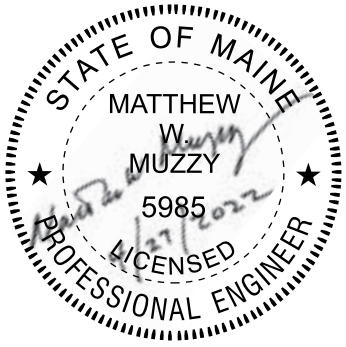
# 2021 ANNUAL REPORT
# DOLBY LANDFILL
# EASY MILLINOCKET, MAINE

Prepared for

**STATE OF MAINE**
DEPARTMENT OF ADMINISTRATION
AND FINANCAIL SERVICES
Augusta, Maine




April 2022

4 Blanchard Road
P.O. Box 85A
Cumberland, Maine 04021
Phone: 207.829.5016 smemaine.com

ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE

SME
SEVEE & MAHER
ENGINEERS

**TABLE OF CONTENTS**

**LIST OF APPENDICES**

## LIST OF FIGURES (LOCATED AT THE END OF EACH SECTION)



## LIST OF TABLES

**2021 ANNUAL REPORT**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

## 1.0 INTRODUCTION

The Dolby Solid Waste Landfill (Dolby Landfill or landfill) is located in the town of East Millinocket, Maine. The State of Maine Department of Administrative and Financial Services (DAFS) owns the landfill and the Bureau of General Services (BGS) operates the landfill. The Landfill operates under a license obtained by the Great Northern Paper Company (GNP) from the Maine Department of Environmental Protection (MEDEP) in 1984). Subsequent MEDEP amendment orders transferred the Dolby Landfill license to Katahdin Paper Company (April 2003) and then to the State of Maine (September 2011). The Dolby Landfill license requires the landfill owner (i.e., State of Maine) to submit an annual report to the MEDEP describing the previous year's operation of the landfill. This Annual Report has been prepared by Sevee & Maher Engineers, Inc. (SME) to fulfill the annual report requirement and includes discussion of the specific reporting items listed in Chapter 401.4.D of the MEDEP Maine Solid Waste Management Rules (Rules).

### 1.1 Site History

Dolby Landfill consists of three landfills (known as Dolby I, Dolby II, and Dolby III), which are located on the east side of Route 157, approximately 2-1/2 miles northwest of the town center of East Millinocket, Maine (see Figure 1-1). Two of the landfills are supported be a lined leachate pond. Leachate is pumped from the pond to the East Millinocket wastewater treatment plant that is located approximately 4 miles to the south.

The Dolby I Landfill received a license from the MEDEP in 1975. Dolby I occupies about 23 acres and is located southwest of the Dolby II and III Landfills. The principal waste streams to Dolby I were wastewater treatment sludge, woodroom/woodyard waste, wood ash, and general rubbish from the former GNP pulp and paper mills in Millinocket and East Millinocket. at Dolby I received waste from 1975 to 1979 and a soil final cover was placed over Dolby I in 1980 /1981.

The Dolby II Landfill is located west of the Dolby I Landfill and immediately east and upslope of the Dolby III Landfill. Dolby II was licensed by the MEDEP in 1978 (Board Order # 26-0796-19170) and occupies about 63 acres. The principal waste streams delivered to Dolby II were wastewater treatment sludge, woodroom/woodyard waste, wood ash, and general rubbish from the former GNP Millinocket and East Millinocket mills. Waste placement in Dolby II occurred between 1979 and 1986. A soil final cover was placed over Dolby II in 1987. Over time, the waste placed in Dolby II settled creating a near flat landfill top area. In 1996, GNP was granted an amendment for a vertical increase on the top of Dolby II (MEDEP Order #S-000796-WD-AC-A). To construct the vertical increase the final cover for the Dolby II top area was

removed and additional waste was placed. The waste placement, regrading, and replacement of the soil final cover occurred between 1996 and 1999.

Construction of Dolby III was initiated in 1984 and a license renewal for the landfill was submitted to MEDEP in 1989 (SME, 1989). Dolby III occupies about 65 acres and consists of 17 waste cells; all of which have been closed.[1] The original waste streams at Dolby III were wastewater treatment sludge, woodroom/woodyard waste, wood ash, general rubbish from the former Millinocket and East Millinocket mills and municipal solid waste (MSW) from the local communities. MSW disposal in Dolby III was stopped in 1993 due to a change in the MEDEP Rules. From 1987 to 1999, Dolby III was licensed to receive wood ash from the Signal Sherman biomass power boiler (MEDEP Order #L-000796-07-A-N). From 1988 to 1993, Dolby III received ash resulting from burning demolition debris and brush piles by the towns of East Millinocket and Millinocket (MEDEP Order #L-000796-7A-L-M). In September 2011, the MEDEP issued a license transfer to the State of Maine (MEDEP Order #S-000796-WR-AJ-T) for operation of the Dolby III Landfill. On December 4, 2012, MEDEP approved a minor license revision (S-000796-WT-AM-N) for a one-time disposal of approximately 1,000 cubic yards of secondary wastewater treatment plant residuals from the Town of Millinocket. On January 18, 2012, MEDEP approved a minor license revision (S-000796-WU-AL-N) that allowed for the disposal of petroleum-contaminated soils from sources other than GNP.

In April 2016, DAFS applied to MEDEP for a landfill cover upgrade for Dolby III to reduce the volume of leachate generated by that landfill and, MEDEP subsequently issued a minor license revision (#S-000796-WO-AO-N) to allow the cover upgrade. Phase 1 of the landfill cover upgrade project included construction of an upgraded cover system over approximately 26 acres of Dolby III waste area. The upgraded cover system for Phase 1 consist of (from top to bottom):

- A 4-inch vegetative soil layer;
- A 14-inch cover soil layer;
- A drainage geocomposite and cover system drainage pipes;
- A 40-mil HDPE textured liner; and
- A minimum 6-inch gas collection system (i.e., sand and gas vent piping).

Approximately 40 acres of additional cover upgrade remain to be completed for Dolby III.

[1] The Dolby III Landfill was closed to day-to-day landfilling in 2011. Since that time, provisions have been made to accept very small volumes of ash from the Towns of Millinocket, East Millinocket, and Medway. Small quantities of municipal water treatment sludge from the Town of Millinocket are also occasionally disposed of in Dolby III. In 2018 a temporary cell for disposal of lagoon sludge from the town of East Millinocket's wastewater treatment plant upgrade.

In 2018, approximately 2.5 acres of Dolby III, which had been previously closed with a soil cover, were temporarily opened for disposal of aeration lagoon sludge from the former East Millinocket mill site. This temporary cell remains open and is used for disposal of small volumes of ash delivered from solid waste transfer stations in Millinocket, East Millinocket, and Medway In 2021, approximately 416 cubic yards of ash from was placed in the temporary cell.

The leachate pond serving Dolby II and Dolby III was constructed in 1984 when Dolby III was built and was reconstructed in 2007. The leachate pond uses a double-synthetic membrane liner with a leak detection system between the primary and secondary liners. Leachate is pumped from the pond and flows via pipeline to the Town of East Millinocket's wastewater treatment plant approximately 3.5 miles away. In 2021, the total leachate volume pumped from the pond was approximately 44.1 million gallons (including water from the leachate pond underdrain.

## 1.2 Hydrogeologic Setting

The Dolby II and Dolby III Landfills are positioned on land sloping from east to west at about 2 to 14 percent grades between elevations 350 feet (west) and 425 feet (east). Surface water from the landfill site area generally flows toward Partridge Brook Flowage. Partridge Brook Flowage in turn flows into Dolby Pond, which is an impoundment on the West Branch of the Penobscot River formed by Dolby Dam. Site subsurface conditions for the landfill were first explored in 1975 (E.C. Jordan Co., 1975); then in 1977 and 1978 (E.C. Jordan, 1978); in 1980 (E.C. Jordan, 1981); and in 1983 (E.C. Jordan, 1983). The exploration data indicated the soil in the Dolby Landfill area consisted of glacial till over bedrock. Moreover, it was determined the site was blanketed with a layer of ablation till ranging in thickness from a few feet to more than 25 feet. In areas where deeper soil was encountered, the ablation till was generally underlain by a layer of basal till such that the overall glacial till thickness generally exceeded 30 feet. Hydraulic conductivity of the glacial till was measured in both the laboratory and field and ranged from approximately $1x10^{-4}$ to $1x10^{-7}$ centimeters per second (cm/sec), with the basal till permeability generally exhibiting the lower end of the range. Bedrock in the form of near-vertically bedded metasiltstone underlies the glacial till. Bedrock hydraulic conductivities were measured to generally range from $1x10^{-4}$ to $1x10^{-8}$ cm/sec.

The ground surface topography and geologic setting for the Dolby II and Dolby III landfills cause a groundwater divide beneath the Dolby II landfill. Groundwater beneath the easter portion of Dolby II generally flows toward the east and groundwater beneath the western portion of Dolby II and all of Dolby III generally flows toward the west. The site setting creates a groundwater condition of upward hydraulic gradients (i.e., groundwater discharge) on the eastern side of the Dolby II landfill and in the lower half (i.e., the western portion) of the Dolby III landfill area. The landfill design for Dolby III addressed this groundwater discharge condition with a leachate collection system and interceptor drain in the western portion of the Dolby III Landfill. Figure 1-2 presents an interpretation of the groundwater discharge areas

on the eastern side of Dolby II and on the western side of Dolby III. Figure 1-2 includes groundwater levels measured in the monitoring wells near the landfill perimeter that are indicative of the upward gradients causing the groundwater discharge.


BASE MAP ADAPTED FROM 7.5 MIN
USGS TOPOGRAPHIC QUADRANGLES
MILLINOCKET, ME - 1988
EAST MILLINOCKET, ME - 1988

2000 0 4000 FEET

DWG: SITE LMN: SITELOC CTB: SME-STD REV: 4/16/2019

FIGURE 1-1
SITE LOCATION MAP
DOLBY LANDFILL FACILITY
EAST MILLINOCKET, MAINE

SME
SEVEE & MAHER
ENGINEERS

\\nserver\CFS\Kpc\Dol\ACAD\SITE.dwg, 4/16/2019 10:43:33 AM, jrl

MW-303A,B
(A)375.14
(B)376.62

MW-206A,B
(A)398.02
(B)398.45

MW-205A,B
(A)410.94
(B)410.41

MW-302B,C
(B)346.13
(C)345.18

MW-301
346.08

MW-304A,B
(A)342.72
(B)341.90

MW-107A
(A)350.63

MW-401A,B
(A)366.63
(B)363.57

MW-402A,B
(A)400.27
(B)397.90

MW-202AR,B
(AR)407.94
(B)NOT SAMPLED - DAMAGED

MW-104B
(B)421.60

N

NOTES

1. BASE MAP FROM AERIAL SURVEY & PHOTO INC, NORRIDGEWOCK, MAINE, PHOTO DATE 5-15-08.

LEGEND

MW-401A,B
(A)366.89
(B)363.85

MONITORING WELL LOCATION

WATER LEVEL ELEVATION MEASURED AT MONITORING WELL LOCATION

AREA OF ESTIMATED UPWARD HYDRAULIC GRADIENTS

150 0 300 FEET

FIGURE 1-2
MEASURED GROUNDWATER ELEVATIONS
JUNE 2021
DOLBY LANDFILL FACILITY
EAST MILLINOCKET, MAINE

SME
SEVEE & MAHER ENGINEERS

DWG: PhreaticSurface LMN: Phreatic-June 2021 CTB: SME-STD REV: 4/8/2022

\\Nserver\cfs\Kpci\Dol\ACAD\WaterSamples\Sites\PhreaticSurface.dwg, 4/8/2022 9:56:21 AM, bwb

## 2.0 2021 LANDFILL ACTIVITY

Activities occurring at the landfill in 2021 consisted of the following:

- Quarterly visual inspections (spring, summer, and fall) of the three landfills were made by SME and occurred in April, September, and October 2021. These inspections also included the leachate pond and associated leachate transport pipeline. The inspection reports are included in Appendix A. Based on the quarterly inspections; all three landfills were found to be in general compliance with the facility's MEDEP license;
- The leachate pond liner was cleaned and efforts were made to resolve an apparent leak in the leachate pond's liner system;
- The leachate transport pipeline (connecting the leachate point to the East Millinocket wastewater treatment plant was cleaned;
- The force main connecting the leachate pond underdrain to the leachate pond pump station was cleaned;
- Leachate Pump #1 (in the leachate pond pump station) was rebuilt;
- The underdrain pump in the leachate pond underdrain was replaced (twice);
- The leachate pump station's wet well was upgraded to include an ultra-sonic water level sensor that communicates with a control module in the pump station building;
- The flow meter for the leak detection system was replaced in September 2021.
- Monitoring well MW-202B was repaired (see Appendix B), and
- The entire surface of Dolby II and III was mowed. The mowing included filling/seeding several low spots on the south side of the Dolby II cover that were hazards to the mowing equipment)

### 2.1 Leachate Pond and Leachate Transport Pipeline

Leachate collected from the Dolby II and III Landfills flows by gravity pipeline to the leachate pond near the west side of Dolby III. The leachate flows via a force main and gravity pipeline (often referred to as the leachate transport pipeline) to the Town of East Millinocket's wastewater treatment plant. The leachate pond is supported by a leachate pump station and an undrain from which groundwater is pumped to the leachate pump station's wet well. The liner system for the leachate pond includes a leak detection layer. Any liquid accumulated in the leak detection layer is pumped into the leachate pump station's wet well. The volume of liquid removed from the leak detection system is measured by a flow meter that reads to the leachate pump station. In spring 2021 it was determined that the flow meter was not working and a

replacement flowmeter was ordered. Supply chain issues precluded replacing the flow meter until March 2022. Leachate pond and pipeline work activities completed in 2021 included:

- In spring 2021 it became apparent that the leak detection layer for the leachate pond's liner system was showing signs of water infiltration. There had been no events in 2020 to suggest a reason for infiltration into the leak detection system to be occurring. Investigation into the possible cause for the leakage into the leak detection layer was explored with MEDEP and BGS. The leachate pond liner system includes boot penetrations at three locations: the leachate inflow pipe, the leachate outfall pipe, and a pipe that serves as a conduit for the leak detection pump and associated electrical feed as well as the pump discharge line. Consensus was that there was no apparent reason for the primary liner to be leaking. Moreover, the steel banding securing the pipe boot(s) to the pipe(s) passing through the boots appeared visibly secure. A decision was made to introduce fluorescent colored dye into the leak detection layer and visually monitor the leachate pond underdrain and the stored water in the leachate held inside the pond. To do this the pond's surface elevation was raised and the water in the pond's underdrain was lower as much as practical. The liquid levels in the leachate pond and underdrain were selected such that liquid in the leak detection layer would be subject to pressure from the leachate in the pond, which would encourage the dye colored liquid in the leak detection layer to seep into the underdrain and/or into the leachate stored in the pond. UV light sources were used to help illuminate the fluorescence of the dye in the underdrain manhole and in the leachate pond pump station's wet well. No visual presence of the fluorescent dye was detected in the underdrain manhole, in the wet well, nor in the leachate pond itself. Appendix C includes information describing the dye test.

  Consensus with MEDEP and BGS was to clean the entire exposed surface of the leachate pond's primary liner, conduct a visual inspection of the primary liner's surface, and inspect the pipe boot penetrations for potential leakage pathways. During the period of July 26 through July 29, 2021 ACV Enviro of Skowhegan, Maine cleaned the liner surface of essentially all accumulated sediment. The cleaned surface was in turn visually inspected by RTD Enterprises of Madison, Maine, BGS's on-site representative and SME for possible leaks. Several blemishes in and previous repairs of the liner surface were detected that were improved by RTD using conventional HDPE welding techniques. The blemishes and previous repairs were result of previous liner cleaning efforts. None of the blemishes or previous repairs observed in 2021 were apparent points of liner leakage (to the leak detection layer).

  After completing the liner improvements, RTD removed the stainless steel banding from each of the liner pipe boot penetrations, removed the (old) waterproof caulking sealant between the pipe boot and adjacent pipe, replaced the removed caulking with new caulking, and installed new stainless steel bands around the pipe boot. Appendix C includes a report of the liner cleaning and pipe boot maintenance activities.

Following the pond liner cleaning the leachate level in the pond was allowed to rise to levels similar to those used for the dye test. No leaks into or out of the leak detection system were noted, however it was observed that the leak detection pump would actuate frequently to remove liquid accumulated in the leak detection layer. That observation suggested leakage into the leak detection layer was still occurring (with no apparent reason). In September 2021 the leak detection flow meter was replaced and subsequent flow readings confirmed volumes of water leaking into the leak detection system were in excess of the Action Leakage Rate for the leachate pond. Appendix D includes correspondence with MEDEP regarding the Action Leakage Rate exceedance. Appendix D includes leak detection flows for months January, February, and March 2022 which confirm leakage into the leak detection layer.

To begin a more direct understanding of the potential effect of the leachate pond leakage on the geologic environment, the underdrain manhole was added to the landfill's water quality monitoring program for 2022. Discussion of the underdrain water quality is presented in Section 5.3. A recommendation to continue the underdrain water quality monitoring is included in Section 10.0 of this Annual Report.

- Leachate pipeline cleaning was performed from August 2 to August 5, 2021 and consisted mainly of the leachate force main and several low spots in the gravity main. ACV Enviro of Skowhegan, Maine was contracted to perform the pipeline dewatering, disassembly, cleaning, and reassembly. In addition to cleaning the leachate pipeline, the pump station wet well was cleaned by removing sediment and pressure washing the interior and the force main connecting the underdrain manhole to the pump station wet well was cleaned Appendix E provides information describing the pipeline cleaning.

## 2.2 Leachate Pond Pumps, Underdrain Pumps, and Leak Detection Flow Meter.

Annual electrical inspection of the leachate pumps in the pump station's wet well was performed by Steven's Electric of Monmouth, Maine. The inspection indicated unacceptable voltage loss in leachate Pump #1. Consensus was to rebuild Pump # 1 during typical a period of typical slow leachate inflow to the leachate pond. The Pump #1 was reinstalled in the wet well in January 2022.

The underdrain pump in underdrain manhole failed and was replaced in 2021. That pump failed again in 2021 and due to supply chain issues was replaced by a temporary pump in March 2022 (in advance of spring thaw and high leachate flows). A more durable pump (and a backup pump) have been on backorder since mid-2021 and are expected later in 2022.

The leak detection flow meter for the leak detection pump failed in 2021. A replacement flow meter was obtained installed January 2022. The flow meter schedule was also affected by supply chain issues.

Appendix F includes model information for the pumps and flow meters.

## 2.3 Access Road and Other Portions of Site

Annual road maintenance was not performed in 2021 as the road was observed to be in adequate condition.

## 2.4 Operator Training

No operator training was conducted in 2021. MEDEP has previously agreed that training was not necessarily due to the minimal use the landfill receives. With the exception of limited special disposal projects of very small scale, the landfill is closed and as such no active operation occurs in the waste disposal areas.

## 3.0 2021 LANDFILL OPERATIONS

SME, under contract to DAFS, served as the day to day landfill operator for the time period reflected in this Annual Report. SME subcontracted with several contractors to perform maintenance and limited operation activities including:

- Mid-South Engineering, Inc. (MSE) of Millinocket, Maine to act as local technical support at the landfill and to perform routine inspections of the landfill, leachate pond, and leachate transport pipeline;
- ACV Enviro of Skowhegan, Maine to perform leachate pond and leachate transport pipeline cleaning;
- Blaine McLaughlin of Medway, Maine to mow the leachate transport pipeline right-of-way, provide tree removal from the site access ways as deemed necessary, and mow the surface of the Dolby II and Dolby III Landfill;
- Stevens Electric of Monmouth, Maine to inspect the pumps and associated equipment used to pump leachate from the Dolby leachate pond to the wastewater treatment plant in East Millinocket, Maine;
- Adam Qualey Incorporated of Millinocket, Maine to provide additional snow removal at the landfill facility and the former GNP mill in East Millinocket (to access the leachate dumping pad);
- Thornton Construction of Milford, Maine for landfill maintenance relating to earthwork and drainage, pumping and trucking leachate from the leachate pond; and
- Katahdin Analytical Services of Scarborough, Maine provided laboratory analysis of groundwater and surface water as required by the facilities Environmental Monitoring Plan (EMP).

Appendix G presents an updated Post-Closure Monitoring and Maintenance Plan for the Dolby Landfill. The Post-Closure Monitoring and Maintenance Plan serves as the operations manual for the landfill in that the landfill is closed to receiving all waste with the exception of infrequent deliveries of wood ash from the nearby municipal transfer stations (see Table 7-1). The Post-Closure Monitoring and Maintenance Plan addresses performance of routine landfill inspections, leachate management (including the leachate pond, leachate pump station, and leachate transport pipeline), environmental monitoring, landfill cover monitoring and maintenance, and other post-closure related activities.

### 3.1 2021 Waste Received

The monthly waste logs for Dolby III for year 2021 (by waste stream) are attached as Appendix H and are summarized in Table 7-1 of Section 7.0. At total of 416 cubic yards (cy) of waste were delivered to the

Dolby III Landfill in 2021. The delivered waste was placed in the temporary cell on Dolby III that also contains lagoon sludge from the East Millinocket wastewater treatment plant.

## 3.2 Capacity Used and Remaining Capacity

There are no day-to-day active filling areas remaining at the Dolby landfill facility, and most of the landfill has been closed by covering. Approximately 2 acres of Dolby III (at the north end) have been closed by daily covering only; that area is expected to receive final cover in 2022 when Phase 2 of the Dolby III cover upgrade project is resumed. The temporary cell on the top of Dolby III remains open; except for the minimal volume disposal projects that involve the temporary cell, no additional waste filling is permitted at the Dolby landfill facility.

## 3.3 Cover Material Usage

No daily, intermediate, or final cover was placed at the Dolby landfill facility in 2021.

## 3.4 Operating Manual Revisions

The most recent Operating Manual for the Dolby Landfill was submitted to the MEDEP in April 2012. No changes to the landfill operation or Operating Manual have been made since that time.

A post-closure monitoring and maintenance plan for the Dolby Landfill was submitted to MEDEP in May 2017.

## 3.5 Environmental Monitoring Plan (EMP) Revisions

The only change to the EMP for the Dolby Landfill in 2021 consisted of adding the leachate pond underdrain manhole to the water quality monitoring locations. The underdrain manhole was added in reaction to the change in leakage rate into the leachate pond's leak detection system. MEDEP was made aware of adding the underdrain manhole to the monitoring list. The underdrain monitoring results are discussed in Section 5.3.

## 3.6 Spills, Fires, Accidents, and Unusual Events

There were no fires, chemical spills, accidents, or unusual events reported in 2021.

## 3.7 Cell Development Plans

Essentially all waste placement at the Dolby landfill has ceased and most of the landfill areas have received final cover. No further cell development is expected.

## 3.8 Hazardous and Special Waste Handling

There was no hazardous or special waste delivered to, or identified at, the Dolby III Landfill in 2021.

## 3.9 Inspection Summary

Approximately 1/3 of the manholes and catch basins at the Dolby II and Dolby III Landfills are visually inspected on a rotating annual basis. The manhole and catch basin inspection reports for 2021 are included in Appendix A.

Visual inspection of the landfill leachate pond was completed in 2021 and discussion has been presented in Section 2.1. Appendix A includes an inspection report for the leachate pond in 2021.

Following MEDEP guidance, a compliance self-audit checklist for the Dolby III Landfill is completed by DAFS on an annual basis. The completed checklist for 2021 is provided as Appendix I to this report.

## 3.10 System Failures and Repairs

- Stephens Electric performed inspection of the pump/pump controls associated with the leachate pond in 2021. The results of the inspection showed that leachate pump #1 was beginning to short-circuit and was no longer reliable. Pump #1 was removed for shop repair and was reinstalled in the leachate pump station wet well in January, 2022 (in advance of spring leachate flows).

## 3.11 Leachate Management

Leachate collected at the Dolby landfill is temporarily stored in the lined leachate pond and then pumped to the Town of East Millinocket's wastewater treatment plant. Approximately 40.9 million gallons of leachate were pumped from the leachate pond to the treatment plant in 2021.

# 4.0 ENVIRONMENTAL MONITORING

As a condition of the landfill operating permit issued by MEDEP, the quality of the groundwater, surface water, and leachate at the Dolby Landfill is routinely monitored. Gas monitoring for concentrations of explosive gases, i.e., methane ($CH_4$), and hydrogen sulfide ($H_2S$) is also conducted at selected landfill locations where explosive or toxic gases could accumulate. The gas monitoring locations include landfill infrastructure such as at the leachate pond pump station, operator shack, leachate collection manholes and near the landfill boundary (i.e., headspace in select monitoring wells).

## 4.1 Monitoring Locations

Tables 4-1 and 4-2 list the water quality and landfill gas monitoring locations, respectively, and Figures 4-1, 4-2, and 4-3 show the monitoring locations relative to the Dolby Landfill(s) and local landmarks. Table 4-3 presents installation information for each of the monitoring wells that are monitored. Water quality was performed in June and September 2021. Landfill gas monitoring was completed at the same time as the water quality sampling. The monitoring parameters, methods, and standards used for the Dolby Landfill environmental monitoring are summarized in the EMP prepared specifically for the Dolby Landfill facility (SME, 2012). The field and laboratory results for the monitoring events, data validation findings, along with a brief data evaluation, were submitted to the MEDEP project manager and the Environmental and Geographic Analysis Database (EGAD) group following SME's receipt of analytical testing results for each monitoring event.

**TABLE 4-1**

**WATER QUALITY MONITORING LOCATIONS**
**DOLBY LANDFILL**

GROUNDWATER MONITORING WELLS

DOLBY III

| | | |
|---|---|---|
| MW-107A | MW-304A | MW-402A |
| MW-301 | MW-304B | MW-402B |
| MW-302B | MW-401A | |
| MW-302C | MW-401B | |

DOLBY II

| | | |
|---|---|---|
| MW-104B | MW-205B | MW-303B |
| MW-202AR | MW-206A | |
| MW-202B | MW-206B | |
| MW-205A | MW-303A | |

DOLBY I

| | |
|---|---|
| MW-103 | MW-113 |

SURFACE WATER SAMPLING LOCATIONS

| | |
|---|---|
| PBFB | Partridge Brook Flowage – Background |
| PBFR | Partridge Brook Flowage – Revised location beginning 2012 |
| ND | North Ditch |
| SPO | Siltation Pond Outlet |
| SPON | Siltation Pond North |
| SPOS | Siltation Pond South |

LEACHATE SAMPLING LOCATIONS

| | |
|---|---|
| LP | Leachate Pond West of Dolby III |
| LPD2 | Leachate Pond East of Dolby II |
| LDS | Leachate Pond Leak Detection Sump |
| UDLP | Leachate Pond Underdrain manhole |

**TABLE 4-2**

**LANDFILL GAS MONITORING LOCATIONS**
**DOLBY LANDFILL**

- Operator shack southwest of Dolby III;
- Dolby III leachate pond pump station control room and sump;
- MW-107B located southeast of Dolby III; and

Nine catch basins/manholes around the perimeter of Dolby II and Dolby III.

| | |
|---|---|
| CB #4 | CB #35 |
| CB #6A | CB #39 |
| CB #13 | CB #43 |
| CB #21 | CB #45 |
| CB #22 | |

**TABLE 4-3**

**MONITORING WELL DETAILS**
**DOLBY LANDFILL**

| Landfill | Sample Location | Geologic Unit Screened | Screened Interval (ft - BGS) | | Well Diameter (inches) | Comments |
|---|---|---|---|---|---|---|
| | | | TOS | BOS | | |
| Dolby I | MW-103 | Bedrock | NA | 15 | 1.5 | Upgradient well |
| | MW-113 | Bedrock | NA | 21.6 | 1.5 | Downgradient well |
| Dolby II | MW-104B | Bedrock | NA | 37 | 1.25 | Upgradient well |
| | MW-202AR | Bedrock | 71.5 | 81.5 | 2 | Downgradient well |
| | MW-202B | Till/Bedrock | 5.4 | 10.4 | 2 | Downgradient shallow companion well to MW-202AR |
| | MW-205A | Bedrock | 26 | 31 | 2 | Downgradient well |
| | MW-205B | Glacial Till | 10 | 15 | 2 | Downgradient shallow companion well to MW-205A |
| | MW-206A | Bedrock | 23.3 | 28.3 | 2 | Downgradient well |
| | MW-206B | Glacial Till | 12 | 17 | 2 | Downgradient shallow companion well to MW-206A |
| | MW-303A | Bedrock | 32.6 | 42.6 | 2 | Downgradient well |
| | MW-303B | Glacial Till | 13.3 | 23.3 | 2 | Downgradient shallow companion well to MW-303A |
| Dolby III | MW-107A | Bedrock | NA | 19.6 | 1.5 | Downgradient well from Cells 1 through 8 |
| | MW-301 | Glacial Till | 10 | 15 | 2 | Downgradient well from Cells 9 through 16 |
| | MW-302B | Bedrock | 18.8 | 23.8 | 2 | Downgradient well from Cells 9 through 16 |
| | MW-302C | Glacial Till | 6 | 11 | 2 | Downgradient shallow companion well to MW-302A |
| | MW-304A | Bedrock | NA | 21.5 | 2 | Downgradient well from Dolby III leachate pond |
| | MW-304B | Glacial Till | NA | 8.6 | 2 | Downgradient shallow companion well to MW-304A |
| | MW-401A | Bedrock | 30.5 | 40.5 | 2 | Downgradient well from Cells 1 through 8 |
| | MW-401B | Glacial Till | 12.5 | 22.5 | 2 | Downgradient shallow companion well to MW-401A |
| | MW-402A | Bedrock | 50.2 | 60.2 | 2 | Cross-gradient well from Cells 3A and 3B |
| | MW-402B | Glacial Till | 10 | 20 | 2 | Cross-gradient shallow companion well to MW-402A |

Abbreviations:
NA = not available
BOS = bottom of screen
TOS = top of screen
ft -BGS = feet below ground surface

## 4.2 Monitoring Parameters

### 4.2.1 Water Quality

The 2021 water quality monitoring parameters are listed in Table 4-4. Specific conductance, temperature, pH, dissolved oxygen (DO), and turbidity were measured in the field and were used as stabilization criteria during low-flow sampling. All remaining parameters listed in Table 4-4 were analyzed by Katahdin Analytical Services of Scarborough, Maine for 2021.

### 4.2.2 Landfill Gas

The landfill gas monitoring program includes the measurement of methane and hydrogen sulfide concentrations. In 2021, the landfill gas measurements were made using a RKI GX2003 portable gas detector (or equivalent) that was designed specifically for use at landfills to monitor landfill gas presence.

## 4.3 Changes to Environmental Monitoring Program in 2021

The only change to the EMP for the Dolby Landfill in 2021 consisted of adding the leachate pond underdrain manhole to the water quality monitoring locations. The underdrain manhole was added to help evaluate the change in leakage rate into the leachate pond's leak detection system. The underdrain manhole identification is known as UDLP for purposes on the water quality monitoring locations discussed in this annual report.

The EMP describes both the detection and assessment water quality monitoring programs in place for the Dolby Landfill. The detection monitoring program consists of the routine monitoring that is conducted to track ongoing water quality and identify unexpected changes in water quality, whereas the assessment monitoring program is used to evaluate conditions that may have led to or caused detection of unexpected water quality changes. The was no assessment water quality monitoring performed at the Dolby Landfall in 2022.

**TABLE 4-4**

**WATER QUALITY MONITORING PARAMETERS**
**DOLBY LANDFILL**

**Detection Monitoring Program Test Parameters:**

| Parameters | Method | Reporting Limit (mg/L) | Groundwater | Surface Water | Leachate |
|---|---|---|---|---|---|
| Field Parameters | | | | | |
| Dissolved Oxygen (D.O.) | Field Parameter | NA | X | X | |
| Field Observations | Field Parameter | NA | X | X | X |
| Monitoring Well Pump Rate | Field Parameter | NA | X | | |
| pH | Field Parameter | NA | X | X | X |
| Turbidity | Field Parameter | NA | X | X | |
| Specific Conductance | Field Parameter | NA | X | X | X |
| Static Water Elevations | Field Parameter | NA | X | | |
| Surface Water Flow Rates | Field Parameter | NA | | X(1) | |
| Temperature | Filed Parameter | NA | X | X | X |
| Indicator Parameters | | | | | |
| Alkalinity | SM 2320B | 5.0 | X | X | X |
| Bicarbonate | SM 4500 CO2 D | 5.0 | X | X | X |
| Chloride | SM 4500 CL E | 2.0 | X | X | X |
| Nitrogen, Ammonia | EPA 350.1 | 2.0 | X | X | X |
| Nitrogen, Nitrate | EPA 9056/353.2 | 0.05 | X | X | X |
| Phosphorous, Total | EPA 365.4 | 0.1 | | X | X |
| Sulfate | EPA 9056/ASTM 516-02 | 1.0 | X | X | X |
| Total Dissolved Solids (TDS) | SM 2540C | 10.0 | X | X | X |
| Total Organic Carbon (TOC) | SM5310 B | 1.0 | X | X | X |
| Total Suspended Solids (TSS) | SM 2440D | 4 | X | X | X |
| Inorganic Parameters | | | | | |
| Arsenic (Total) | EPA 200.7/6010 | 0.008 | X | X | X |
| Calcium (Total) | EPA 6010B | 0.1 | X | X | X |
| Hardness (Mg & Ca) | SM 2340-B | .13 | X | X | X |
| Iron (Total) | EPA 6010B | 01 | X | X | X |
| Magnesium (Total) | EPA 6010B | 0.1 | X | X | X |
| Manganese (Total) | EPA 6010B | 0.005 | X | X | X |
| Potassium (Total) | EPA 6010B | 1.0 | X | X | X |
| Sodium (Total) | EPA 6010B | 1.0 | X | X | X |
| Aluminum (Total) | EPA 6010B | 0.3 | | | X(2) |
| Antimony (Total) | EPA 6010B | 0.008 | | | X(2) |
| Barium (Total) | EPA 6010B | 0.005 | | | X(2) |
| Beryllium (Total) | EPA 6010B | 0.005 | | | X(2) |
| Cadmium (Total) | EPA 6010B | 0.005 | | | X(2) |
| Chromium (Total) | EPA 6010B | 0.01 | | | X(2) |

**TABLE 4-4 (cont'd)**

**WATER QUALITY MONITORING PARAMETERS**
**DOLBY LANDFILL**

**Assessment Monitoring Program Test Parameters:**

| Parameters | Method | Reporting Limit (mg/L) | Groundwater | Surface Water | Leachate |
|---|---|---|---|---|---|
| Inorganic Parameters | | | | | |
| Cobalt (Total) | EPA 6010B | 0.01 | | | X(2) |
| Copper (Total) | EPA 6010B | 0.025 | | X(1) | X(2) |
| Lead (Total) | EPA 6010B | 0.005 | | | X(2) |
| Nickel (Total) | EPA 6010B | 0.01 | | | X(2) |
| Selenium (Total) | EPA 6010B | 0.01 | | | X(2) |
| Silver (Total) | EPA 6010B | 0.01 | | | X(2) |
| Thallium (Total) | EPA 6010B | 0.015 | | | X(2) |
| Zinc (Total) | EPA 6010B | 0.02 | | | X(2) |
| Organic Parameters | | | | | |
| Volatile Petroleum Hydrocarbons (VPH) | MADEP VPH Method | 3.0 to 100 µg/L | X(3) | | X(2) |
| Extractable Petroleum Hydrocarbons (EPH) | MADEP EPH Method | 2.0 to 1000 µg/L | X(3) | | X(2) |

Notes:
1 Only measured at PBFR (Partridge Brook Flowage).
2 The leachate pond (LP) is sampled for the detection monitoring parameters every monitoring event and sampled for assessment parameters once a year (as per Chapter 405 leachate sampling requirements). The leachate pond (LP) was also sampled for VPH and EPH during all three monitoring events in 2021.
3 Monitoring wells MW-301, MW-302B, and MW-302C are sampled for VPH and EPH once a year (fall).

Abbreviations:
NA = Not Applicable


AERIAL PHOTO DATED JULY 8, 2008

LEGEND

- GROUNDWATER WELLS
- SURFACE WATER SITES

500 0 1000 FEET

DWG: AERIAL-2008 LMN: WAT SAMPL SITES WO CTB: SME-STD REV: 4/16/2019

FIGURE 4-1
WATER QUALITY
MONITORING LOCATIONS
DOLBY LANDFILL FACILITY
EAST MILLINOCKET, MAINE

SME
SEVEE & MAHER
ENGINEERS

\\nserver\CFS\Kpc\Dol\ACAD\WaterSampleSites\Aerial-2008.dwg, 4/16/2019 10:58:25 AM, jrl


AERIAL PHOTO DATED JULY 8, 2008

500 0 1000 FEET

LEGEND

SAMPLE LOCATIONS

EXISTING MANHOLE/CATCH BASIN

FLOW DIRECTION OF LEACHATE COLLECTION SYSTEM

DWG: AERIAL-2008 LMN: CB GAS MONITOR CTB: SME-STD REV: 4/18/2019

FIGURE 4-2
LANDFILL GAS
MONITORING LOCATIONS
DOLBY LANDFILL FACILITY
EAST MILLINOCKET, MAINE

SME
SEVEE & MAHER
ENGINEERS

\\nserver\CFS\Kpc\Dol\ACAD\WaterSampleSites\Aerial-2008.dwg, 4/18/2019 9:34:11 AM, paf

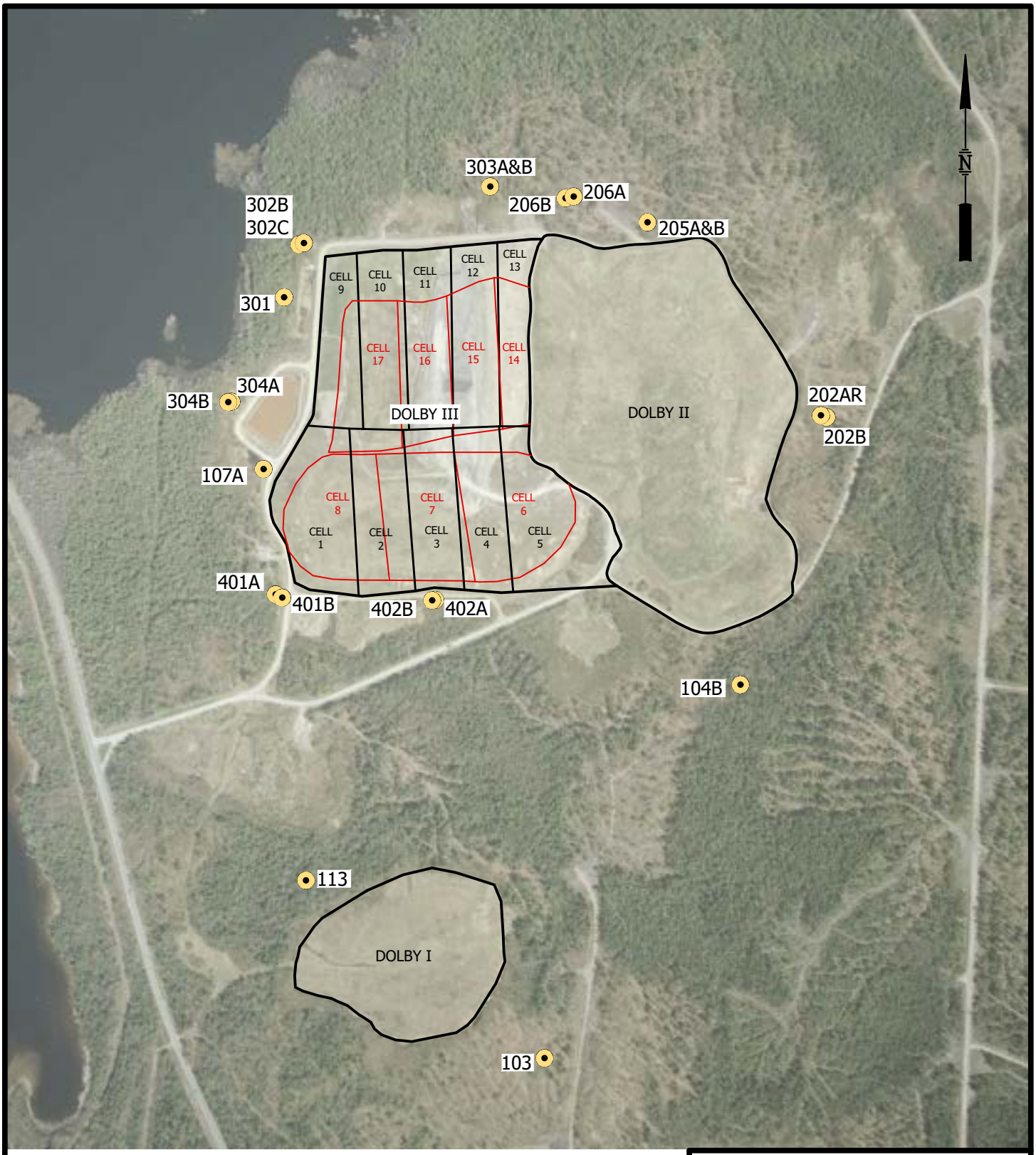



FIGURE 4-3
CELL LAYOUT AND MONITORING WELL LOCATIONS
DOLBY LANDFILL FACLITY
EAST MILLINOCKET, MAINE

SME
SEVEE & MAHER ENGINEERS

## 5.0 WATER QUALITY EVALUATION

Water quality at the Dolby Landfill has been monitored since 1982. Summary tables of the historical water quality including the 2021 monitoring data are presented in Appendix J and Figure 4-1 shows the water quality monitoring locations**.** Detailed summaries of the data by monitoring location are shown on the well evaluation data summary sheets presented in Appendix K. The data summary sheets include measured concentrations for selected water quality parameters analyzed for the 2021 monitoring period, along with the mean and range of the historical record for those same parameters. Also identified on the data summary sheets are the 2021 parameter values that exceeded a historical minimum or maximum concentration value, as well as values that exceed applicable State or Federal water quality guidelines or standards. The historical maximum and minimum values measured this year are summarized on Table 5-1.

The groundwater data for 2021 was evaluated on a well-by-well basis by comparison to Federal and State of Maine drinking water standards and guidelines (i.e., Federal Maximum Contaminant Levels [MCLs], State of Maine Maximum Exposure Guidelines [MEGs], and MEDEP Remedial Action Guidelines – Groundwater Residential [RAG-GwR]). Surface water results were compared to the State of Maine Freshwater Criterion Continuous Concentration (MFCCC) Standards. Parameters reported as exceeding one or more of these guidelines/standards are summarized on Table 5-2. Additionally, the 2021 water quality samples were evaluated to determine if there were notable changes in concentrations of chemical parameters when compared to historical data.

As part of the water quality data evaluation, box and whisker plots were developed for selected parameters at each monitoring point. The annual range, median, and quartiles for each analytical parameter are shown on the box and whisker plots in Appendix K. These plots provide a useful means to visually depict annual and seasonal variations in the data and help show visual data trends over the entire sampling record. Visual evaluation of possible water quality trends (including the 2021 data) was aided by superimposing a Fast Fourier Transform (FFT) regression of the annual median concentration values of each parameter's dataset reaching back to monitoring completed in year 2000. A plot of the FFT regression accompanies the box and whisker plots in Appendix K.

Mann-Kendall (M-K) trend analyses (using a 95 percent confidence level) were run as needed to provide further analysis when current trends in the data were difficult to verify visually. Appendix L presents the results of the M-K analyses.

An interpretation of the water quality data is presented in Sections 5.1, 5.2, and 5.3. Monitoring locations not specifically discussed in those sections exhibited data that were generally consistent with previous years and showed no apparent degradation trends and no notable occurrences of high parameter values. The information presented in the following sections is grouped by well location relative to the general directions of groundwater flow at the landfill site.

**TABLE 5-1**

**HISTORICAL HIGH AND LOW PARAMETER VALUES**
**DOLBY LANDFILL**

| | Specific Conductance | Dissolved Oxygen | Dissolved Solids | Calcium | Alkalinity | Hardness | Bicarbonate | Sodium | Iron | Magnesium | Potassium | Sulfate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BACKGROUND** | | | | | | | | | | | | |
| MW-104B | | | | | Fall – High | | Fall - High | | Fall - High | Fall - High | | |
| **DOLBY I UPGRADIENT** | | | | | | | | | | | | |
| MW-103 | Spring - High | | | | | | | | | | | |
| **DOLBY II DOWNGRADIENT EAST** | | | | | | | | | | | | |
| MW-202AR | | | Fall - Low | | | | | Fall - Low | | | | |
| **DOLBY II DOWNGRADIENT NORTH** | | | | | | | | | | | | |
| MW-205A | Spring & Fall - Low | | | Fall – Low | | | | | | | | |
| MW-206B | | | | Spring - High | | | | | | | | |
| **DOLBY II AND III DOWNGRADIENT NORTH** | | | | | | | | | | | | |
| MW-303A | Fall - Low | | | | | | | | | | | |
| MW-303B | | | | | | | | | Fall - High | | | |
| **DOLBY III SIDEGRADIENT SOUTH** | | | | | | | | | | | | |
| MW-402A | | | | Spring - High | | Spring - High | | Spring & Fall - High | Spring - High | Fall - High | | |
| MW-402B | Spring - L | | | | | | | | Spring - High | Fall - High | | |
| **DOLBY III DOWNGRADIENT NORTHWEST** | | | | | | | | | | | | |
| MW-302B | | | | | | Fall – High | | Fall - High | | | | |
| MW-302C | | | Spring – High | Spring – High | Spring - High | Spring & | Spring - High | Spring & | | Spring & Fall - High | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Fall - High | | Fall - High | | | | |
| **DOLBY III AND LEACHATE POND DOWNGRADIENT EAST** | | | | | | | | | | | | |
| MW-304A | | | Spring – Low | | | | | | | | | |
| MW-304B | | Fall – Low | Fall - High | | | | | | | | | |
| **SURFACE WATER BACKGROUND** | | | | | | | | | | | | |
| PBFB | Fall - Low | | | | | | | | | | | |
| **SURFACE WATER SEDIMENT POND OUTLETS** | | | | | | | | | | | | |
| SPON | | | | | | | | | | | Fall - Low | |
| SPOS | | | | | | | | | | | | Fall - High |

Abbreviations:
Spring sampling event - June 21-23, 2021
Fall sampling event - September 20-23, 2021
High – Historical high parameter value measured
Low – Historical low parameter value measured

**TABLE 5-2**

**SUMMARY OF PARAMETER EXCEEDANCES**
**DOLBY LANDFILL**

| Downgradient Wells | | Arsenic | Manganese | Sodium | Iron | Ammonia |
|---|---|---|---|---|---|---|
| **Applicable Standards** | | | | | | |
| MEG-16 | | 0.01 | 0.3 | 20 | 5 | 30 |
| RAGG-wR | | 0.00052 | 0.43 | - | 14 | |
| **DOLBY II DOWNGRADIENT EAST** | | | | | | |
| MW-202AR | Spring | | 14.1 | 23 | | |
| | Fall | 0.012 | 14.7 | 20.7 | | |
| **DOLBY II SIDEGRADIENT NORTH** | | | | | | |
| MW-205A | Spring | | | 21.9 | | |
| | Fall | | 0.785 | 20.3 | | |
| MW-205B | Spring | | 0.443 | | | |
| MW-206A | Spring | 0.27 | 3.85 | 33.6 | 42.8 | 35 |
| | Fall | 0.307 | 4.37 | 41.8 | 46.6 | 41 |
| **DOLBY II AND III DOWNGRADIENT NORTH** | | | | | | |
| MW-303A | Spring | | 7.27 | | | |
| | Fall | | 8.56 | | | |
| MW-303B | Spring | | 5.06 | | | |
| | Fall | | 9.45 | | | |
| **DOLBY III SIDEGRADIENT SOUTH** | | | | | | |
| MW-402B | Spring | | 2.31 | 24.3 | | |
| | Fall | | 1.83 | 24.8 | | |
| **DOLBY III DOWNGRADIENT SOUTHWEST** | | | | | | |
| MW-107A | Spring | | 14.1 | 39.5 | | |
| | Fall | | 26 | 55.4 | | |
| MW-401A | Spring | 0.138 | | | | |
| | Fall | 0.142 | | | | |
| MW-401B | Fall | | 0.416 | | | |
| **DOLBY III DOWNGRADIENT NORTHWEST** | | | | | | |
| MW-301 | Spring | | 0.685 | 77.6 | | |
| | Fall | | 0.55 | 77.8 | | |
| MW-302B | Spring | | 38.4 | 64.3 | | |
| | Fall | | 38.4 | 69.7 | | |
| MW-302C | Spring | | 60 | 77.6 | | |
| | Fall | | 52 | 69.4 | | |
| **SURFACE WATER SEDIMENT POND OUTLETS** | | | | | | |
| SPON | Fall | | | | 3.59 | |
| SPOS | Spring | | | | 2.84 | |
| | Fall | | | | 1.25 | |

Abbreviations:
Spring sampling event - June 21-23, 2021
Fall sampling event - September 20-23, 2021
MEG – Maine Center for Disease Control Maximum Exposure Guidelines
RAGG-wR - Remedial Action Guidelines - Groundwater Residential

## 5.1 Groundwater Quality

### 5.1.1 Upgradient Monitoring Well

**MW-104B**

- Monitoring well MW-104B monitors bedrock water quality to the south of the Dolby II Landfill. This monitoring well is located approximately 400 feet from the Dolby II perimeter and is not considered to be influenced by any of the Dolby Landfills based on the interpreted directions of groundwater flow.
- Water quality data was generally consistent with historical data for this location except for iron, which was 1.01 mg/L compared to a previous historical high of 0.329 mg/L. No distinct upward or downward data trends have been identified at this location.

### 5.1.2 Dolby I

Monitoring wells MW-103 and MW-113 monitor bedrock groundwater quality upgradient and downgradient of the Dolby I Landfill, respectively. Dolby I Landfill has been closed for more than 30 years and has been removed from the EMP.[2] To supplement the water quality monitoring for the overall Dolby Landfill site, field parameters are monitored at MW-103 and MW-113. Notable observations in the 2021 water quality include:

**MW-103**

- Upgradient well MW-103 yielded an insufficient quantity of water to collect a sample during the fall monitoring event. Specific conductance at well MW-103 has been trending upward beginning in 2019 but is still approximately an order of magnitude lower than specific conductance in downgradient well MW-113.

**MW-113**

- At downgradient well MW-113, the 2021 water quality specific conductance data suggests a slow improvement since the 1980s.

### 5.1.3 Dolby II

As shown on Figure 1-2, there is an apparent groundwater divide located beneath the Dolby II Landfall, with groundwater traveling both to the watersheds east and west of the Dolby II and Dolby III Landfill sites. Eight monitoring wells positioned around the Dolby II Landfill perimeter were sampled for water quality in 2021, including monitoring wells MW-202AR, MW-202B, MW-205A, MW-205B, MW-206A, MW-206B, MW-303A, and MW-303B. These monitoring wells provide spatially distributed data along the

[2] MW-103 and MW-113 were not included in the 2011 Environmental Monitoring Program (as per Section 3.5 of the 2010 Annual Report).

northern and eastern borders of the Dolby II Landfill. The "A" designated wells monitor groundwater quality in the bedrock, while the "B" designated wells monitor groundwater quality in the soil overburden (i.e., glacial till).

#### 5.1.3.1 Side-Gradient Monitoring Wells – North of Dolby II

Monitoring well pairs MW-205A, MW-205B, MW-206A, and MW-206B, monitor northwesterly groundwater flow near the northern boundary of the Dolby II Landfill. While these wells appear to be hydraulically sidegradient from the landfill, they exhibit parameter concentrations that are characteristic of groundwater conditions downgradient of an unlined landfill, suggesting that there is a component of groundwater flow outward from the landfill towards these two well pairs. Both of the shallow wells show less impact than the deep wells, suggesting improving groundwater conditions that may, over time, also occur in the deeper groundwater. Notable observations in the 2021 water quality at these locations include:

**MW-205A**

- Monitoring well MW-205A shows elevated concentrations of specific conductance, several metals, and inorganic parameters as compared to upgradient monitoring well MW-104B. Slightly decreasing trends are apparent in MW-205A for specific conductance, sulfate, TDS, pH, alkalinity, hardness, bicarbonate, iron magnesium, potassium, and chloride beginning in 2003 to 2009.

**MW-205B**

- At MW-205B, historically decreasing trends for specific conductance, calcium, magnesium, sodium, total dissolved solids (TDS), hardness, bicarbonate, chloride, iron, magnesium, and alkalinity have flattened. Sulfate continued to decrease at MW-205B in 2021.

**MW-206A**

- Monitoring well MW-206A shows elevated concentrations of specific conductance, metals, and inorganic parameters as compared to upgradient monitoring well MW-104B. The increasing concentration trends during 2015 and 2016 for alkalinity, ammonia, arsenic, bicarbonate, calcium, hardness, iron, magnesium, manganese, potassium, specific conductance, sodium, TDS, and TSS appear to have been flattening over recent years.
- Chloride, magnesium, and sulfate have lowered since 2003 to 2009 and remain at the lower levels. Some parameters including hardness, bicarbonate, iron, magnesium, potassium, and ammonia appear to show a slight increase on the box and whisker plots but are not increasing at statistically significant levels.

**MW-206B**

- Parameter concentrations measured at this location show minimal landfill influence when compared to the same parameters in the deeper companion wells, i.e., MW-206A. No adverse trends in water quality were apparent at MW-206B.

5.1.3.1 Downgradient Monitoring Wells

5.1.3.2.1 East of Dolby II

Monitoring wells MW-202AR and MW-202B are interpreted to represent groundwater flow downslope (easterly) of the Dolby II Landfill. Monitoring well MW-202AR replaced former well MW-202A in 1994. Notable observations in the 2021 water quality at these locations include:

**MW-202AR**

- Parameter concentrations at this location are characteristic of groundwater conditions downgradient of an unlined landfill and exhibit elevated concentrations of specific conductance, metals, and inorganic parameters as compared to upgradient well MW-104B. Slightly decreasing trends are apparent in MW-202AR for specific conductance, ammonia, and chloride over the last five years. No other clearly visible trends were identified for MW-202AR in 2021.

**MW-202B**

- The parameter concentrations historically measured at MW-202B show similar patterns to those apparent at MW-202AR, but at generally lower concentrations and with more time related variability. Samples have not been collected at MW-202B since 2020 because the well was damaged the previous winter. MW-202B was replaced with MW-202BR on July 30, 2022; Appendix B provides the well replacement details. MW-202BR was included in the Fall 2021 water quality monitoring.

5.1.3.2.2 North of Dolby II and III

**MW-303A**

Well pair MW-303A and MW-303B are located sidegradient of Dolby III and downgradient of Dolby II.

- Comparison of the 2021 water quality data in MW-303A with MW-303B indicates that similar chemical conditions exist in the bedrock and overburden groundwater at those monitoring locations. Parameter concentrations at both MW-303A and MW-303B show elevated concentrations for specific conductance, metals, inorganic and organic parameters as compared to upgradient monitoring well MW-104B suggesting influence from the landfill. The overburden groundwater quality in companion well MW-303B exhibits greater seasonal variation than apparent in the bedrock.

- Decreasing concentration trends for multiple parameters in MW-303A continued to slow or flatten in 2021.

**MW-303B**

- More seasonal variation has been observed over the monitoring record for parameters including specific conductance, calcium, magnesium, hardness, sodium, total organic carbon (TOC), alkalinity, hardness, and bicarbonate at MW-303B than at MW-303A or the background well, MW-104B.
- Parameter concentrations at MW-303B during 2021 were generally consistent with historical concentrations. Decreasing concentration trends for multiple parameters continued to slow or flatten in 2021. Ammonia concentrations have increased slightly over the last three to five years at MW-303B.

### 5.1.4 Dolby III

Ten monitoring wells near the perimeter of the Dolby III Landfill were sampled in 2021. Figure 4-3 shows the location of the monitoring wells relative to the individual cells that comprise Dolby III. Two monitoring wells (MW-402A and MW-402B) are located sidegradient of the landfill near the southern border of Dolby III. Monitoring wells MW-107A, MW-401A, and MW-401B are positioned downgradient along the western perimeter of the Dolby III Landfill. Three monitoring wells (MW-301, MW-302B, and MW-302C) are located downgradient and adjacent to the northwestern corner of Dolby III. Monitoring wells MW-304A and MW-304B are located near the northwest side of the Dolby III Landfill leachate pond and downgradient of the landfill. Because the Dolby III Landfill is immediately adjacent to, and downslope of the Dolby II Landfill, monitoring well MW-104B is considered the background monitoring well for both Dolby II and Dolby III.

#### 5.1.4.1 South of Dolby III – Sidegradient Monitoring Wells

Monitoring well pair MW-402A and MW-402B monitor bedrock and overburden groundwater quality, respectively, sidegradient of Dolby III Cell 3. Notable observations in the 2021 water quality include:

**MW-402A**

- At MW-402A, upward trends are observable in the testing results for specific conductance, calcium, manganese, hardness, chloride, and magnesium beginning in 2000 to 2013. Parameter concentrations suggest limited groundwater degradation may be occurring. In 2021, there were six historically high concentrations for various parameters in MW-402A, but the levels were only very slightly higher than the previously measured highs for that well. Chloride, specific conductance, and sulfate concentrations have leveled off or decreased over the last several years.

**MW-402B**

- In contrast to MW-402A, specific conductance, sodium, total dissolved solids, and chloride have decreased at MW-402B over the last five years and most other parameter concentrations have leveled over the last several years.

5.1.4.2 Downgradient Monitoring Wells

Monitoring wells MW-107A, MW-401A, and MW-401B are downgradient wells on the southwest corner of Dolby III. MW-107A and MW-401A are screened in bedrock, while the MW-401B well is screened in overburden.

5.1.4.2.1 Southwest of Dolby III

**MW-107A**

- At MW-107A, parameter concentrations during 2021 were generally consistent with historical concentrations for this location.
- Ammonia and potassium begin increasing in 2016 but appear to be leveling off.
- At MW-107A, parameters including specific conductance, TDS, alkalinity, hardness, bicarbonate, sodium, and magnesium lowered from approximately 2001 to 2007, but have begun to rise slowly since about 2011. The parameter concentrations are still well below the previous historically high levels, but MW-107A is one of the more impacted wells at the site.

**MW-401A**

- At MW-401A, parameter concentrations were generally consistent with historical data at this location. Magnesium, potassium, alkalinity, bicarbonate, and hardness appear to be trending slightly upward over the last five years. This is corroborated by the 5-year Mann Kendall analysis for this well. Chloride concentrations have decreased over the last five years in MW-401A. Arsenic was measured above its MEG and MCL (0.01 mg/L) for each of the 2021 monitoring events but appears to be generally decreasing. MW-401A shows less impact than the other wells on the west side of Dolby III.

**MW-401B**

- Consistent with MW-401A, magnesium, alkalinity, and bicarbonate have increased over the last five years at MW-401B. Calcium has also shown increases over the last five year. Chloride and sulfate have steadily decreased at MW-401B over the last fifteen years. MW-401B shows generally higher levels than MW-401A.

5.1.4.2.2 Northwest of Dolby III

Three monitoring wells are positioned downgradient of Dolby III's northeast corner. Monitoring well MW-301 is screened in overburden, while monitoring wells MW-302B and MW-302C are screened in the bedrock and overburden, respectively.

**MW-301**

- At MW-301, generally steady increases in specific conductance, calcium, hardness, chloride, potassium, magnesium, TOC, sodium, TDS, bicarbonate, and alkalinity have been measured beginning in 2000. All of these parameters appeared to have leveled off, or in some cases decreased beginning between 2015 and 2019.
- MW-301 shows more water quality impact than most of the other wells at the site.
- Volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) analyses were performed on samples obtained from MW-301 for the fall 2021 monitoring event; no VPH or EPH constituents were detected above the laboratory reporting limits.

**MW-302B AND MW-302C**

- At MW-302B and MW-302C, bicarbonate, alkalinity, TDS, magnesium, manganese, potassium, sodium, hardness, and total organic carbon have been increasing since 2000. Specific conductance and chloride increased from 2000 to approximately 2016 to 2019 and appear to be gradually flattening. Ammonia has increased at MW-302B and MW-302C since 2015. Sulfate concentrations have decreased at MW-302B and MW-302C since 2005.
- The most apparent influence from Dolby III is seen at the MW-302 pair, along with MW-107A and MW-301.
- VPH and EPH analyses were performed on samples obtained from MW-302B and MW-302C during the fall 2021 monitoring event; no VPH or EPH constituents were detected above the laboratory reporting limits.

5.1.4.2.3 East of Dolby III and the Leachate Pond

Monitoring well pair MW-304A and MW-304B are screened in the bedrock and overburden, respectively, and are downgradient of the Dolby III leachate pond. Both wells have exhibited similar improving trends in groundwater quality over their monitoring record. The improving trends are likely related to improvements made to the leachate pond. In 2005 the leachate pond underdrain outlet was redirected from discharging to the native ground surface to being collected and pumped to the leachate pond. In 2007, the leachate pond was reconstructed to include a double-geosynthetic liner system with leak detection. The MW-304 well pair is located between MW-301 and MW-107A, but generally shows much lower parameter concentrations by comparison.

**MW-304A**

- Decreasing trends were observed for several parameters since 2005, including specific conductance, calcium chloride, bicarbonate, and alkalinity, but have begun to level off over the last two years.

**MW-304B**

- With the exception of increases in manganese and iron over recent years, most parameter concentrations appear to be leveling off at MW-304B, although since approximately 2019, concentrations appear to be increasing slightly for alkalinity, hardness, bicarbonate, sodium, calcium, manganese, iron and magnesium.

## 5.2 Surface Water Quality

Surface water quality sample locations are shown on Figure 4-1. Partridge Brook Flowage is sampled at two locations (PBFB and PBFR) as part of the Dolby Landfill EMP. PBFB is the background location for the flowage and is positioned approximately 1,000 feet northwest of the leachate pond, on the opposite side of the flowage. PBFR is located on the landfill side of the flowage and downgradient of the leachate pond. PBFR is a replacement location for the former PBF location, which was sampled for the last time in 2011. PBF was located near the former discharge location for the leachate pond's underdrain.

After flow from the leachate pond underdrain was redirected into the leachate pond pump station, MEDEP requested sampling at PBFR instead of PBF. PBFR is located downstream of the former PBF location and is positioned to reflect potential runoff contributions to the flowage from the landfill's Sediment Pond #2.

Three sediment ponds (Sediment Ponds #1, #2, and #3) are positioned downslope of the Dolby III Landfill (see Figure 4-1). Sediment Ponds #1 and #3 are located near the southwest and northeast corners of the landfill, respectively. Sediment Pond #2 is located immediately south of the leachate pond. Surface water monitoring is performed at the outlet points for each pond. The surface water sample location designations are SPOS (Sediment Pond Outlet South – Sediment Pond #1), SPO (Sediment Pond Outlet – Sediment Pond #2), and SPON (Sediment Pond Outlet North – Sediment Pond #3).

The ditch to the northwest of the landfill (surface water sample point ND) has historically been dry and remained so for the two monitoring events in 2021, as was SPO. SPON was only sampled during the summer 2021 monitoring event due to insufficient water for sample collection during the spring. Surface water at the SPOS was sampled for both monitoring events.

- PBFB is background surface water and is not affected by the landfill.

- As part of the Dolby EMP, copper is analyzed at the PBFR location. Copper was not detected above the laboratory reporting limit for either monitoring event in 2021.
- Surface water sample location SPO has been periodically dry since monitoring began at that location in 1991. Similar to the three-year period including 2016 through 2018, SPO was dry during all monitoring events in 2020 and 2021.
- Parameter concentrations for SPON and SPOS have remained relatively stable since monitoring was initiated at those locations. SPON was only sampled during the summer 2021 monitoring event due to insufficient water in the spring. Magnesium, manganese, potassium, calcium, sulfate, hardness, sodium, alkalinity, total dissolved solids, and chloride concentrations decreased over the last three years at SPON. No other increasing or decreasing trends were observed at SPON during 2021.
- Sample location ND was not sampled in 2021 due to dry conditions during each of the monitoring events. ND has had sufficient water to sample during only five sampling events in the last twenty years.

## 5.3 Leachate and Underdrain Quality

Three leachate sources are sampled at the Dolby Landfill: the Dolby II Leachate Pond (LPD2); the Dolby III Leachate Pond (LP); and the Leak Detection Sump (LDS), which is associated with the Dolby III Leachate Pond.

- No detectable VPH or EPH compounds were reported for the leachate samples tested.
- The leachate shows a reduction over time in specific conductance, TDS, arsenic, calcium, manganese, alkalinity , hardness, bicarbonate, chloride, sodium, magnesium, potassium, and TOC with many parameters appearing to level off in recent years.
- Comparison of the parameter concentrations of LDS with those for the leachate pond (i.e., LP) show similarity in terms of detectable constituents and is suggestive of a possible leak in the primary liner of the leachate pond. In 2021 the leachate pond was drained and the liner was cleaned of sediment then visually inspected for possible leak points (see Section 2.1). Water quality measured in the leak detection system continues to resemble the leachate quality.
- In 2021 water quality monitoring in the leachate pond underdrain manhole was added to the water quality monitoring program. The underdrain designation is UDLP. Overburden monitoring well MW-304B is located close to and downgradient of the leachate pond underdrain and hydraulic gradients in the groundwater on the west side of Dolby III indicate the groundwater is likely discharging upward into the leachate pond's underdrain

system. The proximity of MW-304B to the underdrain suggests water quality at those two locations should be similar. In 2021 specific conductance measured in MW-304B was reported as 146 and 211 µmhos/cm for the spring and fall sampling events, respectively, whereas the specific conductance for UDLP was reported as 788 and 538 µmhos/cm for those same events. Based on comparison of the specific conductance for the two monitoring locations (i.e., MW-304B and UDLP) it appears the underdrain may be influenced by leachate.

- Monitoring location LPD2 is representative of the water in the Dolby II leachate pond located on the eastern side of Dolby II. Water quality data from LPD2 in 2021 was generally within the historical concentration range for that location. Concentrations of most parameters analyzed historically at LPD2 typically show seasonal variations. No increasing or decreasing trends were observed at LPD2 during 2021.

## 5.4 Data Validation and Quality Control (QC)/Quality Assurance (QA)

Data validation and QC/QA are an integral part of the Dolby Landfill water quality monitoring and are necessary to allow assessment of the adequacy of analytical results for their intended use. Field QC/QA activities associated with the water quality sampling for the Dolby Landfill include utilization of standardized sample collection procedures and data recording, calibration of field instruments, and use of chain-of-custody procedures. Analytical QC/QA involves the use of approved analytical protocols by qualified laboratories. Assessment of analytical data quality is performed through review of method-specified quality control data that is delivered with the analytical results. The EMP for Dolby summarizes the sampling procedures and analytical techniques, as well as the QC/QA methods used for the groundwater and surface water monitoring program at the Dolby Landfill in 2021.

Data validation documentation for the Dolby Landfill in 2021 has been previously submitted to MEDEP as part of the data submittals for each of the 2021 monitoring events. The following data validation protocols, as described in the MEDEP Maine SWMRs Chapter 405, were previously submitted to MEDEP to verify the accuracy and precision of the reported results:

- Verification of continuous chain-of-custody for each sample;
- Verification that sample holding times were met;
- Evaluation of duplicate analysis performance;
- Calculation of the ratio of total dissolved solids to specific conductance;
- Comparison of current data with historical data and identification of anomalous results;
- Identification of any parameter in field equipment blanks; and
- Well depth measurements.

## 6.0 EVALUATION OF LANDFILL GAS MONITORING DATA

Landfill gas concentrations were measured in 2021 at locations where landfill gas may collect and pose a potential threat to health or safety. The landfill gas-monitoring program includes measurement of methane and hydrogen sulfide concentrations in potential landfill gas accumulation areas such as the leachate pond pump station, leachate collection manholes and beyond the landfill boundary (i.e., in monitoring wells). Two landfill gas monitoring events were performed in 2021 and the results of that monitoring are presented as Appendix M. A RKI GX2003 portable gas detector (or an equivalent instrument) was used to measure methane and hydrogen sulfide concentrations. Existing landfill gas monitoring locations at the landfill include the following:

- The operator shack, which is located southwest of Dolby III;
- The Dolby III leachate pond pump station control room and wet well;
- Monitoring well MW-107B, which is located southeast of Dolby III; and
- Nine manholes/catch basins located around the perimeter of Dolby II and Dolby III.

The landfill gas monitoring locations are shown on Figure 4-2.

### 6.1 Operator Shack

Landfill gas monitoring inside the operator shack is conducted to check the breathing zone relative to the health and safety of landfill personnel using that space. During 2021, landfill gas concentrations measured inside the operator shack were below the monitoring instrument's detection limits.

### 6.2 Dolby III Leachate Pond Pump Station

During 2021, landfill gas concentrations measured in the leachate pump station control room and associated wet well were below the monitoring instrument's detection limits. It should be noted that the wet well is designated as a confined space; therefore, all human activities in the wet well must follow confined space entry procedures.

### 6.3 Monitoring Well MW-107B

Landfill gas readings have been taken in the wellbore at MW-107B since May 2002. During 2021, methane and hydrogen sulfide concentrations in MW-107B were below the monitoring instrument's detection limits.

## 6.4 Manholes/Catch Basins

During 2021, landfill gas readings were taken at nine manholes/catch basins positioned around the Dolby II and Dolby III Landfills.

The two 2021 gas monitoring events provided the following overall maximum methane levels (methane equivalent, percent by volume) and maximum hydrogen sulfide levels (parts per million [ppm]) measurements:

- CB #4 – 12 percent methane;
- CB #21 – <0.15 percent methane; and
- CB #43 – 9 percent methane.

Methane was below detection limits at CB #6A, CB #13, CB #22, CB #35, CB #39, and CB #45. Hydrogen sulfide was below detection limits in all of the catch basins.

From a health and safety perspective, the manholes/catch basins can only be accessed using confined space entry procedures. If any work is to be completed near or within the structures, air monitoring will be implemented as required by applicable rules/regulations.

## 7.0 WASTE STREAMS DELIVERED TO LANDFILL

Approximately 416 cubic yards of solid waste were delivered to the Dolby III Landfill in 2021. Table 7-1 summarizes the quantities delivered by waste stream.

**TABLE 7-1**

**2021 WASTE DISPOSAL SUMMARY**
**DOLBY LANDFILL**

| Month | Ash[1] | Misc. Waste[2] |
|---|---|---|
| **January** | | 0 |
| **February** | | 0 |
| **March** | | 0 |
| **April** | | 0 |
| **May** | | 0 |
| **June** | | 0 |
| **July** | | 0 |
| **August** | | 5 |
| **September** | 411 | 0 |
| **October** | | 0 |
| **November** | | 0 |
| **December** | | 0 |
| Total (CY) | | 0 |
| Cumulative Total (CY) | 416 | |

Notes:
1 Ash from Millinocket transfer station, East Millinocket transfer station, and Medway transfer station.
2 Waste materials from landfill leachate pond and pipeline cleaning (sediment, gloves, rags, piping, etc.).

## 8.0 FINANCIAL ASSURANCE

According to 06-096 CMR 400(11), the State of Maine is not required to provide financial assurance for closure and post-closure care of the Dolby Landfill facility. The DAFS has the authority to seek legislative appropriations, as necessary, to fund anticipated operation and maintenance of the Dolby Landfill facility when needed.

## 9.0 SUMMARY

Approximately 416 cubic yards of waste were placed in the Dolby III Landfill in 2021.

Approximately 10,400 feet of leachate transport pipeline were cleaned in August 2021. The pumping flow rates before and after the pipeline cleaning were measured and showed restoration to the design pumping flow rate of approximately 600 gallons per minute.

Review of the 2021 water quality data from Dolby I, Dolby II, and Dolby III indicates that ground and surface water quality at the site remains generally consistent with that reported in previous years with minimal, if any, increased degradation apparent.

The following observations are offered relative to site water quality and landfill operation for 2021:

- Groundwater monitored hydraulically downgradient of the Dolby Landfills to the north, east, and west, generally exhibited higher parameter concentrations than those found at the upgradient groundwater monitoring location for the Dolby Landfill facility.
- Surface water quality downgradient of the leachate pond continues to show general improvement since relining of the leachate pond in 2007 and collection of groundwater resulting from the leachate pond underdrain system.

In 2021, the leachate pond and groundwater from monitoring wells MW-301, MW-302B, and MW-302C were analyzed for VPHs and EPHs. No VPHs or EPHs were detected in monitoring wells MW-301, MW-302B, MW-302C, or in the leachate for 2021.

MEDEP primary drinking water standards (i.e., MCLs and MEGs) were exceeded in several of the groundwater monitoring wells one or more times in 2021. Arsenic exceeded its respective MCL and MEG at three monitoring well locations. Iron exceeded its respective MEG in two monitoring wells; manganese exceeded its MEG in 12 monitoring wells; and sodium exceeded its MEG at eight monitoring wells. Manganese have historically been present in the site groundwater, including in the upgradient monitoring well for the Dolby Landfill facility. The MFCCC was not exceeded at any of the four surface water monitoring locations. Overall, the impact from the Dolby Landfills on the surrounding water quality is considered to pose a minimal threat to public health.

## 10.0 RECOMMENDATIONS AND PLANNED OPERATIONAL ADJUSTMENTS FOR 2022

The Dolby Landfill has been closed to receiving residuals from pulp and paper making and other mill-related wastes since 2011. The Dolby I and II Landfills were closed many years ago using soil covers and all but 4.5 acres of the Dolby III Landfill have received various forms of final cover. Approximately 2 acres of the Dolby III Landfill (on the north end) were closed in 2011 with daily cover and approximately 2.5 acres of the Dolby III Landfill (on the south end) were opened as a temporary cell for lagoon sludge disposal (from East Millinocket) in 2018. The daily cover area and the temporary cell are planned for closure when the next phase(s) of cover upgrade are implemented for Dolby III. In the interim, the temporary cell is expected to receive (1) small volumes of wood ash from several nearby municipal owned solid waste transfer stations and (2) small volumes of sediment and disposables from the periodic cleaning of the Dolby III leachate pond and the leachate transport pipeline.

As discussed in Section 2.1, water quality measurements for the leak detection system associated with the Dolby III leachate pond suggest a leak has occurred in either the primary or secondary liner(s) for the pond. Both liners consist of high-density polyethylene (HDPE) geomembranes and include booted pipeline penetrations for moving leachate into and out of the leachate pond. In 2021 the entire surface of the primary liner was cleaned and visually inspected, and a dye test was conducted using the leak detection layer as the dye source. No leaks in the primary liner were visually identified and no dye coloration was observed in the leachate pond or in the water pumped from the leachate pond's underdrain, suggesting no apparent leaks. The leachate pond cleaning included visual inspection of the pipe boots attached to the primary liner as well as re-caulking and re-banding the pipe boots to the pipelines passing through the boots. The leachate pond cleaning, inspection, and maintenance activities completed in 2021 however made no appreciable reduction of flow into the leak detection system. To address this condition the leachate pond underdrain system will continue to be pumped to the leachate pond pump station where the underdrain flow will be handled as leachate.

In 2021 the leachate pond underdrain was added to the water quality monitoring program for the landfill. It is recommended that water quality of the water in the underdrain manhole be added to the long-term water quality monitoring program for the landfill.

## REFERENCES


E.C. Jordan Co., 1985. Test Pit Observations, Sludge Landfill, East Millinocket, Maine, June 1985.

E.C. Jordan Co., 1984. Dolby III Landfill Permit Application.

E.C. Jordan Co., 1981. Geohydrologic Study of the Dolby Landfill Sites, November 1981.

E.C. Jordan Co., 1978. Preliminary Subsurface Investigation, Sludge Landfill Expansion – East Millinocket, Maine, March 21, 1978.

E.C. Jordan Co., 1975. Proposed Bleach Kraft Pulp Mill, Great Northern Paper Company, Millinocket, Maine – Geotechnical Investigation.

Sevee & Maher Engineers, Inc., 1989. Application for License Renewal, Dolby III Landfill, Great Northern Paper Company Millinocket, Maine.

Sevee & Maher Engineers, Inc., 2011. Operating Manual for Dolby III Landfill, East Millinocket, Maine (revised April 2011).

Sevee & Maher Engineers, Inc., 2012. Environmental Monitoring Plan, Dolby Landfill (revised April 2012).

# APPENDIX A

# LANDFILL INSPECTION REPORTS

SME
SEVEE & MAHER
ENGINEERS

**DOLBY LANDFILL**

**CONCRETE MANHOLE INSPECTION FORM**

**Manhole / Catch Basin No: CB #32**

Landfill Location: Dolby III – Northeast Corner

Date: 4/26/2021 Time: 09:41

Weather: Overcast, 35-40°, Light Rain/Snow Inspected by: DPW

Date of last inspection: 10/30/2018

Exterior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other: None

Interior Condition (Comments): Good

Cracks:

Holes: None

Flaking: Some at bottom (1/4" to 1/2")

Seeps: None

Other: None - Flow from all pipes; most from north side.

Corrective Action required (Y/N): None

Date and Details of Corrective Actions (if needed): None

Attachments: Photos

**Manhole Inspection**
**Dolby Landfill, East Millinocket, Maine**
**April 26, 2021**

CB #32 Interior


CB #32 Exterior

**DOLBY LANDFILL**

**CONCRETE MANHOLE INSPECTION FORM**

**Manhole / Catch Basin No: CB #33**

Landfill Location: Dolby III, North Side

Date: 4/26/2021 Time: 09:55

Weather: Overcast, 35-40°, Light Rain/Snow Inspected by: DPW

Date of last inspection: 10/26/2017

Exterior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other: None

Interior Condition (Comments): Fair

Cracks: None

Holes: None

Flaking: Yes, Less than 1-inch

Seeps: None

Other: None

Corrective Action required (Y/N): None

Date and Details of Corrective Actions (if needed): None

Attachments: Photos

**Manhole Inspection**
**Dolby Landfill, East Millinocket, Maine**
**April 26, 2021**

CB #33 Interior


CB #33 Exterior

**DOLBY LANDFILL**

**CONCRETE MANHOLE INSPECTION FORM**

**Manhole / Catch Basin No: CB #34**

Landfill Location: Dolby III, North Side

Date: 4/26/2021 Time: 09:59

Weather: Overcast, 35-40˚, Light Rain/Snow Inspected by: DPW

Date of last inspection: 10/30/2018

Exterior Condition (Comments): Fair

Cracks: North Side has evidence of surface cracking. Cracking present on West as well.

Holes: None

Flaking: None

Seeps: None

Other: None

Interior Condition (Comments): Fair

Cracks: Top Barrel North Side (No separation)

Holes: None

Flaking: Flaking on bottom and second barrel. (+/- 1")

Seeps: None

Other: Vegetation inside at joint between second barrel and top.

Corrective Action required (Y/N): Inspect/observe this manhole yearly during landfill inspections.

Date and Details of Corrective Actions (if needed): Cover upgrade likely in 2022, no repairs needed at this time.

Attachments: Photos

**Manhole Inspection**
**Dolby Landfill, East Millinocket, Maine**
**April 26, 2021**

CB #34 Interior


CB #34 Exterior

**DOLBY LANDFILL**

**CONCRETE MANHOLE INSPECTION FORM**

**Manhole / Catch Basin No: CB #35**

Landfill Location: Dolby III North Slope (middle)

Date: 4/26/2021 Time: 10:06

Weather: Overcast, 35-40°, Light Rain/Snow Inspected by: DPW

Date of last inspection: 10/30/2018

Exterior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other: None

Interior Condition (Comments): Fair

Cracks: None

Holes: None

Flaking: Yes, less than 1-inch

Seeps: None

Other: Sediment in sump. High flows from East.

Corrective Action required (Y/N): None – Clean sediment before final closure.

Date and Details of Corrective Actions (if needed): None

Attachments: Photos

**Manhole Inspection**
**Dolby Landfill, East Millinocket, Maine**
**April 26, 2021**

CB #35 Interior


CB #35 Exterior

**DOLBY LANDFILL**

**CONCRETE MANHOLE INSPECTION FORM**

**Manhole / Catch Basin No: D3 #01**

Landfill Location: Dolby III South Side, Upper Slope

Date: 4/26/2021 Time: 1:35 p.m.

Weather: Overcast, 35-40°, Light Rain/Snow Inspected by: DPW

Date of last inspection: 10/30/2018

Exterior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other: Vegetation growing up around structure.

Interior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other: Biological growth on bottom barrel, Evidence of sediment in sump.

Corrective Action required (Y/N): None – Clean before final closure in this area.

Remove Sediment before final closure.

Date and Details of Corrective Actions (if needed): Discharge pipe cleaned on August 27, 2014

Attachments: Photos

**Manhole Inspection**
**Dolby Landfill, East Millinocket, Maine**
**April 26, 2021**

D3-01 Interior


D3-01 Exterior

**DOLBY LANDFILL**

**CONCRETE MANHOLE INSPECTION FORM**

**Manhole / Catch Basin No: D3 #02**

Landfill Location: Dolby III Southwest Corner

Date: 4/26/2021 Time: 1:29 p.m.

Weather: Overcast, 35°, Slight Snow Flurries Inspected by: DPW

Date of last inspection: 10/30/2018

Exterior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other: None

Interior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other: None

Corrective Action required (Y/N): None

Date and Details of Corrective Actions (if needed): Outlet Pipe flushed August 27, 2014

Attachments: Photos

**Manhole Inspection**
**Dolby Landfill, East Millinocket, Maine**
**April 26, 2021**

D3 – 02 Interior


D3 – 02 Exterior

**DOLBY LANDFILL**

**CONCRETE MANHOLE INSPECTION FORM**

**Manhole / Catch Basin No: D3#04**

Landfill Location: Dolby III Break in Slope, opposite Trailer/Pond

Date: 4/26/2021 Time: 1:17 p.m.

Weather: Overcast, 35°, Slight Snow Flurries Inspected by: DPW

Date of last inspection: 10/30/2018

Exterior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other: None

Interior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other: None

Corrective Action required (Y/N): None

Date and Details of Corrective Actions (if needed): Outlet pipe flushed August 27, 2014

Attachments: Photos

**Manhole Inspection**
**Dolby Landfill, East Millinocket, Maine**
**April 26, 2021**

D3 – 04 Interior

D3 – 04 Exterior

**DOLBY LANDFILL**

**CONCRETE MANHOLE INSPECTION FORM**

**Manhole / Catch Basin No: D3 Temp**

Landfill Location: Dolby III Northeast Corner (Open Area)

Date: 4/26/2021 Time: 1:46 p.m.

Weather: Overcast, 35°, Slight Snow Flurries Inspected by: DPW

Date of last inspection: 10/30/2018

Exterior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other: None – Vegetation has grown all around inlet.

Interior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other:

Corrective Action required (Y/N): Yes – Monitor this manhole annually as it is located in an open area of leachate collection.

Date and Details of Corrective Actions (if needed): Cover upgrade likely in 2022. No Repairs needed at this time.

Attachments: Photos

**Manhole Inspection**
**Dolby Landfill, East Millinocket, Maine**
**April 26, 2021**

D3 – Temp Interior


D3 – Temp Exterior

**DOLBY LANDFILL**

**CONCRETE MANHOLE INSPECTION FORM**

**Manhole / Catch Basin No: D3 #05**

Landfill Location: Dolby III West Side, Top of Slope

Date: 4/26/2021 Time: 2:09 p.m.

Weather: Overcast, 35°, Slight Snow Flurries Inspected by: DPW

Date of last inspection: 10/30/2018

Exterior Condition (Comments): Good

Cracks: None

Holes: None

Flaking:None

Seeps: None

Other: None

Interior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other: None

Corrective Action required (Y/N): None

Date and Details of Corrective Actions (if needed): None

Attachments: Photos

**Manhole Inspection**
**Dolby Landfill, East Millinocket, Maine**
**April 26, 2021**

D3 – 05 Interior


D3 – 05 Exterior

**DOLBY LANDFILL**

**CONCRETE MANHOLE INSPECTION FORM**

**Manhole / Catch Basin No: D3# 08**

Landfill Location: Dolby III Northeast Corner Cell 16 (Open Area)

Date: 4/26/2021 Time: 09:49

Weather: Overcast, 35-40°, Light Rain/Snow Inspected by: DPW

Date of last inspection: 10/30/2018

Exterior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: None

Seeps: None

Other: None

Interior Condition (Comments): Good

Cracks: None

Holes: None

Flaking: Yes, less than 1-inch

Seeps: None

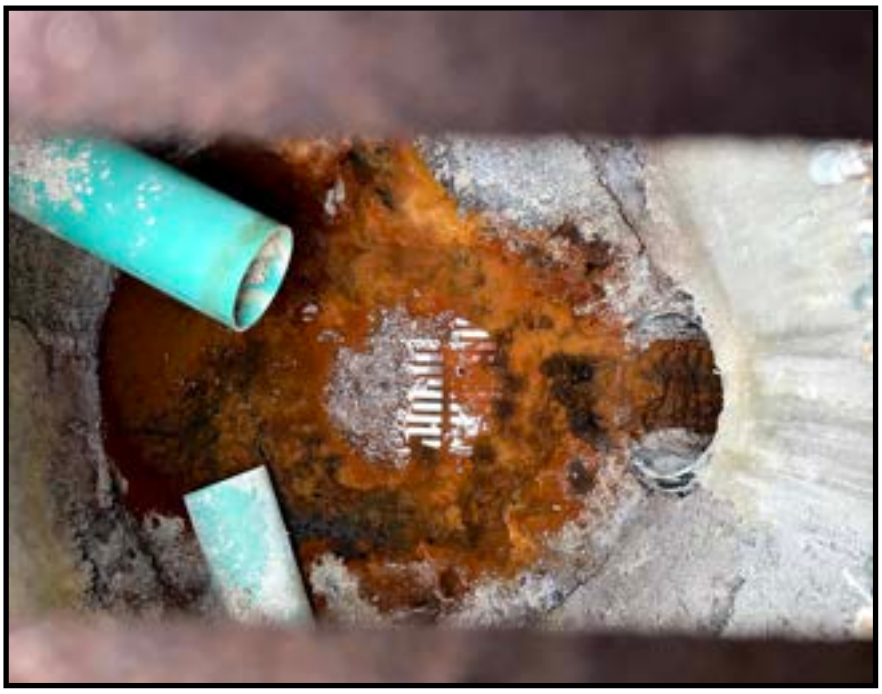
Other: Sludge and biological build-up on bottom of manhole.

Corrective Action required (Y/N): Yes – Continue yearly monitoring as this manhole is in open area leachate collection.

Date and Details of Corrective Actions (if needed): None

Attachments: Photos

**Manhole Inspection**
**Dolby Landfill, East Millinocket, Maine**
**April 26, 2021**



D3 – 08 Interior


D3 – 08 Exterior

SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@smemaine.com
smemaine.com

MEMO TO: Lou Pizzuti, State of Maine **(VIA EMAIL)**

CC: Matt Muzzy, SME

FROM: Brian Pierce, SME

DATE: May 6, 2021

SUBJECT: **LANDFILL INSPECTION**
**SPRING 2021**
**DOLBY I, II AND III LANDFILLS**

The Dolby I, II, and III Landfill inspection (spring quarter) was completed by Brian Pierce of Sevee & Maher Engineers, Inc. (SME) on April 21, 2021. The annual Manhole Inspection was also performed on April 21, 2021 in accordance with the facilities Leachate Manhole Inspection Plan, which included inspection of approximately one-third of the landfill manholes. The Manhole Inspection Plan allows inspection of each manhole once every three years. Inspection forms and photographs of each are attached.

This inspection did not reveal any maintenance items that need to occur immediately, however, we recommend that MEDECD address the following maintenance items before the end of 2021. The items listed below are located on attached Figure 1

1. Replace the Leachate Pond leak detection system flow meter. The existing flow meter isn't working and needs to be repaired or replaced as it establishes the leakage rate for the leak detection system. Observation of the interior of the leak detection manhole, where the leak detection flow meter is housed, indicates that water in the manhole is likely the cause of malfunction. Mid-South Engineering (MSE) plans to pump the water from the manhole, remove the flow meter, then dry it out to see if it will work. If the flow meter doesn't work after being dried out SME recommends installing a new flow meter. Regardless of the outcome, SME and Mid-South will make changes to the manhole to make the manhole more waterproof.
2. Replace the water level transducer for the leachate pond, which is located in the pump station's wet well. The transducer's only function is to provide a wet well water level, which is in turn used to estimate the leachate pond level. The existing water level transducer (installed in the leachate pond wet well) fails to read occasionally and needs occasional cleaning to remain reliable. Given this we expect the transducer will fail soon and we recommend purchasing a spare so that down time is minimal. The function of the leachate pumping system will not be jeopardized if the transducer fails as the leachate pumping system is controlled by level switches not the transducer. SME is also considering replacing the transducer with an ultra-sonic sensor to measure the water level in-lieu of a pressure sensing transducer.
3. Repair one gas vent on the top of the Dolby III Cover Upgrade area. The gas vent was not attached to its base when viewed this spring. It appears the vent was not originally glued to its base. Repair will include hand excavation (+/- 9" depth) around the base, inserting a 4" PVC coupling, and gluing the vent pipe onto its base. A geomembrane boot will be reconstructed around the gas vent during construction of Phase 2 of the Dolby III Cover Upgrade project.
4. Repair one gas vent on the top of the Dolby III Cover Upgrade area. The function of the vent does not appear to be impacted, however, the gas vent was leaning and did not feel like it was attached to its

base. Repair will include hand excavation (+/- 9" depth) around the base, repair, straightening, and gluing the vent pipe onto its base. A geomembrane boot will be reconstructed around the gas vent (if needed) during construction of Phase 2 of the Dolby III Cover Upgrade project.

5. Locate and clean the outlet of the corrugated metal culvert that crosses the leachate pond perimeter road near the northwest corner of the leachate pond. The function of this culvert is critical as clogging of the culvert can cause stormwater/snow melt to back up in the ditch adjacent to the leachate pond and flow into the leachate pond.

The following maintenance items were identified and can be addressed in the future as they are not currently causing problems with landfill operations:

6. Replacement of the culvert crossing the Landfill perimeter road between the southwest corner of Dolby III and the southwest sedimentation basin. The culvert is damaged (but functional). Replacement of this culvert is anticipated when cover upgrade construction occurs in the southwest corner of the Dolby III landfill.
7. Replacement of a corrugated metal culvert that crosses the gravel access road immediately southwest of the leachate pond. The invert of this culvert is corroded and/or missing in some locations. We recommend replacement of the culvert with a 24" diameter corrugated polyethylene pipe.
8. Repair of an area of no grass growth on the north side of Dolby III. There are no signs of erosion in the area (roughly 10' x 10') is without vegetation and should be monitored. The area will be covered during construction of Phase 2 of the Dolby III Cover Upgrade project.

Please contact Matt Muzzy or me if you have any questions or require additional information.

Thank you.

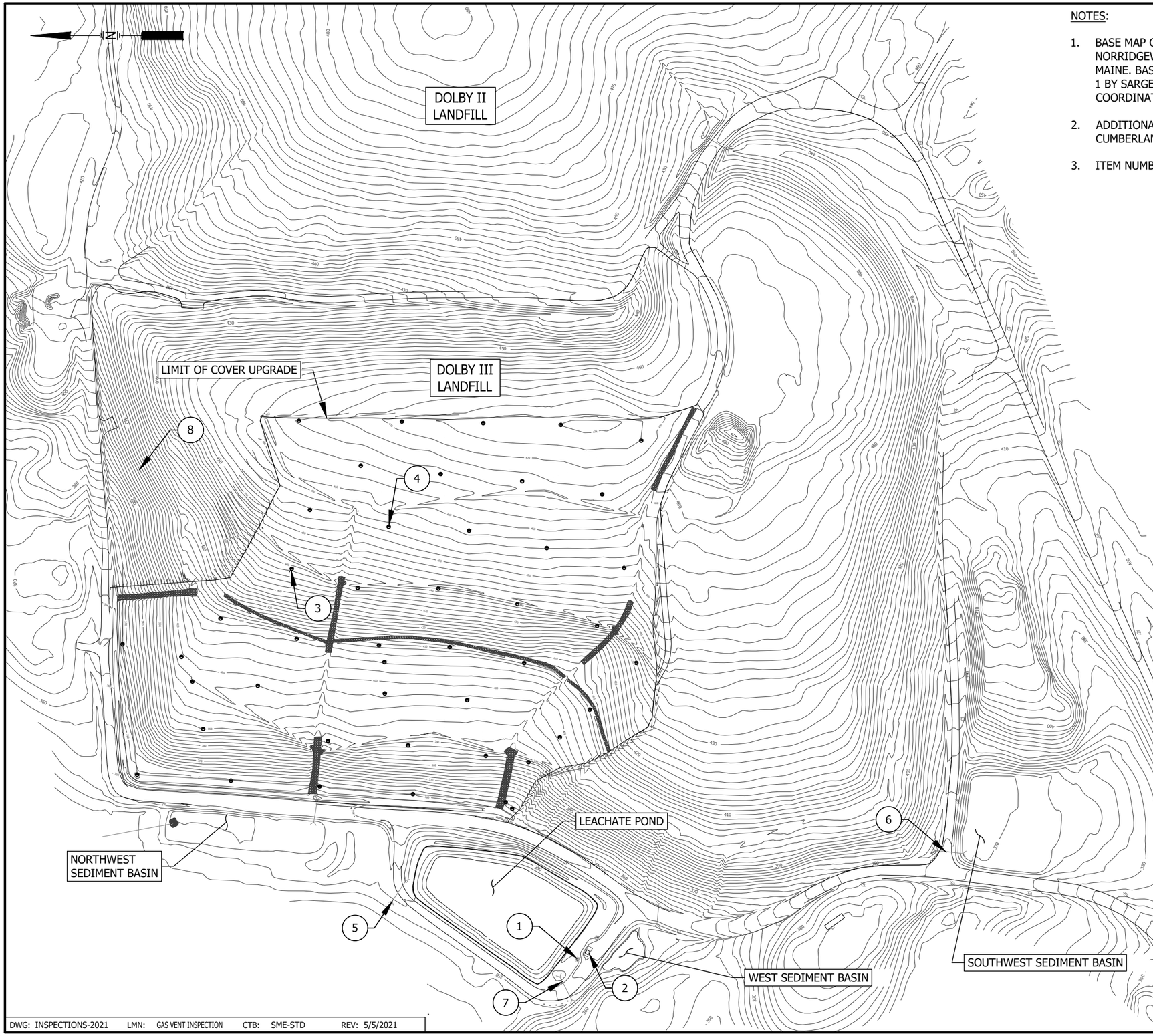
Attachments

Attachment 1 - Figure 1 – Site Plan
Attachment 2 – Spring Quarter Site Inspection Forms and Photos
Attachment 3 – 2021 Annual Manhole Inspection Forms and Photos

**ATTACHMENT 1**

**FIGURE 1 – SITE PLAN**

SME
SEVEE & MAHER
ENGINEERS




NOTES:

1. BASE MAP OUTSIDE OF THE LIMIT OF WORK PREPARED BY AERIAL SURVEY & PHOTO, NORRIDGEWOCK, MAINE. PHOTO DATE 10/15/2015. GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE. BASE MAP INSIDE THE LIMIT OF WORK FROM AS BUILT SURVEY OF DOLBY LANDFILL PHASE 1 BY SARGENT CORPORATION, DATED OCTOBER, 2016. HORIZONTAL DATUM MAINE STATE COORDINATE SYSTEM EAST ZONE, NAD 83. VERTICAL DATUM: NAVD 1929.
2. ADDITIONAL DITCH TOPOGRAPHY ALONG TOE OF LANDFILL BY SEVEE & MAHER ENGINEERS, INC., CUMBERLAND, MAINE, DATED 10/7/2015.
3. ITEM NUMBERS ARE THE SAME AS THOSE ON THE APRIL 2021 INSPECTION MEMO.

| MAINTENANCE ITEM NO. | DESCRIPTION |
|---|---|
| 1 | LEAK DETECTION FLOW METER REPLACEMENT |
| 2 | LEACHATE POND WET WELL TRANSDUCER REPLACEMENT |
| 3 | BROKEN GAS VENT |
| 4 | LEANING GAS VENT |
| 5 | LOCATE AND CLEAN CULVERT OUTLET |
| 6 | CULVERT REPLACEMENT |
| 7 | 24" DIA CULVERT REPLACEMENT |
| 8 | COVER AREA WITHOUT VEGETATION |

125 0 250 FEET

FIGURE 1
DOLBY III SITE PLAN-2021
MAINE BUREAU OF GENERAL SERVICES
EAST MILLINOCKET, MAINE

SME
SEVEE & MAHER ENGINEERS

DWG: INSPECTIONS-2021 LMN: GAS VENT INSPECTION CTB: SME-STD REV: 5/5/2021

\\Nserver\dfs\Kpc\Dol\COVER UPGRADE\Acad\RecDwgs\Figures\INSPECTIONS-2021.dwg, 5/5/2021 1:55:38 PM, sjm

**ATTACHMENT 2**

**SPRING QUARTER SITE INSPECTION FORMS AND PHOTOS**

SME
SEVEE & MAHER
ENGINEERS

**DOLBY LANDFILL**
**LANDFILL INSPECTION CHECKLIST**

Date: April 26, 2021 Time: 9:00a.m. to 5:00 p.m.

Weather: Snowing and windy 30-40 F Inspected By: BDP

| Item | Condition | |
|---|---|---|
| **DOLBY I LANDFILL** | **Ok** | **Not Ok** |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | X | |
| Poor Drainage, Ponding | X (1) | |
| Excessive Settling, Crack Development | X | |
| Grass Die-off-Failure to Thrive | X | |
| Mowing Required | X (2) | |
| Germination of Trees, Deep Root Vegetation | X (2) | |
| Animal Burrowing | X | |
| **COLLECTION PONDS** | | |
| West End Pond Level (low, medium, or high) | X (High) | |
| East End Pond Level (low, medium, or high) | X(Low) | |
| Vegetative Build-up in Ponds (Cat Tails and Trees) | X | |
| **ACCESS GATES** | | |
| Gates Secured and Working Properly (Facility Main Gates) | X | |
| Road Accessible by Vehicle | X | |
| **DOLBY II LANDFILL** | | |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | X | |
| Poor Drainage, Ponding | X | |
| Excessive Settling, Crack Development | X | |
| Grass Die-off, Failure to Thrive | X(3) | |
| Mowing Required (Mowing Should Occur Next Year due to Woody Vegetation) | X | |
| Germination of Trees, Deep Root Vegetation | X | |
| Animal Burrowing | X | |
| **PERIMETER DRAIN CATCH BASINS** | | |
| Build-up Sediment in Catch Basins | X | |
| Flow Conditions (low, medium, or high) | X (Medium-High) | |
| Catch Basins Intact and Serviceable | X | |
| **LEACHATE HOLDING POND** | | |
| Iron Staining (wooded area east of pond) | X | |
| Holding Pond Level | X (Medium-High) | |
| **DOLBY III LANDFILL** | | |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | X | |
| Excessive Settling, Crack Development | X | |
| Grass Die-off-Failure to Thrive | X (3) | |
| Mowing Required | X | |
| Germination of Trees, Deep Root Vegetation | X | |
| Poor Drainage, Ponding | X | |
| Animal Burrowing | X | |
| Access Road Condition | X | |
| Gas Vent Pipes | X (10) | |
| Active Area Berm | X | |
| **PERIMETER DRAIN AND CATCH BASINS** | | |
| Build-up of Sediment in Catch Basins | X | |
| Valves Functioning Properly (free turning) | X | |

| Item | Condition | |
|---|---|---|
| **LEACHATE COLLECTION POND** | **Ok** | **Not OK** |
| **LINER** | | |
| Condition of Liner (rips, holes, torn seams) | X | |
| **LEACHATE PUMP STATION** | | |
| Build-up Sediment in Wetwells or Leachate Pond | X | |
| Pumps Functioning Properly (amps, noises) | X | |
| Valves Functioning Properly (free turning) | X | |
| Flow Conditions (low, medium, or high) | X (Medium-High) | |
| Properly Vented | X | |
| Electrical Panel Inspection (corrosion, etc.) | X | |
| Flow Meter Inspection | X | |
| Transducer | | X(6) |
| **LEAK DETECTION SYSTEM** | | |
| Pump functioning properly (amps, noises) | X | |
| Flow Conditions (low, medium, high) | X (High)(7) | |
| Flow Meter Inspection | | X (4) |
| Control Panel Inspection | X | |
| | | |
| **UNDERDRAIN PUMPING SYSTEM** | | |
| Pump functioning properly | X | |
| Flow Conditions | X (High) | |
| | | |
| **SITE SEDIMENTATION STRUCTURES** | | |
| **NORTHWEST SEDIMENT POND (SEDIMENT POND 3)** | | |
| Check Outlet Structure for Condition | X | |
| Water Level (low, medium, or high) | X (Medium-Low) | |
| **WEST SEDIMENT POND (SEDIMENT POND 2)** | | |
| Check Outlet Structure for Condition | X | |
| Water Level (low, medium, or high) | X (Medium) | |
| **SOUTHWEST SEDIMENT POND (SEDIMENT POND 1)** | | |
| Check Outlet Structure for Condition | X (8) | |
| Water Level (low, medium, or high) | X (Medium) | |
| **SITE ROADWAYS AND DRAINAGE** | | |
| Check Catch Basins for Build-up of Sediment | X | |
| Check Culverts for Blocked Drainage and/or damage | X (9) | |
| Check Monitoring Wells for Visual Damage | X (5) | |
| General condition of Perimeter Roadways | X | |
| **LEACHATE PIPELINE** | | |
| Check Manhole Exterior Condition | X | |
| Check Transition Station Exterior Condition | X | |
| Check Aboveground Utility Line to the Transition Station | X | |
| General condition of Leachate Pipeline Access Road | **X** | |

**COMMENTS:**

(1) Growth of Cattails was noted on the south side of the Dolby I cover system; however, no standing water was observed.

(2) Woody Vegetation observed on Dolby I cover system was most significant in downspouts and stormwater ponds. In 2019 MEDEP (Lou Pizzuti) indicated that MEDEP is okay with the tree growth so long as the water quality around this landfill does not degrade and the perimeter of the landfill is walked in the spring to assure that no leachate breakouts are occurring. Perimeter of Dolby I was walked during this inspection and no leachate breakouts were observed.

(3) Small areas of sparse grass vegetation (failure to thrive) on Dolby II and III landfills. The areas of sparse vegetation may be due to concentrated gas in the areas or topsoil with insufficient nutrients. Regardless of cause the areas are small and do not pose a threat to the overall integrity of the cover systems.

(4) Leak Detection Flow rate meter and totalizer are not working (Repair/replacement of meter is planned for summer 2021).

(5) Visual observation of monitoring wells is performed during each environmental monitoring event.

(6) Transducer in leachate pond wet well fails occasionally and is planned for replacement in the summer of 2020.

(7) The leachate pond, leak detection system, and underdrain system are currently being monitored on a daily basis to determine the source of high flows to the leak detection system. The monitoring plan was approved by the MEDEP.

(8) It appears muskrats have taken up residence in the Sediment Pond 1. Their presence will be monitored as they may attempt to clog the culvert outlet to the pond.

(9) The 24" diameter corrugated metal culvert that crosses the access road near the southwest corner of the leachate pond has rusted and the invert is gone. We recommend replacement of this culvert in 2021.

(10) Two gas vent pipes on Dolby III need repair.

RECOMMENDED ACTIONS:

-Repair and/or Replace leachate pond leak detection flow meter (scheduled for summer 2021)

-Replace leachate pond pump station sump transducer (scheduled for summer 2021).

-Replace 24" diameter corrugated metal pipe with 24" diameter Corrugated Polyethylene Pipe at the southwest corner of the leachate pond.

-Repair two gas vents located on the top of Dolby III during upcoming closure operations in 2022.

Dolby Landfill Inspection Photographs
East Millinocket, Maine
April 26, 2021

Dolby III West Slope and Leachate Pond

Dolby III south Slope

Dolby III – Disposal Cell for Lagoon Waste

Dolby III – Disposal Cell for Lagoon Waste

Dolby Landfill Inspection Photographs
East Millinocket, Maine
April 26, 2021

Dolby III North Side of Open Area

Dolby III Leaning Gas Vent

Dolby III Broken Gas Vent

Leachate Pond

Dolby Landfill Inspection Photographs
East Millinocket, Maine
April 26, 2021

Dolby II South Side

Dolby II Leachate Holding Pond

Dolby I Cover System

Dolby I West End Pond

Dolby Landfill Inspection Photographs
East Millinocket, Maine
April 26, 2021

Dolby I Sideslope

Leachate Pond Perimeter Access Road Culvert at Southwest Corner of Pond

Southwest Sediment Pond

Southwest Sediment Pond Outlet Pipe

Dolby Landfill Inspection Photographs
East Millinocket, Maine
April 26, 2021

West Sediment Pond Outlet

Northwest Sediment Pond

Dolby III Perimeter Access Road Culvert to Northwest Sediment Pond

New Culvert Near Leachate Transport Manhole MH-8

SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@smemaine.com
smemaine.com

MEMO TO: Lou Pizzuti, State of Maine **(VIA EMAIL)**

CC: Matt Muzzy, SME

FROM: Brian Pierce, SME BPP

DATE: September 8, 2021

SUBJECT: **LANDFILL INSPECTION**
**SUMMER 2021**
**DOLBY I, II AND III LANDFILLS**

The Dolby I, II, and III Landfill inspection (summer quarter) was completed by Brian Pierce of Sevee & Maher Engineers, Inc. (SME) on August 20, 2021. Inspection forms and photographs for the inspection are attached.

This inspection did not reveal any maintenance items that need to occur immediately, however, we recommend that MEDECD address the following maintenance items before the end of 2021. The items listed below are located as shown on attached Figure 1.

1. Replace the Leachate Pond leak detection system flow meter. The existing flow meter isn't working and needs to be repaired or replaced as it establishes the leakage rate for the leak detection system. Observation of the interior of the leak detection manhole, where the leak detection flow meter is housed, indicates that water in the manhole is likely the cause of malfunction. SME has contracted with Stevens Electric of Monmouth, Maine to replace the flow meter. The replacement is currently scheduled to occur in the fall of 2021.
2. Replace the water level transducer for the leachate pond, which is in the pump station's wet well. The transducer's only function is to provide a wet well water level, which is in turn used to estimate the leachate pond level. The existing water level transducer (installed in the leachate pond wet well) fails to read on occasion and needs frequent cleaning to remain reliable. Given this, we expect the transducer will fail soon and we recommend purchasing a spare so that down time is minimal. The function of the leachate pumping system will not be jeopardized if the transducer fails as the leachate pumping system is controlled by level switches rather than the transducer. Stevens Electric has been requested to replace the transducer with an ultra-sonic sensor to measure the water level in-lieu of a pressure sensing transducer.
3. Repair two gas vents on the top of the Dolby III Cover Upgrade area. The gas vents were not attached to their bases when viewed this summer. It appears the vents were not originally glued to their bases. Repair will include hand excavation (+/- 9" depth) around the base, inserting a 4" PVC coupling, and gluing the vent pipe onto its base. The geomembrane boots will be reconstructed around the gas vents during construction for Phase 2 of the Dolby III Cover Upgrade project.
4. Repair one gas vent on the top of the Dolby III Cover Upgrade area. The function of the vent does not appear to be impacted, however, the gas vent was leaning and did not feel like it was attached to its base. Repair will include hand excavation (+/- 9" depth) around the base, repair, straightening, and gluing the vent pipe onto its base. A geomembrane boot will be reconstructed around the gas vent (if needed) during construction of Phase 2 of the Dolby III Cover Upgrade project.
5. Locate and clean the outlet of the corrugated metal culvert that crosses the leachate pond perimeter road near the northwest corner of the leachate pond. The function of this culvert is critical as clogging

of the culvert can cause stormwater/snow melt to back up in the ditch adjacent to the leachate pond and flow into the leachate pond. The culvert is critical to controlling emergency discharges from the leachate pond spillway.

6. Replacement of a corrugated metal culvert that crosses the gravel access road immediately southwest of the leachate pond. The invert of this culvert is corroded and/or missing in some locations. We recommend replacement of the culvert with a 24" diameter corrugated polyethylene pipe.

The following maintenance items were identified and can be addressed in the future as they are not currently causing problems with landfill operations:

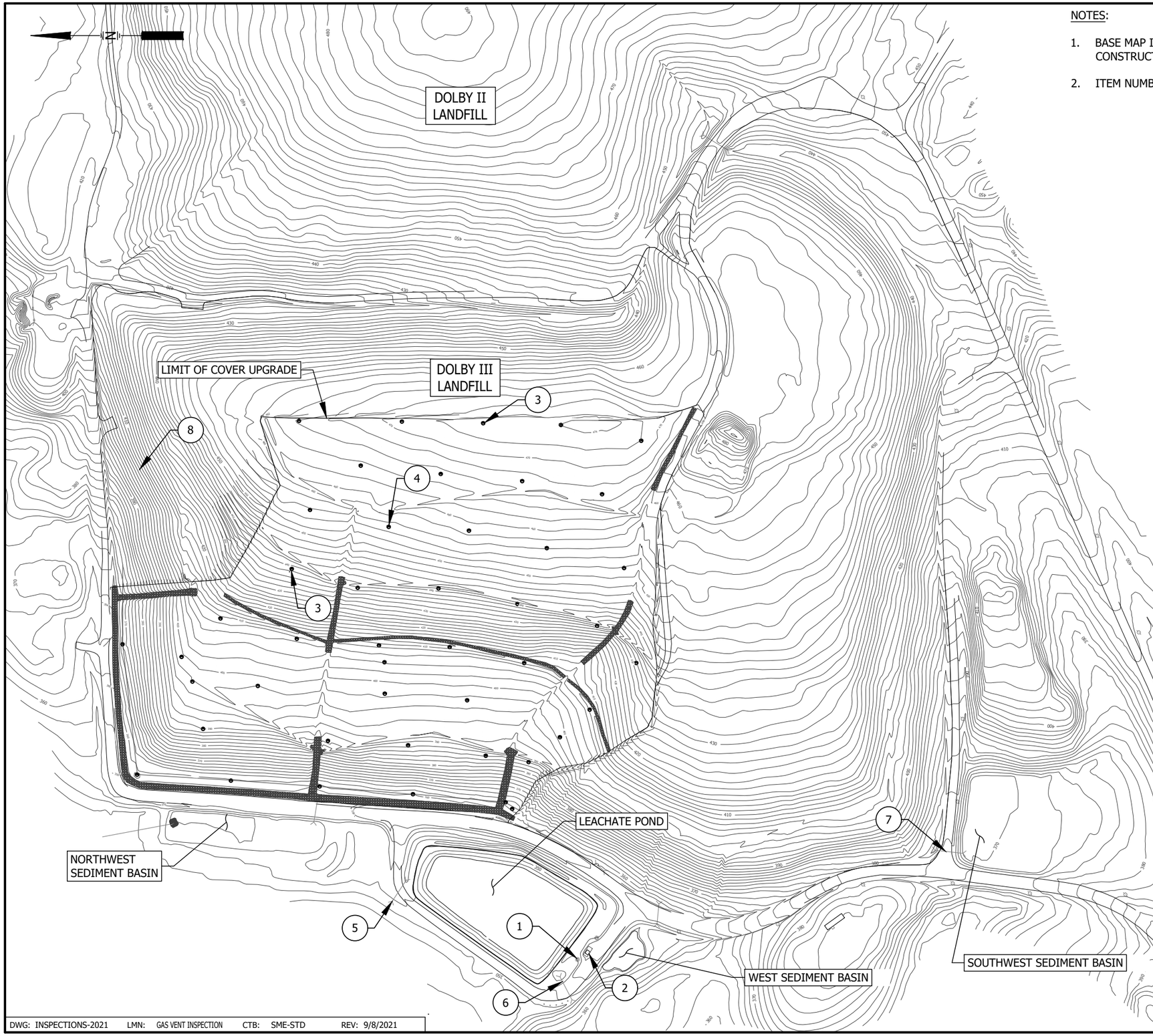
7. Replacement of the culvert crossing the Landfill perimeter road between the southwest corner of Dolby III and the southwest sedimentation basin. The culvert is damaged (but functional). Replacement of this culvert is anticipated when cover upgrade construction occurs in the southwest corner of the Dolby III landfill.
8. Repair of an area of sparse grass growth on the north side of Dolby III. There are no signs of erosion in the area (roughly 10' x 10'), however is without vegetation and should be monitored. The area will be covered during construction of Phase 2 of the Dolby III Cover Upgrade project.

Please contact Matt Muzzy or me if you have any questions or require additional information.

Thank you.

Attachments

Attachment 1 - Figure 1 – Site Plan
Attachment 2 – Summer Quarter Site Inspection Forms and Photos




NOTES:

1. BASE MAP IS A COMPILATION OF PREVIOUS SURVEYS AND SHOULD NOT BE USED FOR CONSTRUCTION ESTIMATES.
2. ITEM NUMBERS ARE THE SAME AS THOSE MENTIONED IN THE AUGUST 2021 INSPECTION MEMO.

| MAINTENANCE ITEM NO. | DESCRIPTION |
|---|---|
| 1 | LEAK DETECTION FLOW METER REPLACEMENT |
| 2 | LEACHATE POND WET WELL TRANSDUCER REPLACEMENT |
| 3 | BROKEN GAS VENT |
| 4 | LEANING GAS VENT |
| 5 | LOCATE AND CLEAN CULVERT OUTLET |
| 6 | 24" DIA CULVERT REPLACEMENT |
| 7 | CULVERT REPLACEMENT |
| 8 | COVER AREA WITHOUT VEGETATION |

125 0 250 FEET

FIGURE 1
DOLBY III SITE PLAN-2021
DEPARTMENT OF ADMINISTRATION
AND FINANCIAL SERVICES
BUREAU OF GENERAL SERVICES
EAST MILLINOCKET, MAINE

SME
SEVEE & MAHER
ENGINEERS

DWG: INSPECTIONS-2021 LMN: GAS VENT INSPECTION CTB: SME-STD REV: 9/8/2021

\\tserver\dfs\Kpc\Dol\COVER UPGRADE\Acad\RecDwgs\Figures\INSPECTIONS-2021.dwg, 9/8/2021 10:55:43 AM, bwb

**DOLBY LANDFILL**
**LANDFILL INSPECTION CHECKLIST**

Date: August 20, 2021 Time: 10:00a.m. to 1:00 p.m.

Weather: Sunny 75-80 F Inspected By: BDP

| Item | Condition | |
|---|---|---|
| **DOLBY I LANDFILL** | **Ok** | **Not Ok** |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | X | |
| Poor Drainage, Ponding | X (1) | |
| Excessive Settling, Crack Development | X | |
| Grass Die-off-Failure to Thrive | X | |
| Mowing Required | X (2) | |
| Germination of Trees, Deep Root Vegetation | X (2) | |
| Animal Burrowing | X | |
| **COLLECTION PONDS** | | |
| West End Pond Level (low, medium, or high) | X (Low) | |
| East End Pond Level (low, medium, or high) | X(Low) | |
| Vegetative Build-up in Ponds (Cat Tails and Trees) | X | |
| **ACCESS GATES** | | |
| Gates Secured and Working Properly (Facility Main Gates) | X | |
| Road Accessible by Vehicle | X | |
| **DOLBY II LANDFILL** | | |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | X | |
| Poor Drainage, Ponding | X | |
| Excessive Settling, Crack Development | X | |
| Grass Die-off, Failure to Thrive | X(3) | |
| Mowing Required (Mowing Should Occur Next Year due to Woody Vegetation) | X | |
| Germination of Trees, Deep Root Vegetation | X | |
| Animal Burrowing | X | |
| **PERIMETER DRAIN CATCH BASINS** | | |
| Build-up Sediment in Catch Basins | X | |
| Flow Conditions (low, medium, or high) | X (Low) | |
| Catch Basins Intact and Serviceable | X | |
| **LEACHATE HOLDING POND** | | |
| Iron Staining (wooded area east of pond) | X | |
| Holding Pond Level | X (Low) | |
| **DOLBY III LANDFILL** | | |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | X | |
| Excessive Settling, Crack Development | X | |
| Grass Die-off-Failure to Thrive | X (3) | |
| Mowing Required | X | |
| Germination of Trees, Deep Root Vegetation | X | |
| Poor Drainage, Ponding | X | |
| Animal Burrowing | X | |
| Access Road Condition | X | |
| Gas Vent Pipes | X (9) | |
| Active Area Berm | X | |
| **PERIMETER DRAIN AND CATCH BASINS** | | |
| Build-up of Sediment in Catch Basins | X | |
| Valves Functioning Properly (free turning) | X | |

| Item | Condition | |
|---|---|---|
| **LEACHATE COLLECTION POND** | **Ok** | **Not OK** |
| **LINER** | | |
| Condition of Liner (rips, holes, torn seams) | X | |
| **LEACHATE PUMP STATION** | | |
| Build-up Sediment in Wetwells or Leachate Pond | X | |
| Pumps Functioning Properly (amps, noises) | X | |
| Valves Functioning Properly (free turning) | X | |
| Flow Conditions (low, medium, or high) | X (Low) | |
| Properly Vented | X | |
| Electrical Panel Inspection (corrosion, etc.) | X | |
| Flow Meter Inspection | X | |
| Transducer | | X(6) |
| **LEAK DETECTION SYSTEM** | | |
| Pump functioning properly (amps, noises) | X | |
| Flow Conditions (low, medium, high) | X (Low) | |
| Flow Meter Inspection | | X (4) |
| Control Panel Inspection | X | |
| | | |
| **UNDERDRAIN PUMPING SYSTEM** | | |
| Pump functioning properly | X | |
| Flow Conditions | X (High) | |
| | | |
| **SITE SEDIMENTATION STRUCTURES** | | |
| **NORTHWEST SEDIMENT POND (SEDIMENT POND 3)** | | |
| Check Outlet Structure for Condition | X | |
| Water Level (low, medium, or high) | X (Low) | |
| **WEST SEDIMENT POND (SEDIMENT POND 2)** | | |
| Check Outlet Structure for Condition | X | |
| Water Level (low, medium, or high) | X (Low) | |
| **SOUTHWEST SEDIMENT POND (SEDIMENT POND 1)** | | |
| Check Outlet Structure for Condition | X (7) | |
| Water Level (low, medium, or high) | X (Low) | |
| **SITE ROADWAYS AND DRAINAGE** | | |
| Check Catch Basins for Build-up of Sediment | X | |
| Check Culverts for Blocked Drainage and/or damage | X (8) | |
| Check Monitoring Wells for Visual Damage | X (5) | |
| General condition of Perimeter Roadways | X | |
| **LEACHATE PIPELINE** | | |
| Check Manhole Exterior Condition | X | |
| Check Transition Station Exterior Condition | X | |
| Check Aboveground Utility Line to the Transition Station | X | |
| General condition of Leachate Pipeline Access Road | **X** | |

**COMMENTS:**

(1) Growth of Cattails was noted on the south side of the Dolby I cover system; however, no standing water was observed.

(2) Woody Vegetation observed on Dolby I cover system was most significant in downspouts and stormwater ponds. In 2019 MEDEP (Lou Pizzuti) indicated that MEDEP is okay with the tree growth so long as the water quality around this landfill does not degrade and the perimeter of the landfill is walked in the spring to assure that no leachate breakouts are occurring.

(3) Small areas of sparse grass vegetation (failure to thrive) on Dolby II and III landfills. The areas of sparse vegetation may be due to concentrated gas in the areas or topsoil with insufficient nutrients. Regardless of cause the areas are small and do not pose a threat to the overall integrity of the cover systems.

(4) Leak Detection Flow rate meter and totalizer are not working (Repair/replacement of meter is planned for summer 2021).

(5) Visual observation of monitoring wells is performed during each environmental monitoring event.

(6) Transducer in leachate pond wet well fails occasionally and is planned for replacement in the summer of 2021.

(7) It appears muskrats have taken up residence in the Sediment Pond 1. Their presence will be monitored as they may attempt to clog the culvert outlet to the pond.

(8) The 24" diameter corrugated metal culvert that crosses the access road near the southwest corner of the leachate pond has rusted and the invert is gone. We recommend replacement of this culvert in 2021.

(9) Three gas vent pipes on Dolby III need repair.

RECOMMENDED ACTIONS:

-Repair and/or Replace leachate pond leak detection flow meter (scheduled for summer 2021)

-Replace leachate pond pump station sump transducer (scheduled for summer 2021).

-Replace 24" diameter corrugated metal pipe with 24" diameter Corrugated Polyethylene Pipe at the southwest corner of the leachate pond.

-Repair three gas vents located on the top of Dolby III during 2021.

Dolby Landfill Inspection Photographs
East Millinocket, Maine
August 20, 2021

Access Road Between Dolby II and Dolby III

Containment Area on Dolby III

Dolby I Cover

Dolby I West Pond

Dolby Landfill Inspection Photographs
East Millinocket, Maine
August 20, 2021

Dolby II Landfill

Dolby II Leachate Pond

Dolby III Broken Gas Vent

Dolby III North Side

Dolby Landfill Inspection Photographs
East Millinocket, Maine
August 20, 2021

Leachate Pond and Pump Station

Leachate Pond North End

Open Area of Dolby III (North End)

Sediment Pond

Dolby Landfill Inspection Photographs
East Millinocket, Maine
August 20, 2021

Sediment Pond

Top of Dolby III

Transition Station

Valley Between Dolby II and Dolby III

SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@smemaine.com
smemaine.com

MEMO TO: William Longfellow, State of Maine **(VIA EMAIL)**

CC: Matt Muzzy, SME

FROM: Brian Pierce, SME

DATE: October 21, 2021

SUBJECT: **LANDFILL INSPECTION**
**FALL 2021**
**DOLBY I, II AND III LANDFILLS**

The Dolby I, II, and III Landfill inspection (summer quarter) was completed by Brian Pierce of Sevee & Maher Engineers, Inc. (SME) on October 5, 2021. Inspection forms and photographs for the inspection are attached.

This inspection did not reveal any maintenance items that need to occur immediately; however, we recommend that Maine Bureau of General Services (BGS) address the following maintenance items before the end of 2021. The items listed below are located as shown on attached Figure 1.

1. Coordinate with Mid-South to get newly installed leak detection system transmitter data to match the existing leak detection panel flow and totalizer. SME has contracted with Mid-South Engineering who will work with Stevens Electric of Monmouth, Maine to get the systems to integrate properly. This work will be performed during fall 2021.
2. Repair two gas vents on the top of the Dolby III Cover Upgrade area. The gas vents were not attached to their bases when viewed this summer. It appears the vents were not originally glued to their bases. Repair will include hand excavation (+/- 9" depth) around the base, inserting a 4-inch PVC coupling, and gluing the vent pipe onto its base. The geomembrane boots will be reconstructed around the gas vents during construction for Phase 2 of the Dolby III Cover Upgrade project. Blaine McLaughlin has been contracted to do this work during fall 2021.
3. Repair one gas vent on the top of the Dolby III Cover Upgrade area. The function of the vent does not appear to be impacted, however, the gas vent was leaning and did not feel like it was attached to its base. Repair will include hand excavation (+/- 9" depth) around the base, repair, straightening, and gluing the vent pipe onto its base. A geomembrane boot will be reconstructed around the gas vent (if needed) during construction of Phase 2 of the Dolby III Cover Upgrade project. SME has contracted with Blaine McLaughlin to do this work during fall 2021.
4. Locate and clean the outlet of the corrugated metal culvert crossing the leachate pond perimeter road near the northwest corner of the leachate pond. The function of this culvert is critical as clogging of the culvert can cause stormwater/snow melt to back up in the ditch adjacent to the leachate pond and flow into the leachate pond. The culvert is critical to controlling emergency discharges from the leachate pond spillway. SME has contracted with Adam Qualey Excavation to do this work during fall 2021.
5. Replacement of a corrugated metal culvert that crosses the gravel access road immediately southwest of the leachate pond. The invert of this culvert is corroded and/or missing in some locations. We recommend replacement of the culvert with a 24-inch diameter corrugated polyethylene pipe. SME has contracted with Adam Qualey Excavation to do this work during fall 2021.

6. Installation of reflective tape or objects on the landfill back gate to increase visibility to recreational vehicles. SME has contracted with Blaine McLaughlin to do this work during fall 2021.
7. Repair of the leachate pond pump station hatch for Pump 1. The hatch hinges are broken and in need of repairs. SME has contracted with Blaine McLaughlin to do this work during fall 2021.

The following maintenance items were identified and can be addressed in the future as they are not currently causing problems with landfill operations:

8. Replacement of the culvert crossing the Landfill perimeter road between the southwest corner of Dolby III and the southwest sedimentation basin. The culvert is damaged (but functional). Replacement of this culvert is anticipated when cover upgrade construction occurs in the southwest corner of the Dolby III landfill.
9. Repair of an area of sparse grass growth on the north side of Dolby III. There are no signs of erosion in the area (roughly 10' x 10'), however is without vegetation and should be monitored. The area will be covered during construction of Phase 2 of the Dolby III Cover Upgrade project.
10. Repair two small "dents" noted in the primary geomembrane of the leachate pond. One dent was noted below the emergency outlet and one was located on the middle of the east side of the pond. Both dents are at high elevations that is seldom see leachate. The damage should be repaired the next time a geomembrane repair company visits the site.
11. Lou Pizzuti and SME to prepare a cost estimate to increase the ability for remote monitoring of leachate pond pump station, leachate pond leak detection, leachate pond underdrain, and leachate pipeline flow meter building. SME has asked Mid-South Engineering to provide a cost to create a plan for this service.

Leachate Pump 1 was removed from the leachate pond wet well prior to the Landfill site visit. Evaluation of the pump by Stevens Pump & Electric (Stevens) of Monmouth, Maine indicated that the pump is in need of repair or replacement. SME is currently working with Stevens to determine the cost for each option.

Please contact Matt Muzzy or me if you have any questions or require additional information.

Thank you.

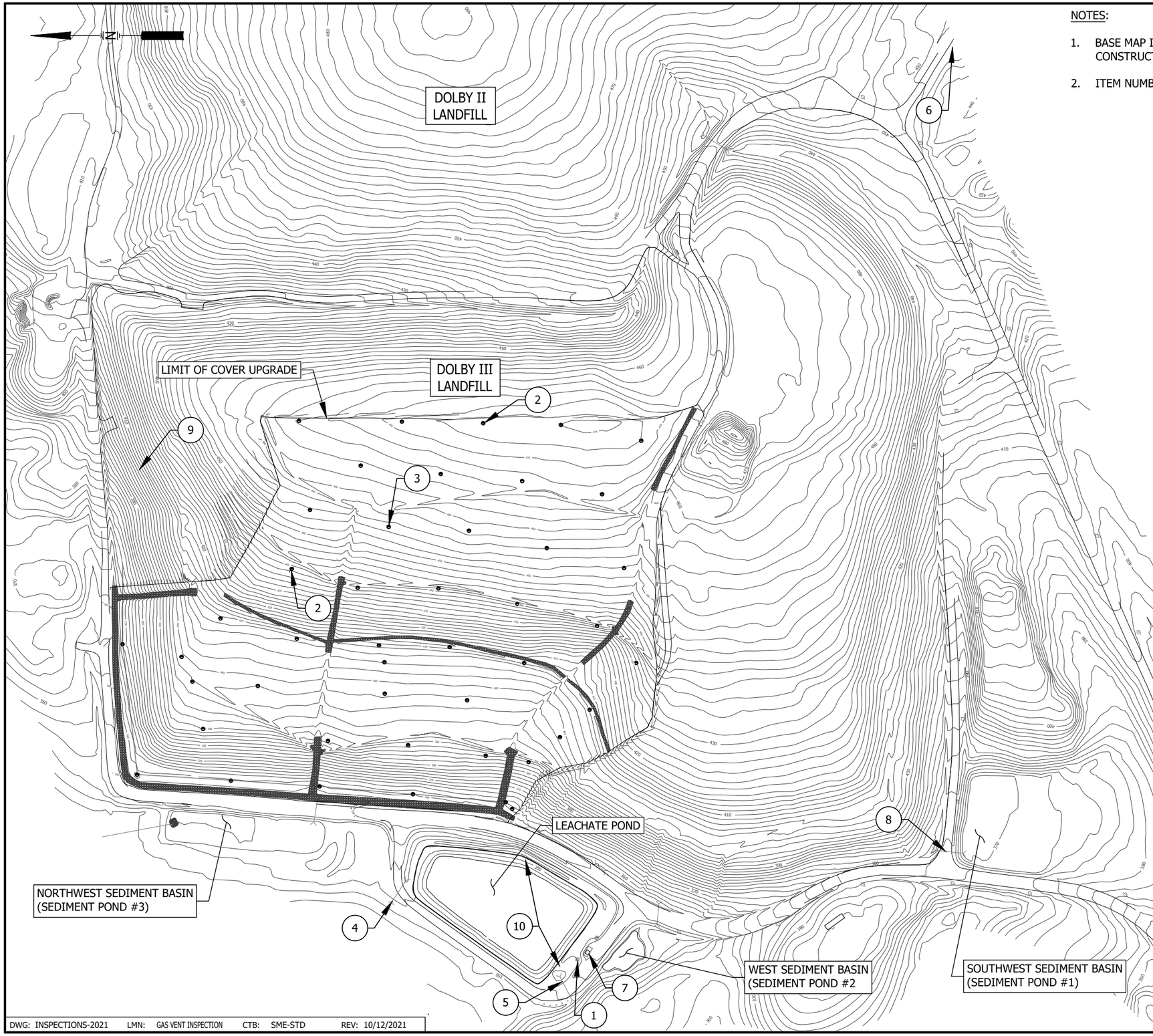
Attachments

Attachment 1 - Figure 1 – Site Plan
Attachment 2 – Fall Quarter Site Inspection Forms and Photos

**ATTACHMENT 1**

**FIGURE 1 – SITE PLAN**

SME
SEVEE & MAHER
ENGINEERS




NOTES:

1. BASE MAP IS A COMPILATION OF PREVIOUS SURVEYS AND SHOULD NOT BE USED FOR CONSTRUCTION ESTIMATES.
2. ITEM NUMBERS ARE THE SAME AS THOSE MENTIONED IN THE AUGUST 2021 INSPECTION MEMO.

| MAINTENANCE ITEM NO. | DESCRIPTION |
|---|---|
| 1 | LEAK DETECTION FLOW METER REPLACEMENT |
| 2 | BROKEN GAS VENT |
| 3 | LEANING GAS VENT |
| 4 | LOCATE AND CLEAN CULVERT OUTLET |
| 5 | 24" DIA CULVERT REPLACEMENT |
| 6 | GATE REFLECTOR INSTALL |
| 7 | LEACHATE PUMP 1 HATCH REPAIR |
| 8 | CULVERT REPLACEMENT |
| 9 | COVER AREA WITHOUT VEGETATION |
| 10 | LEACHATE POND GEOMEMBRANE DENT REPAIR |

125 0 250 FEET

FIGURE 1
DOLBY INSPECTION SITE PLAN
DEPARTMENT OF ADMINISTRATION AND FINANCIAL SERVICES
BUREAU OF GENERAL SERVICES
EAST MILLINOCKET, MAINE

SME
SEVEE & MAHER ENGINEERS

DWG: INSPECTIONS-2021 LMN: GAS VENT INSPECTION CTB: SME-STD REV: 10/12/2021

\\tserver\dfs\Kpc\Dol\COVER UPGRADE\Acad\RecDwgs\Figures\INSPECTIONS-2021.dwg, 10/12/2021 10:52:20 AM, bwb

**ATTACHMENT 2**

**FALL QUARTER SITE INSPECTION FORMS AND PHOTOS**

SME
SEVEE & MAHER
ENGINEERS

**DOLBY LANDFILL**
**LANDFILL INSPECTION CHECKLIST**

Date: October 5, 2021 Time: 10:30 a.m. to 3:30 p.m.

Weather: Sunny 65-70 F Inspected By: BDP

| Item | Condition | |
|---|---|---|
| **DOLBY I LANDFILL** | **Ok** | **Not Ok** |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | X | |
| Poor Drainage, Ponding | X (1) | |
| Excessive Settling, Crack Development | X | |
| Grass Die-off-Failure to Thrive | X | |
| Mowing Required | X (2) | |
| Germination of Trees, Deep Root Vegetation | X (2) | |
| Animal Burrowing | X | |
| **COLLECTION PONDS** | | |
| West End Pond Level (low, medium, or high) | X (Medium) | |
| East End Pond Level (low, medium, or high) | X(Low) | |
| Vegetative Build-up in Ponds (Cat Tails and Trees) | X | |
| **ACCESS GATES** | | |
| Gates Secured and Working Properly (Facility Main Gates) | X | |
| Road Accessible by Vehicle | X | |
| **DOLBY II LANDFILL** | | |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | X | |
| Poor Drainage, Ponding | X | |
| Excessive Settling, Crack Development | X | |
| Grass Die-off, Failure to Thrive | X(3) | |
| Mowing Required (Mowing Should Occur Next Year due to Woody Vegetation) | X | |
| Germination of Trees, Deep Root Vegetation | X | |
| Animal Burrowing | X | |
| **PERIMETER DRAIN CATCH BASINS** | | |
| Build-up Sediment in Catch Basins | X | |
| Flow Conditions (low, medium, or high) | X (Medium)) | |
| Catch Basins Intact and Serviceable | X | |
| **LEACHATE HOLDING POND** | | |
| Iron Staining (wooded area east of pond) | X | |
| Holding Pond Level | X (Medium) | |
| **DOLBY III LANDFILL** | | |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | X | |
| Excessive Settling, Crack Development | X | |
| Grass Die-off-Failure to Thrive | X (3) | |
| Mowing Required | X | |
| Germination of Trees, Deep Root Vegetation | X | |
| Poor Drainage, Ponding | X | |
| Animal Burrowing | X | |
| Access Road Condition | X | |
| Gas Vent Pipes | X (9) | |
| Active Area Berm | X | |
| **PERIMETER DRAIN AND CATCH BASINS** | | |
| Build-up of Sediment in Catch Basins | X | |
| Valves Functioning Properly (free turning) | X | |

| Item | Condition | |
|---|---|---|
| **LEACHATE COLLECTION POND** | **Ok** | **Not OK** |
| **LINER** | | |
| Condition of Liner (rips, holes, torn seams) | X (6) | |
| **LEACHATE PUMP STATION** | | |
| Build-up Sediment in Wetwells or Leachate Pond | X | |
| Pumps Functioning Properly (amps, noises) | X (10) | |
| Valves Functioning Properly (free turning) | X | |
| Flow Conditions (low, medium, or high) | X (Medium) | |
| Properly Vented | X | |
| Electrical Panel Inspection (corrosion, etc.) | X | |
| Flow Meter Inspection | X | |
| Transducer | X | |
| **LEAK DETECTION SYSTEM** | | |
| Pump functioning properly (amps, noises) | X | |
| Flow Conditions (low, medium, high) | X (Low) | |
| Flow Meter Inspection | X(4) | |
| Control Panel Inspection | X | |
| | | |
| **UNDERDRAIN PUMPING SYSTEM** | | |
| Pump functioning properly | X | |
| Flow Conditions | X (High) | |
| | | |
| **SITE SEDIMENTATION STRUCTURES** | | |
| **NORTHWEST SEDIMENT POND (SEDIMENT POND 3)** | | |
| Check Outlet Structure for Condition | X | |
| Water Level (low, medium, or high) | X (Medium) | |
| **WEST SEDIMENT POND (SEDIMENT POND 2)** | | |
| Check Outlet Structure for Condition | X | |
| Water Level (low, medium, or high) | X (Medium) | |
| **SOUTHWEST SEDIMENT POND (SEDIMENT POND 1)** | | |
| Check Outlet Structure for Condition | X (7) | |
| Water Level (low, medium, or high) | X (Medium) | |
| **SITE ROADWAYS AND DRAINAGE** | | |
| Check Catch Basins for Build-up of Sediment | X | |
| Check Culverts for Blocked Drainage and/or damage | X (8) | |
| Check Monitoring Wells for Visual Damage | X (5) | |
| General condition of Perimeter Roadways | X | |
| **LEACHATE PIPELINE** | | |
| Check Manhole Exterior Condition | X | |
| Check Transition Station Exterior Condition | X | |
| Check Aboveground Utility Line to the Transition Station | X | |
| General condition of Leachate Pipeline Access Road | **X** | |

**COMMENTS:**

(1) Growth of Cattails was noted on the south side of the Dolby I cover system; however, no standing water was observed.

(2) Woody Vegetation observed on Dolby I cover system was most significant in downspouts and stormwater ponds. In 2019 MEDEP indicated that MEDEP is okay with the tree growth so long as the water quality around this landfill does not degrade and the perimeter of the landfill is walked in the spring to assure that no leachate breakouts are occurring.

(3) Small areas of sparse grass vegetation (failure to thrive) on Dolby II and III landfills. The areas of sparse vegetation may be due to concentrated gas in the areas or topsoil with insufficient nutrients. Regardless of cause the areas are small and do not pose a threat to the overall integrity of the cover systems.

(4) Leak Detection Flow rate meter and totalizer were replaced during the week of October 1. Mid-South Engineering indicates that the flow rate and totals from the new interface and existing totalizer screen do not match, and programming will be needed to make them match.

(5) Visual observation of monitoring wells is performed during each environmental monitoring event.

(6) Two dents were found high up in the leachate pond geomembrane. One just below the emergency outlet and one on the middle of the east side of the pond.

(7) It appears muskrats have taken up residence in the Sediment Pond 1. Their presence will be monitored as they may attempt to clog the culvert outlet to the pond.

(8) The 24" diameter corrugated metal culvert that crosses the access road near the southwest corner of the leachate pond has rusted and the invert is gone. The culvert is scheduled to be repaired by Adam Qualey during the week of October 10, 2021.

(9) Three gas vent pipes on Dolby III need repair.

(10) Leachate Pump 1 pulled by Stevens Pump due to failed voltage leak. Bench testing will be performed by Stevens and repairs will be made as needed so that pump can be reinstalled in late Fall 2021.

RECOMMENDED ACTIONS:

-Repair and/or Replace leachate pond leak detection flow meter (scheduled for summer 2021)

-Replace leachate pond pump station sump transducer (scheduled for summer 2021).

-Replace 24" diameter corrugated metal pipe with 24" diameter Corrugated Polyethylene Pipe at the southwest corner of the leachate pond. (Scheduled for Fall 2021)

-Repair three gas vents located on the top of Dolby III during 2021. (Scheduled for fall 2021)

- Put reflective tape on the gate at the back of the property and add a reflective triangle also. (Scheduled for Fall 2021)

- Repair "dents" found high up in the leachate pond geomembrane next time RTD is scheduled to visit the site.

- Repair/replace broken hinges on Pump Station Hatch for Pump 1 (Scheduled for Fall 2021)

-Diagnose, Repair and Reinstall Leachate Pump 1. (Currently with Stevens Electric)

- Add reflective markers to back gate of landfill

Dolby Landfill Inspection Photographs
East Millinocket, Maine
October 5, 2021

Dolby II Cover Repairs

Dolby II Leachate Holding Pond

Dolby III Cover Upgrade Area West Side

Dolby III Lagoon Sediment Temporary Disposal Area Inlet

Dolby Landfill Inspection Photographs
East Millinocket, Maine
October 5, 2021

Dolby III Landfill Leachate Inlet DMH4-#1A

Dolby III Landfill Northwest side

Dolby III Landfill Southwest Side

Dolby III Landfill North Side

Dolby Landfill Inspection Photographs
East Millinocket, Maine
October 5, 2021

Dolby Landfill Back Gate

Leachate Pond Leak Detection Manhole Exterior

Leachate Pond Leak Detection Flow Meter

Leachate Pond Emergency Outlet

Dolby Landfill Inspection Photographs
East Millinocket, Maine
October 5, 2021


Leachate Pond Leak Detection Flow Transmitter

Leachate Pond Pump Station Building

Leachate Pond Underdrain Pump Station

Leachate Pond Underdrain Pump

Dolby Landfill Inspection Photographs
East Millinocket, Maine
October 5, 2021


Leachate Pond Underdrain Run Time Meter

Leachate Pond

Leachate Pump Station Hatch Repair Needed


Leachate Pump Station Leak Detection Control Panel

Dolby Landfill Inspection Photographs
East Millinocket, Maine
October 5, 2021

Leachate Pump Station Sonic Level Transmitter

Leachate Transport Pipeline Emergency Leachate Disposal Pad

Leachate Transport Pipeline Flow Meter Building Interior

Leachate Transport Pipeline Flow Meter Building Exterior

Dolby Landfill Inspection Photographs
East Millinocket, Maine
October 5, 2021

Leachate Transport Pipeline Transition Station

Sediment Pond #1 (Southwest)

Sediment Pond #3 (Northwest)

Sediment Pond 2 (West)

Project Name: Dolby Landfills
Facility License Number: #S-000796-WO-AO-N
Location: East Millinocket
Inspection Date: November 2, 2021 Report Date: November 30, 2021
Report Completed By: Vera Maheu and Kathleen Tarbuck

# Technical Services Inspection
# Annual Site Visit

**Purpose**:
Maine Department of Environmental Protection (DEP) staff conducted an inspection of the Dolby Landfills located in East Millinocket on November 8, 2021 as a general overview for staff newly assigned to the site and as the annual site visit.

**Site Location:** Located approximately 2.5 miles north of the East Millinocket Wastewater Treatment Facility (at the old paper mill site) on Route 157/11/Main Street. Turn right onto Dolby Landfill Road.

**Weather Conditions**: Temperature in the 40ºF's, cloudy with wind.

**Attendees:**
DEP Personnel Present: Sean Dougherty, Vera Maheu, Kathy Tarbuck,
BGS Personnel Present: William Longfellow
Sevee & Maher Personnel Present: Matt Muzzy, Brian Pierce
Town Personnel Present: Dick Angotti

**Site History**
On June 13, 1984, the Great Northern Paper Company ("GNP") received Department approval to construct and operate the Dolby III Landfill (#L-000796-07-A-N). Dolby III occupies approximately 72 acres. The originally approved waste streams were wastewater sludges, woodroom/woodyard waste, wood ash, and general rubbish from GNP's Millinocket and East Millinocket paper mills and municipal solid waste (MSW) from the local communities. The disposal of MSW was discontinued in 1993. On April 28, 2003, the Department approved the transfer from GNP of all solid waste licenses and other Department licenses associated with the Dolby Landfill Facility to Katahdin Paper Company LLC ("KPC"). On August 30, 2011, the Maine State Planning Office ("SPO") acquired the Dolby Landfill Facility and related properties from KPC. On September 28, 2011, the Department approved the transfer of all solid waste licenses (#S-000796-WR-AJ-T) and other Department licenses associated with the Dolby Landfill Facility to the SPO from KPC. The SPO has since been dissolved and responsibilities for the oversight and operation of the Dolby Landfill Facility have been turned over to DAFS/BGS (Department of Administrative and Financial Services, Bureau of General Services). DAFS/BGS proposed to close the remaining open portions of Dolby III and upgrade the cover systems of the previously closed areas of Dolby II and III in several phases.

**Site Visit**
Prior to the inspection, Matt Muzzy provided a detailed overview of the history of the Dolby Landfill, as well as plans for Phase II and III cover system for Dolby III. These plans were submitted to the DEP as an application in 2017 but were put on hold due to lack of funding. The

State of Maine has since allocated $7 million for Phases II and III. The original plans have undergone non-substantative revisions based on the funds available. The updates will likely be submitted by the end of November 2021 with construction expected to occur in 2022, after the issuance of the solid waste condition compliance license. An estimated 33 acres will be closed/covered in 2022. Dolby II, which occupies approximately 62 acres, has a soil cover. After the landfill inspection, Matt Muzzy took the group on a driving tour of the entire pipeline, from the landfill to the water treatment plant.

A. Notes and Observations:

The following were noted during the inspection:

1. The leachate pond liner was replaced in 2007. There appears to be some leakage, but this has not been definitely determined. Dye tests performed in 2021 were inconclusive. The investigation is on-going.

2. The entire leachate pipeline is cleaned every 3 years, with the low points being cleaned in the off years. The force main pipeline is cleaned every year.

3. The flow meter needs to be "re-ranged" to match the reading on the computer.

4. Pump #1 needs to be repaired (approx. $17,000-$20,000) or replaced (approx. $50,000).

5. The leak detection manhole was covered with plastic held in place with concrete blocks. The cover does not fit well. See Photo 1.

6. The cover installed in 2016 as Phase I construction appeared to be in good condition and well maintained. See photo 2.

7. Several riprap channels were overgrown with vegetation. Some vegetation was removed last year with plans to remove vegetation again next year. See photo 3.

8. The remains of wood track matting were stockpiled on top of Dolby III. These were used by Sargent for Phase I of the cover project. See Photo 4.

9. The open area on top of Dolby III was contained and controlled properly with intact berms and drainage. See photo 5.

10. It was noted that one side of Dolby II/III was mowed each year, with the other side being mowed the following year. The plan is to mow both sides to see if that will help the snow blow off the landfill (as compared to getting caught in the tall grass), and thereby reduce the runoff/leachate in the spring.

11. Dolby I, which has been closed for over 30 years, is no longer mowed or consistently maintained; however, the perimeter is checked for leachate breakouts each spring. If the area is to be cleared, it will need to be done soon or it will be too much to bush hog . There are already several small trees growing, some approximately 3-4" around. . Discussions had been held during previous visits about whether to let it grow wild or to revert back to maintaining and mowing.

B. Recommended Actions:

1. Continue to investigate the potential leachate pond liner issue.

2. Remove vegetation from the rip rap channels next year, as appropriate, so the channels continue to work as designed and the vegetation does not become too overgrown.

cc: DEP: Vera Maheu, Sean Dougherty, Kathleen Tarbuck
BGS: William Longfellow
SME: Matt Muzzey

| | |
|---|---|
| **Photograph Number:** 1 |  |
| **Description:**<br>Leak detection manhole cover near the leachate pond | |

| | |
|---|---|
| **Photograph Number:** 2 |  |
| **Description:**<br><br>Leachate pond with 2016 Phase I cover system in background. | |

| | |
|---|---|
| **Photograph Number:** 3 |  |
| **Description:**<br><br>Rip rap with vegetation. | |

Project Name: Dolby Landfills
Facility License Number: #S-000796-WO-AO-N
Location: East Millinocket
Inspection Date: November 2, 2021 Report Date: November 30, 2021
Photographs Taken By: Vera Maheu and Kathleen Tarbuck

| | |
|---|---|
| **Photograph Number:** 4 |  |
| **Description:**<br><br>Wood mat stockpile on top of Dolby III | |

| | |
|---|---|
| **Photograph Number:** 5 |  |
| **Description:**<br><br>Area opened and bermed on top of Dolby III for occasional waste. | |

**APPENDIX B**

**MONITORING WELL MW-202B**

SME
SEVEE & MAHER
ENGINEERS

SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@sme-engineers.com
sme-engineers.com

August 11, 2021

Mr. Lou Pizzuti
Bureau of Remediation and Waste Management
Maine Department of Environmental Protection
106 Hogan Road, Suite 6
Bangor, ME 04401

Subject: Monitoring Wells MW-202AR and 202BR

Dear Mr. Pizzuti,

The purpose of this letter is to document replacement of monitoring well MW-202B at the Dolby Landfill in East Millinocket, Maine. MW-202B apparently was damaged by past freezing and frost heaving of the well pipe (PVC) and outer protective steel casing (see Photo 1). In 2020, it was determined the well pipe had become sufficiently damaged several feet below the ground surface to preclude insertion of the necessary water sampling and water level measuring equipment.

On July 30, 2021, New England Boring Contractors (NEBC) replaced MW-202B with MW-202BR. The installation log for MW-202BR is provided as Attachment 1. NEBC also replaced the protective casing for MW-202AR, as the existing protective casing and a portion of the inner PVC well casing had apparently heaved (see Photo 1). Photo 2 shows the repaired wells. MW-202AR is the well shown on the left side of Photo 2, and MW-202BR is the well on the right side of Photo 2. The well in the foreground of Photo 2 is MW-202A, which was abandoned many years ago. The original MW-202A and B wells were installed in 1982.

As can be envisioned from Photos 1 and 2, the top of PVC elevations for MW-202AR and MW-202BR are no longer known. Until such time that vertical survey is conducted at other site locations, and MW-202AR and 202BR can be directly measured, the top of PVC for both wells will be assumed to be El. 414.00, which is consistent with the approximate average elevation previously used for former monitoring wells MW-202AR and MW-202B.

A copy of this letter will be included in the 2021 Annual Report for the Dolby Landfill. If you have any questions or edits regarding the information herein, please do not hesitate to contact me.

Sincerely,

SEVEE & MAHER ENGINEERS, INC.

Matthew W. Muzzy, P.E.
Principal/Senior Geo-Environmental Engineer

Attachments

cc: Brian Pierce (SME)

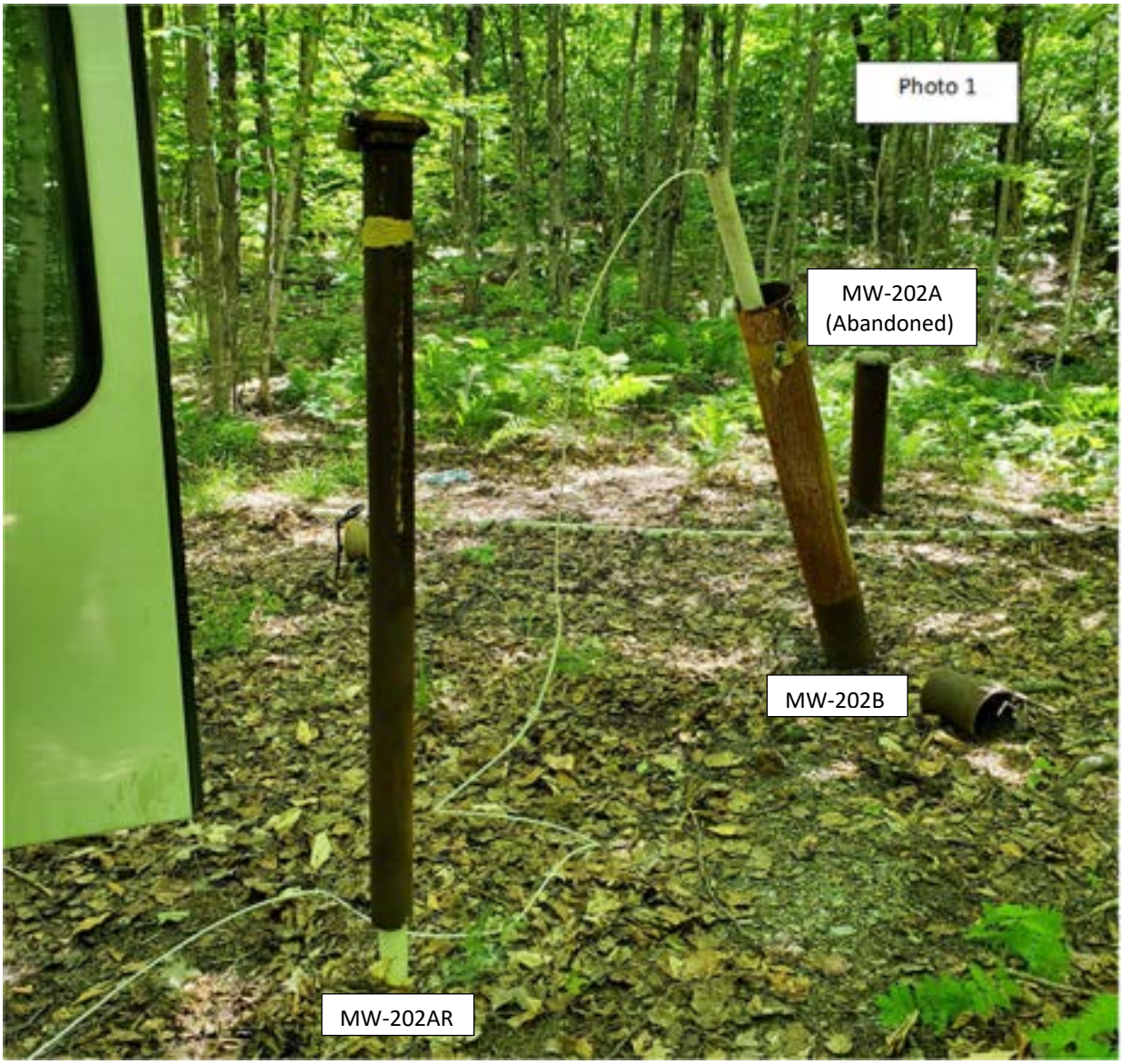


Photo 1
MW-202A
(Abandoned)
MW-202B
MW-202AR


Photo 2
MW-202AR
(Repaired)
MW-202BR
MW-202A
(Abandoned)

**ATTACHMENT 1**

**BORING LOGS**

SME
SEVEE & MAHER
ENGINEERS

SME
Sevee & Maher Engineers, Inc.

PROJECT
Dolby Landfill
Repair of MW-202AR

REPORT OF BORING : 202AR
SHEET 1 of 1
JOB N0.
CHKD. BY MWM

DRILLER: New Hampshire Borings / Tom Schaeffer
INSPECTOR: Brian Bardwell
SAMPLER: No samples taken
CASING:
CASING SIZE: OTHER:

HORIZ: na — See notes for datum
ELEV. GROUND na — WELL TPVC Est 214.00 feet
DATE START 7/30/2021 — DATE END 7/30/2021

GROUNDWATER READINGS

| DATE | TIME | DTW (ft btor) | CASING | STABILIZATION TIME |
|---|---|---|---|---|
| | | | | |
| | | | | |

| DEPTH | CASING | BLOWS | SAMPLE NO. | PEN./REC-ft | SAMPLE DEPTH (Ft.) | LABORATORY SAMPLE ID | SAMPLE DESCRIPTION | PID (ppm) | WELL INSTALLATION DIAGRAM |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Glacial Till<br><br>Note: this is a repair for MW-202AR. The well standpipe for MW-202AR had heaved to > 5 feet above the ground surface. The PVC stickup was shortened to approximatey 2.5 feet above the ground sureface and a new protective standpipe was installed. | | |

Notes:

SME
Sevee & Maher Engineers, Inc

PROJECT
Dolby Landfill
Replacement of MW-202B

REPORT OF BORING : 202BR
SHEET 1 of 1
JOB N0.
CHKD. BY MWM

DRILLER: New Hampshire Borings / Tom Schaeffer
INSPECTOR: Brian Bardwell
SAMPLER: No samples taken
CASING: HW
CASING SIZE: 4 inch OTHER: HQ core

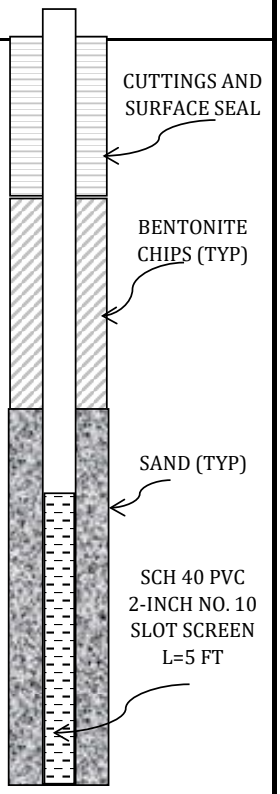
HORIZ: na — See notes for datum
ELEV. GROUND na — WELL TPVC Est 214.00 feet
DATE START 7/30/2021 — DATE END 7/30/2021

GROUNDWATER READINGS

| DATE | TIME | DTW (ft btor) | CASING | STABILIZATION TIME |
|---|---|---|---|---|
| | | | | |
| | | | | |

| DEPTH | CASING | BLOWS | SAMPLE NO. | PEN./ REC-ft | DEPTH (Ft.) | LABORATORY SAMPLE ID | SAMPLE DESCRIPTION | PID (ppm) |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | 1 | | Glacial Till | |
| | | | | | | | | |
| | | | | | 2 | | | |
| | | | | | | | | |
| | | | | | 3 | | | |
| | | | | | | | | |
| | | | | | 4 | | | |
| | | | | | | | | |
| 5 | | | | | 5 | | | |
| | | | | | | | | |
| | | | | | 6 | | | |
| | | | | | | | | |
| | | | | | 7 | | | |
| | | | | | | | | |
| | | | | | 8 | | | |
| | | | | | | | 8.5 Feet | |
| | | | | | 9 | | Bedrock | |
| | | | | | | | | |
| 10 | | | | | 10 | | | |
| | | | | | | | | |
| | | | | | 11 | | | |
| | | | | | | | | |
| | | | | | 12 | | Bottom of Boring at 12 feet | |
| | | | | | | | | |
| | | | | | 13 | | | |
| | | | | | | | Note: this is a replacement well for MW-202B. | |
| | | | | | 14 | | MW-202B was pulled out and borehole backfilled | |
| | | | | | | | with bentonite chips. | |
| 15 | | | | | 15 | | Replacement well is 2-inch diameter PVC, stickup | |
| | | | | | | | is approximately 2.5-feet. Screen zone is 7 to 12 | |
| | | | | | 16 | | feet. Sand pack is 6 to 12 feet. Bentonite seal 3.5 | |
| | | | | | | | to 6 feet. Cuttings and bentonite surface seal 3.5 | |
| | | | | | 17 | | feet to top of ground . Protective surface casing | |
| | | | | | | | installed | |
| | | | | | 18 | | | |
| | | | | | | | | |
| | | | | | 19 | | | |
| | | | | | | | | |
| 20 | | | | | 20 | | | |
| | | | | | | | | |

WELL INSTALLATION DIAGRAM




Notes:

# APPENDIX C

# LEACHATE POND ACTIVITIES

SME
SEVEE & MAHER
ENGINEERS

**ATTACHMENT 1**
**LEACHATE FLOW DATA**
**DOLBY LANDFILL FACILITY**
**EAST MILLINOCKET, MAINE**
**January-2021**

| DAY OF MONTH | PUMP RUN TIME | | | | | Calculated GPM | LEACHATE VOLUME | | | | LEACHATE POND LEVEL (Feet) | LEAK DETECTION | | | DAILY RAINFALL[5] (Inches) | LEACHATE UNDERDRAIN | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | LEVEL | FLOW | TOTAL[7] | | Initial[6] | End[6] | Total | Total Flow | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | | (Gallons) | (Gallons) | (Gallons) | (%) | | (Inches) | (gallons) | (gallons) | | (Hours) | (Hours) | (Minutes) | (Gallons) | |
| 1 | | | 9,079.4 | 9,087.5 | 486 | 501 | 243,000 | 243,500 | 500 | 0.2% | 2.49 | 11.40 | 0 | | | 6622.4 | 6649.2 | 1608 | 40200 | |
| 2 | | | | | 0 | | | | 0 | | | | 0 | | 0.037 | | | 0 | 0 | |
| 3 | 8,712.7 | 8,719.7 | | | 420 | 501 | 210,000 | 210,400 | 400 | 0.2% | | | 0 | | | | | 0 | 0 | |
| 4 | | | 9,087.5 | 9,101.3 | 828 | 500 | 414,000 | 414,050 | 50 | 0.0% | 2.33 | 11.20 | 0 | | | 6649.2 | 6692.2 | 2580 | 64500 | |
| 5 | | | | | 0 | | | | 0 | | | | 0 | | 0.132 | | | 0 | 0 | |
| 6 | 8,719.7 | 8,726.2 | | | 390 | 500 | 195,000 | 195,010 | 10 | 0.0% | 2.37 | 11.10 | 0 | | | 6692.2 | 6715.6 | 1404 | 35100 | |
| 7 | | | | | 0 | | | | 0 | | | | 0 | | 0.002 | | | 0 | 0 | |
| 8 | | | 9,101.3 | 9,108.5 | 432 | 500 | 216,000 | 216,200 | 200 | 0.1% | 2.51 | 11.10 | 0 | | | 6715.6 | 6740.6 | 1500 | 37500 | |
| 9 | | | | | 0 | | | | 0 | | | | 0 | | 0.000 | | | 0 | 0 | |
| 10 | 8,726.2 | 8,731.9 | | | 342 | 501 | 171,000 | 171,250 | 250 | 0.1% | | | 0 | | | | | 0 | 0 | |
| 11 | | | 9,108.5 | 9,115.3 | 408 | 500 | 204,000 | 204,100 | 100 | 0.0% | 2.32 | 10.70 | 0 | | | 6740.6 | 6760.8 | 1212 | 30300 | |
| 12 | | | | | 0 | | | | 0 | | | | 0 | | 0.000 | | | 0 | 0 | |
| 13 | 8,731.9 | 8,737.5 | | | 336 | 500 | 168,000 | 168,025 | 25 | 0.0% | 2.52 | 10.70 | 0 | | | 6760.8 | 6791.3 | 1830 | 45750 | |
| 14 | | | | | 0 | | | | 0 | | | | 0 | | 0.000 | | | 0 | 0 | |
| 15 | | | 9,115.3 | 9,121.8 | 390 | 500 | 195,000 | 195,150 | 150 | 0.1% | 2.38 | 10.50 | 0 | | | 6791.3 | 6804.7 | 804 | 20100 | |
| 16 | | | | | 0 | | | | 0 | | | | 0 | | 0.000 | | | 0 | 0 | |
| 17 | | | | | 0 | | | | 0 | | | | 0 | | | | | 0 | 0 | |
| 18 | | | 9,121.8 | 9,128.7 | 414 | 501 | 207,000 | 207,500 | 500 | 0.2% | 2.49 | 10.80 | 0 | | | 6804.7 | 6828.8 | 1446 | 36150 | |
| 19 | | | | | 0 | | | | 0 | | | | 0 | | 0.020 | | | 0 | 0 | |
| 20 | 8,737.5 | 8,743.3 | | | 348 | 501 | 174,000 | 174,325 | 325 | 0.2% | 2.72 | 10.70 | 0 | | | 6828.8 | 6856.1 | 1638 | 40950 | |
| 21 | | | | | 0 | | | | 0 | | | | 0 | | 0.006 | | | 0 | 0 | |
| 22 | | | 9,128.7 | 9,135.2 | 390 | 500 | 195,000 | 195,142 | 142 | 0.1% | 2.60 | 10.80 | 0 | | | 6856.1 | 6879.3 | 1392 | 34800 | |
| 23 | | | | | 0 | | | | 0 | | | | 0 | | 0.000 | | | 0 | 0 | |
| 24 | | | | | 0 | | | | 0 | | | | 0 | | | | | 0 | 0 | |
| 25 | 8,743.3 | 8,748.8 | | | 330 | 500 | 165,000 | 165,136 | 136 | 0.1% | 2.73 | 10.50 | 0 | | 0.000 | 6879.3 | 6908.4 | 1746 | 43650 | |
| 26 | | | | | 0 | | | | 0 | | | | 0 | | | | | 0 | 0 | |
| 27 | | | 9,135.2 | 9,141.0 | 348 | 502 | 174,000 | 174,560 | 560 | 0.3% | 2.65 | 10.50 | 0 | | 0.000 | 6908.4 | 6912.7 | 258 | 6450 | |
| 28 | | | | | 0 | | | | 0 | | | | 0 | | | | | 0 | 0 | |
| 29 | 8,748.8 | 8,754.7 | | | 354 | 500 | 177,000 | 177,000 | 0 | 0.0% | 2.46 | 10.60 | 0 | | 0.037 | 6912.7 | 6935.8 | 1386 | 34650 | |
| 30 | | | | | 0 | | | | 0 | | | | 0 | | | | | 0 | 0 | |
| 31 | | | 9,141.0 | 9,146.9 | 354 | 500 | 177,000 | 177,000 | 0 | 0.0% | | | 0 | | | | | 0 | 0 | |
| | | | | | | | 3,285,000 | 3,288,348 | | | | | | | 0.234 | | | 18,804 | 470,100 | |
| | | | | | | | 205,313 | gpd | | | | | | | | | | | | |
| | | | | | | | 143 | gpm | | | | | | | | | | | | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered flow from Flowmeter in Flow Meter Buidling.
4. Differnce is calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow, minus 100%.
5. Rainfall as measured at leachate pump station adjacent to leachate pond.
6. Total pumping time from underdrain pump run time meter located in the leachate pump station building. Average flow assumed to be 25 gallons per minute.
7. Leak detection flow meter is not working and will be replaced in the spring of 2021.

# ATTACHMENT 1
# LEACHATE FLOW DATA
# DOLBY LANDFILL FACILITY
# EAST MILLINOCKET, MAINE
# February-2021

| DAY OF MONTH | PUMP RUN TIME | | | | | LEACHATE VOLUME | | | | LEACHATE POND | LEAK DETECTION | | | DAILY RAINFALL[5] | LEACHATE UNDERDRAIN[8] | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | | | | | | | | | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | (Gallons) | (Gallons) | (Gallons) | (%) | LEVEL[6] (Feet) | LEVEL[7] (Inches) | FLOW (gallons) | TOTAL (gallons) | (Inches) | Initial (Hours) | End (Hours) | Total (Minutes) | Total Flow (Gallons) | |
| 1 | 8,754.7 | 8,754.7 | 9,146.9 | 9,146.9 | 0 | 0 | | 0 | | 2.34 | 10.10 | | | 0.000 | 6935.8 | 6956.4 | 1236 | 30900 | |
| 2 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 3 | 8,754.7 | 8,756.2 | | | 90 | 55,350 | 55,666 | 316 | -0.57% | 2.09 | 10.60 | | | 0.000 | 6956.4 | 6975.5 | 1146 | 28650 | |
| 4 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 5 | 8,756.2 | 8,760.0 | | | 228 | 139,080 | 139,327 | 247 | -0.18% | 2.52 | 10.90 | | | 0.144 | 6975.5 | 6990.3 | 888 | 22200 | |
| 6 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 7 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 8 | | | 9,146.9 | 9,151.9 | 300 | 182,700 | 183,027 | 327 | -0.18% | 2.00 | 10.90 | | | 0.118 | 6990.3 | 7020.0 | 1782 | 44550 | |
| 9 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 10 | 8,760.0 | 8,765.1 | | | 306 | 186,354 | 186,627 | 273 | -0.15% | 2.37 | 11.50 | | | 0.090 | 7020.0 | 7033.8 | 828 | 20700 | |
| 11 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 12 | | | | | 0 | 0 | | 0 | | 2.71 | 10.80 | | | 0.012 | 7033.8 | 7047.1 | 798 | 19950 | |
| 13 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 14 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 15 | | | 9,151.9 | 9,157.2 | 318 | 193,662 | 193,927 | 265 | -0.14% | 2.49 | 11.10 | | | 0.000 | 7047.1 | 7071.8 | 1482 | 37050 | |
| 16 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 17 | 8,765.1 | 8,770.4 | | | 318 | 193,662 | 193,927 | 265 | -0.14% | 2.70 | 11.00 | | | 0.048 | 7071.8 | 7084.0 | 732 | 18300 | |
| 18 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 19 | | | | | 0 | 0 | | 0 | | 2.76 | 13.00 | | | 0.000 | 7084.0 | 7096.9 | 774 | 19350 | |
| 20 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 21 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 22 | | | 9,157.2 | 9,162.5 | 318 | 193,662 | 193,927 | 265 | -0.14% | 2.53 | 14.10 | | | 0.030 | 7096.9 | 7121.3 | 1464 | 36600 | |
| 23 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 24 | | | | | 0 | 0 | | 0 | | 2.76 | 14.60 | | | 0.170 | 7121.3 | 7133.8 | 750 | 18750 | |
| 25 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 26 | 8,770.4 | 8,775.5 | | | 306 | 186,354 | 186,327 | -27 | 0.01% | 2.60 | 14.60 | | | 0.017 | 7133.8 | 7145.7 | 714 | 17850 | |
| 27 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 28 | | | 9,162.5 | 9,167.0 | 270 | 164,430 | 164,626 | 196 | -0.12% | | | | | | | | 0 | 0 | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | **TOTAL** | 2,454 | 1,495,254 | 1,497,381 | | | | | | | 0.629 | | | 12,594 | 314,850 | |
| | | | | **AVERAGE** | 88 | 53,402 gpd | | | | | | | | | | | | | |
| | | | | | | 37 gpm | | | | | | | | | | | | | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered volume from flow meter in Flow Meter Building.
4. Difference calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow minus 100%.
5. Daily rainfall measured at the landfill facility.
6. Leachate Pond Level as measured in the Leachate Pump Wet Well.
7. Leak Detection flow meter is not working and will be replaced in the spring of 2021.
8. Total pumping time from underdrain pump run time meter located in leachate pump station buidling. Assumed flow 25 gpm.

**ATTACHMENT 1**
**LEACHATE FLOW DATA**
**DOLBY LANDFILL FACILITY**
**EAST MILLINOCKET, MAINE**
**March-2021**

| DAY OF MONTH | PUMP RUN TIME | | | | | LEACHATE VOLUME | | | | LEACHATE POND | LEAK DETECTION | | | DAILY RAINFALL[5] | LEACHATE UNDERDRAIN | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | | | | | | | | | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | (Gallons) | (Gallons) | (Gallons) | (%) | LEVEL (Feet) | LEVEL (Inches) | FLOW (gallons) | TOTAL (gallons) | (Inches) | Initial (Hours) | End (Hours) | Total (Minutes) | Total Flow (Gallons) | |
| 1 | 8,776 | 8,776 | 9,167 | 9,167 | 0 | 0 | | 0 | | 2.59 | 16.80 | | | 0.392 | 7145.7 | 7168.1 | 1344.000 | 33600 | |
| 2 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 3 | 8,776 | 8,778 | | | 144 | 84,240 | 84,500 | 260 | 0% | 2.10 | 18.70 | | | 0.226 | 7168.1 | 7189.2 | 1266 | 31650 | |
| 4 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 5 | 8,778 | 8,780 | | | 108 | 63,180 | 63,200 | 20 | 0% | 2.52 | 16.90 | | | 0.000 | 7189.2 | 7199.6 | 624 | 15600 | |
| 6 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 7 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 8 | | | 9,167 | 9,172 | 276 | 161,460 | 162,000 | 540 | 0% | 2.36 | 15.30 | | | 0.000 | 7199.6 | 7224.6 | 1500 | 37500 | |
| 9 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 10 | | | | | 0 | 0 | | 0 | | 2.56 | 14.80 | | | 0.000 | 7224.6 | 7242.7 | 1086 | 27150 | |
| 11 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 12 | 8,780 | 8,784 | | | 276 | 161,460 | 162,100 | 640 | 0% | 2.61 | 18.50 | | | 0.000 | 7242.7 | 7255.0 | 738 | 18450 | |
| 13 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 14 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 15 | | | 9,172 | 9,178 | 378 | 221,130 | 221,500 | 370 | 0% | 2.68 | 10.90 | | | 0.000 | 7255.0 | 7288.7 | 2022 | 50550 | |
| 16 | 8,784 | 8,790 | | | 318 | 186,030 | 186,230 | 200 | 0% | | | | | | | | 0 | 0 | |
| 17 | | | 9,178 | 9,183 | 312 | 182,520 | 183,000 | 480 | 0% | 2.62 | 10.40 | | | 0.000 | 7288.7 | 7311.6 | 1374 | 34350 | Flow at 530 GPM at 5:30 |
| 18 | | | | | 0 | 0 | | 0 | | | | | | | | | 0 | 0 | |
| 19 | | | 9,183 | 9,188 | 294 | 171,990 | 172,000 | 10 | 0% | 2.27 | 9.90 | | | 0.000 | 7311.6 | 7335.6 | 1440 | 36000 | |
| 20 | 8,790 | 8,798 | | | 510 | 288,150 | 290,000 | 1,850 | -1% | 2.30 | 9.50 | | | 0.000 | 7335.6 | 7346.0 | 624 | 15600 | Lowered floats for summer level |
| 21 | 8,798 | 8,803 | | | 264 | 151,800 | 152,000 | 200 | 0% | 1.94 | 9.60 | | | 0.000 | 7346.0 | 7353.2 | 432 | 10800 | |
| 22 | | | 9,188 | 9,197 | 528 | 298,848 | 300,000 | 1,152 | 0% | 1.89 | 9.60 | | | 0.000 | 7353.2 | 7360.4 | 432 | 10800 | |
| 23 | 8,803 | 8,812 | | | 552 | 267,720 | 267,450 | -270 | 0% | 1.92 | 9.60 | | | 0.000 | 7360.4 | 7377.7 | 1038 | 25950 | |
| 24 | | | 9,197 | 9,221 | 1,440 | 800,640 | 800,000 | -640 | 0% | 2.24 | 9.80 | | | 0.000 | 7377.7 | 7391.4 | 822 | 20550 | 585 GPM flow rate |
| 25 | 8,812 | 8,831 | | | 1,152 | 600,192 | 600,000 | -192 | 0% | 2.41 | 9.40 | | | 0.055 | 7391.4 | 7408.0 | 996 | 24900 | |
| 26 | | | 9,221 | 9,249 | 1,674 | 649,512 | 650,000 | 488 | 0% | 1.86 | 9.00 | | | 0.110 | 7408.0 | 7424.0 | 960 | 24000 | |
| 27 | 8,831 | 8,851 | | | 1,200 | 500,400 | 500,000 | -400 | 0% | 1.25 | 9.00 | | | 0.546 | 7424.0 | 7444.4 | 1224 | 30600 | Flow reading have entrained air in them causing varying readings. |
| 28 | | | 9,249 | 9,255 | 348 | 160,080 | 160,000 | -80 | 0% | 1.00 | 8.50 | | | 0.001 | 7444.4 | 7449.1 | 282 | 7050 | |
| 29 | 8,851 | 8,869 | | | 1,086 | 610,332 | 610,000 | -332 | 0% | 0.90 | 8.90 | | | 0.685 | 7449.1 | 7483.3 | 2052 | 51300 | |
| 30 | 8,869 | 8,893 | | | 1,440 | 810,720 | 810,000 | -720 | 0% | 1.24 | 8.60 | | | 0.006 | 7483.3 | 7507.5 | 1452 | 36300 | |
| 31 | 8,893 | 8,912 | | | 1,164 | 670,464 | 670,000 | -464 | 0% | 1.89 | 9.00 | | | 0.000 | 7507.5 | 7531.3 | 1428 | 35700 | |
| | | | | Total | 13,464 | 7,040,868 | 7,043,980 | 3,112 | | | | | | 2.021 | | | 23,136 | 578,400 | |
| | | | | Average | 434 | 234,696 | | | | | | | | | | | | | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered volume from flow meter in Flow Meter Building.
4. Difference calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow minus 100%.
5. Daily rainfall measured at the landfill facility.
6. Leachate Pond Level as measured in the Leachate Pump Wet Well.
7. Leak Detection flow meter is not working and will be replaced in the spring of 2020.
8. Total pumping time from underdrain pump run time meter located in leachate pump station buidling. Assumed flow 25 gpm.

# ATTACHMENT 1
# LEACHATE FLOW DATA
# DOLBY LANDFILL FACILITY
# EAST MILLINOCKET, MAINE
# April-2021

| DAY OF MONTH | PUMP RUN TIME | | | | | LEACHATE VOLUME | | | | POND LEVEL[6] | LEAK DETECTION[7] | | | DAILY RAINFALL[5] | LEACHATE UNDERDRAIN[8] | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | LEVEL | FLOW | TOTAL | | Initial | End | Total | Total Flow | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | (Gallons) | (Gallons) | (Gallons) | (%) | (Feet) | (Inches) | (gallons) | (gallons) | (Inches) | (Hours) | (Hours) | (Minutes) | (Gallons) | |
| 1 | 8,912 | 8,943 | 9,255 | 9,255 | 1,842 | 802,191 | 802,171 | -20 | 0% | 1.89 | 9.00 | | | 0.000 | 7,531 | 7,555.1 | 1,428 | 35,700 | |
| 2 | 8,943 | 8,967 | | | 1,410 | 614,055 | 614,055 | 0 | 0% | 1.21 | 8.00 | | | 0.038 | 7,555.1 | 7,578.8 | 1422 | 35,550 | |
| 3 | 8,967 | 8,986 | | | 1,146 | 499,083 | 499,083 | 0 | 0% | 0.95 | 11.50 | | | 0.000 | 7,578.8 | 7,589.5 | 642 | 16,050 | pump failed |
| 4 | 8,986 | 9,001 | | | 930 | 405,015 | 405,015 | 0 | 0% | 0.99 | 17.60 | | | 0.000 | 7,589.5 | 7,589.5 | 0 | 0 | |
| 5 | 9,001 | 9,017 | | | 966 | 420,693 | 420,693 | 0 | 0% | 1.96 | 17.40 | | | 0.105 | 7,589.5 | 7,589.5 | 0 | 0 | |
| 6 | 9,017 | 9,019 | | | 78 | 33,969 | 33,969 | 0 | 0% | 1.18 | 25.60 | | | 0.040 | 7,589.5 | 7,589.5 | 0 | 0 | |
| 7 | 9,019 | 9,024 | | | 348 | 151,554 | 151,554 | 0 | 0% | 1.42 | 29.00 | | | 0.018 | 7,589.5 | 7,590.0 | 30 | 750 | |
| 8 | 9,024 | 9,032 | | | 432 | 188,136 | 188,136 | 0 | 0% | 1.41 | 23.50 | | | 0.000 | 7,590.0 | 7,590.0 | 0 | 0 | |
| 9 | | | 9,255 | 9,264 | 576 | 250,848 | 250,848 | 0 | 0% | | | | | | | | 0 | 0 | |
| 10 | 9,032 | 9,032 | | | 0 | | | | | 2.16 | 22.10 | | | 0.000 | 7,590.0 | 7,613.0 | 1380 | 34,500 | |
| 11 | | | 9,264 | 9,274 | 618 | 269,139 | 269,139 | 0 | 0% | 1.39 | 21.40 | | | 0.003 | 7,613.0 | 7,637.1 | 1446 | 36,150 | |
| 12 | 9,032 | 9,040 | | | 516 | 224,718 | 224,718 | | | 1.40 | 21.40 | | | 0.003 | 7,637.1 | 7,637.1 | 0 | 0 | |
| 13 | | | | | | | | | | 1.67 | 18.90 | | | 0.001 | 7,637.1 | 7,661.1 | 1,440 | 18,000 | temp pump installed |
| 14 | | | 9,274 | 9,283 | 510 | 222,105 | 222,105 | 0 | 0% | 1.58 | 16.80 | | | 0.000 | 7,661.1 | 7,685.4 | 1,458 | 18,225 | |
| 15 | | | 9,283 | 9,284 | 84 | 36,582 | 36,582 | 0 | 0% | 1.45 | 15.10 | | | 0.000 | 7,685.4 | 7,707.6 | 1,332 | 16,650 | |
| 16 | | | 9,284 | 9,292 | 444 | 193,362 | 193,362 | 0 | 0% | 1.56 | 13.70 | | | 0.000 | 7,707.6 | 7,732.1 | 1,470 | 18,375 | |
| 17 | 9,040 | 9,046 | | | 330 | 143,715 | 143,715 | 0 | 0% | 1.40 | 12.60 | | | 0.088 | 7,732.1 | 7,757.0 | 1,494 | 18,675 | |
| 18 | 9,046 | 9,049 | | | 180 | 78,390 | 78,390 | 0 | 0% | 1.64 | 13.20 | | | 0.163 | 7,757.0 | 7,781.5 | 1,470 | 18,375 | |
| 19 | | | 9,292 | 9,301 | 528 | 229,944 | 229,944 | 0 | 0% | 1.30 | 13.20 | | | 0.010 | 7,781.5 | 7,805.1 | 1,416 | 17,700 | |
| 20 | | | | | | | | | | | | | | | | | 0 | 0 | |
| 21 | 9,049 | 9,057 | | | 480 | 209,040 | 209,040 | 0 | | 1.33 | 13.60 | | | 0.020 | 7,805.1 | 7,853.1 | 2,880 | 36,000 | |
| 22 | | | | | | | | 0 | | | | | | | | | 0 | 0 | |
| 23 | | | 9,301 | 9,309 | 486 | 211,653 | 211,653 | 0 | 0% | 1.41 | 15.70 | | | 0.089 | 7,853.1 | 7,900.7 | 2,856 | 35,700 | |
| 24 | | | | | | | | | | | | | | | | | 0 | 0 | |
| 25 | | | | | | | | | | | | | | | | | 0 | 0 | |
| 26 | 9,057 | 9,064 | | | 450 | 195,975 | 195,975 | | | 1.54 | 17.50 | | | 0.032 | 7,900.7 | 7,973.0 | 4,338 | 54,225 | |
| 27 | | | | | | | | 0 | | | | | | | | | 0 | 0 | |
| 28 | | | 9,309 | 9,316 | 468 | 203,814 | 203,814 | 0 | 0% | 1.44 | 15.70 | | | 0.002 | 7,973.0 | 8,021.3 | 2,898 | 36,225 | |
| 29 | | | | | | | | | | | | | | | | | 0 | 0 | |
| 30 | | | 9,316 | 9,324 | 462 | 201,201 | 201,201 | | | 1.38 | 14.70 | | | 1.000 | 8,021.3 | 8,068.0 | 2,802 | 35,025 | changed battery in rain gauge |
| 31 | | | | | | | | | | | | | | | | | | 0 | |
| | | | | Total Pumped = | 13,284 | 5,785,182 | | | | | | | | 1.612 | | | 32202 | 481875 | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered volume from flow meter in Flow Meter Building.
4. Difference calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow minus 100%.
5. Daily rainfall measured at the landfill facility.
6. Leachate Pond Level as measured in the Leachate Pump Wet Well.
7. Leak Detection flow meter is not working and will be replaced in the spring of 2021.
8. Total pumping time from underdrain pump run time meter located in leachate pump station buidling. Assumed flow 25 gpm.

9 Replacement temporary pump flow rate assumed to be 12.5 gpm.

# ATTACHMENT 1
# LEACHATE FLOW DATA
# DOLBY LANDFILL FACILITY
# EAST MILLINOCKET, MAINE
# May-2021

| DAY OF MONTH | PUMP RUN TIME | | | | | | LEACHATE VOLUME | | | | LEACHATE POND LEVEL[6] | LEAK DETECTION[7] | | | DAILY RAINFALL[5] | LEACHATE UNDERDRAIN[8] | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | Flow | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | LEVEL | FLOW | TOTAL | | Initial | End | Total | Total Flow | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | (GPM) | (Gallons) | (Gallons) | (Gallons) | (%) | (Feet) | (Inches) | (gallons) | (gallons) | (Inches) | (Hours) | (Hours) | (Minutes) | (Gallons) | |
| 1 | 9,064 | 9,064 | 9,324 | 9,324 | | | | | | | | | | | | 8,068 | 8,068.0 | | | |
| 2 | 9,064 | 9,085 | | | 1,248 | 556 | 693,888 | 693,990 | 102 | 0% | | | | | | | | | | |
| 3 | | | 9,324 | 9,334 | 594 | 556 | 330,264 | 330,350 | 86 | 0% | 1.08 | 8.00 | | | 0.000 | 8,068.0 | 8,141.1 | 4386 | 54,825 | |
| 4 | 9,085 | 9,087 | | | 108 | 556 | 60,048 | 60,100 | 52 | 0% | | | | | | | | | | |
| 5 | | | 9,334 | 9,342 | 504 | 556 | 280,224 | 280,400 | 176 | 0% | 1.31 | 5.00 | | | 0.024 | 8,141.1 | 8,189.2 | 2886 | 36,075 | |
| 6 | | | | | | | | | | | | | | | | | | | | |
| 7 | 9,087 | 9,095 | | | 492 | 556 | 273,552 | 273,700 | 148 | 0% | 1.48 | 22.60 | | | 0.466 | 8,189.2 | 8,237.1 | 2874 | 35,925 | |
| 8 | | | 9,342 | 9,357 | 852 | 556 | 473,712 | 473,850 | 138 | 0% | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | |
| 10 | 9,095 | 9,099 | | | 258 | 557 | 143,448 | 143,600 | 152 | 0% | 1.06 | 25.00 | | | 0.000 | 8,237.1 | 8,296.3 | 3552 | 44,400 | |
| 11 | | | 9,357 | 9,357 | 24 | 557 | 13,344 | 13,375 | 31 | 0% | | | | | | | | | | |
| 12 | 9,099 | 9,107 | | | 474 | 556 | 263,544 | 263,700 | 156 | 0% | 1.20 | 24.00 | | | 0.475 | 8,296.3 | 8,344.4 | 2,886 | 36,075 | |
| 13 | | | | | | | | | | | | | | | | | | | | |
| 14 | | | 9,357 | 9,365 | 462 | 557 | 256,872 | 257,120 | 248 | 0% | 1.15 | 23.00 | | | 0.045 | 8,344.4 | 8,392.4 | 2,880 | 36,000 | |
| 15 | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | |
| 17 | 9,107 | 9,115 | | | 486 | 556 | 270,216 | 270,450 | 234 | 0% | 1.26 | 23.00 | | | 0.592 | 8,392.4 | 8,463.1 | 4,242 | 53,025 | |
| 18 | | | | | | | | | | | | | | | | | | | | |
| 19 | | | 9,365 | 9,372 | 444 | 556 | 246,864 | 247,050 | 186 | 0% | 1.34 | 23.00 | | | 0.004 | 8,463.1 | 8,510.0 | 2,814 | 35,175 | |
| 20 | | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | | |
| 22 | 9,115 | 9,123 | | | 432 | 556 | 240,192 | 240,350 | 158 | 0% | 1.36 | 10.30 | | | 0.183 | 8,510.0 | 8,577.9 | 4,074 | 50,925 | |
| 23 | | | | | | | | | | | | | | | | | | | | |
| 24 | | | 9,372 | 9,374 | 120 | 557 | 66,720 | 66,800 | 80 | 0% | 1.08 | 8.50 | | | 0.058 | 8,577.9 | 8,597.3 | 1,164 | 14,550 | |
| 25 | | | | | | | | | | | | | | | | | | | | |
| 26 | | | 9,374 | 9,379 | 318 | 557 | 176,808 | 177,100 | 292 | 0% | 1.38 | 8.40 | | | 0.123 | 8,597.3 | 8,599.2 | 114 | 2,850 | UD-Pump by-passed |
| 27 | | | | | | | | | | | | | | | | | | | | |
| 28 | 9,123 | 9,129 | | | 390 | 557 | 216,840 | 217,048 | 208 | 0% | 1.18 | 6.40 | | | 0.000 | 8,599.2 | 8,609.8 | 636 | 15,900 | UD Pump Forcemain Cleaned |
| 29 | | | | | | | | | | | | | | | | 8,609.8 | 8,610.2 | 24 | 600 | |
| 30 | | | | | | | | | | | | | | | | 8,610.2 | 8,626.0 | 948 | 23,700 | |
| 31 | 9,129 | 9,152 | | | 1,380 | 556 | 767,280 | 767,280 | 0 | 0% | 0.50 | 7.10 | | | 0.759 | 8,626.0 | 8,649.4 | 1,404 | 35,100 | |
| | | | | Total | 8,586 | 556 | 4,773,816 | 4,776,263 | 2,447 | | | | | | 2.729 | | | 34,884 | 436,050 | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered volume from flow meter in Flow Meter Building.
4. Difference calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow minus 100%.
5. Daily rainfall measured at the landfill facility.
6. Leachate Pond Level as measured in the Leachate Pump Wet Well.
7. Leak Detection flow meter is not working and will be replaced in the spring of 2021.
8. Total pumping time from underdrain pump run time meter located in leachate pump station buidling. Assumed pumping rate of 12.5 gpm prior to forcemain cleaning and after forcemain cleaning.

**ATTACHMENT 1**
**LEACHATE FLOW DATA**
**DOLBY LANDFILL FACILITY**
**EAST MILLINOCKET, MAINE**
**June-2021**

| DAY OF MONTH | PUMP RUN TIME | | | | | Flow | LEACHATE VOLUME | | | | LEACHATE POND LEVEL[6] | LEAK DETECTION[7] | | | LEACHATE UNDERDRAIN[8] | | | | DAILY RAINFALL[5] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | | | | | | | | | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | (GPM) | (Gallons) | (Gallons) | (Gallons) | (%) | (Feet) | LEVEL (Inches) | FLOW (gallons) | TOTAL (gallons) | Initial (Hours) | End (Hours) | Total (Minutes) | Total Flow (Gallons) | (Inches) | |
| 1 | 9,152 | 9,152 | 9,379 | 9,379 | 0 | | 0 | | | | | | | | 8649.4 | 8649.4 | 0 | 0 | | |
| 2 | 9,152 | 9,156 | | | 240 | 450 | 108,000 | 108,000 | 0 | 0% | 0.64 | 7.80 | NA | NA | 8649.4 | 8659.6 | 612 | 15300 | 0.208 | |
| 3 | | | | | 0 | | 0 | | | #DIV/0! | | | | | | | | 0 | | |
| 4 | | | | | 0 | | 0 | | | | 0.79 | 8.10 | NA | NA | 8659.6 | 8664.5 | 294 | 7350 | 0.041 | |
| 5 | | | | | 0 | | 0 | | | #DIV/0! | | | | | | | | 0 | | |
| 6 | | | | | 0 | | 0 | | | | | | | | | | | 0 | | |
| 7 | | | | | 0 | | 0 | | | | 0.96 | 8.60 | NA | NA | 8664.5 | 8671.3 | 408 | 10200 | 0.093 | |
| 8 | | | | | 0 | | 0 | | | #DIV/0! | | | | | | | | 0 | | |
| 9 | | | | | 0 | | 0 | | | | 1.13 | 8.90 | NA | NA | 8671.3 | 8675.9 | 276 | 6900 | 0.000 | |
| 10 | | | | | 0 | | 0 | | | | | | | | | | | 0 | | |
| 11 | | | | | 0 | | 0 | | | | 1.08 | 8.00 | NA | NA | 8675.9 | 8680.1 | 252 | 6300 | 0.000 | |
| 12 | | | | | 0 | | 0 | | | #DIV/0! | | | | | | | 0 | 0 | | |
| 13 | | | | | 0 | | 0 | | | | | | | | | | | 0 | | |
| 14 | | | | | 0 | | 0 | | | | 1.27 | 7.90 | NA | NA | 8680.1 | 8685.6 | 330 | 8250 | 0.000 | |
| 15 | | | | | 0 | | 0 | | | #DIV/0! | | | | | | | | 0 | | |
| 16 | | | | | 0 | | 0 | | | | 1.28 | 7.60 | NA | NA | 8685.6 | 8689.3 | 222 | 5550 | 0.128 | |
| 17 | | | | | 0 | | 0 | | | #DIV/0! | | | | | | | | 0 | | |
| 18 | | | | | 0 | | 0 | | | | 1.32 | 7.10 | NA | NA | 8689.3 | 8692.6 | 198 | 4950 | 0.000 | |
| 19 | | | | | 0 | | 0 | | | | | | | | | | | 0 | | |
| 20 | | | | | 0 | | 0 | | | | | | | | | | | 0 | | |
| 21 | | | | | 0 | | 0 | | | | 1.81 | 5.80 | NA | NA | 8692.6 | 8697.2 | 276 | 6900 | 0.339 | |
| 22 | | | | | 0 | | 0 | | | #DIV/0! | | | | | | | | 0 | | |
| 23 | | | | | 0 | | 0 | | | | 1.72 | 6.00 | NA | NA | 8697.2 | 8700.2 | 180 | 4500 | 0.611 | |
| 24 | | | | | 0 | | 0 | | | #DIV/0! | | | | | | | | 0 | | |
| 25 | | | | | 0 | | 0 | | | | -0.97 | 6.20 | NA | NA | 8700.2 | 8700.7 | 30 | 750 | 0.000 | |
| 26 | | | | | 0 | | 0 | | | | | | | | | | | 0 | | |
| 27 | | | | | 0 | | 0 | | | | | | | | | | | 0 | | |
| 28 | | | | | 0 | | 0 | | | | -0.91 | 19.90 | NA | NA | 8700.7 | 8700.7 | 0 | 0 | 0.119 | |
| 29 | | | | | 0 | | 0 | | | #DIV/0! | | | | | | | | 0 | | |
| 30 | | | | | 0 | | 0 | | | | -0.90 | 16.60 | NA | NA | 8700.7 | 8700.7 | 0 | 0 | 0.148 | |
| 31 | | | | | ` | | | | | | | | | | | | | 0 | | |
| | | | | Total | 240 | | 108,000 | 108,000 | | | | | | | | | 3,078 | 76,950 | 1.687 | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered volume from flow meter in Flow Meter Building.
4. Difference calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow minus 100%.
5. Daily rainfall measured at the landfill facility.
6. Leachate Pond Level as measured in the Leachate Pump Wet Well for positive numbers and hand measurements for negative numbers.
7. Leak Detection flow meter is not working and will be replaced in 2021.
8. Total pumping time from underdrain pump run time meter located in leachate pump station buidling. Assumed flow 25 gpm.

**ATTACHMENT 1**
**LEACHATE FLOW DATA**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**
**July-2021**

| DAY OF MONTH | PUMP RUN TIME | | | | | Flow | LEACHATE VOLUME | | | | LEACHATE POND LEVEL[6] (Feet) | LEAK DETECTION | | | LEACHATE UNDERDRAIN | | | | DAILY RAINFALL[5] (Inches) | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | | PUMPED[2] | METERED[3] | DIFFERENCE | | | LEVEL (Inches) | FLOW[7] (gallons) | TOTAL[7] (gallons) | Initial[8] (Hours) | End[8] (Hours) | Total (Minutes) | Total Flow (Gallons) | | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | (GPM) | (Gallons) | (Gallons) | (Gallons) | (%) | | | | | | | | | | |
| 1 | 9,156 | 9,156 | 9,379 | 9,379 | 0 | | 0 | | 0 | | | | | | 8700.7 | 8700.7 | - | - | | |
| 2 | | | | | | | | | 0 | | -0.87 | 20.10 | | | 8700.7 | 8700.7 | - | - | 0.298 | |
| 3 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 4 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 5 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 6 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 7 | | | | | | | | | 0 | | -0.86 | 24.20 | | | 8700.7 | 8700.7 | - | - | 0.000 | |
| 8 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 9 | | | | | | | | | 0 | | 2.21 | 19.80 | | | 8700.7 | 8702.1 | 84 | 2,100 | 0.000 | |
| 10 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 11 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 12 | | | 9,379 | 9,380 | 36 | 458 | 16,488 | 16,500 | 12 | -0.1% | 1.52 | 18.00 | | | 8702.1 | 8705.3 | 192 | 4,800 | 2.246 | |
| 13 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 14 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 15 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 16 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 17 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 18 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 19 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 20 | | | | | | | | | 0 | | | | | | | | - | - | | |
| 21 | | | 9,380 | 9,381 | 36 | 458 | 16,488 | 16,500 | 12 | 0% | 0.91 | 9.80 | | | 8705.3 | 8725.8 | 1,230 | 30,750 | 0.926 | |
| 22 | | | 9,381 | 9,428 | 2,850 | 270 | 769,500 | 769,900 | 400 | 0% | | | | | | | - | - | | |
| 23 | 9,156 | 9,204 | | | 2,886 | 270 | 779,220 | 780,000 | 780 | 0% | -2.01 | 4.40 | | | 8725.8 | 8729.7 | 234 | 5,850 | 0.467 | |
| 24 | | | | | | | | | 0 | | | | | | | | | | | |
| 25 | | | 9,428 | 9,494 | 3,972 | 230 | 913,560 | 914,000 | 440 | 0% | | | | | | | | | | |
| 26 | 9,204 | 9,205 | | | 72 | 300 | 21,600 | 21,600 | 0 | 0% | -2.03 | 4.20 | | | 8729.7 | 8736.1 | 384 | 9,600 | 0.158 | |
| 27 | | | | | | | | | 0 | | | | | | | | | | | |
| 28 | | | | | | | | | 0 | | | | | | | | | | | |
| 29 | | | | | | | | | 0 | | | | | | | | | | | |
| 30 | | | | | | | | | 0 | | | | | | | | | | | |
| 31 | | | | | | | | | 0 | | | | | | | | | | | |
| | | | | Total | 9,852 | | 2,516,856 | | | | | | | | | | 2,124 | 53,100 | 4.095 | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered volume from flow meter in Flow Meter Building.
4. Difference calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow minus 100%.
5. Daily rainfall measured at the landfill facility.
6. Leachate Pond Level as measured in the Leachate Pump Wet Well.
7. Leak Detection flow meter is not working and will be replaced in the fall of 2021.
8. Total pumping time from underdrain pump run time meter located in leachate pump station buidling. Assumed flow 25 gpm.

# ATTACHMENT 1
# LEACHATE FLOW DATA
# DOLBY LANDFILL
# EAST MILLINOCKET, MAINE
# August-2021

| DAY OF MONTH | PUMP RUN TIME | | | | | FLOW | LEACHATE VOLUME | | | | LEACHATE POND LEVEL[6] | LEAK DETECTION | | | LEACHATE UNDERDRAIN | | | | DAILY RAINFALL[5] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | | | | | | | | | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | (GPM) | (Gallons) | (Gallons) | (Gallons) | (%) | (Feet) | LEVEL (Inches) | FLOW[7] (gallons) | TOTAL[7] (gallons) | Initial[8] (Hours) | End[8] (Hours) | Total (Minutes) | Total Flow (Gallons) | (Inches) | |
| 1 | 9,205 | 9,205 | 9,494 | 9,494 | 0 | | | | | | | | | | 8736.1 | 8736.1 | | | | |
| 2 | | | | | 0 | | | | | | | | | | | | | | | |
| 3 | 9,205 | 9,212 | | | 396 | 540 | 213,840 | 214,000 | 160 | 0% | | | | | | | | | | |
| 4 | | | 9,494 | 9,517 | 1,356 | 540 | 732,240 | 732,240 | 0 | 0% | | | | | | | | | | |
| 5 | | | | | 0 | | | | | | | | | | | | | | | |
| 6 | | | | | 0 | | | | | | | | | | | | | | | |
| 7 | | | | | 0 | | | | | | | | | | | | | | | |
| 8 | | | | | 0 | | | | | | | | | | | | | | | |
| 9 | | | | | 0 | | | | | | | | | | | | | | | |
| 10 | | | | | 0 | | | | | | | | | | | | | | | |
| 11 | | | | | 0 | | | | | | | | | | | | | | | |
| 12 | | | | | 0 | | | | | | | | | | | | | | | |
| 13 | | | | | 0 | | | | | | | | | | | | | | | |
| 14 | | | | | 0 | | | | | | | | | | | | | | | |
| 15 | | | | | 0 | | | | | | | | | | | | | | | |
| 16 | | | | | 0 | | | | | | 0.50 | 7.70 | | | 8736.1 | 8770.7 | 2076 | 51900 | 0.000 | |
| 17 | | | | | 0 | | | | | | | | | | | | | | | |
| 18 | | | | | 0 | | | | | | 0.56 | 7.90 | | | 8770.7 | 8773.2 | 150 | 3750 | 0.000 | |
| 19 | | | | | 0 | | | | | | | | | | | | | | | |
| 20 | | | | | 0 | | | | | | 0.62 | 8.80 | | | 8773.2 | 8775.6 | 144 | 3600 | 0.001 | |
| 21 | | | | | 0 | | | | | | | | | | | | | | | |
| 22 | | | | | 0 | | | | | | | | | | | | | | | |
| 23 | | | | | 0 | | | | | | 0.70 | 8.80 | | | 8775.6 | 8778.9 | 198 | 4950 | 0.700 | |
| 24 | | | | | 0 | | | | | | | | | | | | | | | |
| 25 | | | | | 0 | | | | | | 0.98 | 8.10 | | | 8778.9 | 8781.3 | 144 | 3600 | 2.584 | |
| 26 | | | | | 0 | | | | | | | | | | | | | | | |
| 27 | | | | | 0 | | | | | | 1.04 | 8.20 | | | 8781.3 | 8784.9 | 216 | 5400 | 0.002 | |
| 28 | | | | | 0 | | | | | | | | | | | | | | | |
| 29 | | | | | 0 | | | | | | | | | | | | | | | |
| 30 | | | | | 0 | | | | | | 1.22 | 6.80 | | | 8784.9 | 8790.4 | 330 | 8250 | 0.035 | |
| 31 | | | | | 0 | | | | | | | | | | | | | | | |
| | | | | Total | 1,752 | | 946,080 | | | | | | | | | | 3,258 | 81,450 | 3.322 | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered volume from flow meter in Flow Meter Building.
4. Difference calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow minus 100%.
5. Daily rainfall measured at the landfill facility.
6. Leachate Pond Level as measured in the Leachate Pump Wet Well.
7. Leak Detection flow meter is not working and will be replaced in the fall of 2021.
8. Total pumping time from underdrain pump run time meter located in leachate pump station buidling. Assumed flow 25 gpm.

# ATTACHMENT 1
# LEACHATE FLOW DATA
# DOLBY LANDFILL
# EAST MILLINOCKET, MAINE
## September-2021

| DAY OF MONTH | PUMP RUN TIME | | | | | FLOW | LEACHATE VOLUME | | | | LEACHATE POND LEVEL[6] | LEAK DETECTION | | | DAILY RAINFALL[5] | LEACHATE UNDERDRAIN | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | LEVEL | FLOW[7] | TOTAL[7] | | Initial[8] | End[8] | Total | Total Flow | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | (GPM) | (Gallons) | (Gallons) | (Gallons) | (%) | (Feet) | (Inches) | (gallons) | (gallons) | (Inches) | (Hours) | (Hours) | (Minutes) | (Gallons) | |
| 1 | 9,212 | 9,212 | 9,517 | 9,517 | 0 | | | | | | 1.29 | 6.90 | | | 0.022 | 8790.4 | 8793.8 | 204 | 5100 | |
| 2 | | | | | 0 | | | | | | | | | | | | | | | |
| 3 | 9,212 | 9,213 | | | 90 | 1,392 | 67,500 | 125,287 | 57,787 | -46% | 1.42 | 4.90 | | | 0.936 | 8793.8 | 8796.9 | 186 | 4650 | Volume Difference due to Leachate Line Filling after cleaning |
| 4 | | | | | 0 | | | | | | | | | | | | | | | |
| 5 | | | | | 0 | | | | | | | | | | | | | | | |
| 6 | | | | | 0 | | | | | | 1.45 | 5.60 | | | 0.163 | 8796.9 | 8801.8 | 294 | 7350 | |
| 7 | | | | | 0 | | | | | | | | | | | | | | | |
| 8 | | | | | 0 | | | | | | | | | | | | | | | |
| 9 | | | | | 0 | | | | | | 1.47 | 5.00 | | | 0.313 | 8801.8 | 8805.0 | 192 | 4800 | |
| 10 | | | | | 0 | | | | | | 1.61 | 4.60 | | | 1.780 | 8805.0 | 8808.4 | 204 | 5100 | |
| 11 | | | | | 0 | | | | | | | | | | | | | | | |
| 12 | | | | | 0 | | | | | | | | | | | | | | | |
| 13 | | | | | 0 | | | | | | 2.16 | 12.60 | | | 0.042 | 8808.4 | 8809.7 | 78 | 1950 | |
| 14 | | | | | 0 | | | | | | | | | | | | | | | |
| 15 | 9,213 | 9,226 | | | 726 | 750 | 544,500 | 544,500 | 0 | 0.00 | 1.38 | 22.00 | | | 0.000 | 8809.7 | 8809.7 | 0 | 0 | Underdrain Pump Stopped due to fouling and faulty float switch |
| 16 | | | | | 0 | | | | | | | | | | | | | | | |
| 17 | | | | | 0 | | | | | | 1.59 | 27.00 | | | 0.611 | 8809.7 | 8809.7 | 0 | 0 | |
| 18 | | | | | 0 | | | | | | | | | | | | | | | |
| 19 | | | | | 0 | | | | | | | | | | | | | | | |
| 20 | 9,226 | 9,227 | | | 60 | 800 | 42,000 | 48,000 | 6,000 | -13% | 1.74 | 36.00 | | | 0.841 | 8809.7 | 8809.7 | 0 | 0 | Pump #1 cycling causing error in due to grounding issues |
| 21 | | | | | 0 | | | | | | | | | | | | | | | Undedrain Pump Repaired |
| 22 | | | | | 0 | | | | | | 1.97 | 8.70 | | | 0.000 | 8809.7 | 8835.6 | 1554 | 38850 | |
| 23 | | | | | 0 | | | | | | | | | | | | | | | |
| 24 | 9,227 | 9,239 | | | 720 | 700 | 504,000 | 504,000 | 0 | 0% | 1.47 | 19.70 | | | 0.002 | 8835.6 | 8835.6 | 0 | 0 | |
| 25 | | | | | 0 | | | | | | | | | | | | | | | |
| 26 | | | | | 0 | | | | | | | | | | | | | | | |
| 27 | 9,239 | 9,260 | | | 1,302 | 700 | 911,400 | 911,400 | 0 | 0% | 1.83 | 23.40 | | | 3.279 | 8835.6 | 8907.2 | 4296 | 107400 | |
| 28 | | | | | 0 | | | | | | | | | | | | | | | |
| 29 | | | 9,517 | 9,535 | 1,062 | 700 | 743,400 | 743,400 | 0 | 0% | 1.81 | 19.90 | | | 0.000 | 8907.2 | 8955.1 | 2874 | 71850 | |
| 30 | | | | | 0 | | | | | | | | | | | | | | | |
| | | | | Total | 3,960 | | 2,812,800 | | | | | | | | 7.967 | | | 9,882 | 247,050 | |
| | | | | Average | 132 | | 468,800 | gpd | | | | | | | | | | | | |
| | | | | | | | 326 | gpm | | | | | | | | | | | | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered volume from flow meter in Flow Meter Building.
4. Difference calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow minus 100%.
5. Daily rainfall measured at the landfill facility.
6. Leachate Pond Level as measured in the Leachate Pump Wet Well.
7. Leak Detection flow meter is not working and will be replaced in the fall of 2021.
8. Total pumping time from underdrain pump run time meter located in leachate pump station buidling. Assumed flow 25 gpm.

# ATTACHMENT 1
# LEACHATE FLOW DATA
# DOLBY LANDFILL
# EAST MILLINOCKET, MAINE
# October-2021

| DAY OF MONTH | PUMP RUN TIME | | | | | FLOW | LEACHATE VOLUME | | | | LEACHATE POND LEVEL[6] | LEAK DETECTION | | | LEACHATE UNDERDRAIN | | | | DAILY RAINFALL[5] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | LEVEL | FLOW[7] | TOTAL[7] | Initial[8] | End[8] | Total | Total Flow | | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | (GPM) | (Gallons) | (Gallons) | (Gallons) | (%) | (Feet) | (Inches) | (gallons) | (gallons) | (Hours) | (Hours) | (Minutes) | (Gallons) | (Inches) | |
| 1 | 9,260 | 9,264 | 9,535 | 9,535 | 198 | 650 | 128,700 | 128,700 | 0 | 0.0% | 2.01 | 15.5 | | | 8955.1 | 9003.2 | 2886.000 | 72150.000 | 0.012 | |
| 2 | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | |
| 4 | | | 9,535 | 9,552 | 1,062 | 650 | 690,300 | 690,300 | 0 | 0.0% | 1.54 | 9.5 | | | 9003.2 | 9075.5 | 4338 | 108450 | 0.033 | Pump #1 Removed / Out for repairs |
| 5 | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | 1.99 | 8.0 | | | 9075.5 | 9123.3 | 2868 | 71700 | 0.002 | |
| 7 | | | | | | | | | | | | | | | | | | | | |
| 8 | | | 9,552 | 9,555 | 156 | 620 | 96,720 | 96,720 | 0 | 0.0% | 1.82 | 7.8 | | | 9123.3 | 9171.3 | 2880 | 72000 | 0.000 | |
| 9 | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | |
| 11 | | | 9,555 | 9,565 | 588 | 620 | 364,560 | 364,560 | 0 | 0.0% | 1.52 | 16.8 | | | 9171.3 | 9173.5 | 132 | 3300 | 0.000 | |
| 12 | | | | | | | | | | | | | | | | | | | | |
| 13 | | | 9,565 | 9,565 | 0 | 0 | 0 | 0 | 0 | #DIV/0! | 1.55 | 26.9 | | | 9173.5 | 9177.5 | 240 | 6000 | 0.000 | |
| 14 | | | | | | | | | | | | | | | | | | | | |
| 15 | | | 9,565 | 9,565 | 0 | 0 | 0 | 0 | 0 | #DIV/0! | 1.66 | 32.5 | | | 9177.5 | 9177.5 | 0 | 0 | 0.005 | |
| 16 | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | 9177.5 | 9190.2 | 762 | 19050 | | |
| 18 | | | 9,565 | 9,575 | 618 | 630 | 389,340 | 389,340 | 0 | 0.0% | 1.66 | 8.9 | | | 9190.2 | 9196.7 | 390 | 9750 | 1.981 | |
| 19 | | | | | | | | | | | | | | | | | | | | |
| 20 | | | 9,575 | 9,586 | 636 | 630 | 400,680 | 400,680 | 0 | 0.0% | 1.55 | 7.9 | | | 9196.7 | 9206.9 | 612 | 15300 | 0.008 | |
| 21 | | | | | | | | | | | | | | | | | | | | |
| 22 | | | 9,586 | 9,587 | 60 | 630 | 37,800 | 37,800 | 0 | 0.0% | 1.70 | 17.1 | | | 9206.9 | 9208.9 | 120 | 3000 | 0.042 | Underdrain Pump Failure Noted |
| 23 | | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | | |
| 25 | | | 9,587 | 9,596 | 564 | 630 | 355,320 | 355,320 | 0 | 0.0% | 1.56 | 26.0 | | | 9208.9 | 9208.9 | 0 | 0 | 0.000 | |
| 26 | | | | | | | | | | | | | | | | | | | | |
| 27 | | | 9,596 | 9,600 | 240 | 630 | 151,200 | 151,200 | 0 | 0.0% | 1.60 | 32.0 | | | 9208.9 | 9208.9 | 0 | 0 | 0.000 | |
| 28 | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | |
| 30 | | | 9,600 | 9,607 | 390 | 630 | 245,700 | 245,700 | 0 | 0.0% | 1.70 | 32.6 | | | 9208.9 | 9208.9 | 0 | 0 | 2.000 | |
| 31 | | | | | | | | | | | | | | | | | | | | |
| | | | | Total | 4,512 | | 2,860,320 | | | | | | | | | | 15,228 | 380,700 | 4.083 | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered volume from flow meter in Flow Meter Building.
4. Difference calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow minus 100%.
5. Rainfall measured at the landfill facility.
6. Leachate Pond Level as measured in the Leachate Pump Wet Well.
7. Leak Detection flow meter transducer and control panel do not agree and will be repaired by Stevens Pump this Fall.
8. Total pumping time from underdrain pump run time meter located in leachate pump station buidling. Assumed flow of 25 gpm.

**ATTACHMENT 1**
**LEACHATE FLOW DATA**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**
**November-2021**

| DAY OF MONTH | PUMP RUN TIME | | | | | Flow | LEACHATE VOLUME | | | | LEACHATE POND LEVEL | LEAK DETECTION | | | DAILY RAINFALL[5] | LEACHATE POND UNDERDRAIN | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | | | | | | | | | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | (GPM) | (Gallons) | (Gallons) | (Gallons) | (%) | (Feet) | LEVEL (Inches) | FLOW (gallons) | TOTAL (gallons) | (Inches) | Initial[6] (Hours) | End[6] (Hours) | Total (Minutes) | Total Flow (Gallons) | |
| 1 | 9,264 | 9,264 | 9,607 | 9,607 | 0 | | 0 | 0 | 0 | | 2.05 | 45.20 | | | 0.004 | 9208.9 | 9208.9 | 0 | 0 | Underdrain pump down |
| 2 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 3 | | | 9,607 | 9,628 | 1,266 | 645 | 816,570 | 816,570 | 0 | 0.0% | 1.68 | 39.60 | | | 0.000 | | | 0 | 0 | |
| 4 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 5 | | | 9,628 | 9,631 | 180 | 645 | 116,100 | 116,100 | 0 | 0.0% | 1.97 | 44.00 | | | 0.000 | | | 0 | 0 | |
| 6 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 7 | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 8 | | | 9,631 | 9,641 | 600 | 645 | 387,000 | 387,000 | 0 | 0.0% | 2.07 | 44.10 | | | 0.000 | | | 0 | 0 | |
| 9 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 10 | | | 9,641 | 9,644 | 228 | 645 | 147,060 | 147,060 | 0 | 0.0% | 2.05 | 44.10 | | | 0.005 | | | 0 | 0 | |
| 11 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 12 | | | 9,644 | 9,647 | 180 | 650 | 117,000 | 117,000 | 0 | 0.0% | 2.08 | 44.50 | | | 0.000 | | | 0 | 0 | |
| 13 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 14 | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 15 | | | 9,647 | 9,661 | 798 | 650 | 518,700 | 518,700 | 0 | 0.0% | 2.11 | 44.90 | | | 0.435 | | | 0 | 0 | |
| 16 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 17 | | | 9,661 | 9,673 | 726 | 650 | 471,900 | 471,900 | 0 | 0.0% | 1.92 | 41.60 | | | 0.001 | | | 0 | 0 | |
| 18 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 19 | | | 9,673 | 9,677 | 252 | 645 | 162,540 | 162,540 | 0 | 0.0% | 2.04 | 44.40 | | | 0.358 | | | 0 | 0 | |
| 20 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 21 | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 22 | | | 9,677 | 9,692 | 894 | 645 | 576,630 | 576,630 | 0 | 0.0% | 2.02 | 44.50 | | | 0.119 | | | 0 | 0 | |
| 23 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 24 | | | 9,692 | 9,708 | 990 | 645 | 638,550 | 638,550 | 0 | 0.0% | 2.22 | 45.20 | | | 0.000 | | | 0 | 0 | |
| 25 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 26 | | | 9,708 | 9,722 | 828 | 645 | 534,060 | 534,060 | 0 | 0.0% | 1.96 | 43.20 | | | 0.000 | | | 0 | 0 | |
| 27 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 28 | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 29 | | | 9,722 | 9,732 | 600 | 645 | 387,000 | 387,000 | 0 | 0.0% | 2.04 | 44.10 | | | 0.249 | | | 0 | 0 | |
| 30 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 31 | | | | | | | | | | | | | | | | | | 0 | 0 | |
| | | | | Total | 7,542 | | 4,873,110 | gallons/month | | | | | | | 1.171 | | | 0 | 0 | |
| | | | | Average | 580 | | 157,197 | gallons/day | | | | | | | | | | | | |
| | | | | | | | 109 | gallons/minute | | | | | | | | | | | | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered flow from Flowmeter in Flow Meter Buidling.
4. Differnce is calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow, minus 100%.
5. Rainfall as measured at leachate pump station adjacent to leachate pond.
6. Total pumping time from underdrain pump run time meter located in the leachate pump station building. Average flow assumed to be 25 gallons per minute.
7. Leak detection flow meter not operating and needs proper calibration.

**ATTACHMENT 1**
**LEACHATE FLOW DATA**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**
**December-2021**

| DAY OF MONTH | PUMP RUN TIME | | | | | FLOW | LEACHATE VOLUME | | | | LEACHATE POND LEVEL | LEAK DETECTION | | | DAILY RAINFALL[5] | LEACHATE POND UNDERDRAIN | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | | | | | | | | | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | (GPM) | (Gallons) | (Gallons) | (Gallons) | (%) | (Feet) | LEVEL (Inches) | FLOW (gallons) | TOTAL (gallons) | (Inches) | Initial[6] (Hours) | End[6] (Hours) | Total (Minutes) | Total Flow (Gallons) | |
| 1 | 9,264 | 9,264 | 9,732 | 9,744 | 690 | 650 | 448,500 | 448,500 | 0 | 0.0% | 2.02 | 41.20 | | | 0.000 | 9208.9 | 9208.9 | 0 | 0 | Underdrain pump down |
| 2 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 3 | | | 9,744 | 9,745 | 54 | 650 | 35,100 | 35,100 | 0 | 0.0% | 2.06 | 46.90 | | | 0.039 | | | 0 | 0 | |
| 4 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 5 | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 6 | | | 9,745 | 9,759 | 846 | 650 | 549,900 | 549,900 | 0 | 0.0% | 2.08 | 41.90 | | | 0.000 | | | 0 | 0 | |
| 7 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 8 | | | 9,759 | 9,772 | 798 | 689 | 549,822 | 549,822 | 0 | 0.0% | | | | | | | | 0 | 0 | |
| 9 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 10 | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 11 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 12 | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 13 | | | 9,772 | 9,784 | 714 | 680 | 485,520 | 485,520 | 0 | 0.0% | 1.84 | 44.00 | | | 0.644 | | | 0 | 0 | |
| 14 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 15 | | | 9,784 | 9,796 | 696 | 680 | 473,280 | 473,280 | 0 | 0.0% | 2.00 | 42.00 | | | 0.000 | | | 0 | 0 | |
| 16 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 17 | | | 9,796 | 9,801 | 330 | 680 | 224,400 | 224,400 | 0 | 0.0% | 2.10 | 44.30 | | | 0.332 | | | 0 | 0 | |
| 18 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 19 | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 20 | | | 9,801 | 9,812 | 654 | 680 | 444,720 | 444,720 | 0 | 0.0% | 2.12 | 44.00 | | | 0.012 | | | 0 | 0 | |
| 21 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 22 | | | 9,812 | 9,823 | 666 | 680 | 452,880 | 452,880 | 0 | 0.0% | 1.90 | 40.40 | | | 0.003 | | | 0 | 0 | |
| 23 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 24 | | | 9,823 | 9,824 | 42 | 680 | 28,560 | 28,560 | 0 | 0.0% | 2.10 | 45.70 | | | 0.003 | | | 0 | 0 | |
| 25 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 26 | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 27 | | | 9,824 | 9,836 | 756 | 716 | 541,296 | 541,296 | 0 | 0.0% | 1.95 | 41.80 | | | 0.000 | | | 0 | 0 | |
| 28 | | | | | | | | | | | | | 0 | 0 | | | | 0 | 0 | |
| 29 | | | 9,836 | 9,836 | 0 | | 0 | | | | 2.26 | 46.00 | | | 0.348 | | | 0 | 0 | |
| 30 | | | | | 0 | | 0 | | | | | | 0 | 0 | | | | 0 | 0 | |
| 31 | | | 9,836 | 9,841 | 306 | 680 | 208,080 | 208,080 | 0 | 0.0% | 2.16 | 44.20 | | | 0.078 | | | 0 | 0 | |
| | | | | Total | 6,552 | | 4,442,058 | gallons/month | | | | | | | 1.459 | | | - | - | |
| | | | | Average | 468 | | 317,290 | gallons/day | | | | | | | | | | | | |
| | | | | | | | 100 | gallons/minute (average) | | | | | | | | | | | | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered flow from Flowmeter in Flow Meter Buidling.
4. Differnce is calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow, minus 100%.
5. Rainfall as measured at leachate pump station adjacent to leachate pond.
6. Total pumping time from underdrain pump run time meter located in the leachate pump station building. Average flow assumed to be 25 gallons per minute.
7. Leak detection flow meter not operating and needs proper calibration.

**ATTACHMENT 1**
**LEACHATE FLOW DATA**
**DOLBY LANDFILL FACILITY**
**EAST MILLINOCKET, MAINE**
**January 2022**

| DAY OF MONTH | PUMP RUN TIME | | | | | Calculated GPM | LEACHATE VOLUME | | | | LEACHATE POND LEVEL (Feet) | LEAK DETECTION | | | | DAILY RAINFALL[5] (Inches) | LEACHATE POND UNDERDRAIN | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED TOTAL (Minutes) | | PUMPED[2] (Gallons) | METERED[3] (Gallons) | DIFFERENCE[4] | | | LEVEL (Inches) | FLOW (gallons) | TOTAL (gallons) | Totalizer Reading | | Initial[6] (Hours) | End[6] (Hours) | Total (Minutes) | Total Flow (Gallons) | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | | | | | (Gallons) | (%) | | | | | | | | | | | |
| 1 | 9,264 | 9,264 | 9,841 | 9,841 | 0 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | 9,841 | 9,846 | 300 | 600 | 180,000 | 180,000 | 0 | 0.0% | 2.54 | 44.00 | | | | | 9209 | 9209 | 0 | 0 | UNDERDRAIN PUMP REMOVED |
| 4 | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | 9,846 | 9,856 | 582 | 602 | 349,200 | 350,200 | 1,000 | 0.3% | 2.29 | 38.80 | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | 9,856 | 9,856 | 0 | | | | | | 2.52 | 42.80 | | | | 0.004 | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | 9,856 | 9,860 | 216 | 605 | 129,600 | 130,600 | 1000 | 0.8% | 2.71 | 44.00 | | | | 0.025 | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | 9,860 | 9,869 | 582 | 600 | 349,200 | 349,200 | 0 | 0.0% | 2.24 | 38.20 | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | 9,869 | 9,869 | 0 | | | | | | 2.40 | 41.50 | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | 9,869 | 9,876 | 396 | 600 | 237,600 | 237,600 | 0 | 0.0% | 2.12 | 39.60 | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | 9,876 | 9,876 | 0 | | | | | | 2.33 | | | | | | | | | | |
| 20 | 9,264 | 9,265 | | | 60 | 583 | 34,500 | 35,000 | 500 | 1.4% | 2.52 | 40.90 | 15.3 | | 2,540 | 0.330 | | | | | PUMP 1 BACK IN OPERATION/ LEAK DETECTION FLOW METER REPAIRED |
| 21 | | | 9,876 | 9,878 | 108 | 631 | 68,148 | 68,148 | 0 | 0.0% | 2.29 | 39.80 | 15.3 | 4,394 | 6,934 | | | | | | |
| 22 | | | | | | | | | | | | | 14.1 | 42,037 | 48,971 | | | | | | |
| 23 | 9,265 | 9,274 | | | 558 | 631 | 352,098 | 352,098 | 0 | 0.0% | 2.12 | 1.50 | | 18,001 | 66,972 | | | | | | |
| 24 | | | | | | | | | | | 2.17 | 1.70 | | 13,130 | 80,102 | | | | | | |
| 25 | | | | | | | | | | | | | | 22,261 | 102,363 | | | | | | |
| 26 | | | | | | | | | | | 2.41 | 1.50 | | 0 | 102,363 | 0.015 | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | 2.55 | 13.40 | 18.6 | 14,825 | 117,188 | 0.001 | | | | | |
| 29 | | | | | | | | | | | | | | | | 0.034 | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | | |
| 31 | 9,274 | 9,286 | | | 702 | 631 | 442,962 | 442,962 | 0 | 0.0% | 2.57 | 7.60 | | 19,701 | 136,889 | | | | | | |
| | | | | | | | 2,143,308 | gallons/month | | | | | | | TOTAL | 0.409 | | TOTAL | - | - | |
| | | | | | | | 69,139 | gallons/day | | | | | | | RAINFALL | | | | | | |
| | | | | | | | 48 | gallons/minute | | | | | | | | | | | | | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered flow from Flowmeter in Flow Meter Buidling.
4. Difference is calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow, minus 100%.
5. Rainfall as measured at leachate pump station adjacent to leachate pond.
6. Total pumping time from underdrain pump run time meter located in the leachate pump station building. Average flow assumed to be 25 gallons per minute.

**ATTACHMENT 1**
**LEACHATE FLOW DATA**
**DOLBY LANDFILL FACILITY**
**EAST MILLINOCKET, MAINE**
**FEBRUARY 2022**

| DAY OF MONTH | PUMP RUN TIME | | | | | Calculated GPM | LEACHATE VOLUME | | | | LEACHATE POND LEVEL (Feet) | LEAK DETECTION | | | | DAILY RAINFALL[5] (Inches) | LEACHATE POND UNDERDRAIN | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | LEVEL | FLOW | TOTAL[7] | Totalizer | | Initial[6] | End[6] | Total | Total Flow | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | | (Gallons) | (Gallons) | (Gallons) | (%) | | (Inches) | (gallons) | (gallons) | Reading | | (Hours) | (Hours) | (Minutes) | (Gallons) | |
| 1 | 9,286 | 9,286 | 9,878 | 9,878 | 0 | | | | | | | | | | | | | | 0 | 0 | |
| 2 | | | | | | | | | | | 2.02 | 18.50 | 18.4 | | 136,889 | 0.003 | 9209 | 9209 | 0 | 0 | |
| 3 | | | | | | | | | | | | | | 2,916 | 139,805 | | | | 0 | 0 | |
| 4 | | | | | | | | | | | 2.39 | 1.60 | 0 | | | | | | 0 | 0 | |
| 5 | | | | | | | | | | | | | | 8,133 | 147,938 | | | | 0 | 0 | |
| 6 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 7 | 9,286 | 9,286 | | | 36 | 606 | 21,816 | 21,816 | 0 | 0.0% | 2.50 | 3.80 | 0 | 10,103 | 158,041 | | | | 0 | 0 | |
| 8 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 9 | 9,286 | 9,296 | | | 570 | 606 | 345,420 | 345,420 | 0 | 0.0% | 2.44 | 1.70 | 0 | 3,947 | 161,988 | | | | 0 | 0 | |
| 10 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 11 | | | | | | | | | | | 2.60 | 9.70 | 0 | 2,756 | 164,744 | 0.126 | | | 0 | 0 | |
| 12 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 13 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 14 | 9,296 | 9,302 | | | 372 | 585 | 217,620 | 217,695 | 75 | 0.0% | 2.57 | 9.90 | 0 | 5,470 | 170,214 | 0.061 | | | 0 | 0 | |
| 15 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 16 | | | | | | | | | | | 2.78 | 10.20 | 0 | 4,863 | 175,077 | 0 | | | 0 | 0 | |
| 17 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 18 | 9,302 | 9,311 | | | 564 | 509 | 287,076 | 287,076 | 0 | 0.0% | 2.94 | 6.30 | 0 | 4,973 | 180,050 | 0.522 | | | 0 | 0 | |
| 19 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 20 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 21 | 9,311 | 9,354 | | | 2,574 | 509 | 1,310,166 | 1,310,166 | 0 | 0.0% | 2.80 | 1.30 | 0.0 | 10,209 | 190,259 | 0.144 | | | 0 | 0 | |
| 22 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 23 | 9,354 | 9,367 | | | 786 | 509 | 400,074 | 400,074 | 0 | 0.0% | 2.70 | 8.40 | 18.5 | 2,519 | 192,778 | 0.195 | | | 0 | 0 | STARTED SECOND PUMP |
| 24 | | | 9,878 | 9,893 | 930 | 509 | 473,370 | 473,370 | 0 | 0.0% | | | | | | | | | 0 | 0 | |
| 25 | 9,367 | 9,416 | | | 2,922 | 509 | 1,487,298 | 1,487,298 | 0 | 0.0% | 2.26 | 1.70 | 18.4 | 6,004 | 198,782 | 0 | | | 0 | 0 | |
| 26 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 27 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 28 | 9,416 | 9,428 | | | 738 | 509 | 375,642 | 375,642 | 0 | 0.0% | 3.05 | 7.20 | 0.0 | 5,326 | 204,108 | 0 | | | 0 | 0 | |
| 29 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 30 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 31 | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| | | | | | | | 4,918,482 | gallons/month | | | | | | 67219 | | 1.051 | | TOTAL | - | - | |
| | | | | | | | 175,660 | gallons/day | | | | | | | | | | | | | |
| | | | | | | | 122 | gallons/minute | | | | | | | | | | | | | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered flow from Flowmeter in Flow Meter Buidling.
4. Difference is calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow, minus 100%.
5. Rainfall as measured at leachate pump station adjacent to leachate pond.
6. Total pumping time from underdrain pump run time meter located in the leachate pump station building. Average flow assumed to be 25 gallons per minute.

**ATTACHMENT 1**
**LEACHATE FLOW DATA**
**DOLBY LANDFILL FACILITY**
**EAST MILLINOCKET, MAINE**
**MARCH 2022**

| DAY OF MONTH | PUMP RUN TIME | | | | | Calculated GPM | LEACHATE VOLUME | | | | LEACHATE POND LEVEL (Feet) | LEAK DETECTION | | | | DAILY RAINFALL[5] (Inches) | LEACHATE POND UNDERDRAIN | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PUMP #1 | | PUMP #2 | | COMBINED | | PUMPED[2] | METERED[3] | DIFFERENCE[4] | | | LEVEL | FLOW | TOTAL[7] | Totalizer | | Initial[6] | End[6] | Total | Total Flow | |
| | INITIAL[1] (Hours) | FINAL[1] (Hours) | INITIAL[1] (Hours) | FINAL[1] (Hours) | TOTAL (Minutes) | | (Gallons) | (Gallons) | (Gallons) | (%) | | (Inches) | (gallons) | (gallons) | Reading | | (Hours) | (Hours) | (Minutes) | (Gallons) | |
| 1 | 9,428.2 | 9,428.2 | 9,893 | 9,893 | 0 | | 0 | | | | | | | | 204108 | | 9208.9 | 9208.9 | 0 | 0 | |
| 2 | 9,428.2 | 9,435.2 | | | 420 | 576 | 241,920 | 241,763 | -157 | -0.1% | 2.70 | 1.80 | 0 | 2199 | 206307 | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | |
| 4 | 9,435.2 | 9,446.5 | | | 678 | 585 | 396,630 | 396,630 | 0 | 0.0% | 2.51 | 1.90 | 0 | 3,057 | 209,364 | 0.256 | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | 9,446.5 | 9,451.0 | | | 270 | 585 | 157,950 | 157,950 | 0 | 0.0% | 3.30 | 10.30 | 0 | 3,604 | 212,968 | 0.419 | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | 9,451.0 | 9,474.7 | | | 1,422 | 585 | 831,870 | 831,870 | 0 | 0.0% | 2.87 | 9.60 | 0 | 2,001 | 214,969 | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | 9,474.7 | 9,482.4 | | | 462 | 585 | 270,270 | 270,270 | 0 | 0.0% | 3.04 | 8.30 | | 3,005 | 217,974 | 0 | 9208.9 | 9209.2 | 18 | 450 | |
| 12 | 9,482.4 | 9,483.4 | | | 60 | 585 | 35,100 | 35,100 | 0 | 0.0% | 3.07 | 1.00 | | | | 0 | 9209.2 | 9227.1 | 1074 | 26850 | |
| 13 | | | | | | | | | | | | | | | | | | | | | |
| 14 | 9,483.4 | 9,502.7 | | | 1,158 | 585 | 677,430 | 677,430 | 0 | 0.0% | 2.76 | 8.70 | | 1,144 | 219,118 | 0.460 | 9227.1 | 9266.8 | 2382 | 59550 | |
| 15 | | | | | | | | | | | | | | | | | | | | | |
| 16 | 9,502.7 | 9,518.3 | | | 936 | 585 | 547,560 | 547,560 | 0 | 0.0% | 2.17 | 10.30 | | 0 | 219,118 | 0.312 | 9266.8 | 9291.7 | 1494 | 37350 | |
| 17 | 9,518.3 | 9,524.0 | | | 342 | 585 | 200,070 | 200,070 | 0 | 0.0% | | | | | | | | | | | |
| 18 | | | 9,893.3 | 9,904.9 | 696 | 585 | 407,160 | 407,160 | 0 | 0.0% | 2.37 | 7.20 | | 1,196 | 220,314 | 0 | 9291.7 | 9333.9 | 2532 | 63300 | |
| 19 | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | 9,904.9 | 9,907.4 | 150 | 565 | 84,750 | 84,750 | 0 | 0.0% | | | | | | | | | | | |
| 21 | 9,524.0 | 9,570.6 | | | 2,796 | 565 | 1,579,740 | 1,579,740 | 0 | 0.0% | 2.30 | 8.40 | | 0 | 220,314 | 1.17 | 9333.9 | 9405.9 | 4320 | 108000 | |
| 22 | | | 9,907.4 | 9,922.0 | 876 | 566 | 495,816 | 495,816 | 0 | 0.0% | | | | | | | | | | | |
| 23 | 9,570.6 | 9,587.2 | | | 996 | 575 | 572,700 | 572,700 | 0 | 0.0% | 2.39 | 9.30 | | 1 | 220,315 | 0.004 | 9405.9 | 9453.5 | 2856 | 71400 | |
| 24 | | | | | | | | | | | | | | | | | | | | | |
| 25 | 9,587.2 | 9,602.5 | | | 918 | 565 | 518,670 | 518,670 | 0 | 0.0% | 3.26 | 10.40 | | 2,841 | 223,156 | 1.097 | 9453.5 | 9502.2 | 2922 | 73050 | |
| 26 | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | 9,922.0 | 9,931.4 | 564 | 565 | 318,660 | 318,660 | 0 | 0.0% | | | | | | | | | | | |
| 28 | 9,602.5 | 9,645.6 | | | 2,586 | 565 | 1,461,090 | 1,461,090 | 0 | 0.0% | 2.55 | 7.40 | | 290 | 223,446 | 0.051 | 9502.2 | 9573.9 | 4302 | 107550 | |
| 29 | | | 9,931.4 | 9,941.5 | 606 | 562 | 340,572 | 340,572 | 0 | 0.0% | | | | | | | | | | | |
| 30 | 9,645.6 | 9,668.6 | | | 1,380 | 565 | 779,700 | 779,700 | 0 | 0.0% | 2.86 | 7.80 | | 8 | 223,454 | 0 | 9573.9 | 9622.1 | 2892 | 72300 | |
| 31 | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | 9,917,658 | gallons/month | | | | | TOTAL | 19346 | TOTAL | 3.769 | | TOTAL | 24,792 | 619,800 | |
| | | | | | | | 319,924 | gallons/day | | | | | | | RAINFALL | | | | | | |
| | | | | | | | 222 | gallons/minute | | | | | | | | | | | | | |

Notes:

1. Pumped hours as indicated by pump time display located within the leachate pump station building adjacent to the leacahte pond.
2. Pumped Volume = Average flow rate (gallon per minute) x combined total (minutes).
3. Metered flow from Flowmeter in Flow Meter Buidling.
4. Difference is calculated as pumped flow minus metered flow. Percentage difference is pumped flow divided by metered flow, minus 100%.
5. Rainfall as measured at leachate pump station adjacent to leachate pond.
6. Total pumping time from underdrain pump run time meter located in the leachate pump station building. Average flow assumed to be 25 gallons per minute.

4/12/21

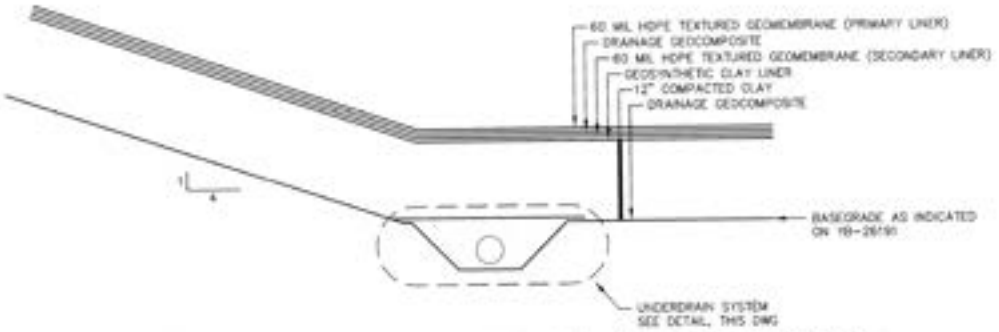
Memo to: E. Clark, M. Barden, L. Pizzuti, B Pierce. D. Angotti
From: M. Muzzy
Subject: Dolby Leachate Pond

Over the last several days it has become apparent that a leak has developed in the leachate pond's liner system. The leak is evidenced by increased flows from the leak detection layer as well as possibly from the underdrain system. Measured specific conductivity in the leachate pond, leak detection system and underdrain system also suggest leachate is leaking from the leachate pond.

**Background**

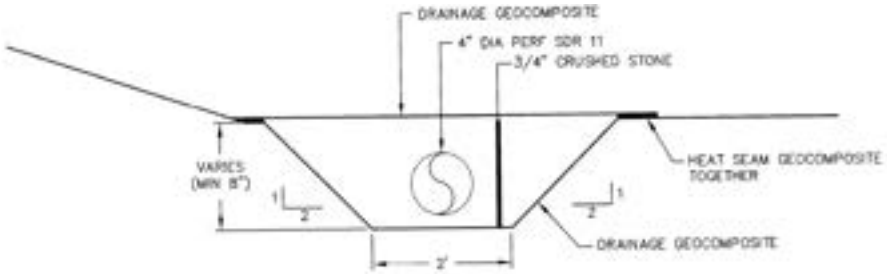
In 2007 the leachate pond was upgraded to a multi-layer liner system including leak detection. The then existing liner and sediment was removed (and placed into the landfill).

The replacement leachate pond liner system consists of the following layers in order of descending position:




LEACHATE POND COMPOSITE LINER (BASE & SIDESLOPE)
NTS

The underdrain system consists of a network of shallow stone filled trenches with drainage geocomposite excavated into the pond's base grade. The underdrain piping connects to a central pipe that flows to the underdrain manhole. The underdrain pump was recently replaced with a temporary replacement and a new pump is expected in several weeks.



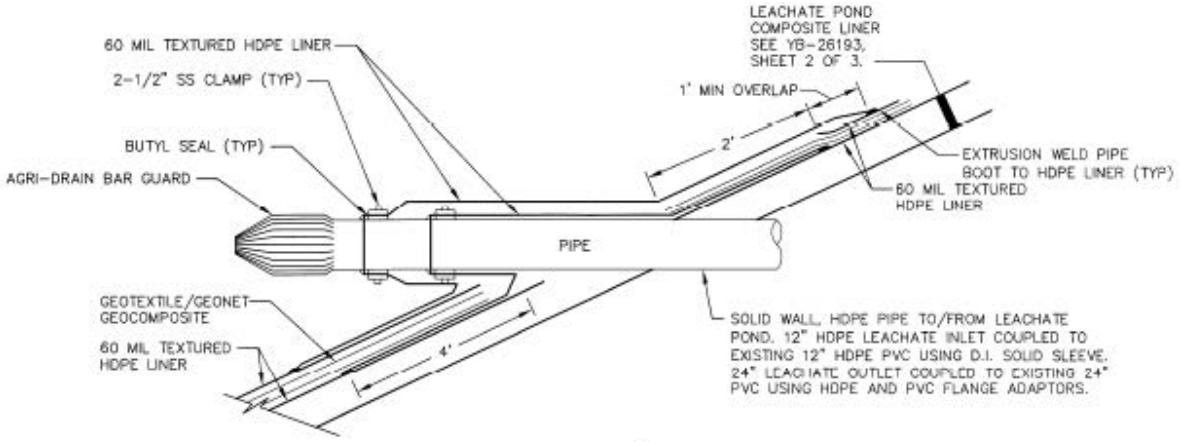

UNDERDRAIN SYSTEM
NTS

The underdrain system includes a layer of drainage geocomposite over the entire pond base.

A 12-inch layer of compacted clay overlies the underdrain and a geosynthetic clay liner (GCL) overlies the clay layer. The GCL supports a 60-mil HDPE secondary liner which is overlain by a drainage geocomposite. The drainage geocomposite slopes to a stone sump at the south end of the leachate pond. The drainage geocomposite and stone sump are covered with the primary 60-mil HDPE liner.

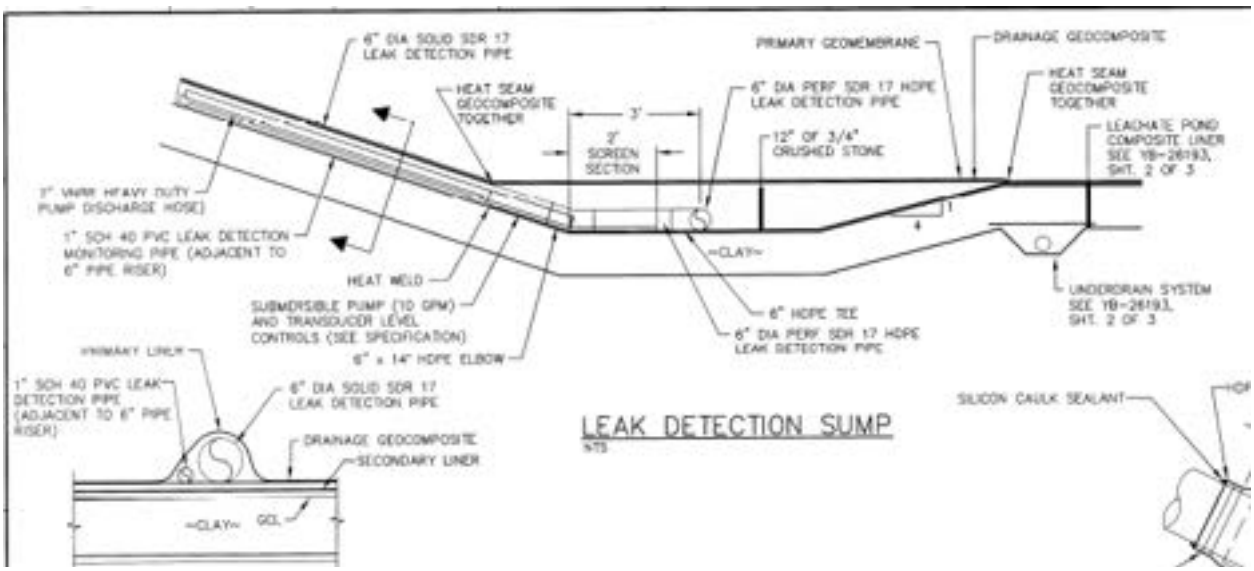
Three pipes penetrate all layers of the liner system. The pipes include : 1) a 24-inch diameter pipe inlet conveys leachate into the pond from the landfill, 2) a 12-inch diameter pipe outlet conveys leachate from the leachate pond into the pump station wet well, and 3) a 6-inch diameter pipe serves as a dry-hydrant line that can be used to pump leachate from the leachate pond into a tank truck if needed.

Each of the three pipes are surrounded by geomembrane boots that are welded to the primary and secondary HDPE liners as appropriate. The boots are also held on the pipes by one or more stainless steel bands. Experience has shown the stainless steel bands need to be replaced from time to time.




LEACHATE INLET/OUTLET PIPE
NTS

A separate 12-inch diameter pipe is a conduit that houses the leak detection pump and associated 2" diameter discharge pipe that is used to pump liquid collected between the primary and secondary liners. This 12" pipe conduit penetrates the primary liner above the ponds maximum leachate level. The leak detection systems 2" diameter discharge pipe passes through a manhole (where a flow meter is located) and then to the pump station wet well.




**Current Conditions**

During the approximate time period of April 1 through April 10 the underdrain and leak detection pump flows have been noticeably higher than typical and exhibit specific conductance (SV) values similar to the leachate in the leachate pond. On Sunday (4-11-21) the following SC values were reported:

Underdrain 642
Leachate pond 886
Leak detection system 980

Also, the leak detection water level was reported as being lowered ~16-inches by pumping only to see an approximate 2-inch rise in the leak detection water level in less than two minutes….suggesting leachate is leaking through the primary liner at one or more locations.

The SC in the underdrain could be a result of leakage from the leachate pond or from the groundwater captured by the underdrain. The current liner system was installed in 2007 and was a replacement for a single geomembrane that had reached is design life. Photographs of the liner replacement suggest that considerable leachate and possible some solids from the leachate pond and likely entered the shallow soil in the underdrain area and could be influencing the SC of the underdrain collected underdrain water (see the first photo), however a leak could also be the cause or a combination of the two.

**At this time, the following measures are being taken.**

The underdrain is pumped automatically by way of a float actuated pump. However, as indicted in earlier communications, the permanent pump for the underdrain recently failed and a temporary pump is currently currently in place. The temporary pump is not equipped with a run time meter relative to estimating the underdrain flow rate.

The leak detection layer is being pumped in increments. Pump flows from the leak detection layer cannot be determined currently as the flow meter for that system is not working (repairs are scheduled for this spring).

The water level in the leachate pond is being lowered to allow direct observation of the pipe inlet /outlet points. The thinking is one or more of the stainless steel bands clamping a pipe boot to a pipe may have failed allowing leachate to flow from the pond into the leak detection system. If one or more of the band(s) are determined to be in need of replacement, temporary measures will be taken to reattach the pipe boot to the pipe. Once any bands are replaced monitoring of flow and SC from the underdrain and leak detection layer will be increased to evaluate if any changes have occurred.

Unless significant improvement is made relative to the inlet and outlet pipe points, the next step will likely be complete cleaning of the pond liner followed by a close inspection for holes in the primary HDEP liner.

**Comment**. As explained above, the overall liner system for the leachate pond consists of multiple layers of low permeability materials. It seems unlikely leachate is leaking quickly through the secondary liner then through the GCL, and then through the compacted clay at a rate sufficient to cause the current underdrain flows. The spring of each year typically represents the highest groundwater levels and such condition seems most reasonable for causing the underdrain flows. The underdrain SC is bothersome; it could be an artifact of high groundwater comingling with the shallow soils forming the leachate pond before the current liner system was installed. It is worth noting that the underdrain pump failed a week or so ago which likely resulted in unwanted high levels of groundwater in the underdrain system, which could have reached the shallow soils affected by the old leachate pond liner discussed earlier.

**Recommendation**.

DAFS, MEDEP, and SME should arrange a phone conversation to discuss the pond and mitigation measures. Dick A. says the pond will be pumped to its lowest practical point likely by Wednesday. He reminded me the pump station was not designed to fully empty the pond (to avoid migration of sediment into the pump station) and as such the pipe connecting to the pump station and the dry hydrant line will remain underwater. Typically, the pond is only pumped dry when the liner is cleaned, and that requires auxiliary pumping and trucking of sediment.

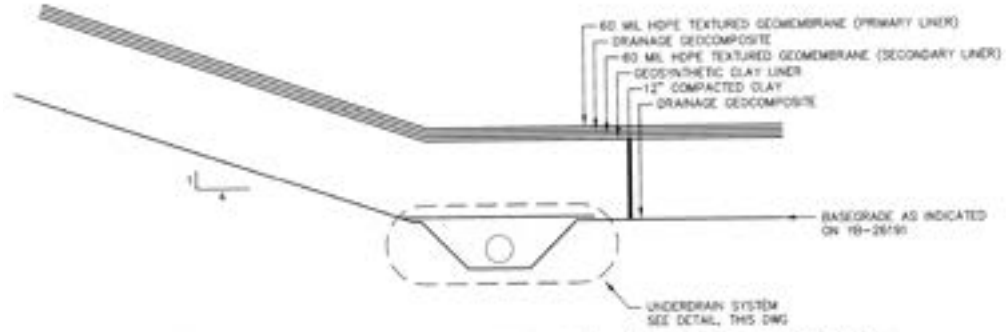
SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@smemaine.com
smemaine.com

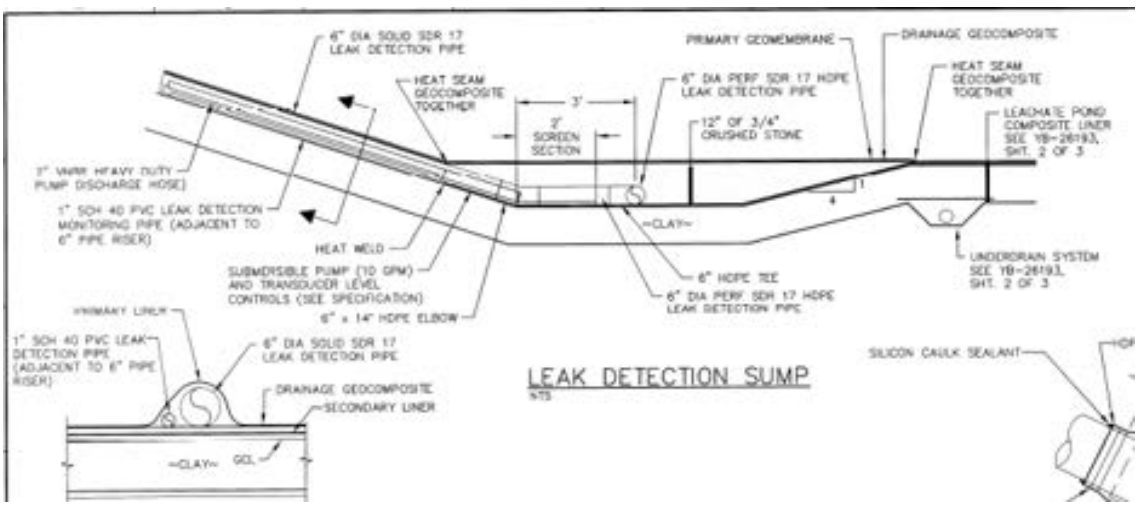
**PROPOSED WORK PLAN FOR**
**IDENTIFYING SOURCE OF LEAKAGE**
**INTO LEAK DETECTION SYSTEM**
**DOLBY LEACHATE POND**
**APRIL 19, 2021**

## BACKGROUND

In 2007, the leachate pond was upgraded to a multi-layer liner system including a leak detection layer and an underdrain layer.




LEACHATE POND COMPOSITE LINER (BASE & SIDESLOPE)
NTS




LEAK DETECTION SUMP
NTS

Recently, flow into the leak detection layer has increased substantially, indicating a leak into that layer has developed. There has been no apparent leak source detected. The source could be from one or more of the following:

- The banding attaching one or more of the geomembrane boots to its respective pipe penetration could have failed.
- A hole(s) in the primary liner could have developed.
- Though considered unlikely, a hole in the secondary liner layer(s) could have developed and the recent underdrain pump failure could have allowed groundwater in the underdrain layer to rise sufficiently to leak into the leak detection layer.

Specific conductivity readings in the underdrain layer are typically lower than both the leachate pond and leak detection layer; however, the specific conductivity for all three layers have been similar recently. Typically, it would be expected that a leak into the leak detection system would come from the leachate pond; thus, the specific conductivity in the leak detection layer would be similar to the that in the leachate pond.

The elevated specific conductivity in the underdrain is concerning for several reasons including that the underdrain is upgradient of two monitoring wells (i.e., MW-304A and B), which monitor shallow groundwater. Monitoring wells MW-304A and B are located approximately 170 feet downgradient of the leachate pond and were installed in 1983. The bottom of well screen for MW-304A is approximately 21.5 feet below ground surface and the bottom of the well screen for MW-304B is approximately 8.6 feet below ground surface. In 2020, specific conductivity in MW-304A was 211, 212, and 282 μmhos/cm during the spring, summer, and fall monitoring events and the specific conductivity in MW-304B was 103, 116, and 41 μmhos/cm for those same events.

**SEQUENCE OF PROPOSED WORK**

The following sequence of work allows evaluation of the leachate pond systems to better assess the cause and location of the leak. The sequence allows less intrusive work (data collection and observation) to occur before more intrusive and costly work is performed.

1) Allow the leachate pond and underdrain return to normal operating conditions. During this time, the underdrain pumping system will be returned to its normal float-actuated pumping condition and the pump(s) for the leachate pond will be placed in automatic mode for normal summer water level settings. During this time, Mid-South Engineering (MSE) will assist SME by performing the following.
    a. Pump the Leak Detection System daily to its lowest practical level (6 to 7-inches).
    b. Record Leak Detection System water elevation before and after pumping.
    c. Record Leak Detection System run time before and after pumping.

d. Measure and Record Leak Detection specific conductivity.
e. Measure and Record the Underdrain specific conductivity.
f. Record Leachate Pond Level (wet well level with the leachate pumps turned off).
g. Measure and Record the Leachate Pond specific conductivity.
h. Report all data to SME.

If clear changes in the leak detection flows occur, estimate the pond level at which the changes occur.

If it is determined that the leak is too large to be pumped from the leak detection system, then SME will address with MEDEP at that time.

2) While the underdrain is operating normally, pump down the leachate pond as low as practical using the leachate pond pump station. During this time, MSE will do the following:
    a. Continue to pump the leak detection system daily and record the items listed in 1.a through 1.h above.

There will be some leachate left in the pond as the leachate outlet pipe is several inches above the pond bottom.

3) When the pond is at its lowest practical level, enter the pond and inspect the liner penetrations (i.e., pipe boots) including:
    a. The presence and condition of bands on each of the three pipe boots. If pipe banding appears to be the problem install replacement bands. This will be done while some leachate is in the pond, so extra care/safety will be necessary.

4) Elevations of key leachate pond features from as-built drawings and ground survey.

The elevations will be used to avoid underdrain water levels that could potentially cause heaving (uplift) of the pond's liner system if further detection of the leak source is necessary.

| Feature | Elevation |
|---|---|
| Top of Pond Liner | 351.5 |
| Invert of Pond Spillway | 350.5 |
| White Line on Pond Liner | 348.5 |
| Rim of Underdrain Manhole | 348.2 |
| Inverts of Pipes Entering/Exiting Pond | 344.03 to 344.35 |
| Top of Pond Liner at Approximate Pond Low Point | 344.0 +/- |
| Invert of Underdrain at Approximate Pond Low Point | 342.14 |

| | |
|---|---|
| Invert of Underdrain into Underdrain Manhole | 341.35 |
| Bottom of Underdrain Manhole | TBD |

The temporary benchmark on the top of the Leachate Pump Station wet well is the reference for the elevation measurements.

5) Provided an obvious pipe boot leak is not observed, begin filling the pond to approximately elevation 347.5 (one foot below the white line). Continue to operate the underdrain pumping system at low level while the pond fills. Continue to operate and monitor the leak detection pumping system, underdrain, and leachate pond daily as indicated in Section 1.

6) When the pond level is at approximately elevation 347.5 stop the underdrain pump and add dye to the underdrain manhole. Allow the underdrain water level to increase to elevation 346.5 while pumping from the leak detection layer daily. Daily measurements for the leak detection flow will follow the list in Section 1. The color of the leak detection flow will be observed daily. The intent of the dye test is to understand if groundwater is entering the leak detection layer.

7) Once the underdrain dye test has been completed, resume underdrain pumping and return the pond to its normal summer operating level. Lower and maintain the underdrain water level to its lowest practical level. Continue pumping the leak detection system daily and obtain the information in Section 1 above.

8) If no cause of leakage into the underdrain has been identified, lower the pond to its lowest level and clean the liner surface of all sediment. Lowering the pond for liner cleaning will require bypass pumping from Dolby III Manhole CB No. 3 to the pump station wet well and closing valves for the pond's inlet and outlet pipes. It will be critical at this time to keep the underdrain pump working. While the leachate level in the pond is being lowered, pump the leak detection system at least twice per day, recording the pump run time and the water elevation in the leachate pond. Use the slope distance from white line to track the pond level as pond lowering proceeds. It could come to pass that as the pond level is lowered, leakage into the leak detection layer slows or stops. Knowing the approximate pond elevation could be suggestive of where a hole(s) in the primary geomembrane liner could be located.

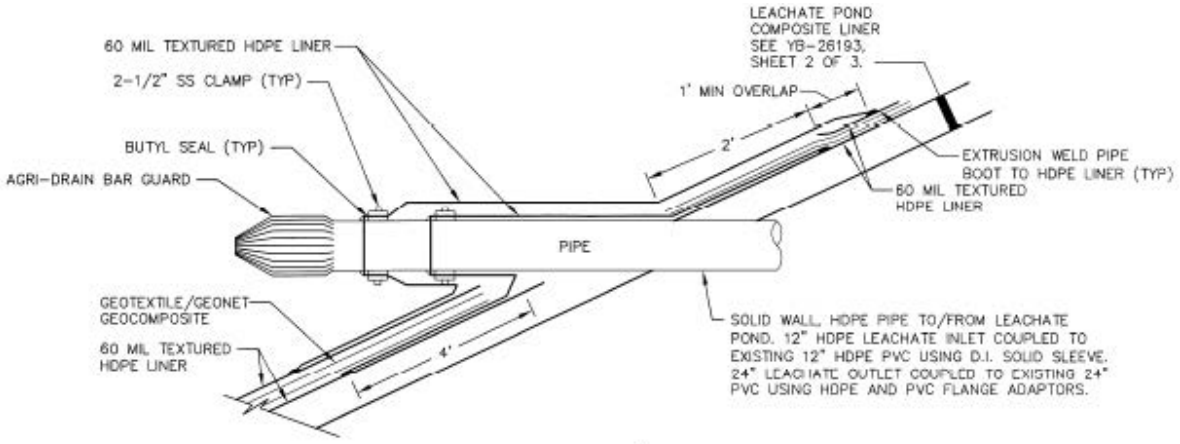
   Lowering the pond level and cleaning the liner surface will require mobilization of a subcontractor to provide by-pass pumping from the landfill to the pump station and vacuum truck /hand equipment to clean the liner surface. All sediment from the pond will be placed in the temporary lagoon sludge storage cell on the top of the Dolby III landfill.

9) Inspect primary geomembrane liner for damage that could allow leachate from the pond to enter the leak detection system and repair hole(s), if found. Repair of the hole(s) will require a specialty subcontractor (e.g., RTD of Madison, Maine). Use of a leak detection (electrical resistivity) subcontractor will be considered as part of the visual inspection.

10) If the leak location has not been identified and repaired, it will be necessary to further investigate the pipe boots (see detail below). There are three pipes entering/exiting the pond. Each pipe has two pipe boots, one for the primary geomembrane liner and one for secondary geomembrane liner. The approach will be to remove the primary pipe boot(s) to expose the secondary pipe boot(s) for visual inspection and possible replacement of the existing bands, securing the secondary boot(s) to the pipe(s) or other repair of the secondary pipe boots if needed. Provided no observed issues with the secondary pipe boots are identified, new primary pipe boots will be fabricated and installed. All work for repair / replacement of the pipe boots will require a specialty subcontractor (e.g., RTD).

    If the above pipe boot repair work is performed, consideration will be given to eliminating the 6-inch diameter dry hydrant pipe that currently penetrates the liner system. The dry hydrant pipe was originally installed for pumping into tank trucks. The dry hydrant pipe is not used and its penetration through the liner system adds one more potential leak location.

11) Allow the leachate pond to fill. Pump the leak detection system each day, measuring the items listed in Section 1.




LEACHATE INLET/OUTLET PIPE
NTS

SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@sme-engineers.com
sme-engineers.com

July 27, 2021

Ms. Kathy Tarbuck
MEDEP
Bureau of Hazardous Materials and Solid Waste
17 State House Station
Augusta, ME 04333

Subject: Dolby Leachate Pond

Dear Ms. Tarbuck:

The purpose of this correspondence is to discuss the recent dye testing performed for the Dolby Landfill Leachate Pond and provide conclusions/actions relative to mitigating the cause for occasional increased water levels in the leak detection system associated with the Dolby leachate pond. The leachate pond includes a primary geomembrane liner, a geocomposite leak detection layer, a secondary geomembrane, a geosynthetic clay liner (GCL), 12 inches of compacted clay, and a geocomposite underdrain. Figure 1 (attached) shows a cross-section of the leachate pond liner and drainage system. Sevee & Maher Engineers, Inc.'s (SME's) work on the leachate pond was authorized by the State of Maine Department of Department of Administrative and Financial Services (DAFS).

In April 2021, increasing water levels in the leachate pond's leak detection system were detected. At about that same time, it was noted that the leachate pond's underdrain pump was not functioning (a temporary replacement pump was installed soon thereafter). At that same time, it was noted that when the water level in the underdrain layer increased, the water level in the leak detection layer also increased. The cause for the water level increase in the leak detection layer is unknown; however, the apparent relationship between the leak detection layer and the underdrain layer suggests the underdrain and leak detection layer could be connected hydraulically.

Specific conductivity measurements were made from April 15 to July 21, 2021, using water from the leachate pond, the leak detection layer, and the underdrain layer. The specific conductivity measurements are shown in Table 1 (attached). The measurements generally show the highest specific conductivity to be associated with the leachate, and the lowest specific conductivity to be associated with the underdrain. The specific conductivity of the water in the leak detection layer was not sufficiently biased to suggest presence of a leak from either the leachate pond or a leak from the leachate pond's underdrain.

In a continued effort to understand if seepage from the leak detection layer could be entering/leaving the underdrain and/or leachate pond, green-colored dye was introduced into the leak detection layer on June 20, 2021, with the intent that the dye would visibly migrate into the underdrain layer and/or into the leachate pond (if a leak were present in either geomembrane liner). Subsequent to introducing the dye, the water level in the leachate pond was raised and the water level in underdrain was

raised/lowered to encourage the dye to move through any would-be leak(s) into the pond and/or underdrain.

The dye used in the leak detection layer was a fluorescent water-tracing dye manufactured by Eco Clean. One gallon of the dye was introduced into the leak detection system. One gallon of dye colors 5,000 to 10,000 gallons of water. The water in the leak detection layer was pumped down as best possible prior to introducing the dye to assure a concentration likely to be seen if leakage from the leak detection layer occurred.

Water in the underdrain (i.e., in the underdrain's access manhole) and in the leachate pond was visually monitored for dye presence between June 20, 2021 and July 20, 2021, and no dye was detected at either location. The dye monitoring also included checking water samples from the underdrain and leachate pond for fluorescence under black light conditions, in the event very dilute dye concentrations were present at either location. The black light monitoring also showed no fluorescence presence in the underdrain or leachate pond. To confirm the dye presence in the leak detection layer, the leak detection pump was activated on July 16, 2021, and the water pumped from the leak detection layer was indeed florescent-green colored. Table 2 and Figure 2 (attached) showing water elevations measured in the pond, leak detection layer, and underdrain layer were prepared to show how water levels in the leak detection layer behaved, as the water levels in the underdrain layer were purposely varied. As indicated earlier, no dye was detected in the underdrain layer or in the leachate pond in spite of purposely raising/lowering the water in the underdrain.

## CONCLUSION

There is no clear reason for why water levels in the leak detection layer change when pumping of the underdrain is suspended. No dye was detected in the underdrain and no dye was detected in the leachate pond, though several efforts were made to encourage the dye to seep to either of those potential receptors. However, it does appear that a very small leak into the leak detection layer from the underdrain is likely in that the leak detection layer has been pumped on several previous occasions when the underdrain pump has failed and water levels in the underdrain have increased. Based on the no dye observed in the leachate pond, it is concluded the primary liner for the leachate pond is not leaking in any measurable amount.

## Mitigation Action

To avoid future water level increases in the underdrain, DAFS intends to instrument the underdrain pump such that if the pump fails, remote monitoring measures will be in place to notify the landfill operator the underdrain needs attention. In the short term, the remote monitoring will occur at the pump station for the leachate pond and will likely consist of a visible (i.e., light) or audible (i.e., horn) alarm. SME and/or its subcontractors visit the leachate pond pump station on a 1- to 3-day frequency, depending on time of year and weather, and will react to any alarm for the underdrain pump. DAFS is also investigating the possibility connecting all water level and flow monitoring devices associated with the leachate pond to the internet so that more frequent remote monitoring can be implemented.

Thank you for discussing the contents of this letter in advance of its preparation. If you have any questions or comments, please contact me at SME or Lou Pizzuti at DAFS.

Very truly yours,

SEVEE & MAHER ENGINEERS, INC.

Matthew W. Muzzy, P.E.
Principal/Senior Geo-Environmental Engineer

Attachments

cc: Lou Pizzuti (DAFS)

**TABLE 1**

**SPECIFIC CONDUCTIVITY MEASUREMENTS**
**DOLBY LEACHATE POND**

| Date | Leachate Pond | Leak Detection Layer | Underdrain Layer | Notes |
|---|---|---|---|---|
| 4/15/2021 | 830 | 800 | 590 | |
| 4/16/2021 | 840 | 1000 | 658 | |
| 4/17/2021 | 767 | 1050 | 322 | |
| 4/18/2021 | 886 | 980 | 642 | |
| 4/19/2021 | 885 | 912 | 660 | |
| 4/21/2021 | 925 | 883 | 651 | |
| 4/23/2021 | 887 | 961 | 669 | |
| 4/24/2021 | 911 | 935 | 663 | |
| 4/28/2021 | 948 | 936 | 667 | |
| 5/22/2021 | 1276 | 825 | 372 | |
| 5/23/2021 | 1302 | 780 | 318 | |
| 5/24/2021 | 1291 | 824 | 327 | |
| 5/26/2021 | 1298 | 790 | 307 | |
| 5/28/2021 | 1400 | 821 | 312 | |
| 6/7/2021 | 1476 | 638 | 740 | |
| 6/9/2021 | 1437 | 651 | 762 | |
| 6/11/2021 | 1560 | 787 | 773 | |
| 6/14/2021 | 1512 | 718 | 794 | |
| 6/16/2021 | 1582 | 768 | 865 | |
| 6/7/2021 | 1476 | 638 | 740 | |
| 6/9/2021 | 1437 | 651 | 762 | |
| 6/11/2021 | 1560 | 787 | 773 | |
| 6/14/2021 | 1512 | 718 | 794 | |
| 6/16/2021 | 1582 | 768 | 865 | |
| 6/20/2021 | | | | Dye Introduced to Leak Detection; Pumping of Leak Detection Stopped |
| 6/21/2021 | | | | No dye detected in Underdrain or Pond |
| 6/22/2021 | 1750 | | 822 | No dye detected in Underdrain or Pond |
| 6/23/2021 | 1728 | | 875 | No dye detected in Underdrain or Pond |
| 6/25/2021 | 1727 | | 747 | No dye detected in Underdrain or Pond |
| 6/26/2021 | 1677 | | 715 | No dye detected in Underdrain or Pond |
| 6/27/2021 | 1726 | | 684 | No dye detected in Underdrain or Pond |
| 6/28/2021 | 1685 | | 665 | No dye detected in Underdrain or Pond |
| 6/29/2021 | 1587 | | 648 | No dye detected in Underdrain or Pond |
| 6/30/2021 | 1614 | | 649 | No dye detected in Underdrain or Pond |
| 7/1/2021 | 1592 | | 602 | No dye detected in Underdrain or Pond |
| 7/2/2021 | 1633 | | 663 | No dye detected in Underdrain or Pond |
| 7/3/2021 | 1817 | | 654 | No dye detected in Underdrain or Pond |
| 7/4/2021 | 1826 | | 658 | No dye detected in Underdrain or Pond |
| 7/5/2021 | 1758 | | 641 | No dye detected in Underdrain or Pond |
| 7/6/2021 | 1718 | | 630 | No dye detected in Underdrain or Pond |
| 7/7/2021 | 1694 | | 647 | No dye detected in Underdrain or Pond |
| 7/8/2021 | 1762 | | 651 | No dye detected in Underdrain or Pond |
| 7/9/2021 | 1725 | | 630 | No dye detected in Underdrain or Pond |
| 7/11/2021 | 1571 | | 990 | No dye detected in Underdrain or Pond |
| 7/12/2021 | 1550 | | 930 | No dye detected in Underdrain or Pond |
| 7/13/2021 | 1584 | | 867 | No dye detected in Underdrain or Pond |
| 7/14/2021 | 1660 | | 938 | No dye detected in Underdrain or Pond |

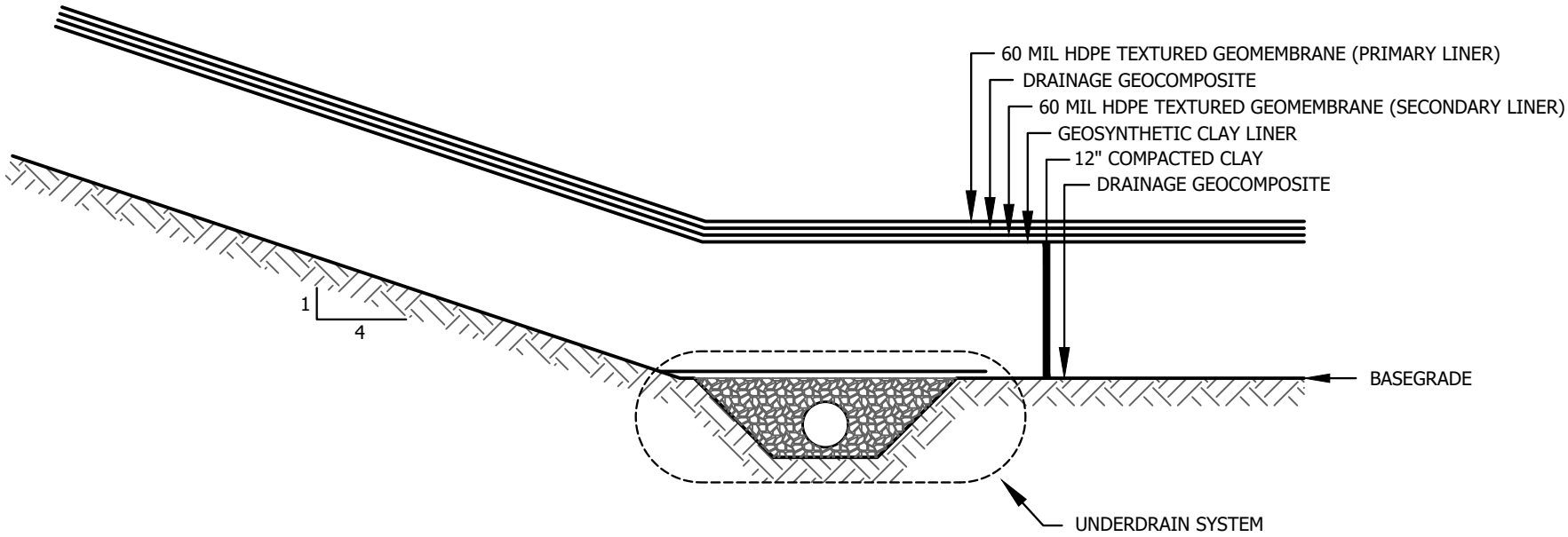
| Date | Leachate Pond | Leak Detection Layer | Underdrain Layer | Notes |
|---|---|---|---|---|
| | | | | Begin varied water level in underdrain |
| 7/15/2021 | 1689 | | 742 | No dye detected in Underdrain or Pond |
| 7/16/2021 | 1663 | | 840 | No dye detected in Underdrain or Pond |
| 7/18/2021 | 1552 | | 704 | No dye detected in Underdrain or Pond |
| 7/19/2021 | 1624 | | 823 | No dye detected in Underdrain or Pond |
| | | | | Return underdrain to normal operation |
| | | | | Begin lowering pond for cleaning |
| 7/20/2021 | 1587 | | 791 | No dye detected in Underdrain or Pond |
| 7/21/2021 | 1559 | | 775 | No dye detected in Underdrain or Pond |
| 7/22/2021 | | | | No dye detected in Underdrain or Pond |
| | | | | Pond lowered for cleaning |

Note:
Specific conductivity meter replaced with new meter on 5/22/2021.

**TABLE 2**

**WATER ELEVATIONS MEASURED DURING DYE STUDY**

| Day | Date | Time (hrs-min) | Water Elevation in Leachate Pond (ft) | Water Elevation in Leak Detection Layer (ft) | Water Elevation in Underdrain Manhole (ft) |
|---|---|---|---|---|---|
| 0 | 6/25/2021 | 0700 | 347.5 | 344.0 | 343.7 |
| | | 1400 | 347.6 | 344.0 | 343.8 |
| | | 1900 | 347.6 | 344.0 | 343.9 |
| 1 | 6/26/2021 | 0700 | 347.7 | 344.1 | 344.0 |
| | | 1200 | 347.7 | 344.1 | 344.1 |
| | | 1730 | 347.8 | 344.1 | 344.1 |
| 2 | 6/27/2021 | 0700 | 347.8 | 344.2 | 344.3 |
| | | 1330 | 347.9 | 344.2 | 344.3 |
| | | 1900 | 347.9 | 344.3 | 344.4 |
| 3 | 6/28/2021 | 0730 | 347.9 | 344.4 | 344.4 |
| | | 1500 | 347.9 | 344.5 | 344.5 |
| 4 | 6/29/2021 | 0730 | 347.9 | 344.6 | 344.5 |
| | | 1900 | 347.9 | 344.7 | 344.6 |
| 5 | 6/30/2021 | 0730 | 347.9 | 344.9 | 344.6 |
| | | 1830 | 347.9 | 345.0 | 344.8 |
| 6 | 7/1/2021 | 0700 | 347.9 | 345.1 | 344.8 |
| | | 1900 | 348.0 | 345.1 | 344.8 |
| 7 | 7/2/2021 | 0700 | 348.0 | 345.2 | 344.9 |
| | | 1800 | 348.0 | 345.2 | 345.0 |
| 8 | 7/3/2021 | 0750 | 348.0 | 345.3 | 345.0 |
| | | 1900 | 348.0 | 345.3 | 345.0 |
| 9 | 7/4/2021 | 0830 | 348.0 | 345.3 | 345.0 |
| | | 1900 | 348.0 | 345.3 | 345.0 |
| 10 | 7/5/2021 | 0730 | 348.0 | 345.4 | 345.0 |
| | | 1930 | 348.0 | 345.4 | 345.0 |
| 11 | 7/6/2021 | 730 | 348.0 | 345.4 | 345.1 |
| | | 1930 | 348.0 | 345.5 | 345.2 |
| 12 | 7/7/2021 | 730 | 348.0 | 345.5 | 345.2 |
| | | 1930 | 348.0 | 345.5 | 345.2 |
| 13 | 7/8/2021 | 730 | 348.0 | 345.5 | 345.2 |
| 14 | 7/9/2021 | 600 | 348.2 | 345.2 | 345.3 |
| | | 1900 | 348.2 | 345.3 | 344.2 |
| 15 | 7/10/2021 | 730 | 348.4 | 345.1 | 344.8 |
| 16 | 7/11/2021 | 930 | 348.5 | 345.0 | 344.8 |
| 17 | 7/12/2021 | 730 | 348.7 | 345.0 | 344.8 |
| | | 1900 | 348.5 | 344.9 | 344.6 |
| 18 | 7/13/2021 | 0700 | 348.8 | 345.0 | 344.7 |
| | | 1830 | 348.8 | 345.0 | 344.6 |
| 19 | 7/14/2021 | 0700 | 348.8 | 345.1 | 344.9 |
| | | 1900 | 348.8 | 344.7 | 342.9 |
| 20 | 7/15/2021 | 0700 | 348.8 | 344.5 | 341.9 |
| | | 1700 | 348.8 | 344.4 | 343.0 |
| 21 | 7/16/2021 | 0800 | 348.8 | 344.4 | 343.0 |
| 22 | 7/17/2021 | 0800 | 348.8 | 344.3 | 343.8 |
| 23 | 7/18/2021 | 0800 | 348.8 | 344.4 | 344.2 |
| | | 1830 | 348.8 | 344.5 | 344.4 |
| 24 | 7/19/2021 | 0800 | 348.8 | 344.4 | 343.8 |




# LEACHATE POND COMPOSITE LINER (BASE & SIDESLOPE)

NTS

FIGURE 1
LEACHATE POND LINER SYSTEM
DOLBY LANDFILL FACILITY

SME
SEVEE & MAHER
ENGINEERS

DWG: 2021 LP FIGURES LMN: LMN CTB: SME-STD REV: 7/26/2021

\\NSERVER\cfs\Kpc\Dol\ACAD\Leachate Pond\2021 LP FIGURES.dwg, 7/26/2021 9:30:34 AM, jrl

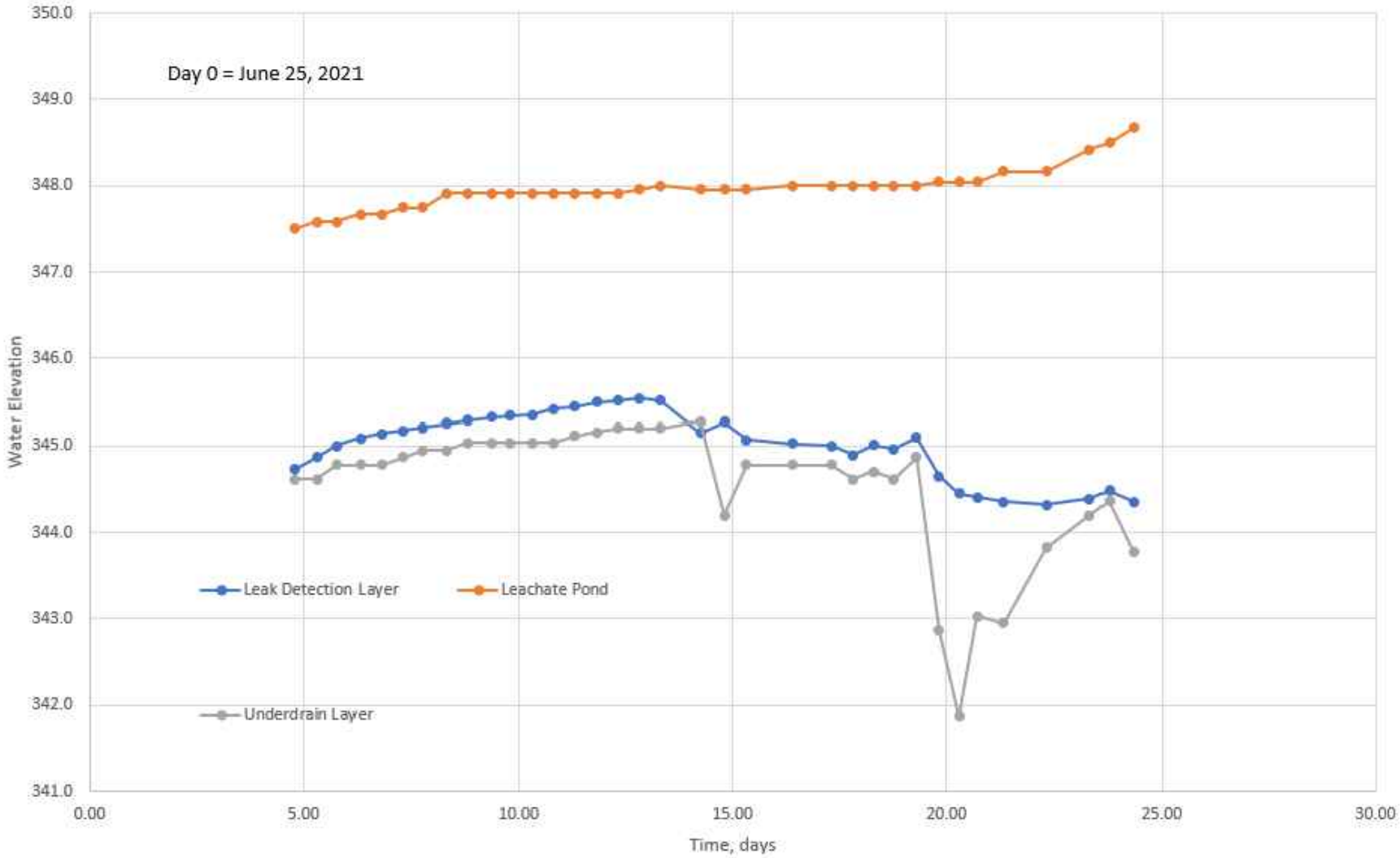



FIGURE 2
WATER LEVEL ELEVATIONS
FOR DYE STUDY
DOLBY LANDFILL FACILITY

SME
SEVEE & MAHER
ENGINEERS

DWG: 2021 LP FIGURES LMN: LMN CTB: SME-STD REV: 7/26/2021

\\NSERVER\cfs\Kpc\Dol\ACAD\Leachate Pond\2021 LP FIGURES.dwg, 7/26/2021 3:17:58 PM, jrl

SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@smemaine.com
smemaine.com

MEMO TO: Lou Pizzutti, State of Maine (**VIA EMAIL**)

CC: Brian Pierce, Sevee & Maher Engineers

FROM: Matt Muzzy, Sevee & Maher Engineers

DATE: August 23, 2021

SUBJECT: **JULY 2021 LEACHATE POND CLEANING**
**DOLBY LANDFILL, EAST MILLINOCKET, MAINE**

## INTRODUCTION

The Dolby Landfill leachate pond was cleaned, and several repairs were performed during the period of July 26, 2021 to July 29, 2021. Sevee & Maher Engineers, Inc. (SME) planned and observed the cleaning. ACV Enviro (ACV) of Skowhegan, Maine was contracted to perform the leachate pond dewatering, and cleaning. RTD Enterprises, Inc. (RTD) of Madison, Maine was contracted to inspect and repair the liner and pipe boot penetrations at the inlet and both outlets of the leachate pond. This memorandum describes the procedures, observations, and recommendations associated with the cleaning and repair effort. Photographs taken during the leachate pond and repair process are attached.

## LEACHATE POND CLEANING AND INSPECTION

On July 26, 2021, leachate was removed from the pond by using the leachate pump station and portable pumps. Leachate inflow into the pond was bypassed during the pond cleaning by closing the pond inlet valve, placing an inflatable pipe plug in the inlet pipe, and pumping leachate from catch basin No. 3 directly to the pump station's wet well. Bypass pumping was monitored continuously during cleaning and a high-level alarm system was in place to alert monitoring personnel of potential of overflows. No pumping failure or problems occurred during the bypass pumping operations.

The leachate pond's 60-mil, textured HDPE geomembrane liner was cleaned beginning Tuesday July 27, 2021 and completing on Thursday July 29, 2019. The surface of the pond liner was cleaned by vacuuming accumulated sediments from the bottom and sideslopes of the pond. Remaining sediments were cleaned by water jetting followed by additional vacuuming. After cleaning of the liner surface was complete, all water was vacuumed from the cleaned area to allow for visual inspection and repair of the liner and pipe boots.

On Thursday July 29, 2021, Matt Muzzy (SME), and RTD conducted a visual inspection of the geomembrane liner and associated pipe boots. The inspection showed several minor scratches on the geomembrane surface that were repaired by RTD. In addition, RTD replaced the pipe boot seals by removing the existing caulking and stainless-steel bands, cleaning the liner and pipe with a wire brush, replacing the wire bands, and applying new caulking over the bands and termination joint formed by the pipe boot(s) and pipe(s).

The sediment and liquid mixture from the pond cleaning was transported to the temporary disposal cell on the Dolby III Landfill. After the cleaning and inspection was completed, bypass pumping was ceased, the inlet valve to the pond was reopened, the inflatable pipe plug was removed, and leachate flows (from the landfills) were directed into the leachate pond.

**CONCLUSIONS AND RECOMMENDATIONS**

ACV commented several times that the consistency of the sediment in the leachate pond appears to have changed in recent years and is now siltier rather than sandy. ACV indicted additional effort is necessary to remove the siltier sediment. The extra effort may be due to capillary forces holding the siltier particles together as compared to sandier sized particles, which are not so susceptible to formation of tensile forces common to silt sized particles. SME observed that overall, the amounts of sediment in the North portion of the pond and around the pond inlet appeared to be less in terms of thickness and volume as compared to that observed for previous cleanings.

If you have any questions or comments relating to the 2021 leachate pond cleaning, please feel free to contact me.

Attachments:

Photographs of 2021 Leachate Pond and Pipeline Cleaning

**JULY 2021 LEACHATE POND CLEANING AND REPAIR PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Sediment accumulation at leachate pond inlet pipe

Sediment accumulation at North end of leachate pond

Removing sediment from North end of leachate pond

Working from North end towards inlet area

**JULY 2021 LEACHATE POND CLEANING AND REPAIR PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Working from North end down west side

Sediment accumulation at Southwest corner

Cleaning inlet area

Finishing pond cleaning at Southwest corner

**JULY 2021 LEACHATE POND CLEANING AND REPAIR PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Condition of inlet prior to repair

Condition of inlet prior to repair

Removing existing caulking

Cleaned inlet pipe and pipe boot

**JULY 2021 LEACHATE POND CLEANING AND REPAIR PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

New steel bands and caulking

Condition of outlet prior to repair

Condition of outlet prior to repair

Existing caulking removed from outlet

**JULY 2021 LEACHATE POND CLEANING AND REPAIR PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

New caulking and steel band on outlet

Condition of pumping outlet prior to repair

Condition of pumping outlet prior to repair

Finishing Pond cleaning at Southwest corner of leachate pond

**JULY 2021 LEACHATE POND CLEANING AND REPAIR PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Caulking and steel band removed

Liner cut and peeled back to install new seal

Welding liner

New steel bands and caulking

**JULY 2021 LEACHATE POND CLEANING AND REPAIR PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Sediment accumulation at leachate pond inlet pipe

Sediment accumulation at North end of leachate pond

Removing sediment from North end of leachate pond

Working from North end towards inlet area

**JULY 2021 LEACHATE POND CLEANING AND REPAIR PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Working from North end down west side

Sediment accumulation at Southwest corner

Cleaning inlet area

Finishing pond cleaning at Southwest corner

**JULY 2021 LEACHATE POND CLEANING AND REPAIR PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Condition of inlet prior to repair

Condition of inlet prior to repair

Removing existing caulking

Cleaned inlet pipe and pipe boot

**JULY 2021 LEACHATE POND CLEANING AND REPAIR PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

New steel bands and caulking

Condition of outlet prior to repair

Condition of outlet prior to repair

Existing caulking removed from outlet

**JULY 2021 LEACHATE POND CLEANING AND REPAIR PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

New caulking and steel band on outlet

Condition of pumping outlet prior to repair

Condition of pumping outlet prior to repair

Finishing Pond cleaning at Southwest corner of leachate pond

**JULY 2021 LEACHATE POND CLEANING AND REPAIR PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Caulking and steel band removed

Liner cut and peeled back to install new seal

Welding liner

New steel bands and caulking

# APPENDIX D

# ACTION LEAKAGE RATE DISCUSSION

SME
SEVEE & MAHER
ENGINEERS

## Matt Muzzy

**From:** Matt Muzzy
**Sent:** Tuesday, February 8, 2022 11:25 AM
**To:** Maheu, Vera A
**Cc:** William.Longfellow@maine.gov; Brian Pierce
**Subject:** Dolby leachate pond
**Attachments:** Field Parameters.pdf; Inorganics.pdf; Metals.pdf

Hello Vera,

The purpose of this email is to discuss the leachate pond at the Dolby Landfill and the Action Leakage Rate (ALR) for the leachate pond liner system.

On January 20, 2022 the flow meter for the Dolby leachate pond's leak detection system was repaired to a functioning condition. Evaluation of leak detection flow measurements indicates the Action Leakage Rate (ALR) for the leachate pond has been exceeded. The ALR for the pond is 20 gallons per acre per day (gpad) and the pond area is approximately 2 acres making the total acceptable daily leakage into the leak detection system approximately 40 gallons. As indicated below, leakage into the leak detection layer is apparently occurring at more than 40 gallons per day.

During 2021 the flow meter for measuring flow from the underdrain failed. The flow meter was replaced on January 21, 2022 and since then it has been possible to record the volume of water removed from the leak detection layer each time the leak detection pump is operated. Between the period of January 21, 2022 and January 30, 2022 approximately 12,000 gallons of liquid per day were pumped from the leak detection layer, which exceeds the ALR for the pond and suggests a significant leak in the pond's liner system remains. Given the repair and maintenance work performed on the leachate pond's primary liner and pipe penetrations during Summer 2021, it appears that the liquid coming into the leak detection layer is most likely water from the underdrain coming into the leak detection layer.

In the fall of 2021, the pump for the leachate pond underdrain failed. Replacement pump(s) have been ordered (for several months) and delivery of those pumps to Dolby is reportedly being affected by "supply chain" issues. When the replacement pump(s) arrive, the pump change out is expected to be easy. Since the pump failed no pumping of water from the underdrain has occurred. As described during MEDEP's visit to Dolby on November 2, 2021 the water level in the leachate pond is being operated at a level greater than in the underdrain in order to maintain a net downward stress on the liner system to void potential uplift forces.

Once the underdrain pump is working, the water level in the underdrain will be lowered and maintained at the lowered level. When the underdrain pumping returns it is expected the leakage into the leak detection system will be substantially reduced. If the leakage into the leak detection layer is indeed reduced it will then be reasonable to conclude that the leak into the leak detection layer was originating from the underdrain rather than from the pond. Sampling of the leak detection system and the underdrain have been added to the quarterly water quality monitoring for the site in effort to better understand what the source of liquid leaking into the leak detection system could be. The spring and fall 2021 water quality results for the leachate pond, leak detections system, and underdrain are attached. Based on a cursory review of those results it is not readily apparent which of the two potential sources is the most likely.

Please contact me with questions / comments

Thank you,

Matt M

REPORT PREPARED: 2/3/2022 14:14
FOR: Dolby Landfill

# SUMMARY REPORT
## Field Parameters - lp,lds,udlp 2021



SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LP) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|
| **LP** | | | | | | | |
| 6/24/2021 | XX | LTXXXXA7A | 1625 | 7.7 | 21.3 | 1.8 | 5.6 |
| 10/5/2021 | XX | LTXXXXA9J | 1110 | 7.6 | 22.4 | 9.1 | 17 |
| **LDS** | | | | | | | |
| 6/24/2021 | XX | LTXXXXA7C | 922 | 6.8 | 23 | 0.7 | 8.5 |
| 9/23/2021 | XX | LTXXXXA97 | 916 | 6.6 | 19.4 | 1.4 | 0.3 |
| **UDLP** | | | | | | | |
| 6/24/2021 | XX | LFXXXXA7J | 788 | 7.1 | 16.5 | 1.5 | 0.5 |
| 9/23/2021 | XX | LFXXXXA9F | 538 | 6.6 | 17.9 | 1.6 | 0.6 |

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

Blank Cells appear when a parameter was not analyzed.

REPORT PREPARED: 2/3/2022 14:18
FOR: Dolby Landfill

# SUMMARY REPORT

## Inorganics LP,LDS,UDLP 2021



SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LP) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **LP** | | | | | | | | | | | | | | | | | |
| 6/24/2021 | XX | LTXXXX47A | 8.5 | 0.084 | 0.1 U | 1200 | 4.8 | 1 U | 622 | 1000 | 1000 | 40 | 50 | | | | |
| 10/5/2021 | XX | LTXXXX49J | 5.6 | 0.52 | 0.1 U | 710 | 7.2 | 55 | 523 | 580 | 580 | 23 | 21 | | | | |
| **LDS** | | | | | | | | | | | | | | | | | |
| 6/24/2021 | XX | LTXXXX47C | 1.5 | 0.5 U | 0.34 | 580 | 4 U | 110 | 382 | 420 | 420 | 85 | 54 | | | | |
| 9/23/2021 | XX | LTXXXX49T | 0.46 | 0.05 U | 0.1 U | 570 | 11 | 16 | 508 | 520 | 520 | 7.2 | 34 | | | | |
| **UDLP** | | | | | | | | | | | | | | | | | |
| 6/24/2021 | XX | LFXXXX47J | 0.19 | 0.098 | | 540 | 4 U | 24 | 452 | 420 | 420 | 6.9 | 30 | | | | |
| 9/23/2021 | XX | LFXXXX49F | 0.16 | 0.096 | | 310 | 4 U | 13 | 282 | 310 | 310 | 4.2 | 13 | | | | |

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

Blank Cells appear when a parameter was not analyzed.

**Concentration Qualifier Notes:**

U - Not Detected above the laboratory reporting limit.

REPORT PREPARED: 2/3/2022 14:17
FOR: Dolby Landfill

# SUMMARY REPORT
## Metals, LP,LDS,UDLP 2021



SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LP) Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L |
|---|---|---|---|---|---|---|---|---|---|---|
| **LP** | | | | | | | | | | |
| 6/24/2021 | XX | LTXXXX47A | 0.008 U | 112 | | 2.15 | 132 | 0.761 | 149 | 55.7 |
| 10/5/2021 | XX | LTXXXX49J | 0.008 U | 113 | 0.025 U | 4.18 | 58.5 | 2.03 | 63.6 | 23.9 |
| **LDS** | | | | | | | | | | |
| 6/24/2021 | XX | LTXXXX47C | 0.016 | 102 | | 6.16 | 31.1 | 3.55 | 66.2 | 42.2 |
| 9/23/2021 | XX | LTXXXX49F | 0.008 | 132 | | 4.46 | 43.4 | 2.25 | 16.8 | 32.2 |
| **UDLP** | | | | | | | | | | |
| 6/24/2021 | XX | LFXXXX47J | 0.008 U | 121 | | 1.1 | 36.7 | 1.7 | 13.1 | 30.2 |
| 9/23/2021 | XX | LFXXXX49F | 0.008 U | 81.1 | | 1.66 | 19.4 | 1.46 | 6.99 | 21.8 |

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

Blank Cells appear when a parameter was not analyzed.

**Concentration Qualifier Notes:**

U - Not Detected above the laboratory reporting limit.

# APPENDIX E

# LEACHATE PIPELINE CLEANING

SME
SEVEE & MAHER
ENGINEERS

SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@smemaine.com
smemaine.com

MEMO TO: Lou Pizzuti, State of Maine (**VIA EMAIL**)

CC: Brian Pierce, Sevee & Maher Engineers

FROM: Matt Muzzy, Sevee & Maher Engineers

DATE: September 15, 2021

SUBJECT: **AUGUST 2021 LEACHATE PIPELINE CLEANING**
**DOLBY LANDFILL, EAST MILLINOCKET, MAINE**

## INTRODUCTION

A portion the pipeline that connects the Dolby Landfill leachate pond to the East Millinocket Wastewater Treatment Plant (EMWWTP) in East Millinocket, Maine was cleaned during the period of August 2, 2021 to August 5, 2021. Sevee & Maher Engineers, Inc. (SME) planned and observed the cleaning. ACV Enviro (ACV) of Skowhegan, Maine was contracted to perform the pipeline dewatering, disassembly, cleaning, and reassembly. This memorandum describes the procedures, observations, and recommendations associated with the cleaning effort. Figure 1 shows the leachate pond, pipeline, and manhole locations from the Dolby Landfill to the former GNP Mill property. Photographs taken during the pipeline cleaning process are attached.

## LEACHATE PIPELINE CLEANING

Leachate pipeline cleaning was performed from August 2, 2021 to August 5, 2021. The leachate pond had been drained and cleaned the previous week; thereby, allowing the pipeline to be temporarily taken out of service. Prior to the pipeline cleaning, power to the pump station pumps was shut off and the electrical power panels were locked out by both Dick Angotti of Mid-South Engineering Company and ACV Enviro using standard lock-out/tag-out safety protocols. ACV then dewatered the leachate pipeline at Manholes (MH-) 2, 8, and 14. During pipeline dewatering, leachate was pumped from the manholes and trucked to the EMWWTP.

Following the pipeline dewatering, the pipe connections were disassembled in manholes between MH-2 and MH-15 (unless otherwise noted on Table 1). MH-7 was not opened, however the equipment used by ACV was capable of cleaning entire sections of pipeline from MH-6 to MH-8. MH-10 to MH-12 was not included in the 2021 cleaning plan. The piping disassembly generally consisted of removing two Victaulic Style 995 couplings and a section of HDPE pipe spool to allow access for the cleaning equipment.

The pipeline cleaning process utilized a high-pressure nozzle attached to a two-inch diameter hose, which was inserted into the pipeline. Water was discharged backwards through the nozzle to advance the hose and remove scale accumulated on the pipe wall. The hose was then pulled back with a hydraulic motor while continuing to flush and remove scale during the backward pass. Water, sediment, and debris from the cleaning process drained to the lower of the manholes associated with the section of

pipe being cleaned. Water, sediment, and removed scale was then vacuumed from the manhole into a tank truck and hauled to the leachate dumping pad located at the former GNP mill property in East Millinocket.

After the pipeline was cleaned, the pipe fittings were cleaned, lubricated, and reassembled. The existing gaskets on the Victaulic couplings were reused. One new nut and one bolt was used from the inventory of spare parts at the office trailer.

In addition to cleaning the leachate pipeline, the pump station wet well was cleaned by removing sediment and pressure washing the interior.

Clean water for the leachate pipeline cleaning was obtained from a hydrant at the EMWWTP.

On September 2, 2021, ACV returned to reassemble the pipeline section in MH-2. The spool section had been taken off-site to E.J. Prescott in Gardiner, Maine for modifications which will allow for better reconnection and faster dewatering (in the future). After MH-2 was reassembled, the force main section of the pipeline was pressurized with leachate and a leak inspection was conducted by Dick Angotti and ACV. No leaks were observed at that time.

## CONCLUSIONS AND RECOMMENDATIONS

Table 1 provides a summary of the lengths of pipeline cleaned, pipeline condition prior to cleaning, and observations made during the pipeline cleaning process.

The leachate pipeline force main from MH-2 to MH-9 was noticeably dirtier than the gravity line portion of the pipeline. As noted in SME's August 18th leachate pond cleaning memo, the sediment was observed to have a finer and siltier texture than in previous years. This same condition was also observed in all pipeline segments during the pipeline cleaning except for the segments between MH-2 and MH-4 which contained a coarser sandy sediment.

If you have any questions or comments relating to the 2021 pipeline cleaning, please feel free to contact me.

Attachments:

Figure 1 – Site Plan of Leachate Pond, Pipeline, and Manholes
Table 1 –August 2021 Leachate Pipeline Cleaning Summary
Photographs of 2021 Pipeline Cleaning

NOTES

1. BASE MAP FROM GOOGLE EARTH PHOTO DATED 4/28/2016.
2. EXISTING PROPERTY BOUNDARY FROM PLAN ENTITLED "BOUNDARY SURVEY OF A PORTION OF THE KATAHDIN PAPER COMPANY LLC PROPERTY, EAST MILLINOCKET, MAINE, VOLUME 8702, PAGE 146 FOR KATAHDIN FOREST MANAGEMENT" PREPARED BY PLIGSA & DAY LAND SURVEYORS, DATED MAY 31, 2011.
3. MANHOLE PIPE LOCATIONS FROM SQUAW BAY CORPORATION DRAWING DATED 4/25/95. LOCATIONS ARE APPROXIMATE.


FIGURE 1
DOLBY LANDFILL FACILITY LAYOUT
DOLBY LANDFILL
EAST MILLINOCKET, MAINE

SME
SEVEE & MAHER
ENGINEERS

DWG: SITEOVERVIEW LMN: FACILITY LAYOUT CTB: SME-STD REV: 7/28/2020

\\Nserver\cfs\Kpcl\Dol\ACAD\SITEOVERVIEW.dwg, 7/28/2020 7:42:19 AM, jrl

**TABLE 1**

**LEACHATE PIPELINE CLEANING SUMMARY**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

| | Pipe Station Component | Air Release Valve (Y/N) | Pipeline Station | Pipe Segment Diameter (in) | Distance Between Manholes (ft) | Distance Cleaned in 2021 (ft) | Cleaning Water Condition Observed During Cleaning[a] | Notes[c] |
|---|---|---|---|---|---|---|---|---|
| Force Main Section | Pump Station Wet Well | N | 0+81 | | | - | | |
| | | | | 8 | 14 | 0 | N/A | |
| | MH No. 1 | N | 0+95 | | | | | Not Opened |
| | | | | 8 | 146 | 146 | N/A | Flushed 3 times |
| | MH No. 2 | N | 2+41 | | | | | MH Opened |
| | | | | 8 | 590 | 590 | Fairly Dirty | Flushed 1 time |
| | MH No. 3 | Y | 8+31 | | | | | MH Opened |
| | | | | 8 | 915 | 915 | Fairly Dirty | |
| | MH No. 4 | Y | 17+46 | | | | | MH Opened |
| | | | | 8 | 1750 | 1750 | Fairly Dirty | |
| | MH No. 5 | N | 34+96 | | | | | MH Opened |
| | | | | 8 | 398 | 398 | Fairly Clean | |
| | MH No. 6 | N | 38+94 | | | | | MH Opened |
| | | | | 8 | 206 | 206 | Fairly Clean | |
| | MH No. 7 | N | 41+00 | | | | | Not Opened |
| | | | | 8 | 1050 | 1050 | Dirty | |
| | MH No. 8 | N | 51+50 | | | | | MH Opened |
| | | | | 8 | 1190 | 1190 | Fairly Clean | |
| | MH No. 9 | N | 63+40 | | | | | MH Opened |
| | | | | | | | | - |
| | Transition Station | NA | 63+75 | | | | | Not Cleaned |
| Gravity Main Section | | | | | | | | |
| | MH No. 10 | N | 64+05 | | | | | Not Opened |
| | | | | 10 | 1430 | 0 | N/A | |
| | MH No. 11 | N | 78+35 | | | | | Not Opened |
| | | | | 10 | 695 | 0 | N/A | |
| | MH No. 12 | N | 85+30 | | | | | Not Opened |
| | | | | 10 | 620 | 620 | Fairly Clean | |
| | MH No. 13 | Y | 91+50 | | | | | MH Opened |
| | | | | 10 | 1650 | 1650 | Dirty | |
| | MH No. 14 | N | 108+00 | | | | | MH Opened |
| | | | | 10 | 1200 | 1200 | Dirty | |
| | MH No. 15 | N | 120+00 | | | | | MH Opened |
| | | | | 10 | 767 | 767 | Fairly clean | |
| | MH No. 16 | Y | 127+67 | | | | | Not Opened |
| | | | | 10 | 833 | 0 | N/A | |
| | MH No. 17 | N | 136+00 | | | | | Not Opened |
| | | | | 10 | 1060 | 0 | N/A | |
| | MH No. 18 | Y | 146+60 | | | | | Not Opened |
| | | | | 10 | 1216 | 0 | N/A | |
| | MH No. 19 | Y | 158+76 | | | | | Not Opened |
| | | | | 10 | 809 | 0 | N/A | |
| | MH No. 20 | Y | 166+85 | | | | | Not Opened |
| | | | | 10 | 515 | 0 | N/A | |
| | MH No. 21 | Y | 169+40 | | | | | Not Opened |
| | | | | 10 | 690 | 0 | N/A | |
| | MH No. 22 | N | 176+30 | | | | | Not Opened |
| | | | | 10 | 174 | 0 | N/A | |
| | MH No. 23 | N | 178+04 | | | | | Not Opened |
| | | | | 10 | 539 | 0 | N/A | |
| | MH No. 24 | N | 183+43 | | | | | Not Opened |
| | | | | 10 | 278 | 0 | N/A | |
| | MH No. 25 | N | 186+21 | | | | | Not Opened |
| | | | | 10 | 233 | 0 | N/A | |
| | MH No. 26 | N | 188+54 | | | | | Not Opened |
| | | | | 10 | 60 | 0 | N/A | |
| | MH No. 27[b] | N | 189+14 | | | | | Not Opened |
| | | | | 8 | 12 | 0 | N/A | |
| | MH No. 28 | N | 189+26 | | | | | Not Opened |
| | | | | 18 | 120 | 0 | N/A | |
| | MH No. 29 | N | 190+46 | | | | | Not Opened |
| | | | | 18 | 482 | 0 | N/A | |
| | MH No. 30 | N | 195+28 | | | | | Not Opened |
| | | | | 18 | 112 | 0 | N/A | |
| | WWTP | N | 196+40 | | | | | |
| | | | total | | 19,754 | **10,482** | | |

Notes:
a. Cleaning water condition observed during cleaning was rated Clean, Fairly Clean, Dirty, Fairly Dirty, or Very Dirty.
b. Flow Meter Building
c. All pipe segments flushed twice unless otherwise noted.



SME
SEVEE & MAHER ENGINEERS

**AUGUST 2021 PIPELINE CLEANING PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Opening manhole 2

Cleaning at manhole 2

Cleaning at manhole 3

Clean line at manhole 3

**AUGUST 2021 PIPELINE CLEANING PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Cleaning at manhole 5

Emptying at emergency disposal pad

Cleaning at manhole 6

Cleaning at manhole 13

**AUGUST 2021 PIPELINE CLEANING PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Cleaning at manhole 14

Cleaning at manhole 15

**AUGUST 2021 PIPELINE CLEANING PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Opening manhole 2

Cleaning at manhole 2

Cleaning at manhole 3

Clean line at manhole 3

**AUGUST 2021 PIPELINE CLEANING PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Cleaning at manhole 5

Emptying at emergency disposal pad

Cleaning at manhole 6

Cleaning at manhole 13

**AUGUST 2021 PIPELINE CLEANING PHOTOGRAPHS**
**DOLBY LANDFILL**
**EAST MILLINOCKET, MAINE**

Cleaning at manhole 14

Cleaning at manhole 15

**APPENDIX F**

**PUMPS AND FLOW METERS**

SME
SEVEE & MAHER
ENGINEERS

| | |
|---|---|
| **From:** | Matt Muzzy |
| **To:** | Tim Stevens; Richard Angotti |
| **Cc:** | William.Longfellow@maine.gov; Brian Pierce |
| **Subject:** | Dolby leachate pump. |
| **Date:** | Tuesday, January 18, 2022 10:49:00 AM |

---

Monday (1/17) Tim Stevens called in to discuss the pump situation for Dolby.

Tim reported that the large (leachate) pump has been rebuilt and is ready to be put back into service.

Tim reported that the two small pumps for the underdrain system remain on back up and discussion with the pump supplier did not provide any better understanding of the delivery schedule.

Owing to spring not being too far off, Tim suggested that the large pump be installed and operated to make sure all will be well for the spring thaw.

My response was to ask Tim to speak with Dick Angotti to arrange an installation date and to go over other any details/services that Dick would want Stevens Electric (SE) to provide as part of the pump install.

Dick and Tim decided that Thursday (1/20) would be a good time for SE to install the leachate pump and make several other adjustments relative to the leak detection flow meter and sonic leachate level sensor (in the pump station wet well).

Dick has indicated when (at least) one of the underdrain pumps show up, he (Dick) can install it without SE's help.

Comment on the underdrain pump. Currently the leachate pond level is being held above the water level in the underdrain to avoid uplift of the leachate pond's liner system. Maintaining that water level difference could become difficult as spring approaches and the water level in the leachate pond is typically lowered. Ordinarily the underdrain would be pumped down so that the weight of the liner system itself would be adequate to keep the liner from being lifted. So …. as spring approaches and if no underdrain pump is available it will be necessary to place a temporary pump in the underdrain manhole and pump leachate into the leachate pond (across the road).

As spring approaches, it will also be necessary to keep the leak detection layer pumped down such that water level in the leak detection layer stays well below the water level in the leachate pond. My understanding is that with the new flow meter for the leak detection layer lowering of the water level in the leak detection system can be returned to automatic.

Tim / Dick … good luck Thursday. Please call me if any there are any changes to your plan.

Thanks

Matt M

*Matthew W. Muzzy, P.E.*
Sevee & Maher Engineers, Inc.
4 Blanchard Road, PO Box 85A
Cumberland Center, ME 04021
Tel: 207-829-5016
Fax: 207-829-5692
Cell: 207-400-6550
www.smemaine.com

# Stevens Electric & Pump Service, Inc.

P.O. Box 238
Monmouth, ME. 04259

| Phone # | Fax # |
|---|---|
| 207-933-9638 | 207-933-9639 |

| Invoice # |
|---|
| 28399 |

| Date | Due Date |
|---|---|
| 5/21/2021 | 6/20/2021 |
| P.O. No. | Terms |
| #18143.07 | Net 30 |
| W.O. No. | Job Date |
| | 5/6/2021 |

Bill To

Dolby Landfill
C/O Sevee and Maher Engineers, Inc.
Attn: Matt Muzzy
PO Box 85A
Cumberland Ctr, ME 04021

Subs

Project

| Qua... | Material | Unit | Description of Work | Amount |
|---|---|---|---|---|
| | | | Reference our Proposal #5430 - 04/08/21 | |
| | As Per Proposal-... | 1,373.00 | (1) Barnes SEV521AU sub sewage pump<br>-- 2"fpt discharge x 2" solids handling "Vortex" impeller<br>-- 1/2hp / 230volt / 1phase / 1800rpm sub motor<br>-- an "automatic" pump, with integral float switch | 1,373.00 |
| | UPS Freight Char... | 218.00 | Freight Charge - shipping in & shipping out | 218.00 |
| | Proposal Notes | | -- Notes --<br>-- Ship Date: 05/06/21<br>-- Via: BSP Transportation - Freight Bill # 050-452813<br>-- Ship To: Dick Angotti (207) 217-0385<br>-- Address: 222 Katahdin Ave , Millinocket, Me 04462 | |

1.5% service charge on balances past 30 days

**Total** $1,591.00

Thank you for your business.

## Invoice

# Stevens Electric & Pump Service, Inc.

P.O. Box 238
Monmouth, ME. 04259

8143 Sub

| Phone # | Fax # |
|---|---|
| 207-933-9638 | 207-933-9639 |

| Invoice # |
|---|
| 28435 |

| Date | Due Date |
|---|---|
| 5/21/2021 | 6/20/2021 |
| P.O. No. | Terms |
| | Net 30 |
| W.O. No. | Job Date |
| 2998 | 5/21/2021 |

**Bill To**

Dolby Landfill
C/O Sevee and Maher Engineers, Inc.
Attn: Matt Muzzy
PO Box 85A
Cumberland Ctr, ME 04021

**Project**

Dolby Landfill

| Qua... | Material | Unit | Description of Work | Amount |
|---|---|---|---|---|
| 6.5 | Service crew | 150.00 | Two men & service truck BS/TC went to the job site to get information about upgrades and repairs. Planned to do a confined space entry.<br><br>The following is what was acquired from the meeting.<br><br>Replace or repair the 2" magnetic flow meter/ (would need to install a PVC spool piece if the unit were to be sent out for repair. ) see pictures<br><br>PVC stick for transducer<br>Hydroranger 200<br>1" seal off<br>Run 4-20 ma signal from Hydroranger to the Foxboro chart recorder pen #3/run the second ma output to the PLC cabinet<br>Run 3 signal wires from chart recorder to the PLC cabinet for level from the Hydroranger and from each of the existing pressure transducers<br><br>30' - 3/4" EMT<br>2 - 3/4" MA EMT<br>12 - 1 hole clips<br>2 - 3/4 LB<br><br>***The PLC would need to be programmed to accept these 3 | 975.00 |

**Total**



**Invoice**

# Stevens Electric & Pump Service, Inc.

P.O. Box 238
Monmouth, ME. 04259

| Phone # | Fax # | Invoice # |
|---|---|---|
| 207-933-9638 | 207-933-9639 | 28435 |

| Date | Due Date |
|---|---|
| 5/21/2021 | 6/20/2021 |
| P.O. No. | Terms |
| | Net 30 |
| W.O. No. | Job Date |
| 2998 | 5/21/2021 |

**Bill To**

Dolby Landfill
C/O Sevee and Maher Engineers, Inc.
Attn: Matt Muzzy
PO Box 85A
Cumberland Ctr, ME 04021

**Project**

Dolby Landfill

| Qua... | Material | Unit | Description of Work | Amount |
|---|---|---|---|---|
| | | | additional analog inputs *** by others<br>***They are talking about adding the PLC to an Internet connections*** by others<br><br>They would like for us to pull pump #1 later this summer ( when the pond is drained and being worked on ) to overhaul the pump. It is starting to meg low to ground.<br><br>Prices for the work will be sent soon. | |

1.5% service charge on balances past 30 days

**Total** $975.00



**Invoice**

# Stevens Electric & Pump Service, Inc.

P.O. Box 238
Monmouth, ME. 04259

| Phone # | Fax # | Invoice # |
|---|---|---|
| 207-933-9638 | 207-933-9639 | 29087 |

| Date | Due Date |
|---|---|
| 9/30/2021 | 10/30/2021 |
| P.O. No. | Terms |
| | Net 30 |
| W.O. No. | Job Date |
| 3816 | 9/30/2021 |

**Bill To**

Dolby Landfill
C/O Sevee and Maher Engineers, Inc.
Attn: Matt Muzzy
PO Box 85A
Cumberland Ctr, ME 04021

**Project**

Dolby Landfill

| Qua... | Material | Unit | Description of Work | Amount |
|---|---|---|---|---|
| 1 | As Per Proposal-... | 17,540.00 | We completed work as proposed #5478<br><br>9/29/21 -BS/BG/TC Installed the Hydroranger 200 ultra sonic head in the pump tank.<br>Installed the Hydroranger 200 controller in the control building, brought 120 V into the controller and programmed the controller to give a 4-20 ma signal to the existing chart recorder.<br>0' on the Hydroranger is set at the bottom of the inlet pipe coming from the retention pond.<br><br>9/30/21 -BS/BG Installed the 2" Siemens 500 mag flow tube in the metering pit.<br>Installed the Siemens 500 receiver in the control building.<br>Ran the 4-20 ma and the pulse totalizer into the PLC panel.<br>The 4-20 ma signal from the Siemens unit is set for 0-88 GPM but the PLC scaling is set for 0-30 GPM and will need to be changed to match the flow tube.<br>The pulse for the totalizer appears to be working properly. | 17,540.00 |

1.5% service charge on balances past 30 days

**Total** $17,540.00

Timothy Stevens

## Invoice

# Stevens Electric & Pump Service, Inc.

P.O. Box 238
Monmouth, ME. 04259

| Phone # | Fax # | Invoice # |
|---|---|---|
| 207-933-9638 | 207-933-9639 | 30061 |

| Date | Due Date |
|---|---|
| 1/21/2022 | 2/20/2022 |
| P.O. No. | Terms |
| | Net 30 |
| W.O. No. | Job Date |
| 4625 | 1/21/2022 |

**Bill To**

Dolby Landfill
C/O Sevee and Maher Engineers, Inc.
Attn: Matt Muzzy
PO Box 85A
Cumberland Ctr, ME 04021

**Project**

Dolby Landfill

| Qua... | Material | Unit | Description of Work | Amount |
|---|---|---|---|---|
| 1 | Service crew | 165.00 | Two men & service truck BS/PV returned to the site and completed the tasks remaining on proposal #5478.<br><br>We also replaced a float switch while on site with an SJE Signal Master 30' float switch. This was not part of the proposed work. This was charged at T & M. | 165.00 |
| 1 | Float Switch - Sig... | 55.65 | Float Switch - Signal Master 30' Normally Open Contacts<br>Changed the Qmax from 88.1 down to 20.0<br>This changes what the 20 ma setting is.<br>( think it should be set at 37.5 +/- to match the scaling in the PLC) | 55.65 |

1.5% service charge on balances past 30 days

**Total** $220.65

Timothy Stevens

# Invoice

# Stevens Electric & Pump Service, Inc.

P.O. Box 238
Monmouth, ME. 04259

| Phone # | Fax # |
|---|---|
| 207-933-9638 | 207-933-9639 |

| Invoice # |
|---|
| 30060 |

| Date | Due Date |
|---|---|
| 1/20/2022 | 2/19/2022 |
| P.O. No. | Terms |
| | Net 30 |
| W.O. No. | Job Date |
| 4622 | 1/20/2022 |

Bill To

Dolby Landfill
C/O Sevee and Maher Engineers, Inc.
Attn: Matt Muzzy
PO Box 85A
Cumberland Ctr, ME 04021

| Project |
|---|
| Large Flygt Pump |

| Qua... | Material | Unit | Description of Work | Amount |
|---|---|---|---|---|
| 1 | As Per Proposal-... | 23,963.00 | We furnished the materials and performed the labor necessary for the completion of proposed work #5554.<br><br>Installed pump and tested. Drawing 29.6 amps. | 23,963.00 |

1.5% service charge on balances past 30 days

**Total** $23,963.00

Timothy Steven

# Invoice

# Stevens Electric & Pump Service, Inc.

P.O. Box 238
Monmouth, ME. 04259

| Phone # | Fax # | Invoice # |
|---|---|---|
| 207-933-9638 | 207-933-9639 | 30061 |

| Date | Due Date |
|---|---|
| 1/21/2022 | 2/20/2022 |
| P.O. No. | Terms |
| | Net 30 |
| W.O. No. | Job Date |
| 4625 | 1/21/2022 |

**Bill To**

Dolby Landfill
C/O Sevee and Maher Engineers, Inc.
Attn: Matt Muzzy
PO Box 85A
Cumberland Ctr, ME 04021

**Project**

Dolby Landfill

| Qua... | Material | Unit | Description of Work | Amount |
|---|---|---|---|---|
| 1 | Service crew | 165.00 | Two men & service truck BS/PV returned to the site and completed the tasks remaining on proposal #5478.<br><br>We also replaced a float switch while on site with an SJE Signal Master 30' float switch. This was not part of the proposed work. This was charged at T & M. | 165.00 |
| 1 | Float Switch - Sig... | 55.65 | Float Switch - Signal Master 30' Normally Open Contacts<br>Changed the Qmax from 88.1 down to 20.0<br>This changes what the 20 ma setting is.<br>( think it should be set at 37.5 +/- to match the scaling in the PLC) | 55.65 |

1.5% service charge on balances past 30 days

**Total** $220.65

Timothy Stevens

# Invoice

# Stevens Electric & Pump Service, Inc.

P.O. Box 238
Monmouth, ME. 04259

| Phone # | Fax # |
|---|---|
| 207-933-9638 | 207-933-9639 |

| Invoice # |
|---|
| 30060 |

| Date | Due Date |
|---|---|
| 1/20/2022 | 2/19/2022 |
| P.O. No. | Terms |
| | Net 30 |
| W.O. No. | Job Date |
| 4622 | 1/20/2022 |

Bill To

Dolby Landfill
C/O Sevee and Maher Engineers, Inc.
Attn: Matt Muzzy
PO Box 85A
Cumberland Ctr, ME 04021

| Project |
|---|
| Large Flygt Pump |

| Qua... | Material | Unit | Description of Work | Amount |
|---|---|---|---|---|
| 1 | As Per Proposal-... | 23,963.00 | We furnished the materials and performed the labor necessary for the completion of proposed work #5554.<br><br>Installed pump and tested. Drawing 29.6 amps. | 23,963.00 |

1.5% service charge on balances past 30 days

**Total** $23,963.00

Timothy Steven

# Invoice

# Stevens Electric & Pump Service, Inc.

P.O. Box 238
Monmouth, ME. 04259

| Phone # | Fax # |
|---|---|
| 207-933-9638 | 207-933-9639 |

| Invoice # |
|---|
| 30393 |

| Date | Due Date |
|---|---|
| 3/16/2022 | 4/15/2022 |
| P.O. No. | Terms |
| 21602 | Net 30 |
| W.O. No. | Job Date |
| 634238 | 3/9/2022 |

**Bill To**

Dolby Landfill
C/O Sevee and Maher Engineers, Inc.
Attn: Matt Muzzy
PO Box 85A
Cumberland Ctr, ME 04021

**Project**

underdrain pump system

| Qua... | Material | Unit | Description of Work | Amount |
|---|---|---|---|---|
| | | | Re: Underdrain pump system, Leachate Pond | |
| 1 | As Per Proposal-... | 1,367.00 | We have supplied a new Goulds submersible sewage pump, as the Barnes brand pump has an unknown delivery date. | 1,367.00 |
| | As Per Proposal-... | | -- consisting of:<br>(1) Goulds WS0512B submersible sewage pump<br>(1) SJE PumpMasterPlus mech'l float switch, with 20ft cord<br>-- and we spliced the switch cord into the pump cord, about 4-5feet from the plug end of the pump cord | |
| | Proposal Notes | | -- Notes --<br>-- Reference our Proposal # 5607<br>-- Shipped to: Dick Angotti ,<br>--- 222 Katahdin Ave, Millinocket, 04462<br>-- Shipped with Packing Slip #634238, on 03/09/22<br>-- Shipped via: BSP Transportation<br>-- We will keep the Barnes pumps on order at this time. | |

1.5% service charge on balances past 30 days

**Total** $1,367.00

Thank you for your business.

## Invoice

## Matt Muzzy

**From:** Matt Muzzy
**Sent:** Tuesday, January 18, 2022 10:50 AM
**To:** Tim Stevens; Richard Angotti
**Cc:** William.Longfellow@maine.gov; Brian Pierce
**Subject:** Dolby leachate pump.

Monday (1/17) Tim Stevens called in to discuss the pump situation for Dolby.

Tim reported that the large (leachate) pump has been rebuilt and is ready to be put back into service.

Tim reported that the two small pumps for the underdrain system remain on back up and discussion with the pump supplier did not provide any better understanding of the delivery schedule.

Owing to spring not being too far off, Tim suggested that the large pump be installed and operated to make sure all will be well for the spring thaw.

My response was to ask Tim to speak with Dick Angotti to arrange an installation date and to go over other any details/services that Dick would want Stevens Electric (SE) to provide as part of the pump install.

Dick and Tim decided that Thursday (1/20) would be a good time for SE to install the leachate pump and make several other adjustments relative to the leak detection flow meter and sonic leachate level sensor (in the pump station wet well).

Dick has indicated when (at least) one of the underdrain pumps show up, he (Dick) can install it without SE's help.

Comment on the underdrain pump. Currently the leachate pond level is being held above the water level in the underdrain to avoid uplift of the leachate pond's liner system. Maintaining that water level difference could become difficult as spring approaches and the water level in the leachate pond is typically lowered. Ordinarily the underdrain would be pumped down so that the weight of the liner system itself would be adequate to keep the liner from being lifted. So .... as spring approaches and if no underdrain pump is available it will be necessary to place a temporary pump in the underdrain manhole and pump leachate into the leachate pond (across the road).

As spring approaches, it will also be necessary to keep the leak detection layer pumped down such that water level in the leak detection layer stays well below the water level in the leachate pond. My understanding is that with the new flow meter for the leak detection layer lowering of the water level in the leak detection system can be returned to automatic.

Tim / Dick ... good luck Thursday. Please call me if any there are any changes to your plan.

Thanks

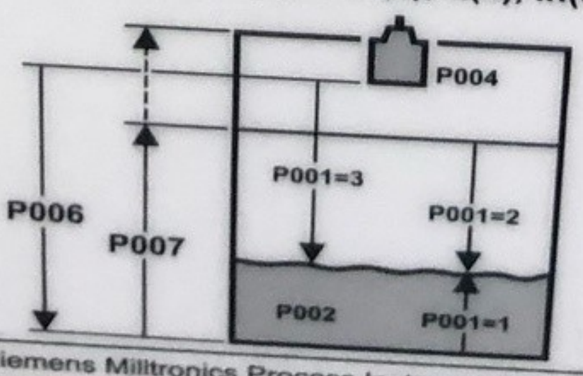
1.41
ft
100
0

| P111 | Relay Function |
|---|---|
| Value | Function |
| 0 | Off |
| 1 | Level |
| 2 | In bounds |
| 3 | Out of bounds |
| 4 | Rate of change |
| 5 | Temperature |
| 6 | Loss of Echo (LOE) |
| 7 | Cable fault |
| 40 | Totalizer |
| 41 | Flow sampler |
| 50 | Fixed duty assist |
| 51 | Fixed duty backup |
| 52 | Alt. duty assist |
| 53 | Alt. duty backup |
| 54 | Service ratio duty assist |
| 55 | Service ratio duty backup |
| 56 | First In First Out |
| 64 | Flush Valve |
| 65 | Communication |

P002

P003

P005 m(1), cm(2), mm(3), ft(4), in(5)




Siemens Milltronics Process Instruments Inc.

INSTRUCTION MANUAL
IM107R12

GOULDS
WATER TECHNOLOGY
a xylem brand

www.xylem.com/goulds

R. Angotti

| | | | | | |
|---|---|---|---|---|---|
| Pump Model | | | | | |
| S/N | | Date Installed | 3/11/22 | | |
| HP | 1/2 | Volts | 240 | Max. Amps | 7.3 |
| PH/HZ | 1 | Therm. Protected | | | |

Fill in required information and affix to control box or any convenient location

WS0512B
K2149456

Important:
Keep this tag for
warranty identification

# Wastewater Pump
# Dewatering, Effluent and

INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

GOULDS
WATER TECHNOLO
a xylem bra

# INSTRUCTION MANUAL

IM107R12

WS0512B

K2149456

**SIEMENS**

*HYDRORANGER 200*
*7ML50341AA01*
*Serial No.: PBD/N8240106*
*Power Rating: 100 - 230V ~ ±15%*
*50/60 Hz, 36 VA (17 W)*
*Contact Rating: 5A @ 250V~ ,Non-Inductive*
*Operating Temperature: -20°C to 50°C*
*Enclosure: TYPE 4X / NEMA 4X / IP65*
*See Instruction Manual For Proper Operation*
*Pour un fonctionnement optimal se reporter aux instructions de service*

KCC-REM-S49
HYDRORANGER

FM APPROVED

c UL us LISTED
MEASURING EQUIPMENT
48FF

C SP US
159134

*Siemens Milltronics Process Instruments, Peterborough*
*Assembled in Canada with domestic and imported parts*

PBD/N8240106

# APPENDIX G

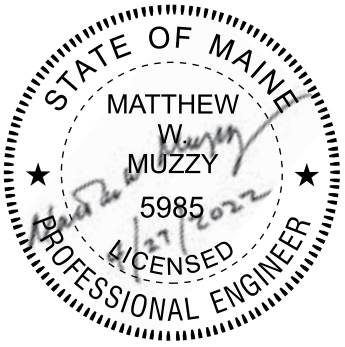
# POST-CLOSE MONITORING AND MAINTENANCE PLAN

SME
SEVEE & MAHER
ENGINEERS

# POST-CLOSURE MONITORING AND MAINTENANCE PLAN
# DOLBY LANDFILL FACILITY
# EAST MILLINOCKET, MAINE

Prepared for

## MAINE BUREAU OF GENERAL SERVICES
Augusta, Maine




April 2022

4 Blanchard Road
P.O. Box 85A
Cumberland, Maine 04021
Phone: 207.829.5016 smemaine.com

ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE

SME
SEVEE & MAHER
ENGINEERS

## TABLE OF CONTENTS



## LIST OF APPENDICES

## LIST OF FIGURES



## LIST OF TABLES

**POST-CLOSURE MONITORING AND MAINTENANCE PLAN**
**DOLBY LANDFILL FACILITY**
**EAST MILLINOCKET, MAINE**

## 1.0 INTRODUCTION AND PURPOSE

This Post-Closure Monitoring and Maintenance Plan (Plan) was prepared for the Dolby Landfill Facility (Facility) in general accordance with Chapter 401, Section 6 of the Maine Department of Environmental Protection's (MEDEP) Solid Waste Management Rules. This Plan is intended for use by the Maine State Department of Administrative and Financial Services (DAFS) - Bureau of General Services (BGS), BGS' post-closure landfill operator (i.e., the landfill operator), and MEDEP for the post-closure care of the Facility. Given that the Dolby Landfill Facility is closed to waste placement, this Plan also serves as the Facility's Operations Manual.

DAFS owns Dolby Landfill Facility and BGS is responsible for the facility's overall operation. The Facility is located approximately 2-1/2 miles northwest of East Millinocket, Maine on Route 157. The Facility consists of three landfills: Dolby I, Dolby II, and Dolby III. Each landfill contains non-hazardous solid wastes generated from pulp and papermaking activities, woodland operations, biomass burning, and general mill and municipal trash collection. A copy of the MEDEP Board Order approved Solid Waste License - Final Closure (#S-000796-WO-AO-N) for the Facility is provided as Appendix A.

The Dolby II and Dolby III Landfills are contiguous and have a combined area of approximately 130 acres. The Dolby I Landfill has an area of approximately 20 acres and is located approximately 0.25 miles south of Dolby II and III. Figure 1-1 shows the location of the Facility and the landfill areas relative to major local landmarks. In the summer of 2016, Phase 1 of the Dolby III cover upgrade was completed. Phases 2 and 3 of the Dolby III cover upgrades are expected to be completed in 2022 and 2023. After completion of Phase 3, approximately 10.5 acres (i.e., Phase 4) of Dolby III will remain for cover upgrade. The cover upgrade includes placement of a geomembrane over the entire Dolby III Landfill surface.

Final closure of the Dolby II Landfill occurred in 1999 by placement of a soil cover over that waste deposit. The Dolby I Landfill was closed more than 30 years ago with a soil cover and is not subject to the requirements of this Plan unless specifically stated.

NOTES

1. BASE MAP FROM GOOGLE EARTH PHOTO DATED 4/28/2016.
2. EXISTING PROPERTY BOUNDARY FROM PLAN ENTITLED "BOUNDARY SURVEY OF A PORTION OF THE KATAHDIN PAPER COMPANY LLC PROPERTY, EAST MILLINOCKET, MAINE, VOLUME 8702, PAVE 146 FOR KATAHDIN FOREST MANAGEMENT" PREPARED BY PLIGSA & DAY LAND SURVEYORS, DATED MAY 31, 2011.
3. MANHOLE PIPE LOCATIONS FROM SQUAW BAY CORPORATION DRAWING DATED 4/25/95. LOCATIONS ARE APPROXIMATE.

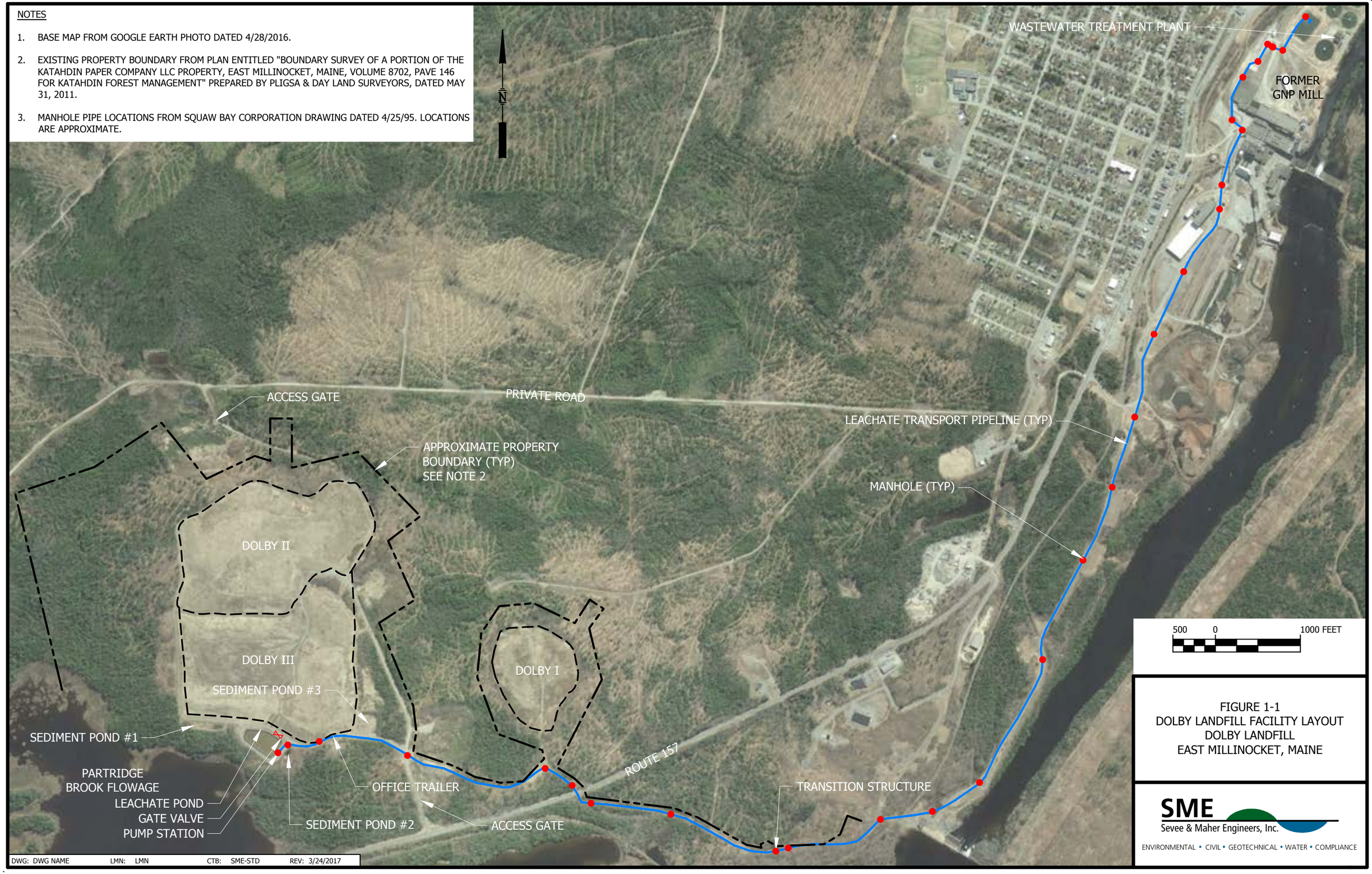



FIGURE 1-1
DOLBY LANDFILL FACILITY LAYOUT
DOLBY LANDFILL
EAST MILLINOCKET, MAINE

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE

DWG: DWG NAME LMN: LMN CTB: SME-STD REV: 3/24/2017

\\Nserver\cls\Kpo\Dol\ACAD\SITEOVERVIEW.dwg, 3/24/2017 2:47:03 PM, jrl

The Facility is supported by a lined leachate storage pond, a leachate pump station, and a leachate transport pipeline. Leachate and groundwater discharge from the Dolby II and Dolby III Landfill areas are collected by a system of perforated pipes and connecting manholes located along the perimeter of Dolby II and Dolby III, and by a leachate collection layer beneath a portion of the Dolby III waste deposit. The collected groundwater and leachate flow to the leachate storage pond (henceforth, the leachate pond) and from there the leachate is pumped via the pump station and leachate transport pipeline to the Town of East Millinocket's wastewater treatment facility (approximately 3.25 miles away). Figure 1-1 shows the general location of the leachate transport pipeline and the Town's wastewater treatment plant. Appendix B includes engineering drawings for the leachate management infrastructure.

A network of groundwater monitoring wells and surface water monitoring points are in place at the Facility and are routinely sampled and analyzed for water quality. The water quality monitoring and follow-up reporting is performed in accordance with an existing Environmental Monitoring Plan for the Facility prepared in 2012 (i.e., the 2012 EMP). The 2012 EMP is on file with the MEDEP and BGS. The EMP is expected to be revised when the Dolby III cover upgrade is complete (estimated 2024-2025).

The purpose of this Plan is to provide the landfill owner and the landfill operator with written guidance for the monitoring and maintenance of the Dolby Landfill Facility during its post-closure life. The remainder of this Plan describes responsibilities related to: performance of inspections and maintenance of the Facility; site safety and emergency procedures; leachate management; water quality monitoring; and general management of the Facility. All persons assisting with the post-closure activities for the Dolby Landfill Facility must be familiar with the contents of this Plan and the need to maintain and monitor the Facility's environmental performance during the post-closure period.

A copy of this Plan and other relevant Plans for the Facility are on file with BGS and are available upon request. This Plan will be revised as necessary; all changes must be coordinated through BGS and no change can be implemented until approved by the MEDEP.

## 2.0 SITE ACCESS AND SECURITY

The Dolby Landfill Facility has two access ways for vehicles. The main access is a combination paved and gravel roadway connecting to Highway Route 157, approximately 0.3 miles away from the southwestern most point of the Dolby III Landfill. A secondary, lesser-used, access road to the Facility exists near the southeastern-most point of the Dolby II Landfill. The secondary access road consists of a 0.4-mile-long gravel roadway that connects to a network of privately owned woodland roadways. Both the main and secondary access roads are gated and locked. The main access road is plowed and sanded during the winter to provide vehicle access to the leachate pond and pump station.

The perimeter of the leachate pond is surrounded by a chain link fence and locking gate. The pump station control building (next to the leachate pond) has a locking steel door and the hatchway to the pump station's wet well is also lockable. The Dolby Landfill Facility includes an office trailer that is also used for storage of leachate pipeline replacement parts. The trailer has two locking access doors. The leachate storage pond, wet well, and office trailer are within the overall limits of the gated/locked landfill Facility.

## 3.0 SITE SAFETY

All personnel working at the Dolby Landfill Facility will follow applicable state and federal safety and health rules and regulations. Should a medical and/or ambulance emergency occur at the Facility, first aid services are available in the nearby Town of East Millinocket and can be requested by dialing 911.

This Plan does not constitute a Health and Safety Plan for activities performed at the Dolby Landfill Facility. All persons performing maintenance and/or monitoring at the Facility will be responsible for having and maintaining their own health and safety plans and shall comply with all applicable state and federal safety and health rules and regulations.

### 3.1 Safety Equipment

Routine safety equipment at the site includes such items as first aid kits and fire extinguishers. Specialty equipment includes explosive gas meters, hydrogen sulfide (H2S) meters, and lockout – tagout equipment. All vehicles associated with construction work being performed at the Facility will be equipped with a first aid kit and fire extinguisher; in addition, a first aid kit is available at the landfill office trailer. Specialty breathing apparatus and air monitoring equipment will be used for entry into any confined space associated with the leachate management system. Confined space entry procedures and use of the associated specialty equipment will be limited to OSHA trained personnel only.

On occasion, odors can be emitted from gas vents installed in the landfill cover system and/or from the landfill surface. When such odors are detected, personnel/equipment should be moved away from the odor and the landfill operator should be notified. The landfill operator will arrange for measurement of hydrogen sulfide, explosive gas, and other potentially odorous compounds in the air so that appropriate safety action can be taken.

Cell phones and/or two-way radios may be used by all personnel working at the Facility for timely communication of emergencies.

### 3.2 Fire Prevention

In the closed condition, the landfill surfaces are mostly open grassland. Because locked gates control vehicular traffic to the Facility and because public access is limited, risk of an accidental grass fire is low. Common practice is to keep vehicles off the landfill surface except for mowing and cover repair. Should a fire occur, firefighting services are available from the Town of East Millinocket by dialing 911.

## 3.3 Emergency Notifications

Any emergency condition occurring at the Dolby Landfill Facility will be reported on a same-day basis to the landfill operator. The landfill operator will in turn notify BGS and MEDEP within 48-hours.

## 4.0 LANDFILL FACILITY INSPECTIONS

Post-closure inspection of the Dolby Landfill Facility will include semi-annual site visits for general inspections and periodic aerial surveys of the landfills to evaluate changes in cover settlement. The general inspections will consist mainly of visual observations of the Facility and are typically completed in the early summer and late fall. Specific items observed and evaluated as part of each general inspection include:

- Erosion and erosion control systems on and around the landfills;
- Condition of the vegetative cover;
- Condition of the drainage systems, ditches, sedimentation ponds, and other stormwater controls;
- Access roads and gates;
- Leachate storage pond, pump station, and leachate transport system;
- Visible sections of the leachate transport pipeline and manholes; and
- Safety equipment and signage.

Each general inspection will also include completion of an observation report describing the condition of items listed above. A sample observation report is included in Appendix C. Each completed observation report will be forwarded to BGS for review and subsequent submittal to MEDEP.

The periodic aerial surveys include review of recent landfill surface topography to help detect areas of total and differential settlement that could suggest potential areas of future runoff ponding and/or later slope movement.

Each settlement evaluation will include completion of a report describing the changes observed from the aerial survey and any related comments or recommendations pertaining to the landfill's geotechnical performance. The settlement evaluation report will be forwarded to BGS for review and subsequent submittal to MEDEP.

## 5.0 STORMWATER INSPECTIONS AND MONITORING

Formal stormwater inspections are no longer performed at the Dolby Landfill Facility. In 2019, MEDEP issued a Notice of Termination to BGS in 2017 indicating the then in-place Multi-Sector General Permit for the Dolby Landfill was no longer needed (MEDEP to BGS letter dated September 20, 2019). Informal stormwater inspections are conducted weekly by landfill personnel operating the leachate pond pump station and as part of the general inspections conducted for the Dolby landfill facility each year.

## 6.0 LEACHATE MANAGEMENT

The Dolby Landfill Facility includes buried piping that collects leachate and groundwater from the perimeter of the Dolby II and Dolby III Landfills, as well as piping that collects leachate and groundwater from a portion of the Dolby III base area. Leachate (including groundwater) collected by the piping system flows to the on-site, lined, leachate storage pond. Leachate is pumped from the leachate pond through a transport pipeline to the Town of East Millinocket's wastewater treatment plant. The leachate pumping is measured on an ongoing basis. The leachate quality is monitored three times per year as described in Section 7.0 of this Plan.

### 6.1 Leachate Pond, Pump Station, and Transport Pipeline

The leachate pond was constructed in 2007 and includes primary and secondary High-Density Polyethylene (HDPE) liners with a geocomposite leak detection layer between them. A geosynthetic clay liner (GCL) underlies the secondary HDPE liner and is in turn underlain by a 12-inch-thick compacted clay liner. There is an underdrain system for control of potential groundwater uplift pressures below the compacted clay liner. Leachate flows into the leachate pond through a 24-inch HDPE inlet pipe and leachate flows out of the pond (to the pump station wet well) through a 12-inch HDPE outlet pipe. Engineering drawings for the leachate pond and associated infrastructure are provided in Appendix B.

The following tables present the leachate pond's volume as related to various water depths and features of the pond. The maximum capacity of the leachate pond can be achieved by damming the pond's emergency spillway with sandbags.

**TABLE 6-1**

**LEACHATE POND VOLUME**

| Leachate Depth Relative to Pond Bottom (ft) | Leachate Surface Elevation (ft) | Approximate Leachate Volume in Pond (gallons) |
|---|---|---|
| 1 | 345.0 | 198,000 |
| 2 | 346.0 | 619,000 |
| 3 | 347.0 | 1,081,000 |
| 4 | 348.0 | 1,578,000 |
| 5 | 349.0 | 2,109,000 |
| 5.5 | 349.5 | 2,389,000 |
| 6.5 | 350.5 (Emergency Spillway Invert) | 2,978,000 |
| 7.5 | 351.5 (Top of Pond Liner) | 3,616,000 |

**TABLE 6-2**

**LEACHATE POND FEATURE AND CORRESPONDING LEACHATE POND VOLUME**

| Pond Feature | Leachate Volume (gallons) | Volume Remaining Relative to Emergency Spillway Invert (gallons) |
|---|---|---|
| Bottom of 24-inch pond inlet pipe | 178,000 | 2,800,000 |
| 24-inch pond inlet pipe flowing half full | 576,000 | 2,403,000 |
| Top of 24-inch pond inlet pipe | 1,034,000 | 1,944,000 |
| Painted line 2 feet below emergency spillway invert | 1,838,000 | 1,140,000 |
| Emergency spillway invert | 2,978,000 | 0 |

During non-freezing weather, the leachate pond level is maintained as low as practical to maximize the holding capacity of the pond in the event of an extreme precipitation event. It should be noted that the leachate pond was sized to store leachate generated by the Facility when it was actively operating. At that time, runoff from the open waste areas flowed directly to the leachate pond. Leachate generation by the closed Facility is expected to be significantly less than that when the Facility was open.

A two-foot freeboard line, as measured from the invert of the emergency spillway, is painted on the leachate pond's primary liner and the leachate level in the pond should not exceed that line during normal operation. In the event the freeboard line becomes submerged, the landfill operator will contact BGS, who will in turn contact MEDEP. BGS and MEDEP will then decide if leachate trucking to the Town of East Millinocket's wastewater treatment plant is needed to avoid leachate pond overtopping.

During freezing weather, the leachate level in the leachate pond should be maintained approximately 6-inches above the top of the 24-inch diameter inlet pipe to help protect the pond's inlet and outlet pipes from ice damage.

## 6.2 Leachate Pump Station and Transport Pipeline

A leachate pump station and wet well are positioned adjacent to the leachate pond. Two pumps in the wet well convey leachate through approximately 6,500 linear feet of 8-inch diameter HDPE force main to a transition structure (i.e., high-point structure). From the transition structure, the leachate flows through approximately 13,300 linear feet of 10-inch diameter HDPE gravity main (including an inverted siphon) to the Town of East Millinocket's wastewater treatment plant. The leachate pump station includes a flow meter and mechanical chart recorder (circular paper) to document the volume of leachate pumped and the level of leachate in the wet well. Figure 1-1 shows the location of the leachate pump station and transport pipeline.

The pump station is equipped with two 600 gallons per minute (gpm) submersible pumps that operate in parallel. One pump is activated/deactivated by floats that sense the leachate pond level; the other pump serves as a standby pump that is manually operated when high leachate pond inflows are occurring. The leachate pumps are equipped with running time meters and pump discharge pressure meters. The running time and discharge pressure are also recorded by the pump station's chart recorder and are used to estimate the leachate volume pumped. In the event the measured and calculated leachate flow rates vary by more than 20 percent, the landfill operator will investigate to determine the cause of the volume discrepancy, which, among other things, could be a sign of leakage from the leachate transport pipeline.

A leachate flow meter is also located in the gravity main, approximately 600 feet upstream of East Millinocket's wastewater treatment plant (approximately 3.2 miles from the landfill pump station). This flow meter also uses a circular chart recorder. The circular paper charts at both recorder locations are typically changed by the landfill operator at 3- to 4-day intervals. Data from the completed charts are reduced and tabulated by the landfill operator.

The flow meter near the East Millinocket wastewater treatment plant is contained in a wooden storage shed. The shed is heated during the cold weather and needs to be checked routinely for freezing interior temperatures. The shed has a lower level that requires confined space entry if accessed. A leachate dumping pad is located adjacent to the south and west sides of the shed. The leachate dumping pad is connected by a gravity pipeline to the leachate transport line. The leachate dumping pad is used to empty tank-trucks when leachate hauling from the Dolby Facility is necessary.

## 6.3 Leachate Pond Leak Detection Monitoring

A leak detection layer exists between the primary and secondary leachate pond liners. A stone-filled collection sump is positioned at the south end of the leak detection layer. All liquid collected in the leak detection layer drains to the sump. A 6-inch pipe connects the sump to the pump station. The 6-inch pipe contains a small submersible pump that is activated by an electronic water level sensor in the sump. Flow from the submersible pump (i.e., flow from the leak detection layer sump) is recorded before being discharged to the wet well. The flow rate from the leak detection pump, flow total, sump water level, and pump running time are stored by a programmable control panel housed in the pump station. The stone thickness in the leak detection sump is 12 inches. The leak detection pump activates when the water level in the sump 10 inches. The pump turns off when the sump water level reaches zero.

The leak detection sump level and pump activity are reviewed and recorded by the landfill operator each time the pump station chart recorder is changed. Should the leak detection pump activate, BGS will be notified. The landfill operator will record flow measurements from the leak detection layer and determine if the Action Leakage Rate (ALR) (i.e., 20 gallons per acre per day [gpad]), for the leachate pond has been exceeded. Small diameter tubing is also connected to the sump to allow sampling and analysis of the leak detection water, if desired.

In the event the leakage into the leak detection layer exceeds the Action Leakage Rate (ALR), BGS will notify MEDEP. As soon as weather conditions allow, the landfill operator will drain the leachate pond and visually inspect the surface of the primary liner and repair any damaged areas.

The ALR represents the rate of leakage into the leak detection layer that will trigger interaction between BGS and the MEDEP to determine the appropriate response action. An Action Leakage Rate/Response Action Plan for the leachate pond is provided in Appendix D to this Plan. In the event an ALR response action occurs, a follow-up report will be prepared for submission to the MEDEP; the report will summarize the results of the response action and will include recommendations relative to future leak detection monitoring.

As of 2021, the ALR for the leachate pond was exceeded. As follow up to the exceedance, the leachate pond primary liner was cleaned and inspected, the pipe penetrations into and out of the leachate pond were inspected, re-caulked, and re-banded. Subsequent leak detection monitoring indicated the ALR continued to be exceeded and MEDEP was alerted to that condition. As of 2012, water collected in the leachate pond underdrain system was (and continues to be) pumped to the leachate pond pump station for subsequent treatment as leachate. In 2021, water quality monitoring of the underdrain system was initiated using the underdrain manhole as the sampling point. Water quality monitoring of the underdrain in 2021 showed presence of several constituents common to leachate. A discussion of the apparent leak in the leachate pond's liner system is provided in the 2021 Annual Landfill Report.

## 6.4 Leachate Pond Level Increase Above Two-foot Freeboard Line

The following procedures will be taken to control the leachate level in the leachate pond if the two-foot freeboard line is exceeded. It should be noted that these procedures are an adaptation of similar procedures set forth in the 2012 Operating Manual for the Dolby III Landfill on file with BGS (SME, 2012). These procedures take into account that during the post-closure period, it is very unlikely that a weather event will occur to cause the two-foot freeboard line to be exceeded. The leachate pond was originally sized to contain runoff from multiple acres of active waste area, which is not the case during post-closure.

- In preparation for forecasted heavy rain or snowmelt, the landfill operator will clear all debris from the leachate pond's outlet pipe rack/screen and operate the leachate pumps manually until the pond is dropped to a minimum level. Care will be taken to avoid the running the leachate pumps dry and risking possible pump damage.

- The landfill operator will contact a tank-truck operator to mobilize sufficient tank-trucks and pumps to remove excess leachate from the leachate pond and haul it to the Town of East Millinocket's wastewater treatment plant. As of 2017, Thornton Construction of Milford, Maine is on call for leachate hauling. Thornton Construction can be reached via cell at 207.949.1966. Standard practice is to contact Thornton Construction (or similar) annually before the spring thaw and confirm that leachate hauling assistance is available. The Town of East Millinocket's wastewater treatment plant operator is also contacted before the spring runoff to verify the procedures necessary for unloading the leachate tank-trucks. The contact phone number for the wastewater treatment plant is 207.447.1452.

- If potential exceedance of the two-foot freeboard line becomes apparent, the landfill operator will monitor the leachate pond level at least four times per day to determine if leachate hauling is necessary. As part of the monitoring, sandbags can be placed in the emergency spillway to block potential overflows. Damming the emergency spillway should be a last resort to prevent the leachate pond from overtopping and should not be used to avoid leachate hauling.

- As soon as the leachate level reaches the painted freeboard line (located two feet below the invert of the emergency spillway), the landfill operator will contact BGS to request initiation of leachate hauling. The hauling will continue as long as necessary to reach the end of the runoff event and will not be terminated until the leachate level in the pond is at least 6 inches below the invert of the emergency spillway and falling.

- If the leachate pond level increase cannot be controlled by pumping and hauling, measures will be implemented to also pump leachate into the #3 sediment pond. For this action to occur, the

outlet for the #3 sediment pond will first be blocked in order to retain as much leachate as possible in the sediment pond before overtopping occurs. Once the level in the leachate pond is at least 6 inches below the invert of the emergency spillway, and falling, the water in the #3 sediment pond will be pumped back to the leachate pond. BGS and MEDEP will identify any mitigation necessary for the #3 sediment pond once all leachate has been removed from it.

## 6.5 Leachate Pond Overflow

In the event of a leachate pond overflow and/or when an overflow of the #3 sediment pond occurs (when that pond is being used to temporarily hold leachate), the following measures can be taken to hasten the stoppage of overflow:

- Shut-off the inflow to the leachate pond via the gate valve located between the leachate pond and catch basin CB #3.
  This measure will provide some temporary storage of leachate within the landfill's leachate collection piping but will cause a potential risk to slope stability of the Dolby III Landfill's cover system, especially along the Landfill's western toe.

- Increase the number of hauling vehicles and the haul frequency.
  The leachate pumping via the transport pipeline and leachate hauling can be performed on an around-the-clock schedule if necessary. Additional tank-trucks for hauling leachate may need to be mobilized. The expanded hauling schedule will be initiated prior to any leachate pond overflow or #3 sediment pond overtopping.

- Visual inspections and specific conductivity monitoring.
  All areas overtopped by leachate (i.e., the emergency spillway and #3 sediment pond) will be routinely inspected during and after the overtopping to identify areas of potentially immediate erosion threats and/or structural deficiencies. If an immediate threat is noted, corrective measures will be taken. If leachate is released to the environment, frequent specific conductivity measurements of the outflow will be recorded to assist with evaluation of any potential impact.

## 6.6 Pump Station Failure

In the event of a pump station failure, leachate can be stored in the leachate pond. If the pump station failure will be for an extended period of time or, if the pond level exceeds the two-foot freeboard line, portable pumps and leachate hauling trucks will be mobilized to maintain the leachate pond level below the two-foot freeboard line.

## 6.7 Leachate Pond Cleaning and Pump Station Maintenance

Sediment collected in the leachate pond will be periodically removed and the pond liner will be visually inspected. Pending completion of the cover upgrade for the Dolby III Landfill it is expected that sediment accumulation in the leachate pond will become minimal, thereby making the need for frequent cleaning and sediment removal unnecessary. When leachate pond cleaning is necessary, the activities will include wash down of the leachate pond's primary liner and close visual inspection of the primary liner's surface for possible points of leakage. Care will be taken during the leachate pond cleaning to avoid causing any damage to the liner. The leachate pond liner inspection will also include the inlet and outlet pipe penetrations.

The leachate pump station wet well will be cleaned and inspected at the same time as the leachate pond. A report of the leachate pond and wet well cleaning, with photographs and recommendations, will be prepared and submitted to BGS.

Periods of low leachate generation and leachate pond cleaning often provide good opportunities to perform pump station maintenance. At those times, the leachate pumps and their associated equipment will be inspected for wear and necessary parts replaced. As of April 2022, the leachate pumps are Flygt Model CP-3170-MT submersible pumps. The #2 pump was rebuilt in 2013 and the #1 pump was rebuilt in 2022. The #1 pump is located closest to the pump station control house. Each pump has a pumping output of approximately 600 gallons per minute (gpm) and when combined have a capacity of approximately 700 gpm.

CAUTION: Anyone working in the pump station wet well must follow confined space entry procedures.

## 6.8 Leachate Transport Pipeline Cleaning

The leachate transport pipeline from the leachate pond to the East Millinocket wastewater treatment plant will be cleaned when the combined pumping flow rate in the pipeline drops below 450 gpm. A report of the pipeline cleaning will be prepared and submitted to BGS. Engineering drawings for the leachate transport pipeline are presented in Appendix B.

## 7.0 ENVIRONMENTAL MONITORING

Environmental Monitoring for the Dolby Landfill Facility during the post-closure period will consist of sampling and analysis of groundwater, surface water, leachate, and landfill gas at a number of existing monitoring points. The environmental monitoring is used to evaluate performance of the Facility relative to potential threats to public health and safety as well as threats to the environment. The Environmental Monitoring Plan (2012 EMP) for the Dolby Landfill Facility was updated in April 2012 and is on file at MEDEP and BGS. The 2012 EMP is not expected to change in the early years of post-closure monitoring for the Facility. The sampling frequency and parameters for the closed landfill Facility are, however, expected to decrease later in the post-closure life. Any changes to the EMP will be approved by MEDEP before implementation.

Condition No. 5 of the MEDEP approved Solid Waste License - Final Closure (#S-000796-WO-AO-N) for the Dolby Landfill Facility (see Appendix A) contains language pursuant to a future specific evaluation of water quality at three existing monitoring well locations at the Dolby III Landfill and the potential for a corrective action for the groundwater, dependent on water quality at those locations. Any change in groundwater quality monitoring as result of that future evaluation or any other reason must be approved by MEDEP and will be documented by amending the 2012 EMP.

### 7.1 Groundwater, Surface Water, and Leachate Monitoring

Twenty-one groundwater monitoring locations, six surface water locations, three leachate monitoring locations, and the leachate pond underdrain are routinely sampled and analyzed at the Dolby Landfill Facility. The monitoring points are listed by identification code in Table 7-1 and their site locations are shown on Figure 7-1. The 2012 EMP describes the frequency, methods, materials, chemical parameters, analyses, and reporting associated with sampling and analysis of the monitoring points. The underdrain sampling point (i.e., UDLP) was added in 2021and follows the same monitoring schedule and parameter list as the monitoring wells.

**TABLE 7-1**

**WATER QUALITY MONITORING LOCATIONS**

GROUNDWATER MONITORING WELLS

DOLBY III

| | | |
|---|---|---|
| MW-107A | MW-304A | MW-402A |
| MW-301 | MW-304B | MW-402B |
| MW-302B | MW-401A | |
| MW-302C | MW-401B | |

DOLBY II

| | | |
|---|---|---|
| MW-104B | MW-205B | MW-303B |
| MW-202AR | MW-206A | |
| MW-202B | MW-206B | |
| MW-205A | MW-303A | |

DOLBY I

| | |
|---|---|
| MW-103 | MW-113 |

SURFACE WATER SAMPLING LOCATIONS

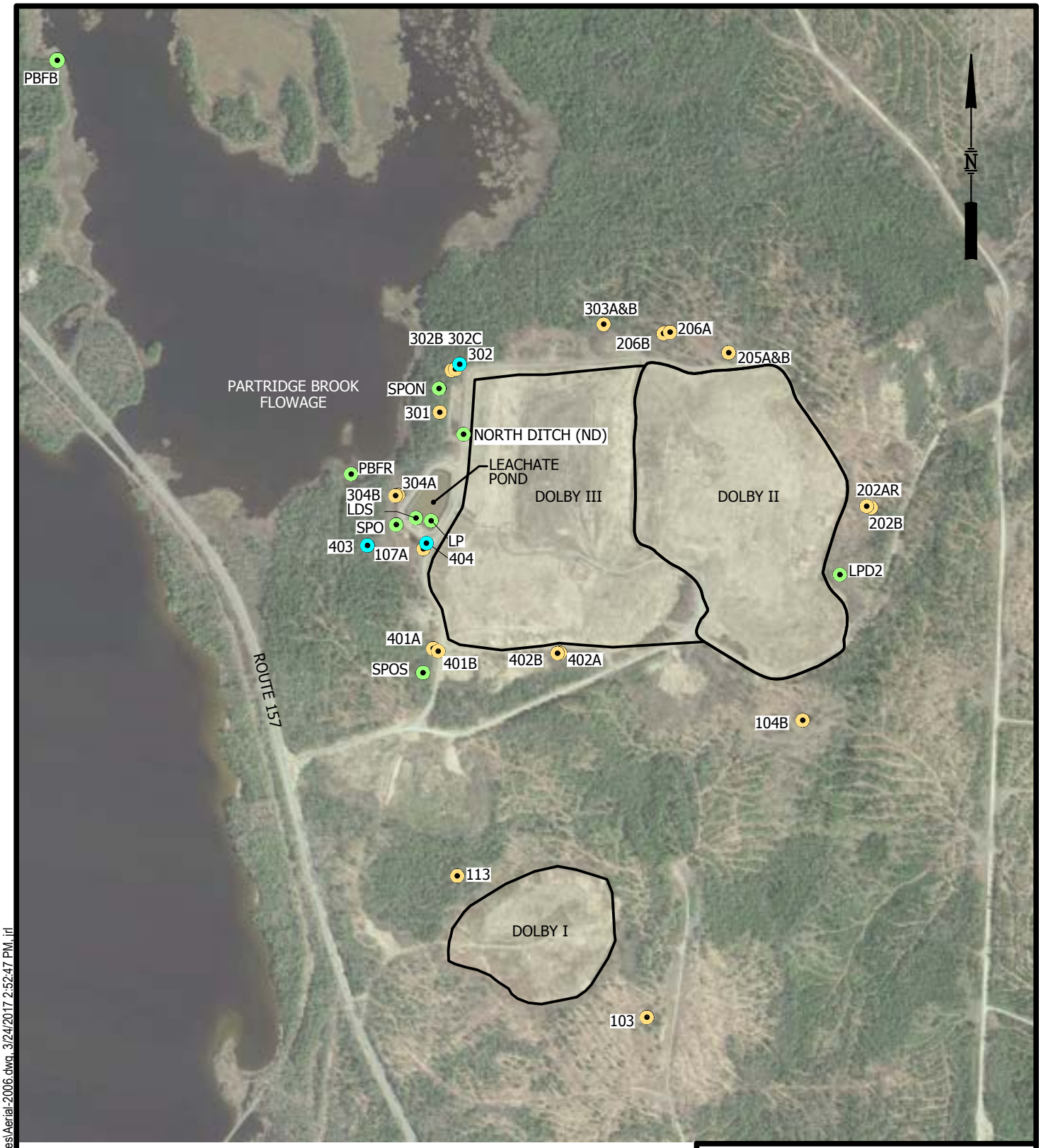
PBFB Partridge Brook Flowage – Background
PBFR Partridge Brook Flowage – Revised location beginning 2012
ND North Ditch
SPO Siltation Pond Outlet
SPON Siltation Pond North
SPOS Siltation Pond South

UDLP – Underdrain for leachate pond (collected from manhole on the western side of the leachate pond).

FIELD PARAMETERS from MW – 103 and MW – 113, which are monitoring wells associated with the Dolby I

LEACHATE SAMPLING LOCATIONS

LP Leachate Pond South of Dolby III
LPD2 Leachate Pond East of Dolby II
LDS Leachate Pond Leak Detection Sump




AERIAL IMAGE FROM GOOGLE EARTH,
DATED APRIL 28, 2016.

LEGEND

- GROUNDWATER WELLS
- SURFACE WATER SITES
- PIEZOMETER

500 0 1000 FEET

FIGURE 7-1
WATER QUALITY MONITORING LOCATIONS
DOLBY LANDFILL
EAST MILLINOCKET, MAINE

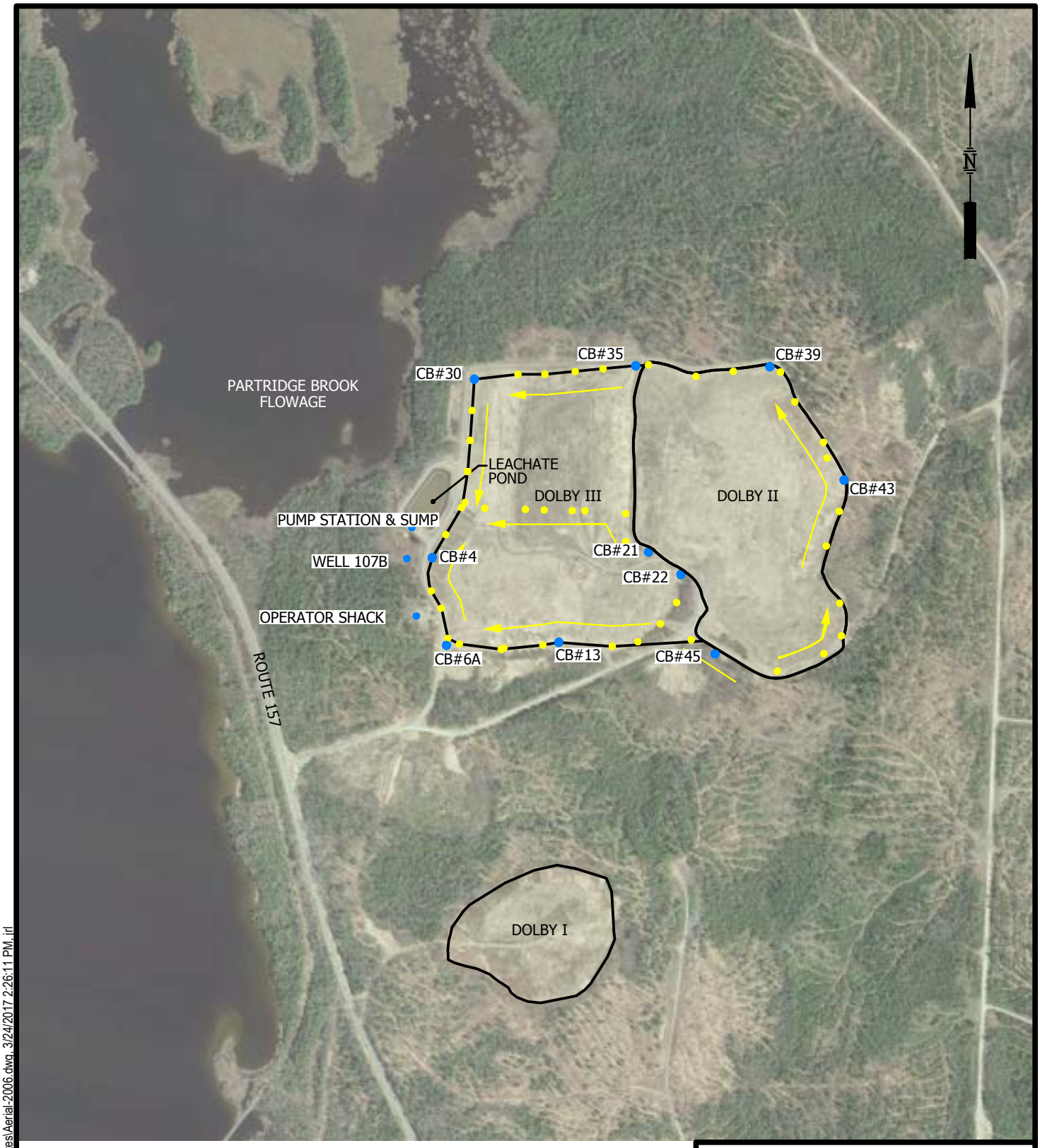
SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE

DWG: AERIAL-2006 LMN: WAT SAMPL SITES CTB: SME-STD REV: 3/2/2017

\\Nserver\cfs\Kpc\Dol\ACAD\WaterSampleSites\Aerial-2006.dwg, 3/24/2017 2:52:47 PM, jrl

## 7.2 Landfill Gas Monitoring

Fourteen locations are routinely monitored for the presence of landfill gas (i.e., hydrogen sulfide and explosive gas) at the Dolby Landfill Facility. The locations consist of ten catch basin locations spaced along the perimeter of the landfill (i.e., #4, #6A, #13, #21, #22, #30, #35, #39, #43, and #45), one former groundwater monitoring well (107B), the office trailer, the leachate pond pump station, and the associated wet well. The gas monitoring locations are shown on Figure 7-2. Several of the gas monitoring locations will be eliminated as a result of the Dolby III cover upgrade. The eliminated locations consist of leachate catch basins that will be permanently removed from access due to the Dolby III Landfill cover upgrade. By end of 2023, it is expected that only groundwater monitoring well (107B), the office trailer, the pump station, wet well, and two catch basins (CB # 39 and CB#43) will remain available for gas monitoring. The 2012 EMP describes the frequency, methods, monitoring equipment, and reporting associated with sampling and analysis of the gas locations.




AERIAL IMAGE FROM GOOGLE EARTH,
DATED APRIL 28, 2016.

500 0 1000 FEET

LEGEND

GAS SAMPLE LOCATIONS

EXISTING MANHOLE/CATCH BASIN

FLOW DIRECTION OF LEACHATE COLLECTION SYSTEM

FIGURE 7-2
GAS MONITORING LOCATIONS
DOLBY LANDFILL
EAST MILLINOCKET, MAINE

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE

DWG: AERIAL-2008 LMN: CB GAS MONITOR CTB: SME-STD REV: 3/22/2017

\\Nserver\cfs\Kpc\Dol\ACAD\WaterSampleSites\Aerial-2006.dwg, 3/24/2017 2:26:11 PM, jrl

## 8.0 LANDFILL COVER MONITORING AND MAINTENANCE

The final cover systems for the Dolby II and Dolby III Landfills are visually monitored as part of the semi-annual general inspections (see Section 4.0). Common elements of these inspections are to identify landfill surface areas where: ponding of water on the landfill cover is occurring; cover soil erosion is occurring; stress of the vegetative layer is observed; animal burrows are present; and where any other features are visible that could affect the cover integrity.

The Landfill cover is mowed every other year to prevent growth of deep rooted, woody plant species. Starting in with winter 2020, the surface of both Dolby II and Dolby III have been mowed annually. The annual mowing is an experiment to understand if annual mowing will reduce winter snow accumulation (i.e., drifting) on the landfill, which could reduce spring leachate flows (when leachate trucking is sometimes necessary to supplement the leachate pumping capacity at the leachate pond. At such time that the Dolby III cover upgrade is complete, the biannual mowing schedule may be reinstituted.

## 9.0 RECORD KEEPING AND REPORTING

Records maintained for the Dolby Landfill Facility pertain mainly to the volume of leachate pumped (and hauled) to treatment, leachate pumping flow and pressure statistics, the results of precipitation event monitoring as discussed in the SWPPP, inspection reports, and documentation of physical maintenance and repair of the Facility. Water quality and gas measurement results will be submitted to MEDEP following each monitoring episode as described in the 2012 EMP. An annual report for the Facility will be prepared and submitted to MEDEP that includes the leachate pumping records, inspections, and documentation of maintenance and repair. The water quality results will also be included in the annual report along with an interpretation of those results as related to MEDEP standards and site trends.

## 10.0 POST-CLOSURE MONITORING AND MAINTENANCE COST ESTIMATE.

The following table of estimated post-closure monitoring and maintenance costs was provided by BGS. The table includes estimated costs during five years of landfill closure activity (i.e., 2017 through 2021) and thirty years of landfill post-closure life (i.e., 2022 through 2052).

**TABLE 10-1**

**ESTIMATED ANNUAL POST-CLOSURE MONITORING AND MAINTENANCE COSTS**

| Years | Water Quality [1] | General Inspections [2] | Leachate Control [3] | Maintenance [4] | Engineering Design Support [5] | Cover Settlement Evaluation [6] | Annual Average Cost |
|---|---|---|---|---|---|---|---|
| Years 1-7 Implementation of Closure 2017-2024 | $69,000 | $64,000 | $93,000 | $25,000 | $85,000 | $5,000 | $343,000 |
| Years 1-15 Post-Closure 2024-2039 | 47,000 | 31,000 | $64,000 | $17,000 (yrs 1-4) $29,000 (yrs 5) | $12,000 | $2000 | $181,000 |
| Years 16-30 Post-Closure 2039-2054 | 47,000 | 31,000 | $64,000 | $17,000 (yrs 1-4) $29,000 (yrs 5) | $12,000 | $2,000 | $171,100 |
| **Total Closure and Post-Closure Monitoring and Maintenance Cost (2024 – 2054) $5,265,000** | | | | | | | |

Notes:

1. Includes Groundwater Sampling, Reporting, and Annual Groundwater Report Preparation. Assumes that decreased sampling and reporting (# of sample sites and/or # of rounds) is allowed after cover upgrade is completed (i.e., 2024 or after)
2. Assumes "local" Inspections performed three times a week during 7-year closure period then once per week thereafter. All options include three annual site visits by an independent engineering firm.
3. Includes performing inspection and repair/replacement of air release valves, pipeline cleaning, pond cleaning, and pump rebuilding/maintenance every other year during the closure period and every third year during post closure period. This annual cost is expected to become lower as leachate flow from landfill diminishes and the need for pipeline and pump capacity are reduced.
4. Includes snow removal every year, road/culvert maintenance every year, alternate year mowing of Dolby II and III, and trimming trees along the leachate transport pipeline every 5 years.
5. Includes oversight of subcontractors, interaction with owner and regulatory agencies, quality control, project management, and administration.
6. Includes biannual aerial survey of Dolby II and Dolby III for 7 year closure implementation period for evaluation of cover settlement. Includes aerial survey every fifth year for 30 year post-closure to evaluate landfill settlement.
7. All values are in 2022 dollars. Does not include electrical costs for the leachate transport pipeline and leachate treatment at new municipally owned wastewater treatment plant in East Millinocket. All costs are estimated average annual costs.
8. Actual annual costs may vary.

## REFERENCES

Sevee & Maher Engineers, Inc., 2012. Environmental Monitoring Plan, Dolby Landfill, April 2012.

Sevee & Maher Engineers, Inc., 2012. Operating Manual, Dolby III Landfill, April 2012.

**APPENDIX A**

**MEDEP LICENSE FOR DOLBY FACILITY**

SME
SEVEE & MAHER
ENGINEERS

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

BOARD ORDER

IN THE MATTER OF

| | | |
|---|---|---|
| STATE OF MAINE, ACTING THROUGH THE | ) | SOLID WASTE |
| DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL | ) | LICENSE |
| SERVICES, BUREAU OF GENERAL SERVICES | ) | |
| EAST MILLINOCKET, PENOBSCOT COUNTY, MAINE | ) | |
| DOLBY LANDFILL FACILITY | ) | |
| #S-000796-WO-AO-N | ) | FINAL CLOSURE |
| (APPROVAL WITH CONDITIONS) | ) | |

Pursuant to the provisions of the *Maine Hazardous Waste, Septage and Solid Waste Management Act,* 38 M.R.S. §§1301 to 1319-Y; the *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2 (last amended October 19, 2015); and the *Solid Waste Management Rules: General Provisions,* 06-096 CMR 400 (last revised April 6, 2015); *Landfill Siting, Design and Operation*, 06-096 CMR 401 (last revised April I2, 2015); and *Water Quality Monitoring, Leachate Monitoring, and Waste Characterization,* 06-096 CMR 405 (last revised April 12, 2015), the Department of Environmental Protection ("Department") has considered the application of the STATE OF MAINE, acting through the Department of Administrative and Financial Services, Bureau of General Services, with its supportive data, agency review comments, staff summary, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. APPLICATION SUMMARY

A. Application: The Department of Administrative and Financial Services, Bureau of General Services ("DAFS/BGS") has applied for a license to close an existing paper mill landfill facility in East Millinocket.

B. History:

(1) On June 13, 1984, the Great Northern Paper Company ("GNP") received Department approval to construct and operate the Dolby III landfill (Department license #L-000796-07-A-N).

(2) The Dolby III landfill occupies approximately 72 acres and has been operated in stages consisting of 17 waste cells. Operations are currently in Cell 16.

(3) The originally-approved waste streams were wastewater sludges, woodroom/woodyard waste, wood ash, and general rubbish from GNP's Millinocket and East Millinocket paper mills and municipal solid waste from the local communities. The disposal of municipal solid waste was discontinued in 1993 in response to new federal solid waste regulations. The site also includes the Dolby I and Dolby II landfills, which have been filled to licensed capacity and are closed. Dolby I, II and III are hereinafter collectively referred to as the Dolby Landfill Facility.

(4) On April 28, 2003, the Department approved the transfer from GNP of all solid waste licenses, and other Department licenses, associated with the Dolby Landfill Facility to Katahdin Paper Company LLC ("KPC").

(5) On August 30, 2011, the Maine State Planning Office ("SPO") acquired the Dolby Landfill Facility and related properties from KPC. On September 28, 2011, the Department approved the transfer of all solid waste licenses (Department license #S-000796-WR-AJ-T), and other Departmental licenses, associated with the Dolby Landfill Facility to the SPO from KPC.

(6) Since the issuance of the aforementioned transfer license, the SPO has been dissolved and responsibilities for the oversight and operation of the Dolby Landfill Facility have been turned over to the DAFS/BGS.

C. Summary of Proposal: The DAFS/BGS is proposing to close the remaining open portions of Dolby III and upgrade the cover system of previously closed areas of Dolby II and Dolby III in several phases over the next few years. The entire project is hereinafter referred to as the Dolby Landfill Cover Upgrade Project. An Application for Landfill Closure entitled Dolby Landfill Cover Upgrade - Phase I (hereinafter "Application" or "Dolby Landfill Cover Upgrade Project - Phase I") was prepared by Sevee & Maher Engineers, Inc. and is dated April 2016. The Department accepted the Application as complete for processing on April 27, 2016.

2. TITLE, RIGHT, OR INTEREST

The Dolby Landfill Facility site is approximately 436 acres in size. The DAFS/BGS has submitted an executed copy of the Acquisition Agreement, dated August 30, 2011, that conveyed the property that the Dolby Landfill Facility is located on from KPC to the SPO. The SPO was dissolved in 2011 and ownership of the Dolby Landfill Facility was

transferred to the DAFS/BGS by PL 2011, c. 655; thereby, establishing the DAFS/BGS as the owner/operator of the facility.

The Department finds that the DAFS/BGS has submitted sufficient evidence of title, right, or interest with respect to the property proposed for use.

3. NOTICE OF INTENT

The DAFS/BGS has provided documentation of the publication of a "Notice of Intent to File" and has documented notification of abutters as required by 06-096 CMR 2. The Notice of Intent to File was published in the March 19-20, 2016 edition of the Bangor Daily News.

The Department finds that the DAFS/BGS has complied with all of the public notice requirements of 06-096 CMR 2.

4. FINANCIAL ABILITY AND ASSURANCE

The DAFS/BGS has allocated approximately $12 million for the proposed closure/cover system upgrade at the Dolby Landfill Facility. The funds for the Dolby Landfill Cover Upgrade Project were included in the 2016-2017 State of Maine biennial budget (PL 2015, c. 267 Part M). The Dolby Landfill is a state-owned facility and is not subject to the financial assurance requirements of 06-096 CMR 400(11) of Maine's *Solid Waste Management Rules* ("Department Rules").

The Department finds that the DAFS/BGS has provided adequate evidence of financial ability and assurance for the proposed Dolby Landfill Cover Upgrade Project.

5. TECHNICAL ABILITY

The DAFS/BGS has retained Sevee & Maher Engineers, Inc. ("SME") of Cumberland, Maine to assist with the design, construction management and oversight of the Dolby Landfill Cover Upgrade Project. SME was formed in 1985 to provide civil and environmental services to private and public sectors. Services provided by SME include siting, design, permitting, and operation of solid waste landfills. Personnel from SME have been involved with various aspects of the design and operation of the Dolby Landfill Facility since the mid 1980's. SME provided information regarding the technical ability of its personnel who will be utilized to design, manage, and oversee the construction of the Dolby Landfill Cover Upgrade Project. The DAFS/BGS and SME will also work with earthworks and geosynthetics contractors experienced in landfill cover construction to complete the project. Post-closure care and maintenance of the

facility will continue to be provided by the DAFS/BGS using personnel familiar with the site.

The Department finds that the DAFS/BGS has demonstrated technical ability for the proposed Dolby Landfill Cover Upgrade Project.

6. LIABILITY INSURANCE

The DAFS/BGS is a public entity and is exempt from the liability insurance requirements of 06-096 CMR 400(10).

The Department finds that the DAFS/BGS is exempt from the liability insurance requirements of 06-096 CMR 400(10) of the Department Rules.

7. SURFACE WATER QUALITY AND FLOODING

Stormwater from the Dolby Landfill site is managed in accordance with the facility's Stormwater Pollution Plan and is in compliance with the Maine Multi-Sector General Permit Sector L. In general, surface water from the site flows towards the Partridge Brook Flowage, which then flows into Dolby Pond. Partridge Brook Flowage is not listed as an impaired water body. Stormwater management for the facility includes 3 separate sediment/detention ponds that are positioned near the downslope perimeter of the Dolby III landfill. Runoff from the closed landfill areas and access roads enter grass and stone lined ditches that flow into the sediment/detention ponds. Discharges from each sediment/detention pond flow into level spreaders and then become sheet flow into the adjacent wooded areas.

Since the Dolby III landfill ceased operations prior to reaching its permitted final waste grade, the proposed final grading plan will have sideslopes that are flatter in some areas than previously expected. The proposed cover upgrades will also utilize existing cover material to re-establish a vegetative cover surface that will mimic the current cover conditions in terms of stormwater runoff from the site. SME proposes no changes to the site's current Stormwater Management Plan with respect to the proposed cover system upgrade. However, during each phase of the cover system upgrade, a stormwater analysis will be performed to verify the capacity requirements of the site's existing structures and to design the necessary temporary and permanent erosion control measures required for the proposed cover upgrades. Based upon the stormwater analysis for the Phase 1 cover upgrade area, the emergency spillway of Sedimentation Pond #3 will be modified. Modifications include the installation of a riprap-lined emergency spillway and outlet pipe riprap protection.

The Department finds that the proposed Dolby Landfill Cover Upgrade Project will not have an unreasonable adverse effect on surface water quality and will not unreasonably cause or increase flooding on-site or on adjacent properties nor create an unreasonable flood hazard to any structure.

8. EROSION AND SEDIMENTATION CONTROL

The proposed Dolby Landfill Cover Upgrade Project will occur within the limits of the existing landfill footprint and will minimize the disturbance of any native soils. The design and implementation of all erosion control measures associated with the proposed project will be conducted in accordance with the Maine Erosion and Sediment Control Practices Field Guide for Contractors, March 2015, or its equivalent. Suitable erosion control measures will be in-place prior to disturbance of the existing soil cover associated with the proposed project. A comprehensive Erosion and Sedimentation Control Plan has been prepared by SME and was submitted as part of the Application.

The Department finds that the DAFS/BGS has adequately addressed erosion and sediment control for the proposed Dolby Landfill Cover Upgrade Project and has demonstrated that the proposed project will not cause unreasonable sedimentation or erosion of soil.

9. FACILITY BACKGROUND AND PROJECT DESCRIPTION

The Dolby II and Dolby III landfills are non-secure landfills that collect leachate and groundwater-containing leachate. The Dolby II and Dolby III landfills have a combined size of approximately 135 acres and were permitted by the Department in 1978 and 1984, respectively. Originally, the waste streams included municipal solid wastes from the Towns of Millinocket, East Millinocket and Medway, and wastewater treatment sludge and various pulp and papermaking residuals from the GNP mills. Over the years, the Department has approved disposal of a number of different wastes streams, including, but not limited to, the following: wood waste; boiler ash; wood ash; coal ash; demolition debris ash; asbestos-containing materials; oil-contaminated soils; lime grit; waste sulfur; ink sludge; and solid waste from Baxter State Park and GNP Woodland Operations.

Cover materials have been previously placed on all of Dolby II and a majority of Dolby III. In an effort to significantly reduce the volume of leachate generated at the Dolby Landfill Facility, the DAFS/BGS plans to close the remainder of Dolby III and upgrade the cover system of previously closed areas of Dolby III and portions of previously closed areas of Dolby II. The proposed cover system upgrades will significantly limit precipitation infiltration into the waste; thereby, reducing leachate generated at the site. The objective of reducing the leachate generated at the site is to minimize future costs

associated with the transportation and treatment of leachate from the facility that will be paid for by the taxpayers of Maine.

10. SITE ASSESSMENT REPORT

Consistent with Department Rules, the DAFS/BGS is exempt from conducting an additional site investigation for closure as long as the site was previously characterized and water quality monitoring is conducted in accordance with the requirements of 06-096 CMR 405. Previous site investigations including a study conducted by E.C. Jordan in 1981 have documented the hydrogeologic conditions at the Dolby Landfill Facility. In December 2015, SME conducted an investigation to better define the bedrock surface and groundwater divide in the vicinity of Dolby II. This investigation was performed to establish the proposed cover upgrade work limits on Dolby II that would provide the greatest long-term benefit in terms of reducing leachate generation and subsequent collection, conveyance and treatment costs. Results of the December 2015 investigation were submitted, along with interpretive bedrock and phreatic surface maps for this portion of the landfill site, as part of the Application.

A facility water quality monitoring program consisting of groundwater, surface water and leachate sampling and testing has been conducted triannually with the data submitted in the annual reports.

The Department finds that the DAFS/BGS has completed a site investigation for closure and site assessment report that adequately supports the design of the proposed final cover system and that the DAFS/BGS conducts water quality monitoring in accordance with Department Rules.

11. ENGINEERING DESIGN AND REPORT

A. Closure Design: The DAFS/BGS has submitted a proposed cover system design, prepared by SME and dated March 29, 2016. The proposed Dolby Landfill Cover Upgrade Project is to occur in phases of approximately 25 acres in size over a 4 to 5 year period. The first phase, Phase I, will include a majority of the remaining open areas of Dolby III (i.e., Cells 15 and 16) and other areas in the southwest portion of Dolby III. Other phases will follow sequentially as detailed on Figure 1-2, Conceptual Closure Sequence, submitted in the Application. The Application details the approximate amount of acreage to be covered in each construction season and is as follows: for Dolby III, Summer 2016 – 25 acres, Summer 2017 – 24 acres and Summer 2018 – 23 acres; and for Dolby II, Summer 2019 – 25 acres.

Approximately 38 acres of the existing Dolby II cover system will not be upgraded. The cover system upgrade design will incorporate existing topsoil, cover soil, and sand drainage material previously placed at the site to the extent possible. A soil re-use plan has been submitted to describe how existing soils will be re-used within Phase I of the proposed Dolby Landfill Cover Upgrade Project. The proposed cover system upgrade includes, from the bottom up, the following components: a minimum 6-inch gas collection system (i.e., sand and gas vent piping); a 40-mil high density polyethylene ("HDPE") textured geomembrane; a drainage geocomposite and cover system drainage pipes; a 14-inch cover soil layer; a 4-inch vegetative soil layer; and miscellaneous permanent erosion control measures (i.e., erosion control mats, rip rap, etc.).

B. Stability and Settlement Assessment and Monitoring: Slope stability of the proposed cover system was evaluated relative to the materials and material interfaces which will comprise the proposed cover system. Slope stability factors of safety ("FOS") were calculated using soil and geosynthetic material properties considered representative of the materials available to the project and which are consistent with geotechnical literature and accepted engineering practices. Soil and geosynthetic material properties utilized within the slope stability analyses will be verified during construction.

The slope stability calculations indicate that a stable cover system configuration will be maintained during the closure and post-closure periods. The FOSs for the proposed final cover system were calculated to be consistently greater than 1.3 and 1.5 for static construction/operational and post-closure conditions, respectively, and consistently greater than 1.1 and 1.5 for seismic construction/operational and post-closure conditions, respectively. All of the calculated slope stability FOSs meet or exceed the required minimum FOSs specified in 06-096 CMR 401(2)(F)(1) of the Department Rules.

Settlement of the proposed cover systems during the post-closure period was evaluated by SME. The calculations show that: 1) the as-placed cover grades are expected to change minimally during the post-closure period and the cover system drainage is not expected to be affected and 2) the HDPE geomembrane will maintain its integrity and performance at the maximum predicted settlements. The minimal amount of settlement calculated for Phase I is largely predicated on the minor regrading and filling that will be performed to construct the proposed cover system and that much of the waste in Phase I has been in place for several years. It is expected that only a small amount of settlement will occur during the post-closure period due to long-term waste degradation and waste compression.

C. Water Balance: Leachate volumes collected and treated from the Dolby Landfill Facility have averaged approximately 74.2 million gallons per year ("MGY") over the past 5 years. SME estimates that the leachate generation rate from the Dolby Landfill Facility will be reduced to less than 7 MGY with the placement of a geomembrane cover over the portions of Dolby II and Dolby III that contribute to the facility's leachate collection system. The resistance to infiltration and runoff characteristics of the proposed cover system has been evaluated using the Hydrogeologic Evaluation of Landfill Performance ("HELP") model. The HELP model evaluation shows that the proposed cover system will meet the intent of the Department Rules by minimizing the infiltration of precipitation into the landfill after closure.

D. Leachate Management Plan: The Dolby Landfill Cover Upgrade Project will not involve changes in the site's current leachate collection system, leachate storage pond, or leachate transport system. The proposed cover system construction will be performed in discrete sections that will allow stormwater runoff to be managed properly. Areas of waste which are uncovered during the construction process will be contained using temporary berms constructed from existing cover soil to isolate the open areas and manage impacted runoff from these areas to the greatest practical extent. Impacted runoff will be diverted and/or pumped to various perimeter manholes adjacent to the work area for collection and subsequent treatment.

E. Gas Management Plan: SME recognizes the potential for degradation of the landfill waste and has estimated the gas generation for the portion of the landfill that will be closed by Phase I of the Dolby Landfill Cover Upgrade Project. SME used historical as-built drawings and available annual reports to estimate the waste thickness and the types of waste placed in this area of the landfill. The Landfill Gas Emissions Model ("LandGEM") was used to predict the quantity of gas that could be generated and the emission rate of non-methane organic compounds ("NMOC") from Phase I. Gas collection pipe spacing and passive vent locations necessary to relieve gas pressures generated by the waste and maintain cover stability were determined using standard design methods. The gas calculations indicate that the NMOC emission rate from Phase I will be below the 50 megagrams per year threshold described in 06-096 CMR 401(5)(I)(6)(c) of the Department Rules. As such, SME states that no additional gas control measures for the Dolby Landfill Cover Upgrade Project - Phase I other than passive gas collection and venting are necessary.

Gas monitoring will be performed during construction when modifications to the landfill interior manholes are made to accommodate placement of the geomembrane.

The Department finds that the proposed final cover system will maintain its integrity and performance under the maximum predicted settlement, minimize infiltration of precipitation into the landfill after closure, and adequately manage landfill gas; provided that, an engineering report is submitted to the Department for review and approval at least 3 months prior to the commencement of construction activities within each subsequent phase of the Dolby Landfill Cover Upgrade Project.

12. QUALITY ASSURANCE PLAN

A Construction Quality Assurance (CQA) Plan, prepared by SME and dated April 2016, addressing the construction quality assurance for placement of final cover materials for the Dolby Landfill Cover Upgrade Project - Phase I has been developed and submitted with the Application. The CQA plan outlines the characterization of the cover system's physical properties to determine its ability to achieve the project's performance criteria; defines procedures for cover placement; defines tests and frequency of testing to assure the construction of the cover meets or exceeds design criteria; and provides a method for documenting the cover placement. Geosynthetics and soil components will be inspected, tested, and certified by qualified CQA personnel independent of the Owner and Contractor.

The Department finds that the DAFS/BGS will implement adequate construction quality assurance measures to assure that design specifications and performance requirements for all facility components are met during construction of the Dolby Landfill Cover Upgrade Project; provided that, a CQA Plan is submitted to the Department for review and approval at least 3 months prior to the commencement of construction activities within each subsequent phase of the Dolby Landfill Cover Upgrade Project.

13. CONSTRUCTION CONTRACT BID DOCUMENTS

The DAFS/BGS has submitted *Contract Documents and Construction Specifications, Dolby Landfill Cover System Upgrade – Phase 1 (Documents)*, prepared by SME and dated April 2016. The Documents include drawings, technical specifications, and contract administrative documents for the Dolby Landfill Cover Upgrade Project - Phase I. The Documents describe the proposed project and the means and methods for the installation of the final cover systems.

The Department finds that the construction contract bid documents were adequately prepared and meet the requirements of 06-096 CMR 401(5)(L); provided that, construction contract bid documents, including drawings, technical specifications, and contract administrative documents are submitted to the Department for review and approval at least 3 months prior to the commencement of construction activities within each subsequent phase of the Dolby Landfill Cover Upgrade Project.

14. POST-CLOSURE MONITORING AND MAINTENANCE

An Environmental Monitoring Plan (EMP), dated April 2011, was previously submitted and approved by the Department. The EMP meets the requirements of 06-096 CMR 405 and will be the basis for the post-closure water quality monitoring program for the Dolby Landfill Facility. Provisions for groundwater, surface water, leachate and gas monitoring are outlined in the EMP. Specific procedures for the inspection and maintenance of facility components are outlined in the facility Operating Manual, dated April 2012. Slope stability and settlement monitoring of the proposed cover systems will be routinely conducted during the post-closure period. This monitoring will consist of visual inspections of the completed cover system and periodic topographical surveys for comparison to the cover surface elevations at the time of construction completion. Post-closure slope stability and settlement monitoring will be conducted annually unless conditions are encountered that warrant more frequent monitoring. The post-closure monitoring and maintenance plan will need to be revised to reflect changes associated with the Dolby Landfill Cover Upgrade Project.

Groundwater monitoring data shows that groundwater quality at monitoring well ("MW") 301, MW-302B and MW-302C has deteriorated over time. Data shows that these wells generally began to experience increasing trends for several parameters in the year 2000. The exact cause of increasing trends is unknown; however, completion of the Dolby Landfill Cover Upgrade Project is expected to help mitigate these impacts. The EMP includes a requirement for the ongoing statistical analysis of the monitoring data, using statistical tests approved by the Department, to evaluate trends in groundwater quality. The results of the ongoing evaluation will be provided in the annual report.

SME has submitted a June 23, 2016 letter proposing to evaluate the effectiveness of the Dolby Landfill Cover Upgrade Project relative to improving groundwater quality 5 years after the substantial completion of construction activities of the Dolby Landfill Cover Upgrade Project. Completion of the Dolby Landfill Upgrade Project is scheduled to occur during 2019.

The Department finds that the DAFS/BGS has adequately addressed post-closure monitoring and maintenance for the Dolby Landfill Facility; provided that: (1) the post-

closure monitoring and maintenance plan is revised to reflect changes associated with the Dolby Landfill Cover Upgrade Project and is submitted for Department review and approval at least 30 days prior to substantial completion of construction activities within the Dolby Landfill Cover Upgrade Project - Phase I and (2) five years after the substantial completion of the Dolby Landfill Cover Upgrade Project or no later than year end of 2024, whichever is earlier, the DAFS/BGS submits to the Department, for review and approval, an evaluation of water quality data from MW-301, MW-302B and MW-302C. If there has been no improvement in the water quality at MW-301, MW-302B and MW-302C, the DAFS/BGS must submit a Corrective Action Plan within 90 days of the submittal of the evaluation of water quality data from MW-301, MW-302B and MW-302C, prepared in accordance with the applicable rules in effect at that time, to the Department for review and approval. Once the Corrective Action Plan has been approved by the Department, the plan must be implemented within one year of approval.

15. FINAL USE/PERMANENT RECORD

The DAFS/BGS proposes to maintain the property that the landfill is on as open space. Permanent buildings will not be placed within 100 feet of the landfill. Currently, there are no specific plans for final use of the Dolby Landfill Facility.

Following the completion of the Dolby Landfill Cover Upgrade Project, the DAFS/BGS will prepare and record in the Penobscot County Registry of Deeds information and necessary deed restrictions to provide notice to prospective purchasers and a public record of the location of the Dolby II and Dolby III landfills. The DAFS/BGS will also provide a copy of the record information and necessary deed restrictions to the Department as required by 06-096 CMR 401(5)(B)(4). The final cover or other components of the containment systems or the functioning of the monitoring systems may not be disturbed without the written approval of the Department.

The Department finds that the DAFS/BGS has provided for the permanent record related to the Dolby Landfill Facility.

BASED on the above Findings of Facts, and subject to the CONDITIONS listed below, the Department makes the following CONCLUSIONS:

1. The DAFS/BGS has submitted evidence of sufficient title, right, or interest with respect to the property proposed for use.

2. The DAFS/BGS has complied with all of the public notice requirements of 06-096 CMR 2 and 400.

3. The DAFS/BGS has provided adequate evidence of financial and technical ability to design, construct, operate, maintain, close and accomplish post-closure care of the solid waste facility in a manner consistent with all applicable requirements.

4. The DAFS/BGS is exempt from the liability insurance requirements of 06-096 CMR 400(10).

5. The Dolby Landfill Cover Upgrade Project will not unreasonably cause or increase flooding and will have no unreasonable effect on surface water. The DAFS/BGS has adequately addressed stormwater management for the proposed project.

6. The Dolby Landfill Cover Upgrade Project will not cause unreasonable sedimentation or erosion of soil. The DAFS/BGS has adequately addressed erosion and sedimentation control for the proposed project.

7. The DAFS/BGS has completed a site assessment report that adequately supports the design of the proposed final cover system and conducts water quality monitoring in accordance with the Department Rules.

8. The proposed final cover system will maintain its integrity and performance under the maximum predicted settlement, minimize infiltration of precipitation into the landfill after closure, and adequately manage landfill gas.

9. The DAFS/BGS has proposed a final cover system design meeting the requirements of the Department Rules; provided that, an engineering report, a CQA Plan and the construction contract bid documents, including drawings, technical specifications, and the contract administrative documents are submitted to the Department for review and approval at least 3 months prior to the commencement of construction activities within each subsequent phase of the Dolby Landfill Cover Upgrade Project.

10. The DAFS/BGS has provided for post-closure monitoring and maintenance in accordance with Department Rules; provided that: (1) the post-closure monitoring and maintenance plan is revised to reflect changes associated with the Dolby Landfill Cover Upgrade Project and is submitted for Department review and approval at least 30 days prior to substantial completion of construction activities within the Dolby Landfill Upgrade Project - Phase I and (2) five years after the substantial completion of the Dolby Landfill Cover Upgrade Project or no later than year end of 2024, whichever is earlier, an evaluation of water quality data from MW-301, MW-302B and MW-302C is submitted for Department review and approval. If there has been no improvement in the water quality at MW-301, MW-302B and MW-302C, the DAFS/BGS must submit a Corrective Action Plan within 90 days of the submittal of the evaluation of water quality from MW-

301, MW-302B and MW-302C, prepared in accordance with the applicable rules in effect at that time, to the Department for review and approval. Once the Corrective Action Plan has been approved by the Department, the plan must be implemented within one year of approval.

11. The DAFS/BGS has provided for the permanent record related to the site.

12. The Dolby Landfill Cover Upgrade Project will not pollute any waters of the State, contaminate the ambient air, constitute a hazard to health and welfare, or create a nuisance.

THEREFORE, the Department APPROVES the above noted application of the STATE OF MAINE, DEPARTMENT OF ADMINISTRATIVE and FINANCIAL SERVICES, BUREAU OF GENERAL SERVICES, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

1. The Standard Conditions of Approval, a copy attached as Appendix A.

2. The invalidity or unenforceability of any provision, or part thereof, of this license shall not affect the remainder of the provision or any other provisions. This license shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

3. At least 3 months prior to the commencement of construction of each subsequent phase, the DAFS/BGS shall submit an engineering report, a CQA Plan and the construction contract bid documents including drawings, technical specifications, and the contract administrative documents to the Department for review and approval.

4. At least 30 days prior to substantial completion of construction activities within the Dolby Landfill Cover Upgrade Project - Phase I, the DAFS/BGS shall submit to the Department, for review and approval, a revised post-closure monitoring and maintenance plan to reflect changes associated with the Dolby Landfill Cover Upgrade Project.

5. Five years after the substantial completion of the Dolby Landfill Cover Upgrade Project or no later than year end of 2024, whichever is earlier, the DAFS/BGS shall submit to the Department, for review and approval, an evaluation of water quality data from MW-301, MW-302B and MW-302C. If there has been no improvement in water quality at MW-301, MW-302B and MW-302C, the DAFS/BGS shall submit a Corrective Action Plan within 90 days of the submittal of the evaluation of water quality data from MW-301, MW-302B and MW-302C, prepared in accordance with the applicable rules in effect at that time, to the Department for review and approval.

| | | |
|---|---|---|
| STATE OF MAINE, ACTING THROUGH THE DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL SERVICES, BUREAU OF GENERAL SERVICES EAST MILLINOCKET, PENOBSCOT COUNTY, MAINE DOLBY LANDFILL FACILITY #S-000796-WO-AO-N (APPROVAL WITH CONDITIONS) | 14 | SOLID WASTE LICENSE<br><br>FINAL CLOSURE |

Once the Corrective Action Plan has been approved by the Department, the plan shall be implemented within one year of approval.

DONE AND DATED AT AUGUSTA, MAINE, THIS 30th DAY OF June, 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Lisa Pohlmann for
Paul Mercer, Commissioner

Filed
JUL 06 2016
State of Maine
Board of Environmental Protection

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

Date of initial receipt of application: April 7, 2016
Date of application acceptance: April 27, 2016

Date filed with the Board of Environmental Protection:

xlp80430/lsp

# STANDARD CONDITIONS
# TO ALL SOLID WASTE LANDFILL LICENSES

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL. VIOLATIONS OF THE CONDITIONS UNDER WHICH A LICENSE IS ISSUED SHALL CONSTITUTE A VIOLATION OF THAT LICENSE AGAINST WHICH ENFORCEMENT ACTION MAY BE TAKEN, INCLUDING REVOCATION.

1. **Approval of Variations from Plans.** The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed by the license. Any consequential variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.

2. **Compliance with All Applicable Laws.** The licensee shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.

3. **Compliance with All Terms and Conditions of Approval.** The licensee shall submit all reports and information requested by the Department demonstrating that the licensee has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.

4. **Transfer of License.** The licensee may not transfer the solid waste facility license or any portion thereof without approval of the Department.

5. **Initiation of Construction or Development Within Two Years.** If the construction or operation of the solid waste facility is not begun within two years of issuance of within 2 years after any administrative and judicial appeals have been resolved, the license lapses and the licensee must reapply to the Department for a new license unless otherwise approved by the Department.

6. **Approval Included in Contract Bids.** A copy of the approval must be included in or attached to all contract bid specifications for the solid waste facility.

7. **Approval Shown to Contractors.** Contractors must be shown the license by the licensee before commencing work on the solid waste facility.

8. **Background of key individuals.** A licensee may not knowingly hire as an officer, director or key solid waste facility employee, or knowingly acquire an equity interest or debt interest in, any person convicted of a felony or found to have violated a State or federal environmental law or rule without first obtaining the approval of the Department.

# STANDARD CONDITIONS
# TO ALL SOLID WASTE LANDFILL LICENSES

9. **Fees.** The licensee must comply with annual license and annual reporting fee requirements of the Department's rules.

10. **Recycling and Source Reduction Determination for Solid Waste Disposal Facilities.** This condition does not apply to the expansion of a commercial solid waste disposal facility that accepts only special waste for landfilling.

    The solid waste disposal facility shall only accept solid waste that is subject to recycling and source reduction programs, voluntary or otherwise, at least as effective as those imposed by 38 M.R.S. Chapter 13.

11. **Deed Requirements for Solid Waste Disposal Facilities.** Whenever any lot of land on which an active, inactive, or closed solid waste disposal facility is located is being transferred by deed, the following must be expressly stated in the deed:

    A. The type of facility located on the lot and the dates of its establishment and closure.

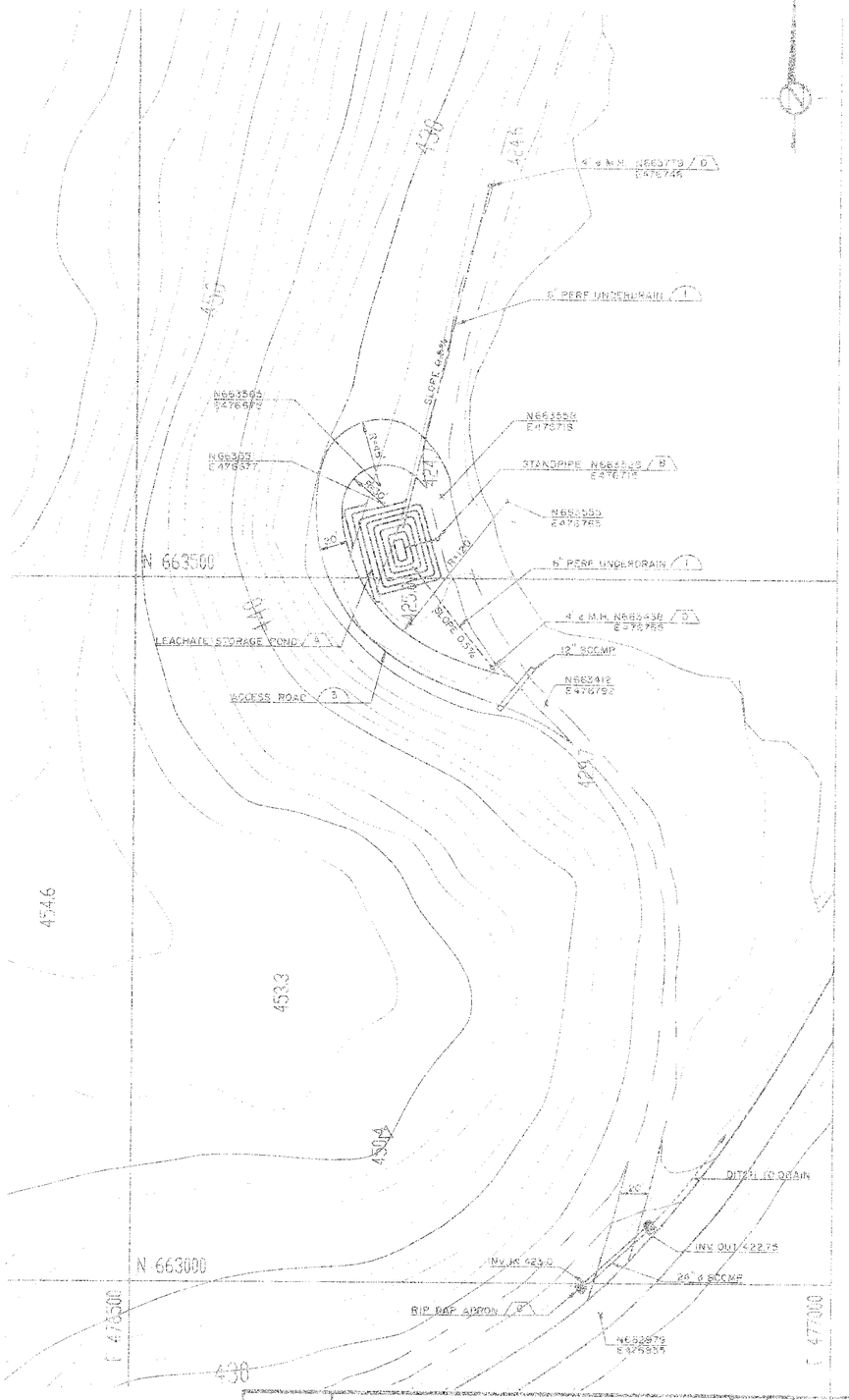
    B. A description of the location and the composition, extent, and depth of the waste deposited.

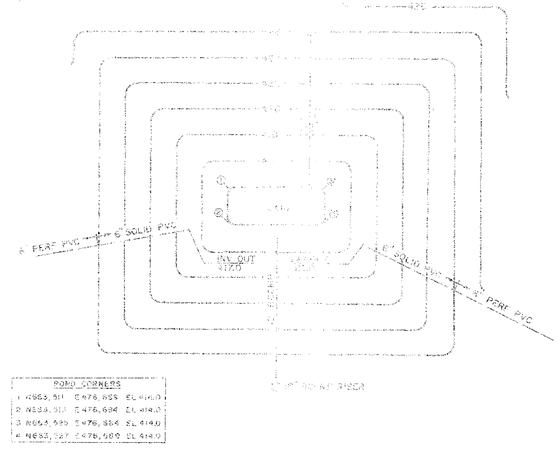
    C. The disposal location coordinates of asbestos wastes must be identified.

**APPENDIX B**

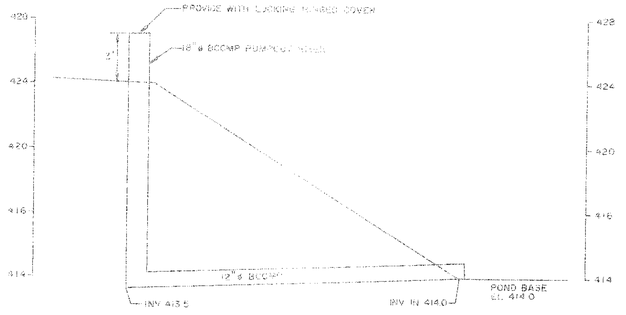
**ENGINEERING DRAWINGS FOR DOLBY LANDFILL FACILITY**
**(This Appendix is supplied via compact disk)**

SME
SEVEE & MAHER
ENGINEERS

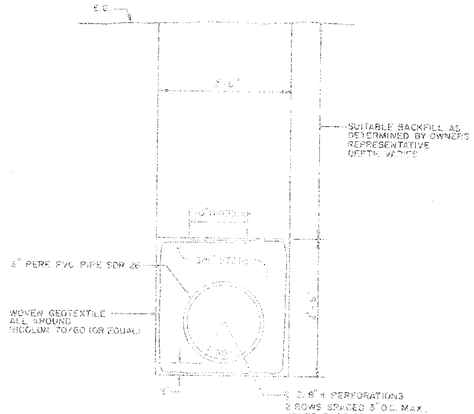


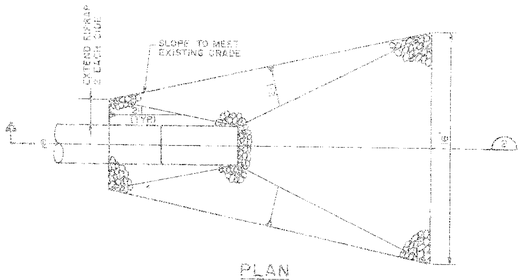

LEACHATE STORAGE POND / A
N.T.S.

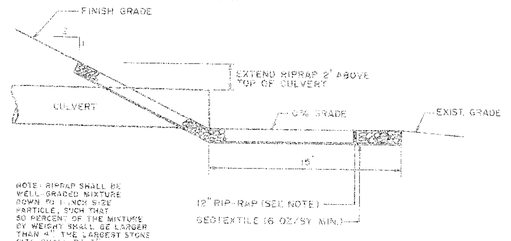



STANDPIPE / B
N.T.S.



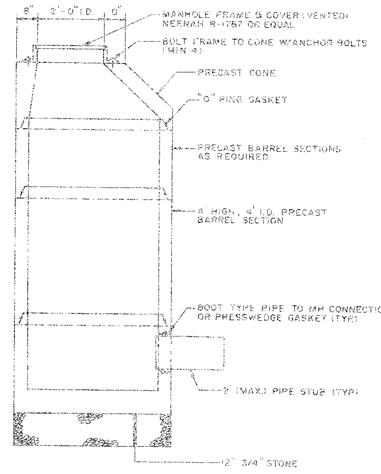

PERF LEACHATE UNDERDRAIN / 1
N.T.S.



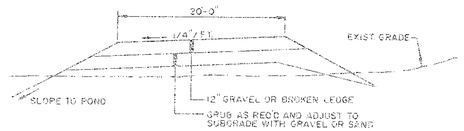




SECTION / 2
N.T.S.

RIP RAP APRON / C




TYPICAL LEACHATE TRANSPORT MANHOLE / D
N.T.S.




ACCESS ROAD / 3
N.T.S.

| | | |
|---|---|---|
| DRAWING NO. | 2-092-4702-70182 | |
| 12/90 | RECORD DRAWING | BLL |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

| | | |
|---|---|---|
| DSN | PF | 11/90 |
| DWN | Blk | 11/90 |
| CHKD | | |
| APPD | | |
| ISSUE CODE | | |
| C - CONST. | | |
| SCALE AS SHOWN | | |

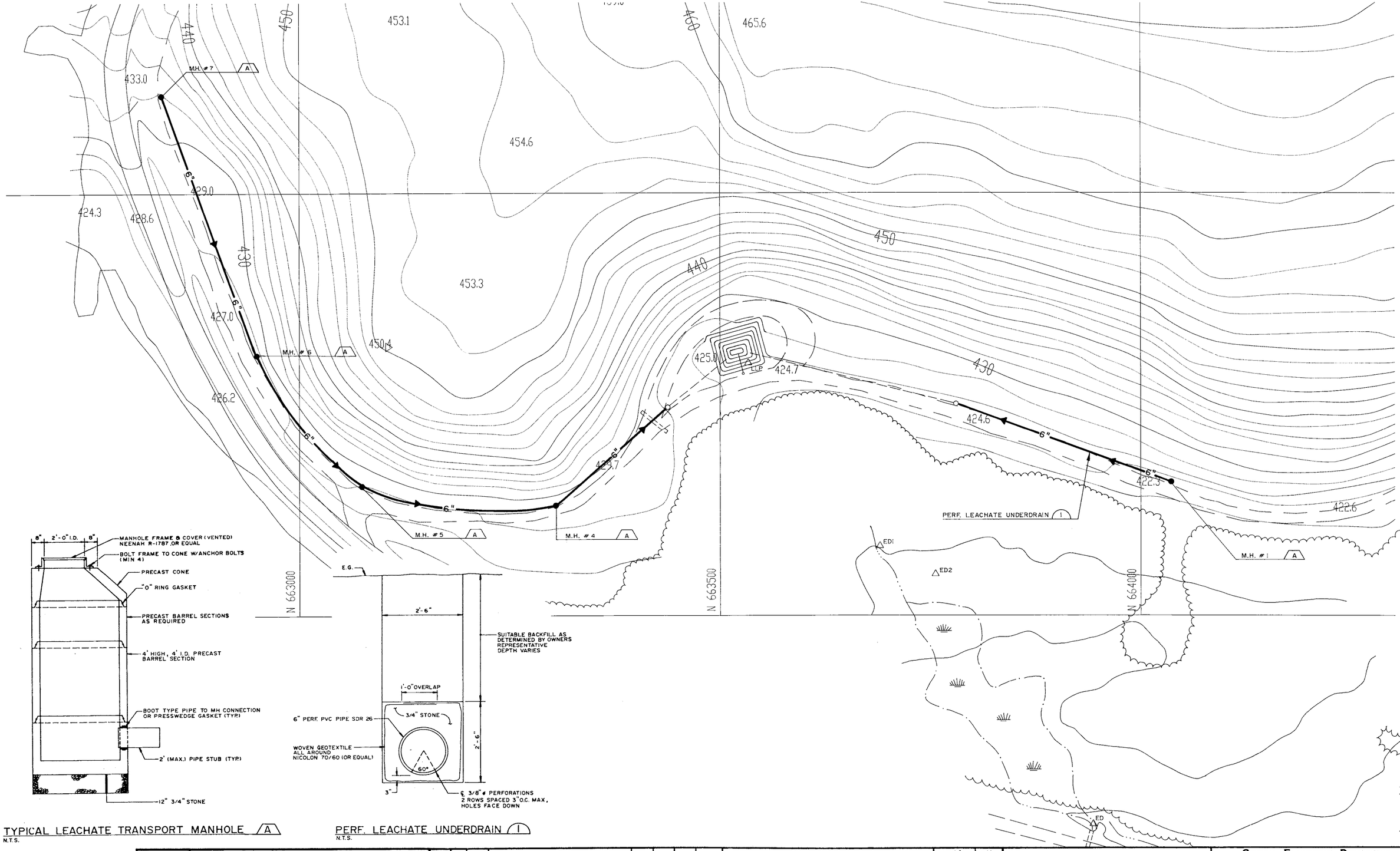
Great Northern Paper
A subsidiary of Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

TEMPORARY LEACHATE POND
DOLBY II LANDFILL

JOB NO. 94552
EWS REQ. NO.
FILE NO. 2-092-4702-70182

YB-19328







TYPICAL LEACHATE TRANSPORT MANHOLE (A)
N.T.S.




PERF. LEACHATE UNDERDRAIN (1)
N.T.S.

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| YB-19328 | TEMPORARY LEACHATE POND, DOLBY II LANDFILL | | | 11/91 | RECORD DRAWING | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

| | | |
|---|---|---|
| DRN | RR | 6/91 |
| CKD | 6/30/91 | |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL T.O. | C - CONST

SCALE 1" = 50'

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

**CENTRAL ENGINEERING DEPARTMENT**
EAST MILLINOCKET MILL
DOLBY II LANDFILL
NORTHEAST INTERCEPTOR
TRENCH EXTENSION

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703, 7082

YB-20021

# GREAT NORTHERN PAPER, INC.
# A SUBSIDIARY OF BOWATER INCORPORATED
# MILLINOCKET, MAINE
# DOLBY II LANDFILL REGRADING

| SHT. NO. | TITLE | DWG. NO. | |
|---|---|---|---|
| 1 | COVER SHEET | YB-23586 | |
| 2 | SYMBOLS & ABBREVIATIONS | YB-23587 | |
| 3 | SITE LOCATION PLAN | YB-23588 | |
| 4 | SITE DEVELOPMENT PLAN | YB-23589 | |
| 5 | DOLBY II NORTH SITE DEVELOPMENT PLAN | YB-23590 | |
| 6 | DOLBY II SOUTH SITE DEVELOPMENT PLAN | YB-23591 | N.I.T.C. |
| 7 | FINAL GRADING PLAN | YB-23592 | |
| 8 | SECTIONS & DETAILS | YB-23593 | |

## SEVEE & MAHER ENGINEERS, INC.
## CUMBERLAND, MAINE

## 1996

STATE OF MAINE
PETER M. MAHER
#4107
REGISTERED PROFESSIONAL ENGINEER

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | PAF |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - Prelim | B - Bids |
| M - MU T.O. | C - Const. |
| SCALE | |

BOWATER
Great Northern Paper

EAST OPERATION

DOLBY II LANDFILL REGRADING
COVER SHEET

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

YB-23586

C D E F G H I L M N O P Q

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (MAGNETIC) | | | STONE WALL | ○ | ● | MANHOLE |
| | | NORTH ARROW (PLAN NORTH) | | | DRAINAGE COURSE (WITH DIRECTION) | ◎ | ○ | CATCH BASIN |
| 25 | 25 | CONTOUR LINES | SHORE SIDE | | EDGE OF WATER | ⋈ | ⋈ | WATER VALVE |
| 25 x 63 | 25.56 | SPOT ELEVATION (GRADE) | | | WATER ELEVATION (GROUND OR SURFACE) | | | HYDRANT |
| | | EXISTING GROUND | | | FENCE LINE (WOOD) | | | UTILITY POLE |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | FENCE LINE (WIRE) | | ⊘ | CLEAN OUT STRUCTURE |
| | | PROPERTY LINE OR R.O.W. | | | RETAINING WALL | G | G | UNDERGROUND GAS MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE LINE |
| 0+00 | 1+00 | CONSTRUCTION BASELINE | | | BUILDING AND STRUCTURES | E | E | UNDERGROUND ELECTRICAL LINE |
| | | BOUNDARY LINE (State, County, Municipality) | | 2 / 1 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | OE | OE | OVERHEAD ELECTRICAL LINE |
| ⊡ | ■ | SURVEY MONUMENT | | TOP OF SLOPE / 2 | SLOPES (WITH SLOPE RATIO) | | 12" ACP | SANITARY SEWER (SIZE & TYPE) |
| ○IF | ●IF | SURVEY IRON | | | EDGE OF TRAVELED WAY | FM | 8" PVC | FORCE MAIN (SIZE & TYPE) |
| ○ | ● | DRILL HOLE, PK, OR STAKE | | C F | CUT OR FILL LINE | W | 8" D.I. | WATER MAIN (SIZE & TYPE) |
| | | WOODS OR BRUSH LINE | | | CLEARING LIMIT LINE | | 12" RCP | STORM DRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Deciduous) | | | BITUMINOUS PAVEMENT | UD | 8" UD | UNDERDRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Coniferous) | | | CONCRETE | | | CULVERT |
| | | TREE, TO BE REMOVED | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | RAILROAD |
| | | MARSH AREA | TP-12 | TP-12 | TEST PIT AND NUMBER | | S | SILTATION FENCE |
| | | | | | | PD | 6" PD | PERIMETER DRAIN (SIZE & TYPE) |
| | | | | | | LT | 6" LD | LEACHATE TRANSPORT (SIZE & TYPE) |
| | | | | | | LC | 6" LC | LEACHATE COLLECTION (SIZE & TYPE) |
| | | | | | | LD | 6" LD | LEAK DETECTION, SIZE & TYPE |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A.C.C.M.P | ASPHALT COATED C.M.P. | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | P.C. | POINT ON CURVE |
| A.C.P. | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HP | HORSEPOWER | PD | PERIMETER DRAIN |
| AC | ACRE | DEG OR ° | DIAMETER | HYD | HYDRANT | P.I. | POINT OF INTERSECTION |
| AGG | AGGREGATE | DEPT | DEPARTMENT | | | P.T. | POINT OF TANGENT |
| ALUM | ALUMINUM | DI | DUCTILE IRON | I.D. | INSIDE DIAMETER | PERF | PERFORATED |
| APPD | APPROVED | DIA OR ø | DIAMETER | IN OR " | INCHES | PSI | POUNDS PER SQUARE INCH |
| APPROX | APPROXIMATE | DIM | DIMENSION | INV | INVERT | PVC | POLYVINYL CHLORIDE |
| ASB | ASBESTOS | DIST | DISTANCE | INV. EL | INVERT ELEVATION | PVMT | PAVEMENT |
| ASPH | ASPHALT | DN | DOWN | | | | |
| AUTO | AUTOMATIC | DR | DRAIN | LB | POUND | QTY | QUANTITY |
| AUX | AUXILIARY | DWG | DRAWING | LC | LEACHATE COLLECTION | | |
| AVE | AVENUE | | | LD | LEAK DETECTION | R.O.W. | RIGHT OF WAY |
| AZ | AZIMUTH | EA | EACH | LIN FT. | LINEAR FEET | RAD | RADIUS |
| | | EG | EXISTING GROUND OR GRADE | LOC | LOCATION | REQD | REQUIRED |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | ELEC | ELECTRIC | LT | LEACHATE TRANSPORT | RT | RIGHT |
| B.M. | BENCH MARK | EL | ELEVATION | | | RTE | ROUTE |
| BIT | BITUMINOUS | ELB | ELBOW | M.H. | MANHOLE | | |
| BLDG | BUILDING | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT | S | SLOPE |
| BOT | BOTTOM | EST | ESTIMATED | MATL | MATERIAL | SCH | SCHEDULE |
| BRG | BEARING | EXC | EXCAVATE | MAX | MAXIMUM | SF | SQUARE FEET |
| | | EXIST | EXISTING | MFR | MANUFACTURE | SHT | SHEET |
| C.B. | CATCH BASIN | | | MIN | MINIMUM | STA | STATION |
| CEN | CENTER | F.G. | FINISH GRADE | MISC | MISCELLANEOUS | SY | SQUARE YARD |
| CEM. LIN. | CEMENT LINED | FBRGL | FIBERGLASS | MON | MONUMENT | | |
| C.M.P. | CORRUGATED METAL PIPE | FDN | FOUNDATION | | | TAN | TANGENT |
| C.O. | CLEAN OUT | FLEX | FLEXIBLE | N.I.T.C. | NOT IN THIS CONTRACT | TDH | TOTAL DYNAMIC HEAD |
| CF | CUBIC FEET | FLG | FLANGE | N.T.S. | NOT TO SCALE | TEMP | TEMPORARY |
| CFS | CUBIC FEET PER SECOND | FLR | FLOOR | N/F | NOW OR FORMERLY | TYP | TYPICAL |
| CI | CAST IRON | FPS | FEET PER SECOND | NO. OR # | NUMBER | | |
| CL | CLASS | FT OR ' | FEET | | | V | VOLTS |
| CONC | CONCRETE | FTG | FOOTING | O.C. | ON CENTER | | |
| CONST | CONSTRUCTION | | | O.D. | OUTSIDE DIAMETER | W/ | WITH |
| CONTR | CONTRACTOR | GA | GAUGE | | | W/O | WITHOUT |
| CTR | CENTER | GAL | GALLON | | | | |
| CY | CUBIC YARD | GALV | GALVANIZED | | | YD | YARD |
| | | GPD | GALLONS PER DAY | | | | |
| | | GPM | GALLONS PER MINUTE | | | | |

## VIEW MARKERS & IDENTIFICATION

SECTION TITLE & NO. — ACCESS ROAD / 3 / C-100 — DRAWING WHERE SECTION APPEARS

DETAIL TITLE & LETTER — MANHOLE / A / C-100 — DRAWING WHERE DETAIL APPEARS

GENERAL NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.
3. EXCAVATIONS ENCOUNTERING WASTE MATERIALS, I.E. SLUDGE, WILL BE DISPOSED OF IN THE ACTIVE DISPOSAL AREA.

MATERIAL SPECIFICATIONS:

DIKE EMBANKMENT SOIL:

COMPACTION – THE DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 85 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR).

STONE BEDDING – THE STONE BEDDING MATERIAL SHALL BE SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL. THE BEDDING MATERIAL SHALL MEET THE FOLLOWING GRADATION:

| SIEVE DESIGNATION | PERCENT PASSING BY WEIGHT |
|---|---|
| 1 INCH | 100 |
| 1/4 INCH | <5 |

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM WORK AREA PRIOR TO PLACING THE EMBANKMENT MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING LANDFILL.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIALS –

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K)

10 LBS PER UNIT

| SEED: | | |
|---|---|---|
| | TALL FESCUE | 59% |
| | RED FESCUE | 25% |
| | RED TOP | 5% |
| | LADINO CLOVER | 3% |
| | ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

STATE OF MAINE — PETER M. MAHER #4107 — REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 2/20/96 | ISSUED FOR BID | | | | |
| | | | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | PAF |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE: P – Prelim | B – Bids | M – MII T.O. | C – Const.

SCALE AS SHOWN

BOWATER — Great Northern Paper

EAST OPERATION

DOLBY II LANDFILL REGRADING
SYMBOLS & ABBREVIATIONS

JOB NO. 67996
ENG. REQ. NO. _____
FILE NO. 2--092--4603,7082

YB-23587

L:\SHEET\ACAD\SYMSHT Wed Feb 12 10:45:47 1997


STATE OF MAINE
PETER M. MAHER
#4107
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|
| | BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. |
| | NORRIDGEWOCK, MAINE – PHOTO DATE 10/23/95. |
| | GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE |
| | |
| | STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS |
| | MANNER SHOULD BE FIELD VERIFIED BY CONTRACTOR BEFORE |
| | CONSTRUCTION. |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 2/20/96 | ISSUED FOR BID | | | | |
| | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P – Prelim | B – Bids |
| M – MU T.O. | C – Const. |
| SCALE AS SHOWN | |

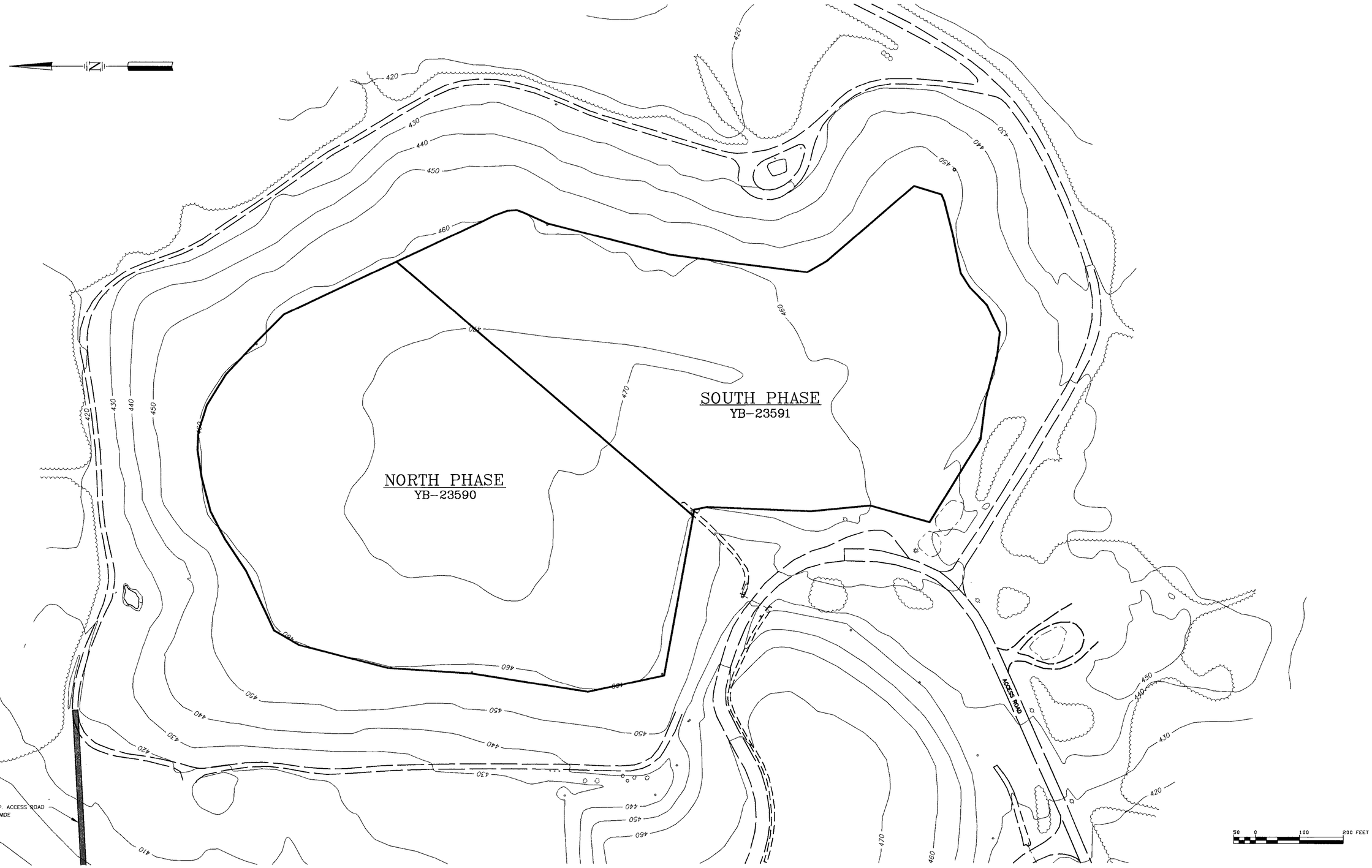
BOWATER
Great Northern Paper

EAST OPERATION

DOLBY II LANDFILL REGRADING
SITE LOCATION PLAN

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB–23588




STATE OF MAINE
PETER M. MAHER
#4107
REGISTERED PROFESSIONAL ENGINEER

BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC.
NORRIDGEWOCK, MAINE – PHOTO DATE 10/23/95.
GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE

STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY CONTRACTOR BEFORE CONSTRUCTION.

DRAWING NO. | REFERENCE DRAWING TITLE

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 2/20/96 | ISSUED FOR BID | | | | |
| | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
SCALE AS SHOWN

BOWATER
Great Northern Paper

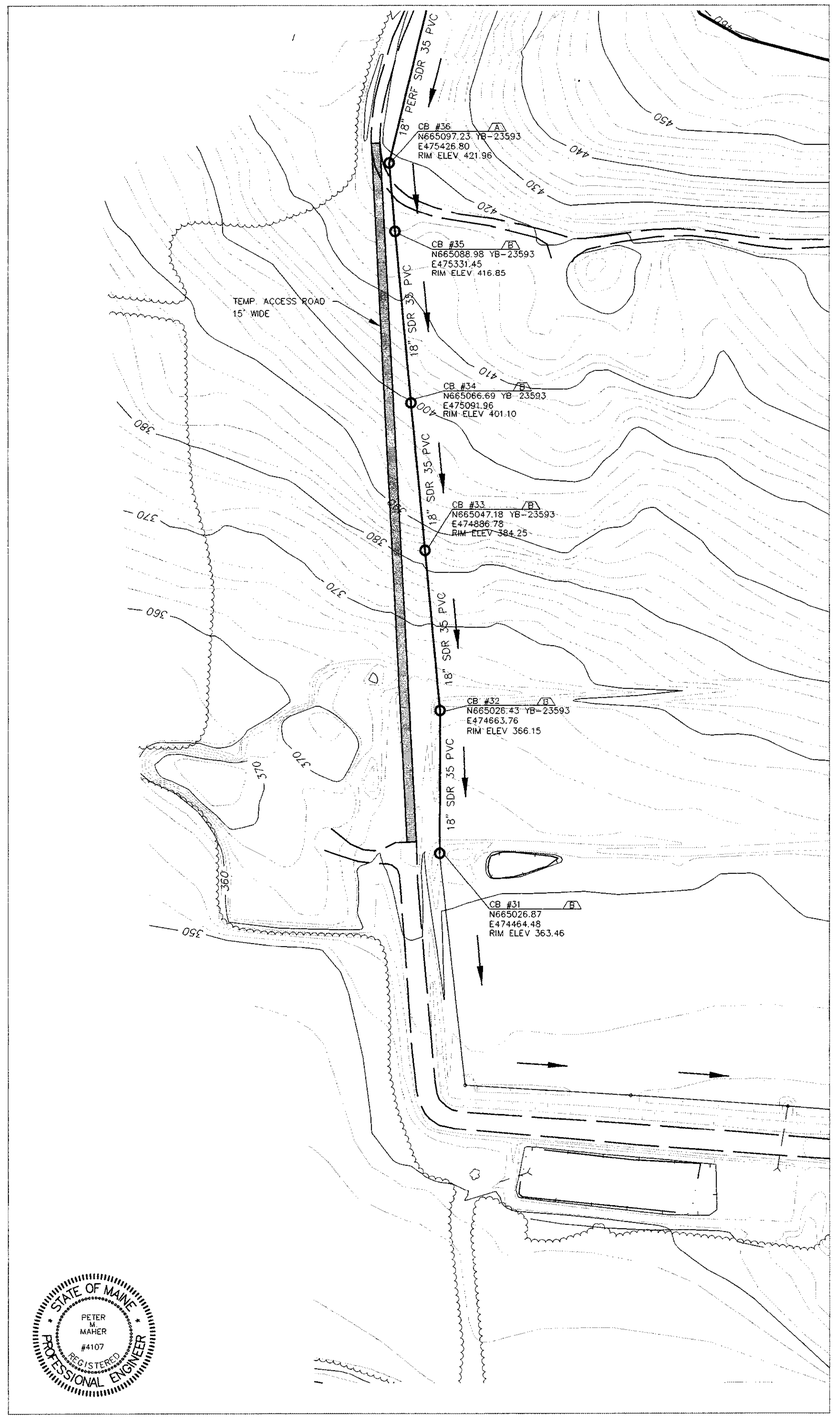
EAST OPERATION

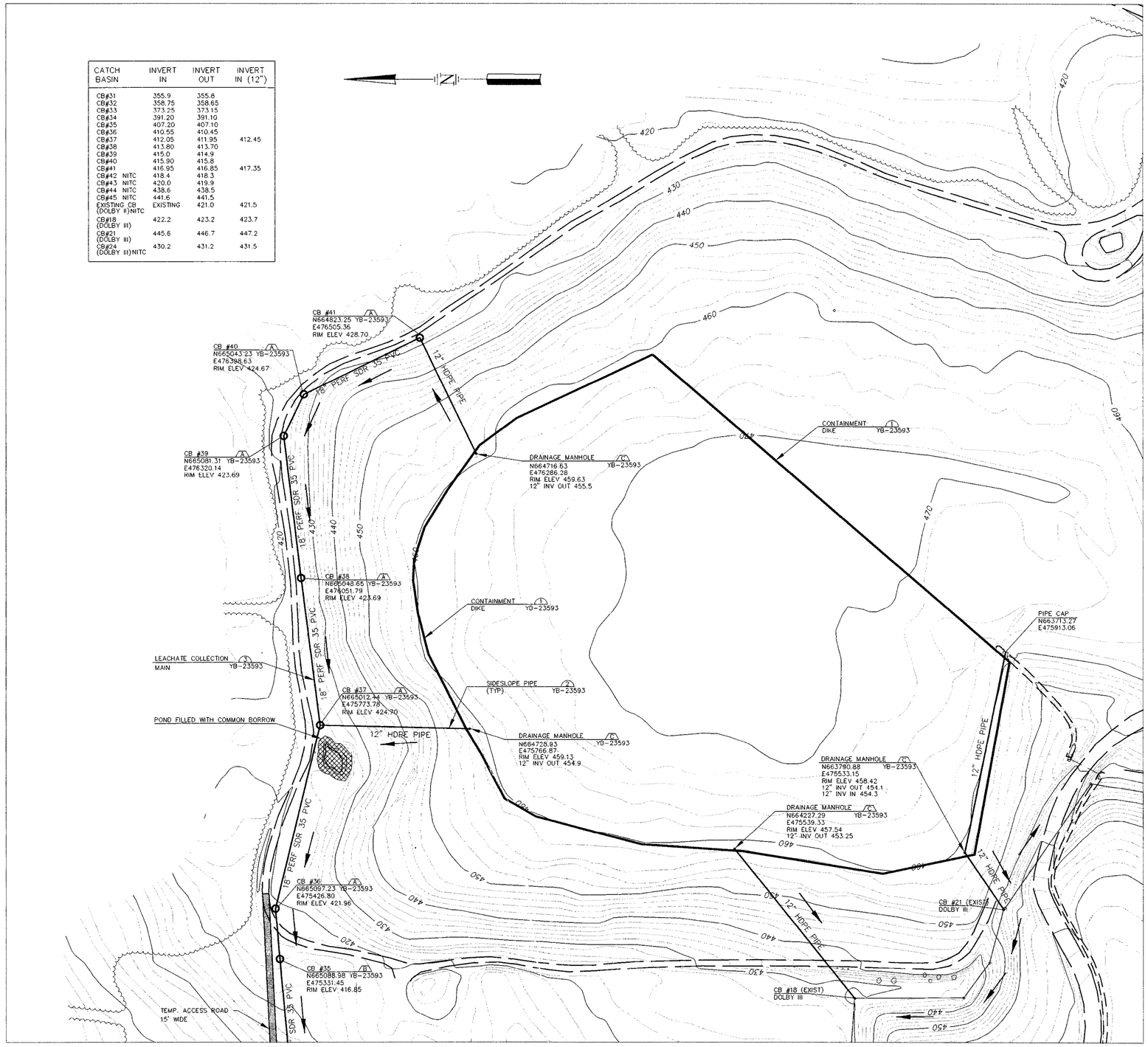
DOLBY II LANDFILL REGRADING
SITE DEVELOPMENT PLAN

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-23589

| CATCH BASIN | INVERT IN | INVERT OUT | INVERT IN (12") |
|---|---|---|---|
| CB#31 | 355.9 | 355.8 | |
| CB#32 | 358.75 | 358.65 | |
| CB#33 | 373.25 | 373.15 | |
| CB#34 | 391.20 | 391.10 | |
| CB#35 | 407.20 | 407.10 | |
| CB#36 | 410.55 | 410.45 | |
| CB#37 | 412.05 | 411.95 | 412.45 |
| CB#38 | 413.80 | 413.70 | |
| CB#39 | 415.0 | 414.9 | |
| CB#40 | 415.90 | 415.8 | |
| CB#41 | 416.95 | 416.85 | 417.35 |
| CB#42 NITC | 418.4 | 418.3 | |
| CB#43 NITC | 420.0 | 419.9 | |
| CB#44 NITC | 438.6 | 438.5 | |
| CB#45 NITC | 441.6 | 441.5 | |
| EXISTING CB (DOLBY II)NITC | EXISTING | 421.0 | 421.5 |
| CB#18 (DOLBY III) | 422.2 | 423.2 | 423.7 |
| CB#21 (DOLBY III) | 445.6 | 446.7 | 447.2 |
| CB#24 (DOLBY III)NITC | 430.2 | 431.2 | 431.5 |




50 0 100 200 FEET

BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC.
NORRIDGEWOCK, MAINE – PHOTO DATE 10/23/95.
GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE

STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY CONTRACTOR BEFORE CONSTRUCTION.

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 1/16/97 | RECORD DRAWING | | | | |
| | | 2/20/96 | ISSUED FOR BID | | | | |
| | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P – Prelim | B – Bids |
| M – Mtl T.O. | C – Const. |
| SCALE: AS SHOWN | |

BOWATER
Great Northern Paper

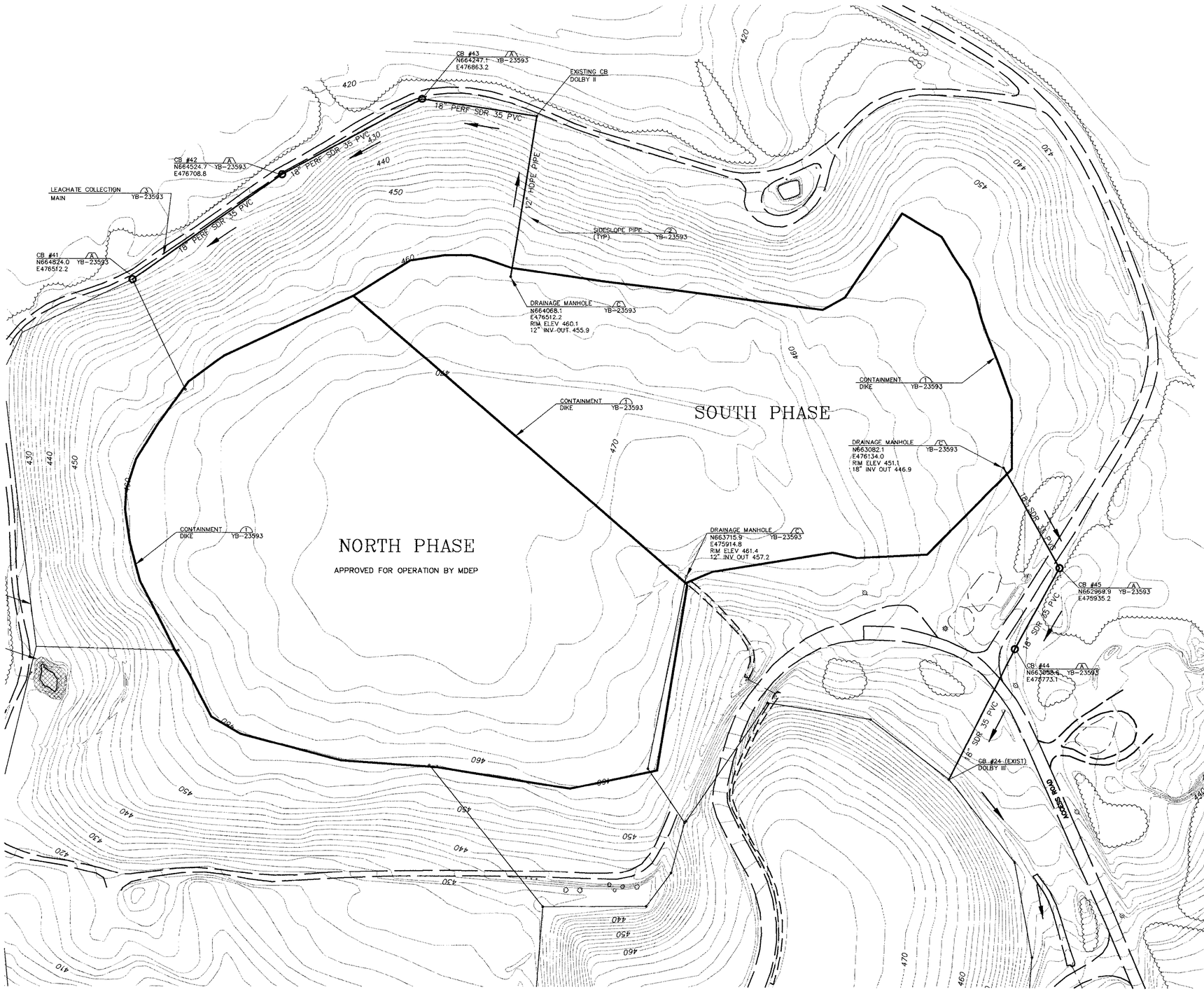
EAST OPERATION

DOLBY II LANDFILL REGRADING
DOLBY II NORTH SITE DEVELOPMENT PLAN

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-23590

D:\GNP\ACAD\A95540 Fri Jan 31 11:14:22 1997




| CATCH BASIN | INVERT IN | INVERT OUT | INVERT IN (12") |
|---|---|---|---|
| CB#31 | 355.6 | 355.5 | |
| CB#32 | 358.6 | 358.5 | |
| CB#33 | 373.1 | 373.0 | |
| CB#34 | 391.1 | 391.0 | |
| CB#35 | 407.1 | 407.0 | |
| CB#36 | 410.4 | 410.3 | |
| CB#37 | 411.9 | 411.8 | 412.3 |
| CB#38 | 413.5 | 413.4 | |
| CB#39 | 414.9 | 414.8 | |
| CB#40 | 415.4 | 415.3 | |
| CB#41 | 416.6 | 416.5 | 417.0 |
| CB#42 | 418.7 | 418.6 | |
| CB#43 | 419.8 | 419.7 | |
| CB#44 | 438.8 | 438.6 | |
| CB#45 | 441.7 | 441.6 | |
| EXISTING CB (DOLBY II) | EXISTING | 421.2 | 421.5 |
| CB#18 (DOLBY III) | 422.2 | 423.2 | 423.7 |
| CB#21 (DOLBY III) | 445.6 | 446.7 | 447.2 |
| CB#24 (DOLBY III) | 430.2 | 431.2 | 431.5 |

STATE OF MAINE
PETER J. MAHER
14107
REGISTERED PROFESSIONAL ENGINEER

BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC.
NORRIDGEWOCK, MAINE – PHOTO DATE 10/23/95.
GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE

STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY CONTRACTOR BEFORE CONSTRUCTION.

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 12/29/97 | RECORD DRAWING | | | | |
| | | | | 3/14/97 | PROJECT STATUS TO MDEP | GHC | | | |
| | | | | 2/20/96 | ISSUED FOR BID | | | | |
| | | | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE: P – Prelim; B – Bids; M – MH T.O.; C – Const.

SCALE AS SHOWN

BOWATER
Great Northern Paper

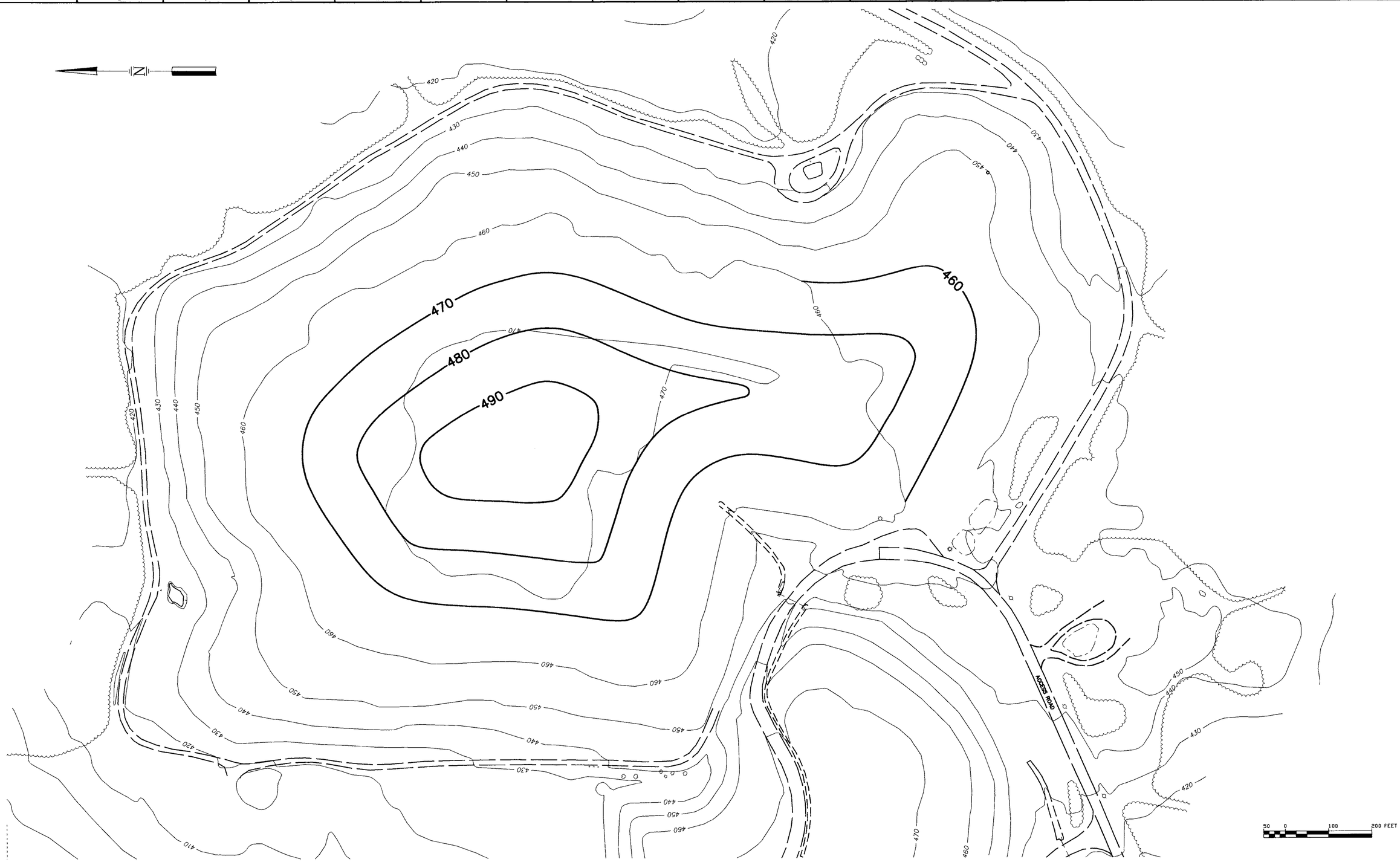
EAST OPERATION

DOLBY II LANDFILL REGRADING
DOLBY II SOUTH SITE DEVELOPMENT PLAN

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

YB-23591

F:\GNP\ACAD\43586-48.DWG Mon Dec 29 11:15:50 1997




STATE OF MAINE
PETER M. MAHER
#4107
REGISTERED
PROFESSIONAL ENGINEER

BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC.
NORRIDGEWOCK, MAINE – PHOTO DATE 10/23/95.
GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE

STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY CONTRACTOR BEFORE CONSTRUCTION.

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 2/20/96 | ISSUED FOR BID | | | | |
| | | | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P – Prelim | B – Bids |
| M – Mtl T.O. | C – Const. |
| SCALE AS SHOWN | |

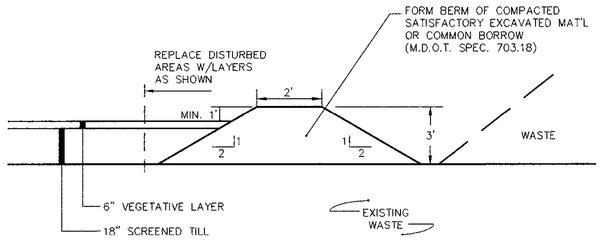
BOWATER
Great Northern Paper

EAST OPERATION

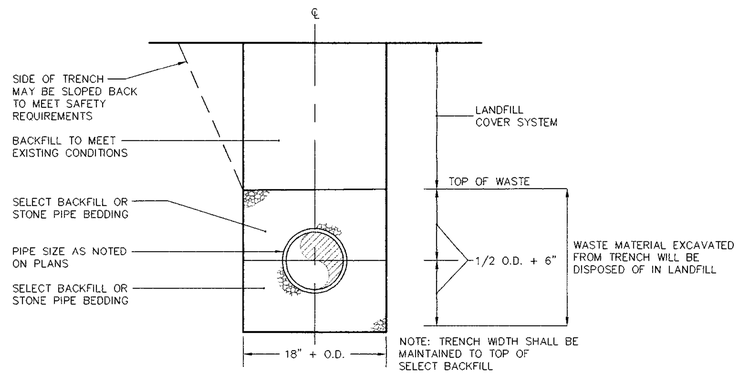
# DOLBY II LANDFILL REGRADING FINAL GRADING PLAN

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

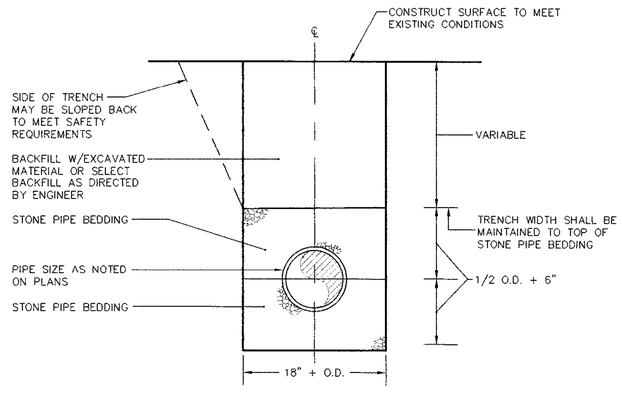
YB-23592



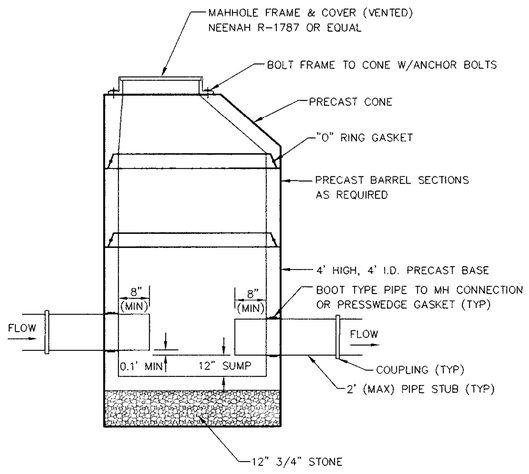

DIKE SECTION 1
NTS
YB-23590
YB-23591



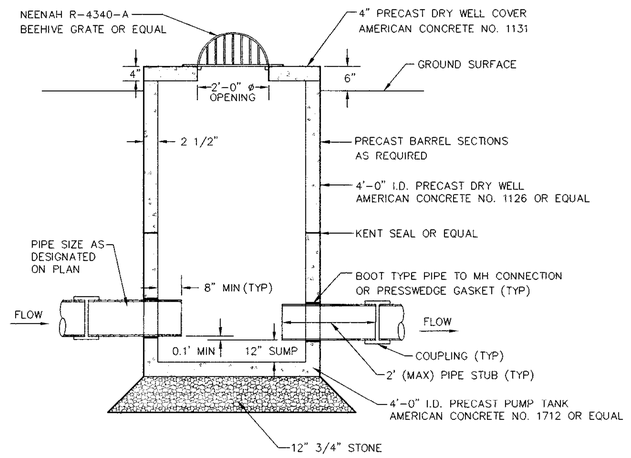

SIDESLOPE PIPE TRENCH 2
NTS
YB-23590
YB-23591



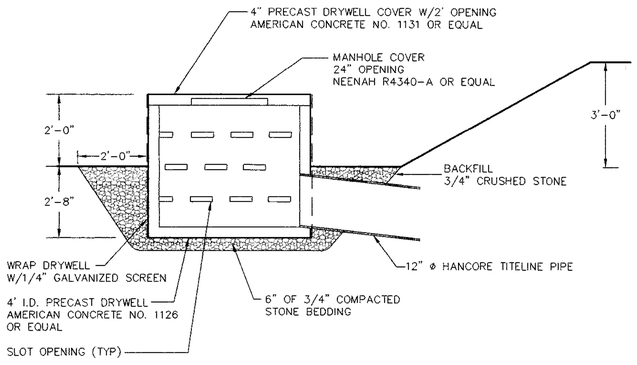

LEACHATE COLLECTION MAIN PIPE TRENCH 3
NTS
YB-23590
YB-23591




TYPICAL MANHOLE A
NTS
YB-23590
YB-23591




CATCH BASIN B
NTS
YB-23590




DRAINAGE MANHOLE C
NTS
YB-23590
YB-23591

STATE OF MAINE — PETER D. MAHER — REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 1/16/97 | RECORD DRAWING | | | | |
| | | | | 2/20/96 | ISSUED FOR BID | | | | |
| | | | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE: P – Prelim; B – Bids; M – Mtl T.O.; C – Const.

SCALE AS SHOWN

BOWATER
Great Northern Paper

EAST OPERATION

DOLBY II LANDFILL REGRADING
SECTIONS & DETAILS

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

YB-23593

D:\MAP\ACAD\DBII\DBIISD Mon Feb 10 14:03:57 1997

LEGEND

△ TEMPORARY BENCH MARK

APPROXIMATE CONSTRUCTION LIMIT

APPROXIMATE LANDFILL LIMIT

N

MW-202 (A,B)

PROPOSED FINAL GRADE
DOLBY # 2 LANDFILL

TP-319

TP-318

B-33

TP-320

B-32

B-31

TP-9

B-30

MW-201

TP-315

TP-317

DOLBY NO.2

DOLBY NO.3

LANDFILL LIMIT

430 440 450 460 470 420

E 476,000

E 475,500

N 665,000

N 664,000

N 663,500

N 662,500

MATCH LINE

100 50 0 100 200 FEET

| | |
|---|---|
| YB-14634 | TOPOGRAPHIC MAP PROPOSED DOLBY 3 LANDFILL AREA |

E.C. JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02 DWG. NO.

ISSUE CODE
P PRELIM B BIDS
M MYLAR C CONST
SCALE 1"=100'

Great Northern Paper

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
EXISTING TOPOGRAPHY MAP

JOB NO. 2668
ENG. 2-6313
FILE 4-092-7082

YB-14790
SHEET 1 OF 2

MATCH LINE

N665,500 N664,000 N663,500 N663,000 N662,500

E475,000 E474,500 E474,000 E473,500

MW-303(A,B) MW-106(A,B) B-27 B-28 TP-313 MW-105(A,B) TP-316 TP-312 TP-310 TP-306 TP-305 TP-304 B-308(A,B) TP-311 TP-307 B-307(A,B,C) TP-303 LANDFILL LIMIT TP-308 TP-302 B-306(A,B) MW-302(A,B) P-302 TP-309 MW-301 MW-107(A,B) MW-304(A,B,C) B-70 B-69

TEMPORARY BENCH MARK
N 662 34 .239
E 474 48 .296
ELEV. 399.89

LEGEND

- △ TEMPORARY BENCH MARK
- APPROXIMATE CONSTRUCTION LIMIT
- APPROXIMATE LANDFILL LIMIT

NOTES:

1. SEE GENERAL NOTES ON SHEET 1.

NOTE :
PARTRIDGE BROOK FLOWAGE
WATER LEVEL 539.3 MAY 10, 1985

50 0 100 200 FEET

YB-14634 TOPOGRAPHIC MAP PROPOSED DOLBY 3 LANDFILL AREA

E.C. JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02 DWG. NO.

| | | |
|---|---|---|
| DRN | LEDUC | 11/10/83 |
| CKD | MAHER | 12/16/83 |
| CKD | R.S.T. | 12/16/83 |
| CONF | W.E.N. | 12-17-83 |
| APPVD | O.J.L. | 12.19.83 |

ISSUE CODE

| | |
|---|---|
| P. PRELIM | B. BIDS |
| M. MTL.T.O. | C. CONST |

SCALE 1"=100'

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL

EXISTING TOPOGRAPHY MAP

JOB NO. 2668
ENG REQ NO. 2-8313
FILE NO 2-092-7082

YB-14790
SHEET 2 OF 2

NOTES:

1\. [illegible]

2\. [illegible] OUTSIDE [illegible] LIMITS OF THE [illegible]

3\. [illegible] THE INSTALLATION OF [illegible] CONSTRUCTION SHALL BE [illegible]

4\. EXISTING TOPOGRAPHY [illegible] MAPPING PROVIDED BY [illegible]

5\. [illegible]

**E.C.JORDAN CO.**
CONSULTING ENGINEERS

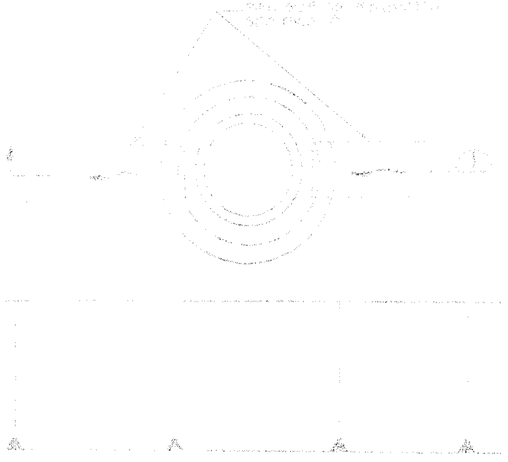
JOB NO. 4187-02
DWG. NO.

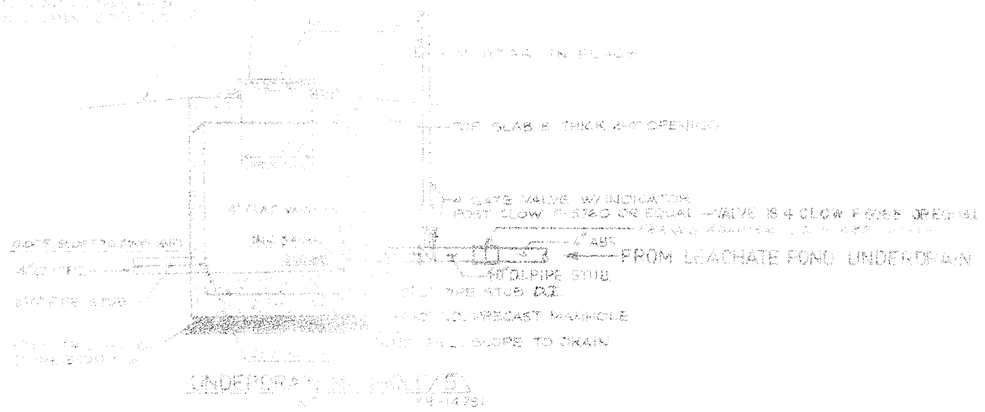
DWN BISHOP
ISSUE CODE

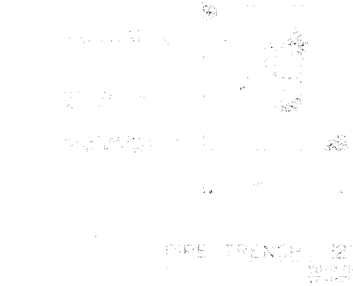
Great Northern Paper
a division of
Great Northern Nekoosa Corporation

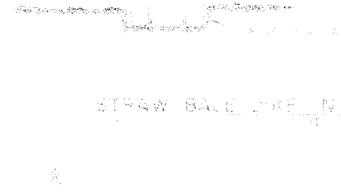
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

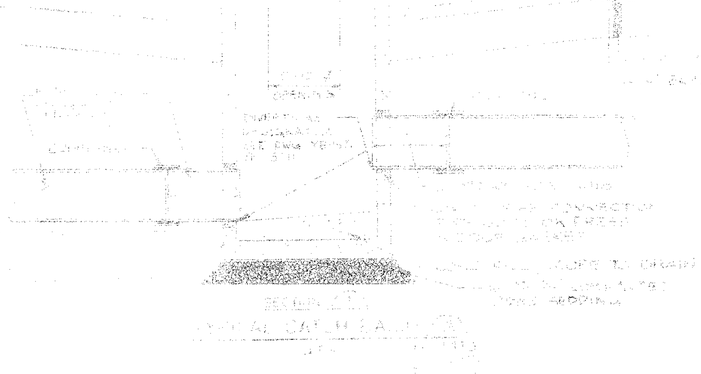
JOB NO. 2666
ENG. REQ. NO.
FILE NO.
YB-14791

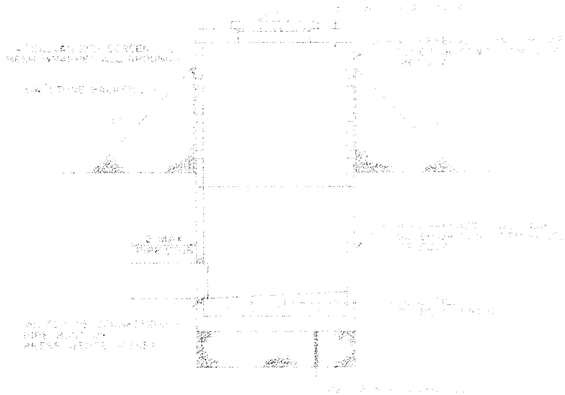






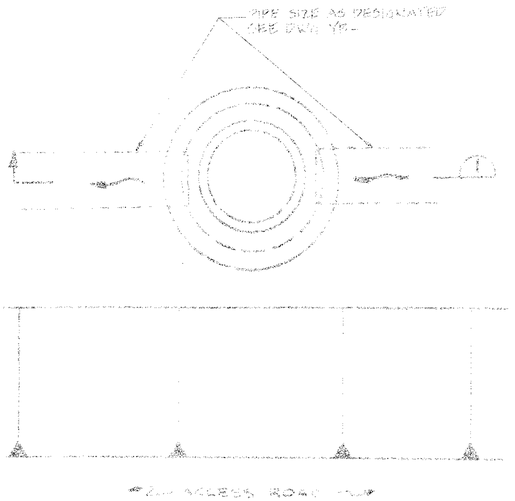


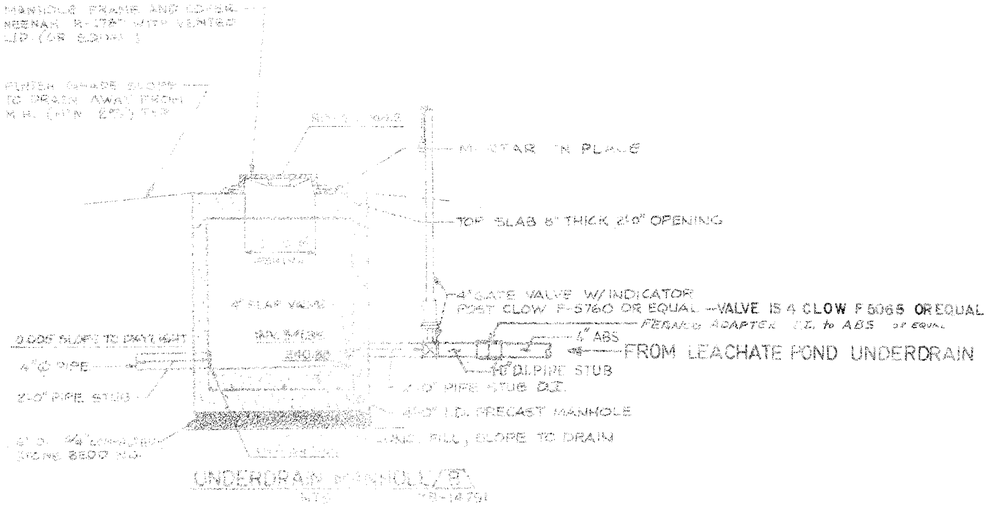


SEWALL & MAHER ENGINEERS, PA
WESTBROOK, MAINE
E.C. JORDAN CO.
CONSULTING ENGINEERS

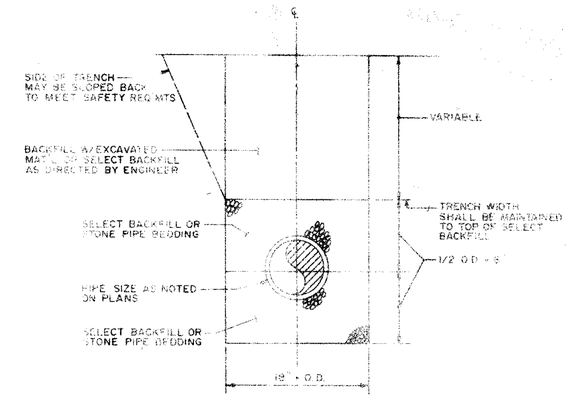
Great Northern Paper
Millinocket, Maine

CENTRAL ENGINEERING DEPARTMENT

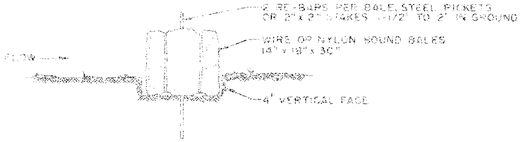



UNDERDRAIN MANHOLE /E
YB-14791

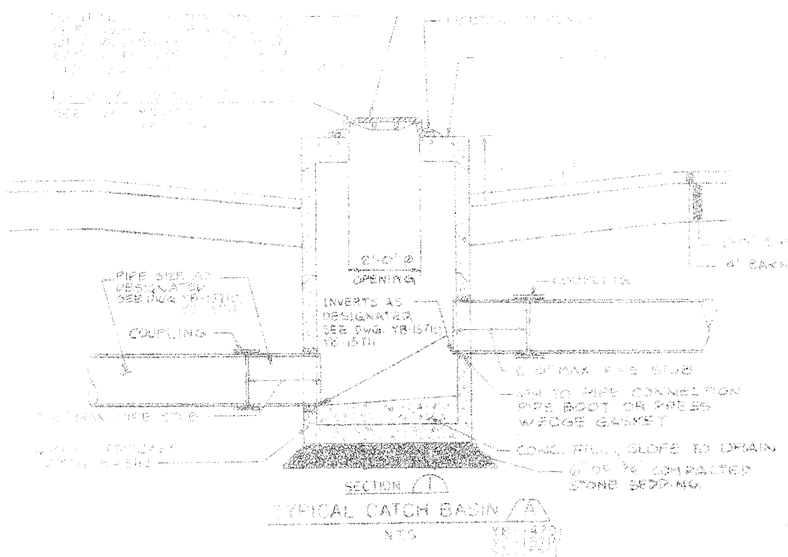



PIPE TRENCH /R
N.T.S. YB-15710 YB-15711



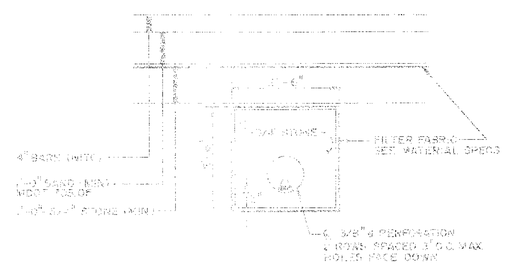

STRAW BALE DIKE /N
N.T.S. YB-15711

PLAN

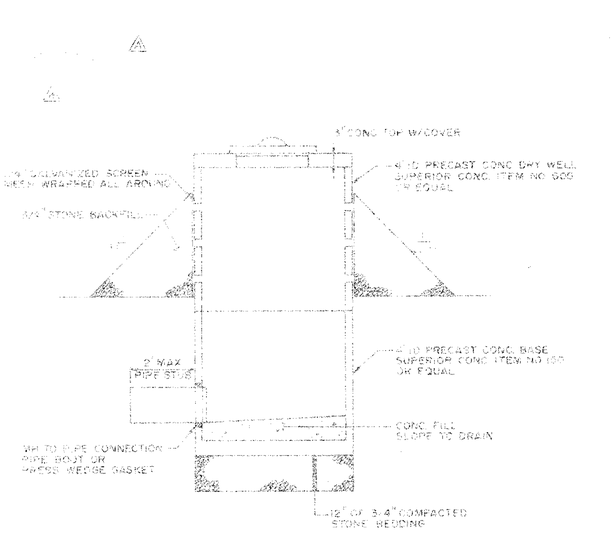



TYPICAL CATCH BASIN /A
N.T.S. YB-14792


TEMPORARY CULVERT CAP /S
N.T.S. YB-14791




AREA DRAIN CELL 2 /T
N.T.S. YB-14792




POND INLET /P
N.T.S. YB-15710

| NO. | REVISIONS | DATE | BY |
|---|---|---|---|
| 2 | ISSUED FOR RECORD DRAWING | 12/97 | JLP |
| 1 | ISSUED FOR APPROVAL AS PER 3 WAY MEETING 6/97 | 7/97 | JLP |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE
E.C. JORDAN CO.
CONSULTING ENGINEERS
JOB NO. 4187-02 DWG. NO.

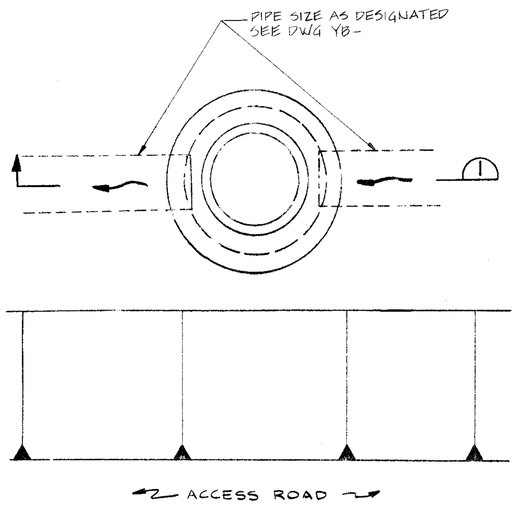
DRAWN JLP 12/97
DES. RJC
DET. JLP
CHK. RJC
APPD. RJC
ISSUE CODE
F - FINAL 12-1997
R - INFO. TO CONST.
SCALE AS NOTED

Great Northern Paper
a company of Great Northern Nekoosa Corporation

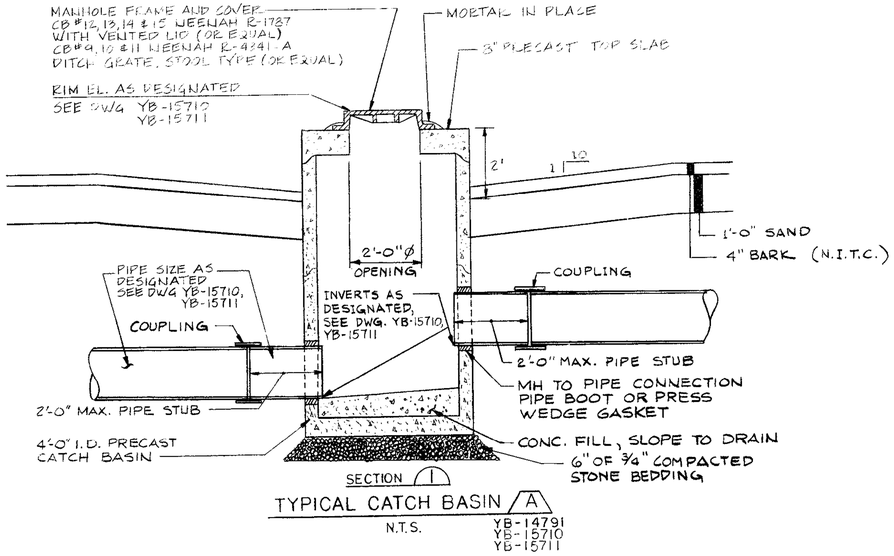
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET, MAINE
DELEY 3 LANDFILL
LANDFILL AREA
DRAINAGE DETAILS

Job No. 2865
Dwg. Rec. No.
File No. 2

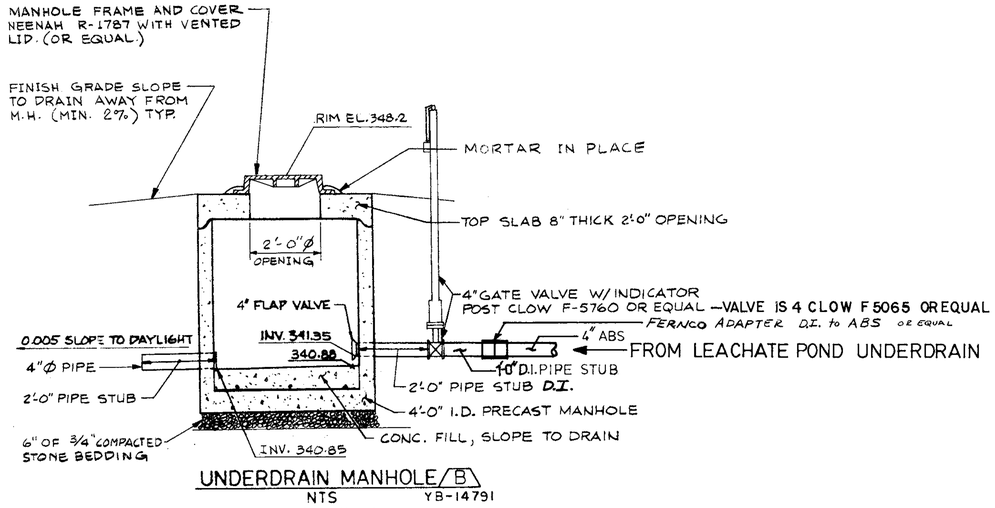
YB-14793-B



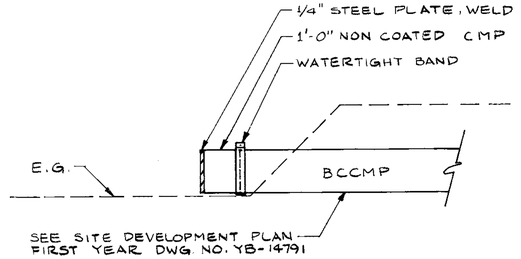

PLAN



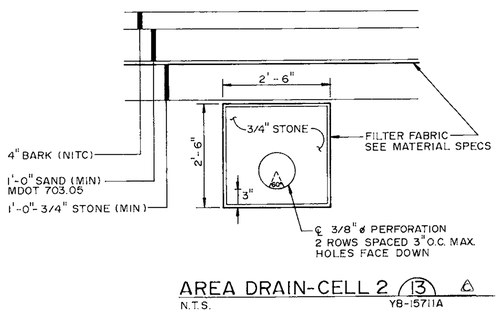

TYPICAL CATCH BASIN A
N.T.S. YB-14791 YB-15710 YB-15711



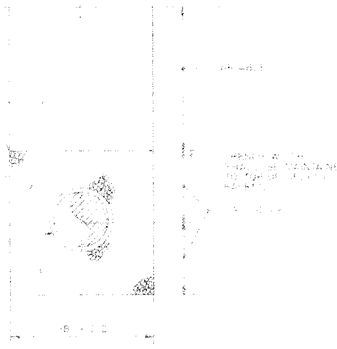

UNDERDRAIN MANHOLE B
NTS YB-14791

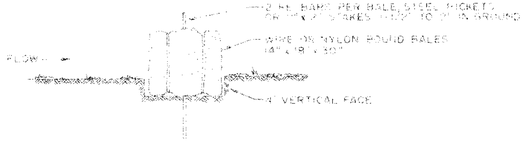



TEMPORARY CULVERT CAP C
N.T.S. YB-14791

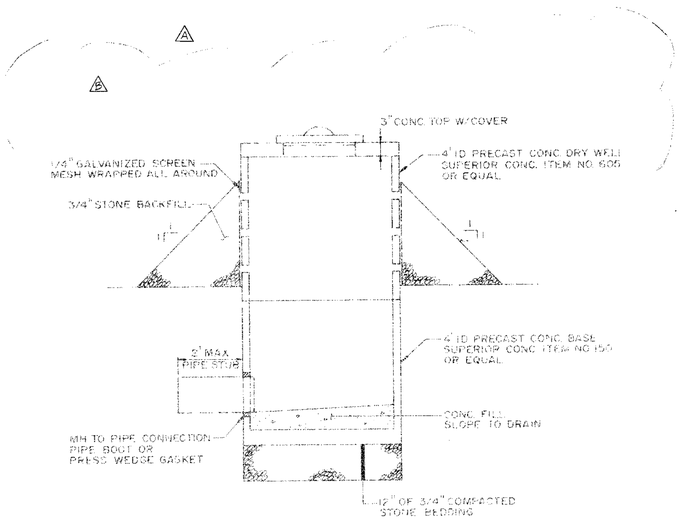



AREA DRAIN-CELL 2 13 Δ
N.T.S. YB-15711A




STRAW BALE DIKE N
N.T.S. YB-15711




POND INLET P
N.T.S. YB-15710

STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER — 4/19/87

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| C | C | 10/20/87 | RECORD DRAWING | MJC | BRS | | 94473 |
| C | B | 7/14/87 | NOT IN THIS CONTRACT | MJC | BRS | | 94473 |
| C | A | 5/26/87 | GENERAL REVISION FOR JOB # 94473 CELL 2 | MJC | ECS | WAN | 94473 |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

E.C. JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02 DWG. NO.

| | |
|---|---|
| DRN MB/RDC | 12/1/83 |
| CKD MAHER | 12/16/83 |
| CKD RSSR | 12/16/83 |
| CORR WAN | 12-17-83 |
| APPVD CJL | 12-19-83 |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL.T.O. | C - CONST |
| SCALE AS NOTED | |

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
LANDFILL AREA
DRAINAGE DETAILS

JOB NO. 2668
ENG. REQ. NO. 2-8313
FILE NO. 2-092-7082

YB-14793-C

# GREAT NORTHERN PAPER CO.
# MILLINOCKET, MAINE

# DOLBY 3 LANDFILL
# CELL 2 CONSTRUCTION

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

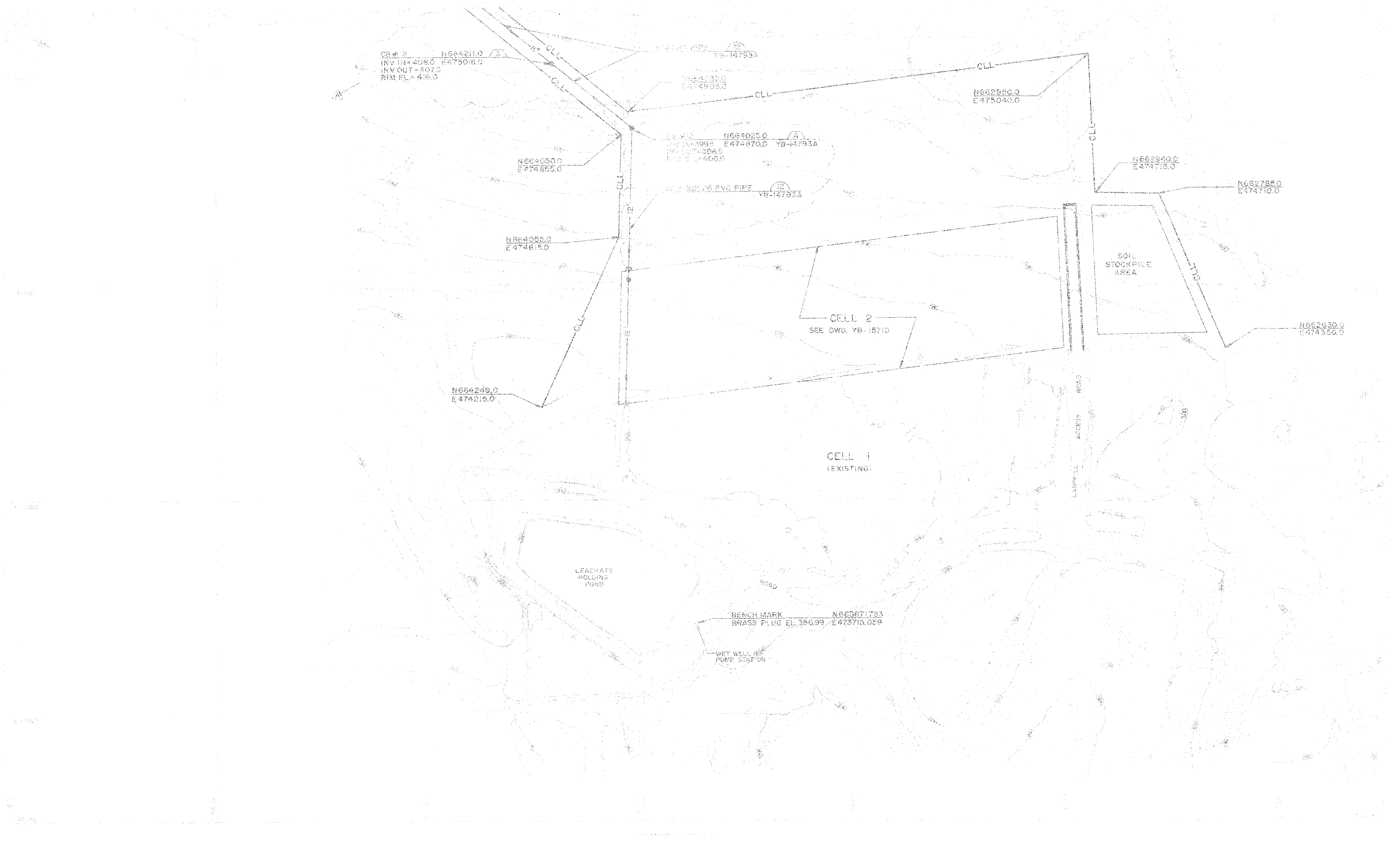
DEVEL & MAHER ENGINEERS, P.A.

WESTBROOK, MAINE

E.C. JORDAN CO.

CONSULTING ENGINEERS

JOB NO. 4107-02 | DWG. NO.



| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY |
|---|---|---|---|---|---|---|
|  |  |  | A | 7/16/87 | [illegible] CONTRACT |  |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

JOB NO. 8717

ISSUE CODE
P - PRELIM | B - BIDS
M - MTL. T.O. | C - CONST

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
CELL 2
SITE LOCATION PLAN

IOS NO. 94475
ENG. REQ. NO. 2-9618
FILE NO. [illegible]

YB-15710 A
SHEET 1 OF 2

DOLBY II LANDFILL

POND INLET MH #2 N664984.0 E475700.0 YB-14793A
INV. OUT = 413.0
RIM EL. = 420.0

N665110.0
E475660.0

6" ABS 45° BEND N665090.0
E475640.0

CLL 6"

AREA TO BE FINAL COVERED & SEEDED (AS OF APRIL 1987)

CB #15 N665132.0 E475353.0 YB-14793A
INV. IN = 410.3
INV. OUT = 410.2
RIM EL. = 416.0

6" ø ABS PIPE 12 YB-14793A

POND INLET MH #1 N664540.0 E475330.0 YB-14793A
INV. OUT = 414.0
RIM EL. = 422.0

N665160.0
E475330.0

CLL 6"

CLL 6"

N664485.0
E475280.0

CB #14 N664540.0 E4752920 YB-14793A
EAST INV. IN = 413.0
NORTH INV. IN = 409.1
INV. OUT = 409.0
RIM EL. = 420.5

N664552.0
E475270.0

CLL 6"

CLL

MATCH LINE SHEET 1

| DRAWING NO | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB NO. |
|---|---|---|---|---|---|---|---|
| C | A | 7/16/87 | NOT IN THIS CONTRACT | | | | |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

JOB NO. 8717

| | | |
|---|---|---|
| DRN | PAT | 6/87 |
| CKD | MHC | 6/87 |
| CKD | ECS | 6/87 |
| CORR | WAN | 6/87 |
| APPVD | | |

ISSUE CODE
P - PRELIM | B - BIDS
M - MTLY. O.A. | C - CONST
SCALE 1" = 100'

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
CELL 2
SITE LOCATION PLAN

JOB NO. 94473
ENG. REQ. NO. 2-6516
FILE NO. 2-092-4703, 7082

YB-15710 A
SHEET 2 OF 2

12"ø SOLID PVC PIPE (12) YB-14793A

CORNER OF DIKE N664046.0 E474531.0

DIKE AND DRAINAGE DIVERSION DITCH SEE DWG. YB-14794B FOR TYPICAL SECTION

PIPE STUB W/TEMP CAP

380

200' MAX.

STRAW BALE DIKE (N) (TYPICAL) YB-14793A

10:1 SLOPE TO EXIST. GRADE

CORNER OF DIKE N663023.0 E474662.0

PIPE STUB W/TEMP CAP

CB #11 (A) N664032.5 E474520.6
INV. IN=365.5
2" INV. IN = 369.7
6" INV. OUT = 368.7
INV. OUT = 365.9
RIM ELEV. = 372.2
YB-14793A

RIP-RAP DITCH

30' TO ℄ OF DITCH

PIPE CAP (TYPICAL)

GRUB CELL 2 AND PROVIDE BASAL DRAINAGE BLANKET

6"ø ABS LEACHATE(Perf.) (9) COLLECTION PIPE YB-14795A

12"ø SOLID PVC LEACHATE (12) COLLECTION MAIN YB-14793A

12"ø PERF PVC LEACHATE (11) COLLECTION MAIN YB-14795A

BRANCH CONNECTION (TYPICAL) (M) YB-14796A

90' (TYPICAL)

2"ø PE LEACHATE(Perf.) (9) COLLECTION PIPES YB-14796A

CB #9 (A) N663016.0 E474370.0
2" INV.=381.3
INV. IN = 378.7
INV.OUT=378.1
RIM ELEV.=385.6

REMOVE 18" PLUG INSTALL 18"x12" C.I. REDUCER

AREA DRAIN (13) 8'x 30' YB-14793B

CB #1
INV. IN = 356.6
INV. OUT = 356.39
6" INV. IN = 356.5
RIM ELEV. = 362.08

8"-45° C.I. BEND

CB #8
INV. IN = 375.60
INV. OUT = 375.13
RIM ELEV. = 386.80

℄ OF DIKE N664055.0 E474223.0

℄ ACCESS ROAD N662995.0 EL 402.0 E474670.0

CB #10 (A) N663031.0 E474652.0
INV. IN=392.8
INV. OUT = 392.5
RIM ELEV.= 399.0
YB-14793A

LANDFILL ACCESS ROAD, S= 4.5% SEE DWG YB-14794B FOR TYPICAL SECTION

12"ø BCCMP N662980.0 E474371.5
INV. IN = 385.0
INV. OUT = 384.5

℄ ACCESS ROAD N662980.0 EL 388.0 E474360.0

REMOVE 18" PLUG

CB #2
INV. IN = 350.85
INV. IN W/CAP = 350.88
INV. OUT = 350.48

CB #3
INV. IN (NORTH) = 348.58
INV. IN (SOUTH) = 348.34
INV. OUT = 345.36

CB #4
INV. IN 6" = 352.73
INV. IN 18" = 349.44
INV. OUT = 349.23

CB #5
INV. IN = 361.91
INV. OUT = 354.10

CB #6
INV. IN = 368.10
INV. OUT = 362.18

CB #7
INV. IN = 371.18
INV. OUT = 370.96

CELL 1 (EXISTING)

LEACHATE COLLECTION POND

24" GATE VALVE

BENCH MARK N663871.735
BRASS PLUG EL. 356.99 E473715.959

WET WELL & PUMP STATION

RETENTION POND

ACCESS ROAD

LANDFILL ACCESS ROAD

MAIN

CLL

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CHD | APPRD | JOB NO. |
|---|---|---|---|---|---|---|---|---|---|
| YB-15283 | DOLBY 3 LANDFILL AREA TOPOGRAPHIC SURVEY & DIGITIZATION AS OF 12-5-85 | C | | 6/14/87 | RECORD DRAWING | MHC | | | |
| | | C | A | 7/16/87 | NOT IN THIS CONTRACT | MHC | | | |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

JOB NO. 8717

| | | |
|---|---|---|
| DRN. | PAF | 6-4-87 |
| CHD. | MHC | 6-4-87 |
| DES. | BCS | 6-3-87 |
| CORR. | MAN | 6-3-87 |
| APPVD. | | |

ISSUE CODE

| | |
|---|---|
| P - PRELIM | B - BIDS |
| M - MYLT.O.S. | C - CONST. |

SCALE 1" = 50'

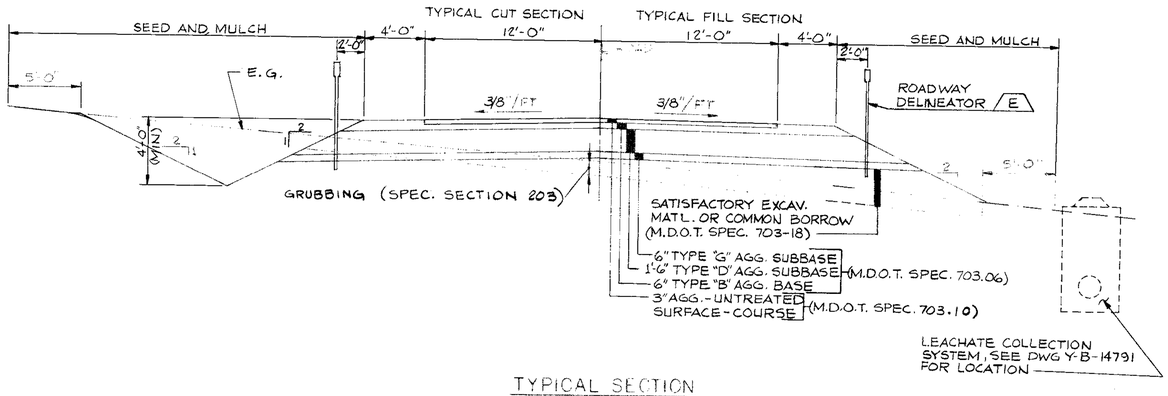
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

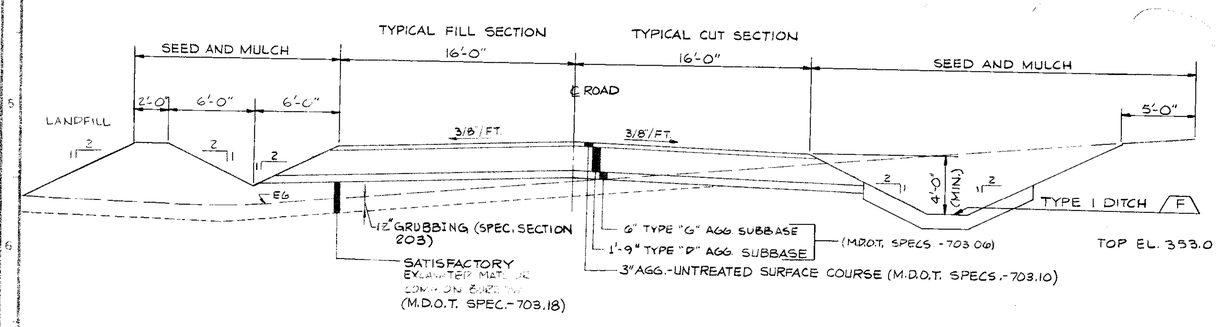
DOLBY 3 LANDFILL
SITE DEVELOPMENT PLAN
CELL 2

JOB NO. 84473
ENG. REQ. NO. 2-8516
FILE NO. 2-092-7088

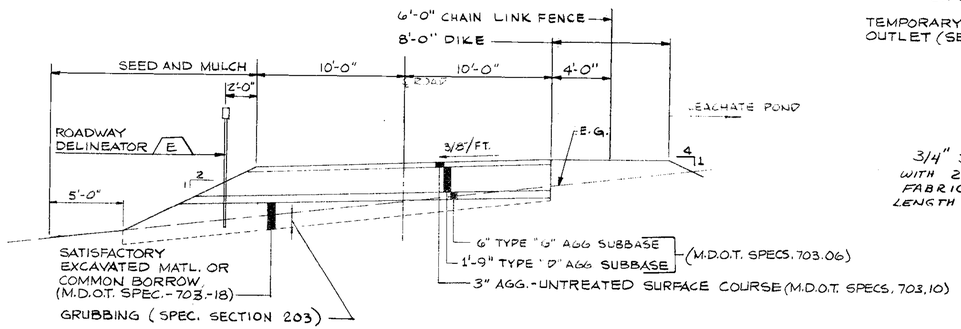
YB-15711A



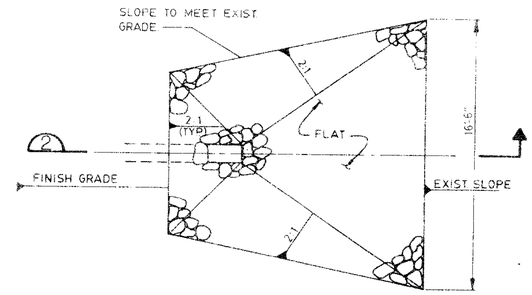

TYPICAL SECTION
MAIN ACCESS ROAD
N.T.S.



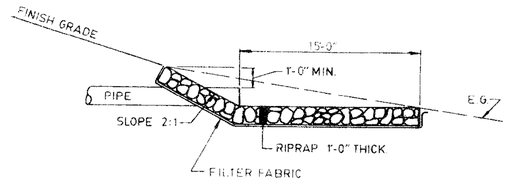

TYPICAL SECTION
LANDFILL ACCESS ROAD
N.T.S.




TYPICAL SECTION
LEACHATE POND ACCESS ROAD
N.T.S.

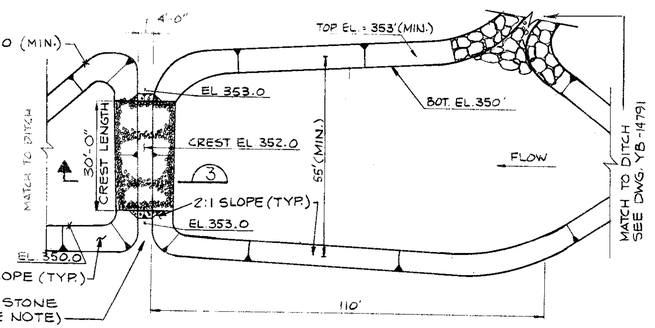



PLAN

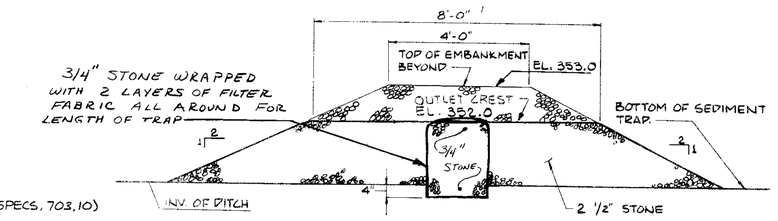



SECTION (2)

RIPRAP APRON (C)
NTS YB-14791

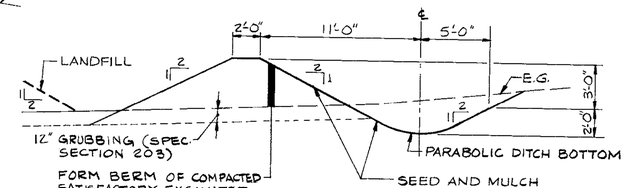



PLAN

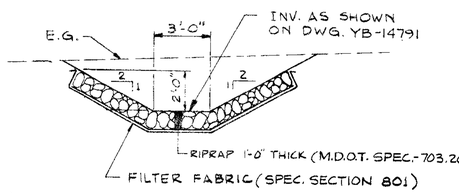



SECTION (3)

STONE OUTLET SEDIMENT TRAP (D)
NTS YB-14791




TYPICAL SECTION
DIKE AND TYPE 2 DRAINAGE DITCH
SCALE: 1"= 5'




TYPE I DITCH (F)
N.T.S. YB-14791
YB-15711

NOTE: STONE OUTLET TO BECOME PERMANENT FIXTURE. ACCUMULATED SEDIMENT TO BE REMOVED AND PLACED IN LANDFILL WHEN CONSTRUCTION COMPLETE AND TRIBUTARY AREA IS STABILIZED WITH VEGETATION, GRAVEL SURFACE OR RIPRAP. AREA TO BE SEEDED AND MULCHED WHEN CONSTRUCTION COMPLETE.

STATE OF MAINE — JOHN L. DOLBY JR. — REGISTERED PROFESSIONAL ENGINEER — 6/1/87

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| C | B | 5/24/87 | GENERAL REVISION FOR JOB #94473 CELL 2 | MJC | ECS | WAN | 94473 |
| C | A | 10/5/84 | NOTES & 3/4" STONE AND FILTER FABRIC | RS JR | | WAN | 2668 |

DRAWING NO. — REFERENCE DRAWING TITLE

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

E.C. JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02 — DWG. NO.

| | |
|---|---|
| DRN LEDOC | 10/12/83 |
| CKD MAHER | 12/14/83 |
| CKD RS JR | 12/16/83 |
| CORR WAN | 12/17/83 |
| APPVD OJL | 12-19-83 |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MYLT O.J. | C - CONST |
| SCALE NOTED | |

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

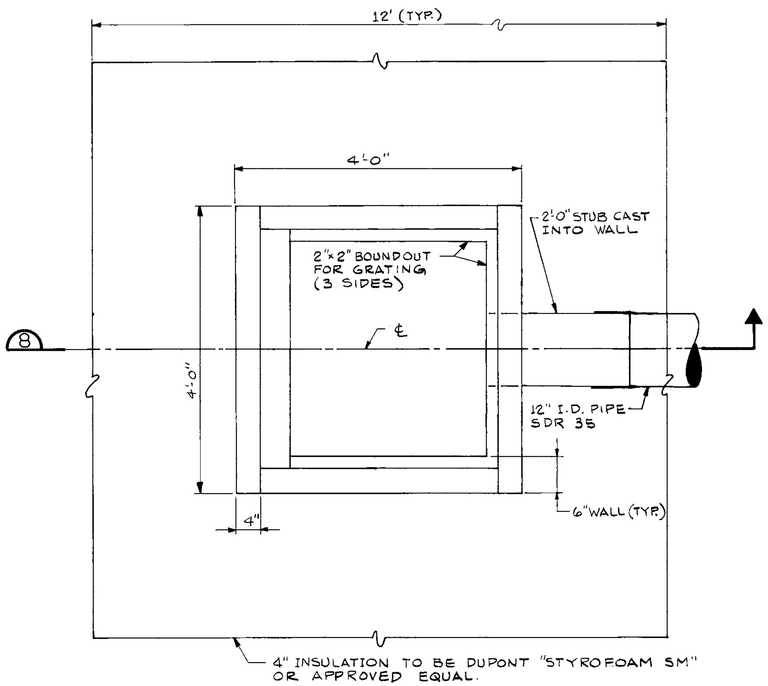
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
ACCESS ROAD
TYPICAL SECTIONS & DETAILS

JOB NO. 2668
ENG. REQ. NO. E-E313
FILE NO 2-032-7082

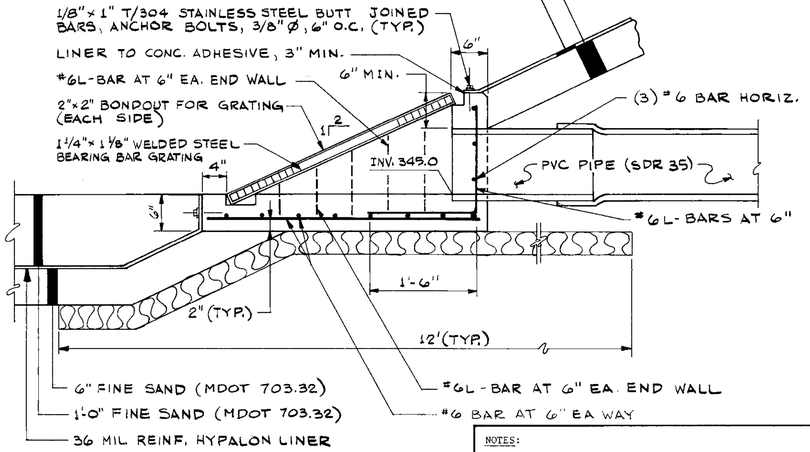
YB-14794-B

SEVEE & MAHER ENGINEERS, PA

E.C. JORDANCO
CONSULTING ENGINEERS




PLAN



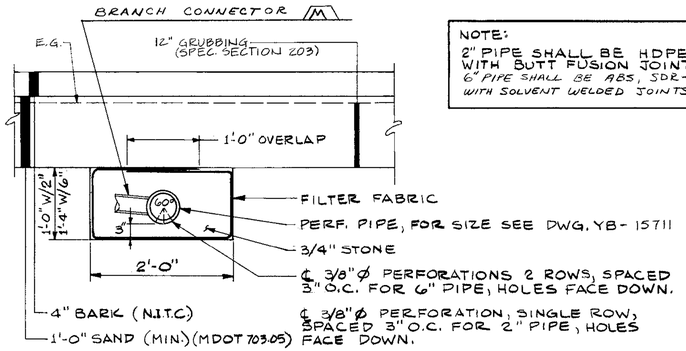

SECTION (8)

NOTES:

1. PENETRATIONS SHALL BE SEALED PER THE MANUFACTURER'S RECOMMENDATION.
2. CONTACT BOND OF LINER TO ALL CONCRETE SURFACES SHALL BE PER THE LINER MANUFACTURER'S APPROVED BONDING METHODS.

## OUTLET STRUCTURE (TYP.) (K)

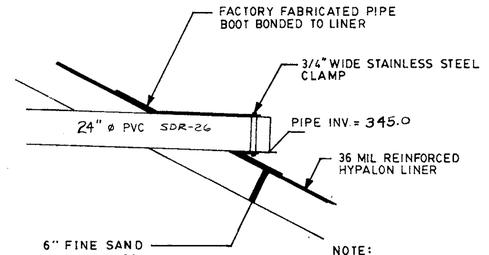
SCALE: 1"= 1'-0" YB-14791




NOTE:
2" PIPE SHALL BE HDPE, SDR-17 WITH BUTT FUSION JOINTS.
6" PIPE SHALL BE ABS, SDR-23.5 WITH SOLVENT WELDED JOINTS.

## 2-IN. 6-IN. LEACHATE COLLECTION PIPES (9)

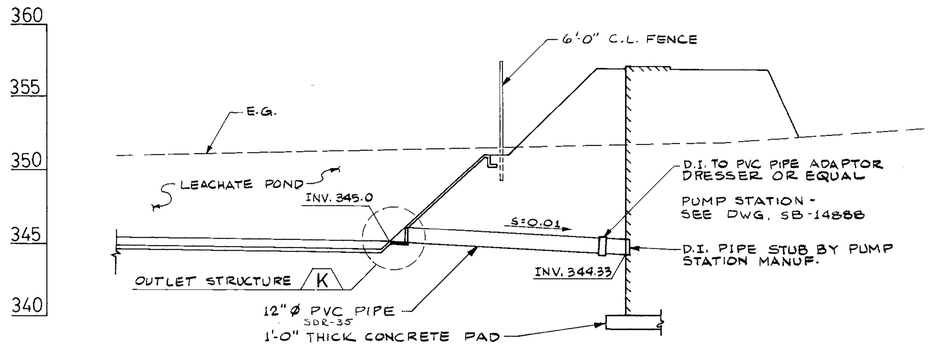
SCALE: 1"= 1'-0" YB-14791 YB-15711




NOTE:
PIPE PENETRATIONS SHALL BE SEALED PER THE LINER MANUFACTURES RECOMMENDED METHODS

## POND INLET AND PIPE BOOT (L)

N.T.S. YB-14791




NOTES:

| | | |
|---|---|---|
| 2" PIPE | HDPE | SDR-17 W/BUTT FUSION JOINTS |
| 4" PIPE | ABS | SDR-23.5 W/SOLVENT JOINTS |
| 6" PIPE | ABS | SDR-23.5 W/SOLVENT JOINTS (A) |
| 12" PIPE | PVC | SDR-35 |
| 18" PIPE | PVC | SDR-26 (A) |
| 24" PIPE | PVC | SDR-26 |

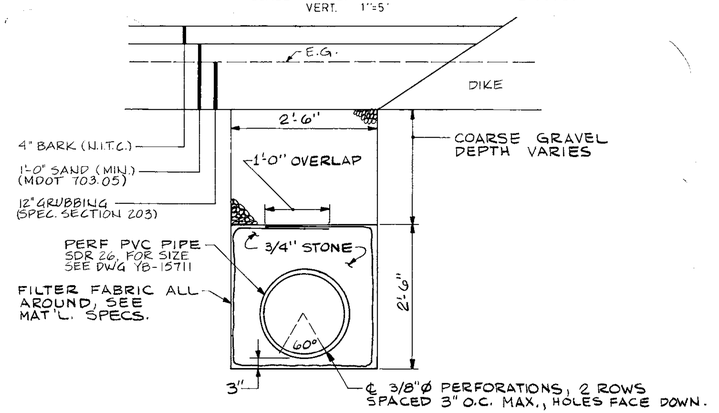
GATE VALVES - CLOW F5065 MECH. JOINT, NON RISING STEM FOR 4" & 24" PIPE OR EQUAL

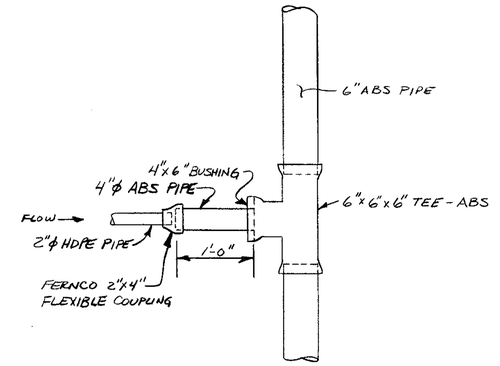
INDICATOR POST - CLOW F5760 OR EQUAL

12" PIPE PVC SDR-26 (A)

## PUMP STATION AND INLET PIPE (10)

SCALE: HORIZ. 1"=20' VERT. 1"=5' YB-14791




BRANCH CONNECTOR (M)

N.T.S. YB-15711

## PERF. LEACHATE COLLECTION MAIN (11)

YB-14791 YB-15711

STATE OF MAINE — JOHN E. MAHER — REGISTERED ENGINEER — 6/14/87

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| C | A | 5/26/87 | GENERAL REVISION FOR JOB # 94473 CELL 2 | RHC | ECS | WBN | 94473 |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

E.C. JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02 DWG. NO.

| | | |
|---|---|---|
| DRN | D.E.D. | 11/22/83 |
| CKD | MAHER | 12/16/83 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P-PRELIM | B-BIDS | M-MTL.T.O. | C-CONST

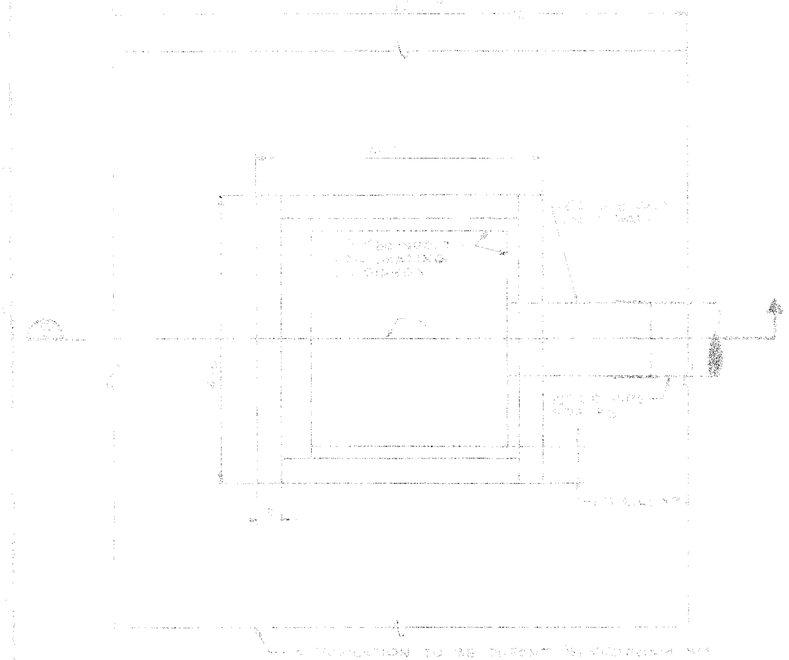
SCALE NOTED

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

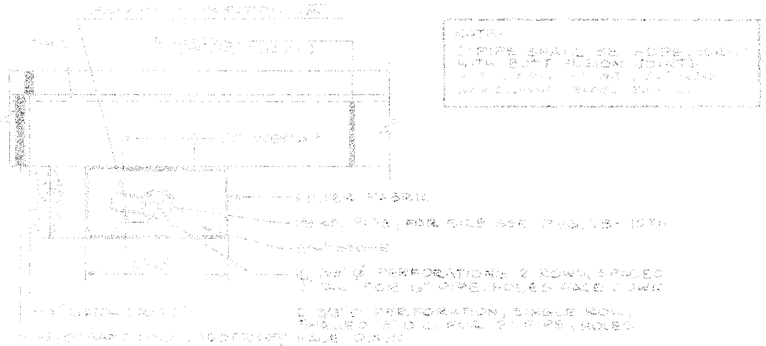
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
SITE DEVELOPMENT
DETAILS

JOB NO. 2668
ENG. REQ. NO. 2-8313
FILE NO. 2-0927082

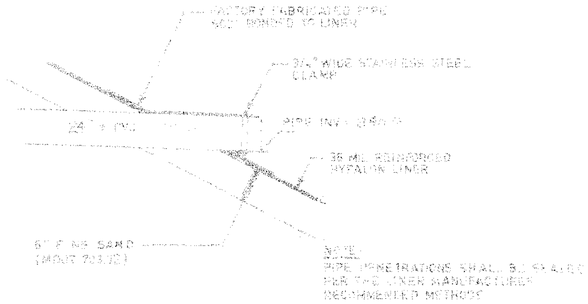
YB-14796-A



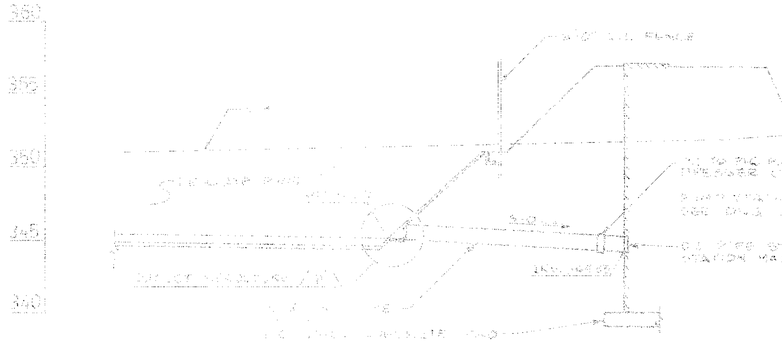
PLAN

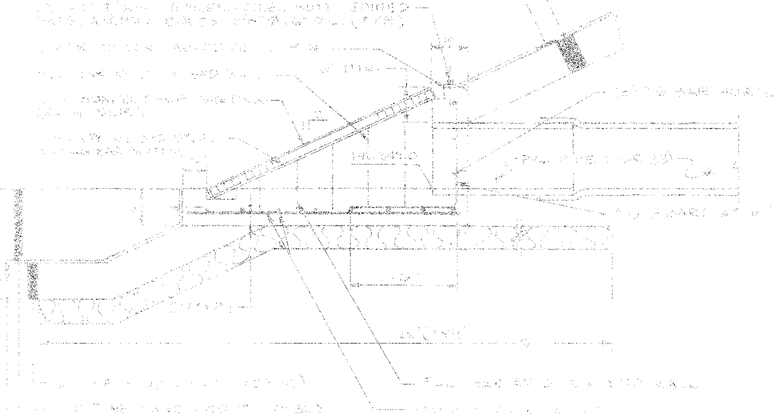


2 IN. DIA. LEACHATE COLLECTION PIPES (9)

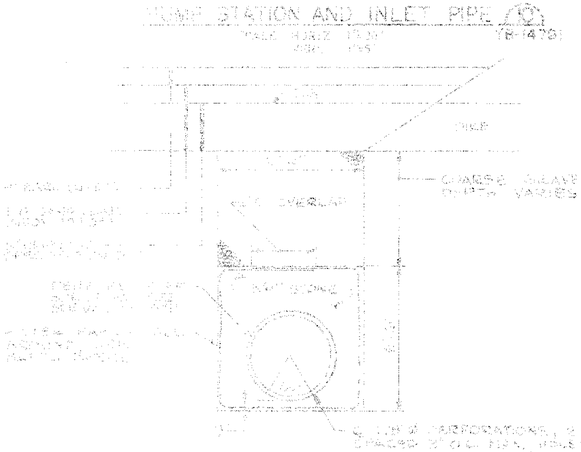


POND INLET AND PIPE BOOT (7)

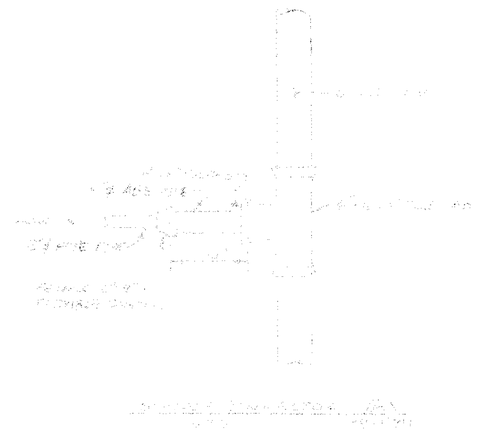




OUTLET STRUCTURE (TYP.) (6)



GAS LEACHATE COLLECTION MAIN (1)



| | | | |
|---|---|---|---|
| | | | |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE
E.C. JORDAN CO.
CONSULTING ENGINEERS

Great Northern Paper
Maine

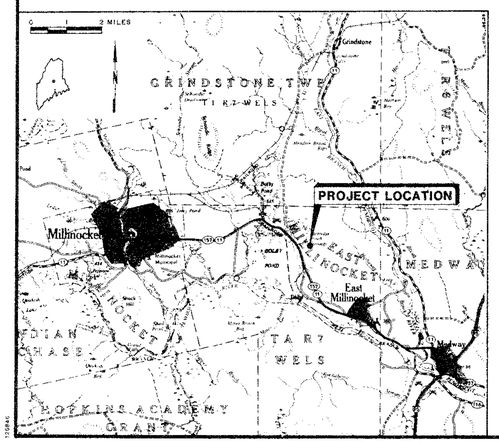
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET, MAINE
LANDFILL EXPANSION
SITE DEVELOPMENT
DETAILS

# GREAT NORTHERN PAPER CO.
# MILLINOCKET, MAINE

# DOLBY 3 LANDFILL
# CELL 3 CONSTRUCTION

**RECORD DRAWINGS**

| TITLE | DWG. NO. |
|---|---|
| COVER SHEET | YB-15911 |
| DOLBY 3 LANDFILL SYMBOLS & ABBREVIATIONS | YB-15912 |
| DOLBY 3 LANDFILL SITE LOCATION PLAN | YB-15913 |
| DOLBY 3 LANDFILL SITE DEVELOPMENT PLAN | YB-15914 |
| DOLBY 3 LANDFILL SECTIONS & DETAILS | YB-15915 |




SEVEE & MAHER ENGINEERS, INC.
WESTBROOK, MAINE

1988

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY 3 LANDFILL
CELLS 3A AND 3B
COVER SHEET

JOB NO.
ENG. REQ. NO. 2-8627
FILE NO. 2-092-4703.7082

YB-15911

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | STONE WALL | TP-103 | TP-103 | TEST PIT & NUMBER |
| | | NORTH ARROW (MAGNETIC) | | | DRAINAGE COURSES W/DIRECTION & DITCH | | | CLEAN OUT STRUCTURES |
| | | NORTH ARROW (PLAN NORTH) | SHORE SIDE | | EDGE OF WATER | | | MANHOLE |
| 25 | 25 | CONTOUR LINES | | | WATER ELEVATION (GROUND OR SURFACE) | | | WATER VALVE |
| 25.63 | 25.56 | SPOT ELEVATION (GRADE) | | | ROCK OUTCROP OR LEDGE | | | HYDRANT |
| E.G. | | EXISTING GROUND (PROFILES & SECTIONS) | | | FENCE LINE (WOOD) | | | TELEPHONE OR POWER POLE |
| S.B. | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT | | | FENCE LINE (WIRE) | | | CATCH BASIN |
| 0+00 | 1+00 | CONSTRUCTION BASELINE | (STONE) | (CONC) FACE | RETAINING WALL (TYPE) | G | 8" G | UNDERGROUND GAS MAIN & SIZE |
| P.L. | | PROPERTY OR DEED LINE (NOT SURVEYED) | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE CABLE/CONDUIT |
| 525.14' N35°-10'-41"E | 525.14' N35°-10'-41"E | PROPERTY LINE W/BEARING & DISTANCE | | | BUILDING & STRUCTURES | E | E | UNDERGROUND ELECTRIC CABLE/CONDUIT |
| | | ROADS, EASEMENTS OR RIGHT OF WAY LINE | | | STEPS W/TYPE (WOOD/CONCRETE) | OE | OE | OVERHEAD ELECTRICAL LINE |
| | | BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY) | | 1' C. OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | | 12"ACP | SANITARY SEWER, SIZE & TYPE |
| MON. | MON. | SURVEY MONUMENT | | TOP OF SLOPE | SLOPES (W/SLOPE RATIO) | | 8" PVC | FORCE MAIN, SIZE & TYPE |
| I.F. | I.F. | SURVEY IRON (FOUND) | | | EDGE OF TRAVELED WAY (TYPE) | | 8" DI | WATER MAIN, SIZE & TYPE |
| D.H. PK. STK. | D.H. PK. STK. | DRILL HOLE, PK OR STAKE | C | F | CUT OR FILL LINE | | 12" RCP | STORM DRAIN, SIZE & TYPE |
| | | WOODS OR BRUSH LINE | CLL | | CONSTRUCTION LIMIT LINE | UD | 8" PVC UD | UNDERDRAIN, SIZE & TYPE |
| | | INDIVIDUAL TREE (DECIDUOUS) | | | BITUMINOUS PAVEMENT | | 12" BCCMP | CULVERT, SIZE & TYPE |
| | | INDIVIDUAL TREE (CONIFEROUS) | | | GRAVEL ROAD | | | RAILROAD |
| | | TREE, TO BE REMOVED | | | CONCRETE | S | S | SILTATION FENCE |
| | | MARSH AREA | B-12 MW-2 P-20 | B-12 MW-2 P-20 | TEST BORING, MONITORING WELL OR PROBE & NUMBER | | | |
| | | | | | | | | |

PIPE SCHEDULE

2" HDPE SHALL BE SDR 17 WITH BUTT FUSED JOINTS.

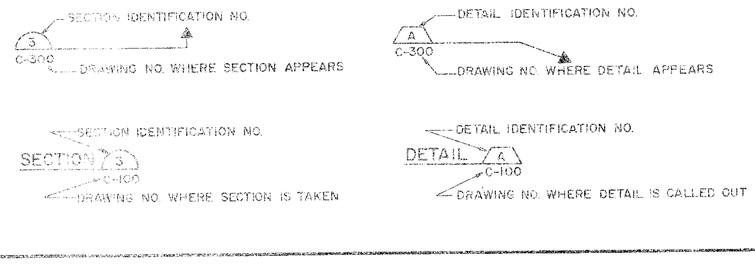
6" PVC SHALL BE SDR 21 WITH PUSH-ON JOINTS.

12" PVC SHALL BE SDR 26 WITH PUSH-ON JOINTS.

# ABBREVIATIONS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A.C.C.M.P. | ASPHALT COATED C.M.P. | CONC | CONCRETE | FPS | FEET PER SECOND | NO | NUMBER |
| A.C.P. | ASBESTOS CEMENT PIPE | CONST | CONSTRUCTION | FT OR ' | FEET | O.C. | ON CENTER |
| AC | ACRE | CONTR | CONTRACTOR | FTG | FOOTING | O.D. | OUTSIDE DIAMETER |
| AGG. | AGGREGATE | CTR | CENTER | GA. | GAUGE | P.C. | POINT OF CURVE |
| ALUM | ALUMINUM | CY | CUBIC YARD | GAL | GALLON | P.I. | POINT OF INTERSECTION |
| APPD | APPROVED | D | DEGREE OF CURVE (ARC DEF.) | GALV | GALVANIZED | P.T. | POINT OF TANGENT |
| APPROX | APPROXIMATE | DBL | DOUBLE | GPD | GALLONS PER DAY | PERF | PERFORATED |
| ASB | ASBESTOS | DEG OR ° | DEGREE | GPM | GALLONS PER MINUTE | PSI | POUNDS PER SQUARE INCH |
| ASPH | ASPHALT | DEPT | DEPARTMENT | HDPE | HIGH DENSITY POLYETHYLENE | PVC | POLYVINYL CHLORIDE |
| ATP C.M.P. | ALUMINUM TYPE 2 C.M.P. | DI | DUCTILE IRON | HP | HORSEPOWER | PVMT | PAVEMENT |
| AUTO | AUTOMATIC | DIA OR Ø | DIAMETER | HYD | HYDRANT | QTY | QUANTITY |
| AUX | AUXILIARY | DIM | DIMENSION | I.D. | INSIDE DIAMETER | R.O.W. | RIGHT OF WAY |
| AVE | AVENUE | DIST | DISTANCE | IN OR " | INCHES | RAD | RADIUS |
| AVG | AVERAGE | DR | DOWN | INVERT | INVERT | REQ'D | REQUIRED |
| AZ | AZIMUTH | DR | DRAIN | INV. EL. | INVERT ELEVATION | RT | RIGHT |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | DRG | DRAWING | LB | POUND | RTE | ROUTE |
| B.M. | BENCH MARK | EA | EACH | LIN. FT. | LINEAR FEET | S | SLOPE |
| BIT | BITUMINOUS | EG | EXISTING GROUND | LOC | LOCATION | SCH | SCHEDULE |
| BLDG | BUILDING | ELEC | ELECTRIC | LT | LEFT | SF | SQUARE FEET |
| BOT | BOTTOM | ELL | ELBOW | MH | MANHOLE | SHT | SHEET |
| BRG | BEARING | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT | STA | STATION |
| C.B. | CATCH BASIN | EST | ESTIMATED | MATL | MATERIAL | SY | SQUARE YARD |
| C.M.P. | CORRUGATED METAL PIPE | EXC | EXCAVATE | MAX. | MAXIMUM | TAN | TANGENT |
| C.O. | CLEAN OUT | EXIST | EXISTING | MFR | MANUFACTURER | TOB | TOP OF ORGANIC MAT |
| CEM. LIN. | CEMENT LINED | F.G. | FINISH GRADE | MIN. | MINIMUM | TEMP | TEMPORARY |
| CEN | CENTRAL ANGLE OF CURVE | FBRGL | FIBERGLASS | MISC | MISCELLANEOUS | TYP | TYPICAL |
| CF | CUBIC FEET | FDN | FOUNDATION | MON | MONUMENT | V | VOLTS |
| CFS | CUBIC FEET PER SECOND | FLEX | FLEXIBLE | N.I.C. | NOT IN THIS CONTRACT | W/ | WITH |
| CI | CAST IRON | FLG | FLANGE | N.T.S. | NOT TO SCALE | W/O | WITHOUT |
| CL | CLASS | FLR | FLOOR | N/F | NOW OR FORMERLY | YD | YARD |

# VIEW MARKERS & IDENTIFICATION




**SEVEE & MAHER ENGINEERS, INC.**
WESTBROOK, MAINE

JOB NO. 8804

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY 3 LANDFILL
CELLS 3A AND 3B
SYMBOLS & ABBREVIATIONS

JOB NO.
ENG. REQ. NO. 2-8627
FILE NO. 2-092-4703,7082

Y88-15912

| DRAWING NO | REFERENCE DRAWING TITLE |
|---|---|
| YB-15263 | DOLBY III LANDFILL AREA TOPOGRAPHIC SURVEY |
| SHEET 1 of 2 | AND DIGITIZATION AS OF DECEMBER 5, 1985 |

| CODE | NO. | DATE | REVISION | BY | CHK | APPD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | | RECORD DRAWING | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
WESTBROOK, MAINE

JOB NO. 8804

| | | |
|---|---|---|
| DRN | P.A.E. | 3/88 |
| CKD | | 3/88 |
| CHD | | |
| COND | | |
| APPVD | | |

ISSUE CODE
P - PRELIM | B - BIDS
M - MFG. T.C. | C - CONST
SCALE 1" = 100'

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY 3 LANDFILL
CELLS 3A AND 3B
SITE LOCATION PLAN

JOB NO.
ENG. REG. NO. 2-3627
FILE NO 2-032-4703-7082

YB-15913

**CONSTRUCTION NOTES**

1. RODENT GUARD SHALL CONSIST OF 1/2" MESH GALVANIZED SCREEN CLAMPED TO OUTLET OF PIPE.
2. 6-INCH PIPE CAPS SHALL BE FERNCO QC106 PIPE CAPS OR EQUIVALENT.

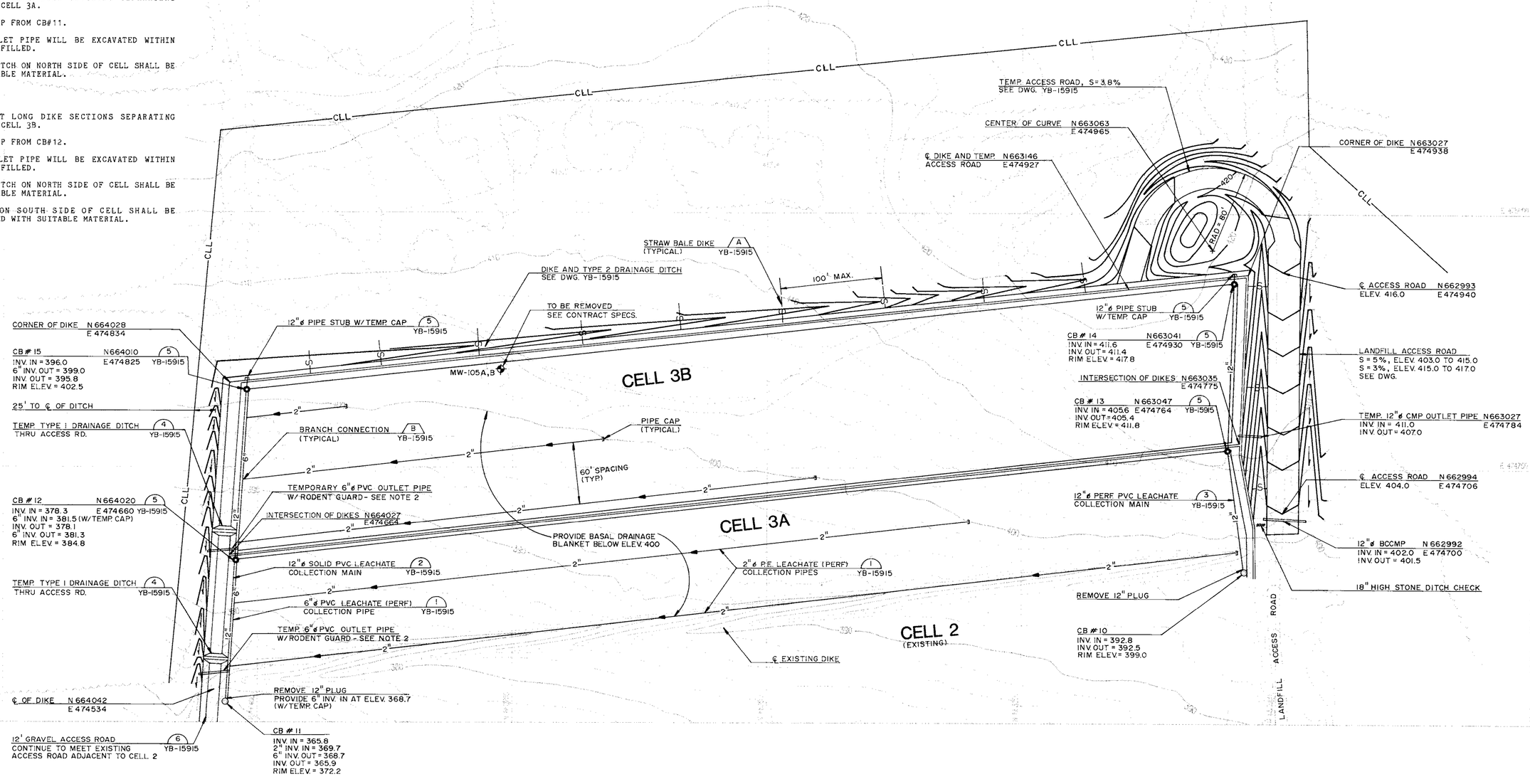
**OPERATION NOTES**

**CELL 3A**

1. REMOVE MINIMUM 15 FT LONG DIKE SECTIONS SEPARATING CB#10 AND CB#11 FROM CELL 3A.
2. REMOVE 6-INCH PIPE CAP FROM CB#11.
3. TEMPORARY 6-INCH OUTLET PIPE WILL BE EXCAVATED WITHIN DIKE, CAPPED AND BACKFILLED.
4. TEMPORARY DRAINAGE DITCH ON NORTH SIDE OF CELL SHALL BE BACKFILLED WITH SUITABLE MATERIAL.

**CELL 3B**

1. REMOVE MINIMUM 15 FT LONG DIKE SECTIONS SEPARATING CB#12 AND CB#13 FROM CELL 3B.
2. REMOVE 6-INCH PIPE CAP FROM CB#12.
3. TEMPORARY 6-INCH OUTLET PIPE WILL BE EXCAVATED WITHIN DIKE, CAPPED AND BACKFILLED.
4. TEMPORARY DRAINAGE DITCH ON NORTH SIDE OF CELL SHALL BE BACKFILLED WITH SUITABLE MATERIAL.
5. TEMPORARY CULVERT ON SOUTH SIDE OF CELL SHALL BE REMOVED AND BACKFILLED WITH SUITABLE MATERIAL.




| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | INIT. | DATE | REVISION | BY | CKD | APPVD | JOB NO. |
|---|---|---|---|---|---|---|---|---|---|
| YB-15800 | DOLBY III LANDFILL - CELL III TOPOGRAPHIC SURVEY AND DIGITIZATION AS OF SEPTEMBER 4, 1987 | | | | | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
WESTBROOK, MAINE

JOB NO. 8804

DSN PAF 3/88
DRD MyCh 3/88
CKD
CORR.
APPVD

ISSUE CODE
P - PRELIM | B - BIDS
M - MTL T.O. | C - CONST

SCALE 1" = 50'

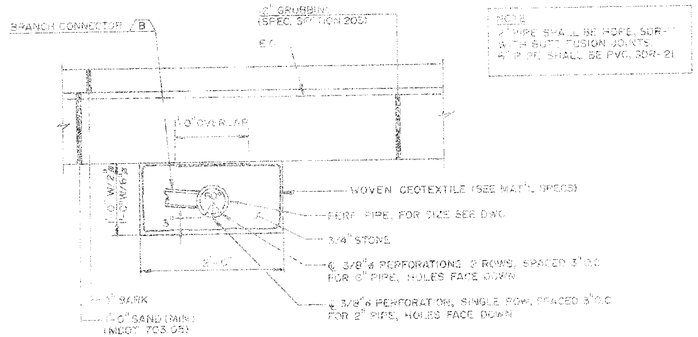
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY 3 LANDFILL
CELLS 3A AND 3B
SITE DEVELOPMENT PLAN

JOB NO.
ENG. REC. NO. 2-8627
FILE NO. 2-092-4703, 7082

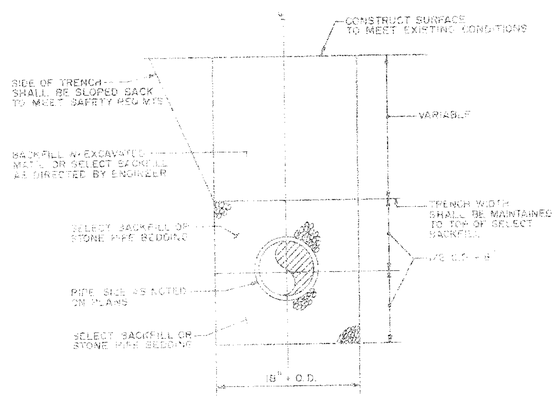
YB-15914




NOTE
4" PIPE SHALL BE HDPE, SDR-17 WITH BUTT FUSION JOINTS
6" & 8" PIPE SHALL BE PVC, SDR-21

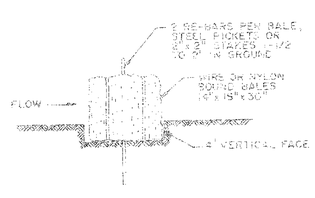
## 2-IN. & 6-IN. LEACHATE COLLECTION PIPES (1)

SCALE: 1" = 1'-0"



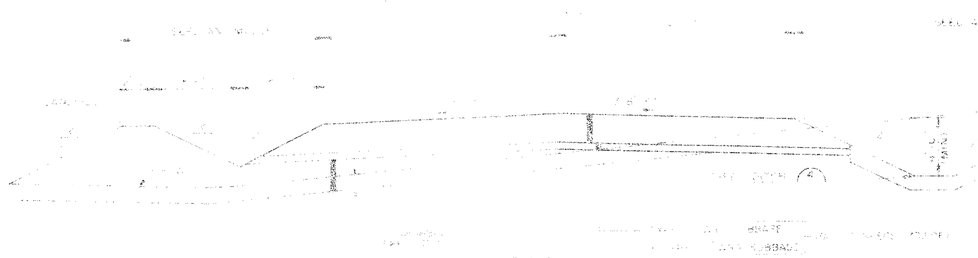

## PIPE TRENCH (2)

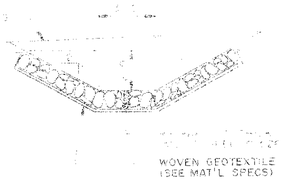
NTS




## STRAW BALE DIKE (A)

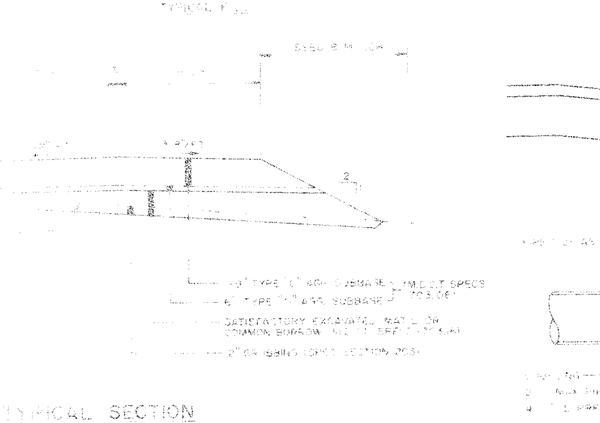
NTS

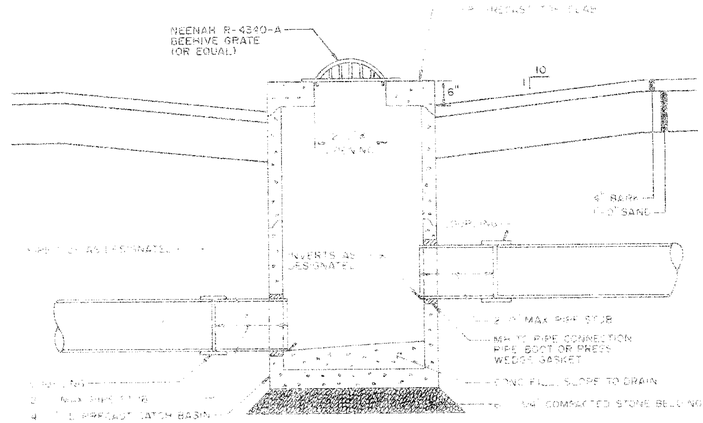



## TYPE 1 DITCH (4)

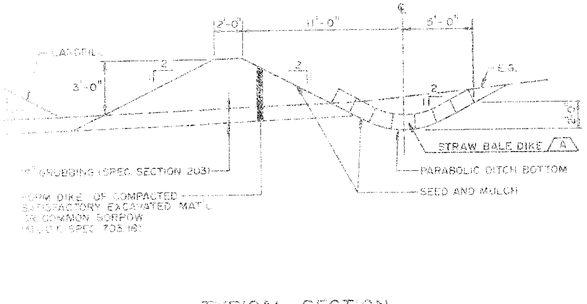
NTS



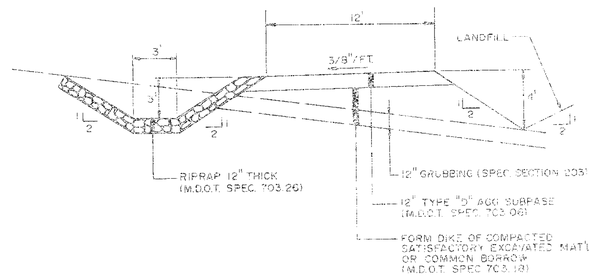

## TYPICAL CATCH BASIN (5)

NTS

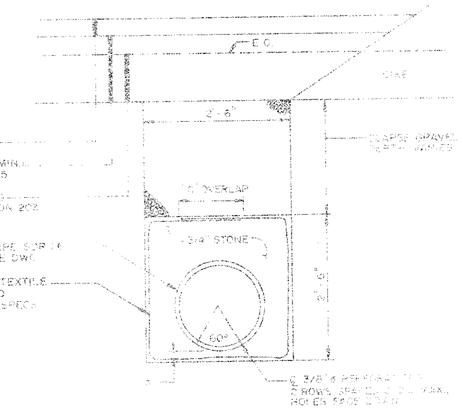



## TYPICAL SECTION
## DIKE AND TYPE 2 DRAINAGE DITCH

SCALE: 1" = 5'

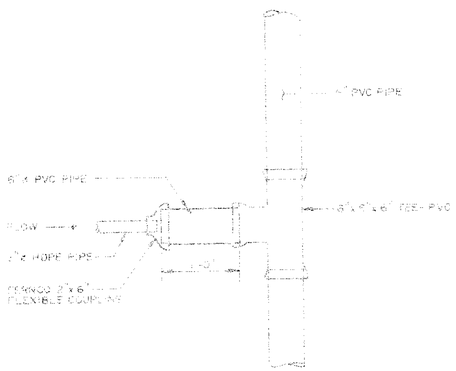



## DIKE ACCESS ROAD (6)




## PERF. LEACHATE COLLECTION MAIN (3)

NTS




## BRANCH CONNECTOR (B)

NTS

RECORD DRAWING

| DATE | BY | REVISION |
|---|---|---|

SEVEE & MAHER ENGINEERS, INC.
WESTBROOK, MAINE

JOB NO. 8804

| | |
|---|---|
| DSN. P.A.F. | 5/88 |
| DRN. M.A.S. | 3/89 |
| CHK. | |
| APPR. | |
| ISSUE CODE | |
| P - PRELIM. | B - BIDS |
| F - FINAL | C - CONST. |
| SCALE: AS SHOWN | |

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

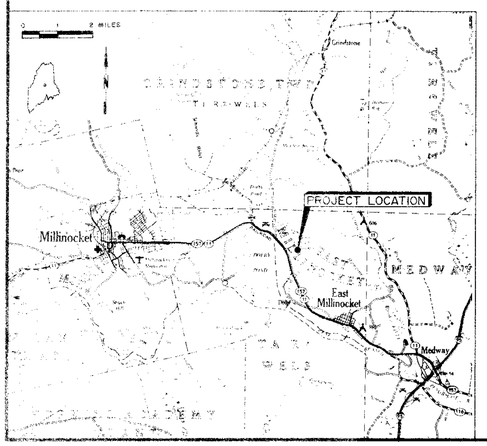
CENTRAL ENGINEERING DEPARTMENT

DOLBY 3 LANDFILL
CELLS 3A AND 3B
SECTIONS AND DETAILS

DRG. NO. Y8-1591
DRG. REF. NO. C-3864
FILE NO. C-298, 1703, 7062

# GREAT NORTHERN PAPER CO.
# MILLINOCKET, MAINE

# DOLBY III LANDFILL
# CELL 4 CONSTRUCTION




SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

1989

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY III LANDFILL
CELL 4
COVER SHEET

JOB NO. 94528
ENG. REQ. NO.
FILE NO 2-092-4703.7082

YB-19000

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | STONE WALL |
| | | NORTH ARROW (MAGNETIC) | | | DRAINAGE COURSES W/DIRECTION & DITCH |
| N | | NORTH ARROW (PLAN NORTH) | SHORE SIDE | | EDGE OF WATER |
| 25 | 25 | CONTOUR LINES | | | WATER ELEVATION (GROUND OR SURFACE) |
| 25.63 | 25.56 | SPOT ELEVATION (GRADE) | | | ROCK OUTCROP OR LEDGE |
| E.G. | | EXISTING GROUND (PROFILES & SECTIONS) | | | FENCE LINE (WOOD) |
| S ℄ | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT | | | FENCE LINE (WIRE) |
| 0+00 | 1+00 | CONSTRUCTION BASELINE | (STONE) | (CONC) FACE | RETAINING WALL (TYPE) |
| | ℄ | PROPERTY OR DEED LINE (NOT SURVEYED) | | | GUARD RAIL |
| 525.14' N35°-10'-41"E | 525.14' N35°-10'-41"E | PROPERTY LINE W/BEARING & DISTANCE | | | BUILDING & STRUCTURES |
| | | ROADS, EASEMENTS OR RIGHT OF WAY LINE | | | STEPS W/ TYPE (WOOD/CONCRETE) |
| | | BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY) | | 2 1 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) |
| MON. | MON. | SURVEY MONUMENT | | TOP OF SLOPE 2 1 | SLOPES (W/SLOPE RATIO) |
| I.F. | I.F. | SURVEY IRON (FOUND) | | | EDGE OF TRAVELED WAY (TYPE) |
| D.H. PK. STK. | D.H. RK. STK. | DRILL HOLE, PK OR STAKE | | C F | CUT OR FILL LINE |
| | | WOODS OR BRUSH LINE | | CLL | CONSTRUCTION LIMIT LINE |
| | | INDIVIDUAL TREE (DECIDUOUS) | | | BITUMINOUS PAVEMENT |
| | | INDIVIDUAL TREE (CONIFEROUS) | | | GRAVEL ROAD |
| | | TREE, TO BE REMOVED | | | CONCRETE |
| | | MARSH AREA | B-12 MW-2 P-20 | B-12 MW-2 P-20 | TEST BORING, MONITORING WELL OR PROBE & NUMBER |

| EXISTING | PROPOSED | |
|---|---|---|
| TP-103 | TP-103 | TEST PIT & NUMBER |
| □ | ■ | CLEAN OUT STRUCTURES |
| ○ | ● | MANHOLE |
| ⌑ | ⌑ | WATER VALVE |
| ⌑ | ⌑ | HYDRANT |
| ⌽ | ⌽ | TELEPHONE OR POWER POLE |
| ◎ | ◎ | CATCH BASIN |
| G | 8" G | UNDERGROUND GAS MAIN & SIZE |
| T | T | UNDERGROUND TELEPHONE CABLE/CONDUIT |
| E | E | UNDERGROUND ELECTRIC CABLE/CONDUIT |
| OE | OE | OVERHEAD ELECTRICAL LINE |
| | 12"ACP | SANITARY SEWER, SIZE & TYPE |
| | 6" PVC | FORCE MAIN, SIZE & TYPE |
| | 8" DI | WATER MAIN, SIZE & TYPE |
| | 12" RCP | STORM DRAIN, SIZE & TYPE |
| UD | 6" PVC UD | UNDERDRAIN, SIZE & TYPE |
| | 12" BCCMP | CULVERT, SIZE & TYPE |
| | | RAILROAD |
| | S S | SILTATION FENCE |

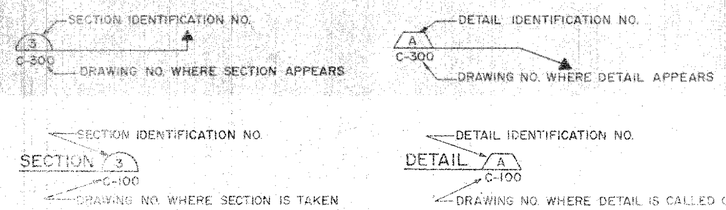
PIPE SCHEDULE

12" PVC SHALL BE SDR 26 WITH PUSH-ON JOINT

## ABBREVIATIONS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A.C.C.M.P. | ASPHALT COATED C.M.P. | CONC | CONCRETE | FPS | FEET PER SECOND | NO. | NUMBER |
| A.C.M.P. | ASPHALTED CEMENT PIPE | CONST | CONSTRUCTION | FT OR ' | FEET | O.C. | ON CENTER |
| AC | ACRE | CONTR | CONTRACTOR | FTG | FOOTING | O.D. | OUTSIDE DIAMETER |
| AGG. | AGGREGATE | CTR | CENTER | GA | GAUGE | P.C. | POINT OF CURVE |
| ALUM | ALUMINUM | CY | CUBIC YARD | GAL | GALLON | P.I. | POINT OF INTERSECTION |
| APPR | APPROVED | D | DEGREE OF CURVE (ARC DEF.) | GALV | GALVANIZED | P.T. | POINT OF TANGENT |
| APPROX | APPROXIMATE | DBL | DOUBLE | GPD | GALLONS PER DAY | PERF | PERFORATED |
| ASB | ASBESTOS | DEG OR ° | DEGREE | GPM | GALLONS PER MINUTE | PSI | POUNDS PER SQUARE INCH |
| ASPH | ASPHALT | DEPT | DEPARTMENT | HDPE | HIGH DENSITY POLYETHYLENE | PVC | POLYVINYL CHLORIDE |
| AVG. C.M.P. | ALUMINUM TYPE 2 C.M.P. | DI | DUCTILE IRON | HP | HORSEPOWER | PVMT | PAVEMENT |
| AUTO | AUTOMATIC | DIA OR ⌀ | DIAMETER | HYD | HYDRANT | QTY | QUANTITY |
| AVE | AVENUE | DIM | DIMENSION | I.D. | INSIDE DIAMETER | R.O.W | RIGHT OF WAY |
| BIT | BITUMEN | DIST | DISTANCE | IN OR " | INCHES | RAD | RADIUS |
| BITG | BITUMINOUS | DR | DOOR | INV | INVERT | RECD | RECEIVED |
| BIT. C.M.P. | BITUMINOUS COATED C.M.P. | DRNG | DRAINING | INV. EL. | INVERT ELEVATION | RT | RIGHT |
| BM | BENCH MARK | EA | EACH | LB | POUND | RTE | ROUTE |
| BOT | BOTTOM | EG | EXISTING GROUND | LIN. FT | LINEAR FEET | S | SLOPE |
| BTWN | BETWEEN | ELEC | ELECTRIC | LOC | LOCATION | SCH | SCHEDULE |
| BVEN | BEVELED | ELEV | ELEVATION | LT | LEFT | SF | SQUARE FEET |
| CAP | CAPACITY | EMBED | EMBEDMENT | M.H. | MANHOLE | SHT | SHEET |
| CATCH BASIN | CB | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT | STA | STATION |
| CENTER LINE | CL | EST | ESTIMATED | MATL | MATERIAL | SY | SQUARE YARD |
| CORRUGATED METAL PIPE | CMP | ESQ | ESQUARE | MAX. | MAXIMUM | TAN | TANGENT |
| CUBIC FOOT | CF | EXIST | EXISTING | MFR | MANUFACTURE | TDH | TOTAL DYNAMIC HEAD |
| CUBIC YARD | CY | F.G. | FINISH GRADE | MIN. | MINIMUM | TEMP | TEMPORARY |
| CENTRAL ANGLE OF CURVE | Δ | FBGLS | FIBERGLASS | MISC | MISCELLANEOUS | TYP | TYPICAL |
| CUBIC FEET | CF | FDN | FOUNDATION | MON | MONUMENT | V | VOLTS |
| CUBIC FEET PER SECOND | CFS | FLEX | FLEXIBLE | N.I.T.C. | NOT IN THIS CONTRACT | W/ | WITH |
| CENTER LINE | CL | FLG | FLANGE | N.T.S. | NOT TO SCALE | W/O | WITHOUT |
| CLEAR | CLR | FLR | FLOOR | N/F | NOW OR FORMERLY | YRD | YARD |

## VIEW MARKERS & IDENTIFICATION





SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE


JOB NO. 8932

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY DAM FALL
CELL 4
SYMBOLS & ABBREVIATIONS

JOB NO. 9852R
ENG. REF. NO.
FILE NO. 2-[illegible]

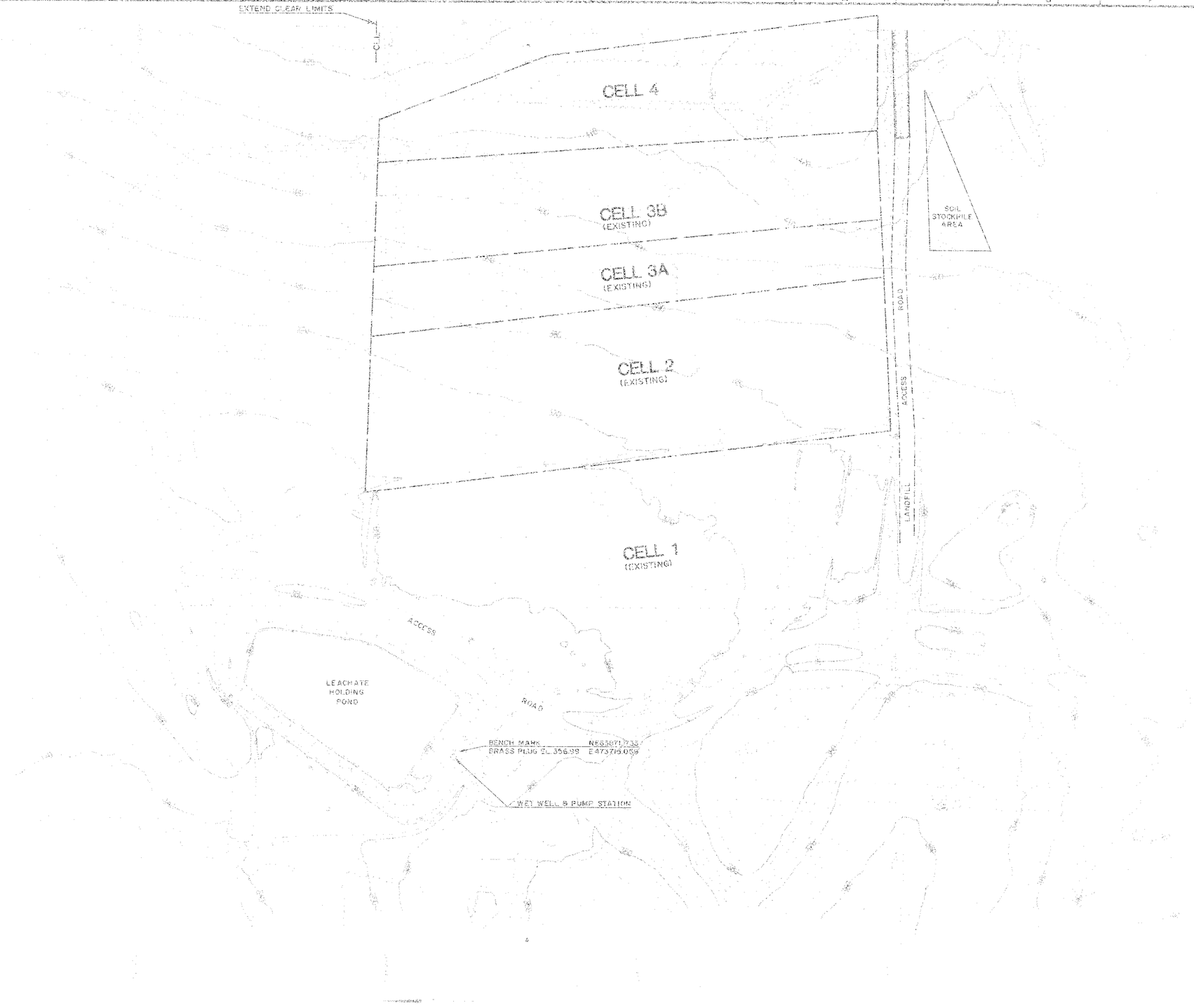
STATE OF MAINE — JOHN M. PEIER — No. 5082 — REGISTERED PROFESSIONAL ENGINEER

5


| | | |
|---|---|---|
| | RECORD DRAWING<br>PLAN OF SOIL SAMPLE POINTS (REF.)<br>CELL 3B EAST BASIN MODIFICATIONS & RELATED<br>CHERRYFIELD | |

SEVEY & MAYER ENGINEERS, INC.
CHERRYFIELD, MAINE

Great Northern Paper




| NO. | REVISED | DATE | BY | CHKD | APPVD |
|---|---|---|---|---|---|
| 0 | RELEASED FOR CONSTRUCTION | 12-5-90 | PAF | | |
| 1 | RECORD DRAWING | 12-5-90 | PAF | | |

DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION
AS OF DECEMBER 5, 1990

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

JOB No. 8932

| | | |
|---|---|---|
| DRAWN | PAF | 8/89 |
| CHKD | PAF | 8/89 |
| DES. | PAF | 9/89 |
| CORR. | | |
| APPD. | | |
| ISSUE CODE | | |
| P - PRELIM | B - BIDS | |
| M - MYLAR | C - CONST | |
| SCALE | 1" = 200' | |

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

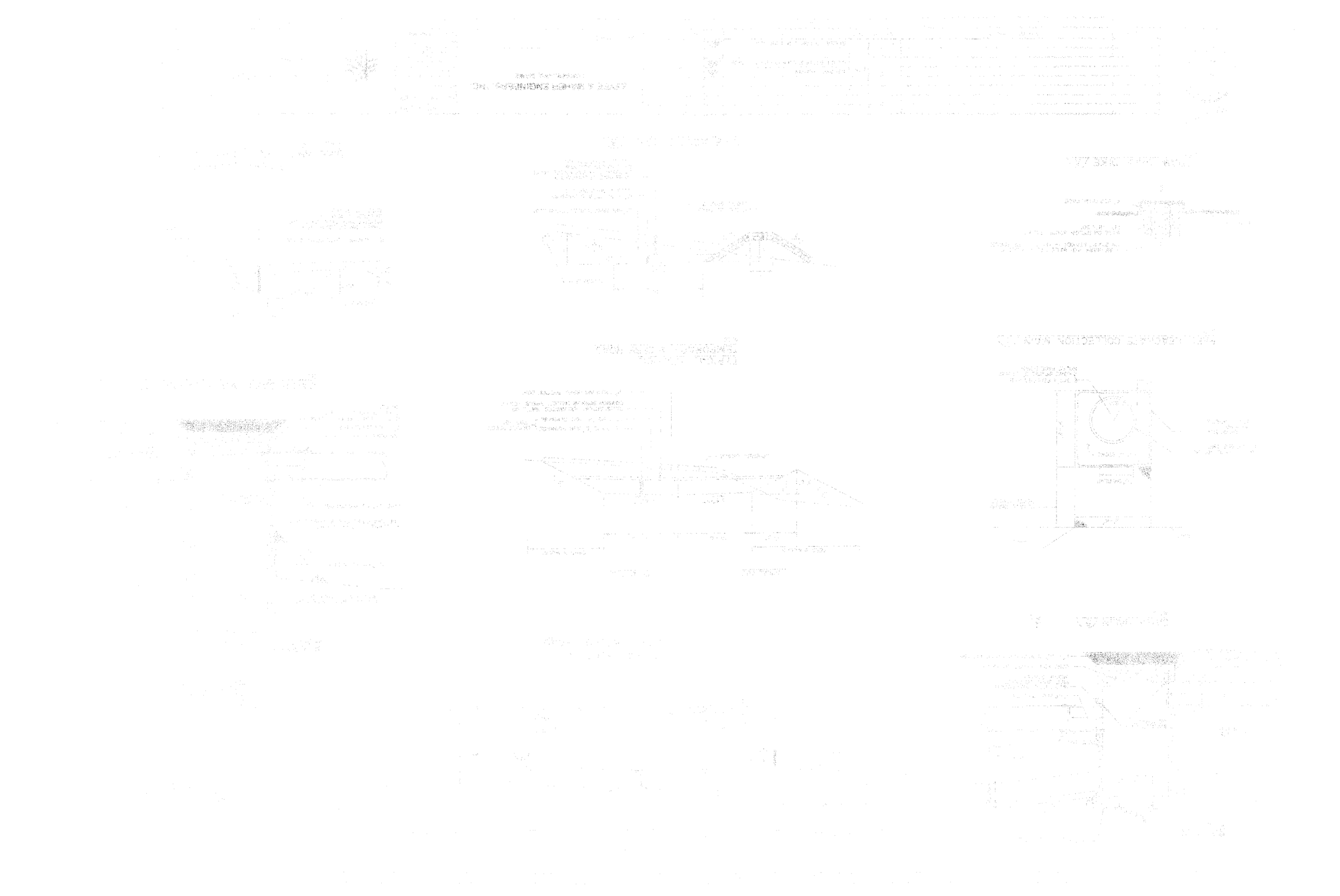
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET, ME.

DOLBY III LANDFILL
CELL 4
SITE LOCATION PLAN

JOB NO. 94529
DWG. NO. 2
FILE NO. E-094-4752-D-R2

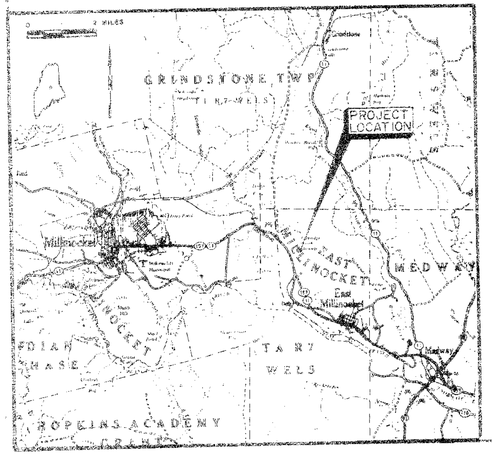
SCALE 1" = 200'

Y2-0002



# GEORGIA-PACIFIC, NORTHERN PAPERS DIVISION
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# REMEDIAL ACTIONS CELLS 1 AND 2

| SHT NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-19176 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-19177 |
| 3 | SITE LOCATION PLAN | YB-19178 |
| 4 | EXISTING TOPOGRAPHY PLAN - CELL 1 | YB-19179 |
| 5 | EXISTING TOPOGRAPHY PLAN - CELL 2 | YB-19180 |
| 6 | SECTIONS & DETAILS | YB-19181 |




## SEVEE & MAHER ENGINEERS, INC.
## CUMBERLAND, MAINE
## 1990

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
COVER SHEET

JOB NO.
ENG. REQ. NO.
FILE NO. Z-092-430(7 7089

YB-19176

# SYMBOLS

EXISTING | PROPOSED

- DOWN ARROW (TRUE)
- NORTH ARROW (MAGNETIC)
- NORTH ARROW (PLAN NORTH)
- CONTOUR LINES
- SPOT ELEVATION (GRADE)
- EXISTING GROUND (MAJOR (5' INTERVAL) MINOR (1' INTERVAL))
- SURVEY BASELINE WITH STATIONING AND INTERSECTION POINT
- CONSTRUCTION BASELINE
- PROPERTY OR DEED LINE (IF SURVEYED)
- PROPERTY LINE W/BEARING & DISTANCE
- ROADS, EASEMENTS OR RIGHT OF WAY LINE
- BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY)
- SURVEY MONUMENT
- SURVEY IRON (FOUND)
- DRILL HOLE, PK OR STAKE
- WOODS OR BRUSH LINE
- INDIVIDUAL TREE (DECIDUOUS)
- INDIVIDUAL TREE (CONIFEROUS)
- TREE TO BE REMOVED
- MARSH AREA

- STONE WALL
- DRAINAGE COURSES W/DIRECTION & DITCH
- EDGE OF WATER
- WATER ELEVATION (FEMA OR U.S. SURVEY)
- ROCK OUTCROP OR LEDGE
- FENCE LINE (WOOD)
- FENCE LINE (WIRE)
- RETAINING WALL (TYPE)
- GUARD RAIL
- BUILDING & STRUCTURES
- STEPS W/TYPE (WOOD, CONCRETE)
- SLOPE RATIO (HORIZONTAL : 1 VERTICAL)
- SLOPES (W/SLOPE RATIO)
- EDGE OF TRAVELED WAY (TYP.)
- CUT OR FILL LINE
- CONSTRUCTION LIMIT LINE
- BITUMINOUS PAVEMENT
- GRAVEL ROAD
- CONCRETE
- TEST BORING, MONITORING WELL OR PROBE & NUMBER

- TEST PIT & NUMBER
- CLEAN OUT STRUCTURES
- MANHOLE
- WATER VALVE
- HYDRANT
- TELEPHONE OR POWER POLE
- CATCH BASIN
- UNDERGROUND GAS MAIN & SIZE
- UNDERGROUND TELEPHONE CABLE / CONDUIT
- UNDERGROUND ELECTRIC CABLE / CONDUIT
- OVERHEAD ELECTRICAL LINE
- SANITARY SEWER, SIZE & TYPE
- FORCE MAIN, SIZE & TYPE
- WATER MAIN, SIZE & TYPE
- STORM DRAIN, SIZE & TYPE
- UNDERDRAIN, SIZE & TYPE
- CULVERT, SIZE & TYPE
- RAILROAD
- SILTATION FENCE

## MATERIAL SPECIFICATIONS

| | |
|---|---|
| SAND - | MDOT SPECIFICATION 703.06b, TYPE F (AGGREGATE FOR SAND LEVELING) PERMEABILITY $2 \times 10^{-3}$ cm/sec |
| COVER SOIL | WELL GRADED TILL SOIL WITH GREATER THAN 15 PERCENT PASSING A NO. 200 SIEVE, NO STONES GREATER THAN 4 INCHES IN DIAMETER (COMPACTED 95 PERCENT STANDARD PROCTOR) |
| TOP COVER SOIL - | A MIXTURE OF WELL GRADED TILL SOIL WITH GREATER THAN 15 PERCENT PASSING A NO. 200 SIEVE AND SECONDARY SLUDGE. NO STONES GREATER THAN 3 INCHES IN DIAMETER |
| SLUDGE - | HOMOGENEOUS SECONDARY SLUDGE AS RECEIVED FROM MILL |

## MATERIAL TESTING SCHEDULE

| BORROW SOURCE | TEST | FREQUENCY |
|---|---|---|
| COVER SOIL | GRAIN SIZE | 4 TEST |
| SAND | GRAIN SIZE | 2 TEST |
| SAND | PERMEABILITY | 2 TEST |
| **ON-SITE** | | |
| COVER SOIL | GRAIN SIZE | 1/2000 CY |
| SAND | GRAIN SIZE | 4 TEST |
| SAND | PERMEABILITY | 1/5000 CY |

TEST METHODS

| | |
|---|---|
| GRAIN SIZE | ASTM D422 |
| PERMEABILITY | ASTM D2434 |

## VIEW MARKERS & IDENTIFICATION

SECTION NO & LOCATION — 3 / C-102 — DRAWING WHERE SECTION OR DETAIL APPEARS

DETAIL IDENTIFICATION & LETTER — MANHOLE A / C-102

SECTION TITLE & NO — ACCESS ROAD 3 / C-100 — DRAWING WHERE SECTION IS TAKEN

DETAIL TITLE & LETTER — MANHOLE A / C-102 — DRAWING WHERE DETAIL IS CALLED OUT

# ABBREVIATIONS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACP | ASPHALT CONCR. PAVE. | C.M.P. | CORRUGATED METAL PIPE | DR | DRAIN | GPD | GALLONS PER DAY |
| A.C.P. | ASBESTOS CEMENT PIPE | C.O. | CLEAN OUT | DWG | DRAWING | GPM | GALLONS PER MINUTE |
| AB | ABOVE | CEM. LIN. | CEMENT LINED | EA | EACH | HDPE | HIGH DENSITY POLYETHYLENE |
| AGG | AGGREGATE | CEN. | CENTRAL ANGLE OF CURVE | EG | EXISTING GROUND OR GRADE | HP | HORSEPOWER |
| ALUM | ALUMINUM | CF | CUBIC FEET | ELEV | ELEVATION | HYD | HYDRANT |
| APPR | APPROVED | CFS | CUBIC FEET PER SECOND | EL | ELBOW | I.D. | INSIDE DIAMETER |
| APPROX | APPROXIMATE | CI | CAST IRON | EQUIP | EQUIPMENT | IN | INCHES |
| ASB | ASBESTOS | CL | CLASS | EST | ESTIMATED | INV | INVERT |
| ASPH | ASPHALT | CONC | CONCRETE | EXC | EXCAVATE | INV. EL. | INVERT ELEVATION |
| ATP (C.M.P.) | ASPHALT COATED (C.M.P.) | CONST | CONSTRUCTION | EXIST | EXISTING | LB | POUND |
| AUTO | AUTOMATIC | CONTR | CONTRACTOR | F.G. | FINISH GRADE | LC | LEACHATE COLLECTION |
| AUX | AUXILLIARY | CTR | CENTER | FRAGL | FIBERGLASS | LD | LEAK DETECTION |
| AVE | AVENUE | CY | CUBIC YARD | FDN | FOUNDATION | LIN. FT. | LINEAR FEET |
| AVG | AVERAGE | D | DEGREE OF CURVE (ARC DEF.) | FLEX | FLEXIBLE | LOC | LOCATION |
| BIT | BITUMEN | DBL | DOUBLE | FLG | FLANGE | LT | LEFT |
| BIT. (C.M.P.) | BITUMINOUS COATED (C.M.P.) | DEG OR ° | DEGREE | FLR | FLOOR | MAX | MAXIMUM |
| B.M. | BENCH MARK | DEPT | DEPARTMENT | FPS | FEET PER SECOND | MH | MANHOLE |
| BIT | BITUMINOUS | DI | DUCTILE IRON | FT OR ' | FEET | MECH. JOINT | MECHANICAL JOINT |
| BLDG | BUILDING | DIA OR Ø | DIAMETER | FTG | FOOTING | MATL | MATERIAL |
| BOT | BOTTOM | DIM | DIMENSION | GA | GAUGE | MFR | MANUFACTURER |
| BRG | BEARING | DIST | DISTANCE | GAL | GALLON | MIN | MINIMUM |
| BSN | BENCH BASIN | DN | DOWN | GALV | GALVANIZED | MISC | MISCELLANEOUS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MON | MONUMENT | SF | SQUARE FEET |
| N.I.C. | NOT IN THIS CONTRACT | SHT | SHEET |
| N.T.S. | NOT TO SCALE | STA | STATION |
| N/F | NOW OR FORMERLY | SY | SQUARE YARD |
| NO. OR # | NUMBER | TAN | TANGENT |
| O.C. | ON CENTER | TDH | TOTAL DYNAMIC HEAD |
| O.D. | OUTSIDE DIAMETER | TEMP | TEMPORARY |
| P.C. | POINT OF CURVE | TYP | TYPICAL |
| P.I. | POINT OF INTERSECTION | V | VOLTS |
| P.T. | POINT OF TANGENT | W/ | WITH |
| PERF | PERFORATED | W/O | WITHOUT |
| PSI | POUNDS PER SQUARE INCH | YD | YARD |
| PVC | POLYVINYL CHLORIDE | | |
| PVMT | PAVEMENT | | |
| QTY | QUANTITY | | |
| R.O.W. | RIGHT OF WAY | | |
| RAD | RADIUS | | |
| REQ'D | REQUIRED | | |
| RT | RIGHT | | |
| RTE | ROUTE | | |
| S | SLOPE | | |
| SCH | SCHEDULE | | |

| NO. | BY | DATE | REVISION |
|---|---|---|---|
| 5 | A. BOOKS | 10/5/07 | ISSUED FOR BID - ADDENDUM 1 |

DES. | DRN. | CHKD. | APPD. | DATE | SCALE | JOB NO.

SEVEE & MAHER ENGINEERS, INC.
COMBERLAND, MAINE

Great Northern Paper
A Company of Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
SOLID WASTE LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
SYMBOLS & ABBREVIATIONS

DWG. NO. Y8-10177
FAC. REF. NO.
FILE NO. 1064-4228.010

CELL 5

CELL 4

CELL 3B

CELL 3A

CELL 2

CELL 1

MATCH LINE SHEET 2

NOTE: CONTOURS SHOWN E 475000 MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE

BOULDER STOCKPILE AREA

ROAD

ACCESS

LANDFILL

LIMITS OF CONSTRUCTION

ACCESS

LEACHATE HOLDING POND

36" BCCMP

BENCH MARK
N663871.733
E473715.059
3" BRASS PLUG EL. 356.99

WET WELL & PUMP STATION

SEDIMENT POND OUTLET STRUCTURE C YB-19181

LEVEL SPREADER (TYP) D YB-19131

E 475500
E 475000
E 474500
E 474000
E 473500
E 473250
N 665500
N 665000
N 664500
N 664000
N 663500
N 663000
N 662500

STATE OF MAINE
PETER M. MAHER
#6107
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO | REFERENCE DRAWING TITLE |
|---|---|
| YB-15263 | DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 12/90 | RECORD DRAWING | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CUMBERLAND, MAINE

| | |
|---|---|
| DRN | R.L.B. 1/90 |
| CKD | M.G.C. 8/90 |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| C-CONST | |
| SCALE | 1" = 100' |

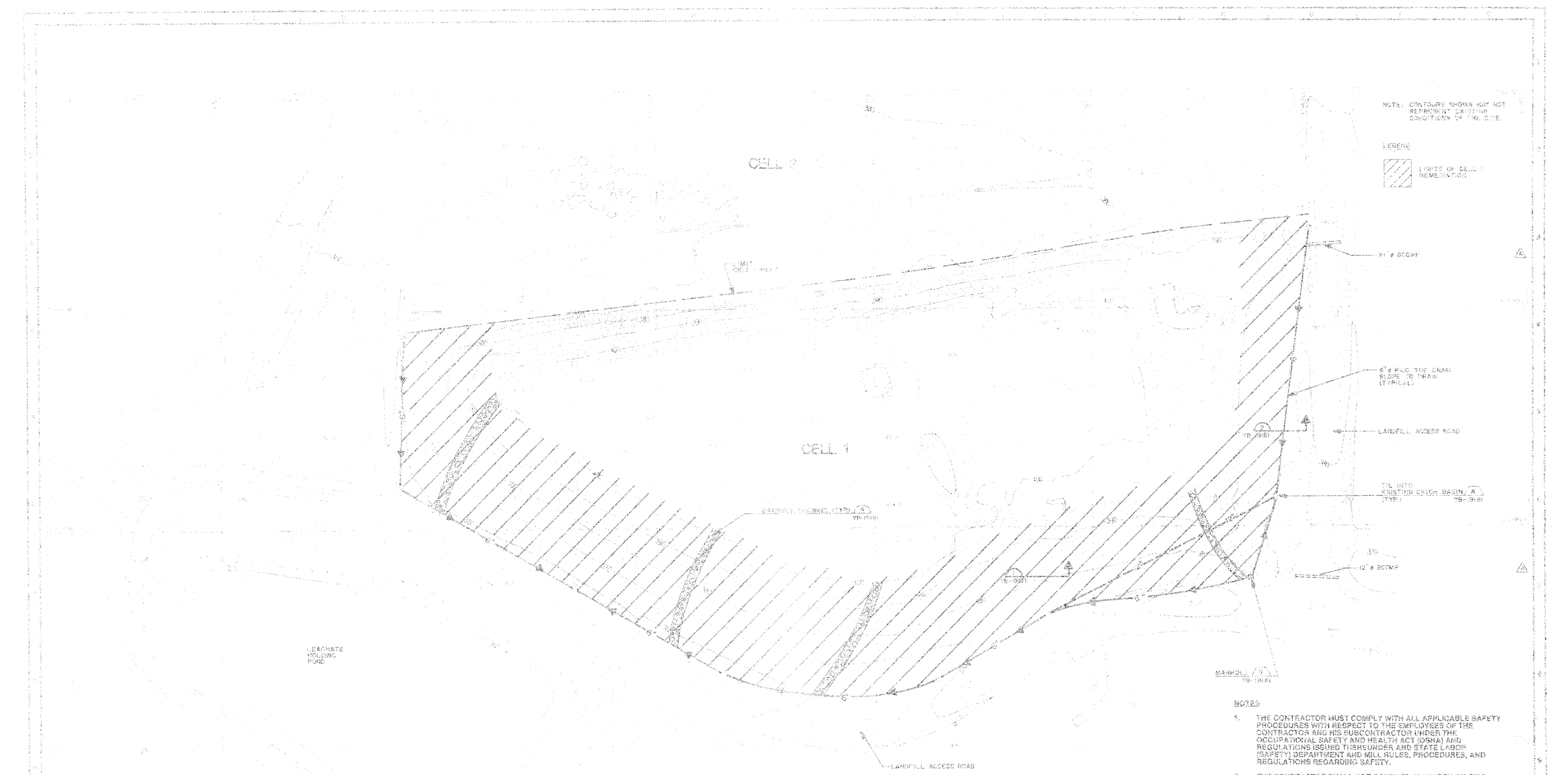
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
SITE LOCATION PLAN

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703.7092

YB-19178




NOTES

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.

| | | | |
|---|---|---|---|
| 15 | 1979B | DOLBY JR LANDFILL-CELL 1 TOPOGRAPHIC SURVEY & CONTOURING | 6/92 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | |
|---|---|
| | RECORD DRAWING |
| B | ADDENDUM ISSUED FOR BID - ADDENDUM 1 |

SEVEE & MAHER ENGINEERS, INC.

COMBERLAND, MAINE

| | |
|---|---|
| DES. | KLL |
| DR. | JAS |
| CK'D | |
| APP'D | |
| ISSUE DATE | 7/92 |
| SCALE | 1" = 50' |

Great Northern Paper

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

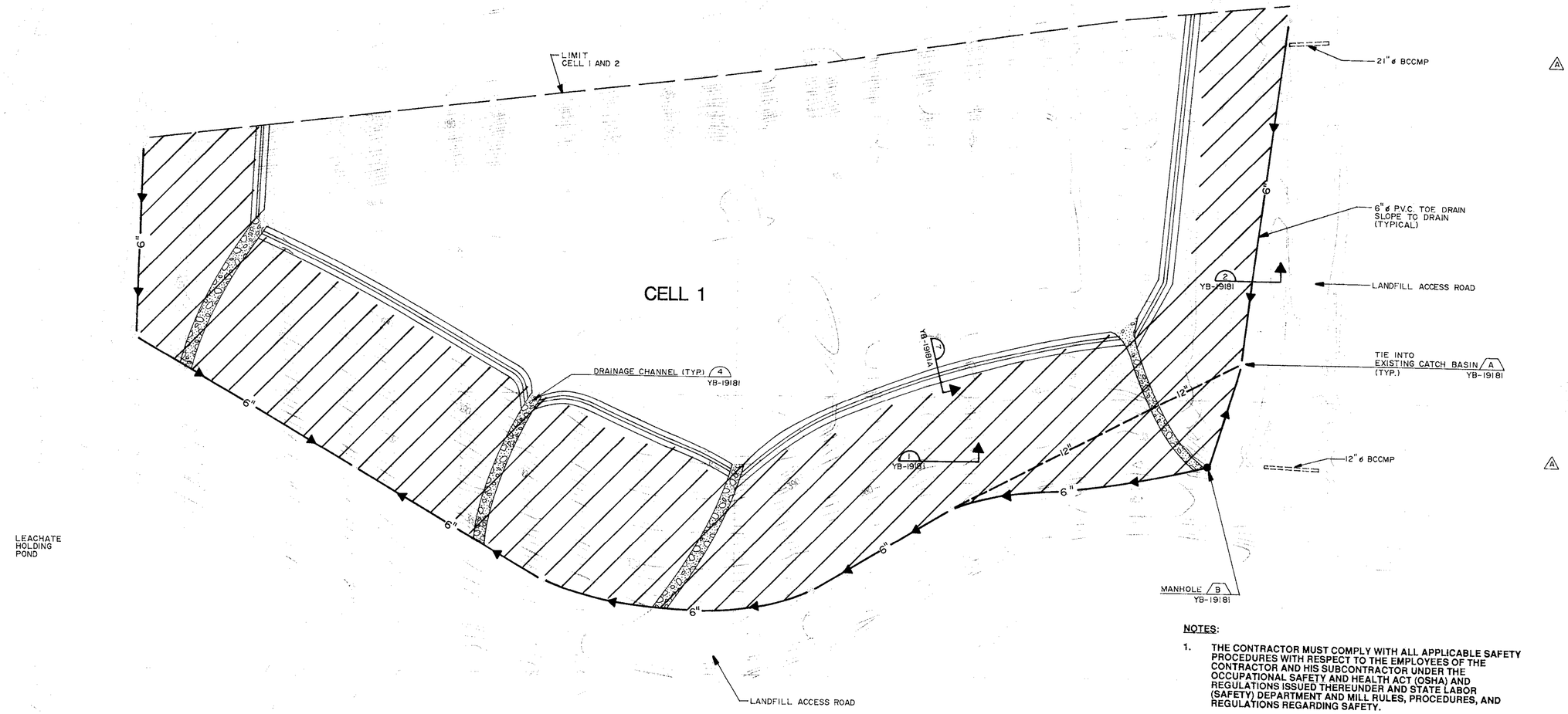
DOLBY JR. LANDFILL
REMEDIAL ACTIONS - CELLS 1 & 2
EXISTING TOPOGRAPHY PLAN - CELL 1

JOB NO. 15-1979
DWG. NO. YB-1917
CONTRACT NO. YB-1917

NOTE: CONTOURS SHOWN MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

LEGEND

LIMITS OF CELL I REMEDIATION




NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.

STATE OF MAINE PETER A. MAHER 14107 REGISTERED PROFESSIONAL ENGINEER

YB-15798 DOLBY III LANDFILL-CELL I, TOPOGRAPHIC SURVEY & DIGITIZ.(9/4/87)

B 12/90 RECORD DRAWING

A 8/20/90 ISSUED FOR BID - ADDENDUM I

**SEVEE & MAHER ENGINEERS, INC.**

**CUMBERLAND, MAINE**

RLR 7/90
M.G.B. 8/90

1" = 50'

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL I & 2
EXISTING TOPOGRAPHY PLAN - CELL I

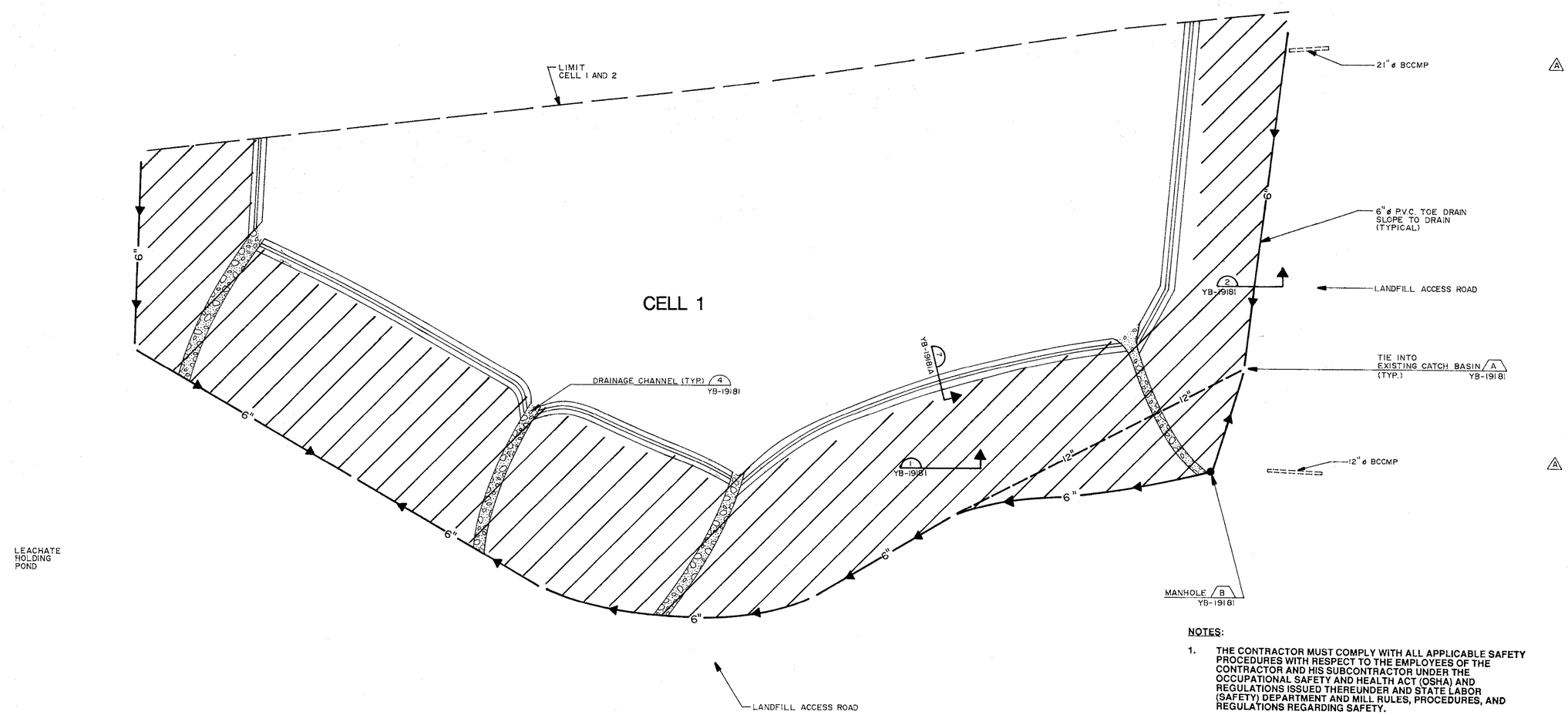
2-092-4703,7082

Y 19179A

NOTE: CONTOURS SHOWN MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

LEGEND

LIMITS OF CELL 1 REMEDIATION




NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.

STATE OF MAINE · PEVEAR · MAHER 14107 · REGISTERED PROFESSIONAL ENGINEER

**SEVEE & MAHER ENGINEERS, INC.**

**CUMBERLAND, MAINE**

RLP 7/90
M. Ø6 8/90

1" = 50'

YB-15798 DOLBY III LANDFILL-CELL 1, TOPOGRAPHIC SURVEY & DIGITIZ.(9/4/87)

| | | |
|---|---|---|
| | 12/90 | RECORD DRAWING |
| B | A 8/20/90 | ISSUED FOR BID - ADDENDUM 1 |

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
EXISTING TOPOGRAPHY PLAN - CELL 1

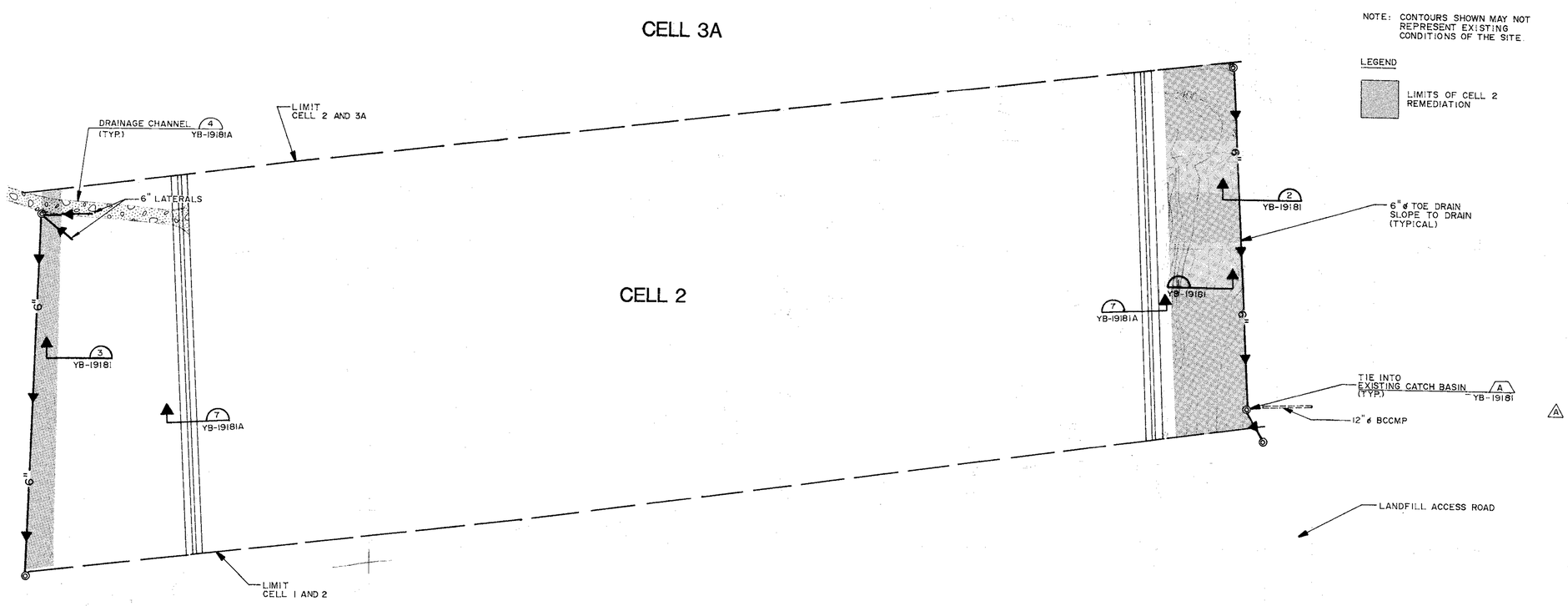
2-092-4703,7082

Y 19179A

NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.




STATE OF MAINE — PETER M. MAHER #4107 — REGISTERED PROFESSIONAL ENGINEER

YB-15799 DOLBY III LANDFILL-CELL 2, TOPOGRAPHIC SURVEY & DIGITIZ. (9/4/87)

| | | |
|---|---|---|
| | 12/90 | RECORD DRAWING |
| B | A 8/20/90 | ISSUED FOR BID - ADDENDUM I |

**SEVEE & MAHER ENGINEERS, INC.**

**CUMBERLAND, MAINE**

RCR 7/90
M. Gits 8/90

[redacted]

△A

# EAST MILLINOCKET MILL

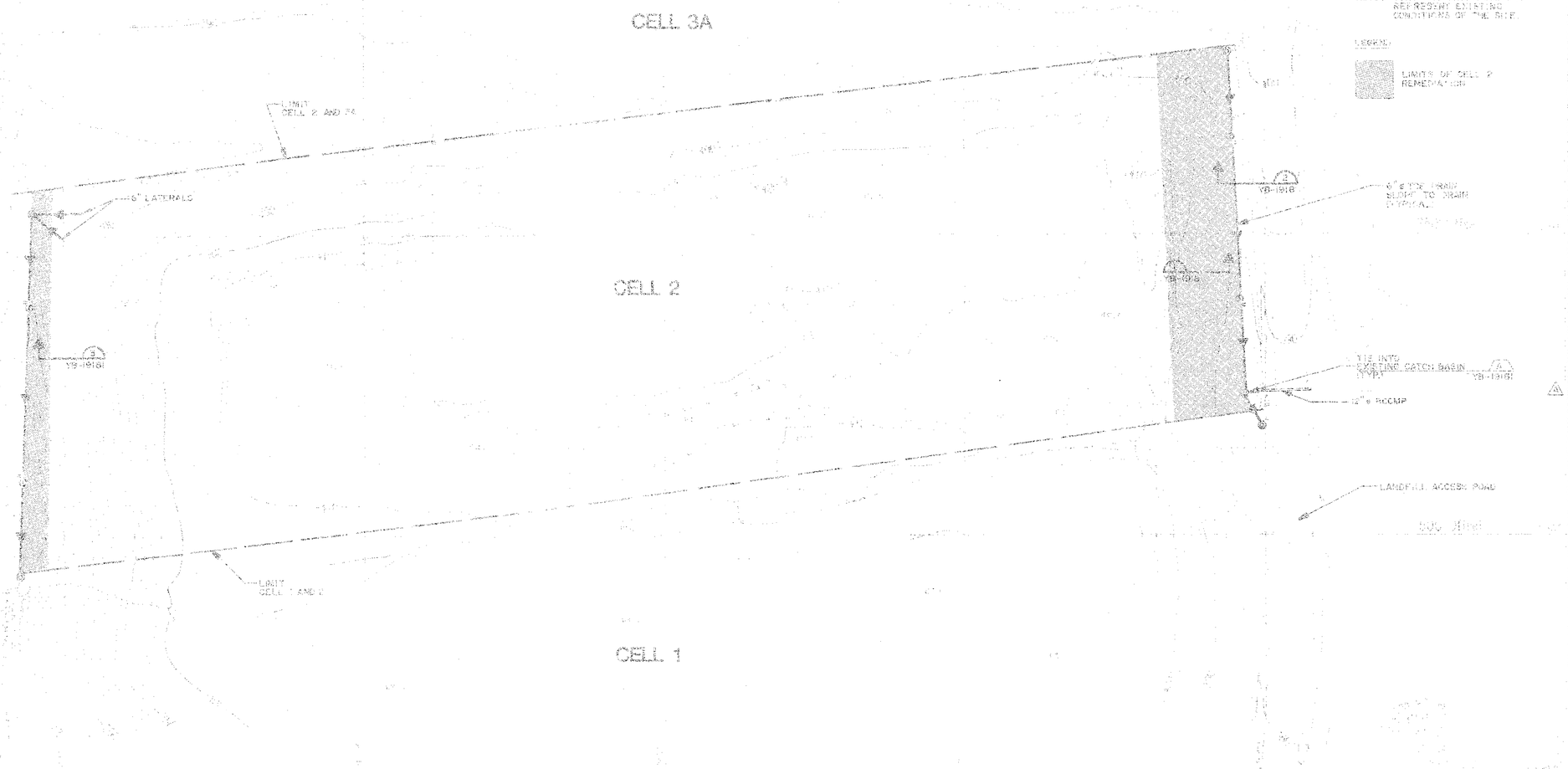
DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
EXISTING TOPOGRAPHY PLAN - CELL 2

2-092-4703, 7082

Y -19180A

NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.



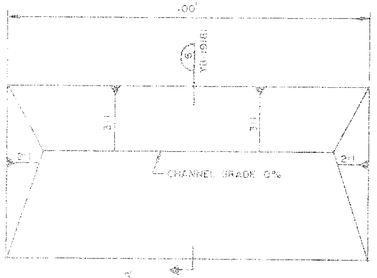

| | | | |
|---|---|---|---|
| YB-1925 | DOLBY III LANDFILL CELL 2 TOPOGRAPHIC SURVEY & PLAN (3/4/21) | B | 10/19/21 RECORD DRAWING |
| | | A | 9/20/00 ISSUED FOR BID - ADDENDUM 1 |

SEVEE & MAHER ENGINEERS, INC.
COMBERLAND, MAINE

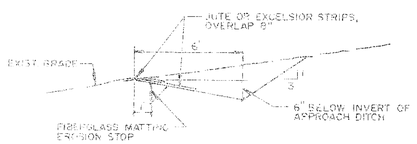
Great Northern Paper

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
EXISTING TOPOGRAPHY PLAN - CELL 2

YB-1912C

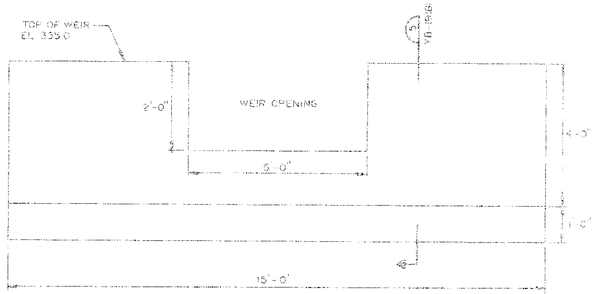


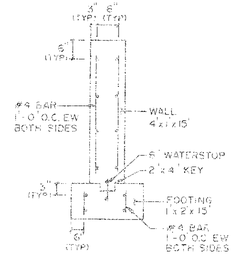

NOTE: LAST 20 FT. OF DRAINAGE FLOW NOT TO EXCEED 3% GRADE




SECTION (6) YB-19181

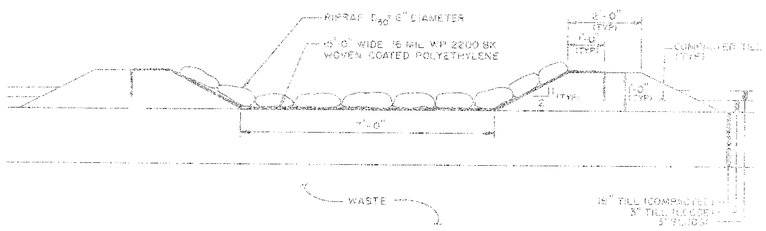
LEVEL SPREADER (D)
N.T.S. YB-19178



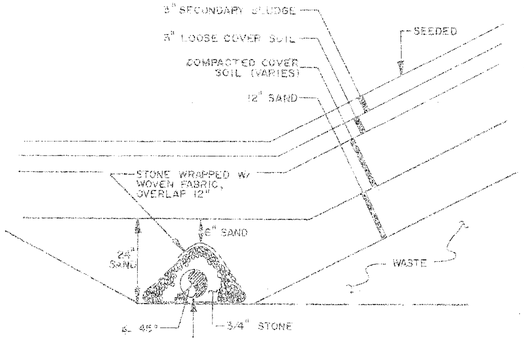




SECTION (5) YB-19181

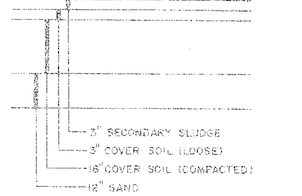
WEIR DETAIL (C)
SCALE: 1"=2'-0" YB-19178




SIDESLOPE DRAINAGE CHANNELS (4)
SCALE: 1"=2'-0" YB-19179




TOE DRAIN SECTION (2)
N.T.S. YB-19179 YB-19180



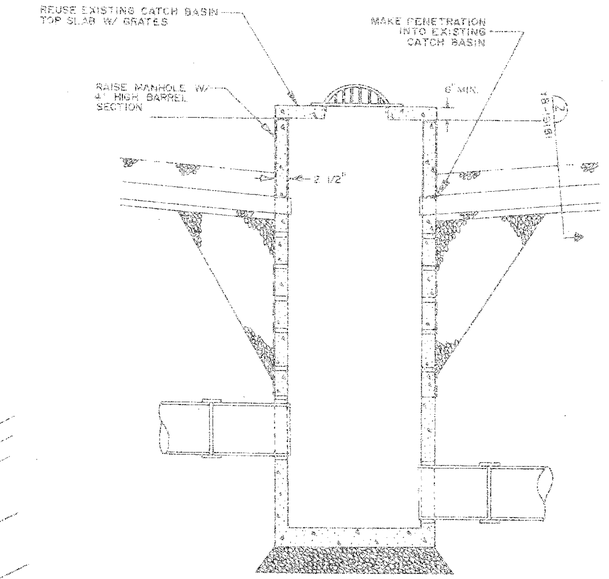

NOTE: SOUTHERN SIDE OF CELL 2 AND ALONG ENTIRE FACE OF CELL 1 AS SHOWN ON EXISTING TOPOGRAPHY PLANS.

FINAL COVER SECTION (1)
SCALE: 1"=2'-0" YB-19179 YB-19180

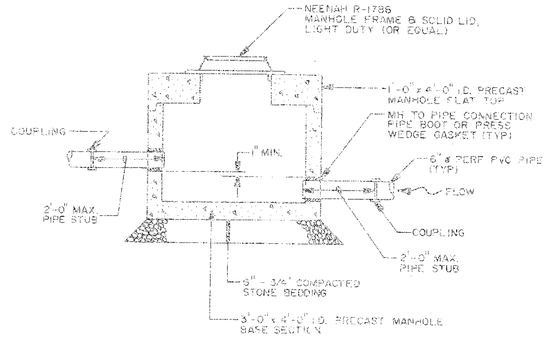



NOTE: NORTHERN SIDE OF CELL 2 SHOWN ON EXISTING TOPOGRAPHY PLAN.

INTERMEDIATE SLOPE COVER SECTION (3)
SCALE: 1"=2'-0" YB-19180




CATCH BASIN (A)
N.T.S. (EXISTING) YB-19179 YB-19180




MANHOLE (B)
SCALE: 1"=2'-0" YB-19179

| NO. | BY | DATE | REVISION | CK | APP |
|---|---|---|---|---|---|
| 0 | | 12/90 | RECORD DRAWING | | |
| A | | 9/20/89 | ISSUED FOR BID - ADDENDUM 1 | | |

ORIGINAL SCALE: AS NOTED
REFERENCE DRAWING NUMBERS:

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

| | |
|---|---|
| DES | J.D.C. |
| DRN | J.D.C. |
| CHKD | R.P.M. |
| QA/QC | |
| APPVD | |
| ISSUE CODE | |
| SCALE | AS SHOWN |

Great Northern Paper
A company of Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

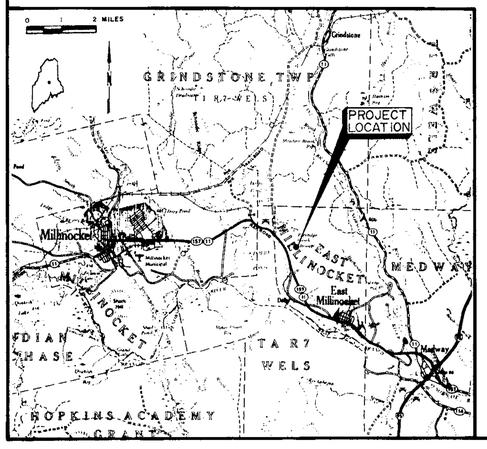
DOLBY B LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
SECTIONS & DETAILS

JOB NO.
WORK ORDER NO.
FILE NO. E-092-4203.7082

YB-19181

# GEORGIA-PACIFIC, NORTHERN PAPERS DIVISION
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# FINAL COVER OF CELLS 3A, 3B AND 4

| SHT NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-19167 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-19168 |
| 3 | SITE LOCATION PLAN | YB-19169 |
| 4 | EXISTING TOPOGRAPHY PLAN | YB-19170 |
| 5 | SECTIONS & DETAILS | YB-19171 |




## SEVEE & MAHER ENGINEERS, INC.
## CUMBERLAND, MAINE
## 1990

STATE OF MAINE PETER J. MAHER 5107 REGISTERED PROFESSIONAL ENGINEER

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
FINAL COVER - CELLS 3A, 3B, & 4
COVER SHEET

JOB NO.
ENG. REQ. NO.
FILE NO 2-092-4703, 7082

YB-19167

# SYMBOLS

| EXISTING | PROPOSED | |
|---|---|---|
| | | NORTH ARROW (TRUE) |
| | | NORTH ARROW (MAGNETIC) |
| N | | NORTH ARROW (PLAN NORTH) |
| 25 | 25 | CONTOUR LINES |
| 25.63 | 25.56 | SPOT ELEVATION (GRADE) |
| E.G. | | EXISTING GROUND (PROFILES & SECTIONS) |
| SB | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT |
| 0+00 | 10+00 | CONSTRUCTION BASELINE |
| P | | PROPERTY OR DEED LINE (NOT SURVEYED) |
| 525.14 N35°-10'-41"E | 525.14 N35°-10'-41"E | PROPERTY LINE W/BEARING & DISTANCE |
| | | ROADS, EASEMENTS OR RIGHT OF WAY LINE |
| | | BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY) |
| MON | MON | SURVEY MONUMENT |
| | | SURVEY IRON (FOUND) |
| DH PK STK | DH PK STK | DRILL HOLE, PK OR STAKE |
| | | WOODS OR BRUSH LINE |
| | | INDIVIDUAL TREE (DECIDUOUS) |
| | | INDIVIDUAL TREE (CONIFEROUS) |
| | | TREE, TO BE REMOVED |
| | | MARSH AREA |

| EXISTING | PROPOSED | |
|---|---|---|
| | | STONE WALL |
| | | DRAINAGE COURSES W/DIRECTION & DITCH |
| SHORE SIDE | | EDGE OF WATER |
| | | WATER ELEVATION (GROUND OR SURFACE) |
| | | ROCK OUTCROP OR LEDGE |
| | | FENCE LINE (WOOD) |
| | | FENCE LINE (WIRE) |
| (STONE) | (CONC) FACE | RETAINING WALL (TYPE) |
| | | GUARD RAIL |
| | | BUILDING & STRUCTURES |
| | | STEPS W/TYPE (WOOD/CONCRETE) |
| | 1 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) |
| TOP OF SLOPE | | SLOPES (W/SLOPE RATIO) |
| | | EDGE OF TRAVELED WAY (TYPE) |
| | | CUT OR FILL LINE |
| | | CONSTRUCTION LIMIT LINE |
| | | BITUMINOUS PAVEMENT |
| | | GRAVEL ROAD |
| | | CONCRETE |
| B-12 MW-2 P-20 | B-12 MW-2 P-20 | TEST BORING, MONITORING WELL OR PROBE & NUMBER |

| EXISTING | PROPOSED | |
|---|---|---|
| TP-103 | TP-103 | TEST PIT & NUMBER |
| | | CLEAN OUT STRUCTURES |
| | | MANHOLE |
| | | WATER VALVE |
| | | HYDRANT |
| | | TELEPHONE OR POWER POLE |
| | | CATCH BASIN |
| -G- | 8" G | UNDERGROUND GAS MAIN & SIZE |
| -T- | T | UNDERGROUND TELEPHONE CABLE/CONDUIT |
| -E- | E | UNDERGROUND ELECTRIC CABLE/CONDUIT |
| OE | OE | OVERHEAD ELECTRICAL LINE |
| | 12" ACP | SANITARY SEWER, SIZE & TYPE |
| | 8" PVC | FORCE MAIN, SIZE & TYPE |
| | 8" DI | WATER MAIN, SIZE & TYPE |
| | 12" RCP | STORM DRAIN, SIZE & TYPE |
| UD | 8" PVC UD | UNDERDRAIN, SIZE & TYPE |
| | 12" BCCMP | CULVERT, SIZE & TYPE |
| | | RAILROAD |
| S | S | SILTATION FENCE |

## MATERIAL SPECIFICATIONS

FINAL COVER

SAND - MDOT SPECIFICATION 703.06b, TYPE F (AGGREGATE FOR SAND LEVELING) PERMEABILITY $\geq 1 \times 10^{-3}$ cm/sec

COVER SOIL - WELL GRADED TILL SOIL WITH GREATER THAN 15 PERCENT PASSING A NO. 200 SIEVE. NO STONES GREATER THAN 4 INCHES IN DIAMETER (COMPACTED 85 PERCENT STANDARD PROCTOR) A1

TOP COVER SOIL - A MIXTURE OF WELL GRADED TILL SOIL WITH GREATER THAN 15 PERCENT PASSING A NO. 200 SIEVE AND SECONDARY SLUDGE. NO STONES GREATER THAN 3 INCHES IN DIAMETER A1

SLUDGE - HOMOGENEOUS SECONDARY SLUDGE AS RECEIVED FROM MILL.

## MATERIAL TESTING SCHEDULE A1

| BORROW SOURCE | TEST | FREQUENCY |
|---|---|---|
| COVER SOIL | GRAIN SIZE | 4 TEST |
| SAND | GRAIN SIZE | 2 TEST |
| SAND | PERMEABILITY | 2 TEST |
| ON-SITE | | |
| COVER SOIL | GRAIN SIZE | 1/2000 CY |
| SAND | GRAIN SIZE | 4 TEST |
| SAND | PERMEABILITY | 1/5000 CY |

TEST METHODS

| | |
|---|---|
| GRAIN SIZE | ASTM D422 |
| PERMEABILITY | ASTM D2434 |

## VIEW MARKERS & IDENTIFICATION

SECTION NO. & LOCATION: 3 / C-300 — DRAWING WHERE SECTION OR DETAIL APPEARS

DETAIL IDENTIFICATION & LETTER: MANHOLE A — C-300

SECTION TITLE & NO.: ACCESS ROAD 3 — DRAWING WHERE SECTION IS TAKEN C-100

DETAIL TITLE & LETTER: MANHOLE A — DRAWING WHERE DETAIL IS CALLED OUT C-100

## ABBREVIATIONS

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A.C.C.M.P. | ASPHALT COATED C.M.P. | C.M.P. | CORRUGATED METAL PIPE | DR | DRAIN | GPD | GALLONS PER DAY | MON | MONUMENT | SF | SQUARE FEET |
| A.C.P. | ASBESTOS CEMENT PIPE | C.O. | CLEAN OUT | DWG | DRAWING | GPM | GALLONS PER MINUTE | N.I.T.C. | NOT IN THIS CONTRACT | SHT | SHEET |
| AC | ACRE | CEM. LIN. | CEMENT LINED | EA | EACH | HDPE | HIGH DENSITY POLYETHYLENE | N.T.S. | NOT TO SCALE | STA | STATION |
| AGG | AGGREGATE | CEN | CENTRAL ANGLE OF CURVE | EG | EXISTING GROUND OR GRADE | HP | HORSEPOWER | N/F | NOW OR FORMERLY | SY | SQUARE YARD |
| ALUM | ALUMINUM | CF | CUBIC FEET | ELEC | ELECTRIC | HYD | HYDRANT | NO. OR # | NUMBER | TAN | TANGENT |
| APPD | APPROVED | CFS | CUBIC FEET PER SECOND | ELL | ELBOW | I.D. | INSIDE DIAMETER | O.C. | ON CENTER | TDH | TOTAL DYNAMIC HEAD |
| APPROX | APPROXIMATE | CI | CAST IRON | EQUIP | EQUIPMENT | IN OR " | INCHES | O.D. | OUTSIDE DIAMETER | TEMP | TEMPORARY |
| ASB | ASBESTOS | CL | CLASS | EST | ESTIMATED | INV | INVERT | P.C. | POINT OF CURVE | TYP | TYPICAL |
| ASPH | ASPHALT | CONC | CONCRETE | EXC | EXCAVATE | INV. EL. | INVERT ELEVATION | P.I. | POINT OF INTERSECTION | V | VOLTS |
| AT2 C.M.P. | ALUMINUM TYPE 2 C.M.P. | CONST | CONSTRUCTION | EXIST | EXISTING | LB | POUND | P.T. | POINT OF TANGENT | W/ | WITH |
| AUTO | AUTOMATIC | CONTR | CONTRACTOR | F.G. | FINISH GRADE | LC | LEACHATE COLLECTION | PERF | PERFORATED | W/O | WITHOUT |
| AUX | AUXILIARY | CTR | CENTER | FBRGL | FIBERGLASS | LD | LEAK DETECTION | PSI | POUNDS PER SQUARE INCH | YD | YARD |
| AVE | AVENUE | CY | CUBIC YARD | FDN | FOUNDATION | LIN. FT. | LINEAR FEET | PVC | POLYVINYL CHLORIDE | | |
| AVG | AVERAGE | D | DEGREE OF CURVE (ARC DEF.) | FLEX | FLEXIBLE | LOC | LOCATION | PVMT | PAVEMENT | | |
| AZ | AZIMUTH | DBL | DOUBLE | FLG | FLANGE | LT | LEFT | QTY | QUANTITY | | |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | DEG OR ° | DEGREE | FLR | FLOOR | M.H. | MANHOLE | R.O.W. | RIGHT OF WAY | | |
| B.M. | BENCH MARK | DEPT | DEPARTMENT | FPS | FEET PER SECOND | M.J. | MECHANICAL JOINT | RAD | RADIUS | | |
| BIT | BITUMINOUS | DI | DUCTILE IRON | FT OR ' | FEET | MATL | MATERIAL | REQD | REQUIRED | | |
| BLDG | BUILDING | DIA OR Ø | DIAMETER | FTG | FOOTING | MAX. | MAXIMUM | RT | RIGHT | | |
| BOT | BOTTOM | DIM | DIMENSION | GA | GAUGE | MFR | MANUFACTURE | RTE | ROUTE | | |
| BRG | BEARING | DIST | DISTANCE | GAL | GALLON | MIN. | MINIMUM | S | SLOPE | | |
| C.B. | CATCH BASIN | DN | DOWN | GALV | GALVANIZED | MISC | MISCELLANEOUS | SCH | SCHEDULE | | |

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APP'D | JOB NO. |
|---|---|---|---|---|---|---|---|
| B | A | 8/20/90 | ISSUED FOR BID - ADDENDUM 1 | | | | |

JOB NO.

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

DRN RLR 7/90
CKD [illegible] 8/90
CKD —
CURR —
APPVD —
ISSUE CODE: 2-BIDS
SCALE

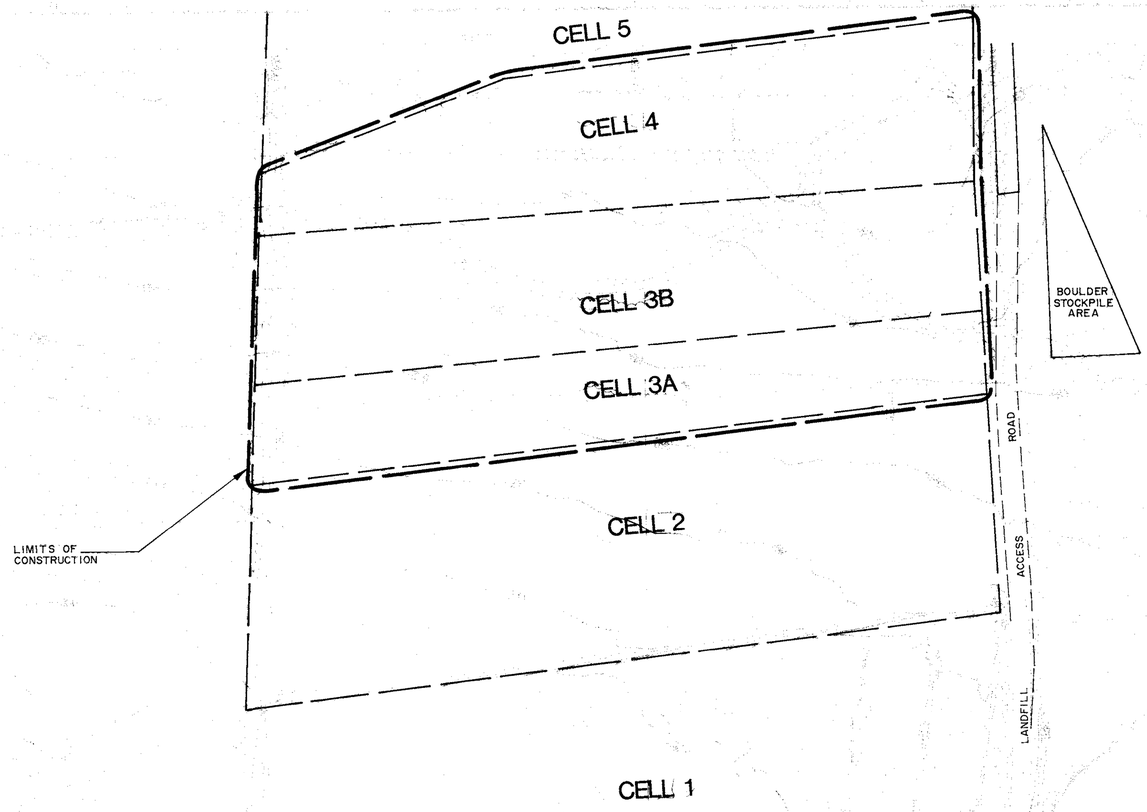
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

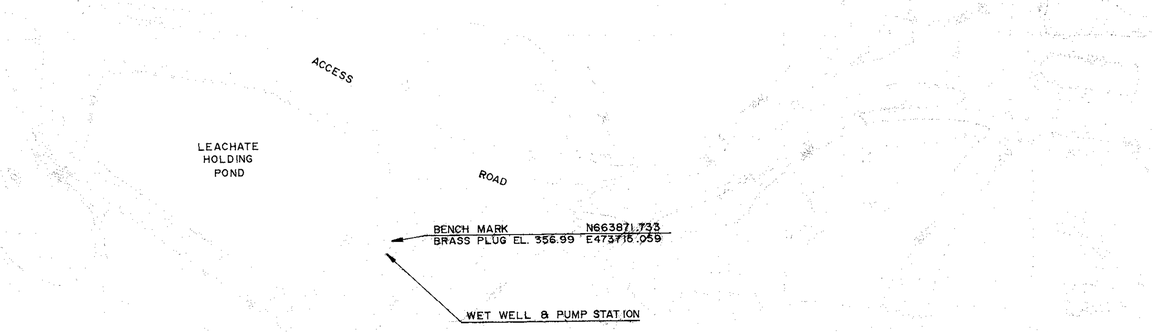
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
FINAL COVER - CELLS 3A, 3B, & 4
SYMBOLS & ABBREVIATIONS

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703, 70R2

YB-19168




STATE OF MAINE
PETER M. MAHER
#4107
REGISTERED PROFESSIONAL ENGINEER

YB-15263 DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION

RCR 7/90
M. Cote 8/90

[redacted]

DOLBY III LANDFILL
FINAL COVER-CELLS 3A, 3B, & 4
SITE LOCATION PLAN

2-092-4703,7082

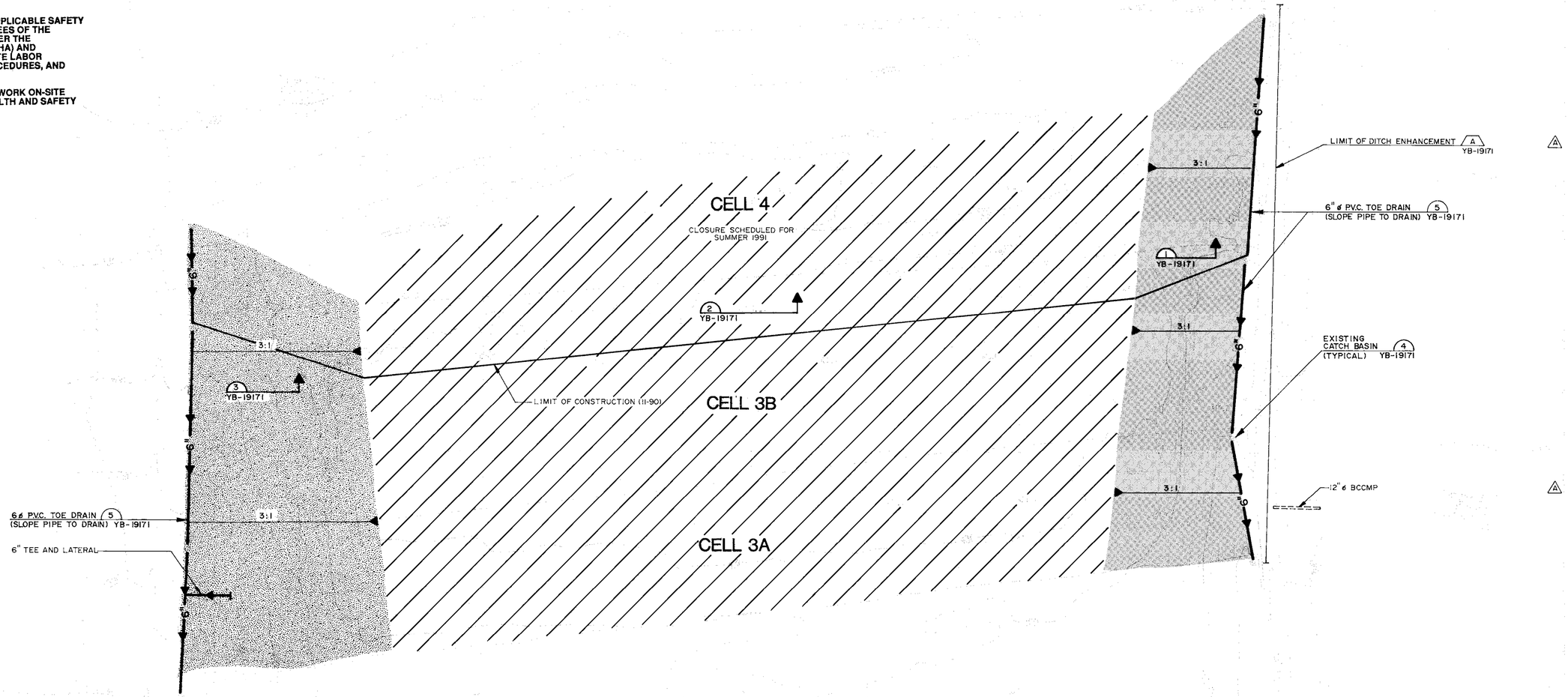
Y-19169

**NOTES:**

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.

NOTE: CONTOURS SHOWN MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.




| | | | | |
|---|---|---|---|---|
| YB-16476 | DOLBY III LANDFILL-CELLS 3A, 3B, & 4 TOPO. SURVEY & DIGITIZ.(4/18/90) | B | 12/90 | RECORD DRAWING |
| | | A | 8/20/90 | ISSUED FOR BID - ADDENDUM 1 |

STATE OF MAINE — PETER A. MAHER — 5102 — REGISTERED PROFESSIONAL ENGINEER

RLR 7/90
AP Cote 8/90

CUMBERLAND, MAINE

JOB NO.

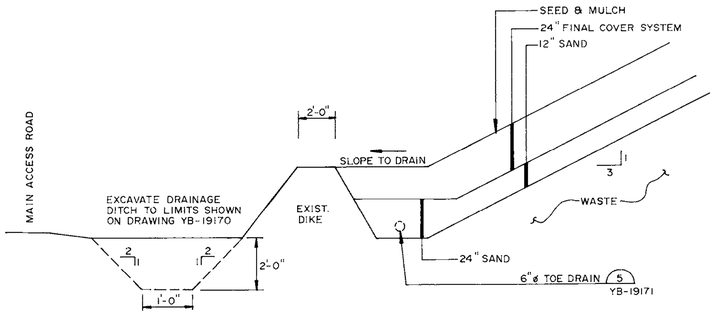
1" = 50'

EAST MILLINOCKET MILL

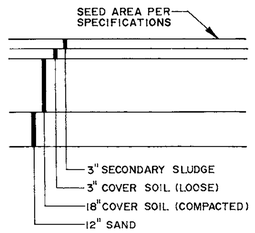
DOLBY III LANDFILL
FINAL COVER-CELLS 3A, 3B, & 4
EXISTING TOPOGRAPHY PLAN

2-092-4703,7082

YB-19170

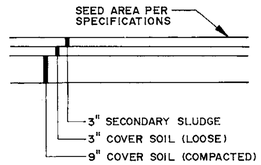



DITCH ENHANCEMENT DETAIL (A)
N.T.S. YB-19170



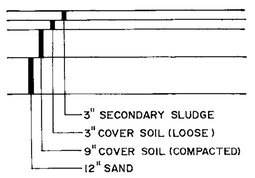

NOTE: SOUTHERN SIDE OF LANDFILL AS SHOWN ON EXISTING TOPOGRAPHY PLAN.

FINAL COVER SECTION (1)
SCALE: 1" = 2'-0" YB-19170



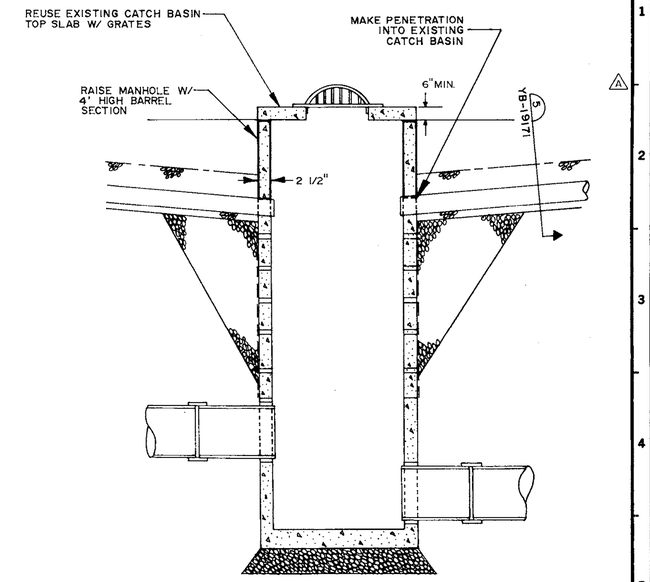

NOTE: TOP OF LANDFILL AS SHOWN ON EXISTING TOPOGRAPHY PLAN.

INTERMEDIATE TOP COVER SECTION (2)
SCALE: 1" = 2'-0" YB-19170

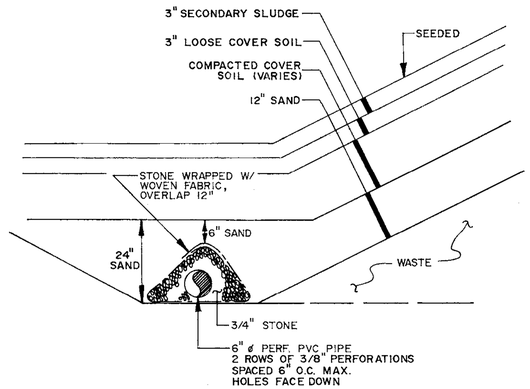



NOTE: NORTHERN SIDE OF LANDFILL AS SHOWN ON EXISTING TOPOGRAPHY PLAN.

INTERMEDIATE SLOPE COVER SECTION (3)
SCALE: 1" = 2'-0" YB-19170




CATCH BASIN (4)
N.T.S. (EXISTING) YB-19170




SECTION (5)
N.T.S. YB-19170 YB-19171

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 12/90 | RECORD DRAWING | | | | |
| | | B | A | 8/20/90 | ISSUED FOR BID - ADDENDUM 1 | | | | |

STATE OF MAINE — 26 FEB 1991 — REGISTERED PROFESSIONAL ENGINEER

**SEVEE & MAHER ENGINEERS, INC.**
**CUMBERLAND, MAINE**

JOB NO.

| | | |
|---|---|---|
| DRN | RLR | 7/90 |
| CKD | A. Cote | 8/90 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: C-CONST
SCALE AS SHOWN

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

**CENTRAL ENGINEERING DEPARTMENT**
EAST MILLINOCKET MILL

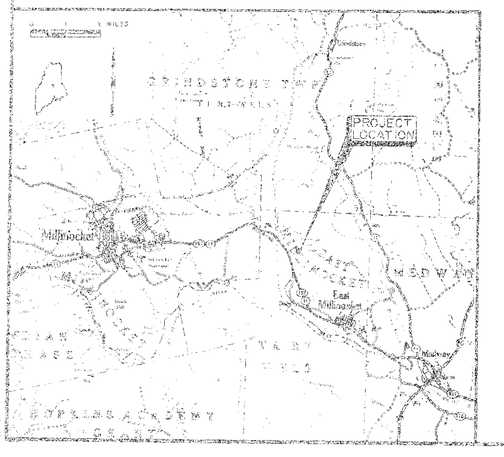
DOLBY III LANDFILL
FINAL COVER-CELLS 3A, 3B, & 4
SECTIONS & DETAILS

JOB NO.
ENG. REQ. NO.
FILE NO 2-092-4703, 7082

**YB-19171**

# GREAT NORTHERN PAPER CO.
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 5 CONSTRUCTION

| SHT NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-19086 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-19087 |
| 3 | SITE LOCATION PLAN SHEET 1 OF 2 | YB-19088 |
| 4 | SITE LOCATION PLAN SHEET 2 OF 2 | YB-19088 |
| 5 | SITE DEVELOPMENT PLAN | YB-19089 |
| 6 | SECTIONS & DETAILS | YB-19090 |
| 7 | FINAL GRADING PLAN | YB-19091 (N.I.T.C.) |




## SEVEE & MAHER ENGINEERS, INC.
## CUMBERLAND, MAINE
## 1990

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY III LANDFILL
CELL 5
COVER SHEET

JOB NO. 93-49
DWG. REQ. NO.
FILE NO. 2-092-4703.70B2

YB-19086

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | STONE WALL | TP-103 | TP-103 | TEST PIT & NUMBER |
| | | NORTH ARROW (MAGNETIC) | | | DRAINAGE COURSES W/DIRECTION & DITCH | □ | ■ | CLEAN OUT STRUCTURES |
| N | | NORTH ARROW (PLAN NORTH) | SHORE SIDE | | EDGE OF WATER | ○ | ● | MANHOLE |
| 25 | 25 | CONTOUR LINES | | | WATER ELEVATION (GROUND OR SURFACE) | ⌑ | ⌑ | WATER VALVE |
| 25.63 | 25.56 | SPOT ELEVATION (GRADE) | | | ROCK OUTCROP OR LEDGE | ⌑ | ⌑ | HYDRANT |
| E.G. | | EXISTING GROUND (PROFILES & SECTIONS) | | | FENCE LINE (WOOD) | ⌑ | ⌑ | TELEPHONE OR POWER POLE |
| SB | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT | | | FENCE LINE (WIRE) | ⌑ | ⌑ | CATCH BASIN |
| 0+00 | 1+00 | CONSTRUCTION BASELINE | (STONE) | (CONC) FACE | RETAINING WALL (TYPE) | G | 9" G | UNDERGROUND GAS MAIN & SIZE |
| | | PROPERTY OR DEED LINE (NOT SURVEYED) | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE CABLE / CONDUIT |
| 525.14' N35°-10'-41"E | 525.14' N35°-10'-41"E | PROPERTY LINE W/BEARING & DISTANCE | | | BUILDING & STRUCTURES | E | E | UNDERGROUND ELECTRIC CABLE / CONDUIT |
| | | ROADS, EASEMENTS OR RIGHT OF WAY LINE | | | STEPS W/ TYPE (WOOD / CONCRETE) | OE | OE | OVERHEAD ELECTRICAL LINE |
| | | BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY) | | 1' 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | | 12"ACP | SANITARY SEWER, SIZE & TYPE |
| MON. | MON. | SURVEY MONUMENT | | TOP OF SLOPE 2 | SLOPES (W/SLOPE RATIO) | | 8" PVC | FORCE MAIN, SIZE & TYPE |
| I.F. | I.F. | SURVEY IRON (FOUND) | | | EDGE OF TRAVELED WAY (TYPE) | | 8" DI | WATER MAIN, SIZE & TYPE |
| D.H. PK STK | D.H. PK STK | DRILL HOLE, PK OR STAKE | C | F | CUT OR FILL LINE | | 12" RCP | STORM DRAIN, SIZE & TYPE |
| | | WOODS OR BRUSH LINE | | CLL | CONSTRUCTION LIMIT LINE | UD | 8" PVC UD | UNDERDRAIN, SIZE & TYPE |
| | | INDIVIDUAL TREE (DECIDUOUS) | | | BITUMINOUS PAVEMENT | | 12" BCCMP | CULVERT, SIZE & TYPE |
| | | INDIVIDUAL TREE (CONIFEROUS) | | | GRAVEL ROAD | | | RAILROAD |
| | | TREE, TO BE REMOVED | | | CONCRETE | | S S | SILTATION FENCE |
| | | MARSH AREA | B-12 MW-2 P-20 | B-12 MW-2 P-20 | TEST BORING, MONITORING WELL OR PROBE & NUMBER | | | |

# ABBREVIATIONS

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A.C.C.M.P. | ASPHALT COATED C.M.P. | C.M.P. | CORRUGATED METAL PIPE | DR | DRAIN | GPD | GALLONS PER DAY | MON | MONUMENT | SF | SQUARE FEET |
| A.C.P. | ASBESTOS CEMENT PIPE | C.O. | CLEAN OUT | DWG | DRAWING | GPM | GALLONS PER MINUTE | N.I.T.C. | NOT IN THIS CONTRACT | SHT | SHEET |
| AC | ACRE | CEM. LIN. | CEMENT LINED | EA | EACH | HDPE | HIGH DENSITY POLYETHYLENE | N.T.S. | NOT TO SCALE | STA | STATION |
| AGG | AGGREGATE | CEN | CENTRAL ANGLE OF CURVE | EG | EXISTING GROUND OR GRADE | HP | HORSEPOWER | N/F | NOW OR FORMERLY | SY | SQUARE YARD |
| ALUM | ALUMINUM | CF | CUBIC FEET | ELEC | ELECTRIC | HYD | HYDRANT | NO. OR # | NUMBER | TAN | TANGENT |
| APPD | APPROVED | CFS | CUBIC FEET PER SECOND | ELL | ELBOW | I.D. | INSIDE DIAMETER | O.C. | ON CENTER | TDH | TOTAL DYNAMIC HEAD |
| APPROX | APPROXIMATE | CI | CAST IRON | EQUIP | EQUIPMENT | IN OR " | INCHES | O.D. | OUTSIDE DIAMETER | TEMP | TEMPORARY |
| ASB | ASBESTOS | CL | CLASS | EST | ESTIMATED | INV | INVERT | P.C. | POINT OF CURVE | TYP | TYPICAL |
| ASPH | ASPHALT | CONC | CONCRETE | EXC | EXCAVATE | INV. EL. | INVERT ELEVATION | P.I. | POINT OF INTERSECTION | V | VOLTS |
| AT2 C.M.P. | ALUMINUM TYPE 2 C.M.P. | CONST | CONSTRUCTION | EXIST | EXISTING | LB | POUND | P.T. | POINT OF TANGENT | W/ | WITH |
| AUTO | AUTOMATIC | CONTR | CONTRACTOR | F.G. | FINISH GRADE | LC | LEACHATE COLLECTION | PERF | PERFORATED | W/O | WITHOUT |
| AUX | AUXILIARY | CTR | CENTER | FBRGL | FIBERGLASS | LD | LEAK DETECTION | PSI | POUNDS PER SQUARE INCH | YD | YARD |
| AVE | AVENUE | CY | CUBIC YARD | FDN | FOUNDATION | LIN. FT. | LINEAR FEET | PVC | POLYVINYL CHLORIDE | | |
| AVG | AVERAGE | D | DEGREE OF CURVE (ARC DEF.) | FLEX | FLEXIBLE | LOC | LOCATION | PVMT | PAVEMENT | | |
| AZ | AZIMUTH | DBL | DOUBLE | FLG | FLANGE | LT | LEFT | QTY | QUANTITY | | |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | DEG OR ° | DEGREE | FLR | FLOOR | M.H. | MANHOLE | R.O.W. | RIGHT OF WAY | | |
| B.M. | BENCH MARK | DEPT | DEPARTMENT | FPS | FEET PER SECOND | M.J. | MECHANICAL JOINT | RAD | RADIUS | | |
| BIT | BITUMINOUS | DI | DUCTILE IRON | FT OR ' | FEET | MATL | MATERIAL | REQD | REQUIRED | | |
| BLDG | BUILDING | DIA OR Ø | DIAMETER | FTG | FOOTING | MAX. | MAXIMUM | RT | RIGHT | | |
| BOT | BOTTOM | DIM | DIMENSION | GA | GAUGE | MFR | MANUFACTURE | RTE | ROUTE | | |
| BRG | BEARING | DIST | DISTANCE | GAL | GALLON | MIN. | MINIMUM | S | SLOPE | | |
| C.B. | CATCH BASIN | DN | DOWN | GALV | GALVANIZED | MISC | MISCELLANEOUS | SCH | SCHEDULE | | |

# VIEW MARKERS & IDENTIFICATION

SECTION NO. & LOCATION

3 / C-300 — DRAWING WHERE SECTION OR DETAIL APPEARS

DETAIL IDENTIFICATION & LETTER

MANHOLE / A — C-300

SECTION TITLE & NO.

ACCESS ROAD / 3 — C-100

DRAWING WHERE SECTION IS TAKEN

DETAIL TITLE & LETTER

MANHOLE / A — C-100

DRAWING WHERE DETAIL IS CALLED OUT

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APP'D | JOB NO. |
|---|---|---|---|---|---|---|---|

**SEVEE & MAHER ENGINEERS, INC.**
CUMBERLAND, MAINE

JOB NO. 9019

| | | |
|---|---|---|
| DRN | RLR | |
| CKD | [illegible] | 5/90 |
| CKD | DKE | 5/90 |
| CORR | [illegible] | 5/15/90 |
| APP'D | BAP | 5/22/90 |

ISSUE CODE: B-BIDS

SCALE

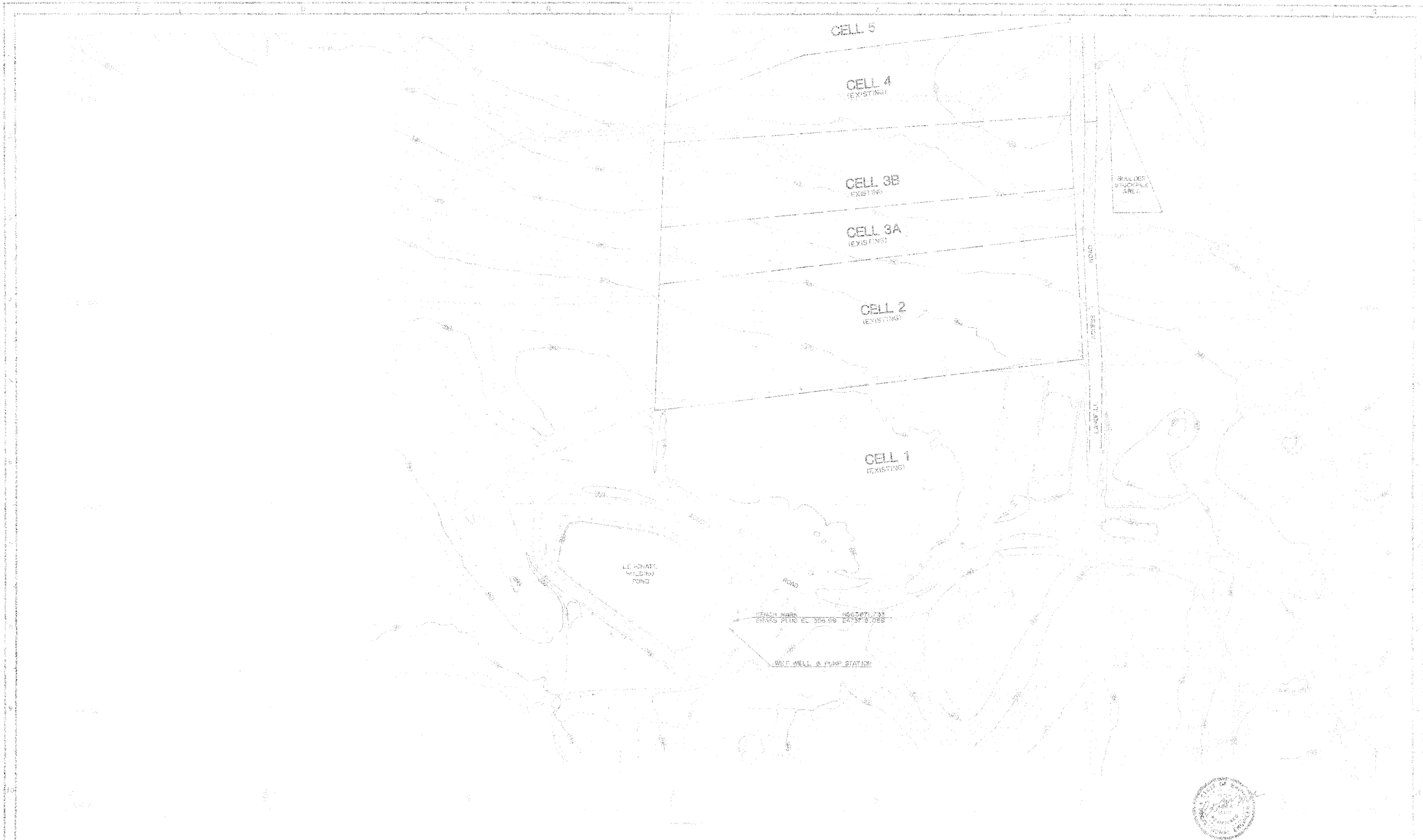
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
CELL 5
SYMBOLS & ABBREVIATIONS

JOB NO. 94545
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

YB-19087




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| YE-5287 | DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION | | | | | | |
| DRAWING NO. | REFERENCE DRAWING NO.'S | CODE | NO. | DATE | REVISION | BY | APP'D |

SEVEE & MAHER ENGINEERS, INC.
COMBERLAND, MAINE

JOB NO. 9019

DES. RLS
DR. SWE 6/9/98
CHK'D RLS 6/9/98
APP'D [illegible] 7/7/98
SURV. [illegible] 6/9/98
ISSUE CODE
S - DWG
SCALE 1"=50'

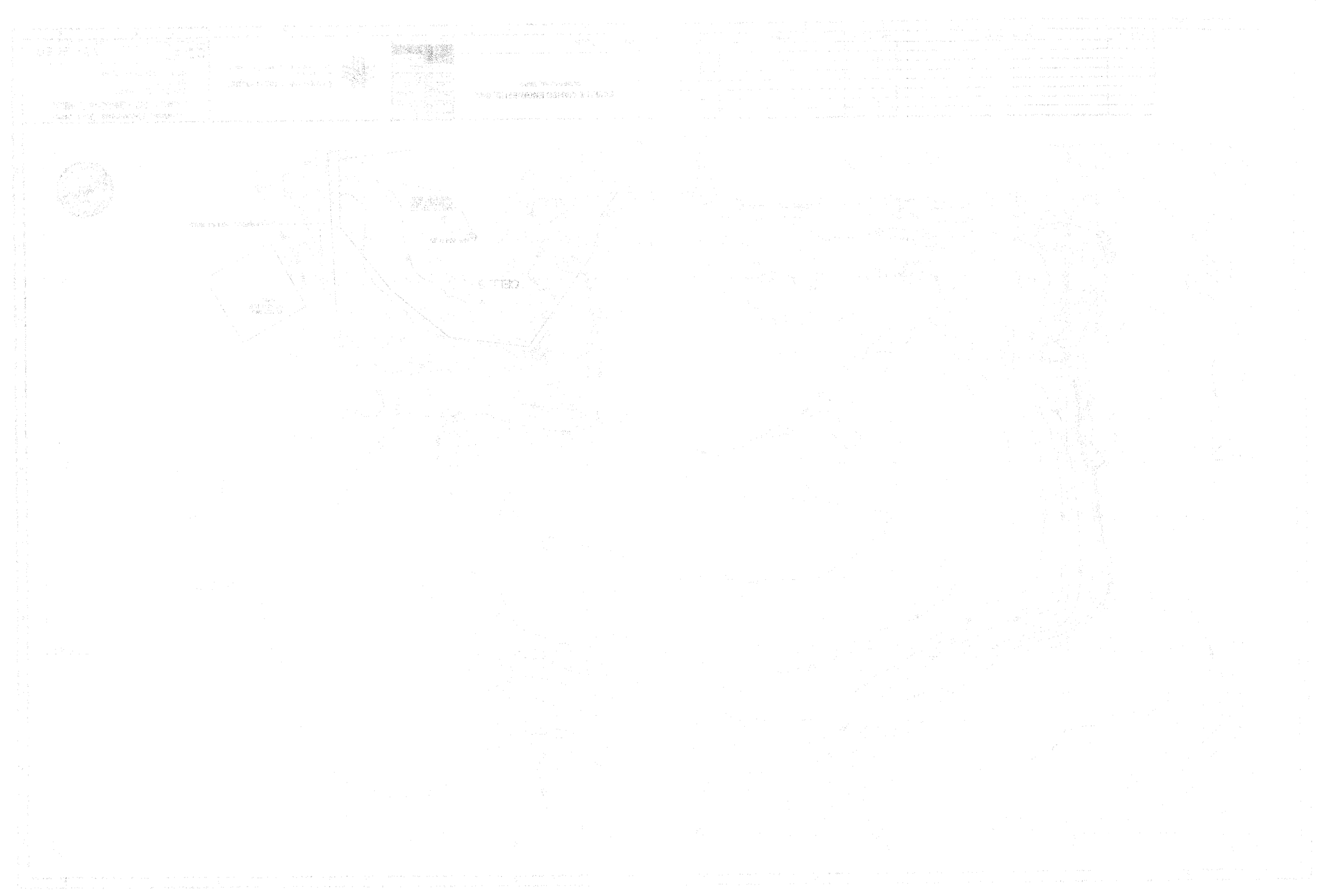
Great Northern Paper
A Subsidiary of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET, MAINE

DOLBY III LANDFILL
CELL 5
SITE LOCATION PLAN

SCALE: 1"=50'
FILE NO. 4-0-5-1-5-4-7-0-4a

YE-5088
SHEET 1 OF 2



OPERATION NOTES:

CELL 4

1. REMOVE MINIMUM 15 FT LONG DIKE SECTIONS SEPARATING CB #16 AND NORTH FROM CELL 5.

CULVERT SCHEDULE

| | TYPE | DIAMETER | MIDPOINT CENTERLINE LENGTH | MIDPOINT CENTERLINE NORTH COORD. | MIDPOINT CENTERLINE EAST COORD. |
|---|---|---|---|---|---|
| CULVERT #1 | CMP | 24" | 40' | 683005 | 475287 |
| CULVERT #2 | CMP | 15" | 40' | 684018 | 475082 |
| CULVERT #3 | CMP | 24" | 40' | 682800 | 475219 |


DOLBY III LANDFILL CELL 5 SITE DEVELOPMENT PLAN

DEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

JOB NO. 303

| | | |
|---|---|---|
| DWN | RLB | |
| CHK | JAS | 5/30 |
| DES | DJS | 5/30 |
| CHK | JAS | |
| APP | JAS | 5/30 |

ISSUE CODE
S = SUP.
SCALE 1" = 50'

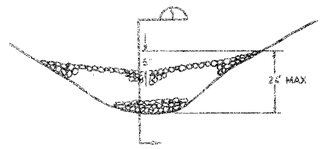
Great Northern Paper
a corporation of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
CELL 5
SITE DEVELOPMENT PLAN

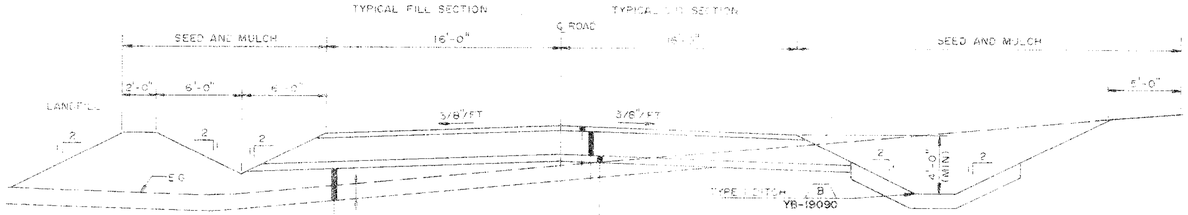
JOB NO. 94545
FWG REG. NO.
FILE NO. 3-082-4209/7092

YB-19089

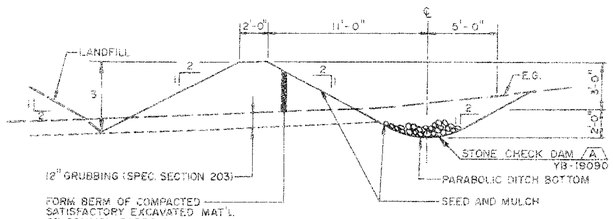


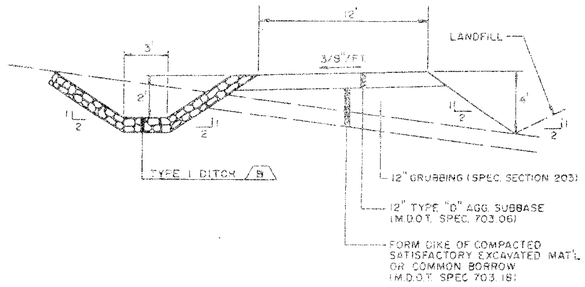

STONE CHECK DAM (A)
N.T.S. YB-19089

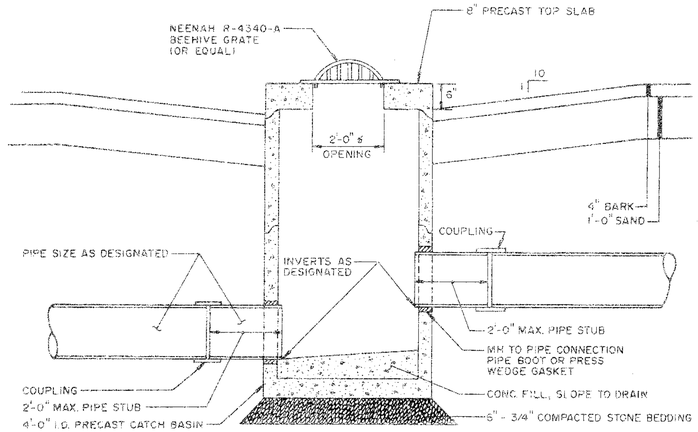

SECTION (1)
N.T.S.




TYPICAL SECTION
LANDFILL ACCESS ROAD (3)
N.T.S. YB-19089

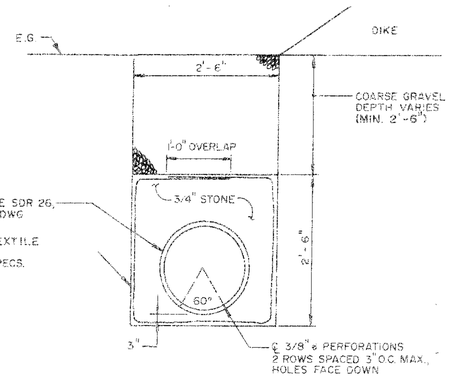


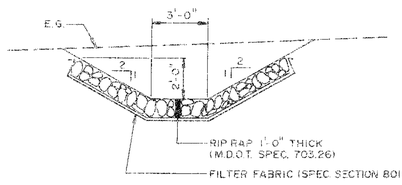




TYPICAL CATCH BASIN (5)
N.T.S. (EXISTING) YB-19089

TYPICAL SECTION
DIKE AND TYPE 2 DRAINAGE DITCH (2)
SCALE: 1"=5' YB-19089



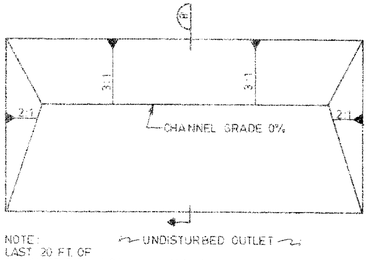

PERF LEACHATE COLLECTION MAIN (7)
N.T.S. YB-19089




TYPE I DITCH (B)
N.T.S. YB-19090

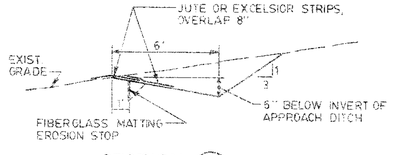
NOTE: STONE OUTLET TO BECOME PERMANENT FIXTURE. ACCUMULATED SEDIMENT TO BE REMOVED AND PLACED IN LANDFILL WHEN CONSTRUCTION COMPLETE AND TRIBUTARY AREA IS STABILIZED WITH VEGETATION, GRAVEL SURFACE OR RIP RAP. AREA TO BE SEEDED AND MULCHED WHEN CONSTRUCTION COMPLETE.

DIKE ACCESS ROAD (4)
N.T.S. YB-19089

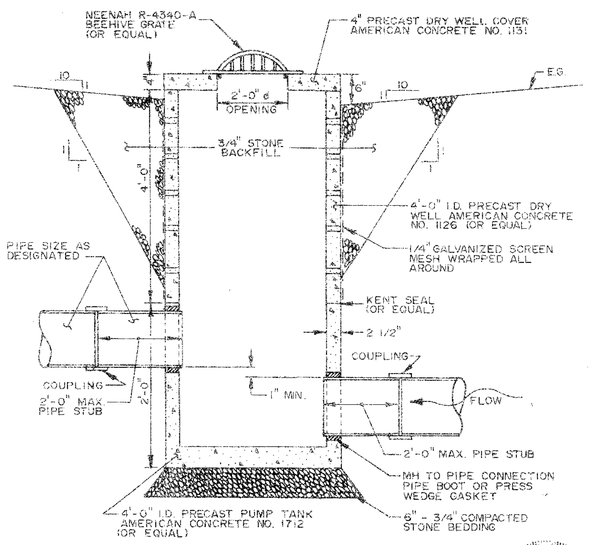



NOTE: LAST 20 FT. OF DRAINAGE DITCH NOT TO EXCEED 1% GRADE

PLAN
SCALE 1"=4'




SECTION (8)
LEVEL SPREADER (C)
N.T.S. YB-19089




CATCH BASIN (6)
N.T.S. YB-19089


| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | REL | DATE | REVISION | BY | CKD | APP'D | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

JOB NO. 9019

| | |
|---|---|
| DRN | RLR |
| CKD | 5/90 |
| CKD | 5/90 |
| CORR. | 5/17/90 |
| APPVD | 5/24/90 |
| ISSUE CODE | |
| B - BIDS | |
| SCALE | AS SHOWN |

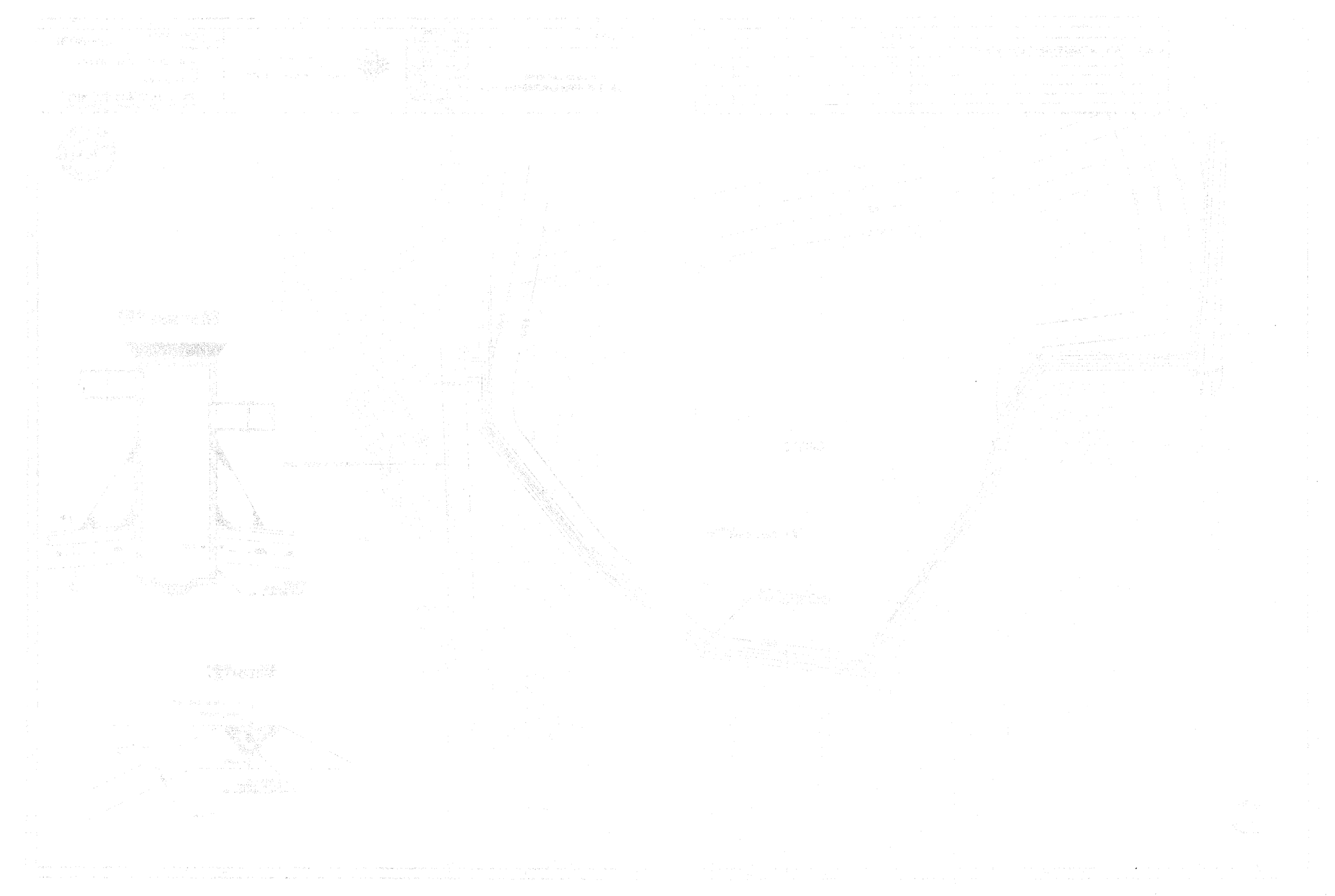
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

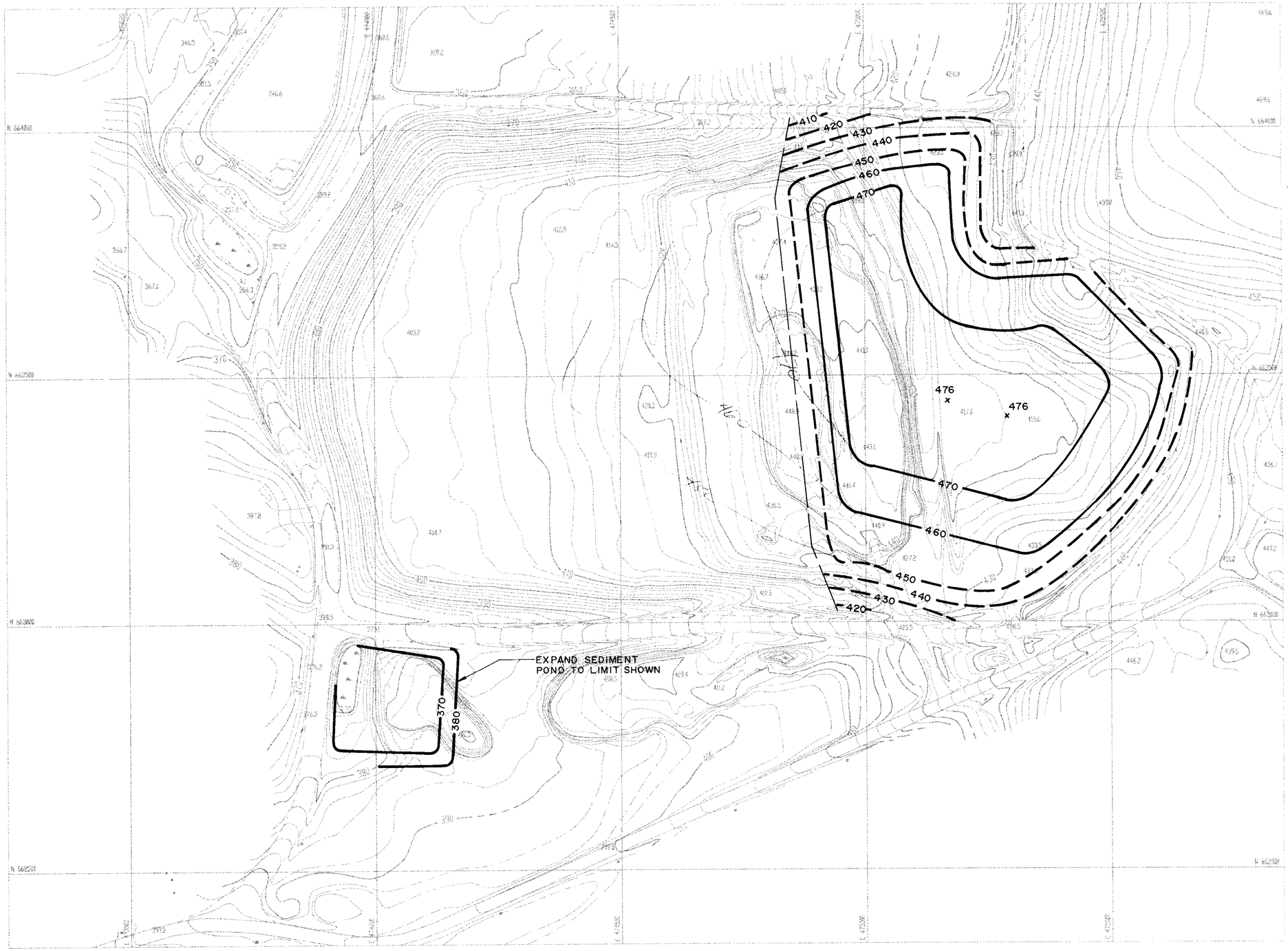
CENTRAL ENGINEERING DEPARTMENT

DOLBY III LANDFILL
CELL 5
SECTIONS & DETAILS

JOB NO. 94545
ENG. REQ. NO.
FILE NO. 2-092-4702.7089

YB-19090






| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 8-5-91 | SUBMITTED TO MDEP | | MHC | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

| | | |
|---|---|---|
| DRN | | |
| CKD | 7/91 | MHC |
| CKD | | |
| CORR | | |
| APPVD | | |
| ISSUE CODE | | |
| P - PRELIM | B - BIDS | |
| M - MTL T.O. | C - CONSY | |
| SCALE | 1" = 100' | |

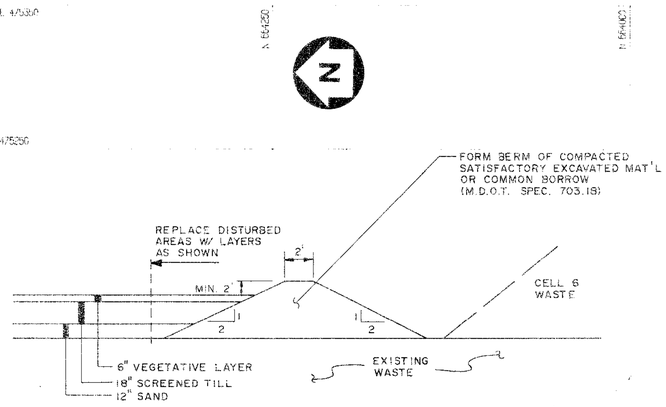
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

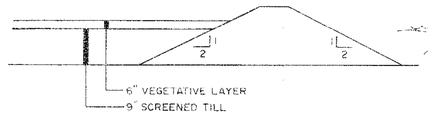
# DOLBY III LANDFILL
# CELL 6
# FINAL GRADING PLAN

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703, 7082

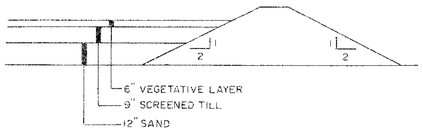
YB-20023



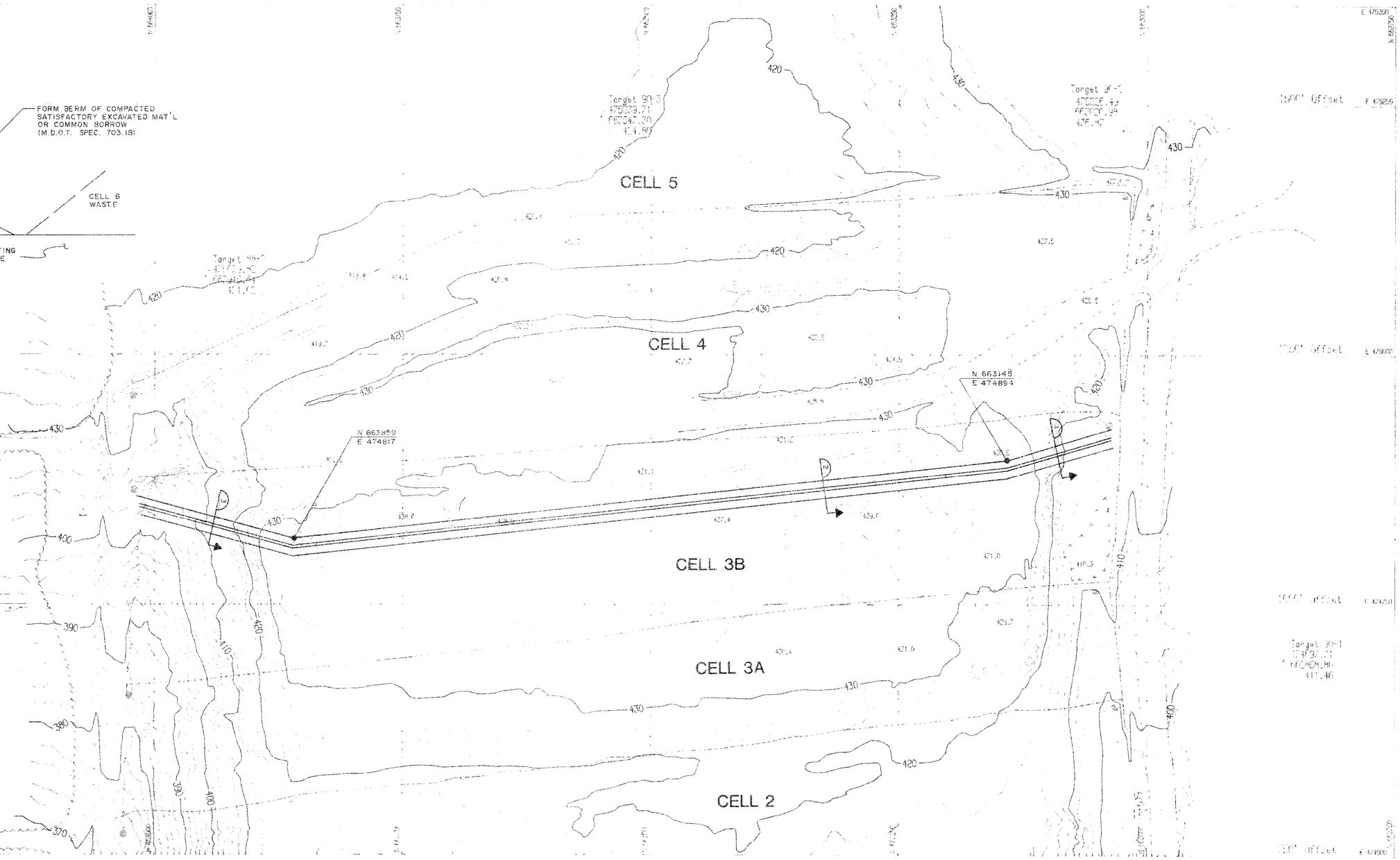

DIKE SECTION (1)
N.T.S.




DIKE SECTION (2)
N.T.S.




DIKE SECTION (3)
N.T.S.




0 25 50 100 150 200 FEET

NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING ASBESTOS HANDLING.
2. CONTOURS SHOWN MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL QUANTITIES

| | |
|---|---|
| BORROW | 1500 CY |
| SEEDING | 20 UNITS |

| DRAWING NO | REFERENCE DRAWING TITLE |
|---|---|
| YB-16476 | DOLBY III LANDFILL - CELLS 3A, 3B, & 4 TOPO SURVEY & DIGITIZ. 14/16/90) |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | 1 | 1-8-92 | RECORD DRAWING | | | | |
| | 0 | 8-5-91 | SUBMITTED TO MDEP | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

| | | |
|---|---|---|
| DRN | | |
| CKD | 7/91 | |
| CRD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL.T.O. | C - CONST

SCALE AS SHOWN

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
CELL 6
SITE DEVELOPMENT PLAN

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092.4703.7062

YB-20024

E 475000

E 474500

CELL 7

REMOVE 15" OF COVER SOIL AND STOCKPILE ON CELL 6

CELL 6 LIMIT

CB#17

CB#16

CB#15

CB#14

CB#13

CB#12

CB#11

CB#10

CB#9

CB#8

CB#1

ROAD

ACCESS

DRAINAGE MANHOLE A
N 663863.90
E 474386.57
RIM EL = 411.79
YB-20546

DRAINAGE MANHOLE A
N 663125.20
E 474358.66
RIM EL = 410.12
YB-20546

N663879.00
E474369.57

N663108.98
E474350.33

22-1/2° ELBOW
TURN TO MATCH SLOPE

22-1/2° ELBOW
TURN TO MATCH SLOPE

CONTAINMENT DIKE

12"ø HANCORE TITELINE PIPE 4 YB-20546

12"ø HANCORE TITELINE PIPE 4 YB-20546

TIE 12"ø PIPE INTO EXISTING CATCH BASIN #1

TIE 12"ø PIPE INTO EXISTING CATCH BASIN #9

3 YB-20546

2 YB-20546

1 YB-20546

△ 4748218
E 474710.53
469.51

COMPILED AND CONTROLLED BY JAMES W. SEWALL CO.
OLD TOWN, ME BY PHOTOGRAMMETRIC METHODS
FROM AERIAL PHOTOGRAPHS DATED 8/9/90

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 1/93 | RECORD DRAWING | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE
JOB NO. 92051

| | | |
|---|---|---|
| DRN | PAF | 9-92 |
| CKD | | 9-92 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - PRELIM | B - BIDS
M - MTL T.O. | C - CONST
SCALE 1" = 50'

**BOWATER**
GREAT NORTHERN PAPER, INC.

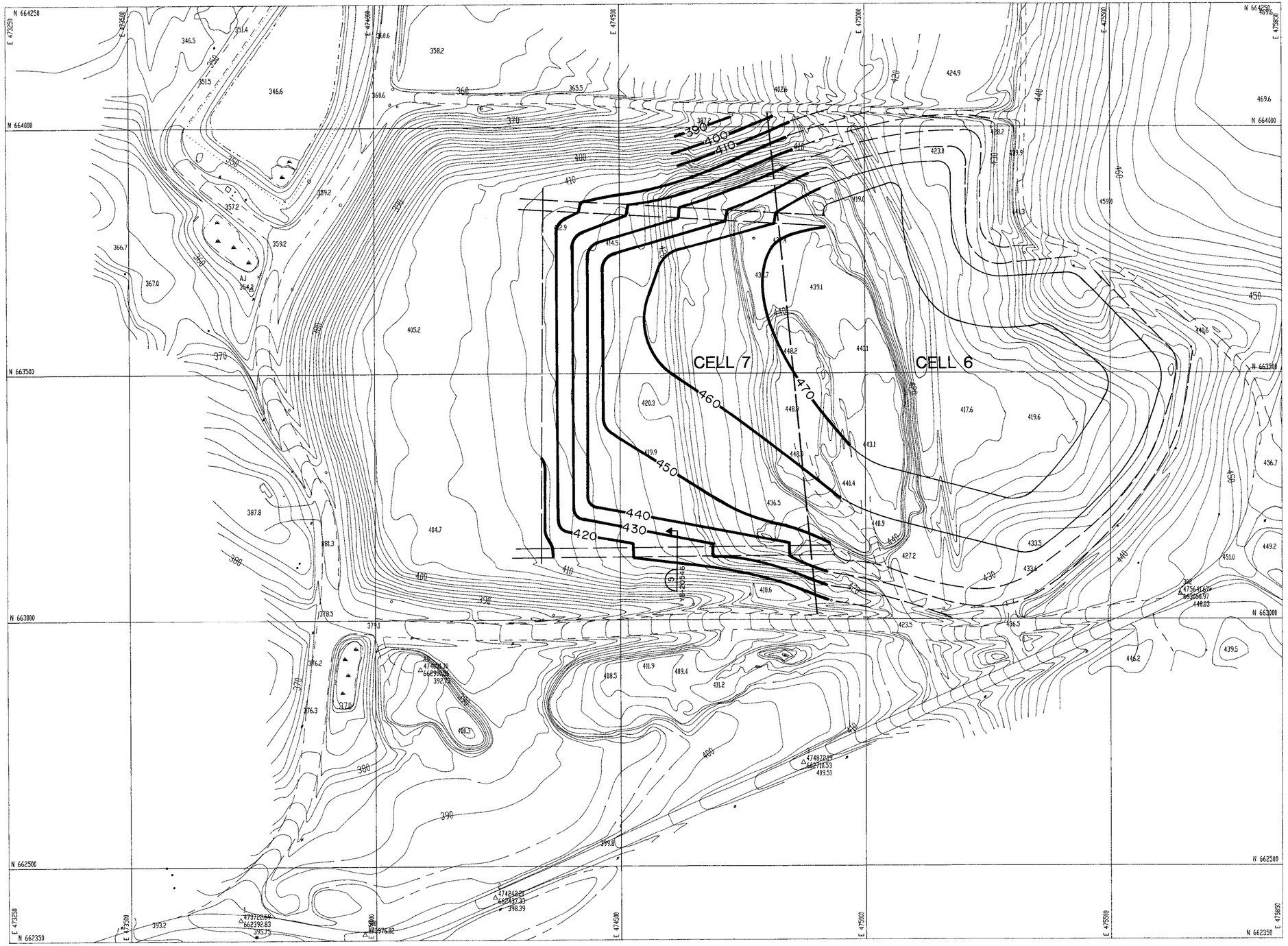
CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 7
SITE DEVELOPMENT PLAN

JOB NO.
ENG. REQ. NO. 95-6249
FILE NO. 2-092-4703,7082

**YB-20544**

SPILLER'S




| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | COMPILED AND CONTROLLED BY JAMES W. SEWALL CO. | | | | | | | | |
| | OLD TOWN, ME BY PHOTOGRAMMETRIC METHODS | | | | | | | | |
| | FROM AERIAL PHOTOGRAPHS DATED 8/9/90 | | | | | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 9205!

| | | |
|---|---|---|
| DRN | PAF | 9-92 |
| CKD | [illegible] | 9-92 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL T.O. | C - CONST

SCALE 1" = 100'

**BOWATER**
GREAT NORTHERN PAPER, INC.

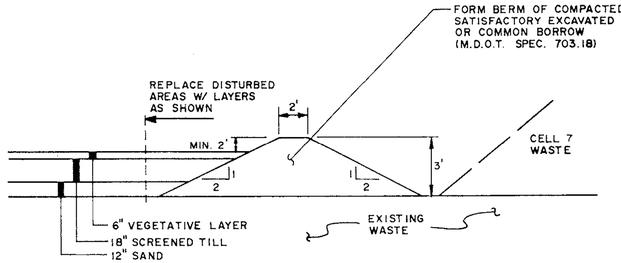
CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

# DOLBY III LANDFILL
# CELL 7
# FINAL GRADING PLAN

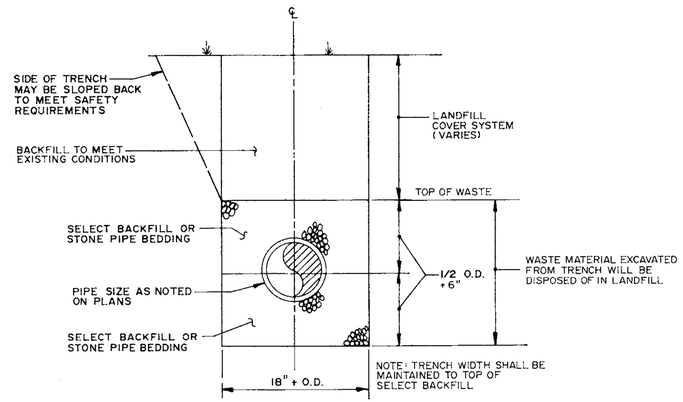
JOB NO. _____
ENG. REQ. NO. 95-6249
FILE NO. 2-092-4703,7082

**YB-20545**

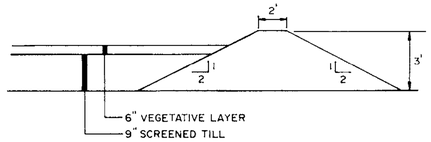
SPILLER'S



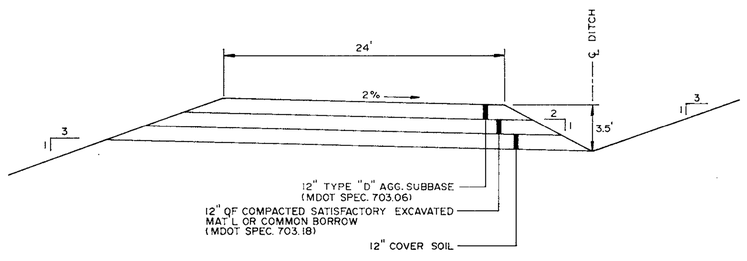

DIKE SECTION 1
N.T.S. YB-20544




PIPE TRENCH 4
N.T.S. YB-20544

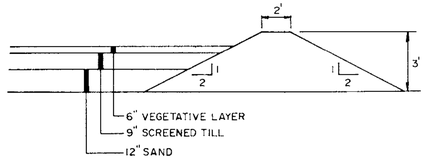



DIKE SECTION 2
N.T.S. YB-20544

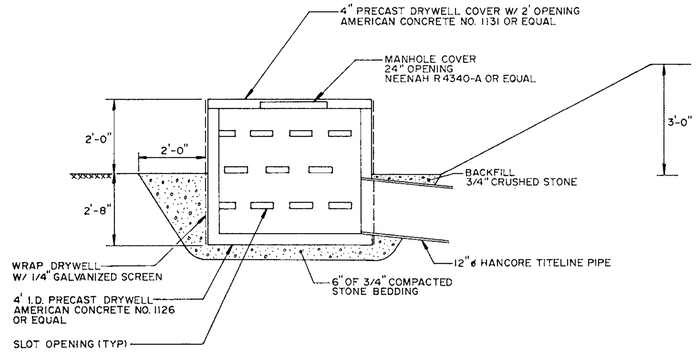



N.T.S.

ROAD TERRACE 5
NTS YB-20545




DIKE SECTION 3
N.T.S. YB-20544




DRAINAGE MANHOLE A
NTS YB-20544

GENERAL NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.
3. EXCAVATIONS ENCOUNTERING WASTE MATERIALS, I.E. SLUDGE, WILL BE DISPOSED OF IN THE ACTIVE DISPOSAL AREA.

MATERIAL SPECIFICATIONS:

DIKE EMBANKMENT SOIL:

COMPACTION - THE DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR).

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL. THE BEDDING MATERIAL SHALL MEET THE FOLLOWING GRADATION:

| SIEVE DESIGNATION | PERCENT PASSING BY WEIGHT |
|---|---|
| 1 INCH | 100 |
| 1/4 INCH | ≤5 |

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM CELL 7 AREA PRIOR TO PLACING THE DRAINAGE OR EMBANKMENT MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING LANDFILL.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIALS -

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

| SEED: | | |
|---|---|---|
| | TALL FESCUE | 59% |
| | RED FESCUE | 25% |
| | RED TOP | 5% |
| | LADINO CLOVER | 3% |
| | ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

MATERIAL QUANTITIES:

| | |
|---|---|
| GRUBBING | 17,000 CY |
| DIKE SOIL | 1,600 CY |
| 12" DIA. PIPE | 355 LF |
| 3/4" STONE | 74 CY |
| DRYWELLS WITH COVERS, GRATES & FRAMES | 2 |

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | 1 | 1/93 | RECORD DRAWING | | | | |

JOB NO. 92051

**SEVEE & MAHER ENGINEERS, INC.**
**CONSULTING ENGINEERS**
**CUMBERLAND, MAINE**

| | | |
|---|---|---|
| DRN | PAF | 9-92 |
| CKD | | 9-92 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL T.O. | C - CONST

SCALE NTS

**BOWATER**
**GREAT NORTHERN PAPER, INC.**

**CENTRAL ENGINEERING DEPARTMENT**
EAST OPERATION
DOLBY III LANDFILL
CELL 7
DETAILS, SECTIONS & MATERIAL SPECIFICATIONS

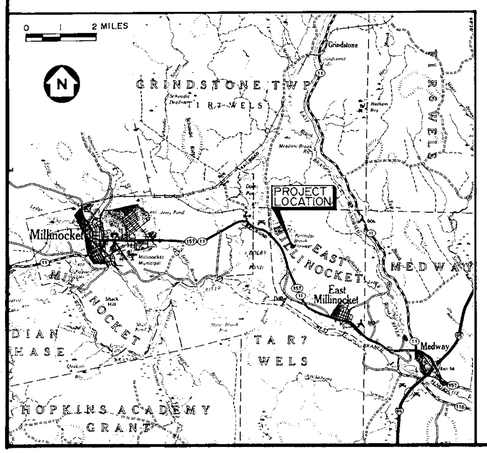
JOB NO.
ENG. REQ. NO. 95-6249
FILE NO. 2-092-4703.7082

**Y B-20546**

SPILLER S

# GREAT NORTHERN PAPER, INC.
# A SUBSIDIARY OF BOWATER INCORPORATED
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 6 CLOSURE,
# CELLS 8 & 9 CONSTRUCTION

| SHT NO. | TITLE | DWG NO. |
|---|---|---|
| 1 | COVER SHEET | YB-21000 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-21001 |
| 3 | SITE LOCATION PLAN | YB-21002 |
| 4 | CELL 8 - SITE DEVELOPMENT PLAN | YB-21003 |
| 5 | CELL 9 - SITE DEVELOPMENT PLAN | YB-21004 |
| 6 | CELLS 6 & 8 - FINAL GRADING PLAN | YB-21005 |
| 7 | SECTIONS & DETAILS | YB-21006 |




# SEVEE & MAHER ENGINEERS, INC.
# CUMBERLAND, MAINE
# 1993

BOWATER
GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION
DOLBY III LANDFILL
CELL 6 CLOSURE,
CELLS 8 & 9 CONSTRUCTION
COVER SHEET

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

YB-21000

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | STONE WALL | TP-103 | TP-103 | TEST PIT & NUMBER |
| | | NORTH ARROW (MAGNETIC) | | | DRAINAGE COURSES W/DIRECTION & DITCH | □ | ■ | CLEAN OUT STRUCTURES |
| N | | NORTH ARROW (PLAN NORTH) | SHORE SIDE | | EDGE OF WATER | ○ | ● | MANHOLE |
| 25 | 25 | CONTOUR LINES | | | WATER ELEVATION (GROUND OR SURFACE) | ⌑ | ⌑ | WATER VALVE |
| 25.63 | 25.56 | SPOT ELEVATION (GRADE) | | | ROCK OUTCROP OR LEDGE | ☼ | ☼ | HYDRANT |
| E.G. | | EXISTING GROUND (PROFILES & SECTIONS) | | | FENCE LINE (WOOD) | ⌽ | ⌽ | TELEPHONE OR POWER POLE |
| S.B.L. | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT | | | FENCE LINE (WIRE) | ◎ | ◎ | CATCH BASIN |
| | 0+00 1+00 | CONSTRUCTION BASELINE | (STONE) | (CONC) FACE | RETAINING WALL (TYPE) | G | 8" G | UNDERGROUND GAS MAIN & SIZE |
| PL | | PROPERTY OR DEED LINE (NOT SURVEYED) | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE CABLE/CONDUIT |
| 525.14' N35°-10'-41"E | 525.14' N35°-10'-41"E | PROPERTY LINE W/BEARING & DISTANCE | | | BUILDING & STRUCTURES | E | E | UNDERGROUND ELECTRIC CABLE/CONDUIT |
| | | ROADS, EASEMENTS OR RIGHT OF WAY LINE | | | STEPS W/TYPE (WOOD/CONCRETE) | OE | OE | OVERHEAD ELECTRICAL LINE |
| | | BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY) | | 1' 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | | 12" ACP | SANITARY SEWER, SIZE & TYPE |
| MON. | MON. | SURVEY MONUMENT | | TOP OF SLOPE 2 1 | SLOPES (W/SLOPE RATIO) | | 8" PVC | FORCE MAIN, SIZE & TYPE |
| I.F. | I.F. | SURVEY IRON (FOUND) | | | EDGE OF TRAVELED WAY (TYPE) | | 8" DI | WATER MAIN, SIZE & TYPE |
| D.H. PK. STK. | D.H. PK. STK. | DRILL HOLE, PK OR STAKE | C F | | CUT OR FILL LINE | | 12" RCP | STORM DRAIN, SIZE & TYPE |
| | | WOODS OR BRUSH LINE | CLL | | CONSTRUCTION LIMIT LINE | UD | 8" PVC UD | UNDERDRAIN, SIZE & TYPE |
| | | INDIVIDUAL TREE (DECIDUOUS) | | | BITUMINOUS PAVEMENT | | 12" BCCMP | CULVERT, SIZE & TYPE |
| | | INDIVIDUAL TREE (CONIFEROUS) | | | GRAVEL ROAD | | | RAILROAD |
| | | TREE, TO BE REMOVED | | | CONCRETE | S S | S S | SILTATION FENCE |
| | | MARSH AREA | B-12 MW-2 P-20 | B-12 MW-2 P-20 | TEST BORING, MONITORING WELL OR PROBE & NUMBER | | | |

## ABBREVIATIONS

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A.C.C.M.P. | ASPHALT COATED C.M.P. | C.M.P. | CORRUGATED METAL PIPE | DR | DRAIN | GPD | GALLONS PER DAY | MON | MONUMENT | SF | SQUARE FEET |
| A.C.P. | ASBESTOS CEMENT PIPE | C.O. | CLEAN OUT | DWG | DRAWING | GPM | GALLONS PER MINUTE | N.I.T.C. | NOT IN THIS CONTRACT | SHT | SHEET |
| AC | ACRE | CEM. LIN. | CEMENT LINED | EA | EACH | HDPE | HIGH DENSITY POLYETHYLENE | N.T.S. | NOT TO SCALE | STA | STATION |
| AGG | AGGREGATE | CEN | CENTRAL ANGLE OF CURVE | EG | EXISTING GROUND OR GRADE | HP | HORSEPOWER | N/F | NOW OR FORMERLY | SY | SQUARE YARD |
| ALUM | ALUMINUM | CF | CUBIC FEET | ELEC | ELECTRIC | HYD | HYDRANT | NO. OR # | NUMBER | TAN | TANGENT |
| APPD | APPROVED | CFS | CUBIC FEET PER SECOND | ELL | ELBOW | I.D. | INSIDE DIAMETER | O.C. | ON CENTER | TDH | TOTAL DYNAMIC HEAD |
| APPROX | APPROXIMATE | CI | CAST IRON | EQUIP | EQUIPMENT | IN OR " | INCHES | O.D. | OUTSIDE DIAMETER | TEMP | TEMPORARY |
| ASB | ASBESTOS | CL | CLASS | EST | ESTIMATED | INV | INVERT | P.C. | POINT OF CURVE | TYP | TYPICAL |
| ASPH | ASPHALT | CONC | CONCRETE | EXC | EXCAVATE | INV. EL. | INVERT ELEVATION | P.I. | POINT OF INTERSECTION | V | VOLTS |
| AT2 C.M.P. | ALUMINUM TYPE 2 C.M.P. | CONST | CONSTRUCTION | EXIST | EXISTING | LB | POUND | P.T. | POINT OF TANGENT | W/ | WITH |
| AUTO | AUTOMATIC | CONTR | CONTRACTOR | F.G. | FINISH GRADE | LC | LEACHATE COLLECTION | PERF | PERFORATED | W/O | WITHOUT |
| AUX | AUXILIARY | CTR | CENTER | FBRGL | FIBERGLASS | LD | LEAK DETECTION | PSI | POUNDS PER SQUARE INCH | YD | YARD |
| AVE | AVENUE | CY | CUBIC YARD | FDN | FOUNDATION | LF | LINEAR FEET | PVC | POLYVINYL CHLORIDE | | |
| AVG | AVERAGE | D | DEGREE OF CURVE (ARC DEF.) | FLEX | FLEXIBLE | LOC | LOCATION | PVMT | PAVEMENT | | |
| AZ | AZIMUTH | DBL | DOUBLE | FLG | FLANGE | LT | LEFT | QTY | QUANTITY | | |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | DEG OR ° | DEGREE | FLR | FLOOR | M.H. | MANHOLE | R.O.W. | RIGHT OF WAY | | |
| B.M. | BENCH MARK | DEPT | DEPARTMENT | FPS | FEET PER SECOND | M.J. | MECHANICAL JOINT | RAD | RADIUS | | |
| BIT | BITUMINOUS | DI | DUCTILE IRON | FT OR ' | FEET | MATL | MATERIAL | REQD | REQUIRED | | |
| BLDG | BUILDING | DIA OR Ø | DIAMETER | FTG | FOOTING | MAX. | MAXIMUM | RT | RIGHT | | |
| BOT | BOTTOM | DIM | DIMENSION | GA | GAUGE | MFR | MANUFACTURE | RTE | ROUTE | | |
| BRG | BEARING | DIST | DISTANCE | GAL | GALLON | MIN. | MINIMUM | S | SLOPE | | |
| C.B. | CATCH BASIN | DN | DOWN | GALV | GALVANIZED | MISC | MISCELLANEOUS | SCH | SCHEDULE | | |

GENERAL NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.
3. EXCAVATIONS ENCOUNTERING WASTE MATERIALS, I.E. SLUDGE, WILL BE DISPOSED OF IN THE ACTIVE DISPOSAL AREA.

**MATERIAL SPECIFICATIONS:**

DIKE EMBANKMENT SOIL:

COMPACTION - THE DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR).

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL. THE BEDDING MATERIAL SHALL MEET THE FOLLOWING GRADATION:

| SIEVE DESIGNATION | PERCENT PASSING BY WEIGHT |
|---|---|
| 1 INCH | 100 |
| 1/4 INCH | ≤5 |

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM CELL 8 AREA PRIOR TO PLACING THE DRAINAGE OR EMBANKMENT MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING LANDFILL.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIALS -

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

## VIEW MARKERS & IDENTIFICATION

SECTION NO. & LOCATION: 3 / C-300 — DRAWING WHERE SECTION OR DETAIL APPEARS

DETAIL IDENTIFICATION & LETTER: MANHOLE A — C-300

SECTION TITLE & NO.: ACCESS ROAD 3 — DRAWING WHERE SECTION IS TAKEN C-100

DETAIL TITLE & LETTER: MANHOLE A — DRAWING WHERE DETAIL IS CALLED OUT C-100

PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | B | 1 | 8-4-93 | ISSUED FOR BID | MAC | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CUMBERLAND, MAINE

JOB NO. 93028

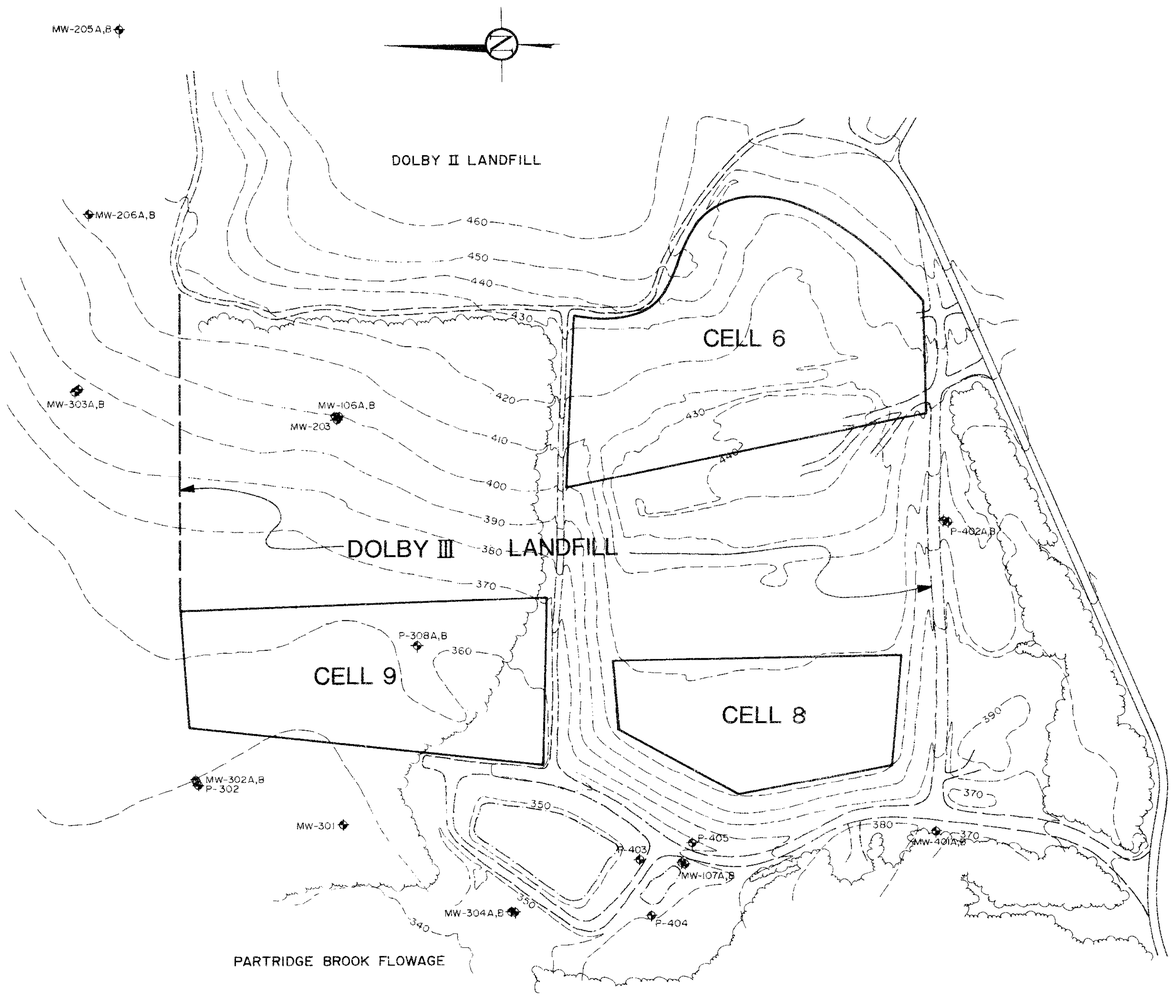
| | | |
|---|---|---|
| DRN | PAF | 6/93 |
| CKD | MAC | 6/93 |
| CKD | | |
| CORR | | |
| APPVD | | |
| ISSUE CODE | B-BIDS | |
| SCALE | | |

**BOWATER**
GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION
DOLBY III LANDFILL
CELL 6 CLOSURE,
CELLS 8 & 9 CONSTRUCTION
SYMBOLS & ABBREVIATIONS

JOB NO.
ENG. REQ. NO.
FILE NO 2-092-4703,7082

YB-21001




| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| B | 1 | 8-4-93 | ISSUED FOR BID | MC | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

| | | |
|---|---|---|
| DRN | PAF | 6/93 |
| CKD | PAF | 6/93 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL.T.O. | C - CONST

SCALE 1" = 200'

BOWATER
GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

# DOLBY III LANDFILL CELL 6 CLOSURE, CELLS 8 & 9 CONSTRUCTION SITE LOCATION PLAN

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703,7092

YB-21002

SPILLER'S

E 474500

E474000

N 664000

N 663500

CELL 7

CELL 8
REMOVE 15" OF COVER SOIL
(5.6 ACRES)

EXISTING 12"ø PIPE
12"
CB#1

EXISTING 12"ø PIPE
12"
CB#9
CB#8

4 YB-21006

DRAINAGE MANHOLE
INV. OUT 397.2
RIM 400.9
A YB-21006

22-1/2° ELBOW
TURN TO MATCH SLOPE

12"ø PIPE INSTALLED
INTO EXISTING CB#3

CB#2

12"

CB#3

CONTAINMENT DIKE

DRAINAGE MANHOLE
INV. OUT 396.4
RIM 400.1
A YB-21006

22-1/2° ELBOW
TURN TO MATCH SLOPE

12"

12"ø PIPE INSTALLED
INTO EXISTING CB#5

CB#4

CB#5

ACCESS ROAD

DRAINAGE MANHOLE
INV. OUT 398.7
RIM 402.4
A YB-21006

12"ø HANCORE TITELINE PIPE
(TYP)
5 YB-21006

12"
CB#7

22-1/2° ELBOW
TURN TO MATCH SLOPE

12"ø PIPE INSTALLED INTO
EXISTING CB#7

CB#6A

CB#6

ACCESS ROAD

0 25 50 100 150 200 FEET

COMPILED AND CONTROLLED BY JAMES W. SEWALL CO.
OLD TOWN, ME BY PHOTOGRAMMETRIC METHODS
FROM AERIAL PHOTOGRAPHS DATED 8/9/90

| DRAWING NO | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 8-18-94 | RECORD DRAWING/CELL 8 CONSTRUCTION | CJB | | | |
| | | B | 1 | 8-4-93 | ISSUED FOR BID | AHC | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

| | | |
|---|---|---|
| DRN | PAF | 6-93 |
| CKD | [illegible] | 6-93 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - PRELIM | B - BIDS
M - MYLT. | C - CONST
SCALE 1" = 50'

BOWATER
GREAT NORTHERN PAPER, INC.

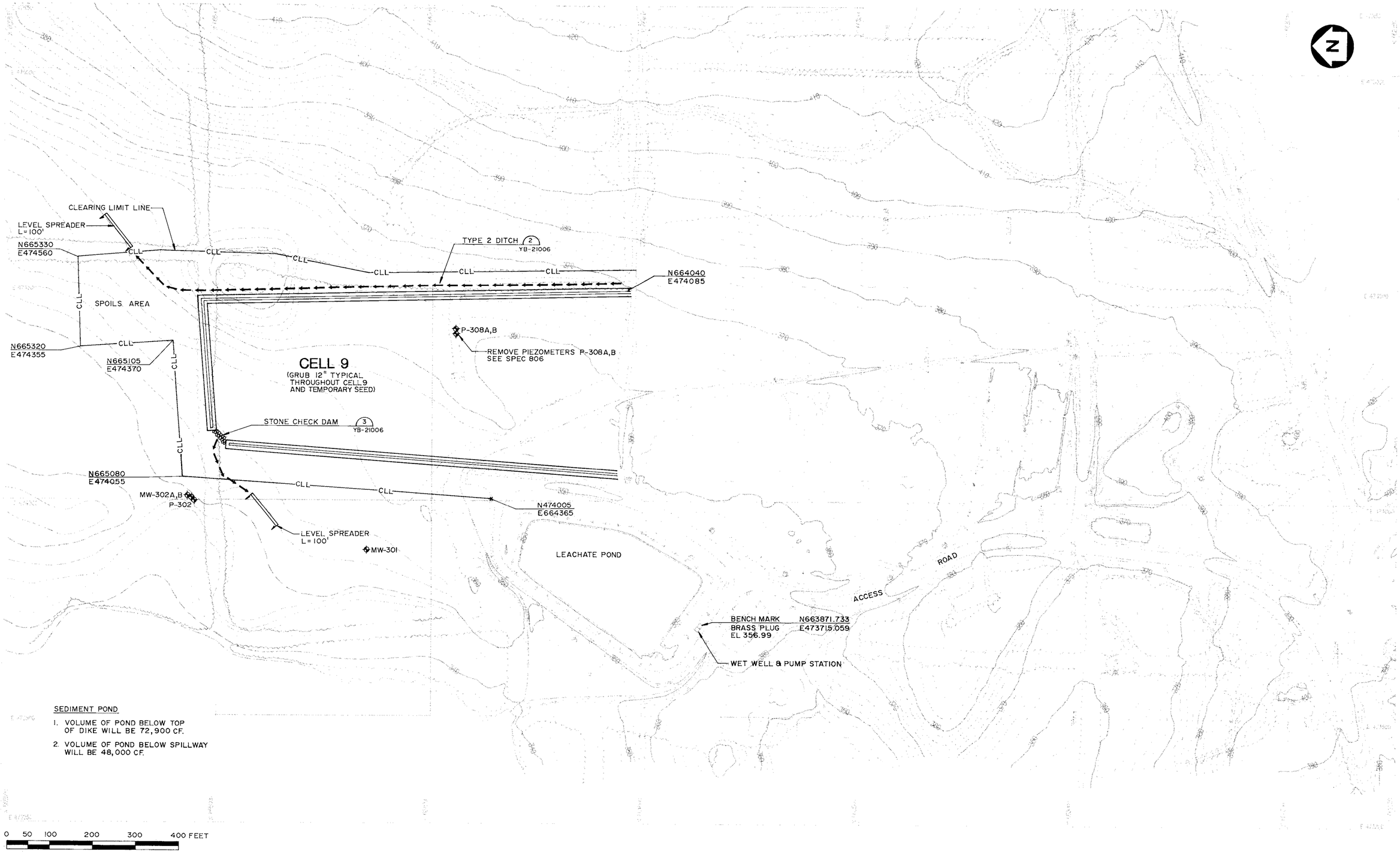
CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 8
SITE DEVELOPMENT PLAN

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703, 7082

YB-21003

SPILLERS




SEDIMENT POND

1. VOLUME OF POND BELOW TOP OF DIKE WILL BE 72,900 CF.
2. VOLUME OF POND BELOW SPILLWAY WILL BE 48,000 CF.

PAUL A. MAHER
No. 5711
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|
| YB-15263 | DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| B | 1 | 8-4-93 | ISSUED FOR BID | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

| | | |
|---|---|---|
| DRN | PAF | 6-93 |
| DES | | 6-93 |
| CKD | | |
| CURR | | |
| APPVD | | |

ISSUE CODE
P - PRELIM | B - BIDS
M - MTL T.O. | C - CONST
SCALE 1" = 100'

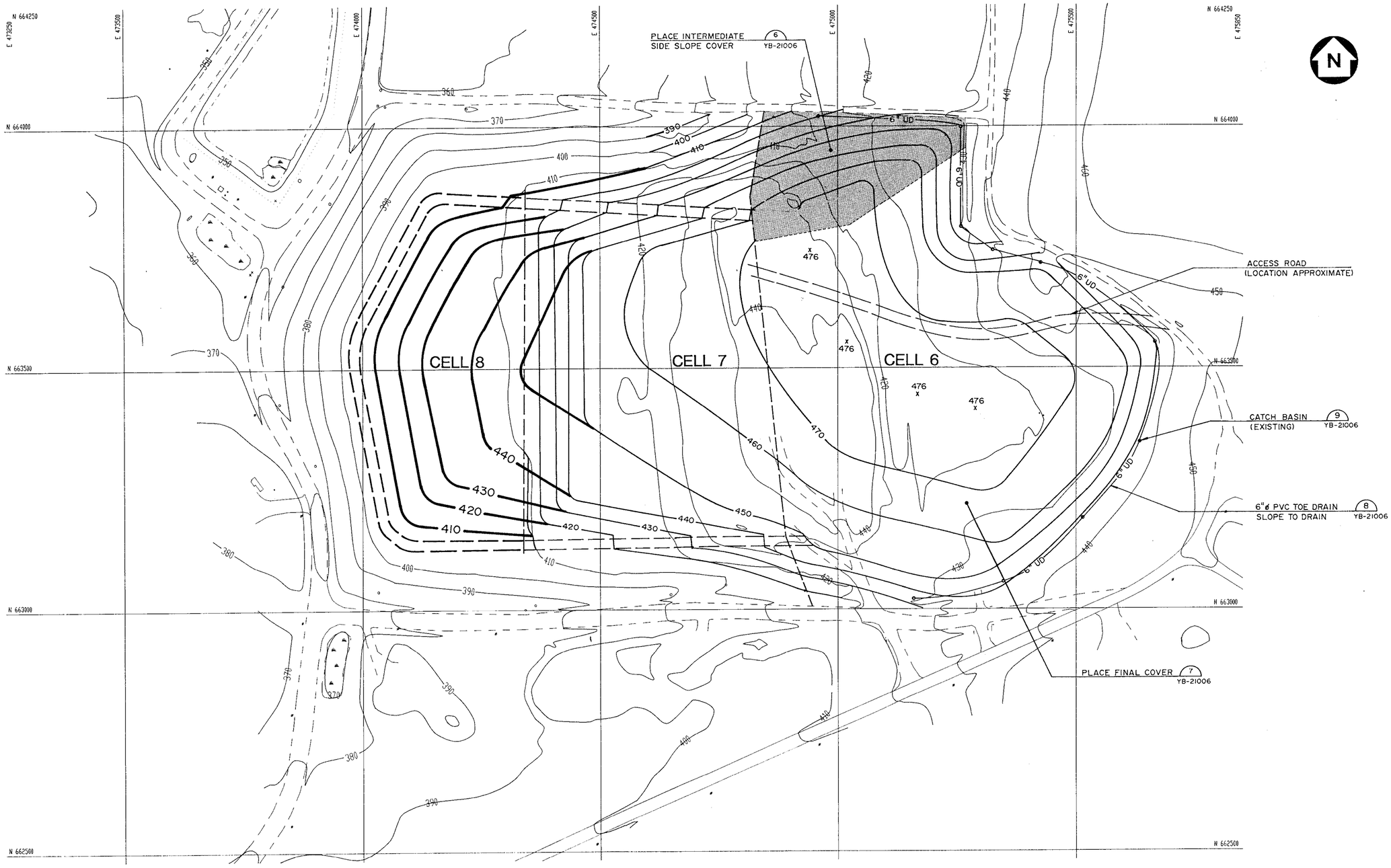
BOWATER
GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 9
SITE DEVELOPMENT PLAN

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-21004




STATE OF MAINE PETER A. MAHER 11107 REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO | REFERENCE DRAWING TITLE |
|---|---|
| | COMPILED AND CONTROLLED BY JAMES W. SEWALL CO. |
| | OLD TOWN, ME BY PHOTOGRAMMETRIC METHODS |
| | FROM AERIAL PHOTOGRAPHS DATED 8/9/90 |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| B | 1 | 8-4-93 | ISSUED FOR BID | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

| | |
|---|---|
| DRN PAF | 6-93 |
| CKD | 6-93 |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL T.O. | C - CONST |
| SCALE 1" = 100' | |

**BOWATER**
GREAT NORTHERN PAPER, INC.

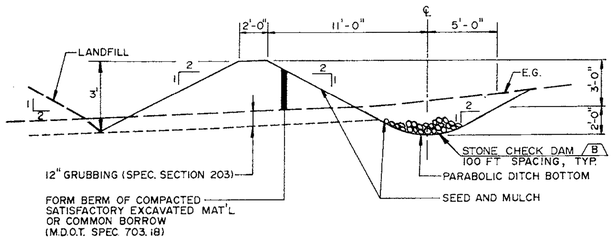
**CENTRAL ENGINEERING DEPARTMENT**
EAST OPERATION

# DOLBY III LANDFILL
# CELL 6 CLOSURE, CELL 8
# FINAL GRADING PLAN

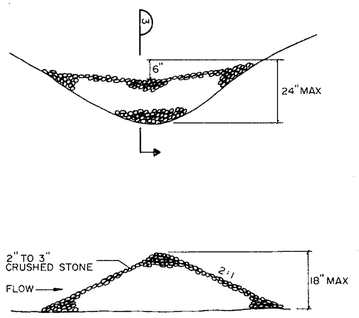
JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

YB-21005

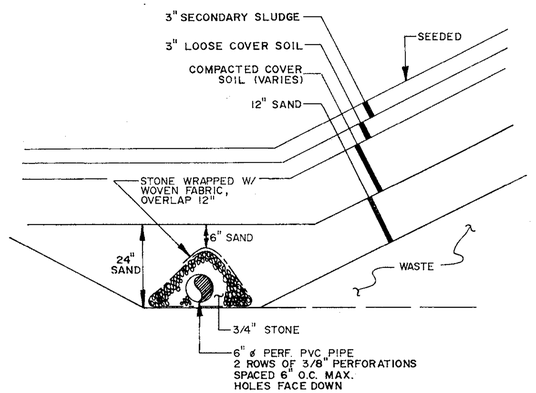
187674
BRILLER'S



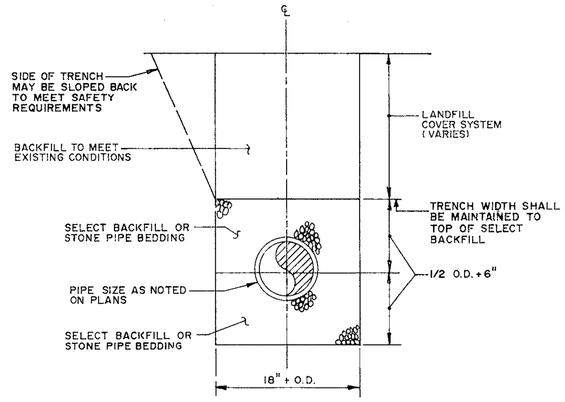

DIKE AND TYPE 2 DRAINAGE DITCH 2
YB-21004



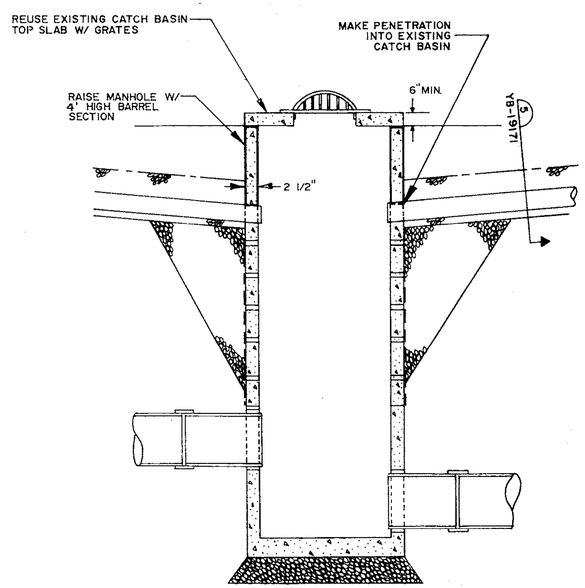

SECTION 3
STONE CHECK DAM B
NTS
YB-21006
YB-21004



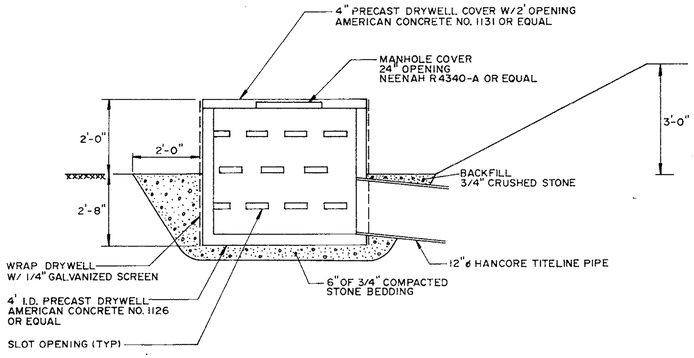

SECTION 8
N.T.S.
YB-21006
YB-21005



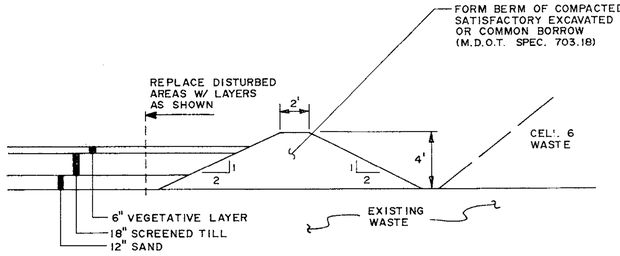

PIPE TRENCH 5
N.T.S.
YB-21003



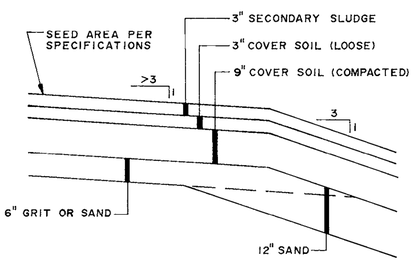

CATCH BASIN 9
N.T.S. (EXISTING)
YB-21005



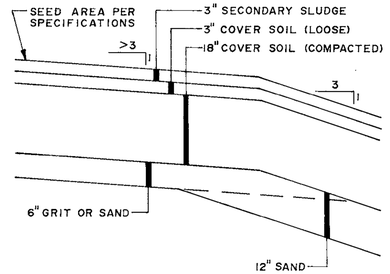

DRAINAGE MANHOLE A
NTS
YB-21003




TYPICAL DIKE SECTION 4
N.T.S.
YB-21003




INTERMEDIATE SLOPE COVER SECTION 6
NTS
YB-21005




FINAL COVER SECTION 7
NTS
YB-21005

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 8-18-94 | RECORD DRAWING/CELL 8 CONSTRUCTION | CSB | | | |
| | | B | 1 | 8-4-93 | ISSUED FOR BID | MC | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

| | | |
|---|---|---|
| DRN | PAF | 6-93 |
| CKD | MC | 6-93 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MYLT.O. | C - CONST
SCALE NTS

BOWATER
GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 6 CLOSURE,
CELLS 8 & 9 CONSTRUCTION
SECTIONS & DETAILS

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-21006

STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER

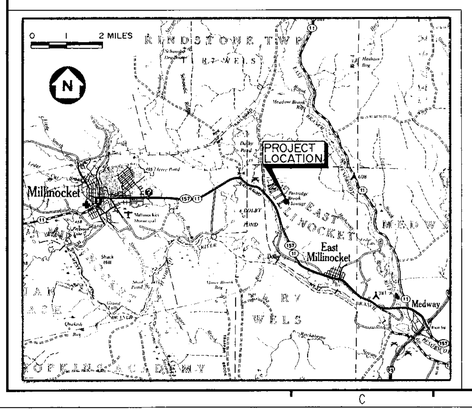
17202
SPILLER'S

# GREAT NORTHERN PAPER, INC.
# A SUBSIDIARY OF BOWATER INCORPORATED
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 9 CONSTRUCTION

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-23039 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-23040 |
| 3 | SITE LOCATION PLAN | YB-23041 |
| 4 | CELL 9 - SITE DEVELOPMENT PLAN | YB-23042 |
| 5 | CELL 9 - FINAL GRADING PLAN | YB-23043 |
| 6 | SECTIONS & DETAILS | YB-23044 SHEET 1 OF 2 |
| 7 | SECTIONS & DETAILS | YB-23044 SHEET 2 OF 2 |

## SEVEE & MAHER ENGINEERS, INC.
## CUMBERLAND, MAINE

## 1994




STATE OF MAINE PETER M. MAHER #4107 REGISTERED PROFESSIONAL ENGINEER

**RECORD DRAWING**

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 94028

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - Prelim | B - Bids |
| M - Mtl T.O. | C - Const. |
| SCALE | |

BOWATER
Great Northern Paper

EAST OPERATION

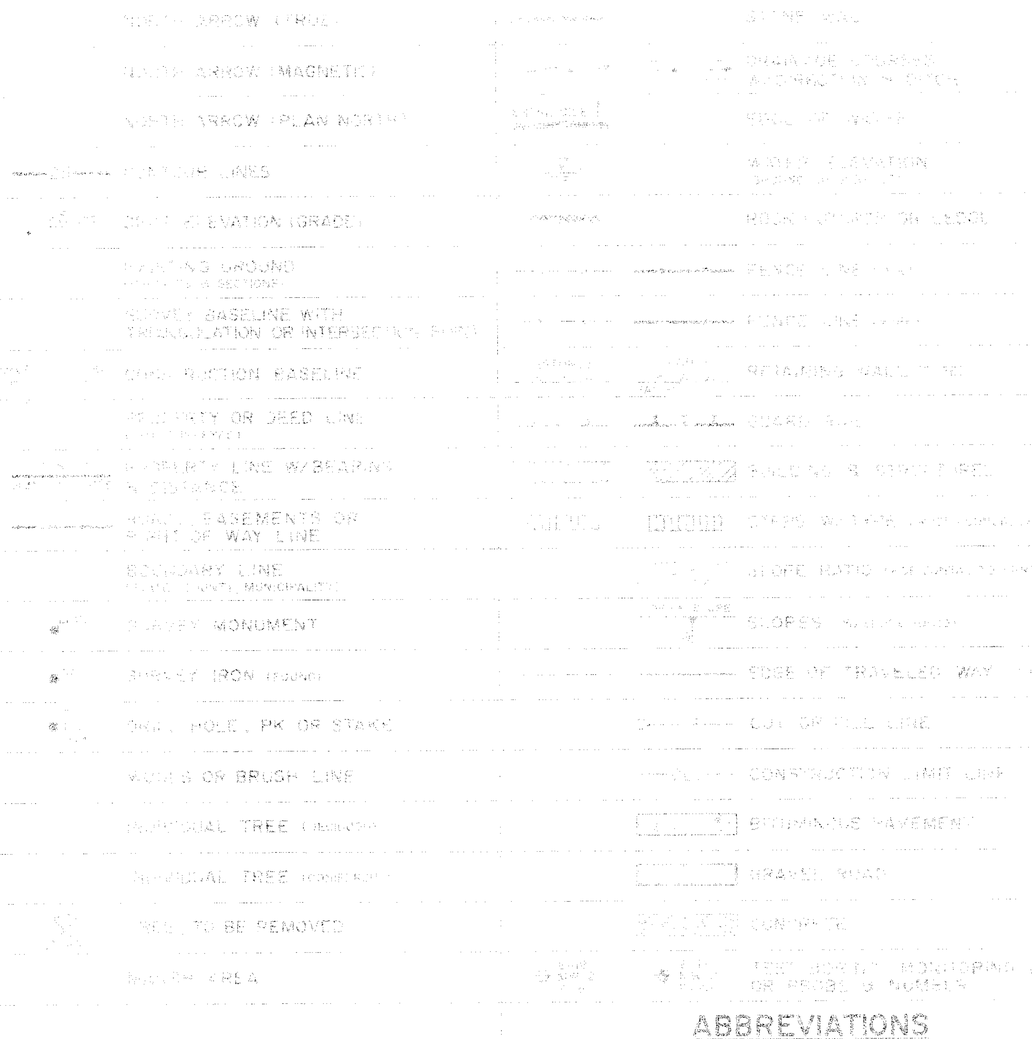
DOLBY III LANDFILL
CELL 9 CONSTRUCTION
COVER SHEET

JOB NO. 94654
ENG. REQ. NO. ——— YB-23039
FILE NO. 2-092-4703.7082

J:\CNSTR\CAD\CONF.DW Thu Sep 8 09:05:39 1994

C D E F G H I L M N O P Q

# SYMBOLS




# ABBREVIATIONS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A.C.M.P. | ASPHALT COATED C.M.P. | C.M.P. | CORRUGATED METAL PIPE | DR. | DRAIN | GPM | GALLONS PER MIN. |
| A.C.P. | ASBESTOS CEMENT PIPE | C.O. | CLEAN OUT | DWG | DRAWING | GPM | GALLONS PER MINUTE (MIN. DENSITY) |
| ACRE | ACRE | CEM. LIN. | CEMENT LINED | EA | EACH | GSPS | GALVANIZED SPIRAL PIPE |
| AGG. | AGGREGATE | CEN | CENTRAL ANGLE OF CURVE | EG | EXISTING GROUND OR GRADE | HP | HORSEPOWER |
| ALUM | ALUMINUM | CF | CUBIC FEET | ELEC | ELECTRIC | HYD | HYDRANT |
| APPD | APPROVED | CFS | CUBIC FEET PER SECOND | ELL | ELBOW | INSIDE DIAM. | INSIDE DIAMETER |
| APPROX | APPROXIMATE | CI | CAST IRON | EQUIP | EQUIPMENT | INCHES | INCHES |
| ASB | ASBESTOS | CL | CLASS | EST | ESTIMATED | INVERT | INVERT |
| ASPH | ASPHALT | CONC | CONCRETE | EXC | EXCAVATE | INVERT ELEV. | INVERT ELEVATION |
| ATTN. C.M.P. | ALUMINUM TYPE 2 C.M.P. | CONST | CONSTRUCTION | EXIST | EXISTING | POUND | POUND |
| AUTO | AUTOMATIC | CONTR | CONTRACTOR | FG | FINISH GRADE | LB | LEAK DETECTOR |
| AUX | AUXILIARY | CTR | CENTER | FIBERGLASS | FIBERGLASS | LD | LEACHATE COLLECTION |
| AVE | AVENUE | CY | CUBIC YARD | FORMATION | FORMATION | LIN. FT | LINEAR FEET |
| AVG | AVERAGE | D | DEGREE OF CURVE (ARC DEF.) | FLEX | FLEXIBLE | LOC | LOCATION |
| AZ | AZIMUTH | DBL | DOUBLE | FLNG | FLANGE | QTY | QUANTITY |
| B.C.M.P. | BITUMINOUS COATED C.M.P. | DEG OR ° | DEGREE | FLR | FLOOR | R.O.W. | RIGHT OF WAY |
| BCM | BENCH MARK | DEPT | DEPARTMENT | FPS | FEET PER SECOND | MECH | MECHANICAL |
| BIT | BITUMINOUS | DI | DUCTILE IRON | FT OR ' | FEET | MATL | MATERIAL |
| BLDG | BUILDING | DIA OR Ø | DIAMETER | FTG | FOOTING | MAX | MAXIMUM |
| BOT | BOTTOM | DIM | DIMENSION | GA | GAUGE | MFR | MANUFACTURE |
| BRG | BEARING | DIST | DISTANCE | GAL | GALLON | MIN | MINIMUM |
| CB | CATCH BASIN | DN | DOWN | GALV | GALVANIZED | MISCELLANEOUS | MISCELLANEOUS |
| | | | | | | MON | MONUMENT |
| | | | | | | N.I.C.O. | NOT IN THIS CONTRACT |
| | | | | | | N.T.S. | NOT TO SCALE |
| | | | | | | N/F | NOW OR FORMERLY |
| | | | | | | NO. OR # | NUMBER |
| | | | | | | O.C. | ON CENTER |
| | | | | | | O.D. | OUTSIDE DIAMETER |
| | | | | | | P.C. | POINT OF CURVE |
| | | | | | | P.I. | POINT OF INTERSECTION |
| | | | | | | P.T. | POINT OF TANGENT |
| | | | | | | PERF | PERFORATED |
| | | | | | | PSF | POUNDS PER SQUARE FOOT |
| | | | | | | PVC | POLYVINYL CHLORIDE |
| | | | | | | PVMT | PAVEMENT |
| | | | | | | QTY | QUANTITY |
| | | | | | | R.O.W. | RIGHT OF WAY |
| | | | | | | RAD | RADIUS |
| | | | | | | REQD | REQUIRED |
| | | | | | | RT | RIGHT |
| | | | | | | RTE | ROUTE |
| | | | | | | S | SLOPE |
| | | | | | | SCH | SCHEDULE |
| | | | | | | SF | SQUARE FEET |
| | | | | | | SHT | SHEET |
| | | | | | | STA | STATION |
| | | | | | | SY | SQUARE YARD |
| | | | | | | TAN | TANGENT |
| | | | | | | TDH | TOTAL DYNAMIC HEAD |
| | | | | | | TEMP | TEMPORARY |
| | | | | | | TYP | TYPICAL |
| | | | | | | V | VOLTS |
| | | | | | | W/ | WITH |
| | | | | | | W/O | WITHOUT |
| | | | | | | YD | YARD |

## GENERAL NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

## MATERIAL SPECIFICATION:

COMMON BORROW - MDOT SPECIFICATION - 703.18

ROADWAY SUBBASE - MDOT SPECIFICATION - 703.06 TYPE "D"

ROADWAY SUBBASE - MDOT SPECIFICATION - 703.06 TYPE "G"

ROADWAY SURFACE COURSE - MDOT SPECIFICATION - 703.10

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

PIPE BEDDING - THE PIPE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

BASAL BLANKET - MDOT SPECIFICATION - 703.05

COMPACTION - DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR).

6" AND 8" PVC PIPE - SDR 21

18" PVC PIPE - SDR 26

## GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 9 ROADWAY AND SEDIMENTATION POND AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING LANDFILL.

## SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIALS -

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

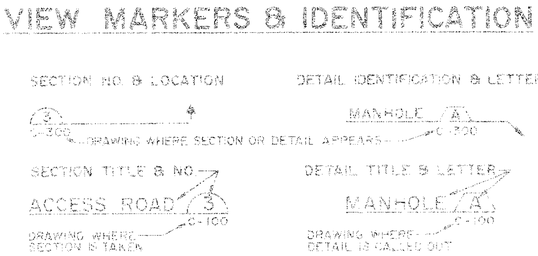
THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH - THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE.

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

## VIEW MARKERS & IDENTIFICATION




STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER

| | |
|---|---|
| 7/95 | RECORD DRAWING |
| 9/8/94 | ISSUED FOR BID |
| 9/7/94 | SUBMITTED TO CLIENT |

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

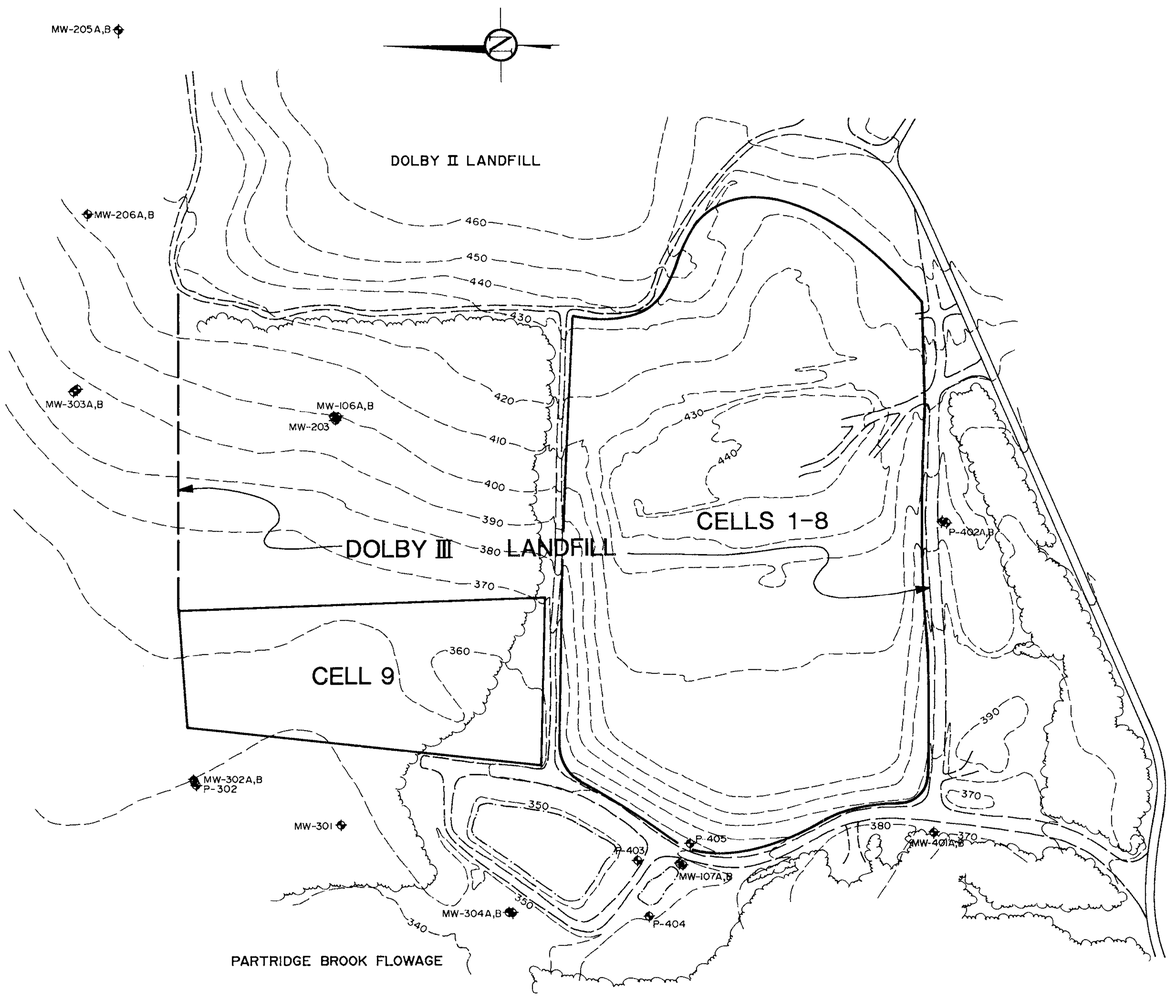
JOB NO. 94028

BOWATER
GREAT NORTHERN PAPER, INC.

EAST OPERATION
DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SYMBOLS & ABBREVIATIONS

JOB NO. 94654
FILE NO. 2-092-470-2792

YD-23040




0 100 200 400 600 800 FEET

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 7/95 | RECORD DRAWING | | | | |
| | | | | 9/8/94 | ISSUED FOR BID | | | | |
| | | | | 9/7/94 | SUBMITTED TO CLIENT | | | | |

REGISTERED PROFESSIONAL ENGINEER

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 94028

| | |
|---|---|
| DRN | |
| CKD | |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL T.O. | C - CONST |
| SCALE 1" = 200' | |

**BOWATER**
GREAT NORTHERN PAPER, INC.

EAST OPERATION
DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SITE LOCATION PLAN

JOB NO. 94654
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-23041

172202
SPILLER'S

# CELL 9

END CAP
INV 356.5

N 665000

N 665115.61
E 474452.50

EXISTING TYPE 1 DITCH

EXISTING
SPOIL
STOCKPILE

CLL

370

360

358

356

355

350

N 664000

E 474500

E 474000

CONTAINMENT DIKES TO BE BUILT
PRIOR TO LANDFILLING IN CELL 9

NTC

END CAP (TYP)

REMOVE EXISTING ROAD PRIOR TO
LANDFILLING IN CELL 9

STRIP EXISTING COVER MATERIAL
PRIOR TO LANDFILLING IN CELL 9

REMOVE EXISTING CATCH BASIN COVER
REPLACE WITH SOLID H-20 LOADING
MANHOLE COVER AS MANUF. BY AMERICAN
CONCRETE, OR EQUAL

BRANCH CONNECTOR A YB-23044

TYPE 1 DRAINAGE DITCH 5 YB-23044

6-IN AND 8-IN LEACHATE COLLECTION PIPES 6 YB-23044

PERFORATED LEACHATE COLLECTION PIPE 4 YB-23044

PERFORATED LEACHATE COLLECTION MAIN 4 YB-23044

STONE CHECK DAM F (TYP) YB-23044

LANDFILL ACCESS ROAD 1 YB-23044

SILTATION FENCE E YB-23044

LEVEL SPREADER D L= 35 FEET YB-23044

CB #30
18" INV IN 353.03
18" INV OUT 353.03
RIM ELEV 359.7

CB #29
18" INV IN 352.55
18" INV OUT 352.55
RIM ELEV 359.2

CB #28
18" INV IN 352.03
8" INV IN 353.65
18" INV OUT 352.03
8" INV OUT 353.65
RIM ELEV 359.7

CB #27
18" INV IN 351.55
18" INV OUT 351.55
RIM ELEV 358.2

CB #26
18" INV IN 351.08
18" INV OUT 351.08
RIM ELEV 357.75

CATCH BASIN 2 YB-23044

STONE CHECK DAM (TYP)

18"

8" PVC (SOLID)

48" BCCMP W/ RIPRAP
INV IN 352.0
INV OUT 349.5
B YB-23044

REMOVE EXISTING STUB AND INSTALL
18" LC PIPE
18" INV IN 350.88

GATE VALVE MANHOLE 3 YB-23044
SHUT OFF UNTIL CELL 9
LANDFILLING BEGINS
INV IN 350.88
INV OUT 350.88

INV 348.3
BASE AT 347.5

RIPRAP
(TYP)

SEDIMENT POND

30" BCCMP

N 665074.47
E 473997.07

N 665094.05
E 473997.07

N 665094.05
E 473978.61

N 665003.13
E 473955.71

N 664498.11
E 474037.88

N 664506.62
E 473930.55

N 664351.47
E 474018.42

POND SPILLWAY C YB-23044

STATE OF MAINE
PETER
MAHER
#4107
REGISTERED
PROFESSIONAL ENGINEER

25 0 50 100 FEET

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 7/95 | RECORD DRAWING | MAK | | | |
| | | 9/8/94 | ISSUED FOR BID | | | | |
| | | 9/7/94 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 94028

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE
P - Prelim | B - Bids
M - Mtl T.O. | C - Const.
SCALE AS SHOWN

BOWATER
Great Northern Paper

EAST OPERATION

# DOLBY III LANDFILL
# CELL 9 CONSTRUCTION
# SITE DEVELOPMENT PLAN

JOB NO. 94654
ENG. REQ. NO. _____ YB-23042
FILE NO. 2-092-4703.7082

D:\GMP\ACAD\CELL9\GNPCELL9 Wed Jul 12 15:21:49 1995

EXISTING
SPOIL
STOCKPILE

370

360

350

FINAL CONTOURS

# CELL 9

400

390

380

370

360

350

25 0 50 100 FEET

STATE OF MAINE
PETER M. MAHER
#4107
REGISTERED
PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 7/95 | RECORD DRAWING | | | | |
| | | 9/8/94 | ISSUED FOR BID | | | | |
| | | 9/7/94 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 94028

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
SCALE AS SHOWN

BOWATER
Great Northern Paper

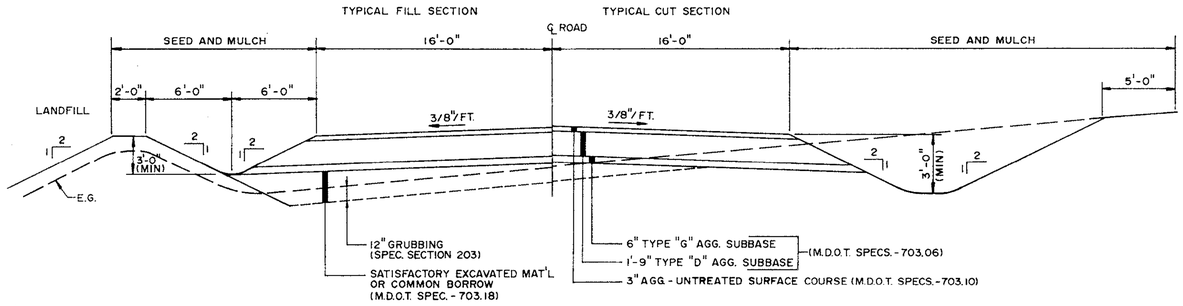
EAST OPERATION

# DOLBY III LANDFILL
# CELL 9 CONSTRUCTION

## FINAL GRADING PLAN

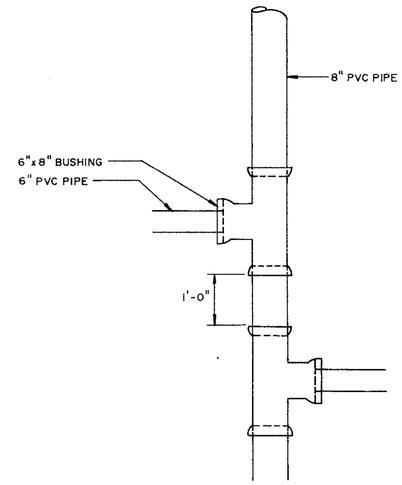
JOB NO. 94654
ENG. REQ. NO. _____ YB-23043
FILE NO. 2-092-4703.7082

D:\GIS\PLAGRID\CELL9 Thu Sep 8 09:31:36 1994



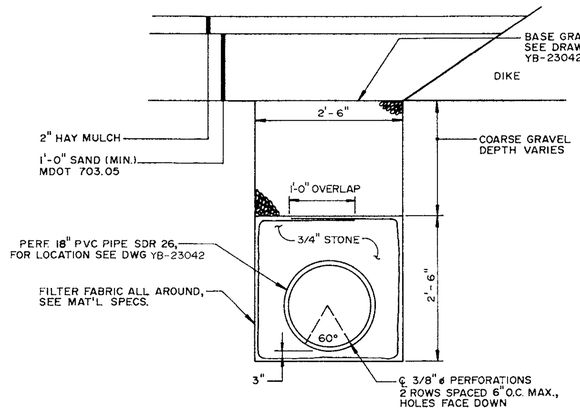

## TYPICAL SECTION LANDFILL ACCESS ROAD (1)

N.T.S. YB-23042



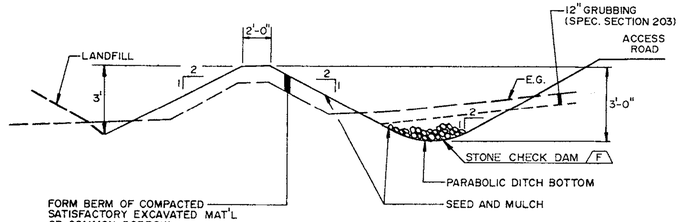

## BRANCH CONNECTOR (A)

N.T.S. YB-23042



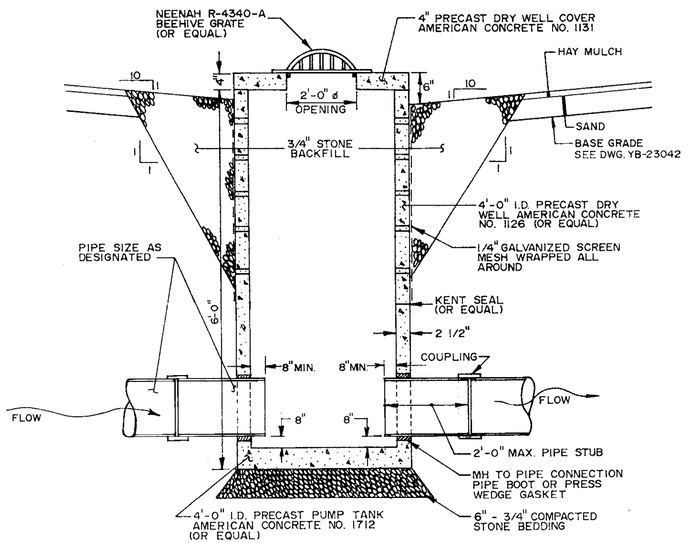

## PERF. LEACHATE COLLECTION MAIN (4)

N.T.S. YB-23042



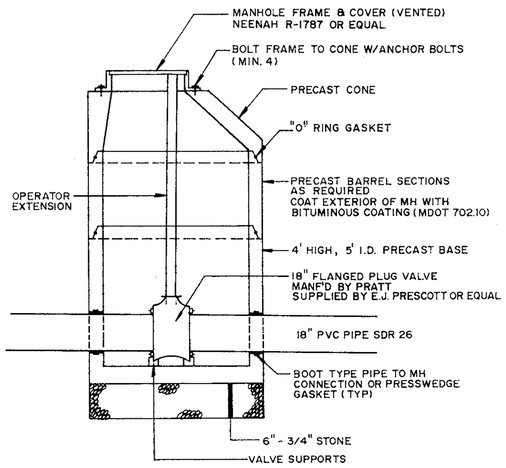

## DIKE AND TYPE I DRAINAGE DITCH (5)

N.T.S. YB-23042



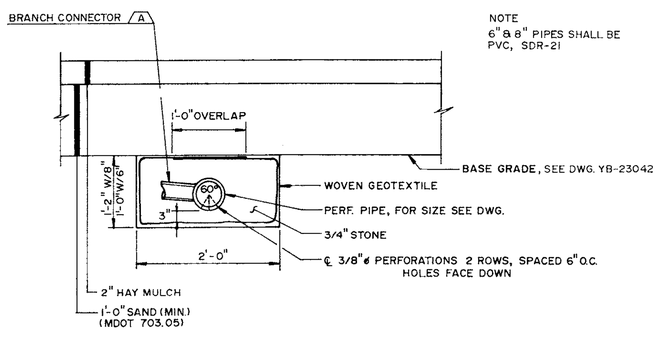

## CATCH BASIN (2)

N.T.S. YB-23042




## VALVE MANHOLE (3)

N.T.S. YB-23042




## 6-IN. 8-IN. LEACHATE COLLECTION PIPES (6)

N.T.S. YB-23042

STATE OF MAINE — PETER M. MAHER #4107 — REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 7/95 | RECORD DRAWING | | | | |
| | | | | 9/8/94 | ISSUED FOR BID | | | | |
| | | | | 9/7/94 | SUBMITTED TO CLIENT | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 94028

| | |
|---|---|
| DRN | |
| CKD | |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL T.O. | C - CONST |
| SCALE N.T.S. | |

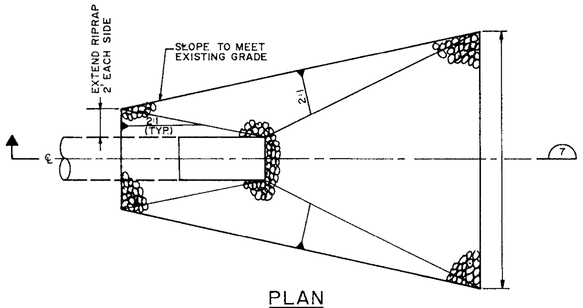
**BOWATER**
GREAT NORTHERN PAPER, INC.

EAST OPERATION
DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SECTIONS & DETAILS

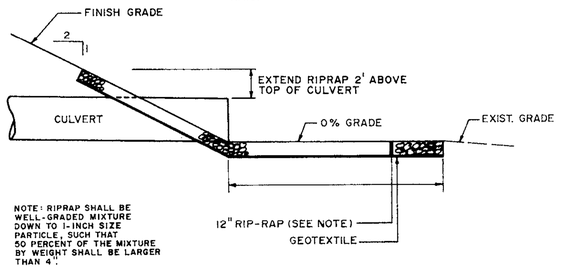
JOB NO. 94654
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

YB-23044
SHEET 1 OF 2

172202
SPILLER'S

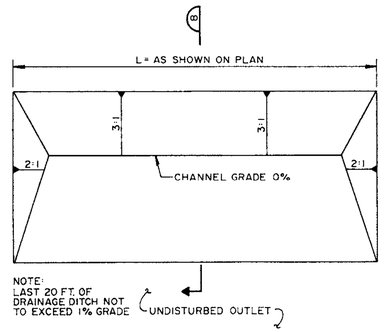



PLAN
N.T.S.

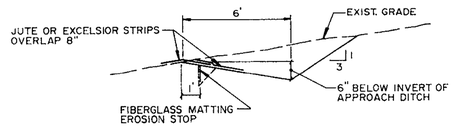



SECTION 7
N.T.S.

CULVERT W/RIPRAP B
YB-23042

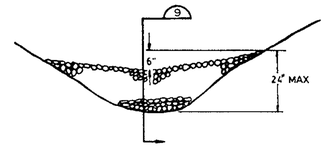



PLAN
NTS



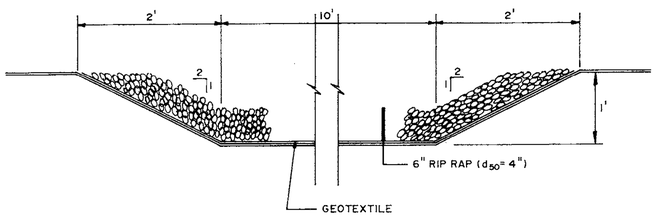

SECTION 8

LEVEL SPREADER D
NTS
YB-23042

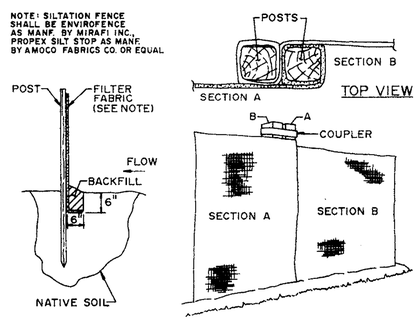



STONE CHECK DAM F
N.T.S.
YB-23042


SECTION 9
N.T.S.




POND SPILLWAY C
N.T.S.
YB-23042




SILTATION FENCE E
N.T.S.
YB-23042

STATE OF MAINE
PETER M. MAHER
8107
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 7/95 | RECORD DRAWING | | | | |
| | | 9/8/94 | ISSUED FOR BID | | | | |
| | | 9/7/94 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 94028

| | |
|---|---|
| DRN | |
| CKD | |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL T.O. | C - CONST |
| SCALE N.T.S. | |

BOWATER
GREAT NORTHERN PAPER, INC.

EAST OPERATION

DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SECTIONS & DETAILS

JOB NO. 94654
ENG. REQ. NO.
FILE NO. 2-092-4703, 7082

YB-23044
SHEET 2 OF 2

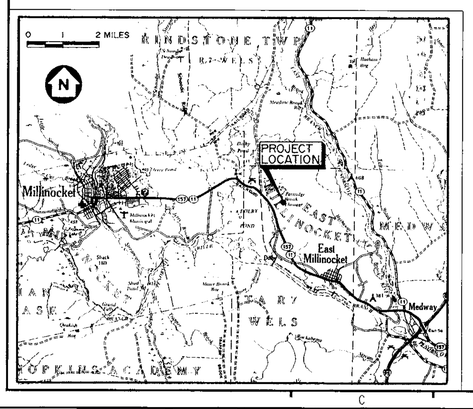
17230
SPILLER'S

# GREAT NORTHERN PAPER, INC.
# A SUBSIDIARY OF BOWATER INCORPORATED
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 10 CONSTRUCTION

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-23378 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-23379 |
| 3 | SITE LOCATION PLAN | YB-23380 |
| 4 | CELL 10 – SITE DEVELOPMENT PLAN | YB-23381 |
| 5 | CELLS 7 & 8 CLOSURE – FINAL GRADING PLAN | YB-23382 |
| 6 | CELL 10 – FINAL GRADING PLAN | YB-23383 |
| 7 | SECTIONS & DETAILS | YB-23384 SHEET 1 OF 2 |
| 8 | SECTIONS & DETAILS | YB-23384 SHEET 2 OF 2 |

## SEVEE & MAHER ENGINEERS, INC.
## CUMBERLAND, MAINE

## 1995




STATE OF MAINE
PETER MAHER
#4107
REGISTERED
PROFESSIONAL ENGINEER

| | |
|---|---|
| SEVEE & MAHER ENGINEERS, INC.<br>CONSULTING ENGINEERS<br>CUMBERLAND CENTER, MAINE | DRN<br>CHK<br>CHK<br>CORR<br>APPVD<br>ISSUE CODE: P – Prelim, B – Bids, M – MTI T.O., C – Const.<br>SCALE |
| JOB NO. 95019 | BOWATER<br>Great Northern Paper |
| EAST OPERATION<br>DOLBY III LANDFILL<br>CELL 10 CONSTRUCTION<br>COVER SHEET<br>JOB NO. _____ YB-23378<br>ENG. REQ. NO. _____<br>FILE NO. 2-092-4703.7082 | |

D:\GNP\ACAD\DFL...10\SMD010 Tue May 23 09:25:02 1995

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (MAGNETIC) | | | STONE WALL | ○ | ● | MANHOLE |
| | | NORTH ARROW (PLAN NORTH) | | | DRAINAGE COURSE (WITH DIRECTION) | ◎ | ○ | CATCH BASIN |
| 25 | 25 | CONTOUR LINES | SHORE SIDE | | EDGE OF WATER | ⋈ | ⋈ | WATER VALVE |
| 25 x 63 | 25.56 x | SPOT ELEVATION (GRADE) | | | WATER ELEVATION (GROUND OR SURFACE) | | | HYDRANT |
| | | EXISTING GROUND | | | FENCE LINE (WOOD) | | | UTILITY POLE |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | FENCE LINE (WIRE) | | ⊘ | CLEAN OUT STRUCTURE |
| | | PROPERTY LINE OR R.O.W. | | | RETAINING WALL | G | G | UNDERGROUND GAS MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE LINE |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | | BUILDING AND STRUCTURES | E | E | UNDERGROUND ELECTRICAL LINE |
| | | BOUNDARY LINE (State, County, Municipality) | | 2 1 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | OE | OE | OVERHEAD ELECTRICAL LINE |
| ⊡ | ■ | SURVEY MONUMENT | | TOP OF SLOPE | SLOPES (WITH SLOPE RATIO) | | 12" ACP | SANITARY SEWER, SIZE & TYPE |
| ○IF | ●IF | SURVEY IRON | | | EDGE OF TRAVELLED WAY | FM | 8" PVC | FORCE MAIN, SIZE & TYPE |
| ○ | ● | DRILL HOLE, PK, OR STAKE | | C F | CUT OR FILL LINE | W | 8" D.I. | WATER MAIN, SIZE & TYPE |
| | | WOODS OR BRUSH LINE | | CLL | CONSTRUCTION LIMIT LINE | | 12" RCP | STORM DRAIN, SIZE & TYPE |
| | | INDIVIDUAL TREE (Deciduous) | | | BITUMINOUS PAVEMENT | UD | 8" UD | UNDERDRAIN, SIZE & TYPE |
| | | INDIVIDUAL TREE (Coniferous) | | | CONCRETE | | | CULVERT |
| | | TREE, TO BE REMOVED | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | RAILROAD |
| | | MARSH AREA | TP-12 | TP-12 | TEST PIT AND NUMBER | | S | SILTATION FENCE |

GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18
ROADWAY SUBBASE – MDOT SPECIFICATION 703.06 TYPE "D"
ROADWAY SUBBASE – MDOT SPECIFICATION 703.06 TYPE "G"
ROADWAY SURFACE COURSE – MDOT SPECIFICATION 703.10

STONE BEDDING – THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE – THE PIPE BEDDING MATERIAL SHALL BE 3/4-INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

BASAL BLANKET – MDOT SPECIFICATION 703.05

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" AND 8" PVC PIPE – SDR 21

12" PVC PIPE – SDR 26

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 10 ROADWAY AND CELL AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING SPOIL PILE.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

## VIEW MARKERS & IDENTIFICATION


| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A.C.C.M.P | ASPHALT COATED C.M.P. | D | DEGREE OF CURVE (ARC DEF.) | HDPE | HIGH DENSITY POLYETHYLENE | P.C. | POINT ON CURVE |
| A.C.P. | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HP | HORSEPOWER | P.I. | POINT OF INTERSECTION |
| AC | ACRE | DEG OR ° | DEGREE | HYD | HYDRANT | P.T. | POINT OF TANGENT |
| AGG | AGGREGATE | DEPT | DEPARTMENT | | | PERF | PERFORATED |
| ALUM | ALUMINUM | DI | DUCTILE IRON | I.D. | INSIDE DIAMETER | PSI | POUNDS PER SQUARE INCH |
| APPD | APPROVED | DIA OR ø | DIAMETER | IN OR " | INCHES | PVC | POLYVINYL CHLORIDE |
| APPROX | APPROXIMATE | DIM | DIMENSION | INV | INVERT | PVMT | PAVEMENT |
| ASB | ASBESTOS | DIST | DISTANCE | INV. EL | INVERT ELEVATION | | |
| ASPH | ASPHALT | DN | DOWN | | | QTY | QUANTITY |
| AUTO | AUTOMATIC | DR | DRAIN | LB | POUND | | |
| AUX | AUXILIARY | DWG | DRAWING | LC | LEACHATE COLLECTION | R.O.W. | RIGHT OF WAY |
| AVE | AVENUE | | | LD | LEAK DETECTION | RAD | RADIUS |
| AZ | AZIMUTH | EA | EACH | LIN FT. | LINEAR FEET | REQD | REQUIRED |
| | | EG | EXISTING GROUND OR GRADE | LOC | LOCATION | RT | RIGHT |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | ELEC | ELECTRIC | LT | LEFT | RTE | ROUTE |
| B.M. | BENCH MARK | EL | ELEVATION | | | | |
| BIT | BITUMINOUS | ELB | ELBOW | M.H. | MANHOLE | S | SLOPE |
| BLDG | BUILDING | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT | SCH | SCHEDULE |
| BOT | BOTTOM | EST | ESTIMATED | MATL | MATERIAL | SF | SQUARE FEET |
| BRG | BEARING | EXC | EXCAVATE | MAX | MAXIMUM | SD | STORM DRAIN |
| | | EXIST | EXISTING | MFR | MANUFACTURE | SDR | STANDARD DIMENSION RATIO |
| C.B. | CATCH BASIN | | | MIN | MINIMUM | SHT | SHEET |
| CEN | CENTER | F.G. | FINISH GRADE | MISC | MISCELLANEOUS | STA | STATION |
| CEM. LIN. | CEMENT LINED | FBRGL | FIBERGLASS | MON | MONUMENT | SY | SQUARE YARD |
| C.M.P. | CORRUGATED METAL PIPE | FDN | FOUNDATION | | | | |
| C.O. | CLEAN OUT | FLEX | FLEXIBLE | N.I.T.C. | NOT IN THIS CONTRACT | TAN | TANGENT |
| CF | CUBIC FEET | FLG | FLANGE | N.T.S. | NOT TO SCALE | TDH | TOTAL DYNAMIC HEAD |
| CFS | CUBIC FEET PER SECOND | FLR | FLOOR | N/F | NOW OR FORMERLY | TEMP | TEMPORARY |
| CI | CAST IRON | FPS | FEET PER SECOND | NO. OR # | NUMBER | TYP | TYPICAL |
| CL | CLASS | FT OR ' | FEET | | | | |
| CONC | CONCRETE | FTG | FOOTING | O.C. | ON CENTER | V | VOLTS |
| CONST | CONSTRUCTION | | | O.D. | OUTSIDE DIAMETER | | |
| CONTR | CONTRACTOR | GA | GAUGE | | | W/ | WITH |
| CTR | CENTER | GAL | GALLON | | | W/O | WITHOUT |
| CY | CUBIC YARD | GALV | GALVANIZED | | | | |
| | | GPD | GALLONS PER DAY | | | YD | YARD |
| | | GPM | GALLONS PER MINUTE | | | | |

STATE OF MAINE — PETER M. J. MAHER #4107 — REGISTERED PROFESSIONAL ENGINEER

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

| ISSUE CODE | |
|---|---|
| P – Prelim | B – Bids |
| M – Mtl T.O. | C – Const. |
| SCALE | |

BOWATER
Great Northern Paper

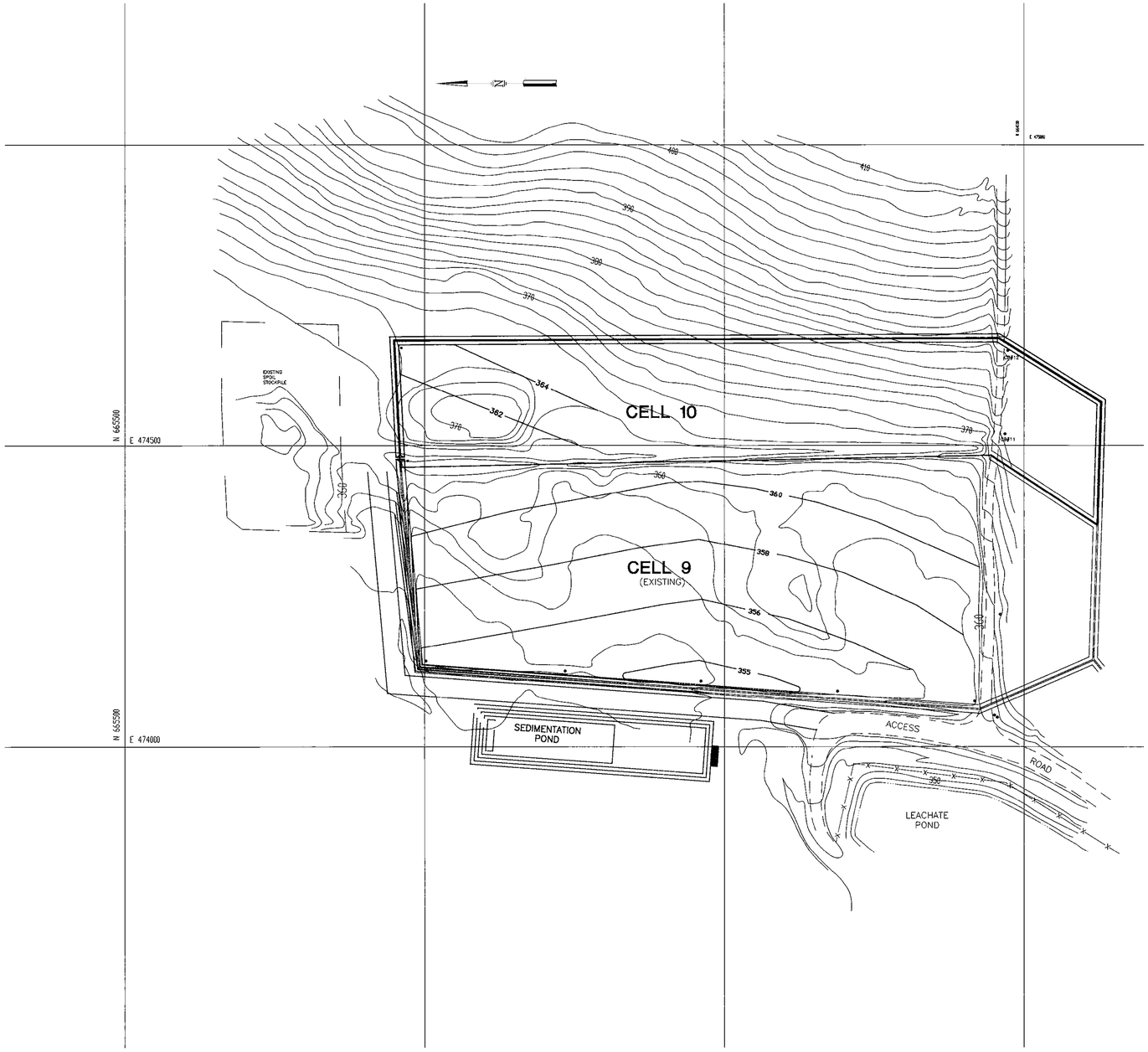
EAST OPERATION

DOLBY III LANDFILL
CELL 10 CONSTRUCTION
SYMBOLS & ABBREVIATIONS

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703.7082

YB-23379

D:\SME\CAD\SYMS4.* Tue May 23 05:46:48 1995




50 0 100 200 FEET

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| YB-15263 | DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION | | | | | | | | |
| YB-23042 | DOLBY III LANDFILL AREA, CELL 9 CONSTRUCTION, SITE DEVELOPMENT PLAN | | | | | | | | |
| | | | | 5/95 | SUBMITTED FOR BID | | | | |
| | | | | 4/95 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P – Prelim | B – Bids |
| M – Mtl T.O. | C – Const. |
| SCALE AS SHOWN | |

STATE OF MAINE
PETER W. MAHER
#4107
REGISTERED
PROFESSIONAL ENGINEER

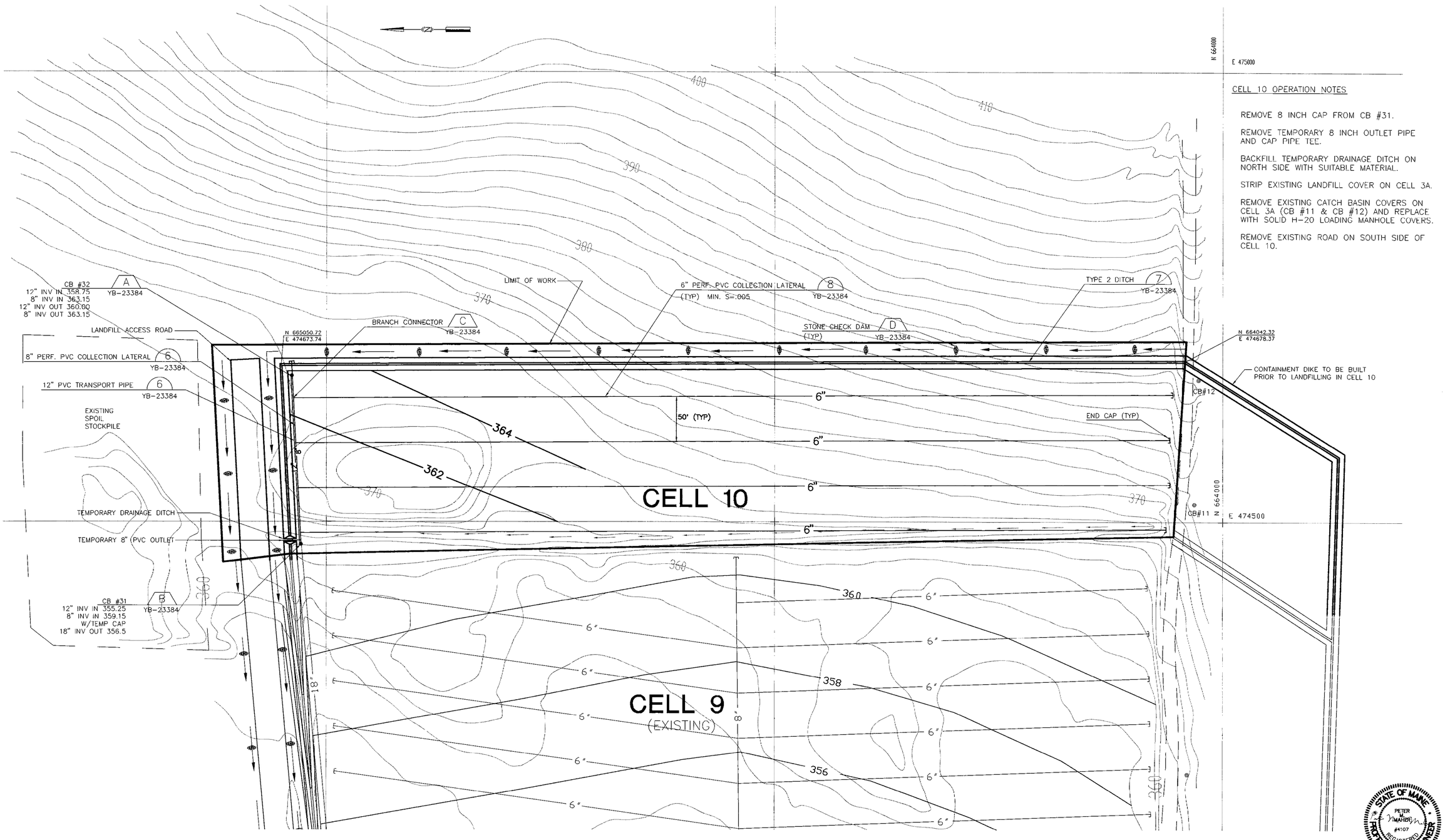
BOWATER
Great Northern Paper

EAST OPERATION

# DOLBY III LANDFILL CELL 10 CONSTRUCTION SITE LOCATION PLAN

JOB NO. _____ YB-23380
ENG. REQ. NO. _____
FILE NO. 2-092-4703.7082

D:\MAP\ACAD\CELL10\DWPCELL10 Tue May 23 10:11:21 1995




| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|
| YB-15263 | DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION |
| YB-23042 | DOLBY III LANDFILL AREA, CELL 9 CONSTRUCTION, SITE DEVELOPMENT PLAN |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 5/95 | SUBMITTED FOR BID | | | | |
| | | 4/95 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE: P – Prelim; B – Bids; M – Mtl T.O.; C – Const.

SCALE AS SHOWN

BOWATER
Great Northern Paper

EAST OPERATION

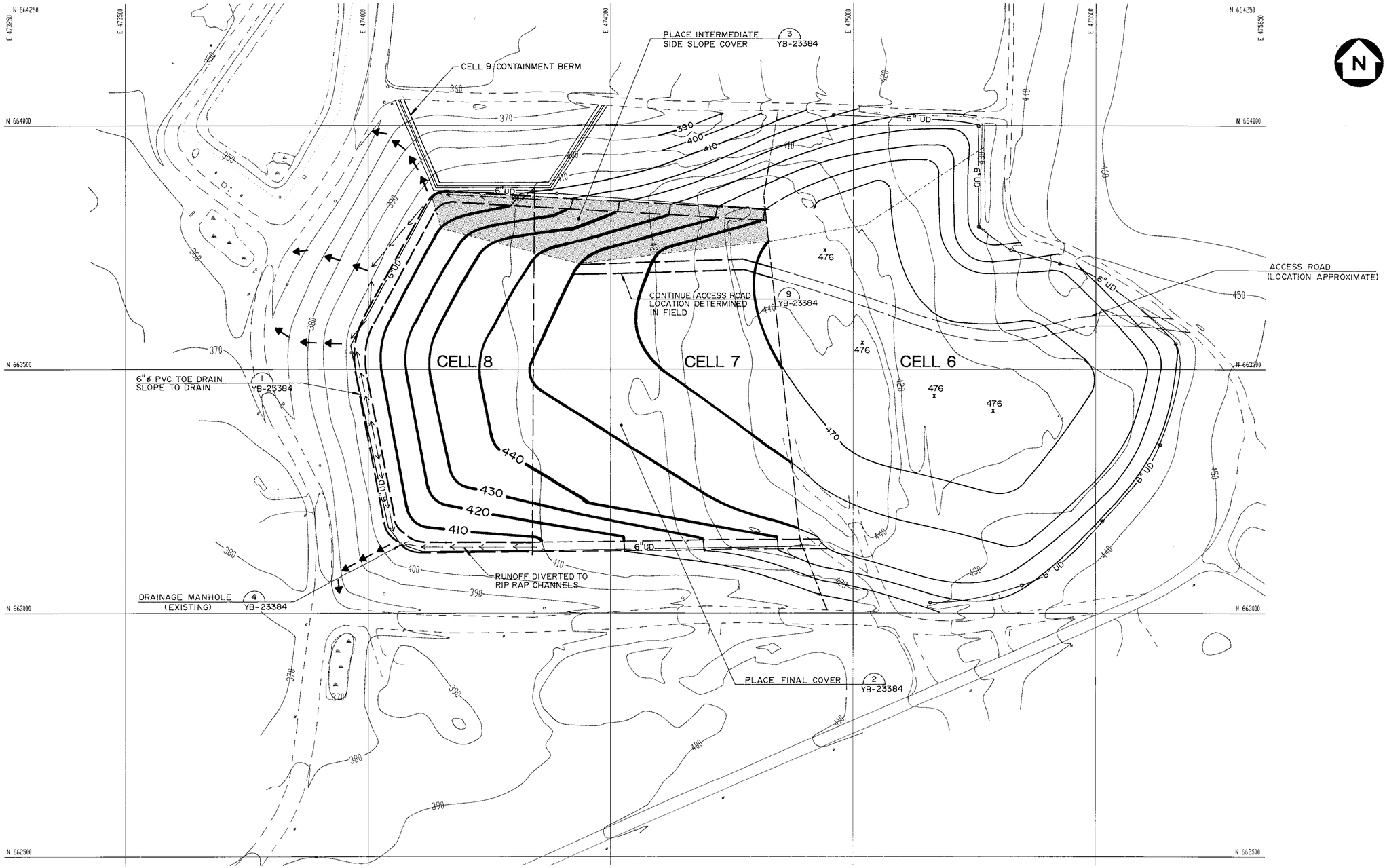
# DOLBY III LANDFILL CELL 10 CONSTRUCTION SITE DEVELOPMENT PLAN

JOB NO. _____ YB-23381
ENG. REQ. NO. _____
FILE NO. 2-092-4703.7082

STATE OF MAINE · PETER M. MAHER #4107 · REGISTERED PROFESSIONAL ENGINEER

85 0 50 100 FEET

D:\DWP\ACAD\CELL10\GNPSCL10 Tue May 23 09:56:58 1995




COMPILED AND CONTROLLED BY JAMES W. SEWALL CO.
OLD TOWN, ME BY PHOTOGRAMMETRIC METHODS
FROM AERIAL PHOTOGRAPHS DATED 8/9/90

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 10/97 | RECORD DRAWING | MHC | | | |
| | | C | | 8/95 | ISSUED FOR CONSTRUCTION | MHC | | | |
| | | B | | 5/95 | SUBMITTED FOR BID | | | | |

STATE OF MAINE — PETER W. MAHER — 9417 — REGISTERED PROFESSIONAL ENGINEER

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | PAE |
| CKD | MHC |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL T.O. | C - CONST |
| SCALE | 1" = 100' |

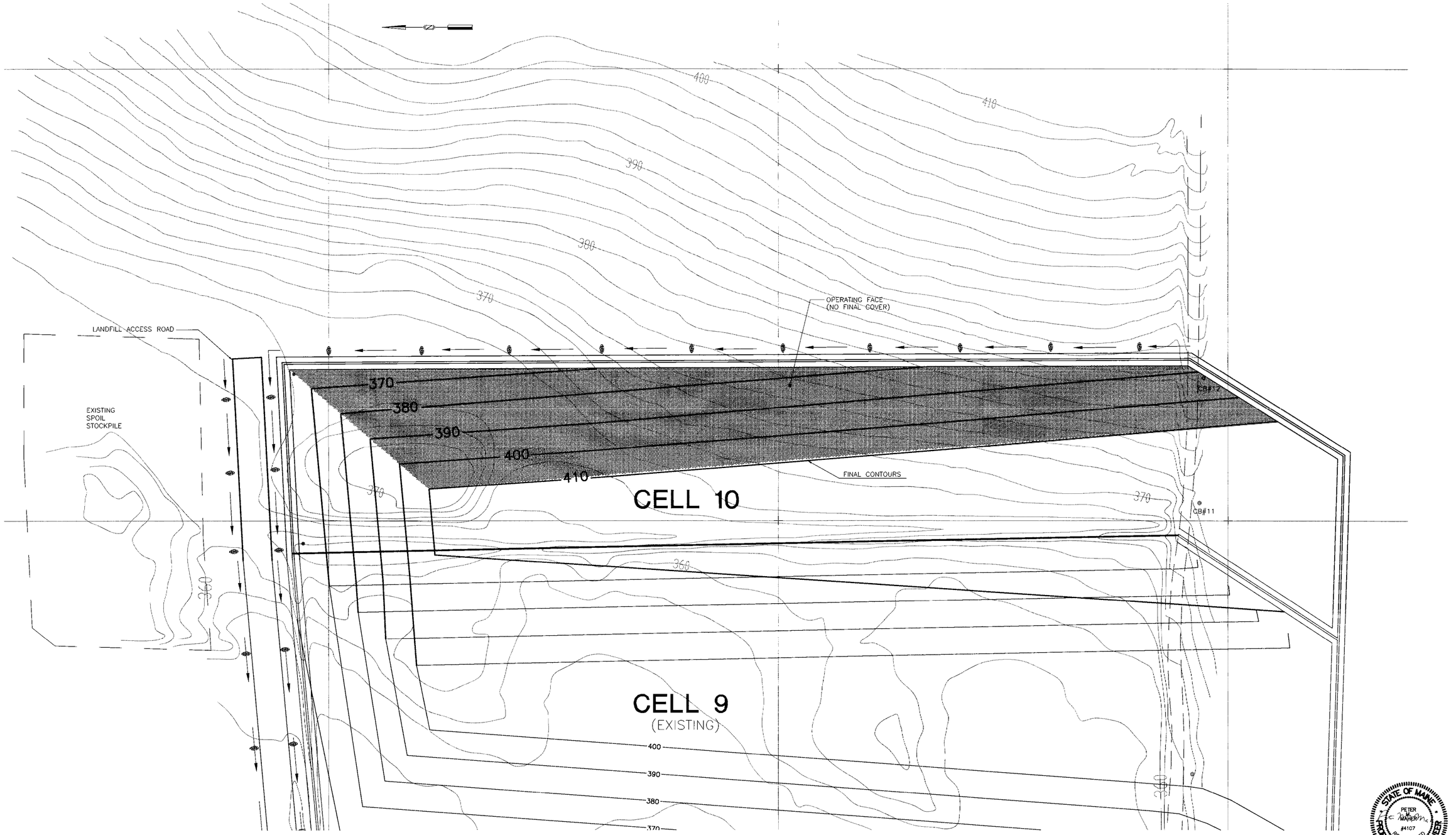
**BOWATER**
GREAT NORTHERN PAPER

EAST OPERATION
DOLBY III LANDFILL
CELLS 7 & 8 CLOSURE
FINAL GRADING PLAN

JOB NO. 94678
ENG. REQ. NO.
FILE NO. 2-092-4703, 7082

YB-23382

SPILLER'S




25 0 50 100 FEET

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|
| YB-15263 | DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION |
| YB-23042 | DOLBY III LANDFILL AREA, CELL 9 CONSTRUCTION, SITE DEVELOPMENT PLAN |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 5/95 | SUBMITTED FOR BID | | | | |
| | | 4/95 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE: P – Prelim; B – Bids; M – Mtl T.O.; C – Const.

SCALE AS SHOWN

STATE OF MAINE · PETER C. MAHER · #4107 · REGISTERED PROFESSIONAL ENGINEER

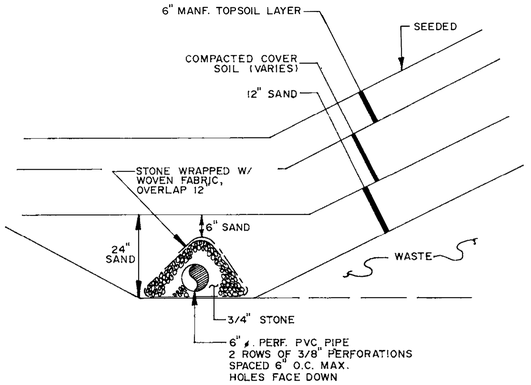
BOWATER
Great Northern Paper

EAST OPERATION

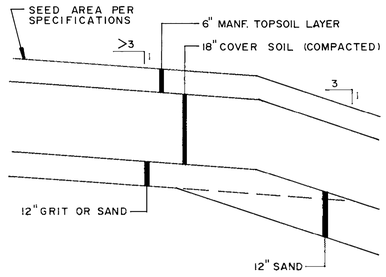
# DOLBY III LANDFILL
# CELL 10 CONSTRUCTION
## FINAL GRADING PLAN

JOB NO. _____ YB-23383
ENG. REQ. NO. _____
FILE NO. 2-092-4703.7082

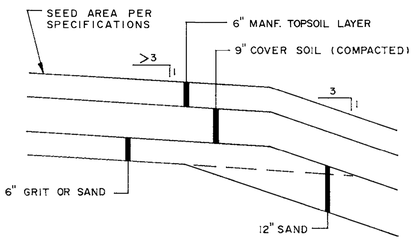
D:\SM\ACAD\CELL10\GNPCEL10 Tue May 23 11:19:14 1995




SECTION 1
N.T.S. YB-23382



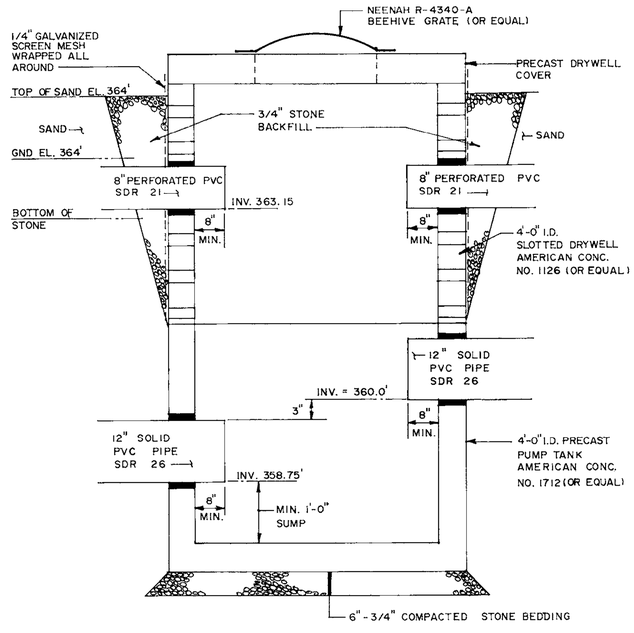

FINAL COVER SECTION 2
N.T.S. YB-23382



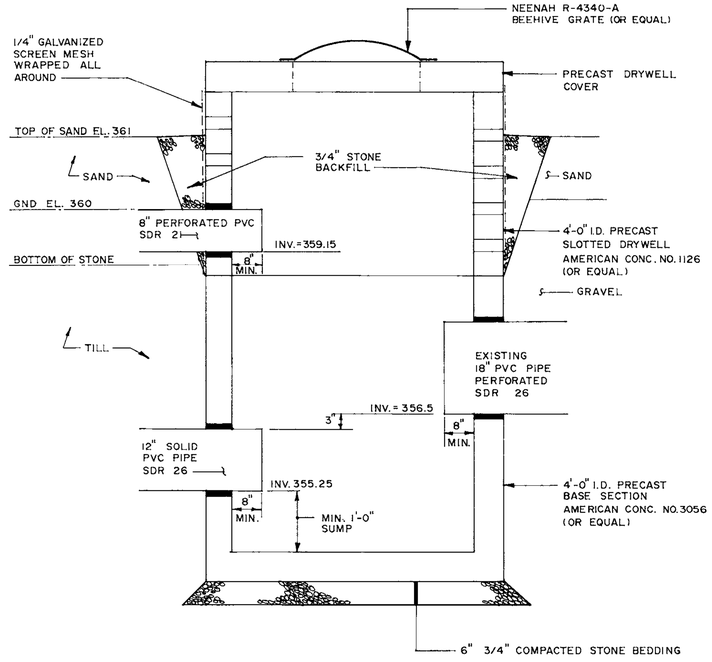

INTERMEDIATE SLOPE COVER SECTION 3
N.T.S. YB-23382




DRAINAGE MANHOLE 4
N.T.S. (EXISTING) YB-23382




CATCH BASIN # 32 A
N.T.S. YB-23381




CATCH BASIN # 31 B
N.T.S. YB-23381

STATE OF MAINE PETER MAHER

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| C | | 8/95 | ISSUED FOR CONSTRUCTION | | | | |
| B | | 5/95 | SUBMITTED FOR BID | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | HAH |
| CKD | |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL T.O. | C - CONST |
| SCALE N.T.S. | |

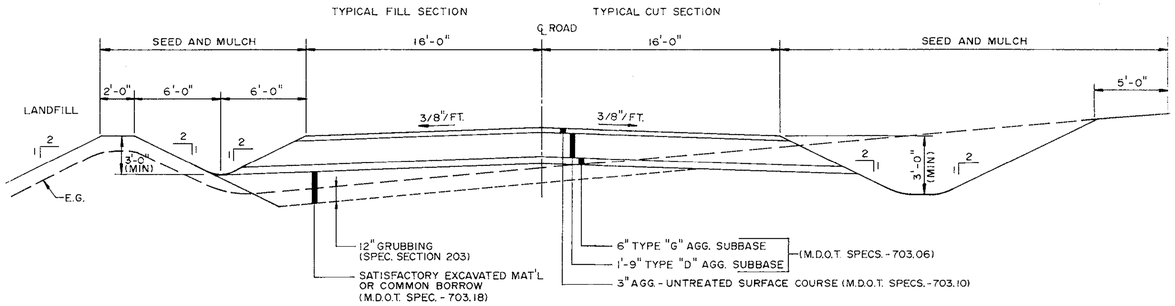
BOWATER
GREAT NORTHERN PAPER

EAST OPERATION
DOLBY III LANDFILL
CELL 10 CONSTRUCTION
SECTIONS & DETAILS

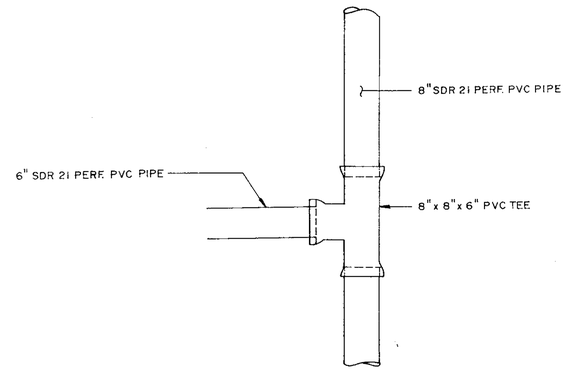
JOB NO. 94678
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-23384
SHEET 1 OF 2

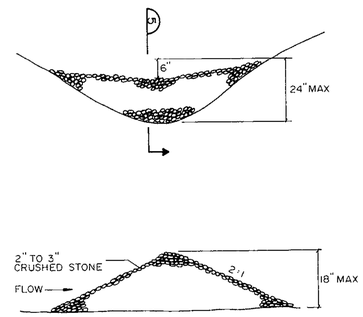
172203
SPILLER'S



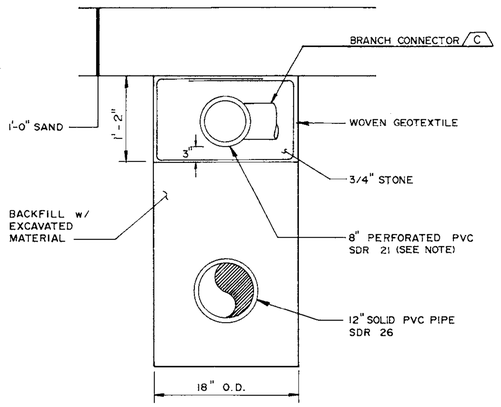

## TYPICAL SECTION
## LANDFILL ACCESS ROAD
NTS




## BRANCH CONNECTOR C
N.T.S. YB-23381

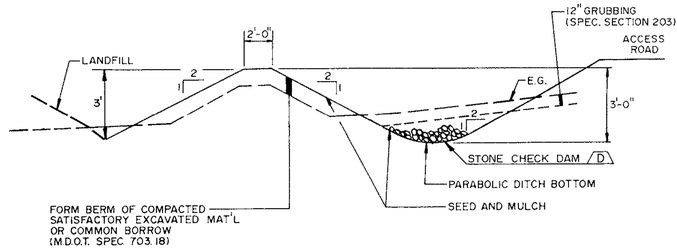



## SECTION 5
## STONE CHECK DAM D
NTS YB-23381

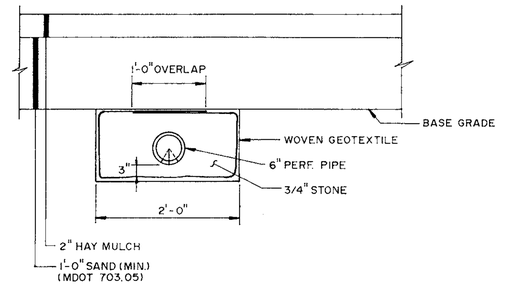



NOTE.
PIPE PERFORATIONS SHALL BE 3/8" ⌀ HOLES, 6" O.C., 2 ROWS. ROWS SHALL BE MINIMUM 45°, MAXIMUM 60° FROM INVERT OF PIPE. HOLES SHALL FACE DOWN.

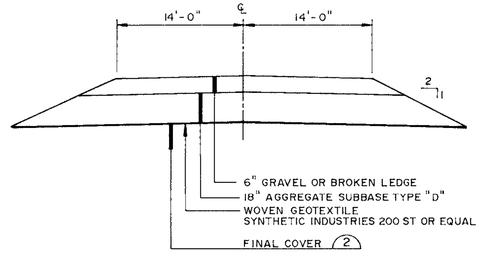
## 12-IN., 8-IN. LEACHATE COLLECTION PIPES 6
NTS YB-23381




## DIKE AND TYPE 2 DRAINAGE DITCH 7
N.T.S. YB-23381




## 6-IN. LEACHATE COLLECTION PIPE 8
N.T.S. YB-23381




## ACCESS ROAD 9
N.T.S. YB-23382

STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| C | | 8/95 | ISSUED FOR CONSTRUCTION | HAM | | | |
| B | | 5/95 | SUBMITTED FOR BID | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | HAM |
| CKD | HAM |
| CKD | |
| CORR | |
| APPVD | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL T.O. | C - CONST

SCALE N.T.S.

**BOWATER**
GREAT NORTHERN PAPER

EAST OPERATION
DOLBY III LANDFILL
CELL 10 CONSTRUCTION
SECTIONS & DETAILS

JOB NO. 94678
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-23384
SHEET 2 OF 2

172202
SPILLER'S

# GREAT NORTHERN PAPER, INC.
# A SUBSIDIARY OF BOWATER INCORPORATED
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 11 CONSTRUCTION

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-25219 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-25220 |
| 3 | EXISTING CONDITIONS PLAN | YB-25221 |
| 4 | CELL 11 - SITE DEVELOPMENT PLAN | YB-25222 |
| 5 | FINAL GRADING PLAN | YB-25223 |
| 6 | SECTIONS & DETAILS | YB-25224 |


*SME*

*Sevee & Maher Engineers, Inc.*

*Waste Management and Hydrogeologic Consultants*

*Cumberland Center, Maine*


99070.00

| | |
|---|---|
| DRN | MSB |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - Prelim | B - Bids |
| M - MH T.O. | C - Const. |
| SCALE | NONE |

BOWATER
Great Northern Paper

EAST OPERATION

DOLBY III LANDFILL
CELL 11 CONSTRUCTION
COVER SHEET

JOB NO. 94744
ENG. REQ. NO.
FILE NO. 2-092-7082

YB-25219

G:\GNP\Do1\ACAD\Cell11\Gnpcov11.dwg Tue Jul 27 08:44:52 1999 DHD

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (MAGNETIC) | | | STONE WALL | ○ | ● | MANHOLE |
| Ⓝ | | NORTH ARROW (PLAN NORTH) | | | DRAINAGE COURSE (WITH DIRECTION) | ◎ | ⊙ | CATCH BASIN |
| 25 | 25 | CONTOUR LINES | SHORE SIDE | | EDGE OF WATER | ⋈ | ⋈ | WATER VALVE |
| 25 x 63 | 25.56 x | SPOT ELEVATION (GRADE) | | | WATER ELEVATION (GROUND OR SURFACE) | | | HYDRANT |
| | | EXISTING GROUND | | | FENCE LINE (WOOD) | | | UTILITY POLE |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | FENCE LINE (WIRE) | | ⊘ | CLEAN OUT STRUCTURE |
| | | PROPERTY LINE OR R.O.W. | | | RETAINING WALL | G | G | UNDERGROUND GAS MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE LINE |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | | BUILDING AND STRUCTURES | E | E | UNDERGROUND ELECTRICAL LINE |
| | | BOUNDARY LINE (State, County, Municipality) | | 1 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | OE | OE | OVERHEAD ELECTRICAL LINE |
| ⊡ | ■ | SURVEY MONUMENT | | TOP OF SLOPE 2 1 | SLOPES (WITH SLOPE RATIO) | | 12" ACP | SANITARY SEWER (SIZE & TYPE) |
| ○IF | ●IF | SURVEY IRON | | | EDGE OF TRAVELED WAY | FM | 8" PVC | FORCE MAIN (SIZE & TYPE) |
| ○ | ● | DRILL HOLE, PK, OR STAKE | | F | CUT OR FILL LINE | W | 8" D.I. | WATER MAIN (SIZE & TYPE) |
| | | WOODS OR BRUSH LINE | | CLL | CLEARING LIMIT LINE | | 12" RCP | STORM DRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Deciduous) | | | BITUMINOUS PAVEMENT | UD | 8" UD | UNDERDRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Coniferous) | | | CONCRETE | | | CULVERT |
| | | TREE, TO BE REMOVED | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | RAILROAD |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | S | SILTATION FENCE |
| | | | | | | PD | 6" PD | PERIMETER DRAIN (SIZE & TYPE) |
| | | | | | | LT | 6" LT | LEACHATE TRANSPORT (SIZE & TYPE) |
| | | | | | | LC | 6" LC | LEACHATE COLLECTION (SIZE & TYPE) |
| | | | | | | LD | 6" LD | LEAK DETECTION, SIZE & TYPE |
| | | | | | | | | TERRACE DRAINAGE SWALE |
| | | | | | | | 4" GS | GRAVITY SEWER |
| | | | | | | | 6" SWP | SOLID WALL PIPE |

GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18

STONE BEDDING – THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE – THE PIPE BEDDING MATERIAL SHALL BE 3/4-INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

BASAL BLANKET – MDOT SPECIFICATION 703.05

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" AND 8" PVC PIPE – SDR 21

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 11 ROADWAY AND CELL AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING SPOIL PILE.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

| SEED: | | |
|---|---|---|
| | TALL FESCUE | 59% |
| | RED FESCUE | 25% |
| | RED TOP | 5% |
| | LADINO CLOVER | 3% |
| | ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

| | | | | | |
|---|---|---|---|---|---|
| A.C.C.M.P | ASPHALT COATED C.M.P. | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE |
| A.C.P. | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HP | HORSEPOWER |
| AC | ACRE | DEG OR ° | DIAMETER | HYD | HYDRANT |
| AGG | AGGREGATE | DEPT | DEPARTMENT | | |
| ALUM | ALUMINUM | DI | DUCTILE IRON | I.D. | INSIDE DIAMETER |
| APPD | APPROVED | DIA OR ø | DIAMETER | IN OR " | INCHES |
| APPROX | APPROXIMATE | DIM | DIMENSION | INV | INVERT |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV. EL. | INVERT ELEVATION |
| ASB | ASBESTOS | DN | DOWN | | |
| ASPH | ASPHALT | DR | DRAIN | LB | POUND |
| AUTO | AUTOMATIC | DWG | DRAWING | LC | LEACHATE COLLECTION |
| AUX | AUXILIARY | | | LD | LEAK DETECTION |
| AVE | AVENUE | EA | EACH | LIN. FT. | LINEAR FEET |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LOC | LOCATION |
| | | ELEC | ELECTRIC | LT | LEACHATE TRANSPORT |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | EL | ELEVATION | | |
| B.M. | BENCH MARK | ELB | ELBOW | M.H. | MANHOLE |
| BIT | BITUMINOUS | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT |
| BLDG | BUILDING | EST | ESTIMATED | MATL | MATERIAL |
| BOT | BOTTOM | EXC | EXCAVATE | MAX | MAXIMUM |
| BRG | BEARING | EXIST | EXISTING | MFR | MANUFACTURE |
| | | | | MIN | MINIMUM |
| C.B. | CATCH BASIN | F.G. | FINISH GRADE | MISC | MISCELLANEOUS |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT |
| CEM. LIN. | CEMENT LINED | FDN | FOUNDATION | | |
| C.M.P. | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | N.I.T.C. | NOT IN THIS CONTRACT |
| C.O. | CLEAN OUT | FLG | FLANGE | N.T.S. | NOT TO SCALE |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO. OR # | NUMBER |
| CI | CAST IRON | FT OR ' | FEET | | |
| CL | CLASS | FTG | FOOTING | O.C. | ON CENTER |
| CONC | CONCRETE | | | O.D. | OUTSIDE DIAMETER |
| CONST | CONSTRUCTION | GA | GAUGE | | |
| CONTR | CONTRACTOR | GAL | GALLON | P.C. | POINT ON CURVE |
| CTR | CENTER | GALV | GALVANIZED | PD | PERIMETER DRAIN |
| CY | CUBIC YARD | GPD | GALLONS PER DAY | P.I. | POINT OF INTERSECTION |
| | | GPM | GALLONS PER MINUTE | P.T. | POINT OF TANGENT |
| | | | | PERF | PERFORATED |
| | | | | PSI | POUNDS PER SQUARE INCH |
| | | | | PVC | POLYVINYL CHLORIDE |
| | | | | PVMT | PAVEMENT |
| | | | | QTY | QUANTITY |
| | | | | R.O.W. | RIGHT OF WAY |
| | | | | RAD | RADIUS |
| | | | | REQD | REQUIRED |
| | | | | RT | RIGHT |
| | | | | RTE | ROUTE |
| | | | | S | SLOPE |
| | | | | SCH | SCHEDULE |
| | | | | SF | SQUARE FEET |
| | | | | SHT | SHEET |
| | | | | STA | STATION |
| | | | | SY | SQUARE YARD |
| | | | | TAN | TANGENT |
| | | | | TDH | TOTAL DYNAMIC HEAD |
| | | | | TEMP | TEMPORARY |
| | | | | TYP | TYPICAL |
| | | | | V | VOLTS |
| | | | | W/ | WITH |
| | | | | W/O | WITHOUT |
| | | | | YD | YARD |

## VIEW MARKERS & IDENTIFICATION

SECTION TITLE & NO. — ACCESS ROAD 3 — C-100 — DRAWING WHERE SECTION APPEARS

DETAIL TITLE & LETTER — MANHOLE A — C-100 — DRAWING WHERE DETAIL APPEARS

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 7/30/99 | SUBMITTED TO CLIENT | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*

| | |
|---|---|
| DRN | MSB |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P – Prelim | B – Bids |
| M – Mtl T.O. | C – Const. |
| SCALE AS SHOWN | |

BOWATER
Great Northern Paper

CENTRAL ENGINEERING

DOLBY III LANDFILL
CELL 11 CONSTRUCTION
SYMBOLS & ABBREVIATIONS

JOB NO. 94744
ENG. REQ. NO.
FILE NO. 2-092-7082

YB-25220

G:\GNP\Go1\ACAD\Ge1111\sysmsht.dwg Fri Jul 30 14:20:40 1999

CELL 11

Existing Leachate Collection Pipes (TYP)

CELL 10
(EXISTING)

CELL 9
(EXISTING)

CELL 1
THROUGH
CELL 8
(EXISTING)

EXISTING SPOIL STOCKPILE

GROUND OBSCURED

N 662500
E 475000
E 474500
E 474000

GENERAL NOTES:

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. NORRIDGEWOCK, MAINE, PHOTOGRAPH DATED 5/1/99.
2. GROUND CONTROL PROVIDED BY PLISGA & DAY, BANGOR, MAINE.
3. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MDEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE, AND LOCAL PERMITS.

50 0 100 200

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 7/30/99 | SUBMITTED TO CLIENT | | | | |


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


JOB NO. 99070

| | |
|---|---|
| DRN | MSB |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE

| | |
|---|---|
| P – Prelim | B – Bids |
| M – Mtl T.O. | C – Const. |

SCALE AS SHOWN

BOWATER
Great Northern Paper

EAST OPERATION

# DOLBY III LANDFILL CELL 11 CONSTRUCTION EXISTING CONDITIONS PLAN

JOB NO. 94744
ENG. REQ. NO.
FILE NO. 2-092-7082

YB-25221

G:\GNP\Dolby11\ACAD\Cell11\CELL11.dwg Fri Jul 30 14:16:04 1999

MW-303A
MW-303B
N 665000
E 475000
MW-106A
MW-106B
MW-203
N 664000
E 475000
CB #33
(EXIST.) 12" INV IN =
8" INV IN = 379.00
(EXIST.) 12" INV OUT
8" INV OUT = 379.00
B
YB-25224
LIMIT OF WORK
TYPE 2 DITCH 1
YB-25224
6" PERF. PVC COLLECTION LATERAL 2
(TYP) MIN. S=.005
YB-25224
CB#16
STONE CHECK DAM C
YB-25224
N 665062.22
E 474898.04
CONTAINMENT DIKE TO BE BUILT PRIOR TO LANDFILLING IN CELL 11
8" PERF. PVC COLLECTION LATERAL 4
YB-25224
EXISTING 12" PVC TRANSPORT PIPE
6"
LIMIT OF SAND DRAINAGE BLANKET (EL. 400)
CB#14
CELL 11
TEMPORARY DRAINAGE DITCH
EXIST. CB #32
12" INV IN 358.75
8" INV IN 363.15
12" INV OUT 360.00
8" INV OUT 363.15
LANDFILL ACCESS ROAD 5
YB-25224
BRANCH CONNECTOR A
YB-25224
N 664042.32
E 474678.37
CB#12
END CAP (TYP)
EXISTING SPOIL STOCKPILE
CELL 10
(EXISTING)
N 665000
E 474500
358.9
CB#11
N 664000
E 474500
GROUND OBSCURED
CELL 9
(EXISTING)

CELL 11 OPERATION NOTES

REMOVE 8 INCH CAP FROM CB #32.

REMOVE TEMPORARY 8 INCH OUTLET PIPE AND CAP PIPE TEE.

BACKFILL TEMPORARY DRAINAGE DITCH ON NORTH SIDE WITH SUITABLE MATERIAL.

STRIP EXISTING LANDFILL COVER ON CELL 3B.

REMOVE EXISTING CATCH BASIN COVER ON CELL 3B (CB #14) AND REPLACE WITH SOLID H-20 LOADING MANHOLE COVER.

25 0 50 100

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 12/27/99 | RECORD DRAWING | | | | |
| | | 7/30/99 | SUBMITTED TO CLIENT | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 99070

| | |
|---|---|
| DRN | MSB |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - Prelim | B - Bids |
| M - Mtl T.O. | C - Const. |
| SCALE | AS SHOWN |

BOWATER
Great Northern Paper

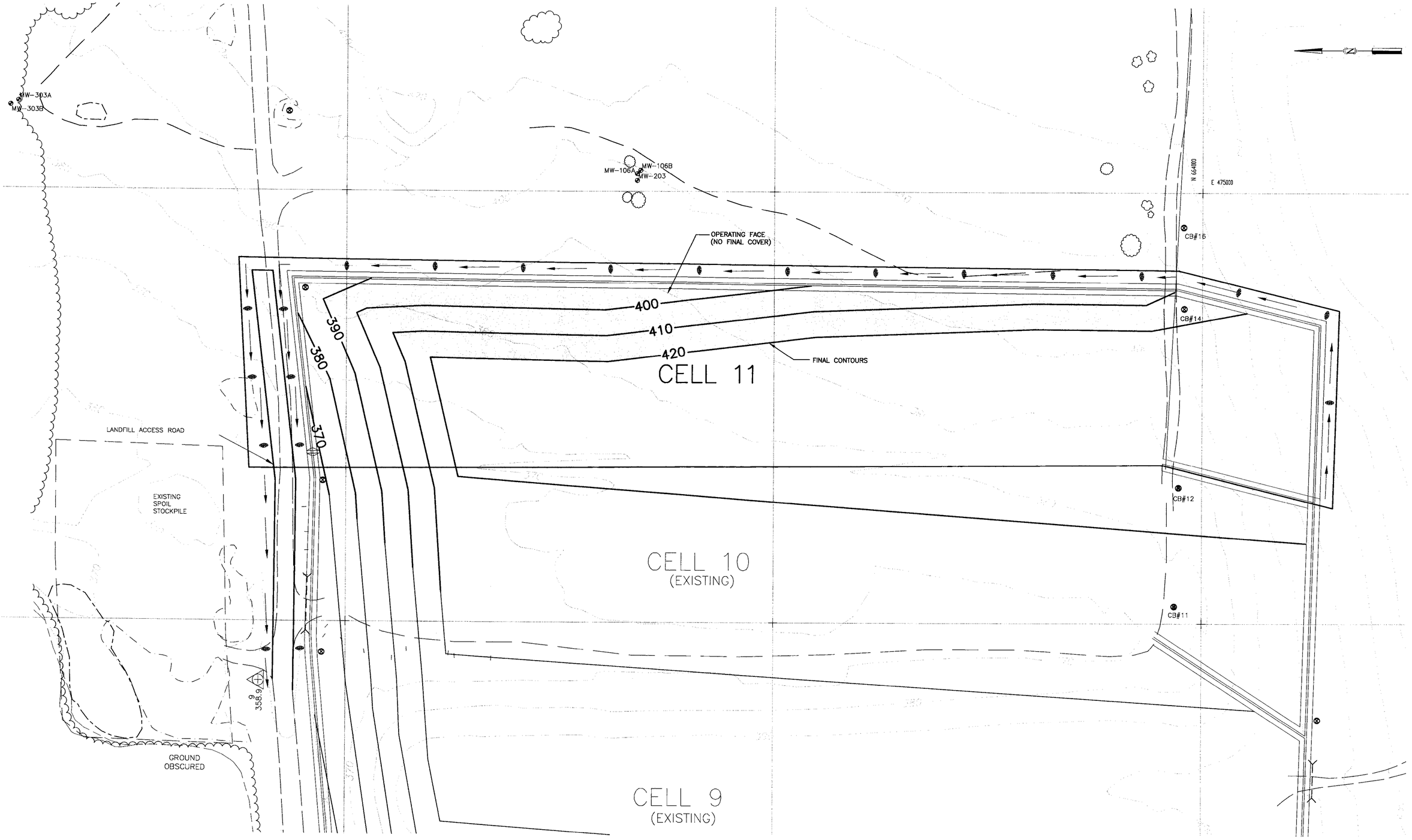
EAST OPERATION

DOLBY III LANDFILL
CELL 11 CONSTRUCTION
SITE DEVELOPMENT PLAN

JOB NO. 94744
ENG. REQ. NO.
FILE NO. 2-092-7082

YB-25222

G:\GNP\Do1\ACAD\Ce111\CELL11.dwg Mon Dec 27 08:44:11 1999




25 0 50 100

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 7/30/99 | SUBMITTED TO CLIENT | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

| | |
|---|---|
| DRN | MSB |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE
P - Prelim. | B - Bids
M - Mtl T.O. | C - Const.
SCALE AS SHOWN

BOWATER
Great Northern Paper

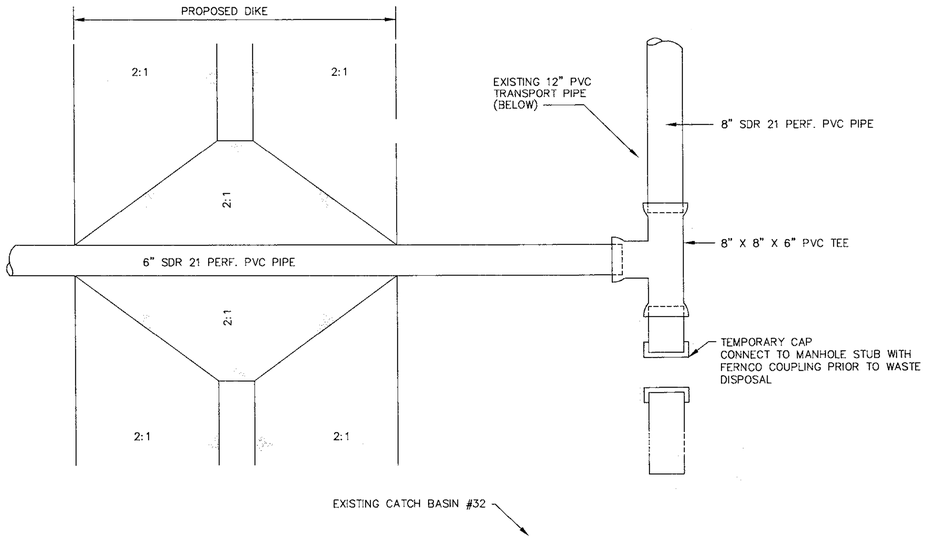
EAST OPERATION

# DOLBY III LANDFILL
# CELL 11 CONSTRUCTION
# FINAL GRADING PLAN

JOB NO. 94744
ENG. REQ. NO.
FILE NO. 2-092-7082

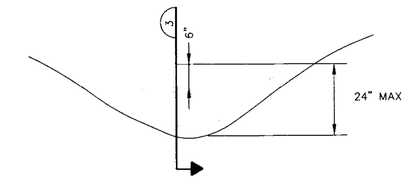
YB-25223

G:\GNP\Dol\ACAD\Cell11\CELL11.dwg Fri Jul 30 14:08:53 1999




## BRANCH CONNECTOR (A)

N.T.S. YB-25222

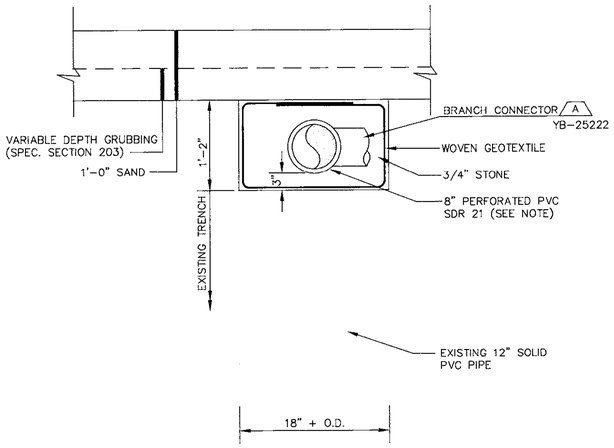




SECTION (3)

## STONE CHECK DAM (C)

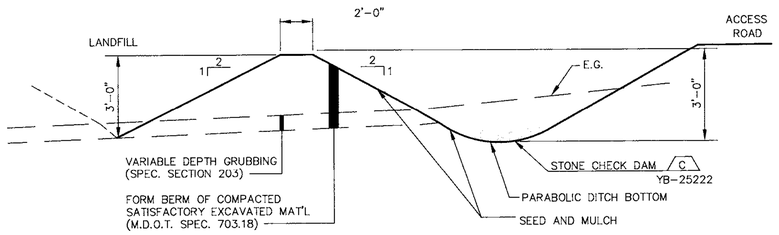
N.T.S. YB-25222




NOTE:
PIPE PERFORATIONS SHALL BE 3/8" DIA. HOLES, 6" O.C., 2 ROWS. ROWS SHLL BE MINIMUM 45°, MAXIMUM 60° FROM INVERT OF PIPE. HOLES SHALL FACE DOWN.

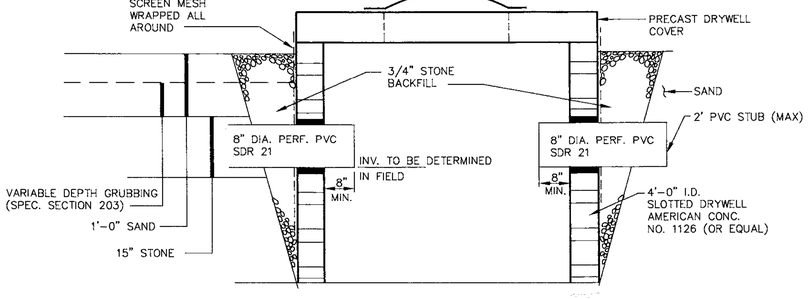
## 8" LEACHATE COLLECTION PIPES (4)

N.T.S. YB-25222



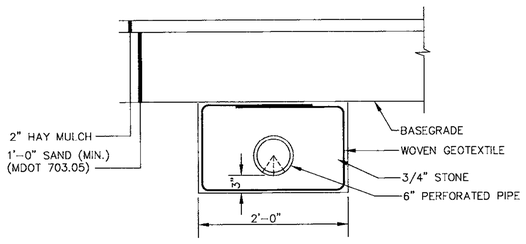

## DIKE AND TYPE 2 DRAINAGE DITCH (1)

N.T.S. YB-25222



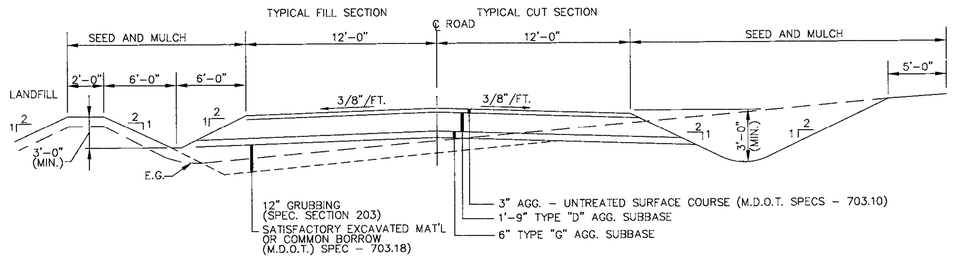

## CATCH BASIN # 33 (B)

N.T.S. YB-25222




## 6" LEACHATE COLLECTION PIPE (2)

N.T.S. YB-25222




## LANDFILL ACCESS ROAD (4)

N.T.S. YB-25222

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 12/27/99 | RECORD DRAWING | | | | |
| | | 7/30/99 | SUBMITTED TO CLIENT | | | | |

JOB NO. 99070


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


| | |
|---|---|
| DRN | MSB |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE: P - Prelim. | B - Bids | M - ME T.O. | C - Const.

SCALE AS SHOWN

BOWATER
Great Northern Paper

EAST OPERATION

# DOLBY III LANDFILL CELL 11 CONSTRUCTION SECTIONS & DETAILS

JOB NO. 94744
ENG. REQ. NO.
FILE NO. 2-092-7082

YB-25224

G:\GNP\Dol\ACAD\Cell11\DETAILS.dwg Mon Dec 27 08:31:20 1999

# GREAT NORTHERN PAPER, INC.
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 12 CONSTRUCTION
# CELL 10 CLOSURE

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-25539 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-25540 |
| 3 | EXISTING CONDITIONS PLAN | YB-25541 |
| 4 | CELL 12 – SITE DEVELOPMENT PLAN | YB-25542 |
| 5 | OPERATIONAL GRADING PLAN | YB-25543 |
| 6 | SECTIONS & DETAILS (SHEET 1 OF 2) | YB-25544 |
| 7 | SECTIONS & DETAILS (SHEET 2 OF 2) | YB-25544 |


SME

*Sevee & Maher Engineers, Inc.*

*Waste Management and Hydrogeologic Consultants*

*Cumberland Center, Maine*


| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | 6/8/00 | C | ISSUED FOR CONSTRUCTION | | | | |
| | 5/31/00 | P | SUBMITTED TO CLIENT | | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |

| | | |
|---|---|---|
| DRN | DRD | 5/31/00 |
| CHKD | GHC | 5/31/00 |
| APPVD | | - - |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

Great Northern PAPER, INC.

CAD FILE: GNPCOV12.DWG

**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 12 CONSTRUCTION**
**CELL 10 CLOSURE**
**COVER SHEET**

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

**YB-25539**

G:\GNP\Dol1\ACAD\CELL12\Gnpcov12.dwg Thu Jun 08 09:06:36 2000

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (MAGNETIC) | | | STONE WALL | ○ | ● | MANHOLE |
| N | | NORTH ARROW (PLAN NORTH) | | | DRAINAGE COURSE (WITH DIRECTION) | ◎ | ◉ | CATCH BASIN |
| 25 | 25 | CONTOUR LINES | SHORE SIDE | | EDGE OF WATER | ⋈ | ⋈ | WATER VALVE |
| 25 x 63 | 25.56 x | SPOT ELEVATION (GRADE) | | | WATER ELEVATION (GROUND OR SURFACE) | | | HYDRANT |
| | | EXISTING GROUND | | | FENCE LINE (WOOD) | | | UTILITY POLE |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | FENCE LINE (WIRE) | | ⊘ | CLEAN OUT STRUCTURE |
| | | PROPERTY LINE OR R.O.W. | | | RETAINING WALL | G | G | UNDERGROUND GAS MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE LINE |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | | BUILDING AND STRUCTURES | E | E | UNDERGROUND ELECTRICAL LINE |
| | | BOUNDARY LINE (State, County, Municipality) | | 1' 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | OE | OE | OVERHEAD ELECTRICAL LINE |
| ⊡ | ■ | SURVEY MONUMENT | | TOP OF SLOPE 2:1 | SLOPES (WITH SLOPE RATIO) | | 12" ACP | SANITARY SEWER (SIZE & TYPE) |
| ○IF | ●IF | SURVEY IRON | | | EDGE OF TRAVELED WAY | FM | 8" PVC | FORCE MAIN (SIZE & TYPE) |
| ○ | ● | DRILL HOLE, PK, OR STAKE | | | CUT OR FILL LINE | W | 8" D.I. | WATER MAIN (SIZE & TYPE) |
| | | WOODS OR BRUSH LINE | | CLL | CLEARING LIMIT LINE | | 12" RCP | STORM DRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Deciduous) | | | BITUMINOUS PAVEMENT | UD | 8" UD | UNDERDRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Coniferous) | | | CONCRETE | | | CULVERT |
| | | TREE, TO BE REMOVED | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | RAILROAD |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | S | SILTATION FENCE |
| | | | | | | PD | 6" PD | PERIMETER DRAIN (SIZE & TYPE) |
| | | | | | | LT | 6" LT | LEACHATE TRANSPORT (SIZE & TYPE) |
| | | | | | | LC | 6" LC | LEACHATE COLLECTION (SIZE & TYPE) |
| | | | | | | LD | 6" LD | LEAK DETECTION, SIZE & TYPE |
| | | | | | | | | TERRACE DRAINAGE SWALE |
| | | | | | | | 4" GS | GRAVITY SEWER |
| | | | | | | | 6" SWP | SOLID WALL PIPE |

GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18

STONE BEDDING – THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE – THE PIPE BEDDING MATERIAL SHALL BE 3/4–INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

BASAL BLANKET – MDOT SPECIFICATION 703.05

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" AND 8" PVC PIPE – SDR 21

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 11 ROADWAY AND CELL AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING SPOIL PILE.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A.C.C.M.P | ASPHALT COATED C.M.P. | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | P.C. | POINT ON CURVE |
| A.C.P. | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HP | HORSEPOWER | PD | PERIMETER DRAIN |
| AC | ACRE | DEG OR ° | DIAMETER | HYD | HYDRANT | P.I. | POINT OF INTERSECTION |
| AGG | AGGREGATE | DEPT | DEPARTMENT | | | P.T. | POINT OF TANGENT |
| ALUM | ALUMINUM | DI | DUCTILE IRON | I.D. | INSIDE DIAMETER | PERF | PERFORATED |
| APPD | APPROVED | DIA OR ø | DIAMETER | IN OR " | INCHES | PSI | POUNDS PER SQUARE INCH |
| APPROX | APPROXIMATE | DIM | DIMENSION | INV | INVERT | PVC | POLYVINYL CHLORIDE |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV. EL | INVERT ELEVATION | PVMT | PAVEMENT |
| ASB | ASBESTOS | DN | DOWN | | | | |
| ASPH | ASPHALT | DR | DRAIN | LB | POUND | QTY | QUANTITY |
| AUTO | AUTOMATIC | DWG | DRAWING | LC | LEACHATE COLLECTION | | |
| AUX | AUXILIARY | | | LD | LEAK DETECTION | R.O.W. | RIGHT OF WAY |
| AVE | AVENUE | EA | EACH | LIN FT. | LINEAR FEET | RAD | RADIUS |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LOC | LOCATION | REQD | REQUIRED |
| | | ELEC | ELECTRIC | LT | LEACHATE TRANSPORT | RT | RIGHT |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | EL | ELEVATION | | | RTE | ROUTE |
| B.M. | BENCH MARK | ELB | ELBOW | M.H. | MANHOLE | | |
| BIT | BITUMINOUS | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT | S | SLOPE |
| BLDG | BUILDING | EST | ESTIMATED | MATL | MATERIAL | SCH | SCHEDULE |
| BOT | BOTTOM | EXC | EXCAVATE | MAX | MAXIMUM | SF | SQUARE FEET |
| BRG | BEARING | EXIST | EXISTING | MFR | MANUFACTURE | SHT | SHEET |
| | | | | MIN | MINIMUM | STA | STATION |
| C.B. | CATCH BASIN | F.G. | FINISH GRADE | MISC | MISCELLANEOUS | SY | SQUARE YARD |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT | | |
| CEM. LIN. | CEMENT LINED | FDN | FOUNDATION | | | TAN | TANGENT |
| C.M.P. | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | N.I.T.C. | NOT IN THIS CONTRACT | TDH | TOTAL DYNAMIC HEAD |
| C.O. | CLEAN OUT | FLG | FLANGE | N.T.S. | NOT TO SCALE | TEMP | TEMPORARY |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY | TYP | TYPICAL |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO. OR # | NUMBER | | |
| CI | CAST IRON | FT OR ' | FEET | | | V | VOLTS |
| CL | CLASS | FTG | FOOTING | O.C. | ON CENTER | | |
| CONC | CONCRETE | | | O.D. | OUTSIDE DIAMETER | W/ | WITH |
| CONST | CONSTRUCTION | GA | GAUGE | | | W/O | WITHOUT |
| CONTR | CONTRACTOR | GAL | GALLON | | | | |
| CTR | CENTER | GALV | GALVANIZED | | | YD | YARD |
| CY | CUBIC YARD | GPD | GALLONS PER DAY | | | | |
| | | GPM | GALLONS PER MINUTE | | | | |

## VIEW MARKERS & IDENTIFICATION

SECTION TITLE & NO. — ACCESS ROAD 3 — C-100 — DRAWING WHERE SECTION APPEARS

DETAIL TITLE & LETTER — MANHOLE A — C-100 — DRAWING WHERE DETAIL APPEARS

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CUDL | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | 6/8/00 | C | ISSUED FOR CONSTRUCTION | | | | |
| | 5/31/00 | P | SUBMITTED TO CLIENT | | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |

SME
Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine

| | | |
|---|---|---|
| DRN | DRD | 5/31/00 |
| CHKD | GHC | 5/31/00 |
| APPVD | | - - |
| ISSUE CODE | | |
| P - Preliminary | | |
| B - Bids | | |
| C - Construction | | |
| ASB - As Built | | |
| SCALE | NONE | |

Great Northern PAPER, INC.

CAD FILE: SYMSHT.DWG

EAST OPERATION

DOLBY III LANDFILL
CELL 12 CONSTRUCTION
CELL 10 CLOSURE
SYMBOLS & ABBREVIATIONS

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

YB-25540

G:\GNP\DOL\ACAD\CELL12\SYMSHT.dwg Thu Jun 08 14:30:27 2000

CELL 11
(EXISTING)

CELL 10
(EXISTING)

CELL 9
(EXISTING)

CELL 1
THROUGH
CELL 8
(EXISTING)

Existing Leachate
Collection Pipes (TYP)

EXISTING
SPOIL
STOCKPILE

Exist. Spoil
Area

Sedimentation
Pond

Sedimentation
Pond

Leachate
Pond

Access
Road

GROUND
OBSCURED

N 662500
E 475000
E 474500
N 662000
E 474000

GENERAL NOTES:

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. NORRIDGEWOCK, MAINE, PHOTOGRAPH DATED 5/1/99.

2. GROUND CONTROL PROVIDED BY PLISGA & DAY, BANGOR, MAINE.

3. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MDEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE, AND LOCAL PERMITS.

5. GREAT NORTHERN PAPER IS ACTIVELY FILLING CELL 10. EXISTING GRADES MAY NOT REPRESENT CURRENT CONDITIONS.

50 0 100 200

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REVISION | BY | CKD | APPVD | JOB CODE | DATE |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | - | | | - - | | | | | | - - |
| 5 | - | | | - - | | | | | | - - |
| 4 | - | | | - - | | | | | | - - |
| 3 | - | | | - - | | | | | | - - |
| 2 | - | | | 6/8/00 | C ISSUED FOR CONSTRUCTION | | | | | - - |
| 1 | - | | | 5/31/00 | P SUBMITTED TO CLIENT | | | | | - - |


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


JOB NO. 00044

| | | |
|---|---|---|
| DRN | DRD | 5/31/00 |
| CHKD | GHC | 5/31/00 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

Great Northern PAPER, INC.

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 12 CONSTRUCTION
## CELL 10 CLOSURE
## EXISTING CONDITIONS PLAN

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

YB-25541

G:\GNP\Dol\MCAD\CELL12\SITEDEV.dwg Thu Jun 08 14:32:25 2000

REGRADE

LIMIT OF WORK

TYPE 2 DITCH (1) YB-25544

STONE CHECK DAM (C) 100' O.C. (TYP) YB-25544

CONTAINMENT DIKE TO BE BUILT PRIOR TO LANDFILLING IN CELL 12

CATCH BASIN #34 (B) YB-25544
(EXIST) 12" INV IN = 391.2
8" INV IN = 397.0
(EXIST) 12" INV OUT = 391.1
8" INV OUT = 397.0

MW-303A
MW-303B

8" LEACHATE TRANSPORT PIPE (4) YB-25544

EXISTING 12" PVC TRANSPORT PIPE

ABANDON EXISTING MONITORING WELLS (BY OTHERS)

MW-106A
MW-106B
MW-203

LEACHATE COLLECTION PIPE (2) YB-25544

LIMIT OF SAND BLANKET (EL: 400)

LANDFILL ACCESS ROAD (5) YB-25544

TEMPORARY DRAINAGE DITCH

END CAP (TYP)

BRANCH CONNECTOR (A) YB-25544

EXISTING CATCH BASIN #33
(EXIST) 12" INV IN = 373.25
8" INV IN = 379.00
(EXIST) 12" INV OUT = 373.15
8" INV OUT = 379.00

N 664000
E 475000

CB#15
CB#14
CB#12
CB#11

CELL 11
(EXISTING)

CELL 10

EXISTING
SPOIL
STOCKPILE

358.9

GROUND

CELL 12 OPERATION NOTES (PRIOR TO FILLING)
REMOVE 8 INCH CAP FROM CB #33.
REMOVE TEMPORARY 8 INCH OUTLET PIPE AND CAP PIPE TEE.
BACKFILL TEMPORARY DRAINAGE DITCH ON NORTH SIDE WITH SUITABLE MATERIAL.
STRIP EXISTING LANDFILL COVER AND CONSTRUCT CONTAINMENT BERM ON CELL 4.
REMOVE EXISTING CATCH BASIN COVER ON CELL 4 (CB #16) AND REPLACE WITH SOLID H-20 LOADING MANHOLE COVER.

25 0 50 100

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|
| 6 | - | | | - - | | | | | - - |
| 5 | - | | | - - | | | | | - - |
| 4 | - | | | - - | | | | | - - |
| 3 | - | | | 10/16/01 | ASB RECORD DRAWING | GHC | | | - - |
| 2 | - | | | 6/8/00 | C ISSUED FOR CONSTRUCTION | | | | - - |
| 1 | - | | | 5/31/00 | P SUBMITTED TO CLIENT | | | | - - |

REVISION | BY | CKD | APPVD | JOB | CODE | DATE

REVISION | BY | CKD | APPVD | JOB

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021
JOB NO. 00044

| | | |
|---|---|---|
| DRN | DRD | 5/31/00 |
| CHKD | GHC | 5/31/00 |
| APPVD | | |
| ISSUE CODE | | |
| P - Preliminary | | |
| B - Bids | | |
| C - Construction | | |
| ASB - As Built | | |
| SCALE | NONE | |

Great Northern PAPER, INC.

CAD FILE: SITEDEV.DWG

# EAST OPERATION

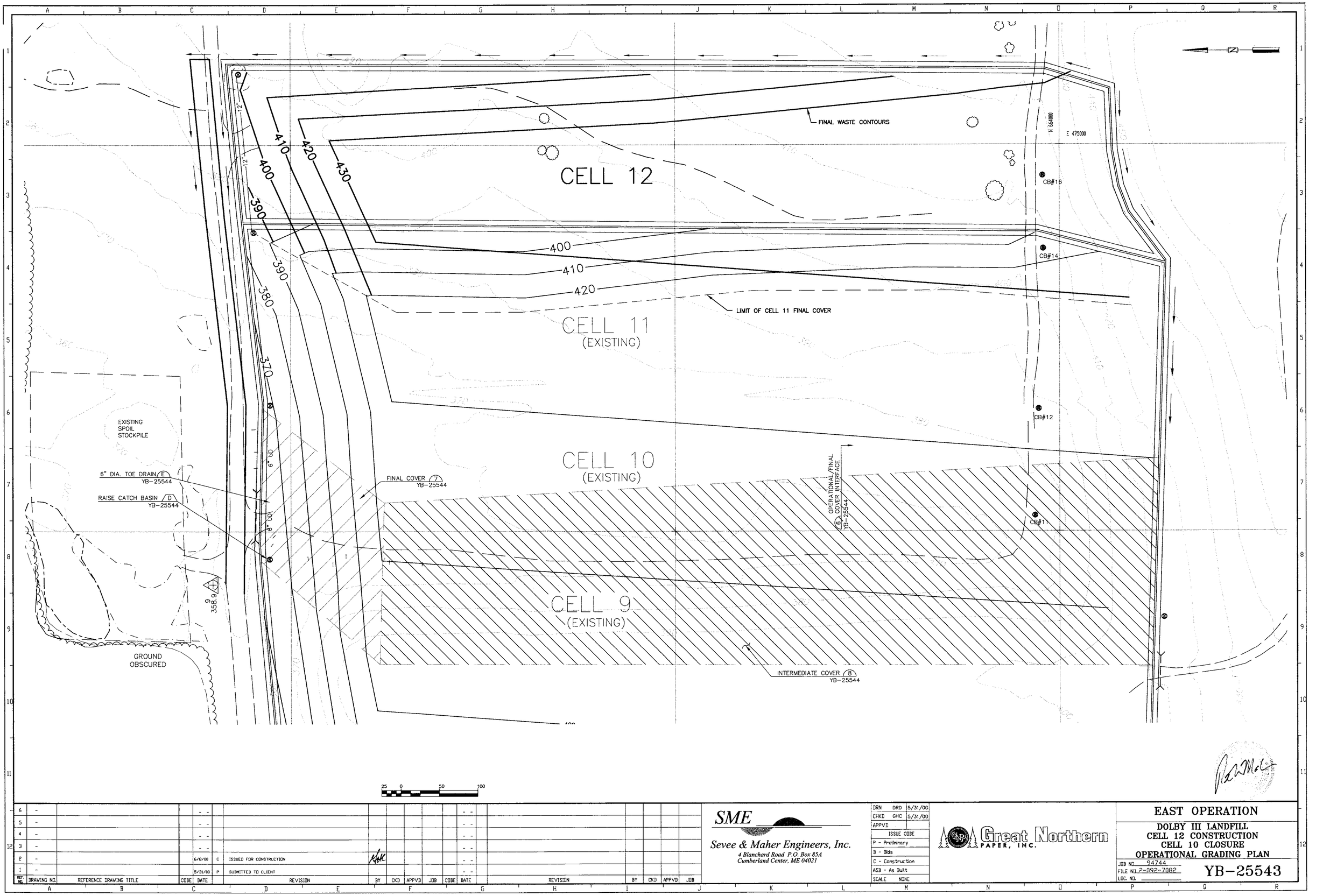
## DOLBY III LANDFILL
## CELL 12 CONSTRUCTION
## CELL 10 CLOSURE
## CELL 12 - SITE DEVELOPMENT PLAN

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

YB-25542

STATE OF MAINE
HELEN M. ALMY
No. 5082
REGISTERED PROFESSIONAL ENGINEER

G:\GNP\Jobs\ACAD\CELL12\SITEDEV.dwg Tue Oct 16 10:13:09 2001 DRD




| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|
| C | 6/8/00 | ISSUED FOR CONSTRUCTION | | | | |
| P | 5/31/00 | SUBMITTED TO CLIENT | | | | |


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


| | | |
|---|---|---|
| DRN | DRD | 5/31/00 |
| CHKD | GHC | 5/31/00 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

Great Northern PAPER, INC.

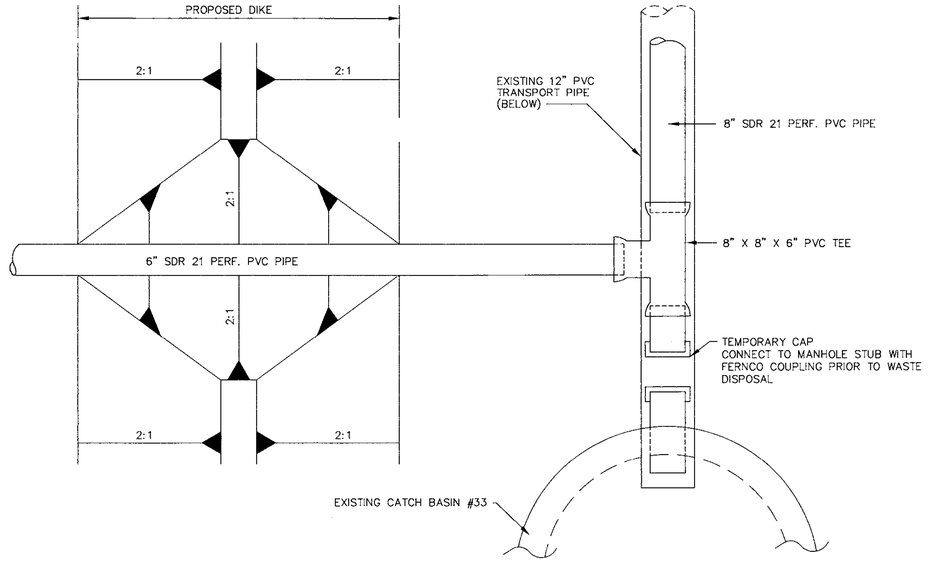
# EAST OPERATION

## DOLBY III LANDFILL
## CELL 12 CONSTRUCTION
## CELL 10 CLOSURE
## OPERATIONAL GRADING PLAN

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

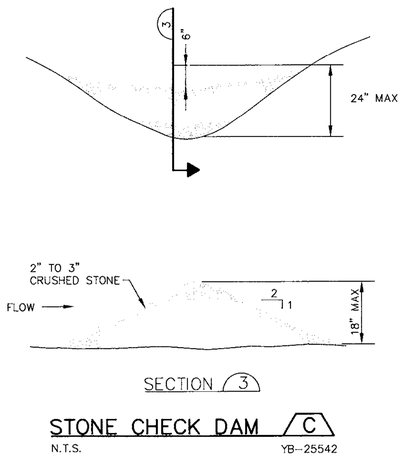
YB-25543

G:\GNP\Dol\ACAD\CELL12\SITEREV.dwg Thu Jun 08 10:10:04 2000




## BRANCH CONNECTOR A

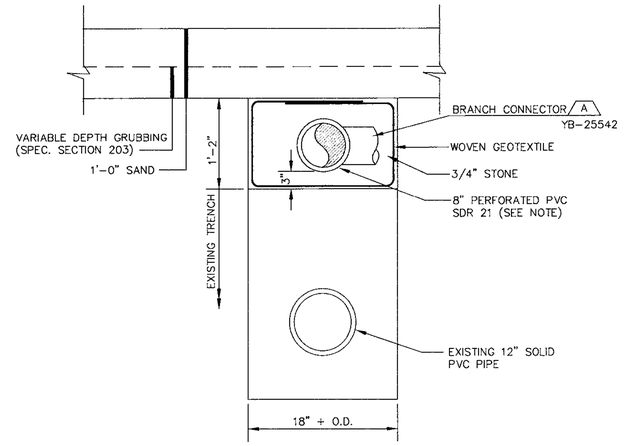
N.T.S. YB-25542




SECTION 3

## STONE CHECK DAM C

N.T.S. YB-25542

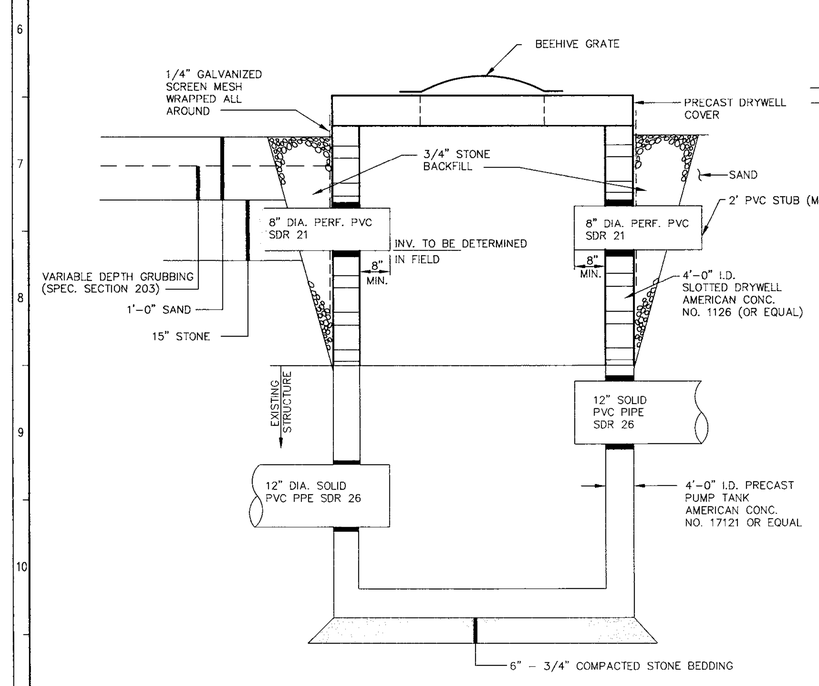



NOTE:

PIPE PERFORATIONS SHALL BE 3/8" DIA. HOLES, 6" O.C., 2 ROWS. ROWS SHALL BE MINIMUM 45°, MAXIMUM 60° FROM INVERT OF PIPE. HOLES SHALL FACE DOWN.

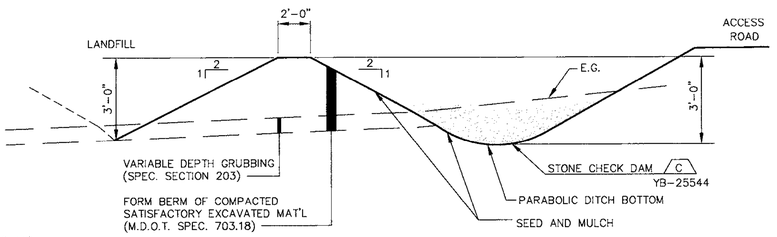
## 8" LEACHATE TRANSPORT PIPES 4

N.T.S. YB-25542



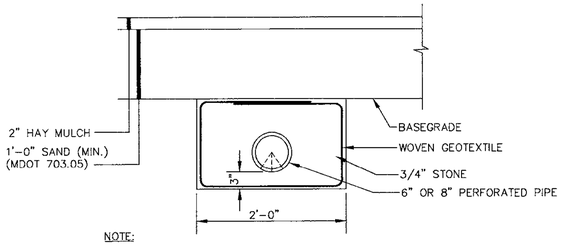

## CATCH BASIN # 34 B

N.T.S. YB-25542




## DIKE AND TYPE 2 DRAINAGE DITCH 1

N.T.S. YB-25542

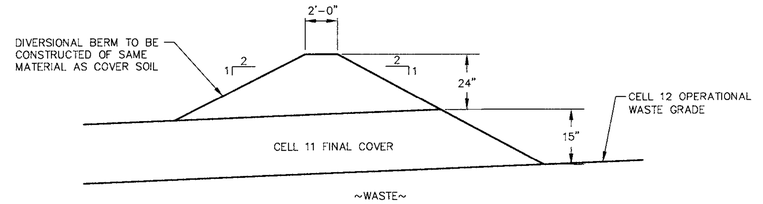



NOTE:

PIPE PERFORATIONS SHALL BE 3/8" DIA. HOLES, 6" O.C., 2 ROWS. ROWS SHALL BE MINIMUM 45°, MAXIMUM 60° FROM INVERT OF PIPE. HOLES SHALL FACE DOWN.

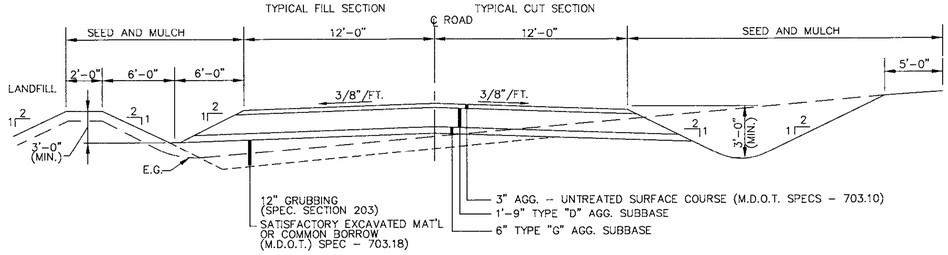
## LEACHATE COLLECTION PIPE 2

N.T.S. YB-25542




## OPERATIONAL/FINAL COVER INTERFACE 6

N.T.S. YB-25543




## LANDFILL ACCESS ROAD 5

N.T.S. YB-25542

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | - - | | | | | | |
| - - | - - | | | | | | |
| - - | - - | | | | | | |
| - - | - - | | | | | | |
| C | 6/8/00 | C | ISSUED FOR CONSTRUCTION | MBISK | | | |
| - - | - - | | | | | | |
| P | 5/31/00 | P | SUBMITTED TO CLIENT | MBISK | | | |
| - - | - - | | | | | | |


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


| | | | |
|---|---|---|---|
| DRN | MBISK | 5/31/00 | |
| CHKD | GHC | 5/31/00 | |
| APPVD | | - - | |
| ISSUE CODE | | | |
| P - Preliminary | | | |
| B - Bids | | | |
| C - Construction | | | |
| ASB - As Built | | | |
| SCALE | NONE | | |

Great Northern PAPER, INC.

CAD FILE: DETAILS.DWG

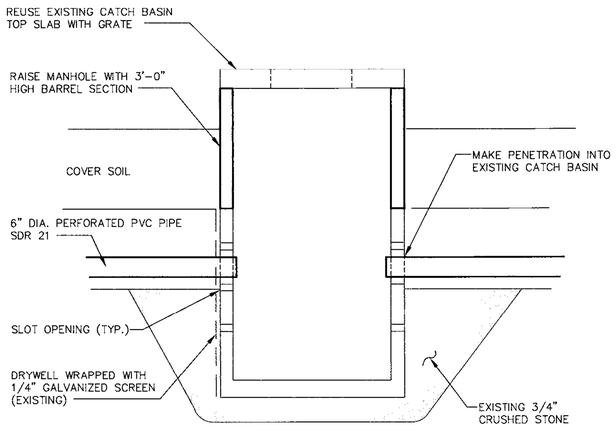
**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 12 CONSTRUCTION**
**CELL 10 CLOSURE**
**SECTIONS & DETAILS**

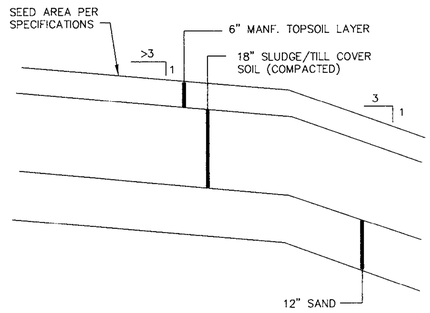
JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

YB-25544
SHEET 1 OF 2

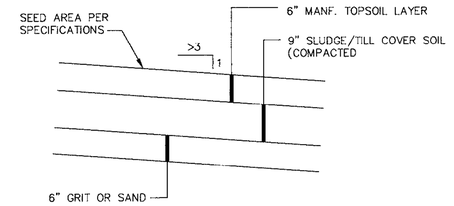
G:\GVP\Dolly\CAD\CELL12\DETAILS.dwg Thu Jun 08 10:14:12 2000



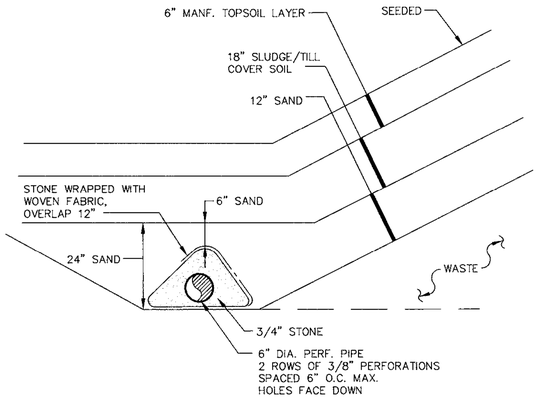

RAISE CATCH BASIN D
N.T.S. (EXISTING) YB-25543




FINAL COVER 7
N.T.S. YB-25543




INTERMEDIATE COVER 8
N.T.S. YB-25543




TOE DRAIN E
N.T.S. YB-25543

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | – | | | – – | | | | | | |
| 5 | – | | | – – | | | | | | |
| 4 | – | | | – – | | | | | | |
| 3 | – | | | – – | | | | | | |
| 2 | – | | | 6/8/00 | C | ISSUED FOR CONSTRUCTION | | | | |
| 1 | – | | | 5/31/00 | P | SUBMITTED TO CLIENT | | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

| | | |
|---|---|---|
| DRN | MBISK | 5/31/00 |
| CHKD | GHC | 5/31/00 |
| APPVD | | – – |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE NONE

Great Northern PAPER, INC.

CAD FILE: DETAILS.DWG

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 12 CONSTRUCTION
## CELL 10 CLOSURE
## SECTIONS & DETAILS

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO. _____

YB-25544
SHEET 2 OF 2

G:\GAP\DWI\ACAD\CELL12\DETAILS.dwg Thu Jun 08 10:14:33 2000

# KATAHDIN PAPER COMPANY, LLC.
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 13 CONSTRUCTION
# CELL 11 CLOSURE

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-26077 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-26078 |
| 3 | EXISTING CONDITIONS PLAN | YB-26079 |
| 4 | CELL 13 – SITE DEVELOPMENT PLAN | YB-26080 |
| 5 | OPERATIONAL GRADING PLAN | YB-26081 |
| 6 | SECTIONS & DETAILS (SHEET 1 OF 3) | YB-26082 |
| 7 | SECTIONS & DETAILS (SHEET 2 OF 3) | YB-26083 |
| 8 | SECTIONS & DETAILS (SHEET 3 OF 3) | YB-26084 |


SME

*Sevee & Maher Engineers, Inc.*

*Waste Management and Hydrogeologic Consultants*

*Cumberland Center, Maine*


STATE OF MAINE PETER A. M. MAHER NO. 4107 REGISTERED PROFESSIONAL ENGINEER

| REV. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | 5/03 | ASB | RECORD DRAWING | GHC | | | |
| | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| | | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |

JOB NO. 02021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | - - | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: GNPCOV13.DWG

**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 13 CONSTRUCTION**
**CELL 11 CLOSURE**
**COVER SHEET**

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

YB-26077

F:\GNP\Dol1\ACAD\CELL13\Record Drawings\GNPCOV13.dwg Tue May 27 09:19:22 2003 DRD

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (MAGNETIC) | | | STONE WALL | ○ | ● | MANHOLE |
| N | | NORTH ARROW (PLAN NORTH) | | | DRAINAGE COURSE (WITH DIRECTION) | ◎ | ◘ | CATCH BASIN |
| 25 | 25 | CONTOUR LINES | SHORE SIDE | | EDGE OF WATER | ⋈ | ⋈ | WATER VALVE |
| 25 x 63 | 25.56 | SPOT ELEVATION (GRADE) | | | WATER ELEVATION (GROUND OR SURFACE) | | | HYDRANT |
| | | EXISTING GROUND | | | FENCE LINE (WOOD) | | | UTILITY POLE |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | FENCE LINE (WIRE) | | ⊘ | CLEAN OUT STRUCTURE |
| | | PROPERTY LINE OR R.O.W. | | | RETAINING WALL | G | G | UNDERGROUND GAS MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE LINE |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | | BUILDING AND STRUCTURES | E | E | UNDERGROUND ELECTRICAL LINE |
| | | BOUNDARY LINE (State, County, Municipality) | | 1" = 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | OE | OE | OVERHEAD ELECTRICAL LINE |
| ⊡ | ■ | SURVEY MONUMENT | | TOP OF SLOPE | SLOPES (WITH SLOPE RATIO) | | 12" ACP | SANITARY SEWER (SIZE & TYPE) |
| ○IF | ●IF | SURVEY IRON | | | EDGE OF TRAVELED WAY | FM | 8" PVC | FORCE MAIN (SIZE & TYPE) |
| ○ | ● | DRILL HOLE, PK, OR STAKE | | | CUT OR FILL LINE | W | 8" D.I. | WATER MAIN (SIZE & TYPE) |
| | | WOODS OR BRUSH LINE | | CL | CLEARING LIMIT LINE | | 12" RCP | STORM DRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Deciduous) | | | BITUMINOUS PAVEMENT | UD | 8" UD | UNDERDRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Coniferous) | | | CONCRETE | | | CULVERT |
| | | TREE, TO BE REMOVED | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | RAILROAD |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | S | SILTATION FENCE |
| | | | | | | PD | 6" PD | PERIMETER DRAIN (SIZE & TYPE) |
| | | | | | | LT | 6" LT | LEACHATE TRANSPORT (SIZE & TYPE) |
| | | | | | | LC | 6" LC | LEACHATE COLLECTION (SIZE & TYPE) |
| | | | | | | LD | 6" LD | LEAK DETECTION, SIZE & TYPE |
| | | | | | | | | TERRACE DRAINAGE SWALE |
| | | | | | | | 4" GS | GRAVITY SEWER |
| | | | | | | | 6" SWP | SOLID WALL PIPE |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A.C.C.M.P | ASPHALT COATED C.M.P. | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | P.C. | POINT ON CURVE |
| A.C.P. | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HP | HORSEPOWER | PD | PERIMETER DRAIN |
| AC | ACRE | DEG OR ° | DIAMETER | HYD | HYDRANT | P.I. | POINT OF INTERSECTION |
| AGG | AGGREGATE | DEPT | DEPARTMENT | | | P.T. | POINT OF TANGENT |
| ALUM | ALUMINUM | DI | DUCTILE IRON | I.D. | INSIDE DIAMETER | PERF | PERFORATED |
| APPD | APPROVED | DIA OR ø | DIAMETER | IN OR " | INCHES | PSI | POUNDS PER SQUARE INCH |
| APPROX | APPROXIMATE | DIM | DIMENSION | INV | INVERT | PVC | POLYVINYL CHLORIDE |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV. EL | INVERT ELEVATION | PVMT | PAVEMENT |
| ASB | ASBESTOS | DN | DOWN | | | | |
| ASPH | ASPHALT | DR | DRAIN | LB | POUND | QTY | QUANTITY |
| AUTO | AUTOMATIC | DWG | DRAWING | LC | LEACHATE COLLECTION | | |
| AUX | AUXILIARY | | | LD | LEAK DETECTION | R.O.W. | RIGHT OF WAY |
| AVE | AVENUE | EA | EACH | LIN FT. | LINEAR FEET | RAD | RADIUS |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LOC | LOCATION | REQD | REQUIRED |
| | | ELEC | ELECTRIC | LT | LEACHATE TRANSPORT | RT | RIGHT |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | EL | ELEVATION | | | RTE | ROUTE |
| B.M. | BENCH MARK | ELB | ELBOW | M.H. | MANHOLE | | |
| BIT | BITUMINOUS | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT | S | SLOPE |
| BLDG | BUILDING | EST | ESTIMATED | MATL | MATERIAL | SCH | SCHEDULE |
| BOT | BOTTOM | EXC | EXCAVATE | MAX | MAXIMUM | SF | SQUARE FEET |
| BRG | BEARING | EXIST | EXISTING | MFR | MANUFACTURE | SHT | SHEET |
| | | | | MIN | MINIMUM | STA | STATION |
| C.B. | CATCH BASIN | F.G. | FINISH GRADE | MISC | MISCELLANEOUS | SY | SQUARE YARD |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT | | |
| CEM. LIN. | CEMENT LINED | FDN | FOUNDATION | | | TAN | TANGENT |
| C.M.P. | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | N.I.T.C. | NOT IN THIS CONTRACT | TDH | TOTAL DYNAMIC HEAD |
| C.O. | CLEAN OUT | FLG | FLANGE | N.T.S. | NOT TO SCALE | TEMP | TEMPORARY |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY | TYP | TYPICAL |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO. OR # | NUMBER | | |
| CI | CAST IRON | FT OR ' | FEET | | | V | VOLTS |
| CL | CLASS | FTG | FOOTING | O.C. | ON CENTER | | |
| CONC | CONCRETE | | | O.D. | OUTSIDE DIAMETER | W/ | WITH |
| CONST | CONSTRUCTION | GA | GAUGE | | | W/O | WITHOUT |
| CONTR | CONTRACTOR | GAL | GALLON | | | | |
| CTR | CENTER | GALV | GALVANIZED | | | YD | YARD |
| CY | CUBIC YARD | GPD | GALLONS PER DAY | | | | |
| | | GPM | GALLONS PER MINUTE | | | | |

## VIEW MARKERS & IDENTIFICATION

SECTION TITLE & NO. — ACCESS ROAD 3 — C-100 — DRAWING WHERE SECTION APPEARS

DETAIL TITLE & LETTER — MANHOLE A — C-100 — DRAWING WHERE DETAIL APPEARS

GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18

STONE BEDDING – THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE – THE PIPE BEDDING MATERIAL SHALL BE 3/4-INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

SAND BLANKET – MDOT SPECIFICATION 703.05

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" PVC PIPE – SDR 35

6" PVC PIPE – SDR 21

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 13 ROADWAY AND CELL AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING SPOIL PILE.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

STATE OF MAINE — PETER W. MAHER NO. 7107 — REGISTERED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | – – |
| | – – | | | | | | – – |
| | – – | | | | | | – – |
| | 5/03 | ASB | RECORD DRAWING | | | | – – |
| | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | – – |
| | – – | P | SUBMITTED TO CLIENT | GHC | | | – – |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | – – |
| | – – | | | | | | – – |
| | – – | | | | | | – – |
| | – – | | | | | | – – |
| | – – | | | | | | – – |
| | – – | | | | | | – – |

SME

*Sevee & Maher Engineers, Inc.*

*Waste Management and Hydrogeologic Consultants*

*Cumberland Center, Maine*

JOB NO. 02021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | – – | |

ISSUE CODE

P - Preliminary

B - Bids

C - Construction

ASB - As Built

SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: SYMSHT.DWG

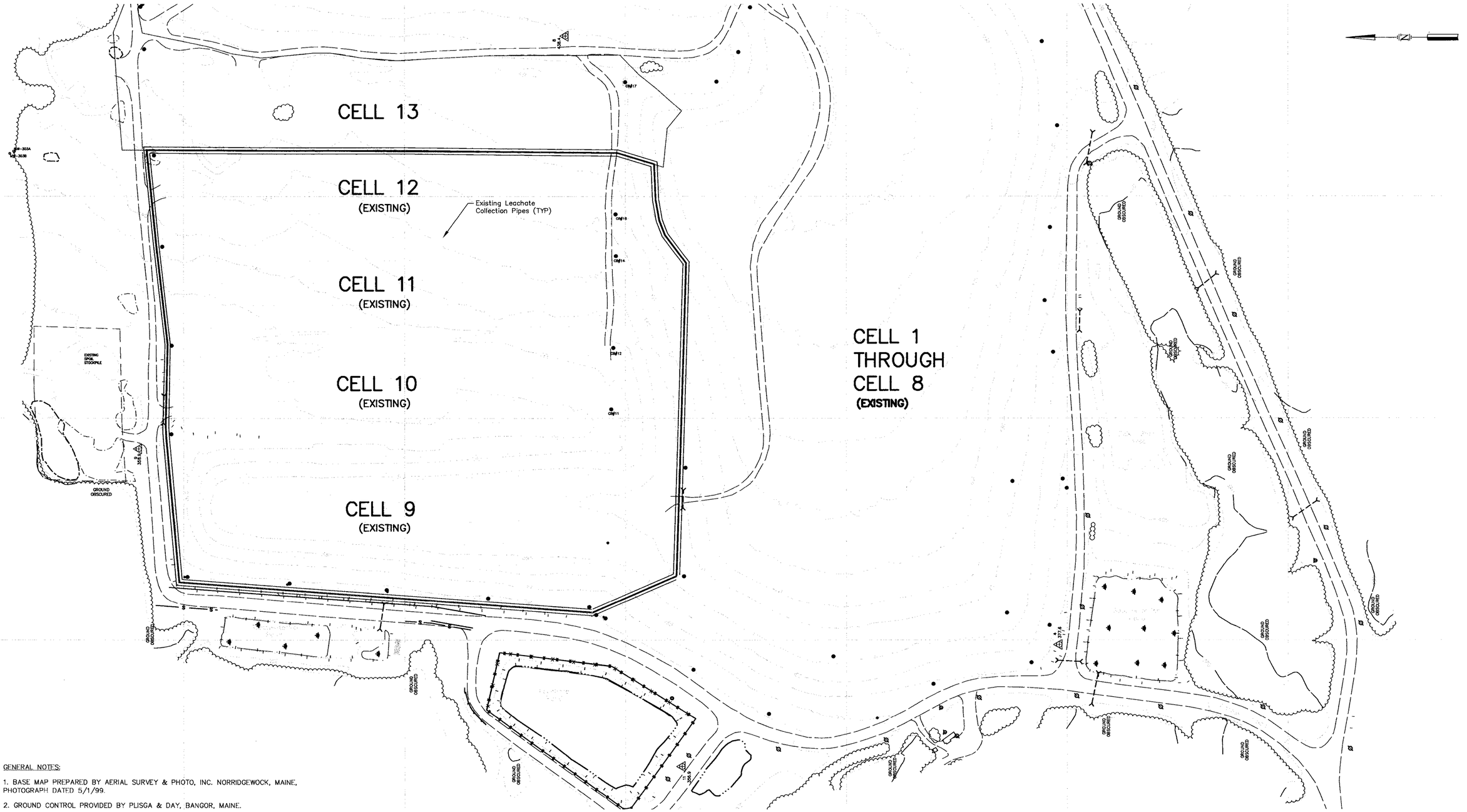
**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 13 CONSTRUCTION**
**CELL 11 CLOSURE**
**SYMBOLS & ABBREVIATIONS**

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

**YB-26078**

F:\GWP\Dol\ACAD\CELL13\Record Drawings\SYMSHT.dwg Tue May 27 09:24:18 2003 DRD




GENERAL NOTES:

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. NORRIDGEWOCK, MAINE, PHOTOGRAPH DATED 5/1/99.

2. GROUND CONTROL PROVIDED BY PLISGA & DAY, BANGOR, MAINE.

3. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MDEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE, AND LOCAL PERMITS.

5. GREAT NORTHERN PAPER IS ACTIVELY FILLING CELL 12. EXISTING GRADES MAY NOT REPRESENT CURRENT CONDITIONS.

50 0 100 200

STATE OF MAINE
PETER M. MAHER
NO. 7007
REGISTERED
PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | -- | |
| 5 | -- | |
| 4 | -- | |
| 3 | -- | |
| 2 | -- | |
| 1 | -- | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | 12/02 | ASB | RECORD DRAWING | KLC | | | |
| | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| | -- -- | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | | |

ISSUE CODE
P -- Preliminary
B -- Bids
C -- Construction
ASB -- As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: CELL13-SITEDEV.DWG

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 13 CONSTRUCTION
## CELL 11 CLOSURE
## EXISTING CONDITIONS PLAN

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

YB-26079

F:\GNP\Dol\ACAD\CELL13\Record Drawings\CELL-13-SITEDEV.dwg, 5/27/2003 9:43:56 AM, drd

LIMIT OF WORK

N 665100.36
E 475344.39

N 664946.55
E 475313.51

N 664899.47
E 475299.56

N 664846.64
E 475287.50

N 664804.46
E 475291.84

N 664774.98
E 475297.30

N 664669.45
E 475304.15

N 664646.11
E 475301.57

N 664601.99
E 475293.73

N 664530.02
E 475287.24

TYPE 2 DITCH (3) YB-26082

N 664324.67
E 475286.54

STONE CHECK DAM (C) YB-26082
100' O.C. (TYP)

N 663995.16
E 475267.74

CATCH BASIN #35 (B) YB-26082
(EXIST) 12" INV IN = 391.2
(EXIST) 12" INV OUT = 391.1

SLOPE TO DRAIN

CB#17

EXISTING 12" PVC TRANSPORT PIPE

N 663903.86
E 475191.89

# CELL 13

BRANCH CONNECTOR (A) YB-26082

6" LEACHATE COLLECTION PIPE (2) YB-26082

END CAP (TYP)

6" 6" 6"

N 663926.78
E 475161.09

03A

B

EXISTING CATCH BASIN #34
(EXIST) 12" INV IN = 391.2
(EXIST) 8" INV IN = 397.0
(EXIST) 12" INV OUT = 391.1

# CELL 12
## (EXISTING)

CB#16

CB#14

# CELL 11
## (EXISTING)

EXISTING
SPOIL
STOCKPILE

CB#12

# CELL 10
## (EXISTING)

CB#11

CELL 13 OPERATION NOTES (PRIOR TO FILLING)
STRIP EXISTING LANDFILL COVER AND CONSTRUCT CONTAINMENT BERM ON CELL 5.

25 0 50 100

STATE OF MAINE
PETER M. MAHER
No. 7107
REGISTERED PROFESSIONAL ENGINEER

| REV. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | - - |
| | - - | | | | | | - - |
| | - - | | | | | | - - |
| | 5/03 | ASB | RECORD DRAWING | | | | - - |
| | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | - - |
| | | P | SUBMITTED TO CLIENT | GHC | | | - - |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | - - |
| | - - | | | | | | - - |
| | - - | | | | | | - - |
| | - - | | | | | | - - |
| | - - | | | | | | - - |
| | - - | | | | | | - - |


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


JOB NO. 02021

| | | |
|---|---|---|
| DRN | K.L.C | 3/6/02 |
| CHKD | G.H.C | 3/8/02 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

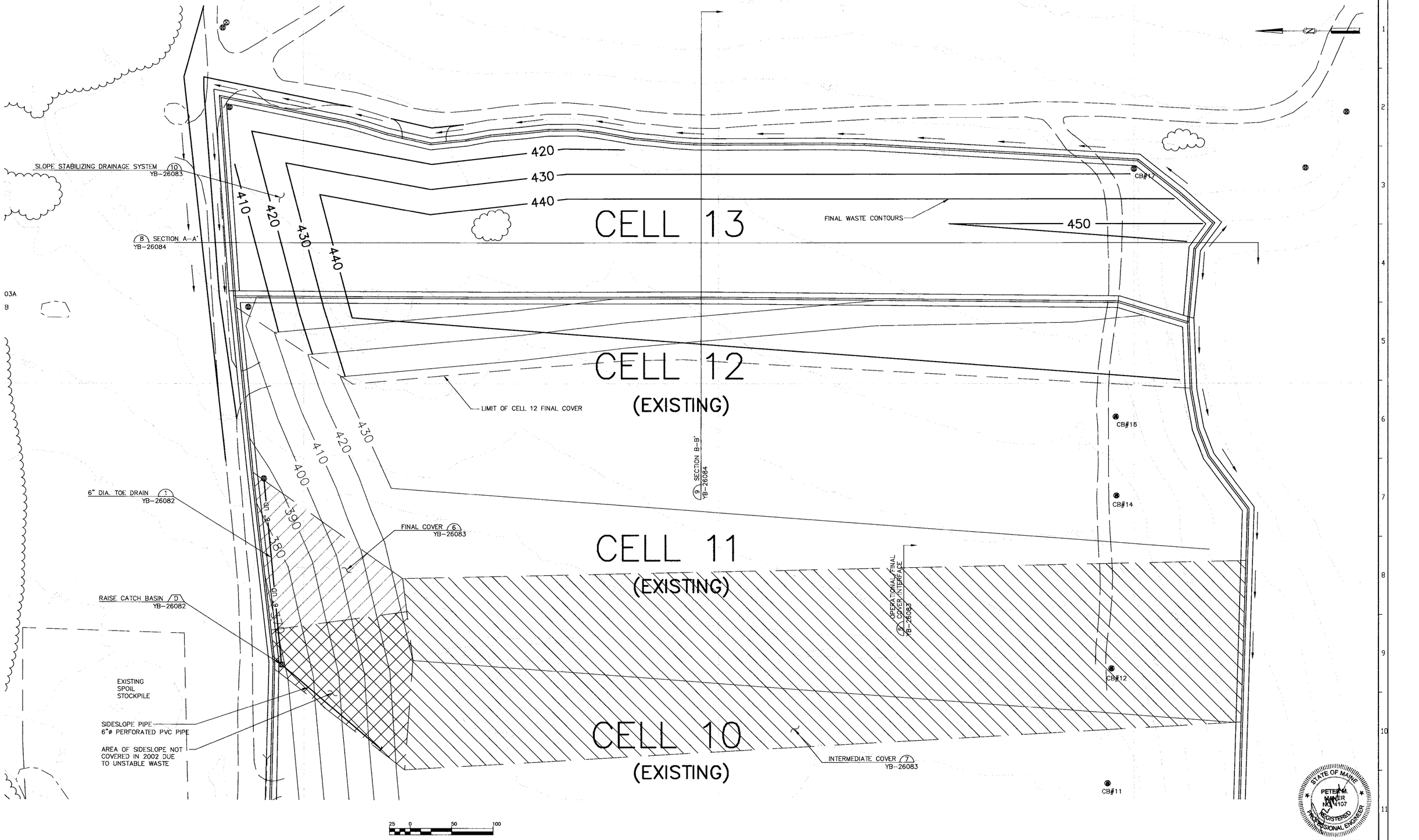
CAD FILE: CELL13-OPERGRADING.DWG

# EAST OPERATION
## DOLBY III LANDFILL
## CELL 13 CONSTRUCTION
## CELL 11 CLOSURE
## CELL 13 - SITE DEVELOPMENT PLAN

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

YB-26080

F:\GIN\PDs\MACAD\CELL13\Record Drawings\CELL13-OPERGRADING.dwg, 5/27/2003 9:40:03 AM, dtd




| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | -- | |
| 5 | -- | |
| 4 | -- | |
| 3 | -- | |
| 2 | -- | |
| 1 | -- | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| -- | -- | | | | | | -- |
| -- | -- | | | | | | -- |
| -- | -- | | | | | | -- |
| ASB | 5/03 | | RECORD DRAWING | | | | -- |
| C | 4/29/02 | | ISSUED FOR CONSTRUCTION | GHC | | | -- |
| P | | | SUBMITTED TO CLIENT | GHC | | | -- |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| -- | -- | | | | | | -- |

SME
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 02021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | | |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: CELL13-OPERGRADING.DWG

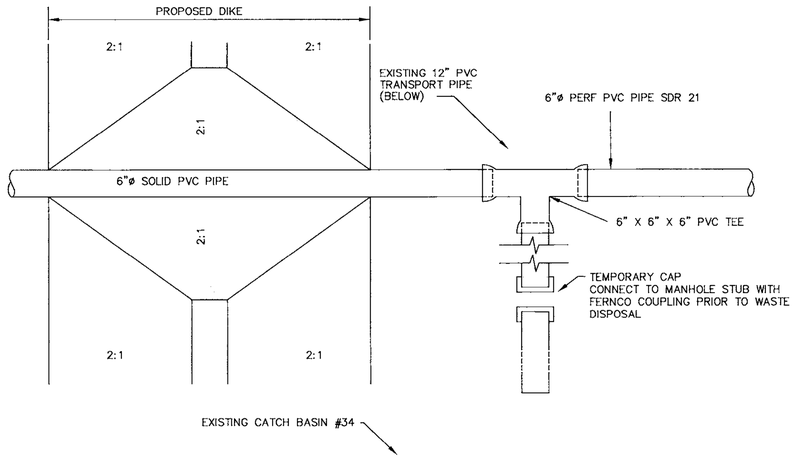
STATE OF MAINE
PETER M. MINER
NO. 14107
REGISTERED PROFESSIONAL ENGINEER

**EAST OPERATION**
**DOLBY III LANDFILL**
**CELL 13 CONSTRUCTION**
**CELL 11 CLOSURE**
**OPERATIONAL GRADING PLAN**

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO. ____

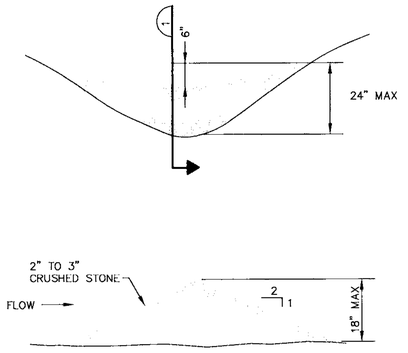
**YB-26081**

F:\GNP\Dolb\ACAD\CELL13\Record Drawings\CELL13-OPERGRADING.dwg, 5/27/2003 9:46:41 AM, dtd



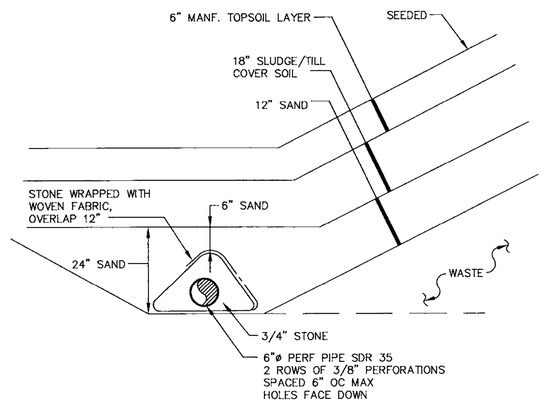

## BRANCH CONNECTOR A

N.T.S. YB-26080



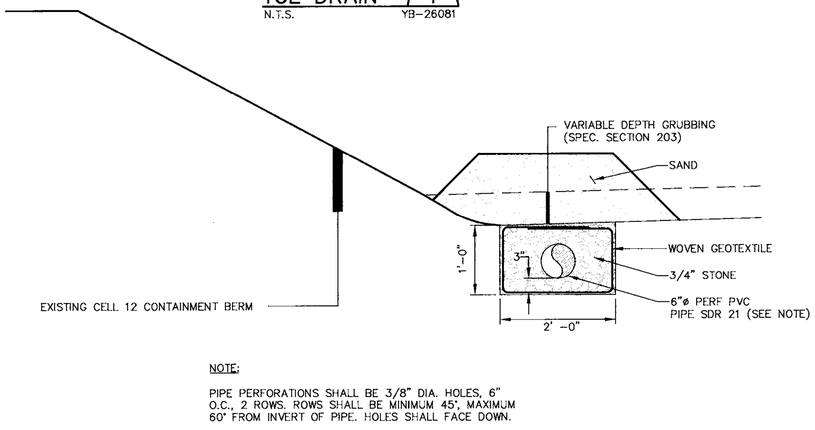

## STONE CHECK DAM C

N.T.S. YB-26080




## TOE DRAIN 1

N.T.S. YB-26081

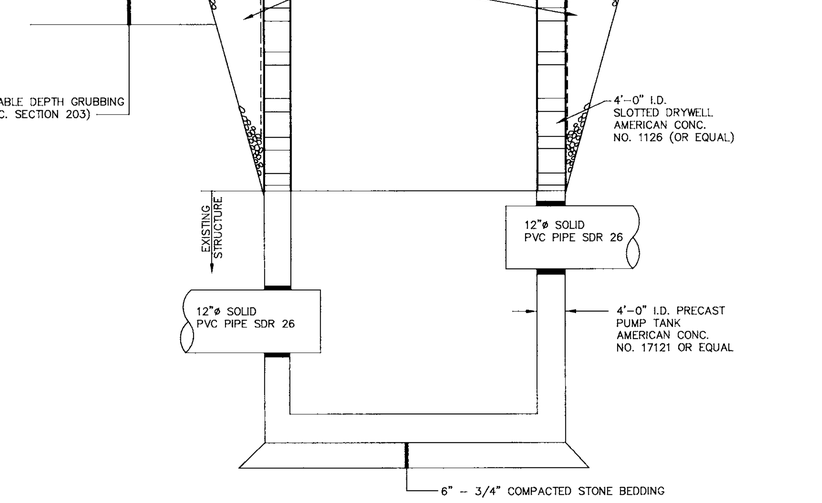



NOTE:

PIPE PERFORATIONS SHALL BE 3/8" DIA. HOLES, 6" O.C., 2 ROWS. ROWS SHALL BE MINIMUM 45°, MAXIMUM 60° FROM INVERT OF PIPE. HOLES SHALL FACE DOWN.

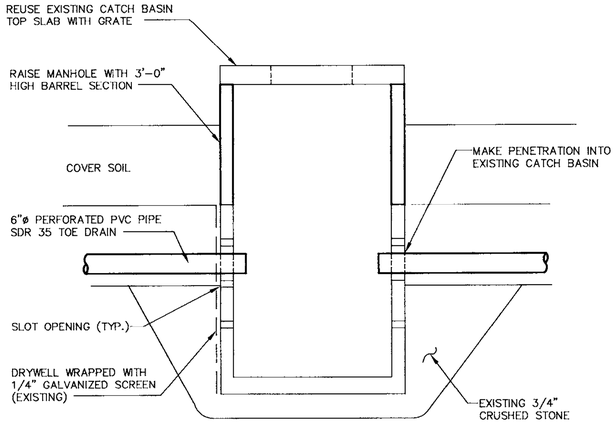
## 6" LEACHATE COLLECTION PIPE 2

N.T.S. YB-26080



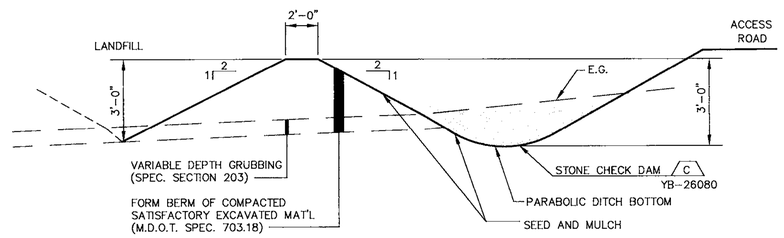

## CATCH BASIN # 35 B

N.T.S. YB-26080




## RAISE CATCH BASIN D

N.T.S. (EXISTING) YB-26081




## DIKE AND TYPE 2 DRAINAGE DITCH 3

N.T.S. YB-26080

STATE OF MAINE PETER W. MAHER NO. 4707 REGISTERED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | – | | | – – | | | | | | |
| 5 | – | | | – – | | | | | | |
| 4 | – | | | – – | | | | | | |
| 3 | – | | | 5/03 | ASB | RECORD DRAWING | KLC | | | |
| 2 | – | | | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| 1 | – | | | | P | SUBMITTED TO CLIENT | GHC | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021
JOB NO. 02021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | | – – |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

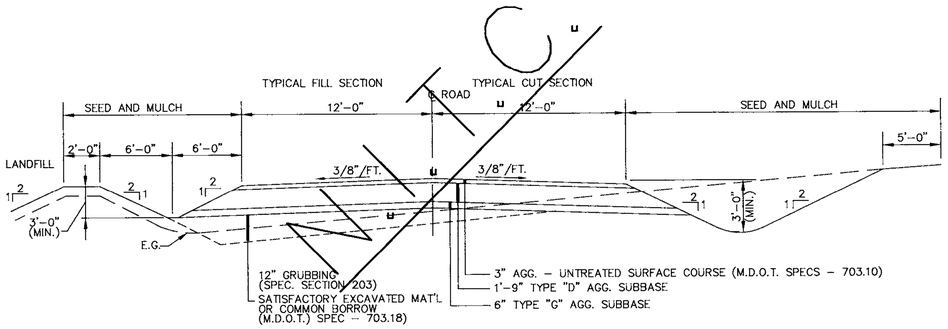
CAD FILE: DETAILS.DWG

**EAST OPERATION**
**DOLBY III LANDFILL**
**CELL 13 CONSTRUCTION**
**CELL 11 CLOSURE**
**SECTIONS & DETAILS**

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

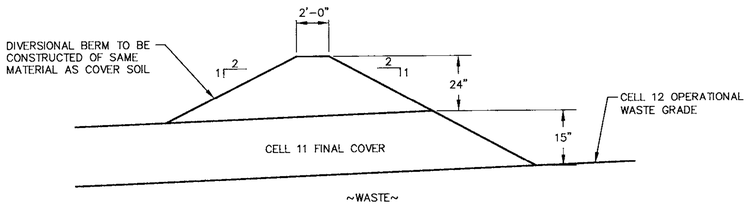
**YB-26082**
SHEET 1 OF 3

F:\GNP\Dol\ACAD\CELL 13\Record Drawings\DETAILS.dwg, 5/27/2003 9:51:41 AM, drd



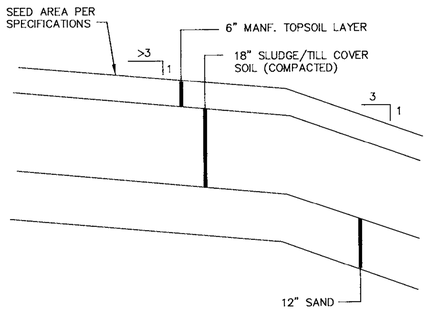

## LANDFILL ACCESS ROAD (4)

N.T.S. YB--26080



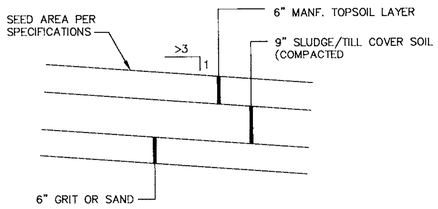

## OPERATIONAL/FINAL COVER INTERFACE (5)

N.T.S. YB-26081



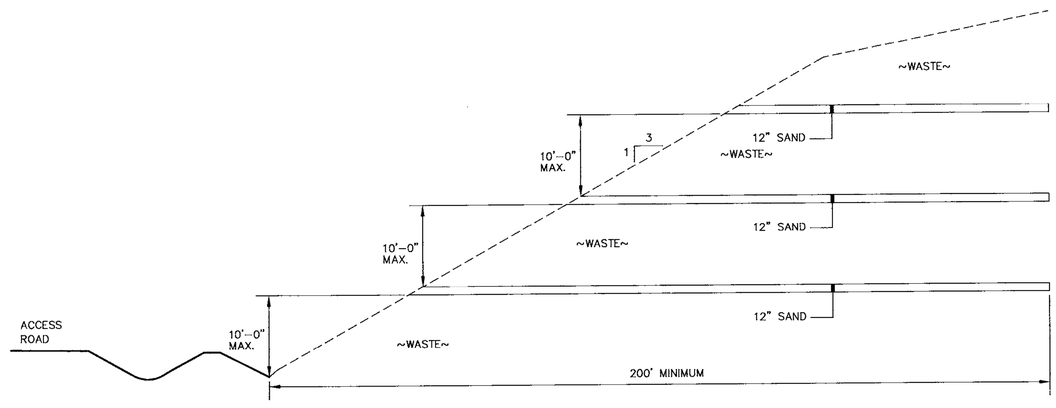

## FINAL COVER (6)

N.T.S. YB-26081




## INTERMEDIATE COVER (7)

N.T.S. YB-26081




NOTE: SAND DRAINAGE LAYERS TO BE INSTALLED ON NORTH SLOPE OF CELL 13

## SLOPE STABILIZING DRAINAGE SYSTEM (10)

N.T.S. YB-26081

STATE OF MAINE PETER A. MAHER NO. 7107 REGISTERED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | -- | |
| 5 | -- | |
| 4 | -- | |
| 3 | -- | |
| 2 | -- | |
| 1 | -- | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | 5/03 | ASB | RECORD DRAWING | | | | |
| | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| | | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 02021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | | -- -- |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: DETAILS.DWG

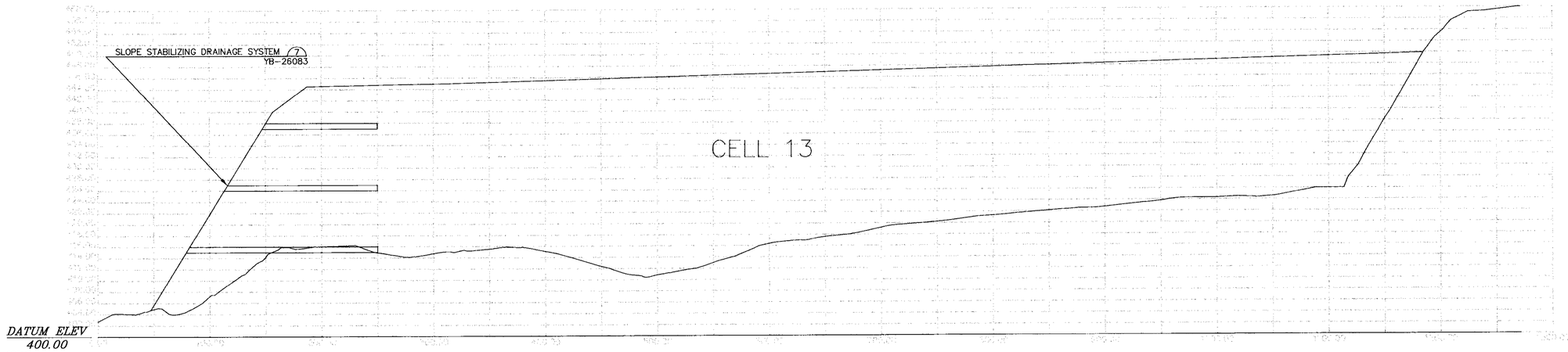
# EAST OPERATION

**DOLBY III LANDFILL**
**CELL 13 CONSTRUCTION**
**CELL 11 CLOSURE**
**SECTIONS & DETAILS**

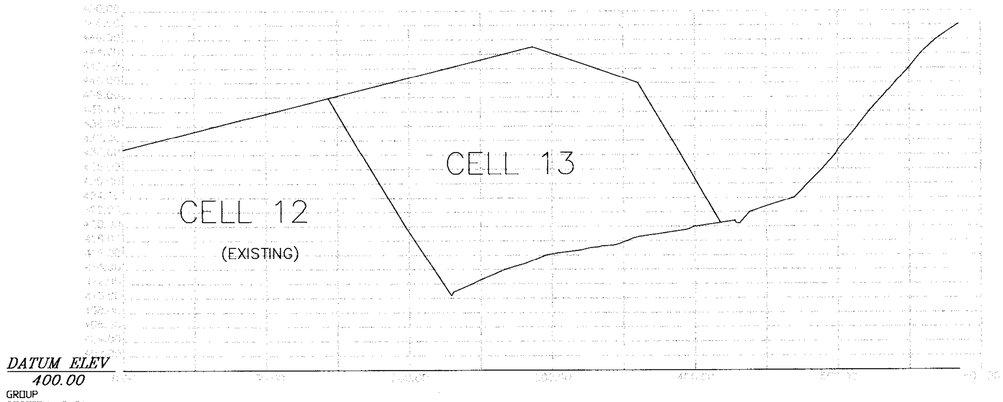
JOB NO. 94768
FILE NO. 2-952-7082
LOC. NO.

**YB-26083**
SHEET 2 OF 3

F:\GNP\Dol\ACAD\CELL13\Record Drawings\DETAILS.dwg, 5/27/2003 9:54:41 AM, drd




SECTION A – A' 8
YB-26081




SECTION B – B' 9
YB-26081

25 0 50 100

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | – | | | – – | | | | | | | | – – | | | | | | |
| 5 | – | | | – – | | | | | | | | – – | | | | | | |
| 4 | – | | | – – | | | | | | | | – – | | | | | | |
| 3 | – | | | 5/03 | ASB | RECORD DRAWING | | | | | | – – | | | | | | |
| 2 | – | | | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | | | – – | | | | | | |
| 1 | – | | | | P | SUBMITTED TO CLIENT | GHC | | | | | – – | | | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 02021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: CELL13-OPERGRADING.DWG

STATE OF MAINE
PETER M. MAHER
No. 7107
REGISTERED PROFESSIONAL ENGINEER

**EAST OPERATION**
**DOLBY III LANDFILL**
**CELL 13 CONSTRUCTION**
**CELL 11 CLOSURE**
**SECTIONS & DETAILS**

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

**YB-26084**
SHEET 3 OF 3

F:\GNP\Dol\ACAD\CELL13\Record Drawings\CELL13-OPERGRADING.dwg, 5/27/2003 10:01:46 AM, drd

# KATAHDIN PAPER COMPANY LLC.
# EAST MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 14 CONSTRUCTION
# CELL 12 CLOSURE

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB–26159 |
| 2 | SYMBOLS & ABBREVIATIONS | YB–26160 |
| 3 | EXISTING CONDITIONS PLAN | YB–26161 |
| 4 | SITE DEVELOPMENT PLAN | YB–26162 |
| 5 | CELL 14 – OPERATIONAL GRADING PLAN | YB–26163 |
| 6 | SECTIONS & DETAILS (SHEET 1 OF 3) | YB–26164 |
| 7 | SECTIONS & DETAILS (SHEET 2 OF 3) | YB–26165 |
| 8 | SECTIONS & DETAILS (SHEET 3 OF 3) | YB–26166 |


SME

*Sevee & Maher Engineers, Inc.*

*Waste Management and Hydrogeologic Consultants*

*Cumberland Center, Maine*


7/12/04

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | 7/12/04 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| | 6/15/04 | P | SUBMITTED TO CLIENT | | | | |

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | DRD | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | – – |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: GNPCOV14.DWG

**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**COVER SHEET**

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

YB–26159

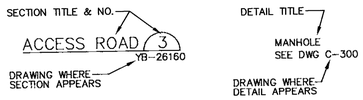
F:\Kpd\Dat\ACAD\CELL14\GNPCOV14.dwg, 7/12/2004 9:52:13 AM, drd

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | DRAINAGE COURSE (WITH DIRECTION) | | UG | UNDERGROUND GAS MAIN |
| DATE | | NORTH ARROW (MAGNETIC) | | | EDGE OF WATER | | UT | UNDERGROUND TELEPHONE LINE |
| (N) | | NORTH ARROW (PLAN NORTH) | | | WATER ELEVATION (GROUND OR SURFACE) | | UE | UNDERGROUND ELECTRICAL LINE |
| | 25 | CONTOUR LINES | | | FENCE LINE (WOOD) | | OE | OVERHEAD ELECTRICAL LINE |
| | INV 25.56 | SPOT ELEVATION (INVERT ELEVATION) | | | FENCE LINE (WIRE) | | OT | OVERHEAD TELEPHONE LINE |
| | | EXISTING GROUND | | | STONE WALL | | 12" SS | SANITARY SEWER |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | RETAINING WALL | | 8" FM | FORCE MAIN |
| | | PROPERTY LINE OR R.O.W. | | | GUARD RAIL | | 8" W | WATER MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | BUILDING AND STRUCTURES | | 12" SD | STORM DRAIN |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | 2 1' OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | | 8" UD | UNDERDRAIN |
| | | BOUNDARY LINE (State, County, Municipality) | TOP OF SLOPE 2 | TOP OF SLOPE 2 | SLOPES (WITH SLOPE RATIO) | | 6" PD | PERIMETER DRAIN |
| ⊟ | ■ | SURVEY MONUMENT | | | EDGE OF ROAD | | 6" LT | LEACHATE TRANSPORT |
| △ | | SURVEY CONTROL | | F | CUT OR FILL LINE | | 6" LC | LEACHATE COLLECTION |
| ○ | • | PROPERTY PIN, DRILL HOLE, PK, OR STAKE | | | BITUMINOUS PAVEMENT | | 6" LD | LEAK DETECTION |
| | | WOODS OR BRUSH LINE | | | CONCRETE | | 6" G | GAS COLLECTION |
| | | INDIVIDUAL TREE | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | ▷ | ▶ | REDUCER |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | | MECHANICAL CAP OR PLUG |
| ⓥ | ◑ | GAS VENT | SW-12 | SW-12 | SURFACE WATER SAMPLE LOCATION | | | COUPLING |
| ⓥ | | GAS VENT (CAPPED) | ⊕ | ⊕ | GAS EXTRACTION WELL | | | BEND |
| ⊘ | ⊘ | CLEAN OUT STRUCTURE | ○ | ● | MANHOLE | | | TEE |
| | | CULVERT | ◎ | ○ | CATCH BASIN | | | PIPE TO BE ABANDONED |
| | | RAILROAD | | | WATER OR GAS VALVE | | | RISER PIPE & INLET GRATE |
| ⊙ | ◘ | SLOPE INCLINOMETER | | | HYDRANT | ▤ | ▤ | STORM GRATE |
| ⊠ | ⊠ | VIBRATING WIRE SETTLEMENT CELL | | | AIR RELEASE VALVE | ◯ | ◯ | DRAINAGE INLET STRUCTURE |
| ⊗ | ⊗ | VERTICAL/HORIZONTAL DISPLACEMENT MONUMENT | | | SURGE RELEASE VALVE | □ | ■ | UNDERDRAIN SUMP |
| ▷ | ▶ | VERTICAL DISPLACEMENT MONUMENT | | | UTILITY POLE | | SF | SILTATION FENCE |
| ⊛ | ⊛ | LIQUID SETTLEMENT GAGE | ☼ | ✷ | LIGHT POLE | | CLL | CLEARING OR CONSTRUCTION LIMIT LINE |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACCMP | ASPHALT COATED CMP | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | PERF | PERFORATED |
| ACP | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HORIZ | HORIZONTAL | PP | POWER POLE |
| AC | ACRE | DEG OR ° | DEGREE | HP | HORSEPOWER | PSI | POUNDS PER SQUARE INCH |
| AGG | AGGREGATE | DEPT | DEPARTMENT | HYD | HYDRANT | PVC | POLYVINYL CHLORIDE |
| ALUM | ALUMINUM | DI | DUCTILE IRON | | | PVMT | PAVEMENT |
| APPD | APPROVED | DIA OR ⌀ | DIAMETER | ID | INSIDE DIAMETER | | |
| APPROX | APPROXIMATE | DIM | DIMENSION | IN OR " | INCHES | QTY | QUANTITY |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV | INVERT | | |
| ASB | ASBESTOS | DN | DOWN | INV EL | INVERT ELEVATION | RCP | REINFORCED CONCRETE PIPE |
| ASP | ASPHALT | DR | DRAIN | | | ROW | RIGHT OF WAY |
| AUTO | AUTOMATIC | DWG | DRAWING | LB | POUND | RAD | RADIUS |
| AUX | AUXILIARY | | | LC | LEACHATE COLLECTION | REQD | REQUIRED |
| AVE | AVENUE | EA | EACH | LD | LEAK DETECTION | RT | RIGHT |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LF | LINEAR FEET | RTE | ROUTE |
| | | ELEC | ELECTRIC | LOC | LOCATION | | |
| BCCMP | BITUMINOUS COATED CMP | EL | ELEVATION | LT | LEACHATE TRANSPORT | S | SLOPE |
| BM | BENCH MARK | ELB | ELBOW | | | SCH | SCHEDULE |
| BIT | BITUMINOUS | EOP | EDGE OF PAVEMENT | MH | MANHOLE | SF | SQUARE FEET |
| BLDG | BUILDING | EQUIP | EQUIPMENT | MJ | MECHANICAL JOINT | SHT | SHEET |
| BOT | BOTTOM | EST | ESTIMATED | MATL | MATERIAL | SMH | SANITARY MANHOLE |
| BRG | BEARING | EXC | EXCAVATE | MAX | MAXIMUM | ST | STREET |
| BV | BALL VALVE | EXIST | EXISTING | MFR | MANUFACTURE | STA | STATION |
| | | | | MIN | MINIMUM | SY | SQUARE YARD |
| CB | CATCH BASIN | FG | FINISH GRADE | MISC | MISCELLANEOUS | | |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT | TAN | TANGENT |
| CEM LIN | CEMENT LINED | FDN | FOUNDATION | | | TDH | TOTAL DYNAMIC HEAD |
| CMP | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | NITC | NOT IN THIS CONTRACT | TEMP | TEMPORARY |
| CO | CLEAN OUT | FLG | FLANGE | NTS | NOT TO SCALE | TYP | TYPICAL |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY | UD | UNDERDRAIN |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO OR # | NUMBER | | |
| CI | CAST IRON | FT OR ' | FEET | | | V | VOLTS |
| CL | CLASS | FTG | FOOTING | OC | ON CENTER | VA TEE | VALVE ANCHORING TEE |
| CONC | CONCRETE | | | OD | OUTSIDE DIAMETER | VERT | VERTICAL |
| CONST | CONSTRUCTION | GA | GAUGE | | | | |
| CONTR | CONTRACTOR | GAL | GALLON | PC | POINT OF CURVE | WG | WATER GATE |
| CS | CURB STOP | GALV | GALVANIZED | PD | PERIMETER DRAIN | W/ | WITH |
| CTR | CENTER | GPD | GALLONS PER DAY | PI | POINT OF INTERSECTION | W/O | WITHOUT |
| CU | COPPER | GPM | GALLONS PER MINUTE | PIV | POST INDICATOR VALVE | | |
| CY | CUBIC YARD | | | PT | POINT OF TANGENT | YD | YARD |

## VIEW MARKERS & IDENTIFICATION




GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18

STONE BEDDING – THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE – THE PIPE BEDDING MATERIAL SHALL BE 3/4-INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

SAND BLANKET – MDOT SPECIFICATION 703.05

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" PVC PIPE – SDR 35

12" LEACHATE TRANSPORT PIPE – SOLID HANCOR TITELINE

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

STATE OF MAINE — JOHN H. DOLBY — 12158 — REGISTERED PROFESSIONAL ENGINEER

| REV. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | 7/12/04 | C | ISSUED FOR CONSTRUCTION | GHC | | | | | | | | | | | |
| | 6/15/04 | P | SUBMITTED TO CLIENT | | | | | | | | | | | | |

SME
Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | DRD | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | – – |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: SYMSHT.DWG

**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**SYMBOLS & ABBREVIATIONS**

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

**YB-26160**

F:\kpc\Dolb\CAD\CELL14\SYMSHT.dwg, 7/12/2004 9:54:37 AM, drd

CELL 13
(EXISTING)

CELL 14

CELL 12
(EXISTING)

Existing Leachate Collection Pipes (TYP)

CELL 11
(EXISTING)

CELL 10
(EXISTING)

CELL 9
(EXISTING)

EXISTING SPOIL STOCKPILE

CELL 1
THROUGH
CELL 8
(EXISTING)

GENERAL NOTES:

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. NORRIDGEWOCK, MAINE, PHOTOGRAPH DATED 5/1/99.

2. GROUND CONTROL PROVIDED BY PLISGA & DAY, BANGOR, MAINE.

3. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MDEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE, AND LOCAL PERMITS.

5. GREAT NORTHERN PAPER IS ACTIVELY FILLING CELL 13. EXISTING GRADES MAY NOT REPRESENT CURRENT CONDITIONS.

50 0 100 200

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | - | | | - - | | | | | | | - - | | | | | | |
| 5 | - | | | - - | | | | | | | - - | | | | | | |
| 4 | - | | | - - | | | | | | | - - | | | | | | |
| 3 | - | | | - - | | | | | | | - - | | | | | | |
| 2 | - | | | 7/12/04 | C | ISSUED FOR CONSTRUCTION | | | | | - - | | | | | | |
| 1 | - | | | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | | - - | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | PAF | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: CELL14--EXCON.DWG

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 14 CONSTRUCTION
## CELL 12 CLOSURE
## EXISTING CONDITIONS PLAN

JOB NO. 46226
FILE NO. 2-092-7082
LIC. NO.

YB-26161

F:\Kpe\Dolv\ACAD\CELL14\CELL14-Excon.dwg, 7/12/2004 9:56:36 AM, dcd

EXISITNG CATCH BASIN #35
(EXIST) 12" INV IN = 391.2
(EXIST) 12" INV OUT = 391.1

EXISTING 12" PVC TRANSPORT PIPE

EXISTING CATCH BASIN #34
(EXIST) 12" INV IN = 391.2
(EXIST) 8" INV IN = 397.0
(EXIST) 12" INV OUT = 391.1

6" DIA. TOE DRAIN (1) YB-26164

FINAL COVER (6) YB-26165

EXISTING CATCH BASIN #33
(EXIST.) 12" INV IN = 373.25
8" INV IN = 379.00
(EXIST.) 12" INV OUT = 373.15
8" INV OUT = 379.00

RAISE CATCH BASIN SEE DWG YB-26164

SIDESLOPE PIPE TRENCH (2) YB-26164

EXISTING CATCH BASIN #32
12" INV IN 358.75
8" INV IN 363.15
12" INV OUT 360.00
8" INV OUT 363.15

EXISTING SPOIL STOCKPILE

DRAINAGE MANHOLE SEE DWG YB-26165

CELL 14 OPERATIONS DITCH (SLOPE TO DRAIN)

INTERMEDIATE COVER (7) YB-26165

OPERATIONAL/FINAL COVER INTERFACE (5) YB-26165

FINAL WASTE CONTOURS

OPERATIONAL ITEM TIE-IN DIKE WHEN STRIPPING COVER

N 663780.60
E 475082.65

N 663649.89
E 475035.46

(3) YB-26164 DIKE AND TYPE I DRAINAGE DITCH

N 663725.59
E 474927.75

N 663862.42
E 474843.32

CELL 13
(EXISTING)

CELL 12
(EXISTING)

CELL 11
(EXISTING)

CELL 10
(EXISTING)

410 420 430 440 450 420 430 410 400 390 380 370

12" UD

CELL 14 OPERATION NOTES (PRIOR TO FILLING)
STRIP EXISTING LANDFILL COVER AND CONSTRUCT CONTAINMENT BERM ON CELL 6.

25 0 50 100

STATE OF MAINE
JOHN F. SEVEE
REGISTERED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | 7/12/04 | C | ISSUED FOR CONSTRUCTION | fsm | | | |
| | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | PAF | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: CELL14-OPERGRADING.DWG

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 14 CONSTRUCTION
## CELL 12 CLOSURE
## SITE DEVELOPMENT PLAN

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

YB-26162

F:\Kpot\Dolf\ACAD\CELL14\CELL14-OPERGRADING.dwg, 7/12/2004 10:03:29 AM, dnd

EXISITNG CATCH BASIN #35
(EXIST) 12" INV IN = 391.2
(EXIST) 12" INV OUT = 391.1

EXISTING 12" PVC TRANSPORT PIPE

EXISTING CATCH BASIN #34
(EXIST) 12" INV IN = 391.2
(EXIST) 8" INV IN = 397.0
(EXIST) 12" INV OUT = 391.1

6" DIA. TOE DRAIN (1) YB-26164

EXISTING CATCH BASIN #33
(EXIST.) 12" INV IN = 373.25
8" INV IN = 379.00
(EXIST.) 12" INV OUT = 373.15
8" INV OUT = 379.00

RAISE CATCH BASIN SEE DWG YB-26164

SIDESLOPE PIPE TRENCH (2) YB-26164

EXISTING CATCH BASIN #32
12" INV IN 358.75
8" INV IN 363.15
12" INV OUT 360.00
8" INV OUT 363.15

EXISTING SPOIL STOCKPILE

FINAL COVER (6) YB-26165

DRAINAGE MANHOLE SEE DWG YB-26165

CELL 14 OPERATIONS DITCH (SLOPE TO DRAIN)

INTERMEDIATE COVER (7) YB-26165

OPERATIONAL COVER (5) YB-26165

FINAL WASTE CONTOURS

BERM REMOVED DURING 2004

CELL 14 BERM CONSTRUCTED DURING 2004

N 663780.60
E 475082.65

COVER STRIPPED DURING 2004

N 663649.89
E 475035.46

(3) YB-26164 DIKE AND TYPE I DRAINAGE DITCH

N 663725.59
E 474927.75

N 663862.42
E 474843.32

OPERATIONAL ITEM TIE-IN DIKE WHEN STRIPPING COVER

AREA OF CELL 12 INTERMEDIATE COVER INSTALLED DURING 2004

CELL 13
(EXISTING)

CELL 12
(EXISTING)

CELL 11
(EXISTING)

CELL 10
(EXISTING)

420 430 440 450 410 420 430 440 400 410 420 430 390 380 370

12" UD

CELL 14 OPERATION NOTES (PRIOR TO FILLING)
STRIP EXISTING LANDFILL COVER AND CONSTRUCT CONTAINMENT BERM ON CELL 6.

25 0 50 100

LEGEND
2004 CONSTRUCTION ACTIVITIES

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB | CODE | DATE | REV. |
|---|---|---|---|---|---|---|---|---|---|---|
| - | - | | | | | | | - | - | |
| - | - | | | | | | | - | - | |
| - | - | | | | | | | - | - | |
| C | 1/18/05 | C | ADDED 2004 CONSTRUCTION ACTIVITIES | GHC | | | | - | - | |
| C | 7/12/04 | C | ISSUED FOR CONSTRUCTION | GHC | | | | - | - | |
| P | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | | - | - | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | PAF | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

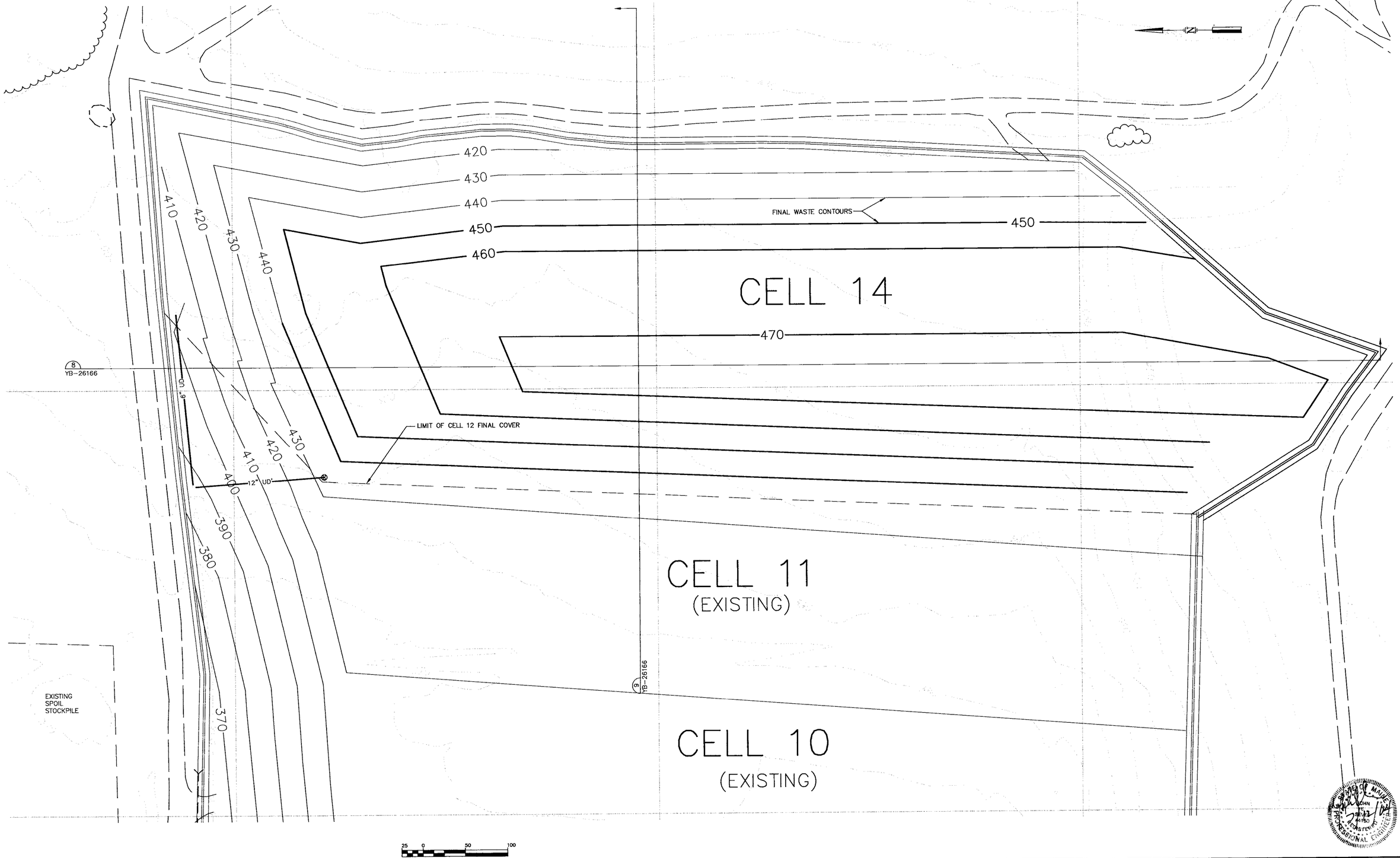
CAD FILE: CELL14-OPERGRADING.DWG

**EAST OPERATION**
**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**2004 CONSTRUCTION ACTIVITIES**

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

**YB-26162A**

P:\kpol\DACAD\CELL14\CELL14-OPERGRADING.dwg, 1/18/2005 7:16:10 AM, drd




| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | 7/12/04 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|

SME

Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | PAF | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: CELL14-OPERGRADING.DWG

**EAST OPERATION**

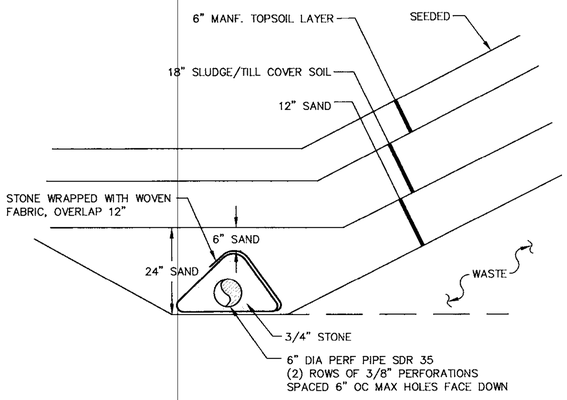
**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**CELL 14-OPERATIONAL GRADING PLAN**

JOB NO. 46226
FILE NO. 2-092-7082
LDC. NO.

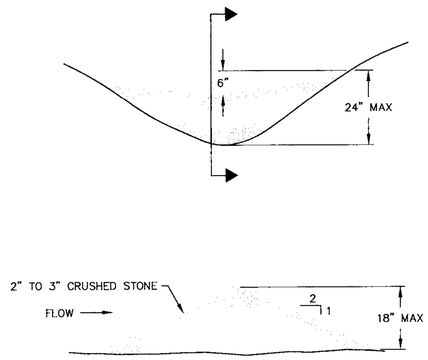
YB-26163

JOHN A. MASTEN 11150 PROFESSIONAL ENGINEER

F:\Kpd\Dat\ACAD\CELL14\CELL14-OPERGRADING.dwg, 7/12/2004 10:05:36 AM, drd

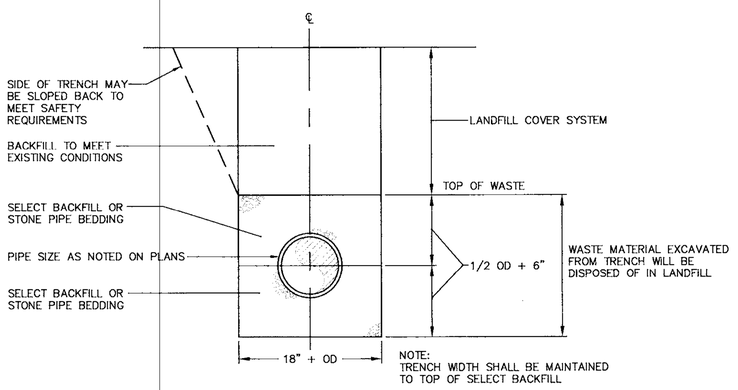



TOE DRAIN 1
NTS YB-26162

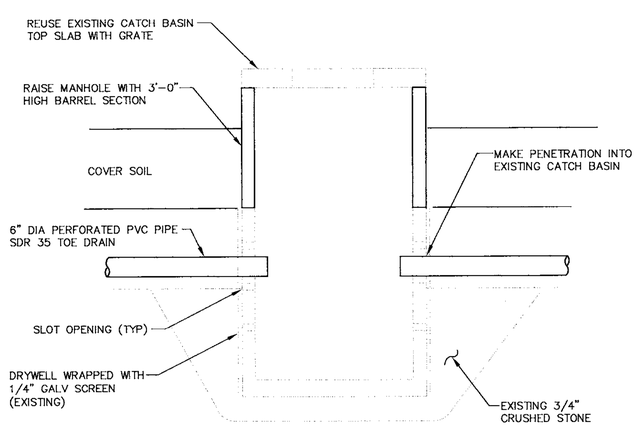



SECTION

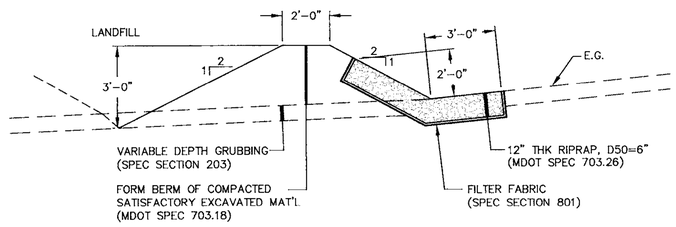
STONE CHECK DAM
NTS




SIDESLOPE PIPE TRENCH 2
NTS YB-26162




RAISE CATCH BASIN
NTS (EXISTING)




DIKE AND TYPE 1 DRAINAGE DITCH 3
NTS YB-26162

STATE OF MAINE
JOHN E. TYLER
No. 11162
REGISTERED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | 7/12/04 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | DRD | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | -- -- |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE: NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: DETAILS.DWG

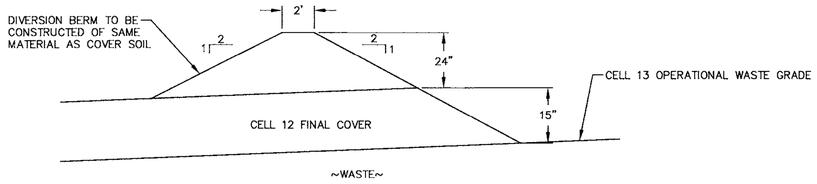
**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**SECTIONS & DETAILS**

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

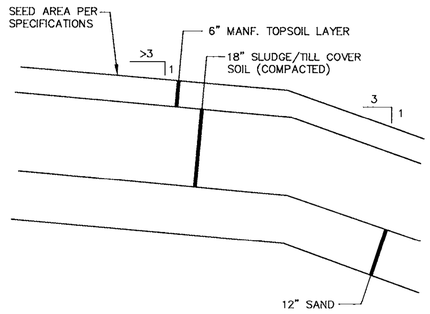
**YB-26164**
SHEET 1 OF 3

F:\Kpc\Dat\ACAD\CELL14\DETAILS.dwg, 7/12/2004 10:15:23 AM, drd



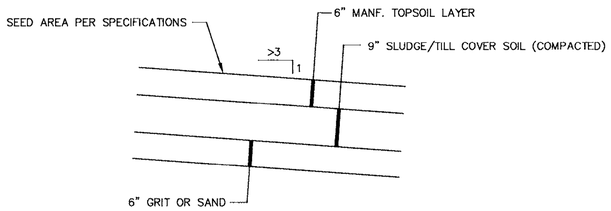

OPERATIONAL/FINAL COVER INTERFACE 5

NTS YB-26162



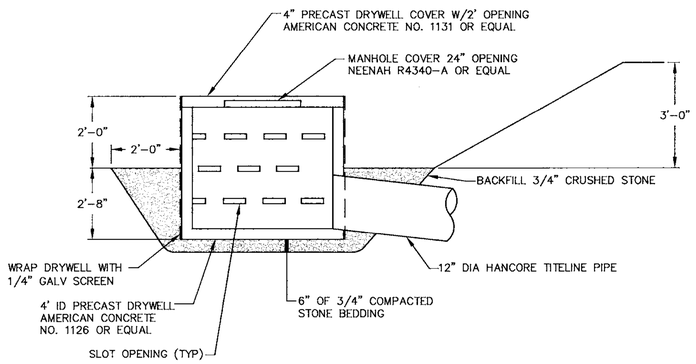

FINAL COVER 6

NTS YB-26162



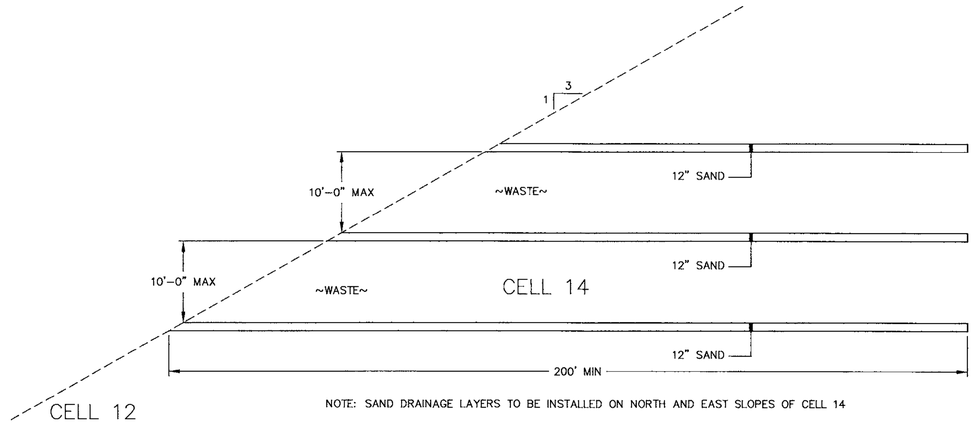

INTERMEDIATE COVER 7

NTS YB-26162




DRAINAGE MANHOLE

NTS




NOTE: SAND DRAINAGE LAYERS TO BE INSTALLED ON NORTH AND EAST SLOPES OF CELL 14

SLOPE STABILIZING DRAINAGE SYSTEM 10

NTS YB-26166

STATE OF MAINE JOHN K. WHITE 10150 REGISTERED PROFESSIONAL ENGINEER 6/17/04

| REV. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | -- | | | -- -- | | | | | | |
| 5 | -- | | | -- -- | | | | | | |
| 4 | -- | | | -- -- | | | | | | |
| 3 | -- | | | -- -- | | | | | | |
| 2 | -- | | | 7/12/04 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| 1 | -- | | | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| -- | -- -- | | | | | | |

SME

Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | DRD | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | -- -- |

ISSUE CODE
P -- Preliminary
B -- Bids
C -- Construction
ASB -- As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: DETAILS.DWG

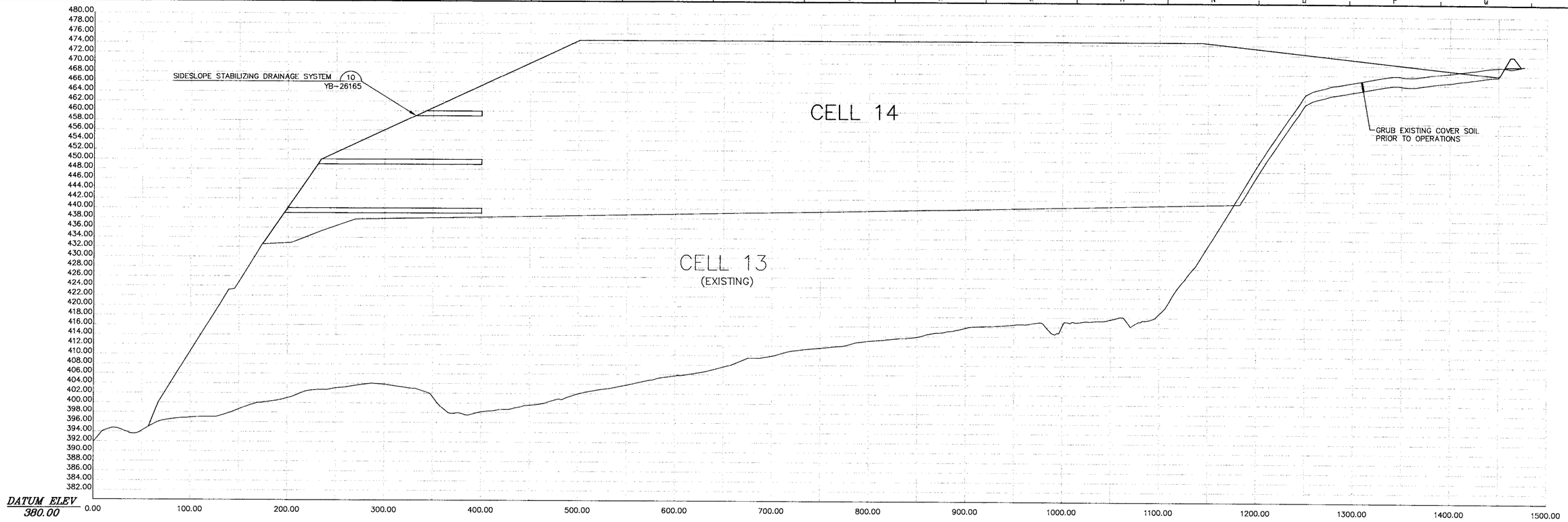
**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**SECTIONS & DETAILS**

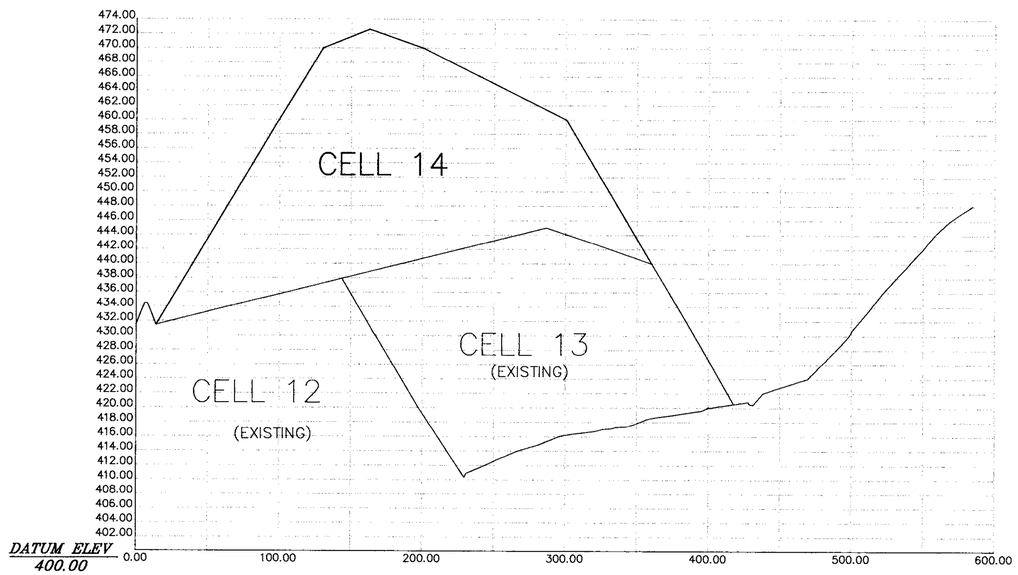
JOB NO. 46226
FILE NO. 2-092-7082
LIC. NO.

YB-26165
SHEET 2 OF 3

F:\Kpo\Dcs\ACAD\CELL14\DETAILS.dwg, 7/12/2004 10:17:28 AM, drd




SECTION 8
YB-26163




SECTION 9
YB-26163

25 0 50 100

STATE OF MAINE
GREGORY H. CROCKETT
7/12/04
REGISTERED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | 7/12/04 | C | ISSUED FOR CONSTRUCTION | | | | |
| | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | DRD | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: CELL13-OPERGRADING.DWG

**EAST OPERATION**
**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**SECTIONS & DETAILS**

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

**YB-26166**
SHEET 3 OF 3

F:\pc\Dbl\CAD\CELL14\CELL14-SECTIONS.dwg, 7/12/2004 10:19:23 AM, drd

RAISE EXISTING CATCH BASIN #35
12" INV IN 407.2 (EXISTING)
12" INV OUT 407.1 (EXISTING)
6" INV IN 415.0
6" INV OUT 415.0
SEE DWG YB-26199
SHT 1 OF 2

6" DIA TOE DRAIN
SEE DWG YB-26199
SHT 1 OF 2

6"UD

410
420
430
440
450
460
470

EXISTING CATCH BASIN #18
6" INV OUT 428.0

LANDFILL COVER
SEE DWG YB-26199
SHT 2 OF 2

2 YB-26199 SHT 2 OF 2

FINAL WASTE CONTOURS

RAISE EXISTING CATCH BASIN #34
12" INV IN 391.2 (EXISTING)
8" INV IN 397.0 (EXISTING)
12" INV OUT 391.1 (EXISTING)
8" INV OUT 397.0 (EXISTING)
6" INV IN
SEE DWG YB-26199
SHT 1 OF 2

2 YB-26199 SHT 2 OF 2

1 YB-26199 SHT 2 OF 2

CELL 14

TIE INTO CELL 14 DIKE

DIKE AND TYPE 1 DRAINAGE DITCH
SEE DWG YB-26199
SHT 1 OF 2

CATCH BASIN #33

EXISTING DRAINAGE MANHOLE

N 663726.69
E 474777.65

N 663712.83
E 474774.23

CELL 15
(INTERIM OPERATIONS)

N 663757.38
E 474712.66

N 663745.63
E 474704.75

BREAK ON SLOPE
TO BE FIELD DETERMINED

CELL 15 OPERATIONAL DITCH
(SLOPE TO DRAIN)

1 YB-26199 SHT 2 OF 2

REMOVE EXISTING COVER

DRAINAGE MANHOLE
SEE DWG YB-26199
SHT 2 OF 2

PIPE TRENCH
SEE DWG YB-26199
SHT 1 OF 2

18"UD

EXISTING DRAINAGE MANHOLE

25 0 50 100

| REV. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | – | | | – – | | | | | | |
| 5 | – | | | – – | | | | | | |
| 4 | – | | | – – | | | | | | |
| 3 | – | | | 2/12/07 | | UPDATED PER MEDEP COMMENTS | | | | |
| 2 | – | | | 10/6/06 | | SUBMITTED TO MEDEP | GHC | | | |
| 1 | – | | | 8/24/06 | P | SUBMITTED TO CLIENT | RBC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


JOB NO. 06116

| | | |
|---|---|---|
| DRN | PAF | 7/18/06 |
| CHKD | GHC | 8/8/06 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE AS SHOWN

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: YB-26197 BO

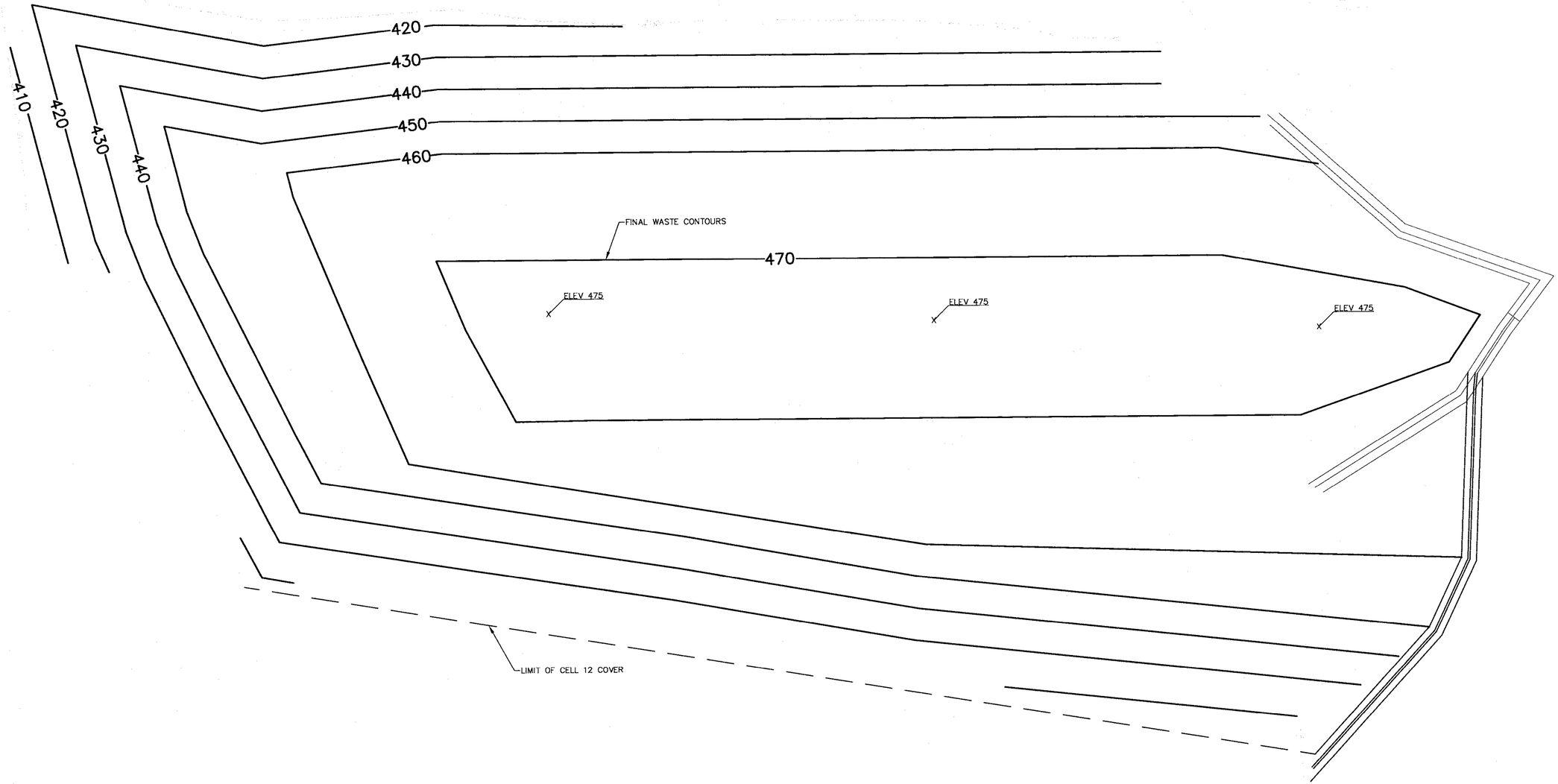
# EAST OPERATION

## DOLBY III LANDFILL
## CELL 15 CONSTRUCTION
## CELL 14 CLOSURE
## SITE DEVELOPMENT PLAN

JOB NO. _____
FILE NO. _____
LIC. NO. _____

YB-26197

F:\Kpc\Dol\ACAD\CELL14\Cell14Closure.dwg, 3/12/2007 12:00:33 PM, paf




25 0 50 100

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | 2/12/07 | | UPDATED PER MEDEP COMMENTS | | | | |
| | 10/6/06 | | SUBMITTED TO MEDEP | GHC | | | |
| | 8/24/06 | P | SUBMITTED TO CLIENT | RBC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |


SME

*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*


JOB NO. 06116

| | | |
|---|---|---|
| DRN | PAF | 7/18/06 |
| CHKD | GHC | 8/6/06 |
| APPVD | | |

ISSUE CODE

P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

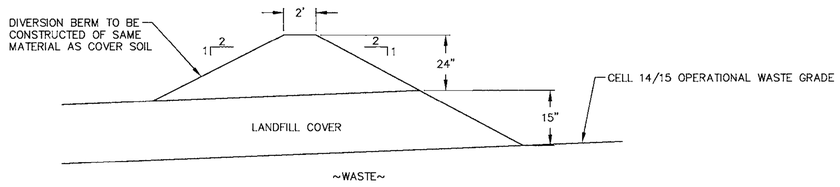
CAD FILE: YB-26198 B0

**EAST OPERATION**
**DOLBY III LANDFILL**
**CELL 15 CONSTRUCTION**
**CELL 14 CLOSURE**
**CELL 15 OPERATIONAL GRADING PLAN**

JOB NO.
FILE NO.
LOC. NO.

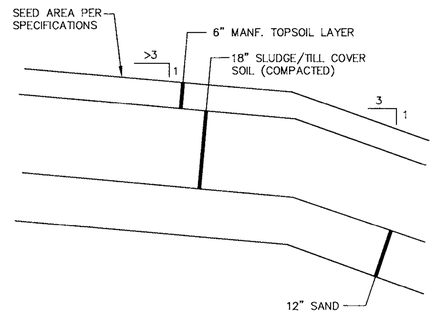
**YB-26198**

F:\Kpr\Dol\ACAD\CELL14\Cell14Closure.dwg, 3/12/2007 12:02:11 PM, paf



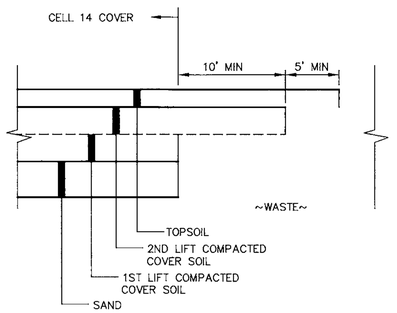

OPERATIONAL/LANDFILL COVER INTERFACE 1

NTS YB-26197



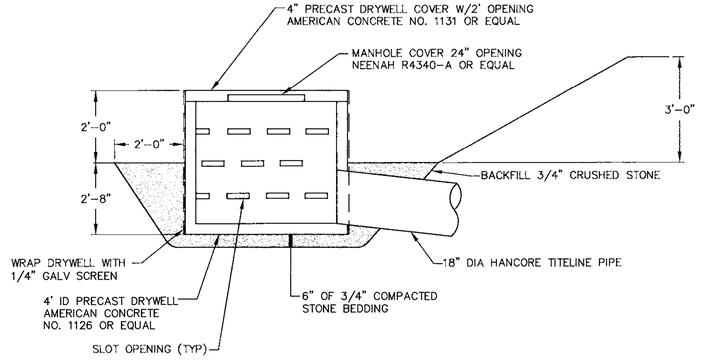

LANDFILL COVER

NTS




SECTION 2

NTS YB-26197




DRAINAGE MANHOLE

NTS

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | -- | | | -- -- | | | | | | | | -- -- | | | | | | |
| 5 | -- | | | -- -- | | | | | | | | -- -- | | | | | | |
| 4 | -- | | | -- -- | | | | | | | | -- -- | | | | | | |
| 3 | -- | | | 2/12/07 | | UPDATED PER MEDEP COMMENTS | | | | | | -- -- | | | | | | |
| 2 | -- | | | 10/6/06 | | SUBMITTED TO MEDEP | GHC | | | | | -- -- | | | | | | |
| 1 | -- | | | 8/24/06 | P | SUBMITTED TO CLIENT | RBC | | | | | -- -- | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | DRD | 8/11/06 |
| CHKD | GHC | 8/11/06 |
| APPVD | | -- -- |

ISSUE CODE
P -- Preliminary
B -- Bids
C -- Construction
ASB -- As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: YB-26199 B1

EAST OPERATION

DOLBY III LANDFILL
CELL 15 CONSTRUCTION
CELL 14 CLOSURE
SECTIONS & DETAILS

JOB NO. YB-26199
FILE NO.
LOC. NO. SHEET 2 OF 2

F:\Xpc\Dol\ACAD\CELL14\DETAILS.dwg, 3/12/2007 12:08:03 PM, paf

# KATAHDIN PAPER COMPANY, LLC
# EAST MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 16 CONSTRUCTION

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | |
| 2 | SYMBOLS & ABBREVIATIONS | C-100 |
| 3 | EXISTING CONDITIONS PLAN | C-101 |
| 4 | SITE DEVELOPMENT PLAN | C-102 |
| 5 | OPERATIONAL GRADING PLAN | C-103 |
| 6 | SECTIONS & DETAILS (SHEET 1 OF 1) | C-300 |


*SME*

*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*


STATE OF MAINE
PETER M. MAHER
NO. 7107
LICENSED
PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| P | 7/23/08 | | SUBMITTED TO MEDEP | ECC | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - | - - | | | | | | |
| - | - - | | | | | | |
| - | - - | | | | | | |
| - | - - | | | | | | |
| - | - - | | | | | | |
| - | - - | | | | | | |


*SME*
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*


JOB NO. 08035.05

| | | |
|---|---|---|
| DRN | MSB | 7/08 |
| CHKD | GHC | 7/08 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: COVERSHT.DWG

EAST OPERATION
DOLBY III LANDFILL
CELL 16 CONSTRUCTION
COVER SHEET

JOB NO.
FILE NO.
LOC. NO.

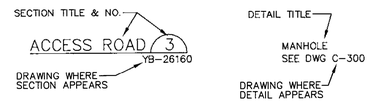
P:\Projects\08035\CAD\CELL 16-18\COVERSHT.dwg, 7/23/2008 2:18:05 PM, mbrooks

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | DRAINAGE COURSE (WITH DIRECTION) | | UG | UNDERGROUND GAS MAIN |
| DATE | | NORTH ARROW (MAGNETIC) | | | EDGE OF WATER | | UT | UNDERGROUND TELEPHONE LINE |
| N | | NORTH ARROW (PLAN NORTH) | | | WATER ELEVATION (GROUND OR SURFACE) | | UE | UNDERGROUND ELECTRICAL LINE |
| | 25 | CONTOUR LINES | | | FENCE LINE (WOOD) | | OE | OVERHEAD ELECTRICAL LINE |
| | INV 25.56 | SPOT ELEVATION (INVERT ELEVATION) | | | FENCE LINE (WIRE) | | OT | OVERHEAD TELEPHONE LINE |
| | | EXISTING GROUND | | | STONE WALL | | 12" SS | SANITARY SEWER |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | RETAINING WALL | | 8" FM | FORCE MAIN |
| | | PROPERTY LINE OR R.O.W. | | | GUARD RAIL | | 8" W | WATER MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | BUILDING AND STRUCTURES | | 12" SD | STORM DRAIN |
| 0+00 | 1+00 | CONSTRUCTION BASELINE | | 1 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | | 8" UD | UNDERDRAIN |
| | | BOUNDARY LINE (State, County, Municipality) | TOP OF SLOPE | TOP OF SLOPE | SLOPES (WITH SLOPE RATIO) | | 6" PD | PERIMETER DRAIN |
| ◻ | ■ | SURVEY MONUMENT | | | EDGE OF ROAD | | 6" LT | LEACHATE TRANSPORT |
| | | SURVEY CONTROL | | C F | CUT OR FILL LINE | | 6" LC | LEACHATE COLLECTION |
| ○ | • | PROPERTY PIN, DRILL HOLE, PK, OR STAKE | | | BITUMINOUS PAVEMENT | | 6" LD | LEAK DETECTION |
| | | WOODS OR BRUSH LINE | | | CONCRETE | | 6" G | GAS COLLECTION |
| | | INDIVIDUAL TREE | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | ▷ | ▶ | REDUCER |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | | MECHANICAL CAP OR PLUG |
| ⏀ | ◑ | GAS VENT | SW-12 | SW-12 | SURFACE WATER SAMPLE LOCATION | | | COUPLING |
| ⏀ | | GAS VENT (CAPPED) | | | GAS EXTRACTION WELL | | | BEND |
| ⊘ | ⊘ | CLEAN OUT STRUCTURE | ○ | ● | MANHOLE | | | TEE |
| | | CULVERT | ◎ | ○ | CATCH BASIN | | | PIPE TO BE ABANDONED |
| | | RAILROAD | | | WATER OR GAS VALVE | | | RISER PIPE & INLET GRATE |
| ◎ | ◘ | SLOPE INCLINOMETER | | | HYDRANT | ▤ | ▤ | STORM GRATE |
| ⊠ | ⊠ | VIBRATING WIRE SETTLEMENT CELL | | | AIR RELEASE VALVE | ◯ | ◯ | DRAINAGE INLET STRUCTURE |
| ⊗ | ⊗ | VERTICAL/HORIZONTAL DISPLACEMENT MONUMENT | | | SURGE RELEASE VALVE | □ | ■ | UNDERDRAIN SUMP |
| ▷ | ▶ | VERTICAL DISPLACEMENT MONUMENT | | | UTILITY POLE | | SF | SILTATION FENCE |
| ⊗ | ● | LIQUID SETTLEMENT GAGE | ☼ | ✷ | LIGHT POLE | | CLL | CLEARING OR CONSTRUCTION LIMIT LINE |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACCMP | ASPHALT COATED CMP | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | PERF | PERFORATED |
| ACP | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HORIZ | HORIZONTAL | PP | POWER POLE |
| AC | ACRE | DEG OR ° | DEGREE | HP | HORSEPOWER | PSI | POUNDS PER SQUARE INCH |
| AGG | AGGREGATE | DEPT | DEPARTMENT | HYD | HYDRANT | PVC | POLYVINYL CHLORIDE |
| ALUM | ALUMINUM | DI | DUCTILE IRON | | | PVMT | PAVEMENT |
| APPD | APPROVED | DIA OR ø | DIAMETER | ID | INSIDE DIAMETER | | |
| APPROX | APPROXIMATE | DIM | DIMENSION | IN OR " | INCHES | QTY | QUANTITY |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV | INVERT | | |
| ASB | ASBESTOS | DN | DOWN | INV EL | INVERT ELEVATION | RCP | REINFORCED CONCRETE PIPE |
| ASP | ASPHALT | DR | DRAIN | | | ROW | RIGHT OF WAY |
| AUTO | AUTOMATIC | DWG | DRAWING | LB | POUND | RAD | RADIUS |
| AUX | AUXILIARY | | | LC | LEACHATE COLLECTION | REQD | REQUIRED |
| AVE | AVENUE | EA | EACH | LD | LEAK DETECTION | RT | RIGHT |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LF | LINEAR FEET | RTE | ROUTE |
| | | ELEC | ELECTRIC | LOC | LOCATION | | |
| BCCMP | BITUMINOUS COATED CMP | EL | ELEVATION | LT | LEACHATE TRANSPORT | S | SLOPE |
| BM | BENCH MARK | ELB | ELBOW | | | SCH | SCHEDULE |
| BIT | BITUMINOUS | EOP | EDGE OF PAVEMENT | MH | MANHOLE | SF | SQUARE FEET |
| BLDG | BUILDING | EQUIP | EQUIPMENT | MJ | MECHANICAL JOINT | SHT | SHEET |
| BOT | BOTTOM | EST | ESTIMATED | MATL | MATERIAL | SMH | SANITARY MANHOLE |
| BRG | BEARING | EXC | EXCAVATE | MAX | MAXIMUM | ST | STREET |
| BV | BALL VALVE | EXIST | EXISTING | MFR | MANUFACTURE | STA | STATION |
| | | | | MIN | MINIMUM | SY | SQUARE YARD |
| CB | CATCH BASIN | FG | FINISH GRADE | MISC | MISCELLANEOUS | TAN | TANGENT |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT | TDH | TOTAL DYNAMIC HEAD |
| CEM LIN | CEMENT LINED | FDN | FOUNDATION | | | TEMP | TEMPORARY |
| CMP | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | NITC | NOT IN THIS CONTRACT | TYP | TYPICAL |
| CO | CLEAN OUT | FLG | FLANGE | NTS | NOT TO SCALE | | |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY | UD | UNDERDRAIN |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO OR # | NUMBER | | |
| CI | CAST IRON | FT OR ' | FEET | | | V | VOLTS |
| CL | CLASS | FTG | FOOTING | OC | ON CENTER | VA TEE | VALVE ANCHORING TEE |
| CONC | CONCRETE | | | OD | OUTSIDE DIAMETER | VERT | VERTICAL |
| CONST | CONSTRUCTION | GA | GAUGE | | | | |
| CONTR | CONTRACTOR | GAL | GALLON | PC | POINT OF CURVE | WG | WATER GATE |
| CS | CURB STOP | GALV | GALVANIZED | PD | PERIMETER DRAIN | W/ | WITH |
| CTR | CENTER | GPD | GALLONS PER DAY | PI | POINT OF INTERSECTION | W/O | WITHOUT |
| CU | COPPER | GPM | GALLONS PER MINUTE | PIV | POST INDICATOR VALVE | | |
| CY | CUBIC YARD | | | PT | POINT OF TANGENT | YD | YARD |

## VIEW MARKERS & IDENTIFICATION




GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18

SCREENED TILL – SHALL BE EARTH, SUITABLE FOR EMBANKMENT CONSTRUCTION. SCREENED TILL SHALL BE GLACIAL TILL FREE OF FROZEN MATERIALS, PERISHABLE RUBBISH, PEAT, ORGANIC MATER, LARGE ROCK FRAGMENTS, OR OTHER UNSUITABLE MATERIAL AND SHALL BE SCREENED TO LESS THAN 4" IN DIAMETER WITH GREATER THAN 20 PERCENT FINES. THE FINAL SURFACE OF THE SCREENED TILL SHALL BE FREE FROM PROTRUDING ROCKS GREATER THAN 3" IN DIAMETER.

SAND – THE DRAINAGE SAND SHALL BE AGGREGATE FREE OF ORGANIC MATTER, DEBRIS, AND ROCK FRAGMENTS LARGER THAN 1 INCH IN DIAMETER. SAND SHALL MEET A GRADATION AND HYDRAULIC CONDUCTIVITY REQUIREMENT AS FOLLOWS:

a.

| SIEVE DESIGNATION | PERCENT BY WEIGHT PASSING SQUARE MESH SIEVE |
|---|---|
| 1/4" | 60 – 100 |
| #40 | 0 – 50 |
| #200 | 0 – 7 |

b. REMOLDED HYDRAULIC CONDUCTIVITY (ASTM D 5084–90) MAXIMUM $\geq 1X10^{-3}$cm/sec

3/4" STONE – THE PIPE BEDDING MATERIAL SHALL BE 3/4–INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" PERFORATED HDPE UNDERDRAIN PIPE – SDR 21 – HDPE PIPE JOINTS SHALL BE BUTT–FUSION WELDED OR ELECTROFUSION COUPLED.

12" UNDERDRAIN/LEACHATE TRANSPORT PIPE – SOLID HANCOR TITELINE

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

STATE OF MAINE — PETER MILLER — NO. 8807 — LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| – | – | – | | – | – | – | – |
| – | – | – | | – | – | – | – |
| – | – | – | | – | – | – | – |
| – | – | – | | – | – | – | – |
| – | – | – | | – | – | – | – |
| P | 7/23/08 | – | SUBMITTED TO MEDEP | EDD | MM | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| – | – | – | | – | – | – | – |

SME

*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 08035.05

| | | |
|---|---|---|
| DRN | MSB | 7/08 |
| CHKD | GHC | 7/08 |
| APPVD | | |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built

SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: SYMSHT

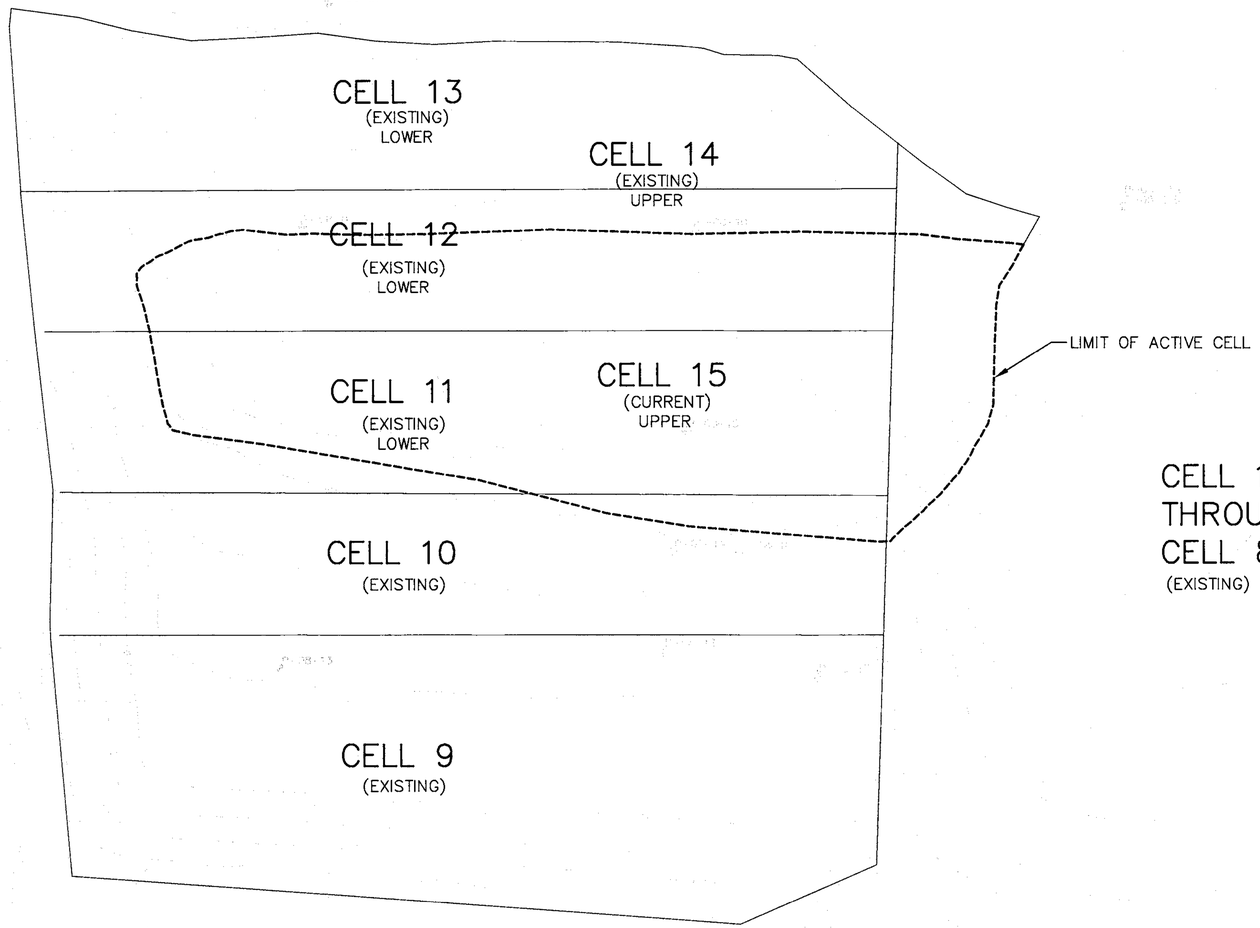
# EAST OPERATION

## DOLBY III LANDFILL CELL 16 CONSTRUCTION SYMBOLS AND ABBREVIATIONS

JOB NO.
FILE NO.
LOC. NO.

**C–100**

P:\KCC\DABCAD\CELL 15-18\DYNAMIC\dwg, 7/23/2008 2:11:25 PM, mbrkab




GENERAL NOTES:

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. NORRIDGEWOCK, MAINE, PHOTOGRAPH DATED 5/14/08.

2. GROUND CONTROL PROVIDED BY SEVEE & MAHER ENGINEERS, INC, CUMBERLAND, MAINE.

3. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MDEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE, AND LOCAL PERMITS.

5. KATAHDIN PAPER COMPANY IS ACTIVELY FILLING CELL 15. EXISTING GRADES MAY NOT REPRESENT CURRENT CONDITIONS.

50 0 100 200 FEET

STATE OF MAINE — PETER G. MAHER — 12107 — LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| P | 7/23/08 | | SUBMITTED TO MEDEP | KRG | MJK | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 08035.05

| | | |
|---|---|---|
| DRN | MSB | 7/08 |
| CHKD | GHC | 7/08 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE AS SHOWN

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: CELL15-16Site

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 16 CONSTRUCTION
## EXISTING CONDITIONS PLAN

JOB NO.
FILE NO.
LOC. NO.

C-101

P:\jobs\08035\CAD\CELL 15-16\Cell15-16Site.dwg, 7/23/2008 2:09:37 PM, mbishop

CELL 15

CELL 16
(INTERIM OPERATIONS)

FINAL WASTE CONTOURS

OPERATIONAL DRAINAGE
SEE SECTIONS AND DETAILS
DWG C-300
(12" SAND LAYER TO BE EXTENDED FROM UNDERDRAIN PIPE UPSLOPE MINIMUM OF 10 FT. IN ELEVATION ON WESTERN SIDESLOPE OF CELL 15 AND NORTHERN SIDESLOPE OF CELL 7).

CORE EXIST DRAINAGE MANHOLE FOR 6" PIPE
N 664876.36
E 474758.74

6" PERFORATED DRAIN

TIE-IN TO CELL 15 DIKE

CELL 16 OPERATIONAL DITCH (SLOPE TO DRAIN)

EXTEND EXISTING 6" UNDERDRAIN

6"UD

6" PERFORATED DRAIN

SECTIONS AND DETAILS DWG C-300

6" TEE (TYP)

N 664858.12
E 474597.92

N 664857.15
E 474503.59

12" SOLID DRAIN

6" PERFORATED DRAIN.

EXISTING CATCH BASIN #31
12" INV IN 365.25
8" INV IN 359.15
18" INV OUT 356.5

CORE EXISTING DRAINAGE MANHOLE FOR 12" PIPE

DRAINAGE MANHOLE SEE SECTIONS AND DETAILS SEE DWG C-300

BREAK ON SLOPE

6" PERFORATED DRAIN (SLOPE TO DRAIN NORTH)

BREAK ON SLOPE TO BE FIELD DETERMINED

STRIP COVER SOIL AND ADD 6" OF SAND

CELL 16 OPERATIONAL DITCH (SLOPE TO DRAIN)

P-08-14 P-08-16

PROTECT PIEZOMETERS FROM DAMAGE DURING CONSTRUCTION.

6" PERFORATED DRAIN (SLOPE TO DRAIN SOUTH)

6" TEE (TYP)

STRIP COVER SOILS FROM BULGING AREA SHOWN AND GRADE WASTE TO MATCH SURROUNDING GRADES. PLACE 12" SAND DRAINAGE LAYER ABOVE GRADED WASTE AND TIE-IN WITH SAND DRAINAGE LAYER.

N 663726.69
E 474777.65

TIE INTO CELL 15 DIKE

N 663712.83
E 474774.23

STRIP AND REMOVE CELL 7 SIDESLOPE COVER

REPLACE PERFORATED MANHOLE TOP WITH SOLID MANHOLE TOP.

N 663719.79
E 474562.70

N 663705.58
E 474556.42

N 663682.32
E 474511.36

DIKE AND TYPE 1 DRAINAGE DITCH SEE SECTIONS AND DETAILS DWG C-300

N 663874.27
E 474431.17

DRAINAGE MANHOLE SEE SECTIONS AND DETAILS SEE DWG C-300

12" SOLID DRAIN

EXISTING DRAINAGE MANHOLE

TIE-IN 12" SOLID DRAIN TO EXISTING 12" DRAIN (TO CB-1) WITH PIPE FITTINGS AS NEEDED FOR SECURE CONNECTION

EXISTING 12" PIPE TO CB#1

P-08-11A
P-08-11B

30 0 60 120 FEET

STATE OF MAINE
GUY H. COTE, JR.
No. 5144
LICENSED
PROFESSIONAL ENGINEER

| REF NO | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | - | | | | | | | | | |
| 5 | - | | | | | | | | | |
| 4 | - | | | | | | | | | |
| 3 | - | | P | 8/22/08 | | REVISED PER MEDEP COMMENTS | | | | |
| 2 | - | | P | 7/25/08 | | RESUBMITTED TO MEDEP | KCC | GHC | | |
| 1 | - | | P | 7/23/08 | | SUBMITTED TO MEDEP | KCC | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

*SME*

*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 08035.05

| | | |
|---|---|---|
| DRN | MSB | 7/08 |
| CHKD | GHC | 7/08 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: CELL15-16Site

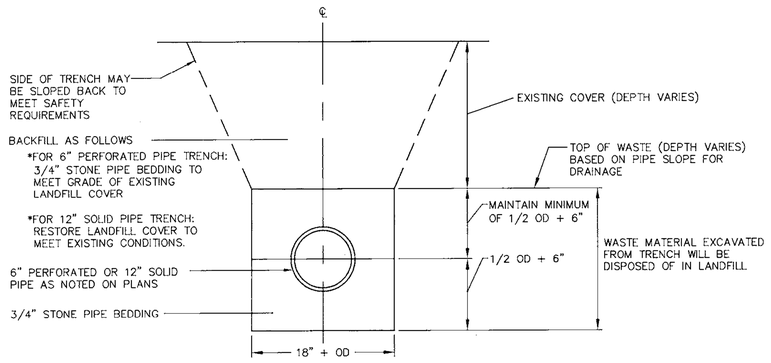
# EAST OPERATION

## DOLBY III LANDFILL
## CELL 16 CONSTRUCTION
## SITE DEVELOPMENT PLAN

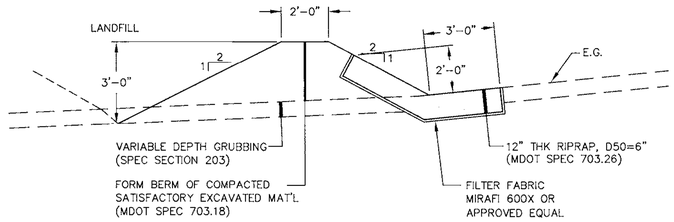
JOB NO.
FILE NO.
LOC. NO.

C-102

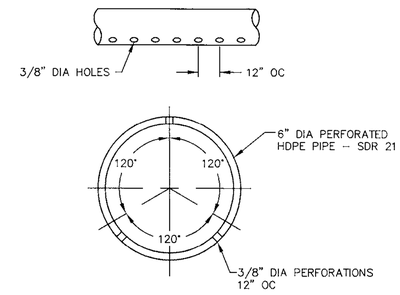
W:\servers\Eng\Dolby\CAD\CELL 15-16\Cell15-16Site.dwg, 8/22/2008 8:17:04 AM, jaf



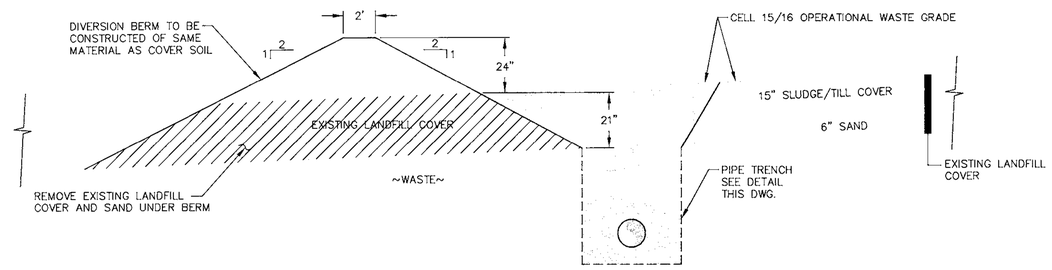

PIPE TRENCH
NTS



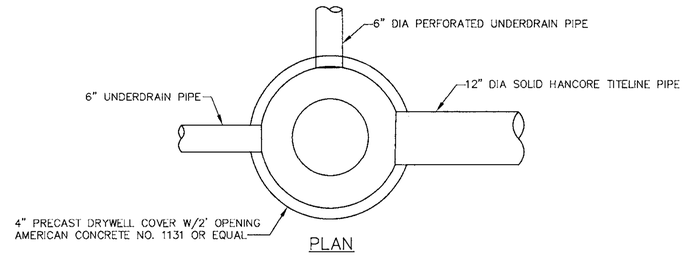

DIKE AND TYPE 1 DRAINAGE DITCH
NTS



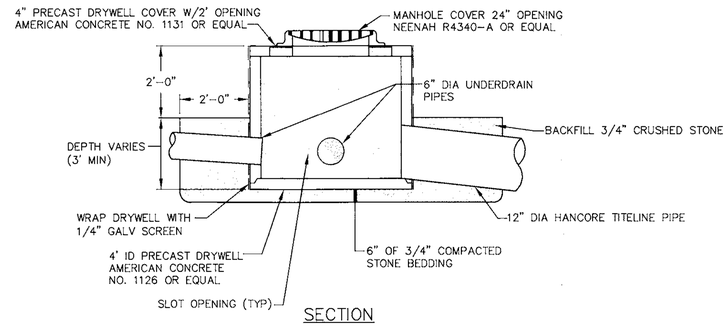

PERFORATED PIPE
NTS




OPERATIONAL/EXISTING LANDFILL COVER INTERFACE 1
NTS

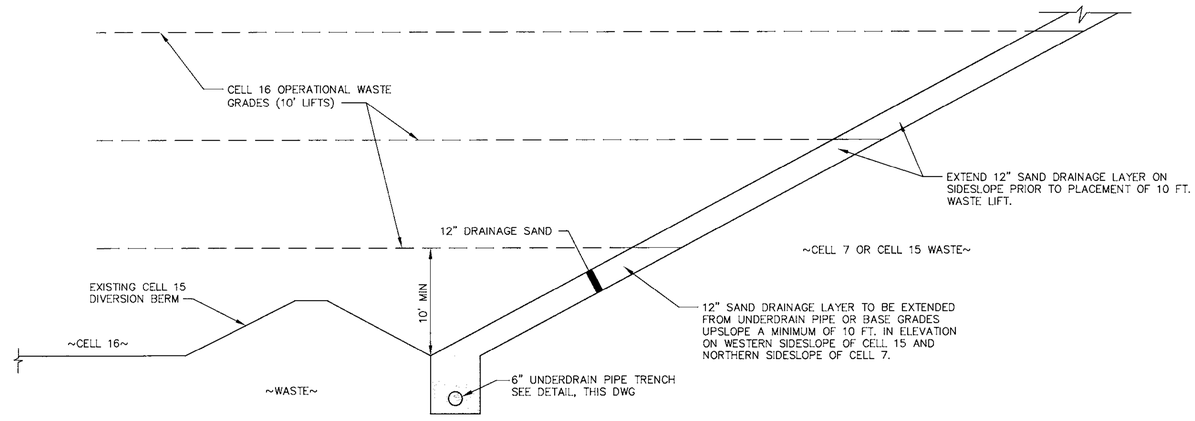



PLAN




SECTION

DRAINAGE MANHOLE
NTS




OPERATIONAL DRAINAGE
NTS

STATE OF MAINE
PATRICK J. LUNER
NO. 4107
LICENSED PROFESSIONAL ENGINEER

| REF NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | -- | | | -- | | | | | | |
| 5 | -- | | | -- | | | | | | |
| 4 | -- | | | -- | | | | | | |
| 3 | -- | | | -- | | | | | | |
| 2 | -- | | | -- | | | | | | |
| 1 | -- | | P | 7/23/08 | | SUBMITTED TO MEDEP | | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021
JOB NO. 08035.05

| | | |
|---|---|---|
| DRN | MSB | 7/08 |
| CHKD | GHC | 7/08 |
| APPVD | | -- |
| ISSUE CODE | | |
| P – Preliminary | | |
| B – Bids | | |
| C – Construction | | |
| ASB – As Built | | |
| SCALE | NONE | |

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE:

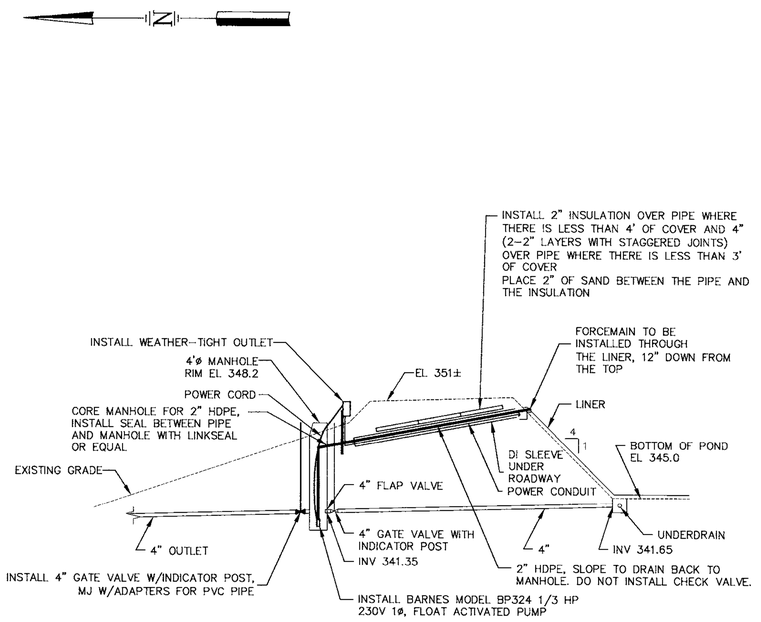
EAST OPERATION

DOLBY III LANDFILL
CELL 16 CONSTRUCTION
SECTIONS & DETAILS

JOB NO.
FILE NO.
LIC. NO.

C-300
SHEET 1 OF 1

P:\jobs\DWG\CAD\CELL 15-16\DETAILS.dwg, 7/23/2008 2:19:52 PM, mbolduc




SECTION 1
NTS

STATE OF MAINE
GREGORY H. CROCKETT
10150
REGISTERED PROFESSIONAL ENGINEER
8/30/02

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE |
|---|---|---|---|---|
| 6 | - | | | - - |
| 5 | - | | | - - |
| 4 | - | BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. | | - - |
| 3 | - | NORRIDGEWOCK, MAINE -- PHOTO DATE 10/23/95. GROUND CONTROL BY PLISGA & DAY, | | - - |
| 2 | - | BANGOR, MAINE. STANDARD PRACTICE DICTATES THAT PLANS | | - - |
| 1 | - | COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY CONTRACTOR BEFORE CONSTRUCTION. | 8/13/02 | SUBMITTED TO MDEP |

| REVISION | BY | CKD | APPVD | JOB | CODE | DATE |
|---|---|---|---|---|---|---|
| | | | | | | - - |
| | | | | | | - - |
| | | | | | | - - |
| | | | | | | - - |
| | | | | | | - - |
| | | | | | | - - |

| REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|
| | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 02005

| | | |
|---|---|---|
| DRN | DRD | 7/27/02 |
| CHKD | GHC | 7/27/02 |
| APPVD | | |
| ISSUE CODE | | |
| P - Preliminary | | |
| B - Bids | | |
| C - Construction | | |
| ASB - As Built | | |
| SCALE | NONE | |

Great Northern PAPER, INC.

CAD FILE: AS9548.DWG

# EAST OPERATION

## DOLBY III LANDFILL
## LEACHATE POND
## REPIPING OF UNDERDRAIN DISCHARGE

JOB NO.
FILE NO.
LOC. NO.

YB-26109

G:\GMP\Dol1\ACAD\as9548\YB-26109.dwg Mon Aug 19 14:29:07 2002 DRD

# KATAHDIN PAPER COMPANY LLC.
# EAST MILLINOCKET, MAINE
# DOLBY III LANDFILL
# LEACHATE POND REDEVELOPMENT

| SHT NO | TITLE | DWG NO |
|---|---|---|
| 1 | COVER SHEET | YB–26187 |
| 2 | SYMBOLS & ABBREVIATIONS | YB–26188 |
| 3 | SITE LOCATION PLAN | YB–26189 |
| 4 | EXISTING CONDITIONS PLAN | YB–26190 |
| 5 | BASE GRADING AND UNDERDRAIN PLAN | YB–26191 |
| 6 | LEAK DETECTION PLAN | YB–26192 |
| 7 | SECTIONS & DETAILS (SHEET 1 OF 3) | YB–26193 |
| 8 | SECTIONS & DETAILS (SHEET 2 OF 3) | YB–26193 |
| 9 | SECTIONS & DETAILS (SHEET 3 OF 3) | YB–26193 |


SME

*Sevee & Maher Engineers, Inc.*

*Waste Management and Hydrogeologic Consultants*

*Cumberland Center, Maine*


STATE OF MAINE — JOHN E. SEVEE NO. 2150 — LICENSED PROFESSIONAL ENGINEER

| REF. NO | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | |
| | – – | | | | | | |
| ASB | 11/26/07 | | RECORD DRAWING | | GHC | | |
| B | 10/31/06 | | ISSUED FOR BID | | GHC | | |
| P | 5/17/06 | | REVISED PER MEDEP COMMENTS | | GHC | | |
| P | 12/9/05 | | SUBMITTED TO MEDEP | | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |

05034.01

| | | |
|---|---|---|
| DRN | JRD | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | – – |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: LPOND–COVER.DWG

EAST OPERATION

DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
COVER SHEET

JOB NO. 00000
FILE NO. 0–000–0000
LOC. NO.

YB–26187

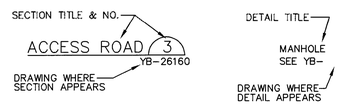
G:\PROJDOS\ACAD\LPOND\PRINT\LPOND-COVER.DWG, 11/29/2007 4:37:09 PM, LDeSoup

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | DRAINAGE COURSE (WITH DIRECTION) | | UG | UNDERGROUND GAS MAIN |
| DATE | | NORTH ARROW (MAGNETIC) | | | EDGE OF WATER | | UT | UNDERGROUND TELEPHONE LINE |
| N | | NORTH ARROW (PLAN NORTH) | | | WATER ELEVATION (GROUND OR SURFACE) | | UE | UNDERGROUND ELECTRICAL LINE |
| | 25 | CONTOUR LINES | | | FENCE LINE (WOOD) | | OE | OVERHEAD ELECTRICAL LINE |
| | INV 25.56 | SPOT ELEVATION (INVERT ELEVATION) | | | FENCE LINE (WIRE) | | OT | OVERHEAD TELEPHONE LINE |
| | | EXISTING GROUND | | | STONE WALL | | 12" SS | SANITARY SEWER |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | RETAINING WALL | | 8" FM | FORCE MAIN |
| | | PROPERTY LINE OR R.O.W. | | | GUARD RAIL | | 8" W | WATER MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | BUILDING AND STRUCTURES | | 12" SD | STORM DRAIN |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | 2 1F OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | | 8" UD | UNDERDRAIN |
| | | BOUNDARY LINE (State, County, Municipality) | TOP OF SLOPE 2 1 | TOP OF SLOPE 2 1 | SLOPES (WITH SLOPE RATIO) | | 6" PD | PERIMETER DRAIN |
| | | SURVEY MONUMENT | | | EDGE OF ROAD | | 6" LT | LEACHATE TRANSPORT |
| | | SURVEY CONTROL | | P | CUT OR FILL LINE | | 6" LC | LEACHATE COLLECTION |
| | | PROPERTY PIN, DRILL HOLE, PK, OR STAKE | | | BITUMINOUS PAVEMENT | | 6" LD | LEAK DETECTION |
| | | WOODS OR BRUSH LINE | | | CONCRETE | | 6" G | GAS COLLECTION |
| | | INDIVIDUAL TREE | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | REDUCER |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | | MECHANICAL CAP OR PLUG |
| | | GAS VENT | SW-12 | SW-12 | SURFACE WATER SAMPLE LOCATION | | | COUPLING |
| | | GAS VENT (CAPPED) | | | GAS EXTRACTION WELL | | | BEND |
| | | CLEAN OUT STRUCTURE | | | MANHOLE | | | TEE |
| | | CULVERT | | | CATCH BASIN | | | PIPE TO BE ABANDONED |
| | | RAILROAD | | | WATER OR GAS VALVE | | | RISER PIPE & INLET GRATE |
| | | SLOPE INCLINOMETER | | | HYDRANT | | | STORM GRATE |
| | | VIBRATING WIRE SETTLEMENT CELL | | | AIR RELEASE VALVE | | | DRAINAGE INLET STRUCTURE |
| | | VERTICAL/HORIZONTAL DISPLACEMENT MONUMENT | | | SURGE RELEASE VALVE | | | UNDERDRAIN SUMP |
| | | VERTICAL DISPLACEMENT MONUMENT | | | UTILITY POLE | | SF | SILTATION FENCE |
| | | LIQUID SETTLEMENT GAGE | | | LIGHT POLE | | CL | CLEARING OR CONSTRUCTION LIMIT LINE |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACCMP | ASPHALT COATED CMP | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | PERF | PERFORATED |
| ACP | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HORIZ | HORIZONTAL | PP | POWER POLE |
| AC | ACRE | DEG OR ° | DEGREE | HP | HORSEPOWER | PSI | POUNDS PER SQUARE INCH |
| AGG | AGGREGATE | DEPT | DEPARTMENT | HYD | HYDRANT | PVC | POLYVINYL CHLORIDE |
| ALUM | ALUMINUM | DI | DUCTILE IRON | | | PVMT | PAVEMENT |
| APPD | APPROVED | DIA OR ø | DIAMETER | ID | INSIDE DIAMETER | | |
| APPROX | APPROXIMATE | DIM | DIMENSION | IN OR " | INCHES | QTY | QUANTITY |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV | INVERT | | |
| ASB | ASBESTOS | DN | DOWN | INV EL | INVERT ELEVATION | RCP | REINFORCED CONCRETE PIPE |
| ASP | ASPHALT | DR | DRAIN | | | ROW | RIGHT OF WAY |
| AUTO | AUTOMATIC | DWG | DRAWING | LB | POUND | RAD | RADIUS |
| AUX | AUXILIARY | | | LC | LEACHATE COLLECTION | REQD | REQUIRED |
| AVE | AVENUE | EA | EACH | LD | LEAK DETECTION | RT | RIGHT |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LF | LINEAR FEET | RTE | ROUTE |
| | | ELEC | ELECTRIC | LOC | LOCATION | | |
| BCCMP | BITUMINOUS COATED CMP | EL | ELEVATION | LT | LEACHATE TRANSPORT | S | SLOPE |
| BM | BENCH MARK | ELB | ELBOW | | | SCH | SCHEDULE |
| BIT | BITUMINOUS | EOP | EDGE OF PAVEMENT | MH | MANHOLE | SF | SQUARE FEET |
| BLDG | BUILDING | EQUIP | EQUIPMENT | MJ | MECHANICAL JOINT | SHT | SHEET |
| BOT | BOTTOM | EST | ESTIMATED | MATL | MATERIAL | SMH | SANITARY MANHOLE |
| BRG | BEARING | EXC | EXCAVATE | MAX | MAXIMUM | ST | STREET |
| BV | BALL VALVE | EXIST | EXISTING | MFR | MANUFACTURE | STA | STATION |
| | | | | MIN | MINIMUM | SY | SQUARE YARD |
| CB | CATCH BASIN | FG | FINISH GRADE | MISC | MISCELLANEOUS | | |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT | TAN | TANGENT |
| CEM LIN | CEMENT LINED | FDN | FOUNDATION | | | TDH | TOTAL DYNAMIC HEAD |
| CMP | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | NITC | NOT IN THIS CONTRACT | TEMP | TEMPORARY |
| CO | CLEAN OUT | FL | FLANGE | NTS | NOT TO SCALE | TYP | TYPICAL |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY | | |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO OR # | NUMBER | UD | UNDERDRAIN |
| CI | CAST IRON | FT OR ' | FEET | | | V | VOLTS |
| CL | CLASS | FTG | FOOTING | OC | ON CENTER | VA TEE | VALVE ANCHORING TEE |
| CONC | CONCRETE | | | OD | OUTSIDE DIAMETER | VERT | VERTICAL |
| CONST | CONSTRUCTION | GA | GAUGE | | | | |
| CONTR | CONTRACTOR | GAL | GALLON | PC | POINT OF CURVE | WG | WATER GATE |
| CS | CURB STOP | GALV | GALVANIZED | PD | PERIMETER DRAIN | W/ | WITH |
| CTR | CENTER | GPD | GALLONS PER DAY | PI | POINT OF INTERSECTION | W/O | WITHOUT |
| CU | COPPER | GPM | GALLONS PER MINUTE | PIV | POST INDICATOR VALVE | | |
| CY | CUBIC YARD | | | PT | POINT OF TANGENT | YD | YARD |

## VIEW MARKERS & IDENTIFICATION




GENERAL NOTES:

THE DOLBY LANDFILL IS AN ACTIVE FACILITY THAT RECEIVES WASTE ON A DAILY BASIS IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE OWNER WITH REGARDS TO USE OF PREMISES, INCLUDING HAUL ROUTES AND VEHICULAR ACCESS. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES SO AS NOT TO INTERFERE WITH ACTIVE LANDFILLING OPERATIONS. THE CONTRACTOR SHALL OBEY ALL TRAFFIC, NOISE, AND DUST CONTROL POLICIES OF THE DOLBY LANDFILL.

THE CONTRACTOR SHALL COMPLY FULLY WITH CONDITIONS OF THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, (MEDEP), NRPA PERMIT BY RULE CONDITIONS, MEDEP CONSTRUCTION GENERAL PERMIT, AND MEDEP "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES", AS APPLICABLE, AND SHALL TAKE EVERY PRECAUTION TO INSURE THAT NO SILTATION OF STORMWATER DRAINAGE COURSES OCCURS AS A RESULT OF SOIL DISTURBANCE ASSOCIATED WITH THE CONTRACT SCOPE OF WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING COMPLETE PROTECTION OF THE PROJECT DURING CONSTRUCTION FROM ANY ACTS OF NATURE OR MAN, SUCH AS, BUT NOT LIMITED TO, FLOODS, WIND DAMAGE, EARTHEN SLIDES, AND SLOPE FAILURES. DAMAGE TO THE PROJECT CAUSED BY SUCH ACTS WILL NOT BE SUFFICIENT CAUSE TO INCREASE CONTRACTOR COSTS TO THE OWNER.

THE CONTRACTOR SHALL PROTECT EXISTING ON-SITE STRUCTURES FROM DAMAGE DURING CONSTRUCTION, INCLUDING: MONITORING WELLS, POWER LINES, SURVEY POINTS, AND EXISTING LEACHATE COLLECTION AND TRANSPORT FACILITIES AND SYSTEMS, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS REQUIRED TO CORRECT DAMAGE MADE TO EXISTING ON-SITE STRUCTURES DESCRIBED ABOVE RESULTING FROM ANY CONSTRUCTION ACTIVITY.

THE CONTRACTOR AND ITS SUBCONTRACTORS MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES AND REQUIREMENTS UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE. CONTRACTOR SHALL FIELD VERIFY CONDITIONS PRIOR TO CONSTRUCTION.

MATERIAL SPECIFICATIONS: (SEE TECHNICAL SPECIFICATIONS FOR MORE INFORMATION)

SCREENED TILL: SHALL BE EARTH, SUITABLE FOR EMBANKMENT CONSTRUCTION. SCREENED TILL SHALL BE GLACIAL TILL FREE OF FROZEN MATERIALS, PERISHABLE RUBBISH, PEAT, ORGANIC MATTER, LARGE ROCK FRAGMENTS, OR OTHER UNSUITABLE MATERIAL AND SHALL BE SCREENED TO LESS THAN 1" IN DIAMETER WITH GREATER THAN 20 PERCENT FINES. THE FINAL SURFACE OF THE SCREENED TILL SHALL BE FREE FROM PROTRUDING ROCKS GREATER THAN 1-INCH IN DIAMETER.

COMMON BORROW – MDOT SPECIFICATION 703.18

CLAY – THE CLAY FOR POND LINER BASE SHALL BE SILTY CLAY SOIL FREE OF ORGANIC MATTER, DEBRIS, AND ROCK FRAGMENTS LARGER THAN 1 INCH IN DIAMETER. CLAY SHALL MEET A GRADATION AND HYDRAULIC CONDUCTIVITY REQUIREMENT AS FOLLOWS:

| a. SIEVE DESIGNATION | PERCENT BY WEIGHT PASSING SQUARE MESH SIEVE |
|---|---|
| 1" | 100 |
| #40 | 90-100 |
| #200 | 75-100 |

b. REMOLDED HYDRAULIC CONDUCTIVITY (ASTM D 5084-90) MAXIMUM ≤ 1X10-7 cm/sec

c. LIQUID LIMIT: > 20
PLASTICITY INDEX: 8 ≤ P.E. <30

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

3/4" STONE - THE PIPE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

2" SOLID SDR 11 PVC LEAK DETECTION FORCE MAIN
4" PERFORATED SDR 15.5 HDPE PIPE
6" SOLID AND PERFORATED SDR 17 HDPE PIPE
12" SOLID SDR 17 HDPE PIPE
24" SOLID SDR 17 HDPE PIPE

SEED AND FERTILIZER:
AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

| SEED: | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.


| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | - | | | - - | | | | | | - - |
| 5 | - | | | - - | | | | | | - - |
| 4 | - | | | 11/26/07 | ASB | RECORD DRAWING | | GHC | | - - |
| 3 | - | | | 10/31/06 | B | ISSUED FOR BID | | GHC | | - - |
| 2 | - | | | 5/17/06 | P | REVISED PER MEDEP COMMENTS | | GHC | | - - |
| 1 | - | | | 12/9/05 | P | SUBMITTED TO MEDEP | | GHC | | - - |

SME
*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*
JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | DRD | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | - - |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

CAD FILE: SYMSHT.DWG

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

EAST OPERATION

DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
SYMBOLS & ABBREVIATIONS

JOB NO. 00000
FILE NO. 0-000-0000
LOC. NO.

YB-26188

K:\pro\DOLACAD\Leachate Pond\RecDwg\LPOND_DETAILS.dwg, 11/29/2007 4:53:04 PM, mbiskup

CELL 14

DOLBY III

CELLS 1–8

TBM NO. 1
N 665004.19
E 474154.03
EL 358.19

SEDIMENT POND

TBM NO. 2
N 664313.43
E 473976.09
EL 352.25

LEACHATE POND

BRASS DISK
N 663871.73
E 473715.06
EL 356.99

SEDIMENT POND

TBM NO. 5
N 663018.29
E 473989.32
EL 377.69

SEDIMENT POND

OPERATOR SHACK

N

NOTE:

1. PLAN COMPILED FROM AERIAL PHOTOGRAPH DATED AUGUST 18, 2005.

2. AERIAL PHOTOGRAPHY AND BASE MAP PERFORMED BY AERIAL SURVEY & PHOTO, INC. OF NORRIDGEWOCK, MAINE. GROUND CONTROL PROVIDED BY PLISGA & DAY OF BANGOR, MAINE. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

3. EXISTING TOPOGRAPHY SHOWN AT 2–FOOT INTERVALS AND REPRESENT GRADES AT THE TIME OF THE SURVEY.

4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MAINE DEP AND BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE AND LOCAL PERMITS.

50 0 100 200 FEET

STATE OF MAINE
JOHN E. SEVEE NO. 4480
LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | |
| | – – | | | | | | |
| ASB | 11/26/07 | | RECORD DRAWING | | | | |
| B | 10/31/06 | | ISSUED FOR BID | | GHC | | |
| P | 5/17/06 | | REVISED PER MEDEP COMMENTS | | GHC | | |
| P | 12/9/05 | | SUBMITTED TO MEDEP | | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*

JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | DRD | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | – | – |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE AS NOTED

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: LPOND.DWG

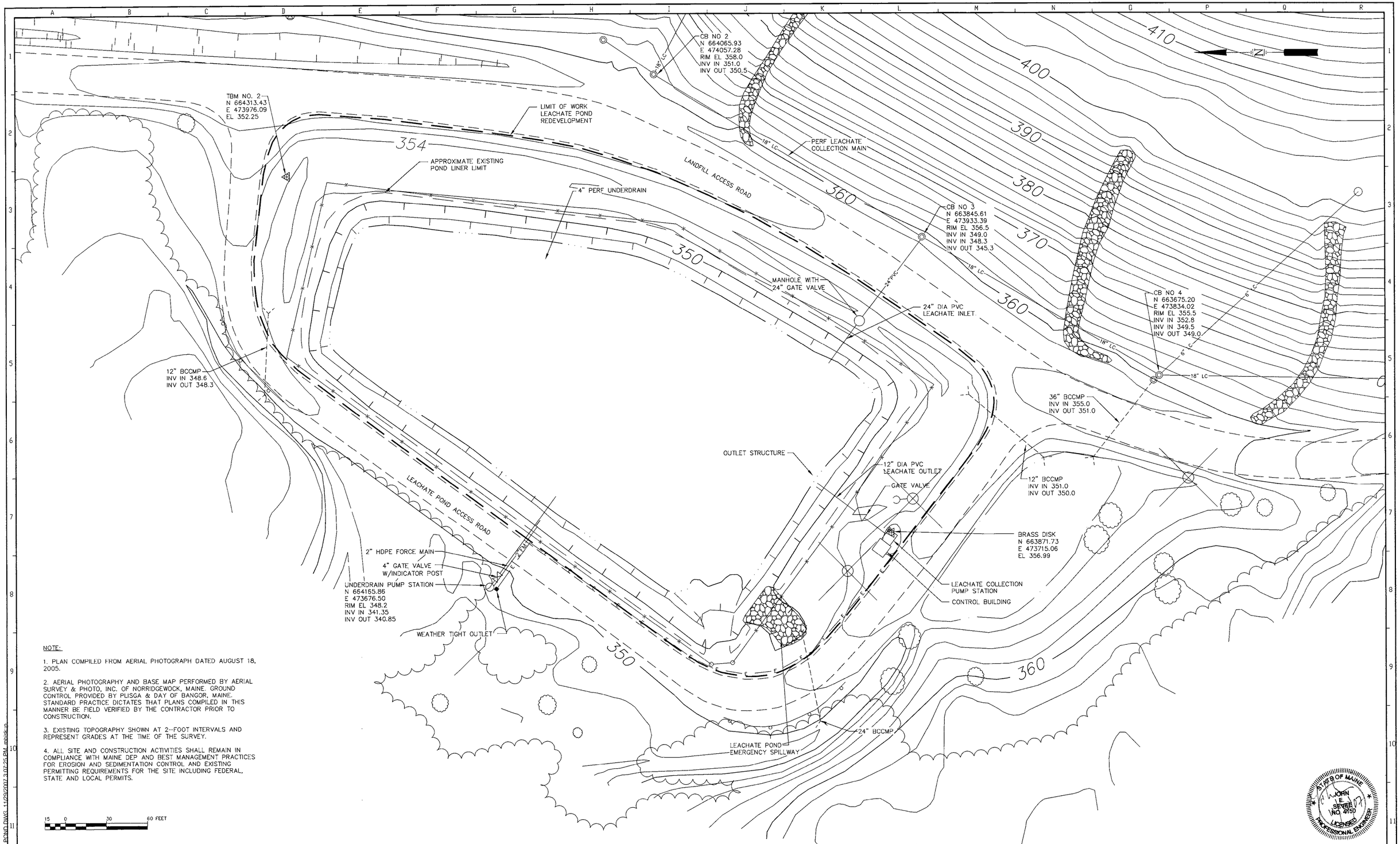
# EAST OPERATION

## DOLBY III LANDFILL
## LEACHATE POND REDEVELOPMENT
## SITE LOCATION PLAN

JOB NO. 00000
FILE NO. G-000-0000
LOC. NO.

YB–26189

G:\PROJOBS\ACAD\EngFiles\Forms\REDWG\LPOND.DWG, 11/2/2007 8:38:14 AM, DWGsetup




NOTE:

1. PLAN COMPILED FROM AERIAL PHOTOGRAPH DATED AUGUST 18, 2005.

2. AERIAL PHOTOGRAPHY AND BASE MAP PERFORMED BY AERIAL SURVEY & PHOTO, INC. OF NORRIDGEWOCK, MAINE. GROUND CONTROL PROVIDED BY PLISGA & DAY OF BANGOR, MAINE. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

3. EXISTING TOPOGRAPHY SHOWN AT 2--FOOT INTERVALS AND REPRESENT GRADES AT THE TIME OF THE SURVEY.

4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MAINE DEP AND BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE AND LOCAL PERMITS.

STATE OF MAINE
JOHN E. SEVERE
NO. 9150
LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | | | | | | | |
| - - | | | | | | | |
| | 11/26/07 | ASB | RECORD DRAWING | | | | |
| | 10/31/06 | B | ISSUED FOR BID | GHC | | | |
| | 5/17/06 | P | REVISED PER MEDEP COMMENTS | GHC | | | |
| | 12/9/05 | P | SUBMITTED TO MEDEP | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |

*SME*

*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*

JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | MBISK | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | - - |
| ISSUE CODE | | |
| P - Preliminary | | |
| B - Bids | | |
| C - Construction | | |
| ASB - As Built | | |
| SCALE | AS NOTED | |

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: LPOND.DWG

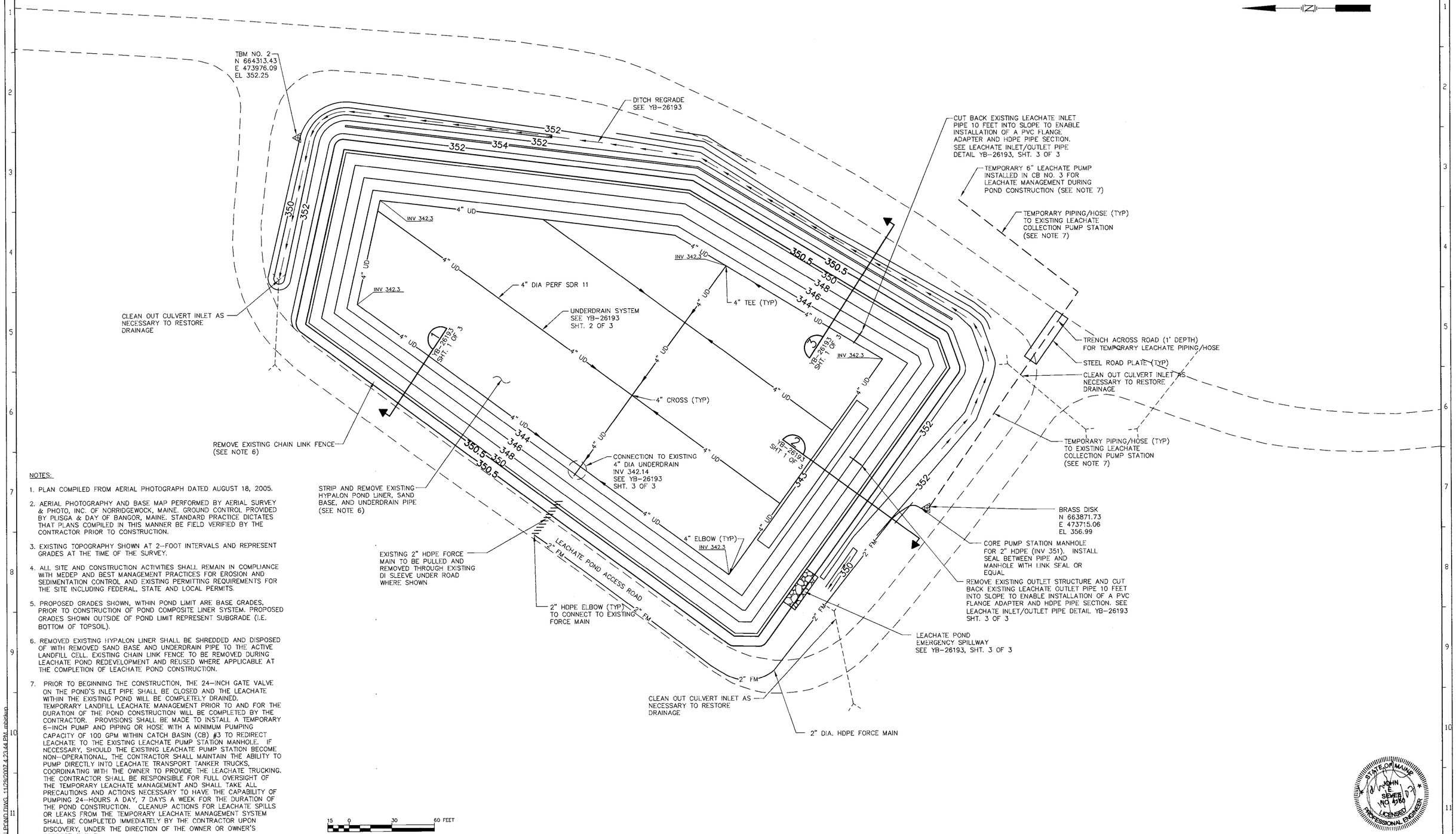
EAST OPERATION

DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
EXISTING CONDITIONS PLAN

JOB NO. 000000
FILE NO. 0-000-0000
LDC. NO. ____

YB-26190

C:\Cad\Job\ACAD\Leachate Pond\Redev\Dwg\LPOND.DWG, 11/29/2007 3:07:25 PM, rdaskin




NOTES:

1. PLAN COMPILED FROM AERIAL PHOTOGRAPH DATED AUGUST 18, 2005.
2. AERIAL PHOTOGRAPHY AND BASE MAP PERFORMED BY AERIAL SURVEY & PHOTO, INC. OF NORRIDGEWOCK, MAINE. GROUND CONTROL PROVIDED BY PLISGA & DAY OF BANGOR, MAINE. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
3. EXISTING TOPOGRAPHY SHOWN AT 2--FOOT INTERVALS AND REPRESENT GRADES AT THE TIME OF THE SURVEY.
4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MEDEP AND BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE AND LOCAL PERMITS.
5. PROPOSED GRADES SHOWN, WITHIN POND LIMIT ARE BASE GRADES, PRIOR TO CONSTRUCTION OF POND COMPOSITE LINER SYSTEM. PROPOSED GRADES SHOWN OUTSIDE OF POND LIMIT REPRESENT SUBGRADE (I.E. BOTTOM OF TOPSOIL).
6. REMOVED EXISTING HYPALON LINER SHALL BE SHREDDED AND DISPOSED OF WITH REMOVED SAND BASE AND UNDERDRAIN PIPE TO THE ACTIVE LANDFILL CELL. EXISTING CHAIN LINK FENCE TO BE REMOVED DURING LEACHATE POND REDEVELOPMENT AND REUSED WHERE APPLICABLE AT THE COMPLETION OF LEACHATE POND CONSTRUCTION.
7. PRIOR TO BEGINNING THE CONSTRUCTION, THE 24--INCH GATE VALVE ON THE POND'S INLET PIPE SHALL BE CLOSED AND THE LEACHATE WITHIN THE EXISTING POND WILL BE COMPLETELY DRAINED. TEMPORARY LANDFILL LEACHATE MANAGEMENT PRIOR TO AND FOR THE DURATION OF THE POND CONSTRUCTION WILL BE COMPLETED BY THE CONTRACTOR. PROVISIONS SHALL BE MADE TO INSTALL A TEMPORARY 6--INCH PUMP AND PIPING OR HOSE WITH A MINIMUM PUMPING CAPACITY OF 100 GPM WITHIN CATCH BASIN (CB) #3 TO REDIRECT LEACHATE TO THE EXISTING LEACHATE PUMP STATION MANHOLE. IF NECESSARY, SHOULD THE EXISTING LEACHATE PUMP STATION BECOME NON--OPERATIONAL, THE CONTRACTOR SHALL MAINTAIN THE ABILITY TO PUMP DIRECTLY INTO LEACHATE TRANSPORT TANKER TRUCKS, COORDINATING WITH THE OWNER TO PROVIDE THE LEACHATE TRUCKING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULL OVERSIGHT OF THE TEMPORARY LEACHATE MANAGEMENT AND SHALL TAKE ALL PRECAUTIONS AND ACTIONS NECESSARY TO HAVE THE CAPABILITY OF PUMPING 24--HOURS A DAY, 7 DAYS A WEEK FOR THE DURATION OF THE POND CONSTRUCTION. CLEANUP ACTIONS FOR LEACHATE SPILLS OR LEAKS FROM THE TEMPORARY LEACHATE MANAGEMENT SYSTEM SHALL BE COMPLETED IMMEDIATELY BY THE CONTRACTOR UPON DISCOVERY, UNDER THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE.

STATE OF MAINE JOHN E. SEVEE NO. 5160 LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| ASB | 11/26/07 | ASB | RECORD DRAWING | | GHC | | |
| B | 12/5/06 | B | ADDENDUM NO. 2 | | GHC | | |
| B | 10/31/06 | B | ISSUED FOR BID | | GHC | | |
| P | 5/17/06 | P | REVISED PER MEDEP COMMENTS | | GHC | | |
| P | 12/9/05 | P | SUBMITTED TO MEDEP | | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

SME

*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*

JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | MBISK | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | - - |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE AS NOTED

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

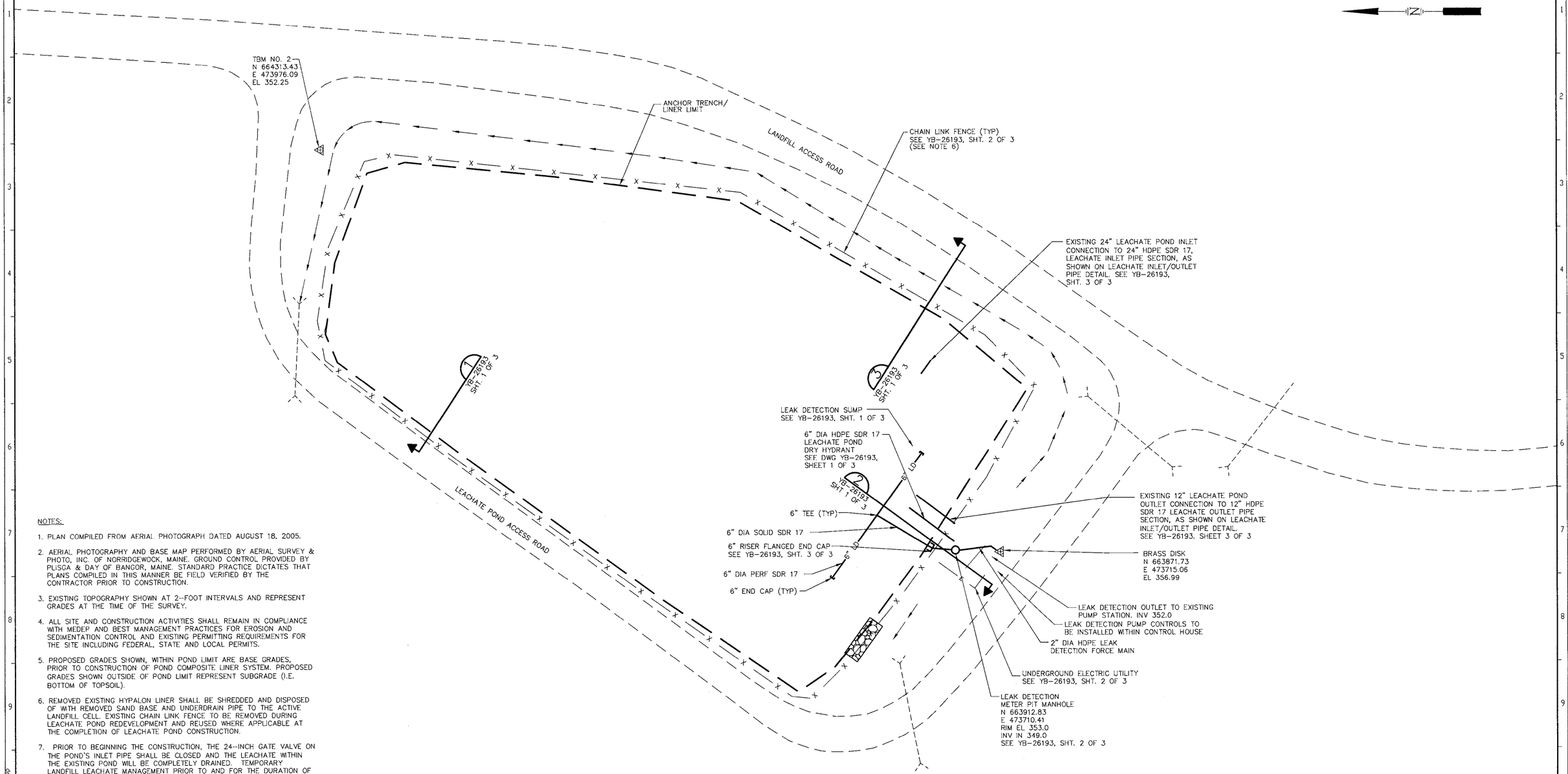
CAD FILE: LPOND.DWG

EAST OPERATION
DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
BASE GRADING AND
UNDERDRAIN PLAN

JOB NO. 000000
FILE NO. 0-000-0000
LOC. NO.

YB-26191

G:\Jobs\Data\ACAD\Leachate Pond\Dwgs\LPOND.DWG, 11/29/2007 4:23:44 PM, mbisku




NOTES:

1. PLAN COMPILED FROM AERIAL PHOTOGRAPH DATED AUGUST 18, 2005.
2. AERIAL PHOTOGRAPHY AND BASE MAP PERFORMED BY AERIAL SURVEY & PHOTO, INC. OF NORRIDGEWOCK, MAINE. GROUND CONTROL PROVIDED BY PLISGA & DAY OF BANGOR, MAINE. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
3. EXISTING TOPOGRAPHY SHOWN AT 2-FOOT INTERVALS AND REPRESENT GRADES AT THE TIME OF THE SURVEY.
4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MEDEP AND BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE AND LOCAL PERMITS.
5. PROPOSED GRADES SHOWN, WITHIN POND LIMIT ARE BASE GRADES, PRIOR TO CONSTRUCTION OF POND COMPOSITE LINER SYSTEM. PROPOSED GRADES SHOWN OUTSIDE OF POND LIMIT REPRESENT SUBGRADE (I.E. BOTTOM OF TOPSOIL).
6. REMOVED EXISTING HYPALON LINER SHALL BE SHREDDED AND DISPOSED OF WITH REMOVED SAND BASE AND UNDERDRAIN PIPE TO THE ACTIVE LANDFILL CELL. EXISTING CHAIN LINK FENCE TO BE REMOVED DURING LEACHATE POND REDEVELOPMENT AND REUSED WHERE APPLICABLE AT THE COMPLETION OF LEACHATE POND CONSTRUCTION.
7. PRIOR TO BEGINNING THE CONSTRUCTION, THE 24-INCH GATE VALVE ON THE POND'S INLET PIPE SHALL BE CLOSED AND THE LEACHATE WITHIN THE EXISTING POND WILL BE COMPLETELY DRAINED. TEMPORARY LANDFILL LEACHATE MANAGEMENT PRIOR TO AND FOR THE DURATION OF THE POND CONSTRUCTION WILL BE COMPLETED BY THE CONTRACTOR. PROVISIONS SHALL BE MADE TO INSTALL A TEMPORARY 6-INCH PUMP AND PIPING OR HOSE WITH A MINIMUM PUMPING CAPACITY OF 100 GPM WITHIN CATCH BASIN (CB) #3 TO REDIRECT LEACHATE TO THE EXISTING LEACHATE PUMP STATION MANHOLE. IF NECESSARY, SHOULD THE EXISTING LEACHATE PUMP STATION BECOME NON-OPERATIONAL, THE CONTRACTOR SHALL MAINTAIN THE ABILITY TO PUMP DIRECTLY INTO LEACHATE TRANSPORT TANKER TRUCKS, COORDINATING WITH THE OWNER TO PROVIDE THE LEACHATE TRUCKING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULL OVERSIGHT OF THE TEMPORARY LEACHATE MANAGEMENT AND SHALL TAKE ALL PRECAUTIONS AND ACTIONS NECESSARY TO HAVE THE CAPABILITY OF PUMPING 24-HOURS A DAY, 7 DAYS A WEEK FOR THE DURATION OF THE POND CONSTRUCTION. CLEANUP ACTIONS FOR LEACHATE SPILLS OR LEAKS FROM THE TEMPORARY LEACHATE MANAGEMENT SYSTEM SHALL BE COMPLETED IMMEDIATELY BY THE CONTRACTOR UPON DISCOVERY, UNDER THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE.

STATE OF MAINE
JOHN E. SEVEE
No. 4750
LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| ASB | 11/26/07 | | RECORD DRAWING | | | | |
| B | 10/31/06 | | ISSUED FOR BID | | GHC | | |
| P | 5/17/06 | | REVISED PER MEDEP COMMENTS | | GHC | | |
| P | 12/9/05 | | SUBMITTED TO MEDEP | | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |

SME
Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine
JOB NO. 05043.01

| | |
|---|---|
| DRN MBISK | 11/05 |
| CHKD GHC | 11/05 |
| APPVD | - - |
| ISSUE CODE | |
| P - Preliminary | |
| B - Bids | |
| C - Construction | |
| ASB - As Built | |
| SCALE AS NOTED | |

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: LPOND.DWG

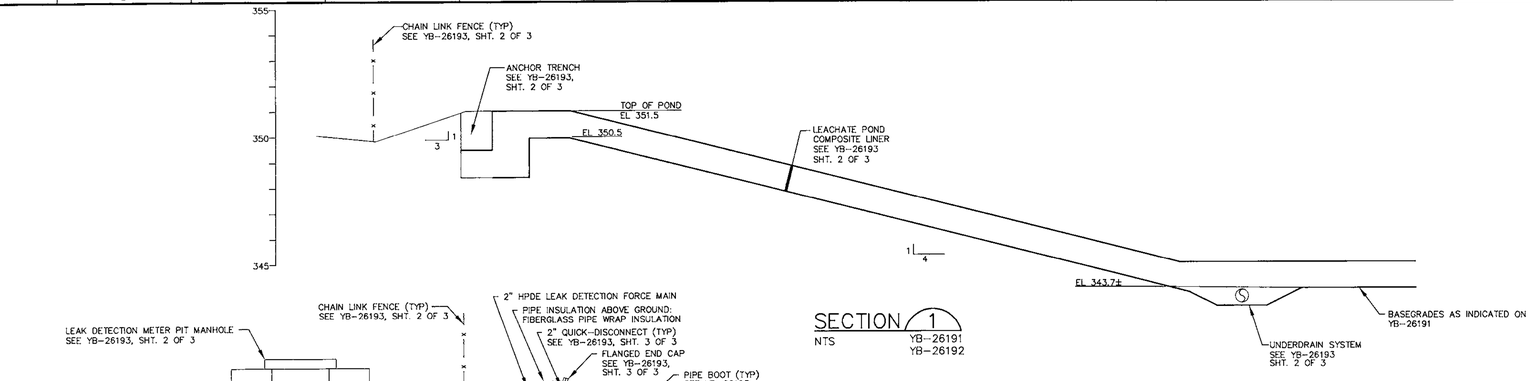
EAST OPERATION

DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
LEAK DETECTION PLAN

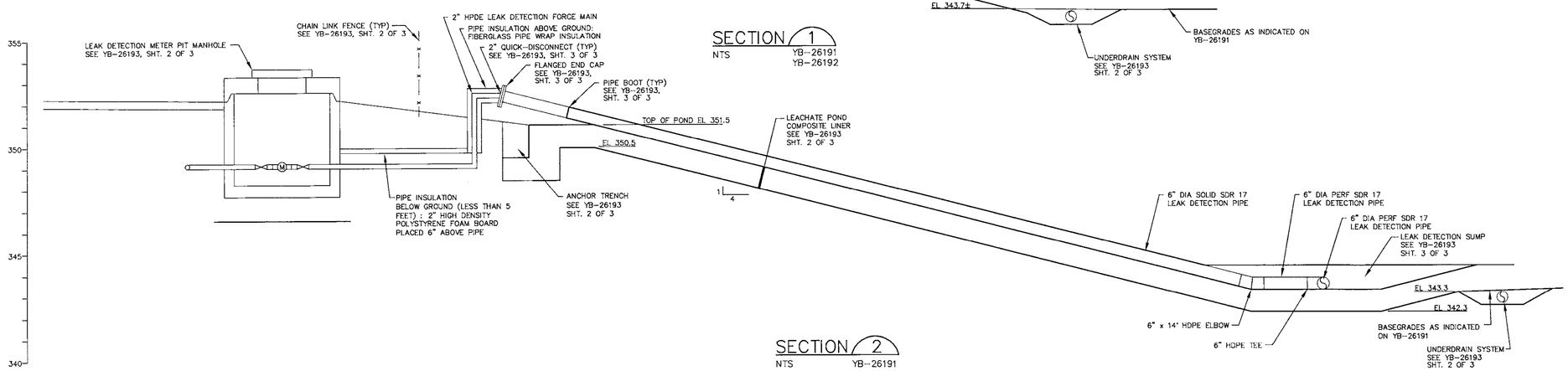
JOB NO. 00000
FILE NO. 0-000-0000
LOC. NO.

YB-26192

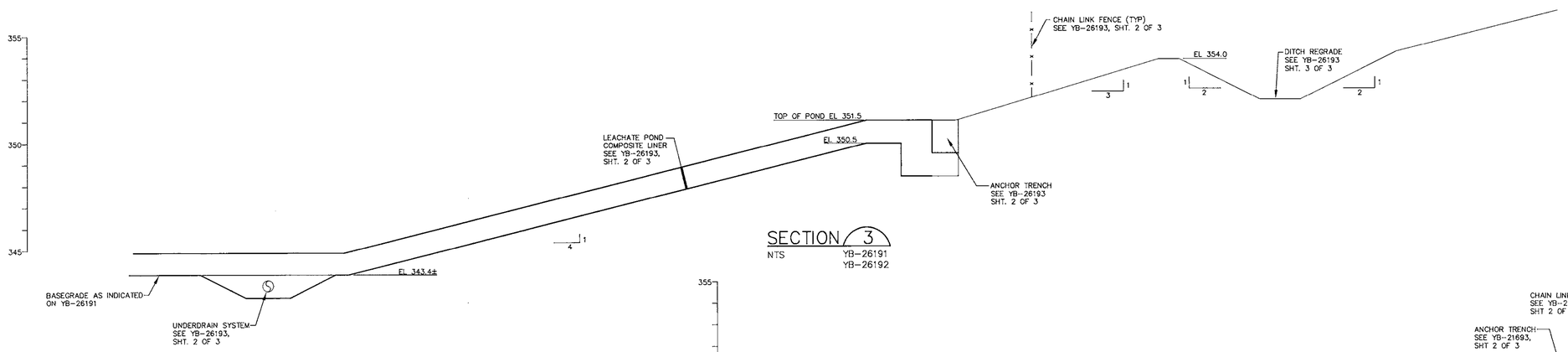
G:\projects\DWG\ACAD\Katahdin Pond\redwg\LPOND.DWG, 11/29/2007 4:01:08 PM, mbissop



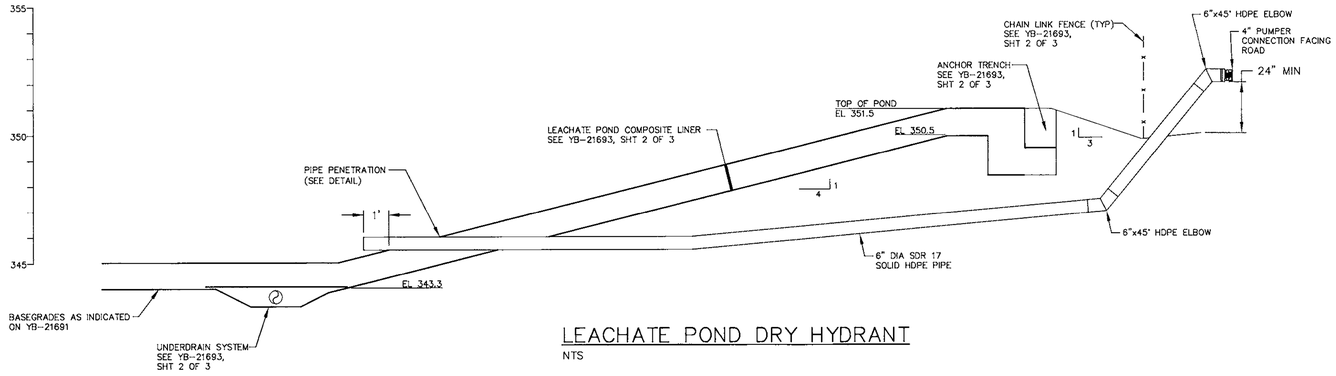

SECTION 1
NTS
YB-26191
YB-26192




SECTION 2
NTS
YB-26191
YB-26192




SECTION 3
NTS
YB-26191
YB-26192




LEACHATE POND DRY HYDRANT
NTS

STATE OF MAINE
JOHN
E
SEVEE
NO. 4150
LICENSED
PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | | | | | | | |
| - - | | | | | | | |
| ASB | 11/26/07 | | RECORD DRAWING | | | | |
| B | 10/31/06 | | ISSUED FOR BID | GHC | | | |
| P | 5/17/06 | | REVISED PER MEDEP COMMENTS | GHC | | | |
| P | 12/9/05 | | SUBMITTED TO MEDEP | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |

*SME*

*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*

JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | DRD | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | - - |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE AS NOTED

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

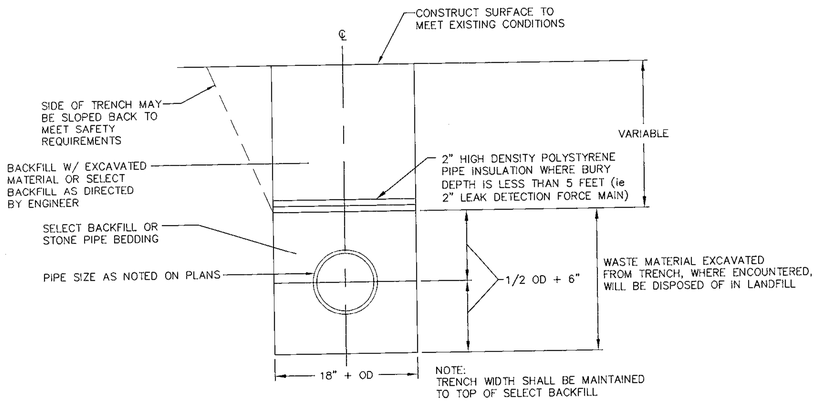
CAD FILE: YB-26193 B0

EAST OPERATION
DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
SECTIONS AND DETAILS
(SHEET 1 OF 3)

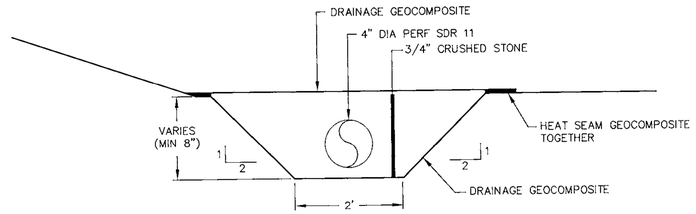
JOB NO. 00000
FILE NO. 0-000-0000
LOC. NO.

YB-26193

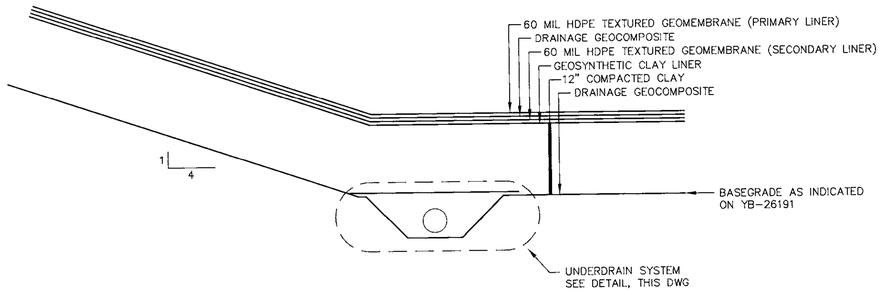
G:\Kpcd\Dolt\ACAD\Leachate Pond\Rocl\wg\LPOND-DETAILS.dwg, 11/29/2007 4:26:06 PM, mbiskup



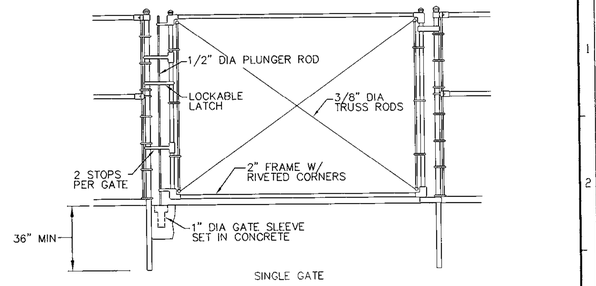

PIPE TRENCH
NTS



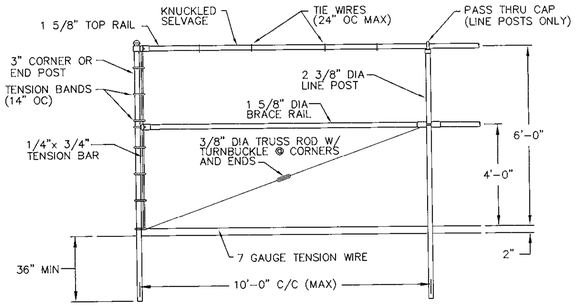

UNDERDRAIN SYSTEM
NTS




LEACHATE POND COMPOSITE LINER (BASE & SIDESLOPE)
NTS

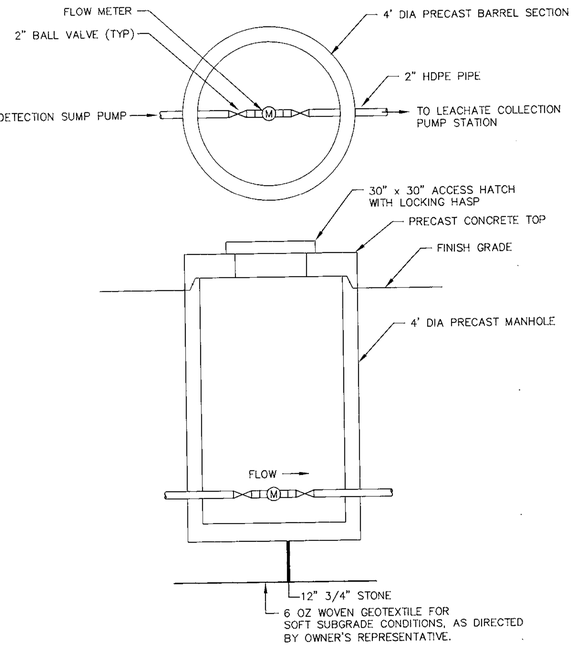



SINGLE GATE

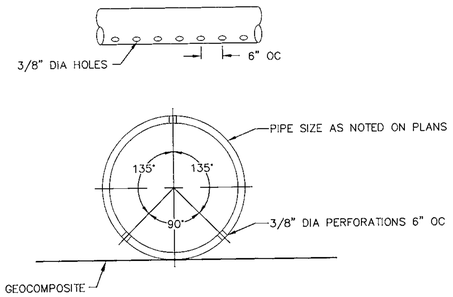



FENCE

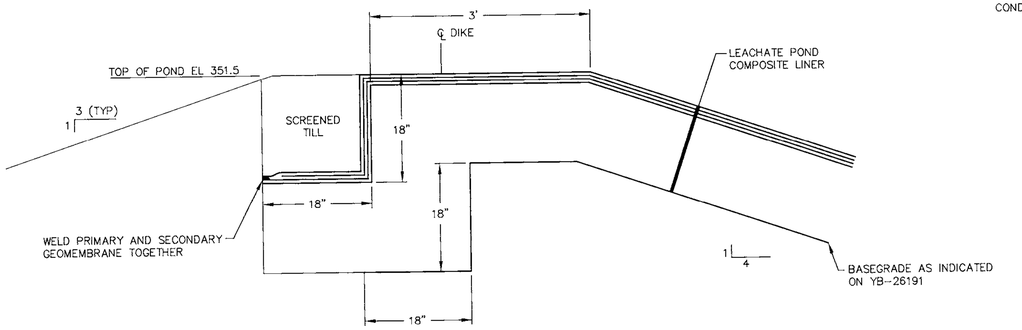
TYPICAL CHAIN LINK FENCE
NTS



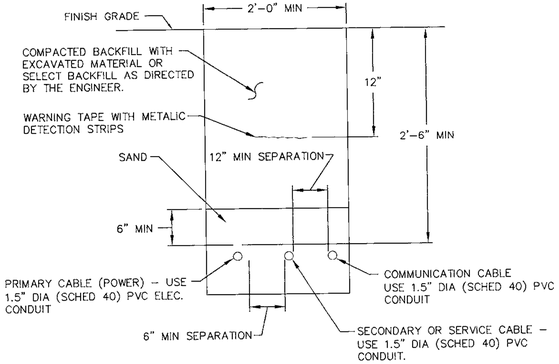

METER PIT
NTS




PERFORATED PIPE
NTS




ANCHOR TRENCH
NTS




UNDERGROUND ELECTRIC UTILITY
NTS

STATE OF MAINE
JOHN E. SEVEE
No. 4190
LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| ASB | 11/26/07 | | RECORD DRAWING | | | | |
| B | 10/31/06 | | ISSUED FOR BID | | GHC | | |
| P | 5/17/06 | | REVISED PER MEDEP COMMENTS | | GHC | | |
| P | 12/9/05 | | SUBMITTED TO MEDEP | | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |

SME
Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine
JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | DRD | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | -- -- |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE: AS NOTED

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

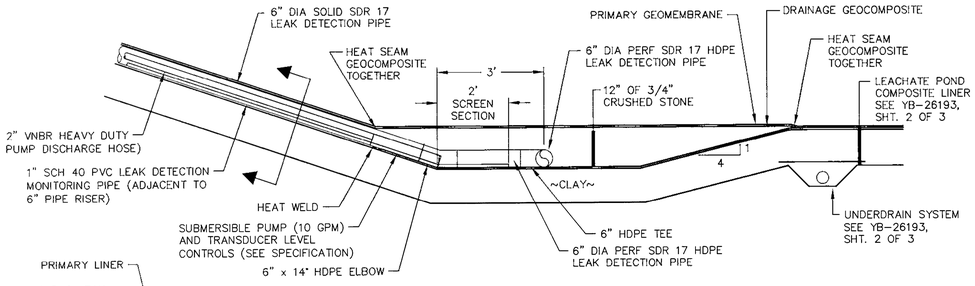
CAD FILE: YB-26193 B1

EAST OPERATION
DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
SECTIONS AND DETAILS
(SHEET 2 OF 3)

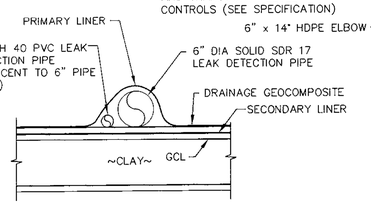
JOB NO. 00000
FILE NO. 0-000-0000
LOC. NO.

YB-26193

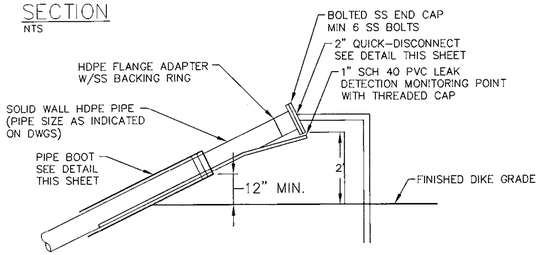
G:\PROJECTS\PAC\AUTOCAD\Plotting Forms\PRECDWG\LPONDDETAILS.dwg, 11/29/2007 3:01:02 PM, rhoskup



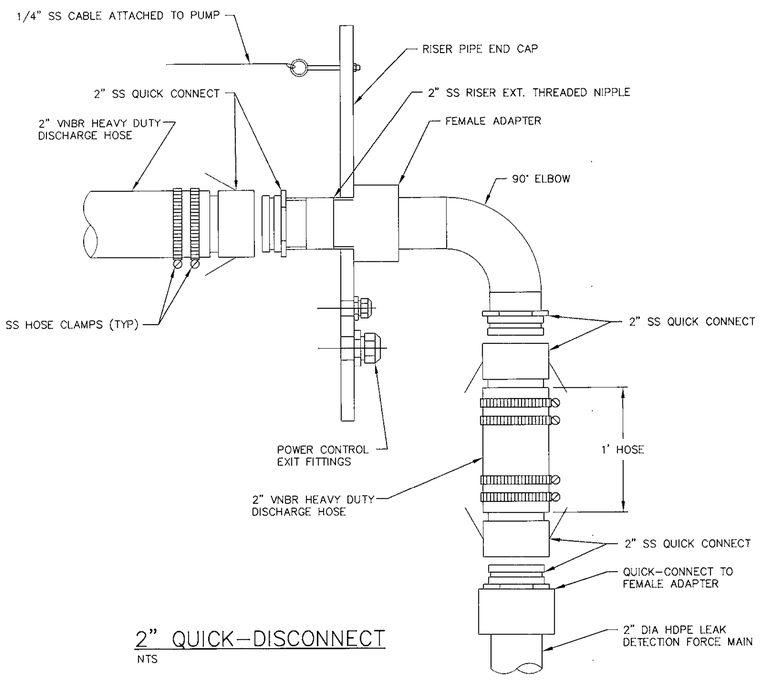

## LEAK DETECTION SUMP
NTS



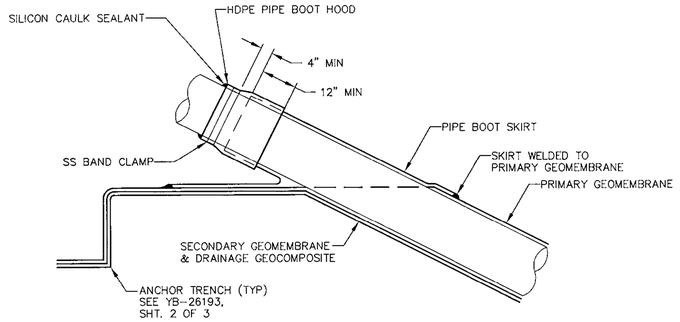

## SECTION
NTS



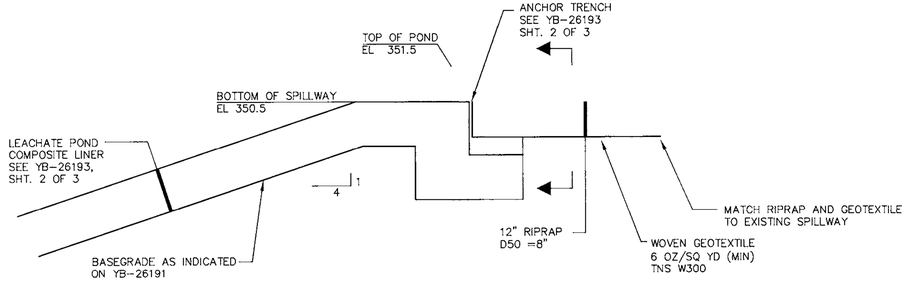

## FLANGED END CAP
NTS

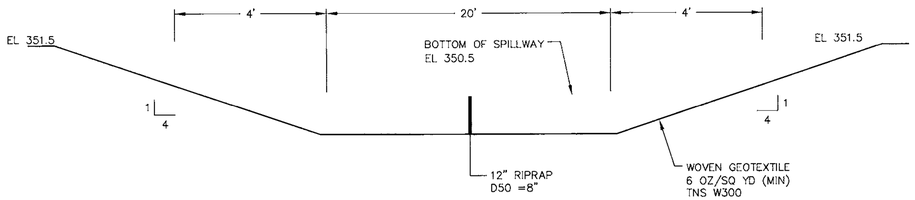



## 2" QUICK-DISCONNECT
NTS

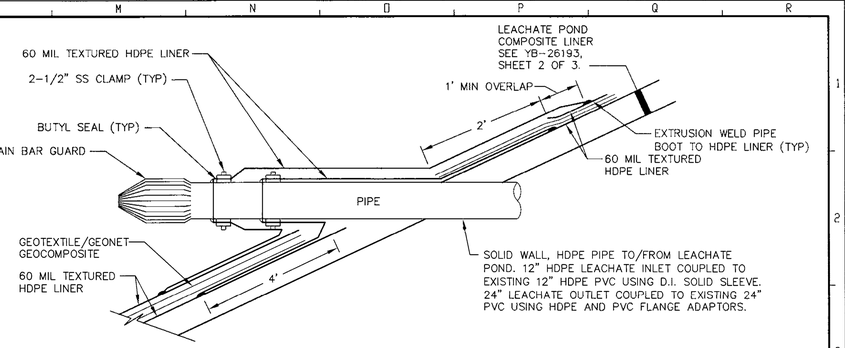



## LEAK DETECTION PUMP CONDUIT PIPE BOOT
NTS

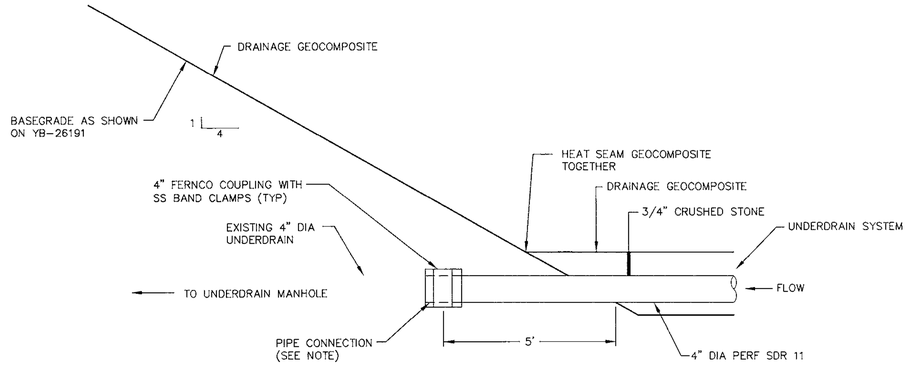



## SECTION
## LEACHATE POND EMERGENCY SPILLWAY
NTS



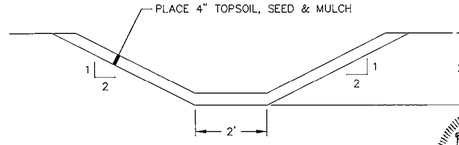

## LEACHATE INLET/OUTLET PIPE
NTS




NOTE:

CUT BACK EXISTING UNDERDRAIN 5 FT INTO SLOPE TO CONNECT. MATCH EXISTING INVERT AND DRAINAGE MEDIA FROM PIPE CONNECTIONS TO BASEGRADE.

## CONNECTION TO EXISTING 4" UNDERDRAIN
NTS




## DITCH REGRADE
NTS

STATE OF MAINE — JOHN E. SEVEE NO. 4162 — LICENSED PROFESSIONAL ENGINEER

| REF. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | | | | | | | |
| - - | | | | | | | |
| ASB | 11/26/07 | A | RECORD DRAWING | GHC | | | |
| B | 10/31/06 | B | ISSUED FOR BID | GHC | | | |
| P | 5/17/06 | P | REVISED PER MEDEP COMMENTS | GHC | | | |
| P | 12/9/05 | P | SUBMITTED TO MEDEP | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*
JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | DRD | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | - - |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE AS NOTED

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: YB-26193 B2

EAST OPERATION
DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
SECTIONS AND DETAILS
(SHEET 3 OF 3)

JOB NO. 00000
FILE NO. 0-000-0000
LOC. NO.

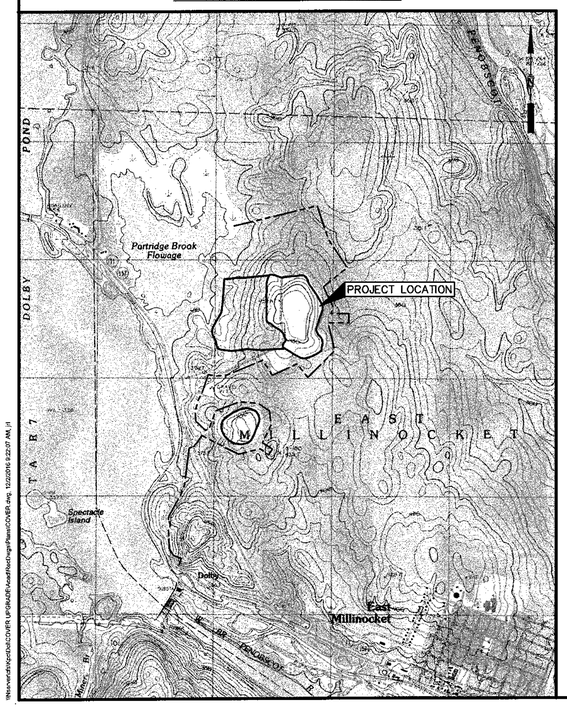
YB-26193

G:\PROJ\DOLBY\CAD\LEACHATE Pond\Rdd\Dwg\LPOND_DETAILS.dwg, 11/29/2007 4:22:39 PM, mcskup

# MAINE BUREAU OF GENERAL SERVICES
# DOLBY LANDFILL COVER UPGRADE - PHASE 1
# EAST MILLINOCKET, MAINE

| TITLE | DWG NO |
|---|---|
| COVER SHEET | C-000 |
| SYMBOLS & ABBREVIATIONS | C-100 |
| PHASED CLOSURE PLAN | C-101 |
| EXISTING CONDITIONS PLAN | C-102 |
| SITE BASE GRADING PLAN (NOT INCLUDED) | C-103 |
| SITE PLAN | C-104 |
| GAS COLLECTION PIPING PLAN | C-105 |
| UNDERDRAIN PIPING PLAN | C-106 |
| SECTIONS AND DETAILS | C-300 |
| SECTIONS AND DETAILS | C-301 |
| SECTIONS AND DETAILS | C-302 |
| SECTIONS AND DETAILS | C-303 |
| LAYOUT POINT TABLES (NOT INCLUDED) | C-304 |
| SEDIMENT POND #3 RESTORATION PLAN AND DETAILS | C-305 |
| SECTIONS AND DETAILS | C-306 |

LOCATION MAP




SME
Sevee & Maher Engineers, Inc.

ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE

4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

STATE OF MAINE
SCOTT E. STE
No. 5144
LICENSED
PROFESSIONAL ENGINEER
12/6/16

**RECORD DRAWINGS**

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | DRAINAGE COURSE (WITH DIRECTION) | G | UG | UNDERGROUND GAS MAIN |
| DATE | | NORTH ARROW (MAGNETIC) | | | EDGE OF WATER | T | UT | UNDERGROUND TELEPHONE LINE |
| N | | NORTH ARROW (PLAN NORTH) | | | WATER ELEVATION (GROUND OR SURFACE) | E | UE | UNDERGROUND ELECTRICAL LINE |
| 25 | 25 | CONTOUR LINES | | | FENCE LINE (WOOD) | OE | OE | OVERHEAD ELECTRICAL LINE |
| | INV 25.56 | SPOT ELEVATION (INVERT ELEVATION) | | | FENCE LINE (WIRE) | OT | OT | OVERHEAD TELEPHONE LINE |
| | | EXISTING GROUND | | | STONE WALL | 12" SS | 12" SS | SANITARY SEWER |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | RETAINING WALL | 8" FM | 8" FM | FORCE MAIN |
| | | PROPERTY LINE OR R.O.W. | | | GUARD RAIL | 8" W | 8" W | WATER MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | BUILDING AND STRUCTURES | 12" SD | 12" SD | STORM DRAIN |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | 2 1' OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | 8" UD | 8" UD | UNDERDRAIN |
| | | BOUNDARY LINE (State, County, Municipality) | TOP OF SLOPE 2 1 | TOP OF SLOPE 2 1 | SLOPES (WITH SLOPE RATIO) | 6" PD | 6" PD | PERIMETER DRAIN |
| | | SURVEY MONUMENT | | | EDGE OF ROAD | 6" LT | 6" LT | LEACHATE TRANSPORT |
| | | SURVEY CONTROL | | P | CUT OR FILL LINE | 6" LC | 6" LC | LEACHATE COLLECTION |
| | | PROPERTY PIN, DRILL HOLE, PK, OR STAKE | | | BITUMINOUS PAVEMENT | LD | 6" LD | LEAK DETECTION |
| | | WOODS OR BRUSH LINE | | | CONCRETE | GC | 6" G | GAS COLLECTION |
| | | INDIVIDUAL TREE | B-12 SW-12 P-12 | B-12 SW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | REDUCER |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | | MECHANICAL CAP OR PLUG |
| | | GAS VENT | SW-12 | SW-12 | SURFACE WATER SAMPLE LOCATION | | | COUPLING |
| | | GAS VENT (CAPPED) | | | GAS EXTRACTION WELL | | | BEND |
| | | CLEAN OUT STRUCTURE | | | MANHOLE | | | TEE |
| | | CULVERT | | | CATCH BASIN | | | PIPE TO BE ABANDONED |
| | | RAILROAD | | | WATER OR GAS VALVE | | | RISER PIPE & INLET GRATE |
| | | SLOPE INCLINOMETER | | | HYDRANT | | | STORM GRATE |
| | | VIBRATING WIRE SETTLEMENT CELL | | | AIR RELEASE VALVE | | | DRAINAGE INLET STRUCTURE |
| | | VERTICAL/HORIZONTAL DISPLACEMENT MONUMENT | | | SURGE RELEASE VALVE | | | UNDERDRAIN SUMP |
| | | VERTICAL DISPLACEMENT MONUMENT | | | UTILITY POLE | | SF | SILTATION FENCE |
| | | LIQUID SETTLEMENT GAGE | | | LIGHT POLE | | CLL | CLEARING OR CONSTRUCTION LIMIT LINE |

| | |
|---|---|
| ACCMP | ASPHALT COATED CMP |
| ACP | ASBESTOS CEMENT PIPE |
| AC | ACRE |
| AGG | AGGREGATE |
| ALUM | ALUMINUM |
| APPD | APPROVED |
| APPROX | APPROXIMATE |
| ARMH | AIR RELEASE MANHOLE |
| ASB | ASBESTOS |
| ASP | ASPHALT |
| AUTO | AUTOMATIC |
| AUX | AUXILIARY |
| AVE | AVENUE |
| AZ | AZIMUTH |
| BCCMP | BITUMINOUS COATED CMP |
| BM | BENCH MARK |
| BIT | BITUMINOUS |
| BLDG | BUILDING |
| BOT | BOTTOM |
| BRG | BEARING |
| BV | BALL VALVE |
| CB | CATCH BASIN |
| CEN | CENTER |
| CEM LIN | CEMENT LINED |
| CMP | CORRUGATED METAL PIPE |
| CO | CLEAN OUT |
| CF | CUBIC FEET |
| CFS | CUBIC FEET PER SECOND |
| CI | CAST IRON |
| CL | CLASS |
| CONC | CONCRETE |
| CONST | CONSTRUCTION |
| CONTR | CONTRACTOR |
| CS | CURB STOP |
| CTR | CENTER |
| CU | COPPER |
| CY | CUBIC YARD |
| D | DEGREE OF CURVE |
| DBL | DOUBLE |
| DEG OR ° | DEGREE |
| DEPT | DEPARTMENT |
| DI | DUCTILE IRON |
| DIA OR ø | DIAMETER |
| DIM | DIMENSION |
| DIST | DISTANCE |
| DN | DOWN |
| DR | DRAIN |
| DWG | DRAWING |
| EA | EACH |
| EG | EXISTING GROUND OR GRADE |
| ELEC | ELECTRIC |
| EL | ELEVATION |
| ELB | ELBOW |
| EOP | EDGE OF PAVEMENT |
| EQUIP | EQUIPMENT |
| EST | ESTIMATED |
| EXC | EXCAVATE |
| EXIST | EXISTING |
| FG | FINISH GRADE |
| FBRGL | FIBERGLASS |
| FDN | FOUNDATION |
| FLEX | FLEXIBLE |
| FLG | FLANGE |
| FLR | FLOOR |
| FPS | FEET PER SECOND |
| FT OR ' | FEET |
| FTG | FOOTING |
| GA | GAUGE |
| GAL | GALLON |
| GALV | GALVANIZED |
| GPD | GALLONS PER DAY |
| GPM | GALLONS PER MINUTE |
| HDPE | HIGH DENSITY POLYETHYLENE |
| HORIZ | HORIZONTAL |
| HP | HORSEPOWER |
| HYD | HYDRANT |
| ID | INSIDE DIAMETER |
| IN OR " | INCHES |
| INV | INVERT |
| INV EL | INVERT ELEVATION |
| LB | POUND |
| LC | LEACHATE COLLECTION |
| LD | LEAK DETECTION |
| LF | LINEAR FEET |
| LOC | LOCATION |
| LT | LEACHATE TRANSPORT |
| MH | MANHOLE |
| MJ | MECHANICAL JOINT |
| MATL | MATERIAL |
| MAX | MAXIMUM |
| MFR | MANUFACTURE |
| MIN | MINIMUM |
| MISC | MISCELLANEOUS |
| MON | MONUMENT |
| NITC | NOT IN THIS CONTRACT |
| NTS | NOT TO SCALE |
| N/F | NOW OR FORMERLY |
| NO OR # | NUMBER |
| OC | ON CENTER |
| OD | OUTSIDE DIAMETER |
| PC | POINT OF CURVE |
| PD | PERIMETER DRAIN |
| PI | POINT OF INTERSECTION |
| PIV | POST INDICATOR VALVE |
| PT | POINT OF TANGENT |
| PERF | PERFORATED |
| PP | POWER POLE |
| PSI | POUNDS PER SQUARE INCH |
| PVC | POLYVINYL CHLORIDE |
| PVMT | PAVEMENT |
| QTY | QUANTITY |
| RCP | REINFORCED CONCRETE PIPE |
| ROW | RIGHT OF WAY |
| RAD | RADIUS |
| REQD | REQUIRED |
| RT | RIGHT |
| RTE | ROUTE |
| S | SLOPE |
| SCH | SCHEDULE |
| SF | SQUARE FEET |
| SHT | SHEET |
| SMH | SANITARY MANHOLE |
| ST | STREET |
| STA | STATION |
| SY | SQUARE YARD |
| TAN | TANGENT |
| TDH | TOTAL DYNAMIC HEAD |
| TEMP | TEMPORARY |
| TYP | TYPICAL |
| UD | UNDERDRAIN |
| V | VOLTS |
| VA TEE | VALVE ANCHORING TEE |
| VERT | VERTICAL |
| WG | WATER GATE |
| W/ | WITH |
| W/O | WITHOUT |
| YD | YARD |

## VIEW MARKERS & IDENTIFICATION

DETAIL TITLE
MANHOLE
SEE DWG C-300
DRAWING WHERE DETAIL APPEARS

GENERAL NOTES

1. THE CONTRACTOR SHALL COMPLY FULLY WITH CONDITIONS OF THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION (MEDEP) OPERATING PERMIT, BOARD ORDER, MEDEP NRPA PERMIT BY RULE CONDITIONS, MEDEP CONSTRUCTION GENERAL PERMIT, MEDEP "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES", AND MAINE DEPARTMENT OF TRANSPORTATION (MDOT) ENTRANCE PERMIT REQUIREMENTS, AS APPLICABLE.
2. THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL ABIDE BY ALL SAFETY REQUIREMENTS ASSOCIATED WITH WORKING AT AN ACTIVE SOLID WASTE LANDFILL FACILITY (i.e., RISK OF WORKER EXPOSURE TO LANDFILL GASES, LEACHATE, SOLID WASTE) INCLUDING THE FOLLOWING:
   - COMPLY WITH ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS;
   - COMPLY WITH ALL VERSO SAFETY REQUIREMENTS, INCLUDING USE OF HARD HATS, SAFETY GLASSES, AND FLUORESCENT SAFETY VESTS AT ALL TIMES;
   - FOLLOW CONFINED SPACE ENTRY RULES ESTABLISHED BY VERSO OPERATIONS AND OSHA FOR THE SITE, INCLUDING, BUT NOT LIMITED TO, MANHOLES, CATCH BASINS, PUMP STATIONS, TEST PITS, TRENCHES, ETC., AND
   - ALL EQUIPMENT USED ON SITE SHALL BE EQUIPPED WITH BACK-UP ALARMS AND WARNING LIGHTS.
3. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO ENSURE THAT NO SILTATION OF STORMWATER DRAINAGE COURSES OCCURS AS A RESULT OF SOIL DISTURBANCE ASSOCIATED WITH THE CONTRACT SCOPE OF WORK.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING COMPLETE PROTECTION OF THE PROJECT DURING CONSTRUCTION FROM ANY ACTS OF NATURE OR MAN, SUCH AS, BUT NOT LIMITED TO, FLOODS, WIND DAMAGE, EARTH SLIDES, AND SLOPE FAILURES. DAMAGE TO THE PROJECT CAUSED BY SUCH ACTS WILL NOT BE SUFFICIENT CAUSE TO INCREASE CONTRACT COSTS TO THE OWNER.
5. THE CONTRACTOR SHALL PROTECT EXISTING ON-SITE STRUCTURES FROM DAMAGE DURING CONSTRUCTION, INCLUDING: MONITORING WELLS, POWER LINES, MAINTENANCE FACILITIES, EXISTING LEACHATE COLLECTION, LINER AND TRANSPORT SYSTEMS, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS REQUIRED TO CORRECT DAMAGE MADE TO EXISTING ON-SITE STRUCTURES DESCRIBED ABOVE RESULTING FROM ANY CONSTRUCTION ACTIVITY.
6. THE DESIGN INTENT, AS DETERMINED BY THE ENGINEER, WILL GOVERN IN THE CASE OF DISCREPANCY IN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS. THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT AND CLARIFY THE DRAWINGS, AS SOMETIMES WORK IS CALLED FOR IN THE SPECIFICATIONS THAT IS NOT SHOWN ON THE DRAWINGS AND SOMETIMES THE DRAWINGS INDICATE WORK THAT IS NOT MENTIONED IN THE SPECIFICATIONS. BOTH DRAWINGS AND SPECIFICATIONS MUST BE COMPILED WITH IN ORDER TO FULFILL THE CONTRACT REQUIREMENTS, AND ANY WORK CALLED FOR BY EITHER IS AS BINDING AS THOUGH IT WERE CALLED FOR BY BOTH. THE CONTRACTOR SHALL TAKE NO ADVANTAGE OF ANY ERROR OR OMISSION IN THE DRAWINGS OR OF ANY DISCREPANCY BETWEEN THE DRAWINGS AND SPECIFICATIONS. IN ALL CASES OF DOUBT AS TO THE TRUE MEANING OF THE DRAWINGS AND SPECIFICATIONS, THE DECISION OF THE ENGINEER WILL BE FINAL AND CONCLUSIVE.

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | NHT | 11/2016 | RECORD DRAWING |
| | PCM | 6/2016 | ISSUED FOR CONSTRUCTION |
| | PCM | 4/2016 | ISSUED FOR BID |

STATE OF MAINE — GUY H. COTE, JR. — No. 5166 — LICENSED PROFESSIONAL ENGINEER

MAINE BUREAU OF GENERAL SERVICES
DOLBY LANDFILL COVER UPGRADE – PHASE 1
EAST MILLINOCKET, MAINE

SYMBOLS AND ABBREVIATIONS

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

DESIGN BY: PCM
DRAWN BY: SJM
DATE: 4/2016
CHECKED BY:
LMN: NONE
CTB: SME-STD

JOB NO. 15250.00 DWG FILE SYMSHT

C-100


NOTES

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, NORRIDGEWOCK, MAINE. PHOTO DATE 10/15/2015. HORIZONTAL DATUM MAINE STATE COORDINATE SYSTEM EAST ZONE, NAD 83. GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE. VERTICAL DATUM: NAVD 1929. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
2. ADDITIONAL DITCH TOPOGRAPHY ALONG TOE OF LANDFILL BY SEVEE & MAHER ENGINEERS, INC., CUMBERLAND, MAINE, DATED 10/7/2015
3. PHASED CLOSURE AREAS ARE APPROXIMATE AND ARE SUBJECT TO CHANGE.
4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | NMT | 11/2016 | RECORD DRAWING |
| | PCM | 6/2016 | ISSUED FOR CONSTRUCTION |
| | PCM | 4/2016 | ISSUED FOR BID |

STATE OF MAINE
GUY R. COTE
No. 12141
LICENSED PROFESSIONAL ENGINEER

# MAINE BUREAU OF GENERAL SERVICES
# DOLBY LANDFILL COVER UPGRADE – PHASE 1
# EAST MILLINOCKET, MAINE

## PHASED CLOSURE PLAN

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

| | |
|---|---|
| DESIGN BY: | PCM |
| DRAWN BY: | SJM |
| DATE: | 4/2016 |
| CHECKED BY: | |
| LMN: | PHASED |
| CTB: | SME–STD |

JOB NO. 15250.00 DWG FILE BASE

C–101

NOTES

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, NORRIDGEWOCK, MAINE. PHOTO DATE 10/15/2015. HORIZONTAL DATUM MAINE STATE COORDINATE SYSTEM EAST ZONE, NAD 83. GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE. VERTICAL DATUM: NAVD 1929. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
2. VERTICAL DATUM: BRASS PLUG BENCHMARK (EL. 356.99) AT PUMP STATION. HORIZONTAL DATUM: MAINE STATE COORDINATES EAST ZONE NAD 83.
3. ADDITIONAL DITCH TOPOGRAPHY ALONG TOE OF LANDFILL BY SEVEE & MAHER ENGINEERS, INC., CUMBERLAND, MAINE, DATED 10/7/2015.
4. BORINGS AND TEST PITS PERFORMED BY MAINE TEST BORING. FIELD LOCATION AND LOGS BY SEVEE & MAHER ENGINEERS.
5. CATCH BASIN DATA AS SHOWN ON HISTORICAL DRAWINGS FOR SITE DEVELOPMENT PLAN CELL 2, CELL 9 AND CELL 14 CONSTRUCTION AND CELL 12 CLOSURE.
6. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.

**PHASE I CATCH BASIN SCHEDULE**

| CB ID | RIM EL | INV IN | INV OUT |
|---|---|---|---|
| CB#2 | 362.00 | 350.9 (18")<br>350.48 (18") | 350.48 (18") |
| CB#26 | 357.80 | 351.1 (18") | 351.1 (12") |
| CB#27 | 358.20 | 351.6 (18") | 351.6 (18") |
| CB#28 | 359.70 | 352.0 (18")<br>353.7 (8") | 352.0 (18") |
| CB#29 | 359.20 | 352.6 (18") | 352.6 (18") |
| CB#30 | 359.70 | 353.0 (18") | 353.0 (18") |
| CB#31 | 364.00 | 355.3 (12")<br>359.2 (8") | 356.5 (18") |

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | NMT | 11/2016 | RECORD DRAWING |
| | PCM | 6/2016 | ISSUED FOR CONSTRUCTION |
| | PCM | 4/2016 | ISSUED FOR BID |

STATE OF MAINE — PAUL C. MACEACHERN — No. 5742 — LICENSED PROFESSIONAL ENGINEER

# MAINE BUREAU OF GENERAL SERVICES
# DOLBY LANDFILL COVER UPGRADE – PHASE 1
# EAST MILLINOCKET, MAINE

## EXISTING CONDITIONS PLAN

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

DESIGN BY: PCM
DRAWN BY: SJM
DATE: 4/2016
CHECKED BY: PCM
LMN: EXCON
CTB: SME-STD

JOB NO. 15250.00 DWG FILE BASE

C-102

50 0 100 200 FEET

I:\Waterville\Projects\DOLCOVER_UPGRADE\Acad\Rev2\Dwgs\Plans\BASE.dwg, 11/9/2016 8:16:13 AM, pf

TYPE IV FINAL COVER TERMINATION (TYP) SEE DWG C-300

TYPE III FINAL COVER TERMINATION (TYP) SEE DWG C-300

TYPE IV FINAL COVER TERMINATION (TYP) SEE DWG C-300

RIPRAP DOWNSPOUT TRANSITION AT SURFACE SWALE (TYP) SEE DWG C-301

GRASS LINED DITCH (TYP) SEE DWG C-301

RIPRAP TRANSITION AT SURFACE SWALE (TYP) SEE DWG C-301

SURFACE SWALE (TYP) SEE DWG C-300

RIPRAP/GRASS LINED DITCH TRANSITION (TYP) SEE DWG C-301

TOE BERM (TYP) SEE DWG C-300

FINAL COVER GRADES (TYP)

GRASS LINED DITCH (TYP) SEE DWG C-301

RIPRAP TRANSITION AT SURFACE SWALE (TYP) SEE DWG C-301

RIPRAP DOWNSPOUT (TYP) SEE DWG C-301

CULVERT PIPE BOOT SEE DWG C-303

RIPRAP DITCH RD-1 SEE DWG C-303

RIPRAP DITCH RD-2 SEE DWG C-303

SEDIMENT POND #3

TYPE I FINAL COVER TERMINATION (TYP) SEE DWG C-300

LIMIT OF FINAL COVER GEOEMEMBRANE LAYOUT POINT (TYP) SEE DWG C-304

LEACHATE POND

RIPRAP DITCH RD-3 (TYP) SEE DWG C-303

18' WIDE GRAVEL ACCESS ROAD SEE SECTION 4, DWG C-302

RIPRAP/GRASS LINED DITCH TRANSITION SEE DWG C-301

GRASS LINED DITCH (TYP) SEE DWG C-301

LIMIT OF FINAL COVER GEOMEMBRANE (TYP)

TYPE II FINAL COVER TERMINATION (TYP) SEE DWG C-300

LIMIT OF WORK (TYP)

PILE

MW-302A,B

MW-301A,B

## FINAL COVER TERMINATION LEGEND

1 — TYPE I FINAL COVER TERMINATION
2 — TYPE II FINAL COVER TERMINATION
3 — TYPE III FINAL COVER TERMINATION
4 — TYPE IV FINAL COVER TERMINATION

NOTE: FOR DETAILS SEE DWG C-300

NOTES

1. BASE MAP OUTSIDE OF THE LIMIT OF WORK PREPARED BY AERIAL SURVEY & PHOTO, NORRIDGEWOCK, MAINE. PHOTO DATE 10/15/2015. GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE. BASE MAP INSIDE THE LIMIT OF WORK FROM AS BUILT SURVEY OF DOLBY LANDFILL PHASE 1 BY SARGENT CORPORATION, DATED OCTOBER, 2016. HORIZONTAL DATUM MAINE STATE COORDINATE SYSTEM EAST ZONE, NAD 83. VERTICAL DATUM: NAVD 1929.
2. ADDITIONAL DITCH TOPOGRAPHY ALONG TOE OF LANDFILL BY SEVEE & MAHER ENGINEERS, INC., CUMBERLAND, MAINE, DATED 10/7/2015.
3. BORINGS AND TEST PITS PERFORMED BY MAINE TEST BORING. FIELD LOCATION AND LOGS BY SEVEE & MAHER ENGINEERS.
4. CATCH BASIN DATA AS SHOWN ON HISTORICAL DRAWINGS FOR SITE DEVELOPMENT PLAN CELL 2, CELL 9 AND CELL 14 CONSTRUCTION AND CELL 12 CLOSURE.
5. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.
6. BASE GRADES REPRESENT THE TOP OF THE GAS COLLECTION SAND LAYER PRIOR TO INSTALLATION OF 40 MIL TEXTURED HDPE GEOMEMBRANE OF THE FINAL COVER SYSTEM. THE CONTRACTOR SHALL ACHIEVE THE BASE GRADES BY RE-GRADING WASTE SURFACE OR FILLING WITH COMMON BORROW. THE TOP 6 INCHES OF FILL NECESSARY TO ACHIEVE BASE GRADE SHALL BE SAND OR GRIT (1" MINUS).
7. EXISTING COVER SOILS WITHIN THE LIMIT OF THE FINAL COVER GEOMEMBRANE SHALL BE STRIPPED TO THE TOP OF EXISTING GAS COLLECTION LAYER. THE CONTRACTOR SHALL VERIFY THE THICKNESS OF EXISTING GAS COLLECTION SAND OR GRIT AND SHALL ADD ADDITIONAL SAND AS NECESSARY TO ACHIEVE A MINIMUM SAND THICKNESS OF 6 INCHES.
8. CONTRACTOR SHALL PRESERVE THE EXISTING TOE DRAIN. EXISTING TOE DRAIN SHALL REMAIN TO COLLECT LEACHATE AND GAS BELOW THE COVER SYSTEM.

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | NMT | 11/2016 | RECORD DRAWING |
| | PCM | 6/2016 | ISSUED FOR CONSTRUCTION |
| | PCM | 4/2016 | ISSUED FOR BID |

STATE OF MAINE — GUY H. COTE JR. — No. 5 — LICENSED PROFESSIONAL ENGINEER — 10/6/16

# MAINE BUREAU OF GENERAL SERVICES
# DOLBY LANDFILL COVER UPGRADE – PHASE 1
# EAST MILLINOCKET, MAINE

## SITE PLAN

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

DESIGN BY: PCM
DRAWN BY: SJM
DATE: 4/2016
CHECKED BY: GHC
LMN: SITE PLAN
CTB: SME-STD

JOB NO. 15250.00 DWG FILE BASE

C-104

30 0 60 120 FEET

\\Server2\Wip\Dolby\COVER UPGRADE\Arc\Final\DrawingFiles\BASE.dwg 11/9/2015 8:48:05 AM jrf

PHASE III
ACRES = 22

END CAP (TYP)

LIMIT OF FINAL COVER GEOMEMBRANE (TYP)

LOCATION OF GAS BUBBLE WHERE ADDITIONAL GAS VENT WAS INSTALLED SEE DWG C-303

FINAL COVER GRADES (TYP)

4" DIA SLOTTED CORR HDPE PIPE (TYP)

GAS VENTING SYSTEM (TYP) SEE DWG C-303

LIMIT OF WORK (TYP)

48" DIA CMP CULVERT

SEDIMENT POND #3

EXISTING 6" DIA PERFORATED HDPE TOE DRAIN TO REMAIN SEE NOTE 8

GAS VENT AT CB (TYP) SEE EXISTING CATCH BASIN ABANDONMENT DWG C-303

30" DIA BCCMP CULVERT

LEACHATE POND

24" DIA LEACHATE OUTLET PIPE

RILE

CB#34 CB#33 CB#32 CB#21 CB#3 CB#4

DMH D3-#8 DMH D3-#5

P-08-11A,B

MW-302A,B MW-301 MW-303A

30 0 60 120 FEET

NOTES

1. BASE MAP OUTSIDE OF THE LIMIT OF WORK PREPARED BY AERIAL SURVEY & PHOTO, NORRIDGEWOCK, MAINE. PHOTO DATE 10/15/2015. GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE. BASE MAP INSIDE THE LIMIT OF WORK FROM AS BUILT SURVEY OF DOLBY LANDFILL PHASE 1 BY SARGENT CORPORATION, DATED OCTOBER, 2016. HORIZONTAL DATUM MAINE STATE COORDINATE SYSTEM EAST ZONE, NAD 83. VERTICAL DATUM: NAVD 1929.
2. ADDITIONAL DITCH TOPOGRAPHY ALONG TOE OF LANDFILL BY SEVEE & MAHER ENGINEERS, INC., CUMBERLAND, MAINE, DATED 10/7/2015.
3. BORINGS AND TEST PITS PERFORMED BY MAINE TEST BORING. FIELD LOCATION AND LOGS BY SEVEE & MAHER ENGINEERS.
4. CATCH BASIN DATA AS SHOWN ON HISTORICAL DRAWINGS FOR SITE DEVELOPMENT PLAN CELL 2, CELL 9 AND CELL 14 CONSTRUCTION AND CELL 12 CLOSURE.
5. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.
6. BASE GRADES REPRESENT THE TOP OF THE GAS COLLECTION SAND LAYER PRIOR TO INSTALLATION OF 40 MIL TEXTURED HDPE GEOMEMBRANE OF THE FINAL COVER SYSTEM. THE CONTRACTOR SHALL ACHIEVE THE BASE GRADES BY RE-GRADING WASTE SURFACE OR FILLING WITH COMMON BORROW. THE TOP 6 INCHES OF FILL NECESSARY TO ACHIEVE BASE GRADE SHALL BE SAND OR GRIT (1" MINUS).
7. EXISTING COVER SOILS WITHIN THE LIMIT OF THE FINAL COVER GEOMEMBRANE SHALL BE STRIPPED TO THE TOP OF EXISTING GAS COLLECTION LAYER. THE CONTRACTOR SHALL VERIFY THE THICKNESS OF EXISTING GAS COLLECTION SAND OR GRIT AND SHALL ADD ADDITIONAL SAND AS NECESSARY TO ACHIEVE A MINIMUM SAND THICKNESS OF 6 INCHES.
8. CONTRACTOR SHALL PRESERVE THE EXISTING TOE DRAIN. EXISTING TOE DRAIN SHALL REMAIN TO COLLECT LEACHATE AND GAS BELOW THE COVER SYSTEM.

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | 11/2016 | RECORD DRAWING |
| | PCM | 6/2016 | ISSUED FOR CONSTRUCTION |
| | PCM | 4/2016 | ISSUED FOR BID |

STATE OF MAINE
SCOTT M. HOTE
No. 5
LICENSED
PROFESSIONAL ENGINEER

# MAINE BUREAU OF GENERAL SERVICES
# DOLBY LANDFILL COVER UPGRADE – PHASE 1
# EAST MILLINOCKET, MAINE

## GAS COLLECTION PIPING PLAN

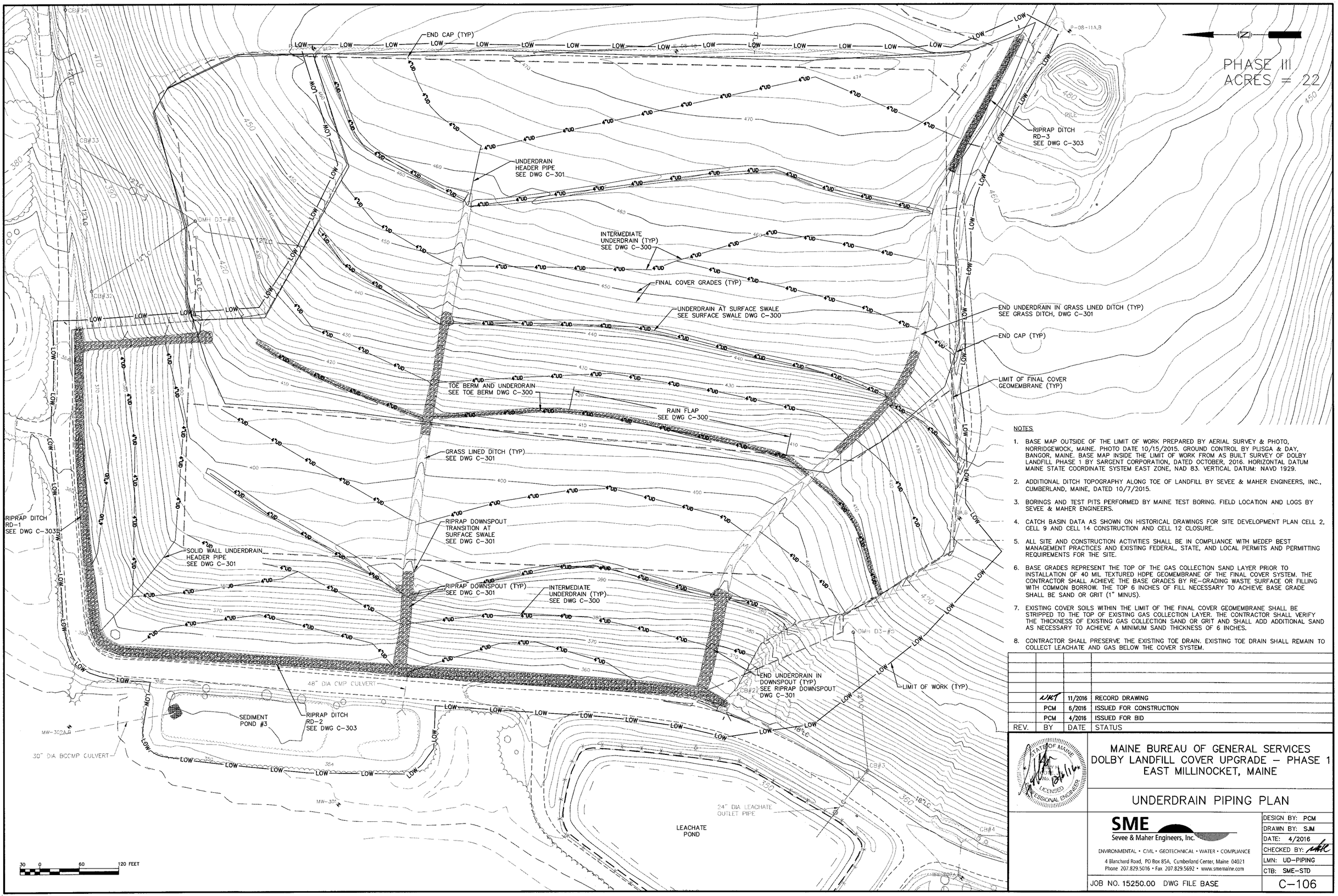
SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

| | |
|---|---|
| DESIGN BY: | PCM |
| DRAWN BY: | SJM |
| DATE: | 4/2016 |
| CHECKED BY: | |
| LMN: | GC-PIPING |
| CTB: | SME-STD |

JOB NO. 15250.00 DWG FILE BASE

C-105

\\Network\Projects\DOLCOVER UPGRADE\Cad\ReDwgs\Plans\BASE.dwg, 12/7/2015 11:37:35 AM, JH




NOTES

1. BASE MAP OUTSIDE OF THE LIMIT OF WORK PREPARED BY AERIAL SURVEY & PHOTO, NORRIDGEWOCK, MAINE. PHOTO DATE 10/15/2015. GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE. BASE MAP INSIDE THE LIMIT OF WORK FROM AS BUILT SURVEY OF DOLBY LANDFILL PHASE 1 BY SARGENT CORPORATION, DATED OCTOBER, 2016. HORIZONTAL DATUM MAINE STATE COORDINATE SYSTEM EAST ZONE, NAD 83. VERTICAL DATUM: NAVD 1929.
2. ADDITIONAL DITCH TOPOGRAPHY ALONG TOE OF LANDFILL BY SEVEE & MAHER ENGINEERS, INC., CUMBERLAND, MAINE, DATED 10/7/2015.
3. BORINGS AND TEST PITS PERFORMED BY MAINE TEST BORING. FIELD LOCATION AND LOGS BY SEVEE & MAHER ENGINEERS.
4. CATCH BASIN DATA AS SHOWN ON HISTORICAL DRAWINGS FOR SITE DEVELOPMENT PLAN CELL 2, CELL 9 AND CELL 14 CONSTRUCTION AND CELL 12 CLOSURE.
5. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.
6. BASE GRADES REPRESENT THE TOP OF THE GAS COLLECTION SAND LAYER PRIOR TO INSTALLATION OF 40 MIL TEXTURED HDPE GEOMEMBRANE OF THE FINAL COVER SYSTEM. THE CONTRACTOR SHALL ACHIEVE THE BASE GRADES BY RE-GRADING WASTE SURFACE OR FILLING WITH COMMON BORROW. THE TOP 6 INCHES OF FILL NECESSARY TO ACHIEVE BASE GRADE SHALL BE SAND OR GRIT (1" MINUS).
7. EXISTING COVER SOILS WITHIN THE LIMIT OF THE FINAL COVER GEOMEMBRANE SHALL BE STRIPPED TO THE TOP OF EXISTING GAS COLLECTION LAYER. THE CONTRACTOR SHALL VERIFY THE THICKNESS OF EXISTING GAS COLLECTION SAND OR GRIT AND SHALL ADD ADDITIONAL SAND AS NECESSARY TO ACHIEVE A MINIMUM SAND THICKNESS OF 6 INCHES.
8. CONTRACTOR SHALL PRESERVE THE EXISTING TOE DRAIN. EXISTING TOE DRAIN SHALL REMAIN TO COLLECT LEACHATE AND GAS BELOW THE COVER SYSTEM.

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | JMT | 11/2016 | RECORD DRAWING |
| | PCM | 6/2016 | ISSUED FOR CONSTRUCTION |
| | PCM | 4/2016 | ISSUED FOR BID |

STATE OF MAINE — PAUL C. MERCIER — No. 10116 — LICENSED PROFESSIONAL ENGINEER

# MAINE BUREAU OF GENERAL SERVICES
# DOLBY LANDFILL COVER UPGRADE – PHASE 1
# EAST MILLINOCKET, MAINE

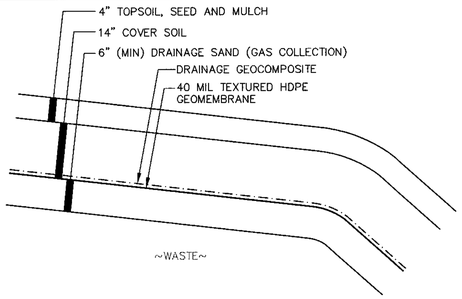
## UNDERDRAIN PIPING PLAN

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

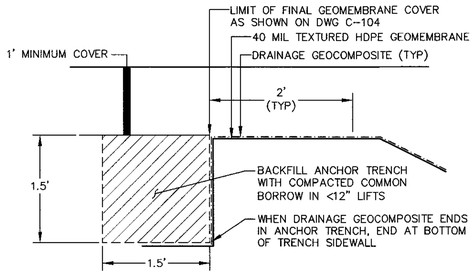
| | |
|---|---|
| DESIGN BY: | PCM |
| DRAWN BY: | SJM |
| DATE: | 4/2016 |
| CHECKED BY: | PCM |
| LMN: | UD-PIPING |
| CTB: | SME-STD |

JOB NO. 15250.00 DWG FILE BASE

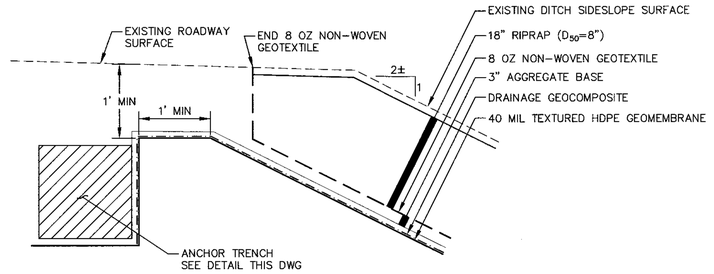
C-106



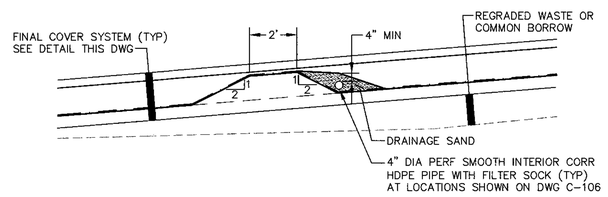

## FINAL COVER SYSTEM
NTS



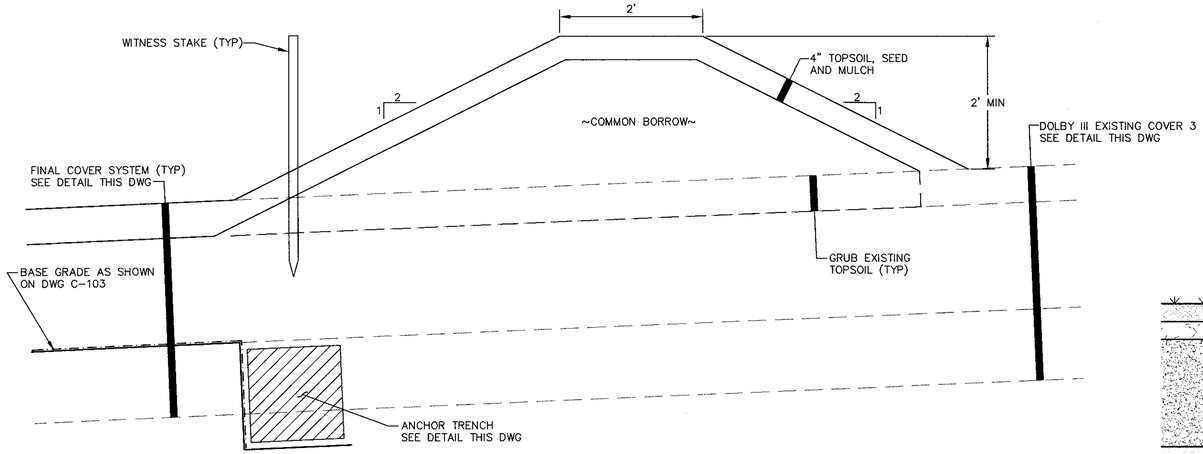

## ANCHOR TRENCH
NTS



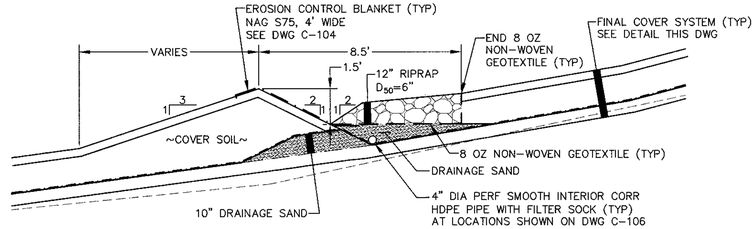

## TYPE I FINAL COVER TERMINATION
NTS



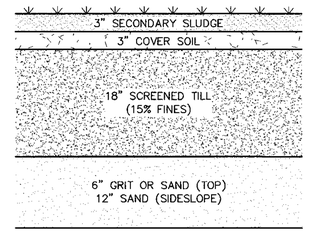

## INTERMEDIATE UNDERDRAIN
NTS



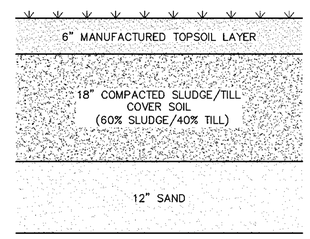

## TYPE II FINAL COVER TERMINATION
NTS



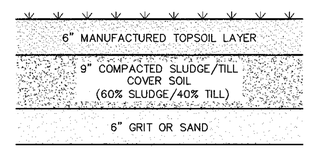

## TOE BERM AND UNDERDRAIN
NTS



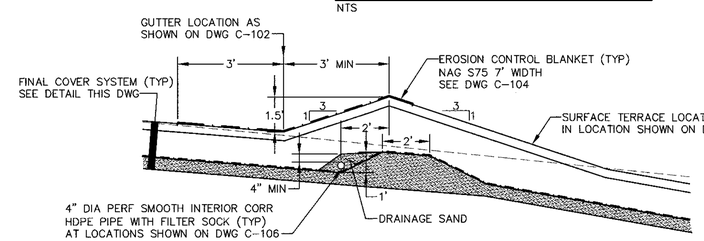

## DOLBY III – EXISTING COVER 1
NTS



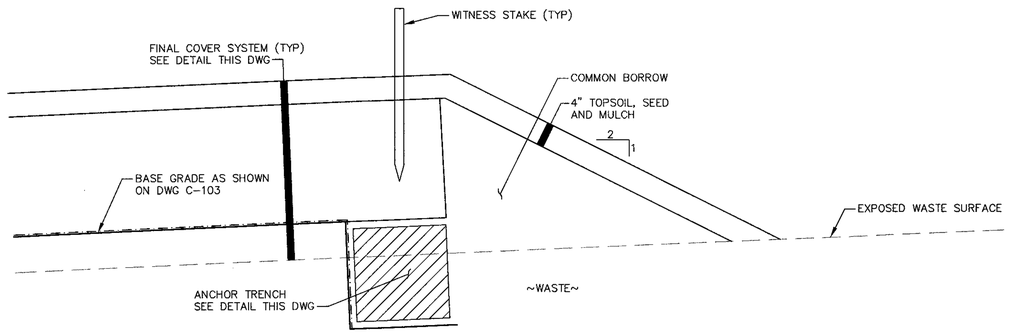

## DOLBY III – EXISTING COVER 2
NTS



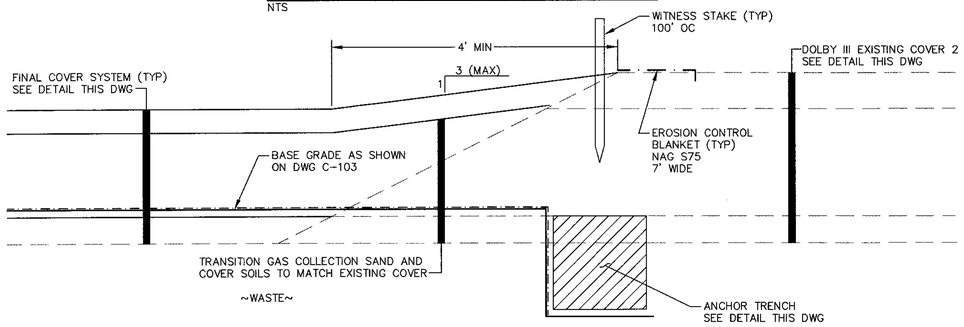

## DOLBY III – EXISTING COVER 3
NTS



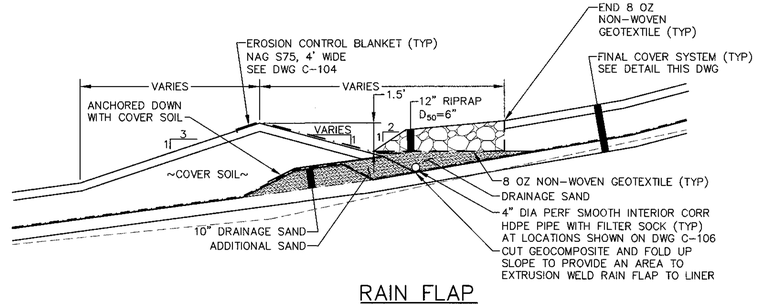

## SURFACE SWALE AND UNDERDRAIN
NTS




## TYPE III FINAL COVER TERMINATION
NTS




## TYPE IV FINAL COVER TERMINATION
NTS




## RAIN FLAP
NTS

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | NMT | 11/2016 | RECORD DRAWING |
| | PCM | 6/2016 | ISSUED FOR CONSTRUCTION |
| | PCM | 4/2016 | ISSUED FOR BID |

STATE OF MAINE — JUSTIN J. MAHER — No. 9577 — LICENSED PROFESSIONAL ENGINEER

MAINE BUREAU OF GENERAL SERVICES
DOLBY LANDFILL COVER UPGRADE – PHASE 1
EAST MILLINOCKET, MAINE

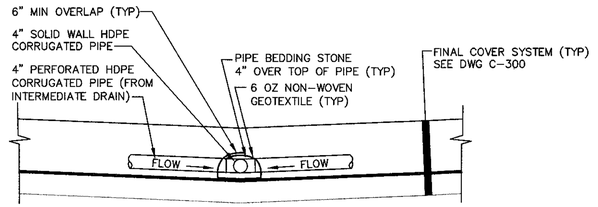
SECTIONS AND DETAILS

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

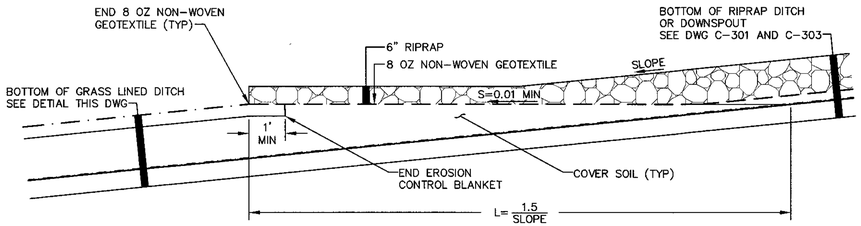
DESIGN BY: PCM
DRAWN BY: SJM
DATE: 4/2016
CHECKED BY:
LMN: NONE
CTB: SME-STD

JOB NO. 15250.00 DWG FILE DETAILS

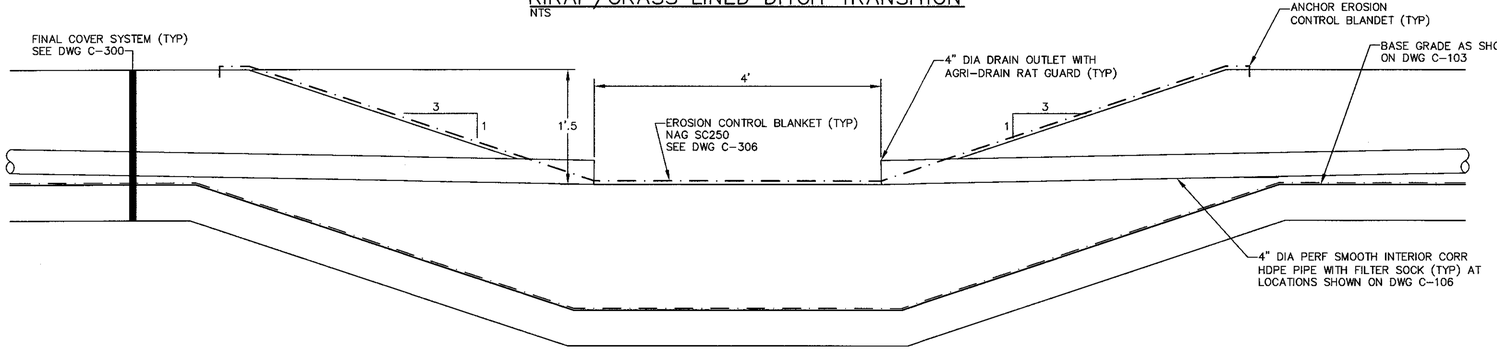
C-300



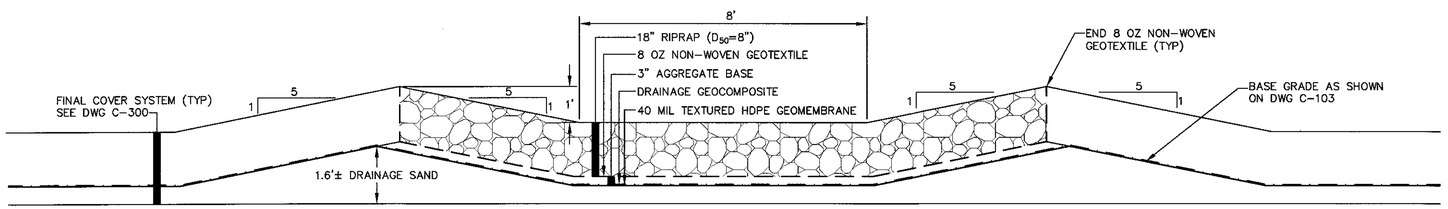

## UNDERDRAIN HEADER PIPE
NTS



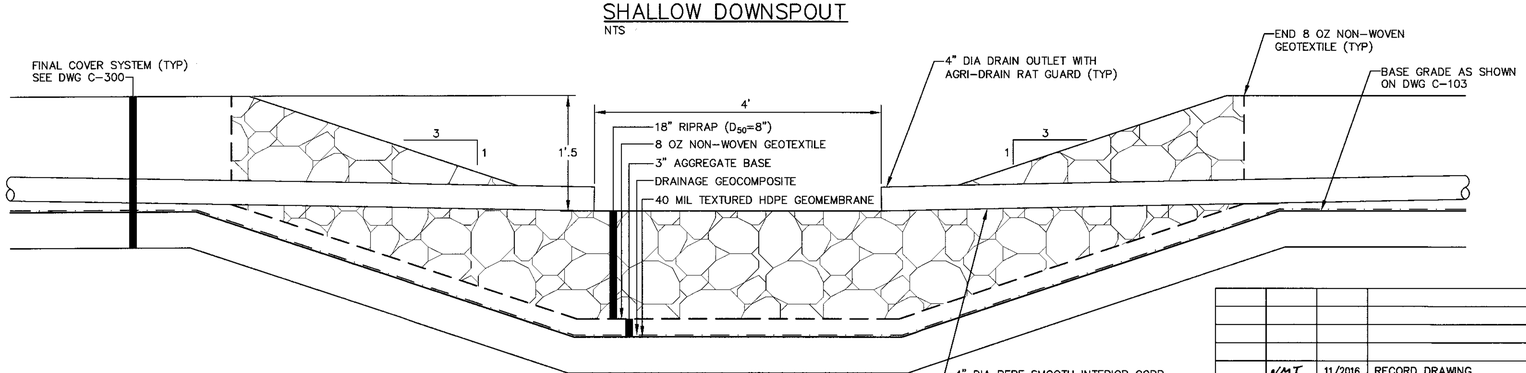

## RIRAP/GRASS LINED DITCH TRANSITION
NTS



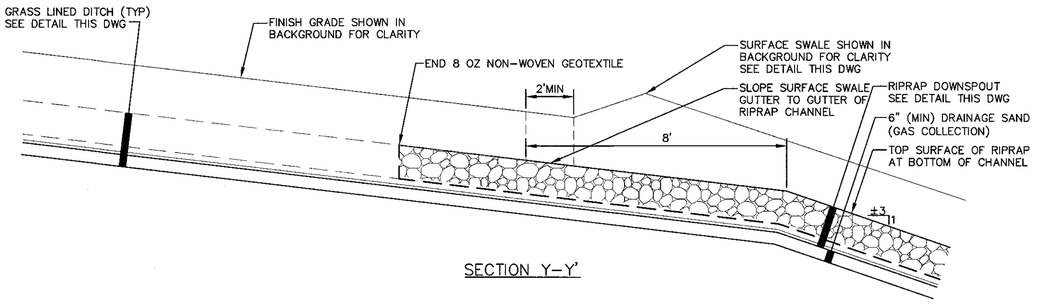

## GRASS LINED DITCH
NTS



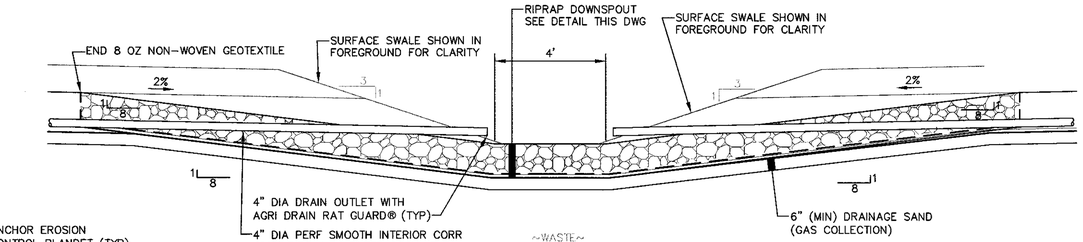

## SHALLOW DOWNSPOUT
NTS



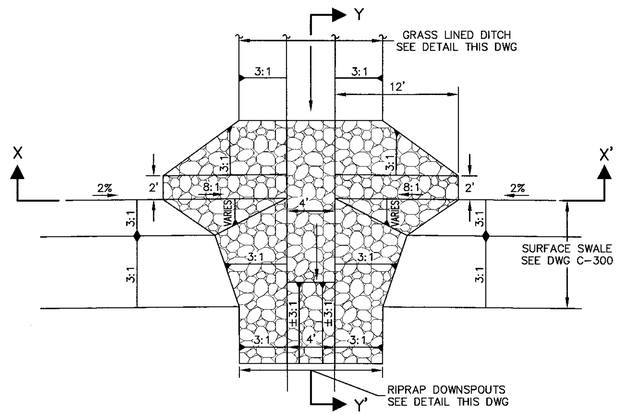

## RIPRAP DOWNSPOUT
NTS




## SECTION Y-Y'




## SECTION X-X'




## RIPRAP TRANSITION AT SURFACE SWALE
NTS

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | NMT | 11/2016 | RECORD DRAWING |
| | PCM | 6/2016 | ISSUED FOR CONSTRUCTION |
| | PCM | 4/2016 | ISSUED FOR BID |

STATE OF MAINE — PETER L. MITCHELL — No. 5144 — LICENSED PROFESSIONAL ENGINEER

MAINE BUREAU OF GENERAL SERVICES
DOLBY LANDFILL COVER UPGRADE – PHASE 1
EAST MILLINOCKET, MAINE

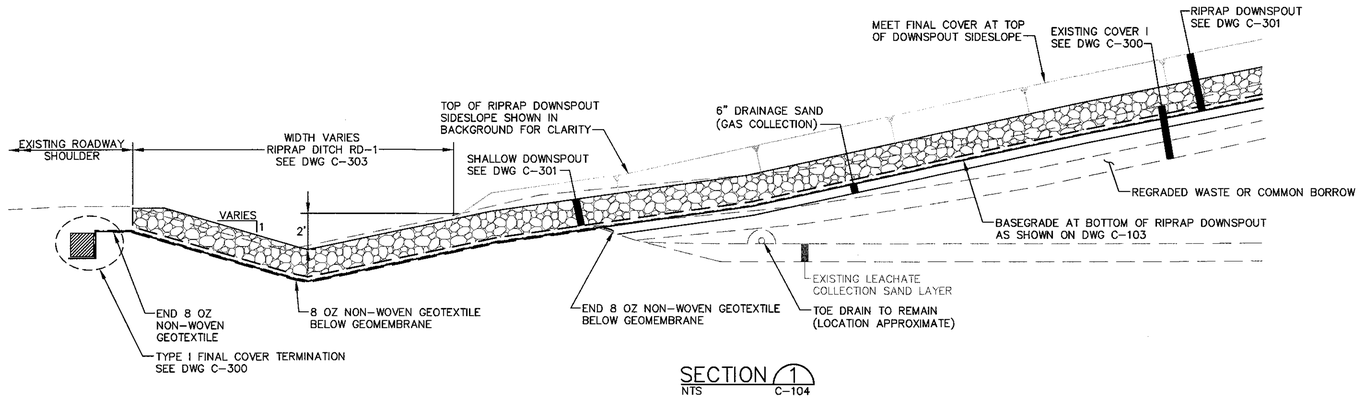
SECTIONS AND DETAILS

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

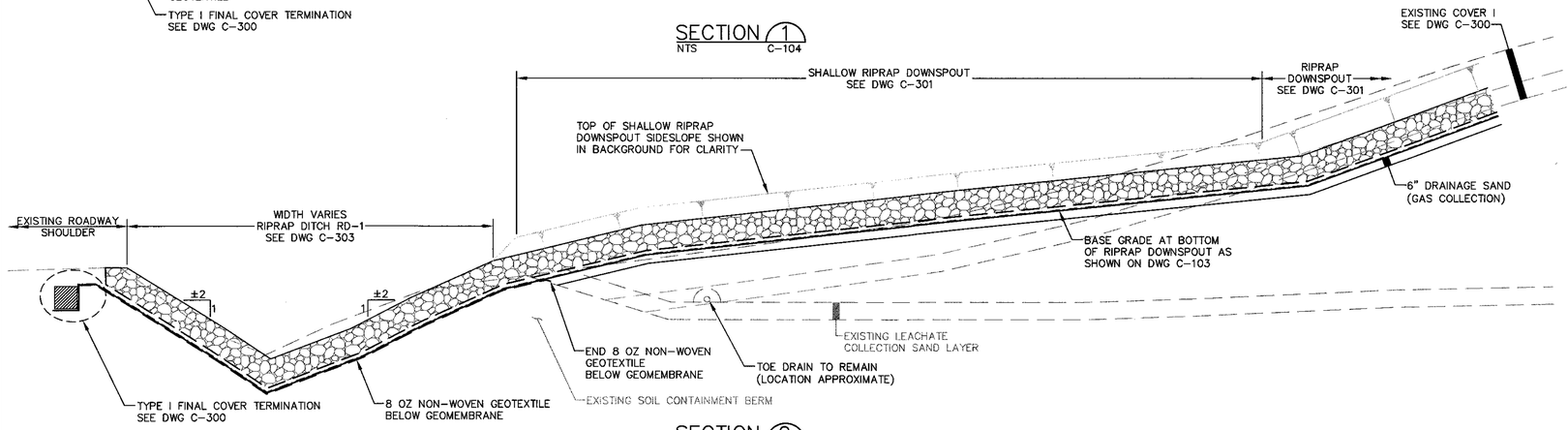
DESIGN BY: PCM
DRAWN BY: SJM
DATE: 4/2016
CHECKED BY:
LMN: NONE
CTB: SME-STD

JOB NO. 15250.00 DWG FILE DETAILS

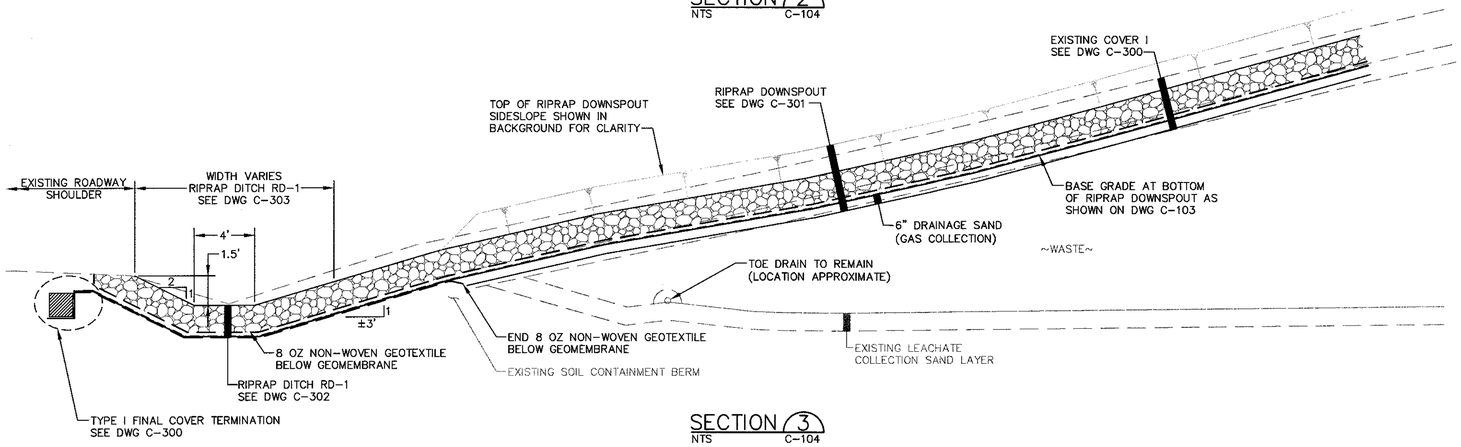
C-301



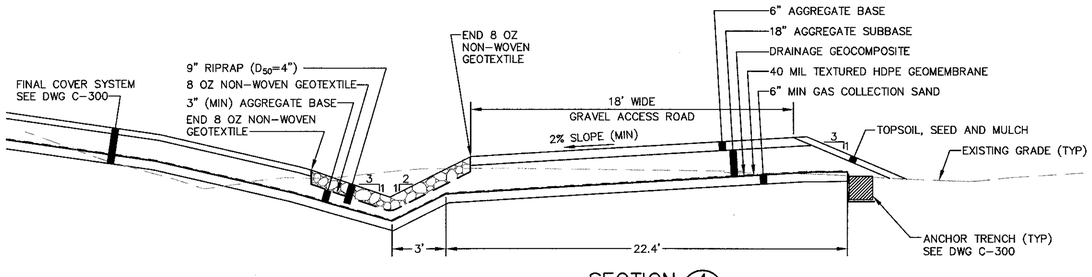

SECTION 1
NTS C-104




SECTION 2
NTS C-104




SECTION 3
NTS C-104




SECTION 4
NTS C-104

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | NMT | 11/2016 | RECORD DRAWING |
| | PCM | 6/2016 | ISSUED FOR CONSTRUCTION |
| | PCM | 4/2016 | ISSUED FOR BID |

STATE OF MAINE
CLAYTE JR. [illegible]
No. 5[illegible]
LICENSED
PROFESSIONAL ENGINEER

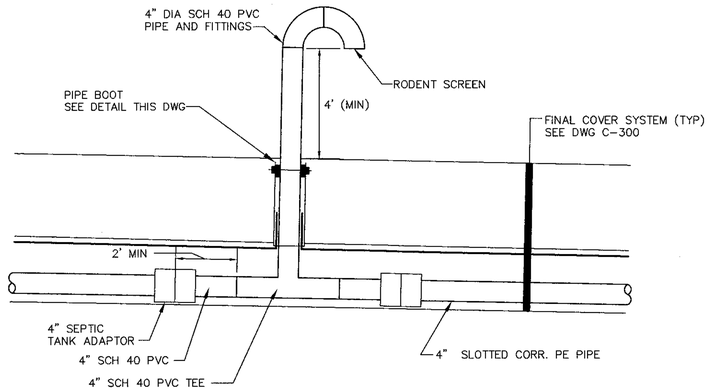
MAINE BUREAU OF GENERAL SERVICES
DOLBY LANDFILL COVER UPGRADE – PHASE 1
EAST MILLINOCKET, MAINE

SECTIONS AND DETAILS

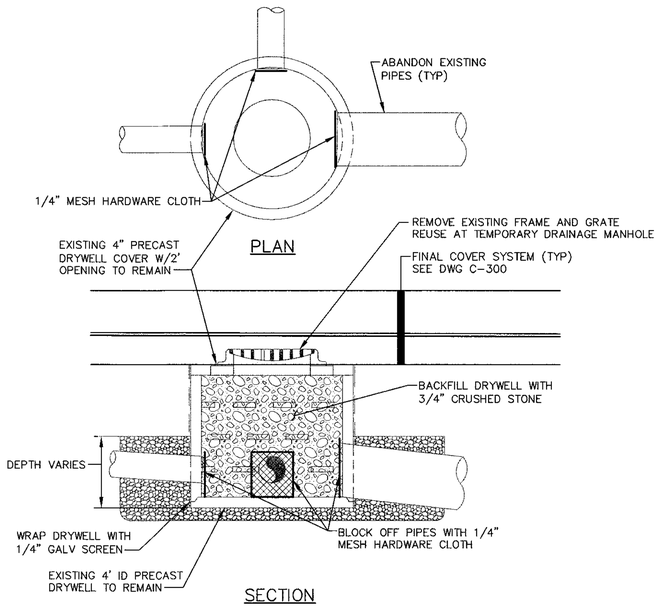
SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

| | |
|---|---|
| DESIGN BY: | PCM |
| DRAWN BY: | SJM |
| DATE: | 4/2016 |
| CHECKED BY: | |
| LMN: | NONE |
| CTB: | SME-STD |

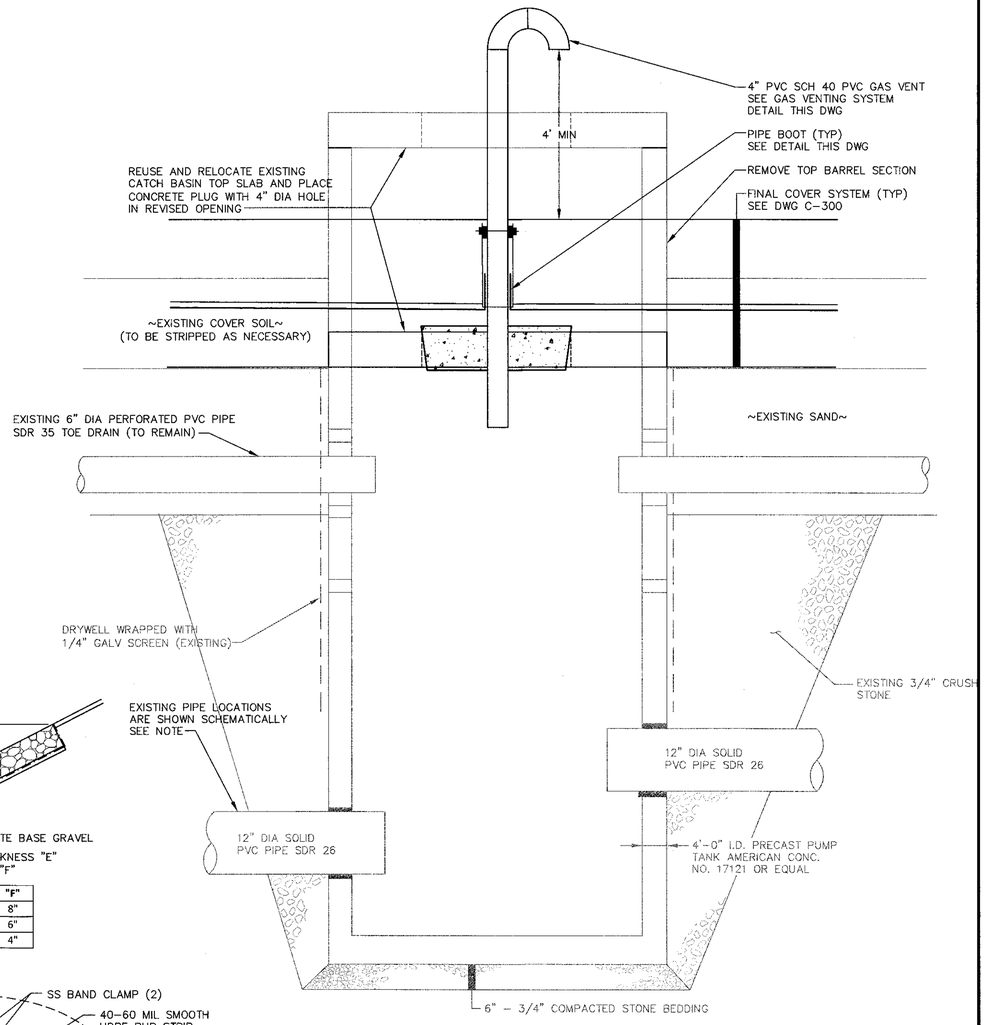
JOB NO. 15250.00 DWG FILE DETAILS C-302




## GAS VENTING SYSTEM
NTS

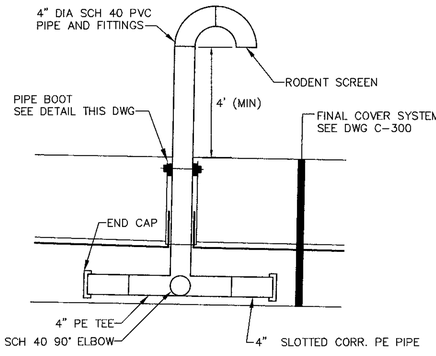



## DRAINAGE MANHOLE ABANDONMENT
NTS

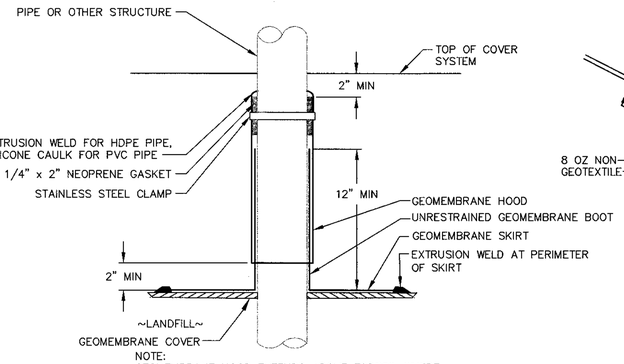



NOTE:
1. CONTRACTOR SHALL FIELD VERIFY PIPE LOCATIONS AND OTHER EXISTING CONDITIONS PRIOR TO ABANDONMENT.
2. COVER SYSTEM MATERIAL OVER CATCH BASINS VARIES TO AS THIN AS 6-8 INCHES.

## EXISTING CATCH BASIN ABANDONMENT
NTS

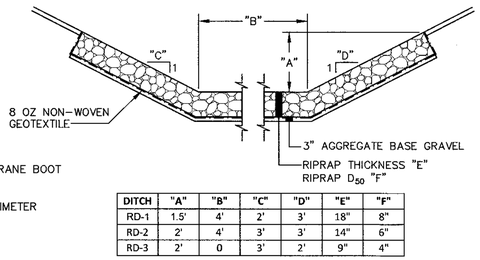



## ADDITIONAL GAS VENT
NTS



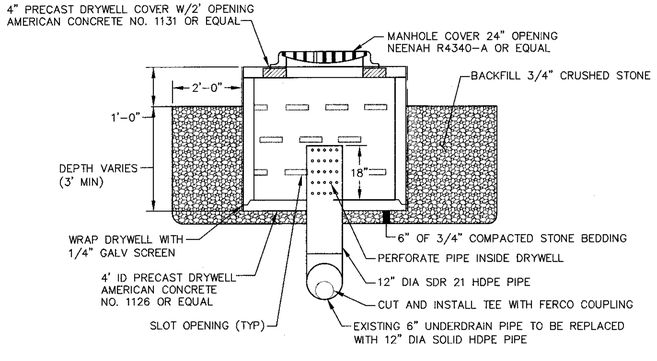

NOTE:
GEOMEMBRANE HOOD EXTENDS ABOVE TOPSOIL WHERE COVER MATERIALS ARE LESS THAN 14" THICK.

## PIPE BOOT
NTS

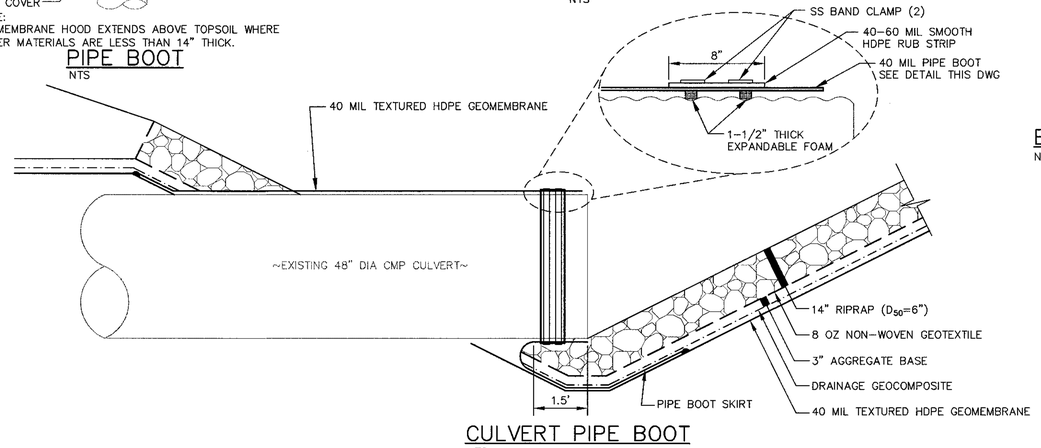



| DITCH | "A" | "B" | "C" | "D" | "E" | "F" |
|---|---|---|---|---|---|---|
| RD-1 | 1.5' | 4' | 2' | 3' | 18" | 8" |
| RD-2 | 2' | 4' | 3' | 3' | 14" | 6" |
| RD-3 | 2' | 0 | 3' | 2' | 9" | 4" |

## RIPRAP DITCH
NTS




## TEMPORARY DRAINAGE MANHOLE
NTS




## CULVERT PIPE BOOT
NTS

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | NMT | 11/2016 | RECORD DRAWING |
| | PCM | 6/2016 | ISSUED FOR CONSTRUCTION |
| | PCM | 4/2016 | ISSUED FOR BID |

STATE OF MAINE
TIMOTHY H. POTE, JR.
No. 9
LICENSED
PROFESSIONAL ENGINEER

MAINE BUREAU OF GENERAL SERVICES
DOLBY LANDFILL COVER UPGRADE – PHASE 1
EAST MILLINOCKET, MAINE

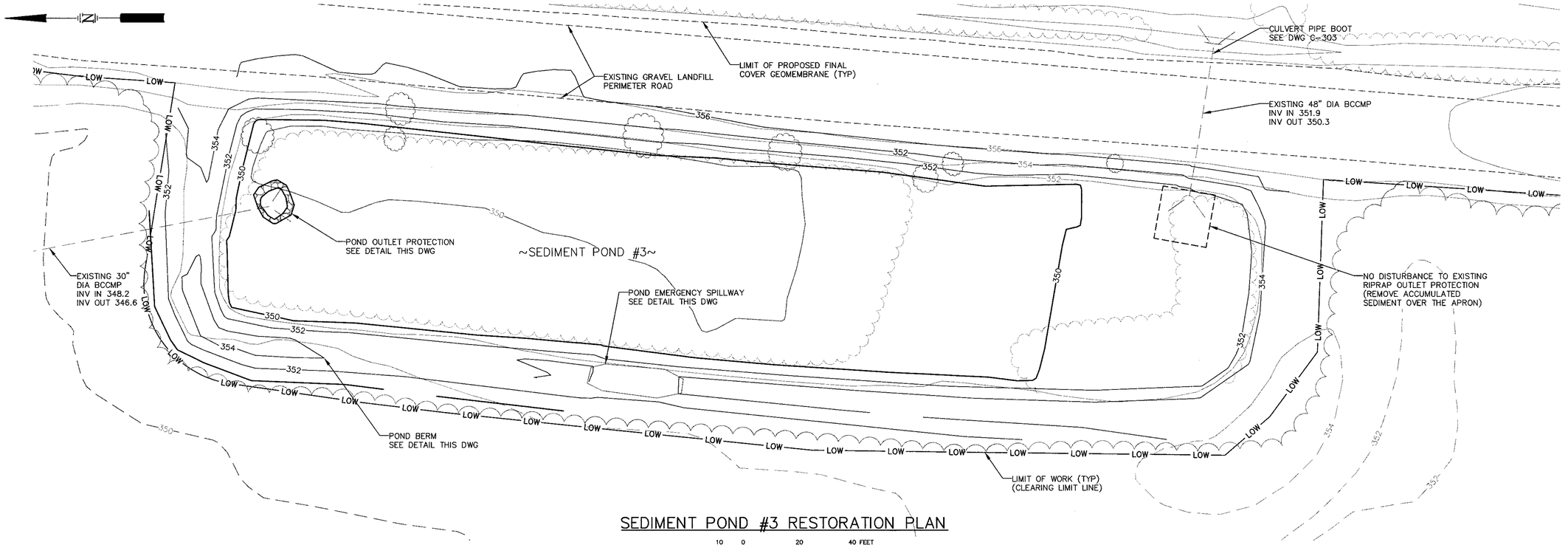
SECTIONS AND DETAILS

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

| | |
|---|---|
| DESIGN BY: | PCM |
| DRAWN BY: | SJM |
| DATE: | 4/2016 |
| CHECKED BY: | |
| LMN: | NONE |
| CTB: | SME-STD |

JOB NO. 15250.00 DWG FILE DETAILS

C-303

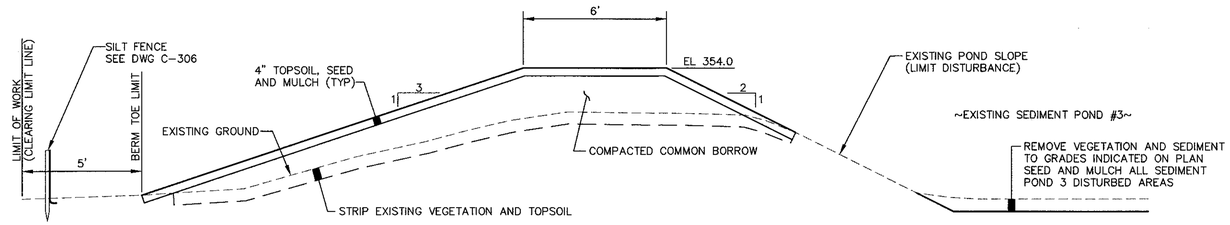



## SEDIMENT POND #3 RESTORATION PLAN

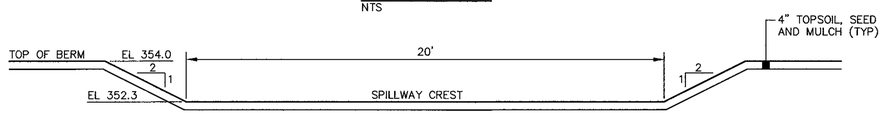
10 0 20 40 FEET

NOTES

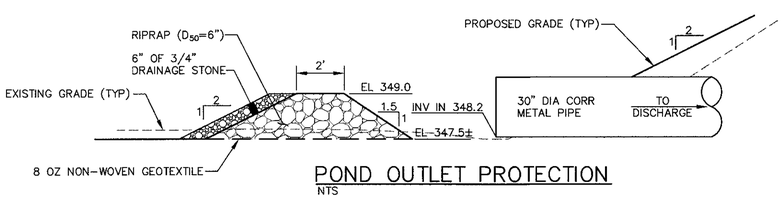
1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, NORRIDGEWOCK, MAINE. PHOTO DATE 10/15/2015. HORIZONTAL DATUM MAINE STATE COORDINATE SYSTEM EAST ZONE, NAD 83. GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE. VERTICAL DATUM: NAVD 1929. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
2. ADDITIONAL DITCH TOPOGRAPHY ALONG TOE OF LANDFILL BY SEVEE & MAHER ENGINEERS, INC., CUMBERLAND, MAINE, DATED 10/7/2015.
3. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.




## POND BERM
NTS




## POND EMERGENCY SPILLWAY
NTS




## POND OUTLET PROTECTION
NTS

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | NAC | 11/2016 | RECORD DRAWING |
| | PCM | 6/2016 | ISSUED FOR CONSTRUCTION |
| | PCM | 4/2016 | ISSUED FOR BID |

STATE OF MAINE — TIMOTHY J. POTTLE No. 5 — LICENSED PROFESSIONAL ENGINEER

MAINE BUREAU OF GENERAL SERVICES
DOLBY LANDFILL COVER UPGRADE – PHASE 1
EAST MILLINOCKET, MAINE

SEDIMENT POND #3 RESTORATION PLAN AND DETAILS

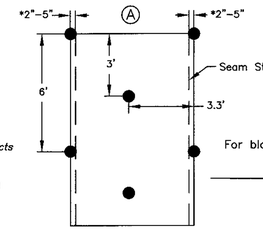
SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

DESIGN BY: PCM
DRAWN BY: SJM
DATE: 4/2016
CHECKED BY:
LMN: POND-RESTORE
CTB: SME-STD

JOB NO. 15250.00 DWG FILE BASE

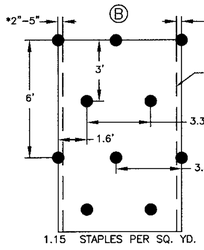
C-305

NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS
14649 HIGHWAY 41 NORTH
EVANSVILLE, IN 47725
800-772-2040
www.nagreen.com



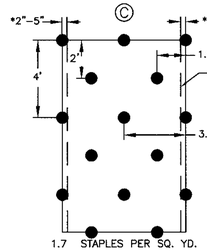

0.7 STAPLES PER SQ. YD.

For blankets with the North American Green DOT System™ place staples through each of the dots.



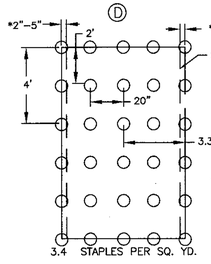

1.15 STAPLES PER SQ. YD.

For blankets with the North American Green DOT System™ place staples through each of the dots.




1.7 STAPLES PER SQ. YD.

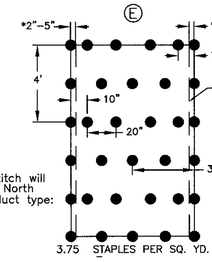
For blankets with the North American Green DOT System™ place staples through each of the dots.




3.4 STAPLES PER SQ. YD.

For blankets with the North American Green DOT System™ place staples through each of the dots.

*Location of Seam Stitch will vary depending on North American Green product type:

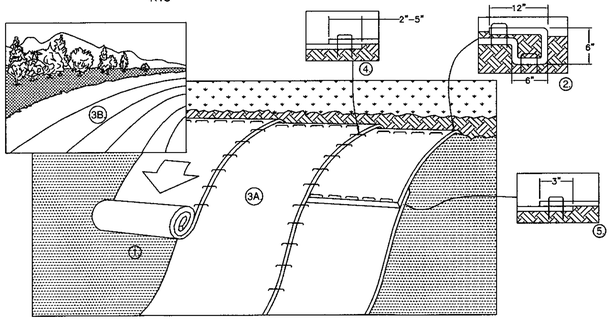



3.75 STAPLES PER SQ. YD.

For blankets with the North American Green DOT System™ place staples through each of the dots.

## ECB STAPLE PATTERN GUIDE

NTS

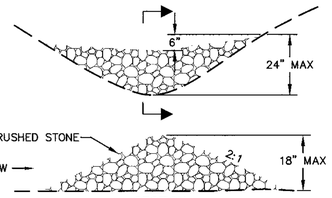



1. PREPARE BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S). INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6"DEEPx6"WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™. STAPLES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP'S WIDTH.

*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

## SLOPE INSTALLATION

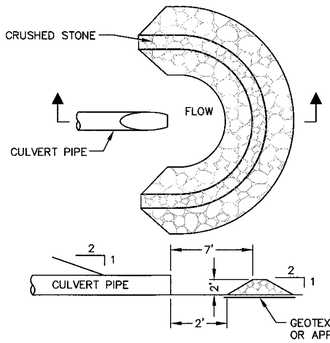
NTS




SECTION

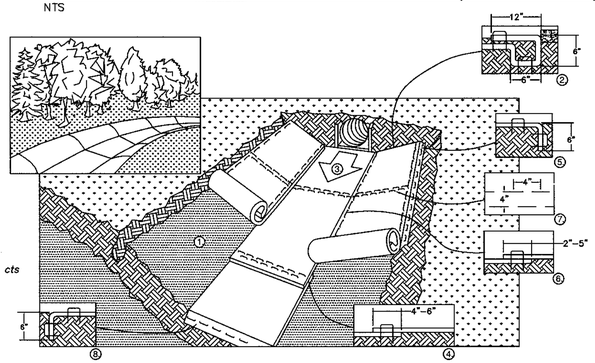
## STONE CHECK DAM

NTS



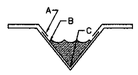

## RIPRAP CULVERT INLET PROTECTION (TEMPORARY)

NTS




1. PREPARE BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S). INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6"DEEPx6"WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL CENTER RECP'S IN THE DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP'S END OVER END (SHINGLE STYLE) WITH A 4" TO 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECP'S.
5. FULL LENGTH EDGE OF RECP'S AT OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP'S MUST BE OVERLAPPED APPROXIMATELY 2" TO 5" (DEPENDING ON RECP'S TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP'S MUST BE ANCHORED WITH A ROW OF STAPLES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.




CRITICAL POINTS

A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

## CHANNEL INSTALLATION

NTS

TEMPORARY AND PERMANENT
EROSION AND SEDIMENTATION CONTROL

A. GENERAL

1. All soil erosion and sediment control will be done in accordance with the Maine Erosion and Sediment Control Best Management Practices, Maine Department of Environmental Protection, March 2003, and as currently revised.
2. The contractor will be responsible for the repair/replacement/ maintenance of all erosion control measures until all disturbed areas are stabilized. Contractor shall be responsible for plan preparation, documentation and inspection in accordance with Maine Construction General Permit obtained for this project.
3. Disturbed areas will be permanently stabilized within 7 days of final grading. Disturbed areas not to be worked upon within 14 days of disturbance, shall be temporarily stabilized within 7 days of the disturbance.
4. In all areas, removal of trees, bushes and other vegetation, as well as disturbance of topsoil will be kept to a minimum while allowing proper site operations.
5. Any suitable topsoil will be stripped and stockpiled for reuse in final grading. Topsoil will be stockpiled in a manner such that natural drainage is not obstructed and no off-site sediment damage will result. If a stockpile is necessary, the side slopes of the topsoil stockpile will not exceed 2:1. Silt fence will be installed around the perimeter of all topsoil stockpiles. Topsoil stockpiles will be surrounded with siltation fencing and will be temporarily seeded with aroostook rye, annual or perennial ryegrass, within 7 days of formation, or temporarily mulched if seeding cannot be done within the recommended seeding dates. Recommended seeding dates and application rates are as follows:

Aroostook Rye: Recommended Seeding Dates: 9/10 – 11/1
Application Rate: 112 lbs/acre

Perennial Ryegrass: Recommended Seeding Dates: 4/1 – 9/10
Application Rate: 85 lbs/acre

Mulch: o Hay or Straw
Application Rate: 2 – 3 tons/acre.
Anchor with tack or 300 lbs/acre fiber mulch

o Wood Fiber Cellulose
Application Rate: 4,000 lbs/acre.
Anchoring not required

B. TEMPORARY MEASURES

1. Silt Fence

(a) Silt fence will be installed prior to and downgradient of all construction activity where soil disturbance may result in erosion.

(b) The height of a silt fence will not exceed 36 inches.

(c) The filter fabric will be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter cloth will be spliced together only at a support post, with a minimum 6-inch overlap, and securely sealed.

(d) Posts will be spaced a maximum of 10 feet apart at the barrier location and driven securely into the ground (minimum of 12 inches). When extra strength fabric is used without the wire support fence, post spacing will not exceed 6 feet.

(e) A trench will be excavated approximately 4 inches wide and 4 inches deep along the line of posts and upgradient from the barrier.

(f) The standard strength of filter fabric will be stapled or wired to the fence, and 8 inches of the fabric will be extended into the trench. The fabric will not extend more than 36 inches above the original ground surface. Filter fabric will not be stapled to existing trees.

(g) When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric will be stapled or wired directly to the posts with all other provisions of item (f) applying.

(h) The trench will be backfilled and the soil compacted over the filter fabric.

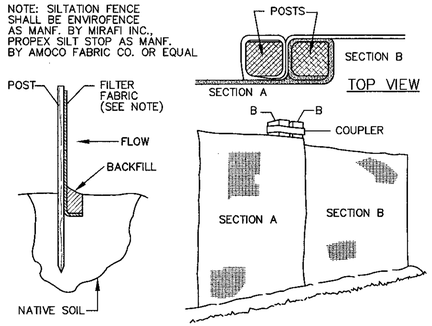
(i) Silt fences will be removed when they have served their useful purpose, but not before the upgradient areas have been permanently stabilized.

(j) Silt fences will be inspected immediately after each rainfall and at least daily during prolonged rainfall. They will be inspected if there are any signs of erosion or sedimentation below them. Any required repairs will be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind them, they will be replaced with a temporary crushed stone check dam.

(k) Should the fabric on a silt fence decompose or become ineffective prior to the end of the expected usable life, and the barrier still be necessary, the fabric will be replaced promptly.

(l) Sediment deposits should be removed after each storm event if significant buildup has occurred or if deposits exceed 15 inches in depth.

NOTE: SILTATION FENCE SHALL BE ENVIROFENCE AS MANF. BY MIRAFI INC., PROPEX SILT STOP AS MANF. BY AMOCO FABRIC CO. OR EQUAL




## SILTATION FENCE

NTS

B. TEMPORARY MEASURES (CONT)

2. Stone Check Dams

(a) Stone check dams should be constructed of 2 to 3-inch stone. The stone should be placed according to the configuration shown on the drawing. Hand or mechanical placement will be necessary to achieve complete coverage of the ditch or swale and to ensure that the center of the dam is lower than the edges.

(b) Check dams should be installed as the swale is being constructed.

(c) Sediment will be removed from behind the check dams when it has accumulated to one half of the original height of the dam.

(d) Check dams will be removed when the grass has matured sufficiently to protect the ditch or swale. The area beneath the check dams will be seeded and mulched immediately after they are removed.

(e) Regular inspections will be made to ensure that the center of the dam is lower than the edges. Erosion caused by high flows around the edges of the dam will be corrected. If evidence of siltation in the water is apparent downstream from the check dam, the check dam will be inspected and adjusted. Check dams will be checked for sediment accumulation after each significant rainfall.

3. WOOD WASTE COMPOST/BARK FILTER BERMS

(a) The filter berm shall consist of an approved wood waste compost/bark mulch mix or recycled composted bark flume grit and fragmented wood generated from water-flume log handling systems or small shredding of stumpage (6 inches long x 1/2" dia.). The mixture needs to be a well-graded blend of organic and mineral substance. The composition is usually manufactured on or off site and by blending it with a well graded sand and gravel. The objective is a tight, heavy, non-erodible mixture that is not composed of one uniform material, i.e. just bark mulch will not suffice. Comparable composted mixes can be used upon approval of the Department of Environmental Protection, Bureau of Land and Water Quality.

(b) The mix shall conform to the following standards:
* Moisture Content 30 – 60%
* PH-5.0-8.0
* Screen Size – 100% less than 6-inch max; 70% less than 0.75 inch.
* No less than 80% organic material (dry weight) by loss of ignition.
* No stones larger than 4 inch diameter.
* Silts, clays or sugar sands are not acceptable in the mix.

(c) Installation and Size of Berm: The dimensions of the berm are more a function of the strength of the material than the flows (forces) it will encounter. At a minimum the berm shall be 4 feet wide and 18 inches high. The berm shall be placed, uncompacted along a relatively level contour. Wherever possible the existing surface must be scoured and the mixture keyed in like any other sediment control measure.

(d) Maintenance: All deficiencies shall be immediately corrected with additional material place on top of the berm to reach the desired height. When the berm is decomposed, clogged with sediment, eroded, or becomes ineffective, it shall be replaced.

(e) Clean up and Retrieval: At the end of the job, an erosion control berm shall be removed or spread out so that the native earth can be seen below.

4. Erosion Control Mats

(a) During the growing season (April 1 to September 10) use mats indicated on drawings an channel bottoms and steep slopes >3H:1V.

(b) During the fall and winter (September 11 to March 31) use heavy grade mats as recommended by the engineer on all channel bottoms and slopes >4h:1V.

(c) Install mats in accordance with the manufacturer's recommendations.

5. Erosion Control Measures

(a) The smallest practical area of land shall be exposed to construction at any one time.

(b) The temporary erosion control measures shall be maintained until the permanent erosion control measures are present.

(c) All areas disturbed by construction shall have available loam placed before seeding (or an acceptable alternative).

(d) After construction is terminated, all temporary erosion control measures shall be removed and accumulated sediment disposed of in a secure location.

(e) Mulch shall be mowings of acceptable herbaceous growth, free from noxious weeds or woody stems, and shall be dry.

C. PERMANENT MEASURES

1. Riprapped Ditches, Aprons and Plunge Pools

(a) Construct riprapped ditches, aprons and plunge pools in accordance with the details shown on the Drawings.

(b) Stone for riprap will consist of sub-angular field stone or rough unhewn quarry stone. The stone will be hard and of such quality that it will not disintegrate on exposure to water or weathering, be chemically stable and suitable in all other respects for the purpose intended. The bulk specific gravity (saturated surface-dry basis) of the individual stones will be at least 2.5.

(c) The riprap should be placed so that it produces a dense well-graded mass of stone with a minimum of voids. The desired distribution of stones throughout the mass may be obtained by selective loading at the quarry, controlled clumping of successive loads during final placing, or by combination of these methods. The riprap should be placed to its full thickness on one operation. The riprap should not be placed in layers. The riprap should not be placed by dumping into chutes or similar methods which are likely to cause segregation of the various stone sizes. Care should be taken not to dislodge the underlying material when placing the stones.

The finished slope should be free of pockets of small stone or clusters of large stones. Hand placing may be necessary to achieve the required grades and a good distribution of stone sizes. Final thickness of the riprap blanket should be within plus or minus 1/4 of the specified thickness.

(d) Riprap will be inspected periodically to determine if high flows have caused scour beneath the riprap or dislodged any of the stone. If repairs are needed, they should be accomplished immediately.

B. PERMANENT MEASURES (CONT)

2. Topsoil, Seed, Mulch

(a) Topsoil: Use stockpiled materials spread to the depths shown on the plans, If available. Approved topsoil substitutes may be used (refer to Section C-2-2 of Best Management Practices Handbook, see Note 2).

(b) Seeding should be completed by September 15 of each year. Areas not seeded or which do not obtain satisfactory growth by October 1, will be seeded with Aroostook Rye or mulched at rates previously specified herein. After November 1, or the first killing frost, disturbed areas should be treated as indicated in C below:

SEEDING SPECIFICATIONS

| Seed | Permanent Seeding (180 lbs/acre) | Temporary Seeding (120 lbs/acre) |
|---|---|---|
| Red Fescue | 50% by weight | |
| Red Top | 2% by weight | 100% by weight |
| White Cover | 5% by weight | |
| Annual Ryegrass | 25% by weight | |
| Birdsfoot Trefoil | 3% by weight | |
| Kentucky Bluegrass | 15% by weight | |

Fertilizer: Apply 2 pounds per unit (87 lbs/acre) of nitrogen, phosphoric acid, and potash, or 41.3 lbs/acre of 19-19-19 fetilizer.

Lime: Apply liquid limestone at a rate of 3 tons per acre (138 lbs/1,000 sq ft).

Mulch: Mulch with weed-free hay or straw at 3.0 tons per acre with tack or 260 lbs/acre fiber mulch.

(c) If permanent vegetated stabilization cannot be established due to the season of the year, all exposed and disturbed areas not to undergo further disturbance are to have dormant seeding applied and be temporarily mulched to protect the site. The following methods may be used to perform a dormant seeding:

(1) Prepare the seedbed, add the required amounts of lime and fertilizer, then mulch and anchor. After the first killing frost and before snow fall, broadcast or hydroseed the selected seed mixture. Double the regular seeding rates for this type seeding.

(2) When soil conditions permit, between the first killing frost and before snow fall, prepare the seedbed, lime and fertilize, apply the selected seed mixture, and mulch and anchor. Double the regular seeding rates for this type of seeding.

Dormant seedings need to be anchored extremely well on slopes, ditch bases and areas of concentrated flows.

Dormant seeding requires inspection and reseeding as needed in the spring. All areas where cover is inadequate must be immediately reseeded and mulched as soon as possible.

(3) Erosion Control Mats
(a) Install mats as indicated on drawings and in accordance with manufacturers' recommendations

D. MAINTENANCE PLAN

1. Routine Maintenance Inspection shall be performed annually by a qualified person during wet weather to ensure that the facility performs as intended. Inspection priorities shall include checking erosion controls for accumulation of sediments.

2. Grassed Areas

(a) Lime according to a soil test or at a minimum of every five years using a rate of 2 tons per acre (100 pounds per 1,000 sq ft)

(b) Topdress with fertilizer in the early spring (before May 15) one year after planting with a balanced fertilizer, applying 50 pounds of nitrogen/acre (500 pounds of 10-20-20 per acre). Thereafter, fertilize according to a soil test or broadcast biennially, 300 pounds of 10-10-10 or equivalent per acre (7.5 pounds per 1,000 sq ft).

E. INSPECTIONS

1. Inspections will be undertaken by qualified personnel to ensure that temporary and permanent erosion and sedimentation controls are properly installed and correctly functioning, and that additional erosion control measures are installed if needed. Such inspections will occur weekly and before and after each significant rainfall event (1 inch or more within a 24 hour period) during construction until permanent erosion control measures have been properly installed and the site is stabilized.

2. A log (report) must be kept summarizing the scope of the inspection, name(s) and qualifications of the personnel making the inspection, the date(s) of the inspection, and the major observations relating to the operation of erosion and sedimentation controls and pollution prevention measures. Major observations must include: BMP's that need to be maintained; location(s) of BMP's that failed to operate as designed or proved inadequate for a particular location; and location(s) of where additional BMP's area needed that did not exist at the time of inspection. Follow-up to correct deficiencies or enhance controls must also be indicated in the log and dated, including what action was taken and when.

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | NMT | 11/2016 | RECORD DRAWING |
| | PCM | 6/2016 | ISSUED FOR CONSTRUCTION |
| | PCM | 4/2016 | ISSUED FOR BID |

STATE OF MAINE — CUY COTE No. 12116 — LICENSED PROFESSIONAL ENGINEER

MAINE BUREAU OF GENERAL SERVICES
DOLBY LANDFILL COVER UPGRADE – PHASE 1
EAST MILLINOCKET, MAINE

SECTIONS AND DETAILS

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

DESIGN BY: PCM
DRAWN BY: SJM
DATE: 4/2016
CHECKED BY:
LMN: NONE
CTB: SME-STD

JOB NO. 15250.00 DWG FILE DETAILS

C-306

## GENERAL NOTES

1. UTILITIES AND AGENCIES

BANGOR AND AROOSTOOK RAILROAD
MAINE DEPARTMENT OF TRANSPORTATION - DIVISION OFFICE, BANGOR, MAINE
BANGOR HYDRO-ELECTRIC CO. – ROUTE 2, LINCOLN, MAINE
NYNEX
DIG SAFE

2. NOTES

–REFER TO DRAWING YB–22974 FOR MANHOLE AND STRUCTURE SCHEDULE
–PAVEMENT AND BASES REMOVED BY THE PIPELINE CONSTRUCTION SHALL BE REPLACED TO THE SAME THICKNESS OF THE ADJACENT LAYERS.
–ALL AREAS DISTURBED BY THE PIPELINE CONSTRUCTION AND NOT RESURFACED SHALL BE COVERED WITH TWO (2") INCHES OF LOAM, GRADED, SEEDED, AND MULCHED.
–THRUST RESTRAINT REQUIRED ON ALL FORCE MAIN BENDS GREATER THAN 22.5°. SEE DETAIL YB–22977

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| STRUCTURES | | |
| MANHOLE | | |
| CONTOUR | 211 | 211 |
| WETLAND EDGE | | |
| LEACHATE LINE | | |
| SURVEY BASELINE | | |
| TREE LINE | | |
| OVERHEAD TELEPHONE | O.T. | |
| UTILITY POLE | | |
| TEST PIT | 37 | 37 |
| WETLAND SETBACK BUFFER | | |
| RAILROAD | | |
| FILL OR CUT AREA (PROFILE) | | |

## DATUM

HORIZONTAL DATUM FROM STATION 0+20 TO STATION 167+00 IS BASED ON MAINE STATE GRID (EAST ZONE) 1927 NORTH AMERICAN DATUM.

VERTICAL DATUM FROM STATION 0+00 TO STATION 167+00 IS BASED ON NGVD29.

HORIZONTAL AND VERTICAL CONTROL

SQUAW BAY CONTROL POINT #1 = BRASS DISK IN TOP OF CONCRETE MANHOLE ON WESTERLY SIDE OF LEACHATE POND.

COORDINATES: NORTH 664363.732
EAST 473676.782

ELEVATION: 348.59

IDENTIFICATION: "MON.#1"

SQUAW BAY CONTROL POINT #2 = BRASS DISK IN TOP OF CONCRETE PUMP STATION ON SOUTHERLY SIDE OF LEACHATE POND.

COORDINATES: NORTH 663871.733
EAST 473715.008

ELEVATION: 356.99

IDENTIFICATION: "MON.#2"

SQUAW BAY CONTROL POINT #29 = BRASS DISK IN TOP OF CONCRETE CYLINDER ON NORTHWEST CORNER OF FIBER RECYCLE BUILDING.

COORDINATES: NORTH 653349.381
EAST 478333.704

ELEVATION: 318.24

IDENTIFICATION: CONTROL MON. 705A

VERTICAL DATUM CONVERSION FACTOR

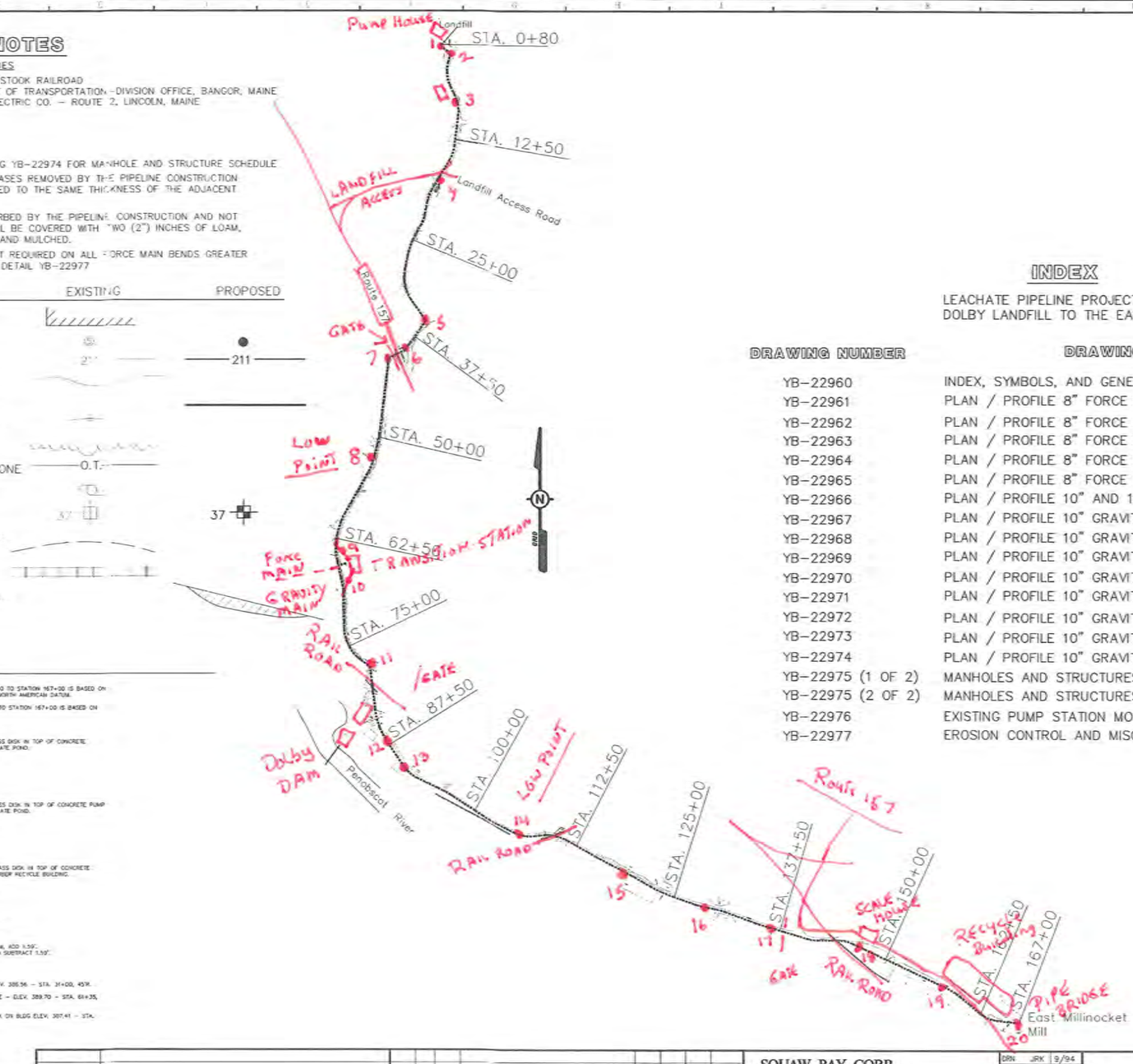
TO CONVERT NGVD (29) TO "MILL DATUM, ADD 11.59'.
TO CONVERT MILL DATUM TO NGVD (29) SUBTRACT 11.59'.

TEMPORARY BENCHMARKS (TBM)

TBM, PL-13 – TOP OF BOULDER – ELEV. 386.56 – STA. 31+00, 45'W.

TBM, SCOUT RD – TOP OF GRIND STONE – ELEV. 389.70 – STA. 64+35, 50'W.

TBM, GROUNDWOOD BLDG – PAINT MARK ON BLDG ELEV. 307.41 – STA. 167+00 165'W.




## INDEX

LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION



STATE OF MAINE
PETER J. TUBBS
2879
REGISTERED PROFESSIONAL ENGINEER
4-3-96

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C | 3/96 | RECVD DRAWING | MSB | PBT | | | |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | | 22846 | |
| B | 4/95 | ISSUED FOR BIDS | MSB | PBT | | 22846 | |
| P | 4/25 | PRELIMINARY CONSTRUCTION ISSUE | MSB | JRK | | 22846 | |
| ISSUE | NO. | DATE | REVISION | BY | CHK | APPVD | JOB NO. |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - Prelim. B - Bids
W - WE T.O. C - Const.
SCALE N.T.S.

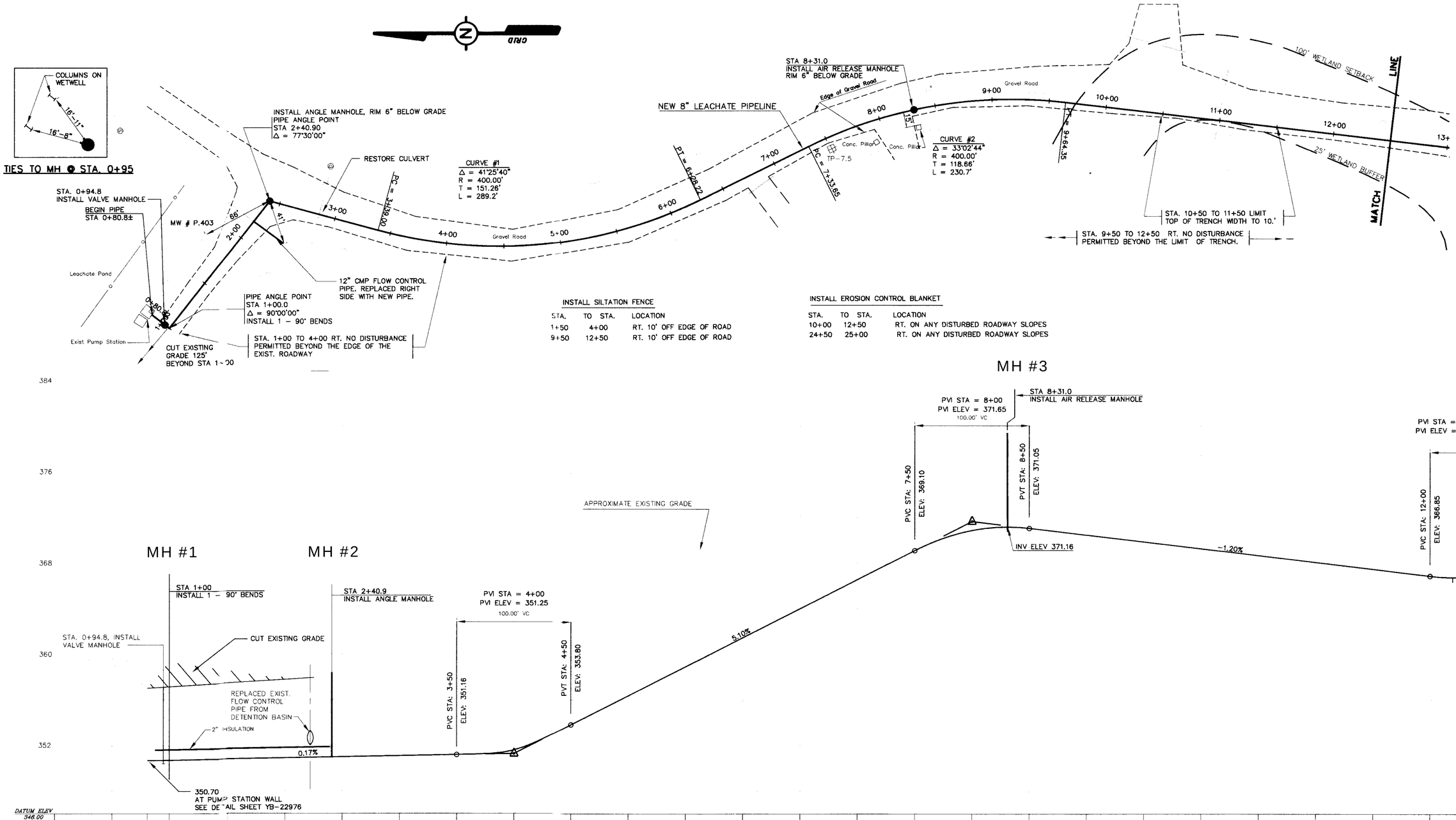
BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 0+80. TO STA. 167+00
8" FORCE MAIN
INDEX, SYMBOLS, AND GENERAL NOTES

JOB NO. 22846
ENG. REQ. NO. ____
FILE NO. 2-092-4783

YB–22960
SHEET 1 OF 1

D:\94-227\ACAD\DWGS\ Thu Mar 28 07:56:55 1996




384

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| YB-14801 | DOLBY 3 LANDFILL, INTERPRETIVE GEOLOGIC PROFILES | | | | | | |
| YB-14800 | DOLBY 3 LANDFILL, PHREATIC SURFACE MAP | | | | | | |
| YB-14799 | DOLBY 3 LANDFILL, BEDROCK SURFACE TOPOGRAPHY MAP | C | 3/96 | RECORD DRAWING | MSB | PBT | |
| YB-14797 | DOLBY 3 LANDFILL, SITE DEVELOPMENT | C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| YB-14796-A | DOLBY 3 LANDFILL, SITE DEVELOPMENT DETAILS | B | 4/95 | ISSUED FOR BIDS | MSB | PBT | |
| YB-14795 | DOLBY 3 LANDFILL, LEACHATE POND DETAILS | P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| SB-14888 | DOLBY LANDFILL LEACHATE PUMP STATION, PLANS & SECTIONS | P | 12/94 | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |

STATE OF MAINE
PETER B TUBBS 2678
REGISTERED PROFESSIONAL ENGINEER

SQUAW BAY CORP
CONSULTING ENGINEERS

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - Prelim | B - Bids
M - MH T.O. | C - Const.
1"=40'H;1'=4'V

BOWATER

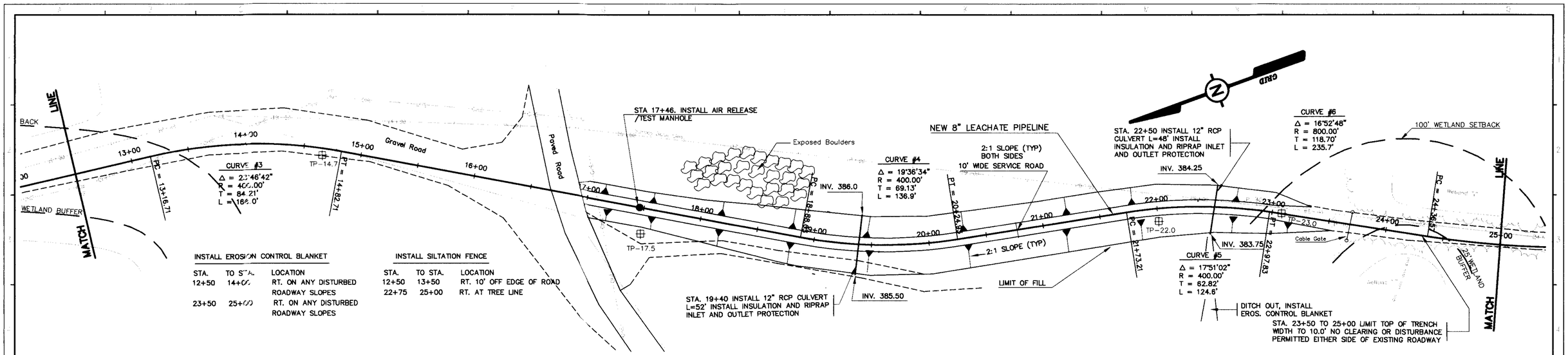
**EAST OPERATION**

LEACHATE PIPELINE PROJECT

DOLBY LANDFILL TO THE EAST OPERATION
STA. 0+80.8 TO STA. 12+50
8" FORCE MAIN
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22961
SHEET 1 OF 1




STATE OF MAINE
PETER B TUBBS
2878
REGISTERED PROFESSIONAL ENGINEER

| | | | | | | |
|---|---|---|---|---|---|---|
| C | | 3/96 | RECORD DRAWING | MSB | PBT | |
| C | | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| B | | 4/95 | ISSUED FOR BIDS | RMC | PBT | |
| P | | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| P | | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |
| DRAWING NO. | | | REVISION | BY | CHK | APPVD JOB NO |

**SQUAW BAY CORP**
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
SCALE 1"=40'H;1"=4'V

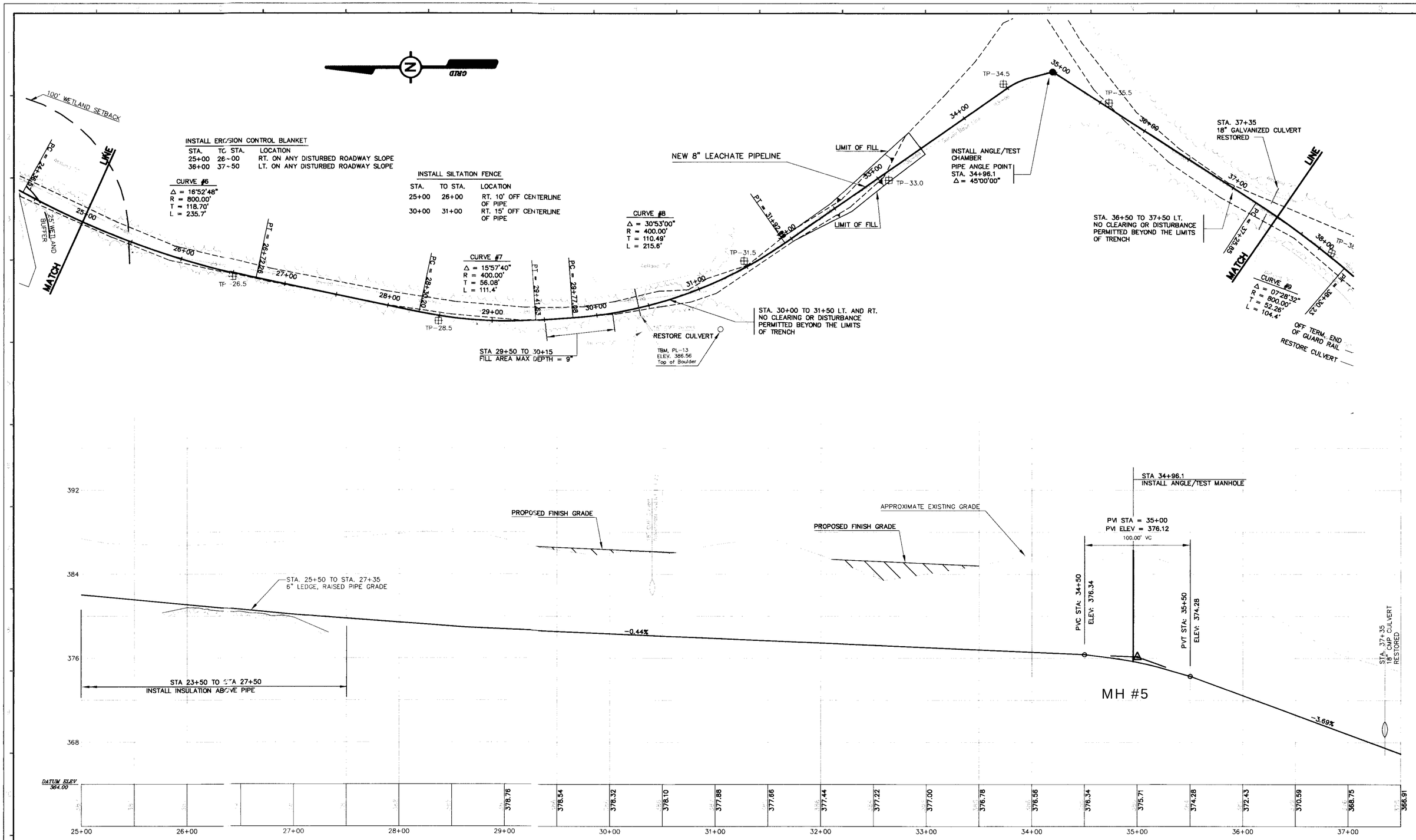
BOWATER
Great Northern Paper

**EAST OPERATION**
**LEACHATE PIPELINE PROJECT**
DOLBY LANDFILL TO THE EAST OPERATION
STA. 12+50 TO STA. 25+00
8" FORCE MAIN
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22962
SHEET 1 OF 1

L:\94227\ACAD\94226PH12 Thu Mar 28 14:07:37 1996




STATE OF MAINE
PETER B TUBBS 2678
REGISTERED PROFESSIONAL ENGINEER

| | | | | | |
|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT | |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| B | 4/95 | ISSUED FOR BIDS | RMC | PBT | |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 864 CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - Prelim | B - Bids
M - MH T.O. | C - Const.
SCALE 1"=40'H;1"=4'V

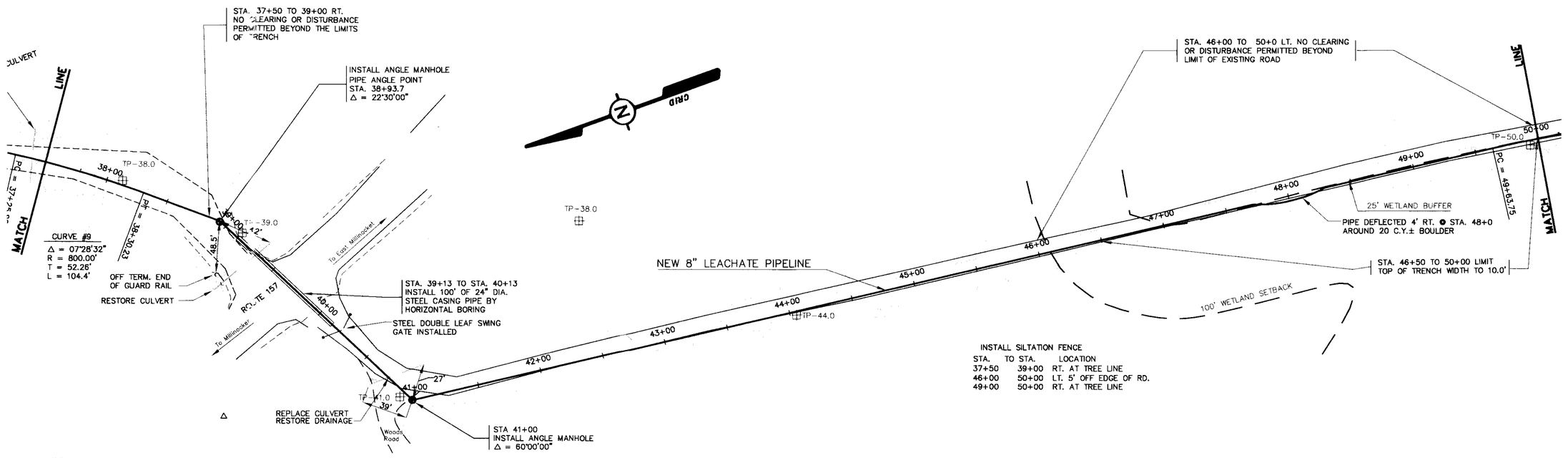
BOWATER
Great Northern Paper

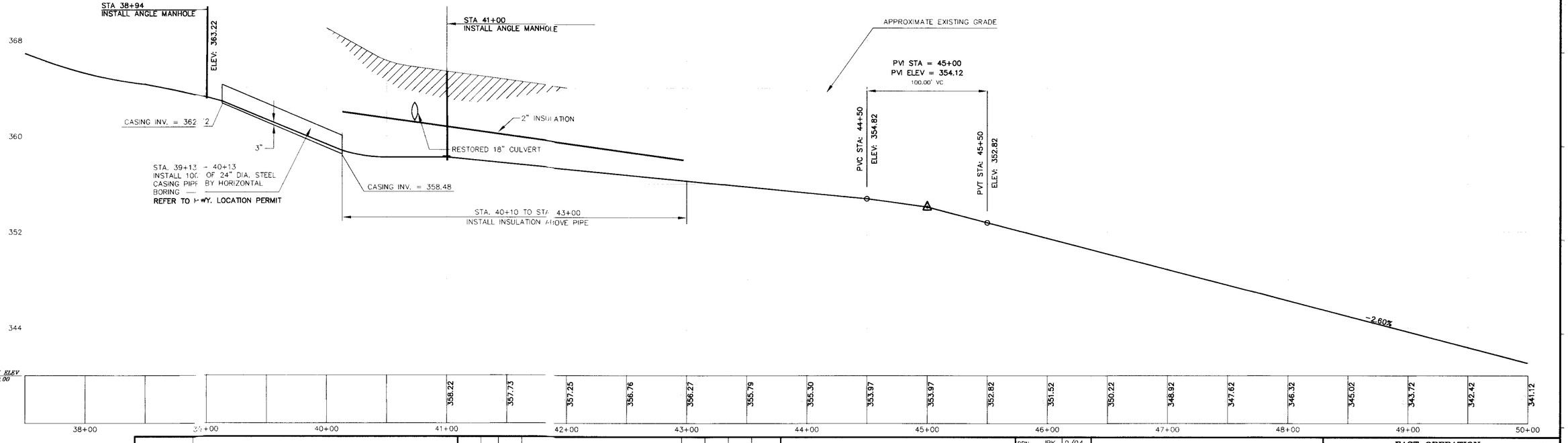
**EAST OPERATION**
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 25+00 TO STA. 37+50
8" FORCE MAIN
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22963
SHEET 1 OF 1

U: \94-227\ACAD\94227H12 Thu Mar 28 14:50:42 1996




| | | | | | | |
|---|---|---|---|---|---|---|
| | C | 3/96 | RECORD DRAWING | MSB | PBT | |
| | C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| | P | 4/95 | ISSUED FOR BIDS | RMC | PBT | |
| | P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| 18 | | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |

18 STATE HIGHWAY COMMISSION – PROJECT NO. S-0315(2)

PETER B TUBBS 2678 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE

SQUAW BAY CORP
CONSULTING ENGINEERS
CUMBERLAND CO., MAINE

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
1"=40'H;1"=4'V

BOWATER

**EAST OPERATION**

# LEACHATE PIPELINE PROJECT

DOLBY LANDFILL TO THE EAST OPERATION
STA. 37+50 TO STA. 50+00
8" FORCE MAIN
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22964
SHEET 1 OF 1

STA. 50+00 TO 56+00 LT. NO CLEARING OR DISTURBANCE PERMITTED BEYOND THE EXISTING ROAD

(Cedar post) property line marker

STA 51+50
INSTALL TEST MANHOLE

NEW POLE # 6

RESTORE CULVERT

CURVE #10
Δ = 07°35'58"
R = 800.00'
T = 53.13'
L = 106.1'

CURVE #11
Δ = 15°03'36"
R = 800.00'
T = 105.75'
L = 210.3'

CURVE #12
Δ = 41°46'55"
R = 800.00'
T = 305.35'
L = 583.39'

NEW 8" LEACHATE PIPELINE

Woods Road

Bituminous Paved Roadway

Gravel Parking Area

TP-55.2 TP-58.5 TP-59.5 TP-61.5

PC = 49+63.75
PT = 50+69.86
PC = 52+28.96
PT = 54+32.5
PC = 59+44.26

50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00

MATCH LINE

16" INSULA
10"

STA. 50+00 TO 55+50 LIMIT TOP OF TRENCH WIDTH TO 10'

STA.50+00 TO 56+00 RT. NO CLEARING OR DISTURBANCE PERMITTED BEYOND THE EXISTING TREE LINE

STA. 62+00 TO 62+50 RT. NO CLEARING OR DISTURBANCE BEYOND THE TREE LINE

18.5' 2.7'
NEW POLE # 6
TIES TO MH @ STA. 51+50

0'

25' WETLAND BUFFER

100' WETLAND SETBACK

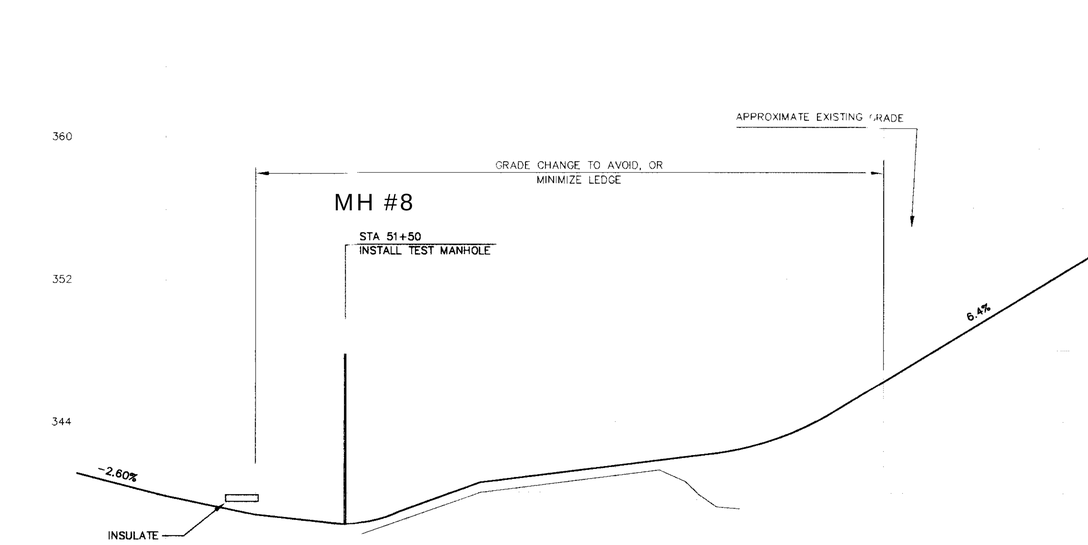
TBM-SCOUT RD.
ELEV 389.70

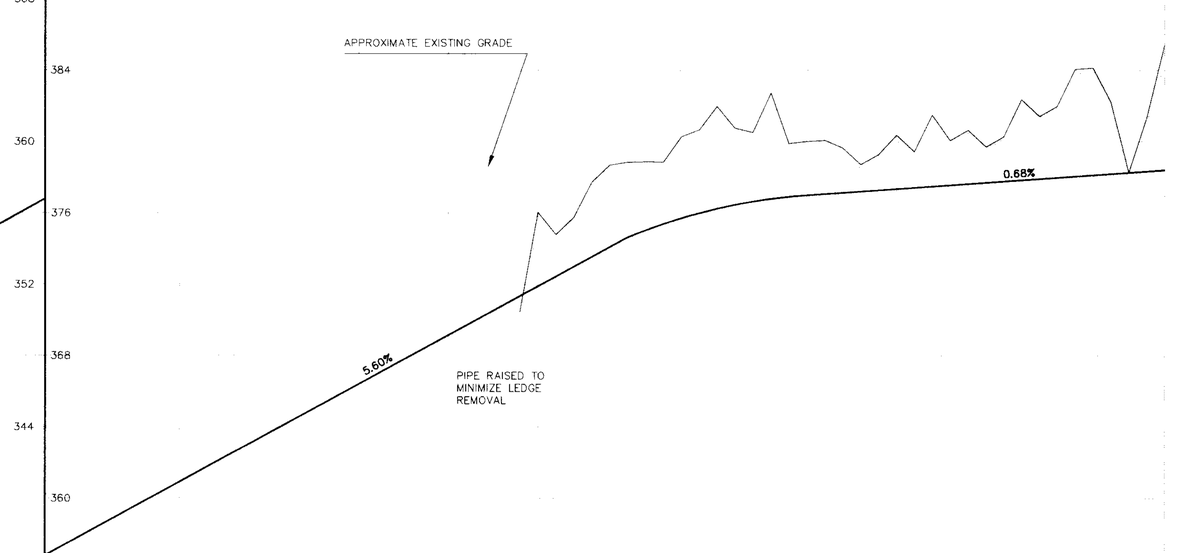
INSTALL SILTATION FENCE

| STA. | TO STA. | LOCATION |
|---|---|---|
| 50+00 | 55+50 | RT. AT THE TREE LINE |
| 62+00 | 62+50 | RT. AT THE TREE LINE |

INSTALL EROSION CONTROL BLANKET

| STA. | TO STA. | LOCATION |
|---|---|---|
| 50+00 | 55+50 | RT. ON ANY DISTURBED ROADWAY SLOPE |




PETER B TUBBS 2678 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE

| | | | | | |
|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT |
| B | 4/95 | ISSUED FOR BIDS | MSB | PBT |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT |

SQUAW BAY CORP
CONSULTING ENGINEERS

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - Prelim B - Bids
M - Mtl T.O. C - Const.

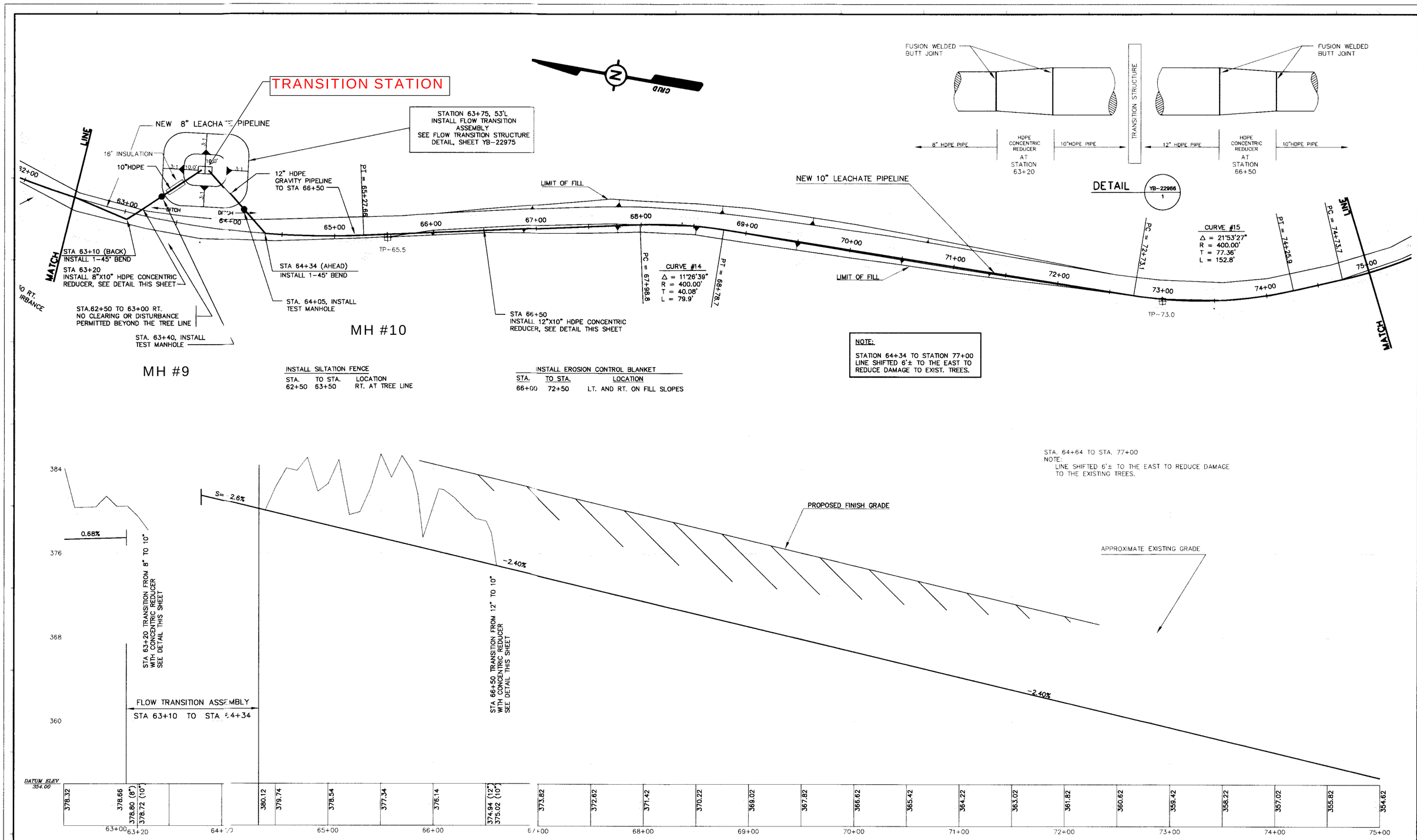
1"=40'-0"; 1"=4'-0"

BOWATER

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 50+00 TO STA. 62+50
8" FORCE MAIN
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22965
SHEET 1 OF 1




INSTALL SILTATION FENCE

| STA. | TO STA. | LOCATION |
|---|---|---|
| 62+50 | 63+50 | RT. AT TREE LINE |

INSTALL EROSION CONTROL BLANKET

| STA. | TO STA. | LOCATION |
|---|---|---|
| 66+00 | 72+50 | LT. AND RT. ON FILL SLOPES |

**NOTE:**

STATION 64+34 TO STATION 77+00 LINE SHIFTED 6'± TO THE EAST TO REDUCE DAMAGE TO EXIST. TREES.

STA. 64+64 TO STA. 77+00
NOTE:
LINE SHIFTED 6'± TO THE EAST TO REDUCE DAMAGE TO THE EXISTING TREES.




| | | | | | |
|---|---|---|---|---|---|
| C | | 3/96 | RECORD DRAWING | MSB | PBT |
| C | | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT |
| B | | 4/95 | ISSUED FOR BIDS | RMC | PBT |
| P | | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT |
| P | | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT |

STATE OF MAINE
PETER B. TURBS
3678
REGISTERED
PROFESSIONAL ENGINEER

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 1258 WISCASSET, MAINE 04578

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - Prelim | B - Bids
M - Mtl T.O. | C - Const.
1"=40'H;1"=4'V

BOWATER

**EAST OPERATION**

LEACHATE PIPELINE PROJECT

DOLBY LANDFILL TO THE EAST OPERATION
STA. 62+50 TO STA. 75+00
8" FORCE MAIN/12" & 10" GRAVITY TRANSITION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22966
SHEET 1 OF 1

NOTE: REFER TO B.A.R.R. CO.RIGHT OF WAY & TRACK MAP,SCHOODIC STREAM JCT. TO E. MILLINOCKET (V.2.h. / 2)

FUSION WELDED BUTT JOINT

PIPE

PIPE ANGLE POINT
STA 78+35.3
Δ = 45°00'00"
INSTALL ANGLE MANHOLE

STEEL DOUBLE LEAF SWING GATE INSTALLED

GRID

CURVE #16
Δ = 29°06'25"
R = 400.00'
T = 103.85'
L = 203.2'

PT = 76+15.9

PC = 74+13.7

TP-78.5

TP-76

AREA TO BE FILLED

NEW 10" LEACHATE PIPELINE

STA 272+70± (CENTERLINE TRACK) = STA 80+67± (LEACHATE LINE)

STA 80+22 – STA 81+22
INSTALL 100' OF 24" D.I. CASING PIPE

PC = 83+23.0

TEST PIT REQUIRED TO LOCATE 2" WATER (MAINTAIN IN SERVICE)

CURVE #17
Δ = 26°55'47"
R = 800.00'
T = 191.54'
L = 376.0'

PT = 86+99.0

BM 1

48'

107'

STA. 85+30
INSTALL TEST M.H.

Elec. Substation

MATCH LINE

MATCH LINE

75+00 76+00 77+00 78+00 79+00 80+00 81+00 82+00 83+00 84+00 85+00 86+00 87+00 88+00

APPROXIMATE EXISTING GRADE

MH #11

STA 78+35.3
INSTALL ANGLE MANHOLE

PROPOSED FINISH GRADE

GRADE CHANGE OVER UNBLASTED LEDGE 8-4-95

9.0'± COVER

-4.50%

STA 272+70± (CENTERLINE TRACK) = STA 80+67± (LEACHATE LINE)

STA 80+22 – STA 81+22
INSTALL 100' OF 24"DIA. D.I. CASING PIPE

360 352 344 336

100' VC
PVI STA = 82+00
PVI ELEV = 329.42

PVC STA: 81+50
ELEV: 331.67

PVT STA: 82+50
ELEV: 325.49

-7.86%

PVI STA = 84+50
PVI ELEV = 309.77
100.00' VC

PVC STA: 84+00 ELEV: 313.70

PVT STA: 85+00
ELEV: 309.34

MH #12
STA 85+30
INSTALL TEST MANHOLE

APPROXIMATE EXISTING GRADE

-0.86%

360 352 328 320 312 336

DATUM ELEV. 330.00

354.62 353.42 352.22 351.02 350.50 350.00 348.20 345.17 342.92 340.67 338.42 336.17 333.92

75+00 76+00 77+00 78+00 79+00 80+00 81+00 +25 +50

DATUM ELEV. 306.00

331.67 329.00 325.49 321.56 317.63 313.70 310.64 309.34 308.91 308.48 308.05 307.62 307.19

82+00 83+00 84+00 85+00 86+00 87+00

PETER B TUBBS 2878 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE

| | | | | | | |
|---|---|---|---|---|---|---|
| | | C | 3/96 | RECORD DRAWING | MSB | PBT |
| | | C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT |
| | | B | 4/95 | ISSUED FOR BIDS | MSB | PBT |
| | | | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT |
| | | | 3/15/95 | SUBMITTED FOR R.R. APPROVAL | PBT | PBT |
| V2h-2 | B.A.R.R. Co. RIGHT OF WAY & TRACK MAP, SCHOODIC STREAM JCT. TO E. MILLINOCKET | P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT |

SQUAW BAY CORP
CONSULTING ENGINEERS

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - Prelim | B - Bids | M - Mtl T.O. | C - Const.

1"=40'H; 1"=4'V

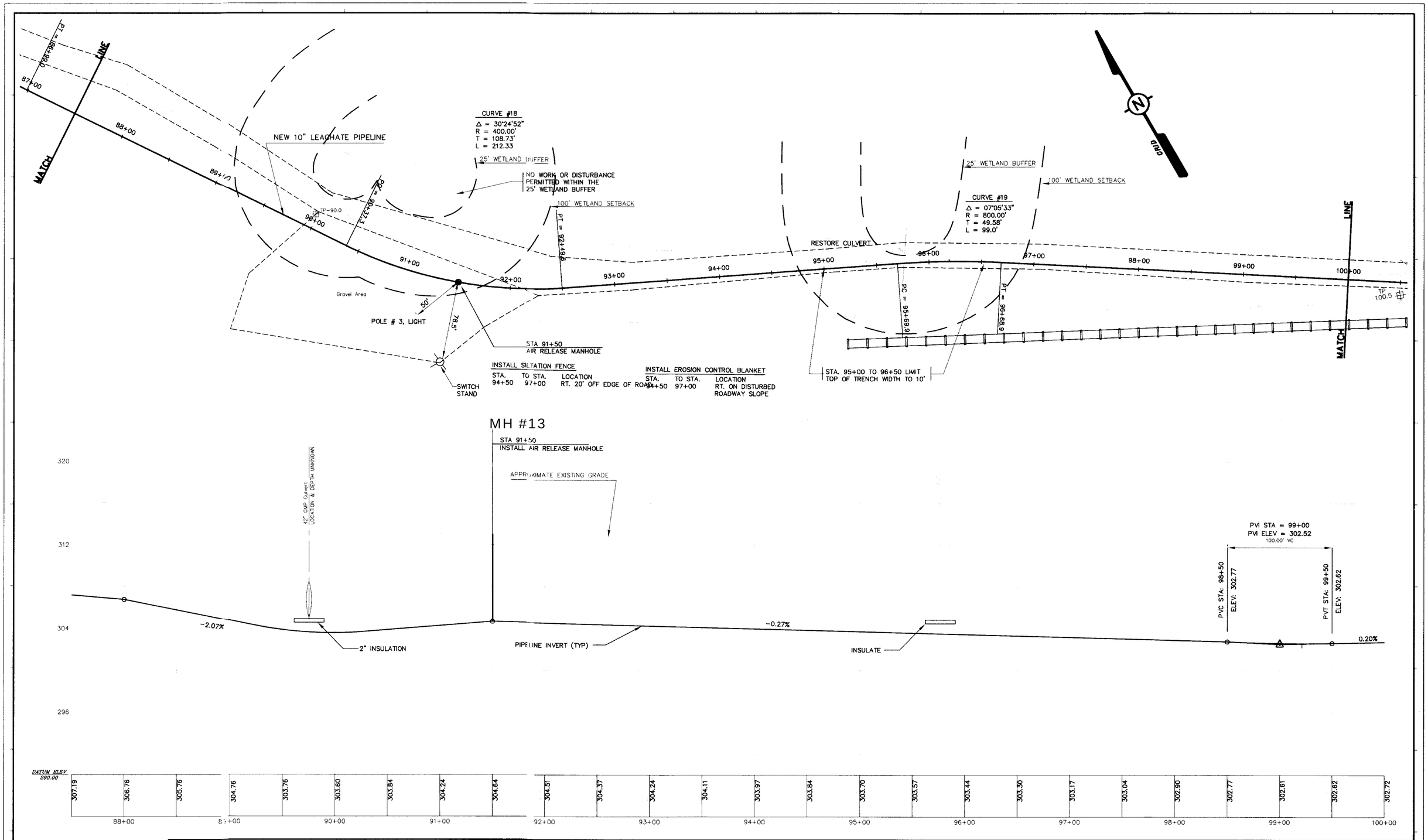
BOWATER

Forest Fiber Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 75+00 TO STA. 87+50
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22967
SHEET 1 OF 1




STATE OF MAINE
PETER B TUBBS 7678
REGISTERED PROFESSIONAL ENGINEER

| | | | | | |
|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT |
| B | 4/95 | ISSUED FOR BIDS | RMC | PBT |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT |

SQUAW BAY CORP
CONSULTING ENGINEERS
PORTLAND, MAINE

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

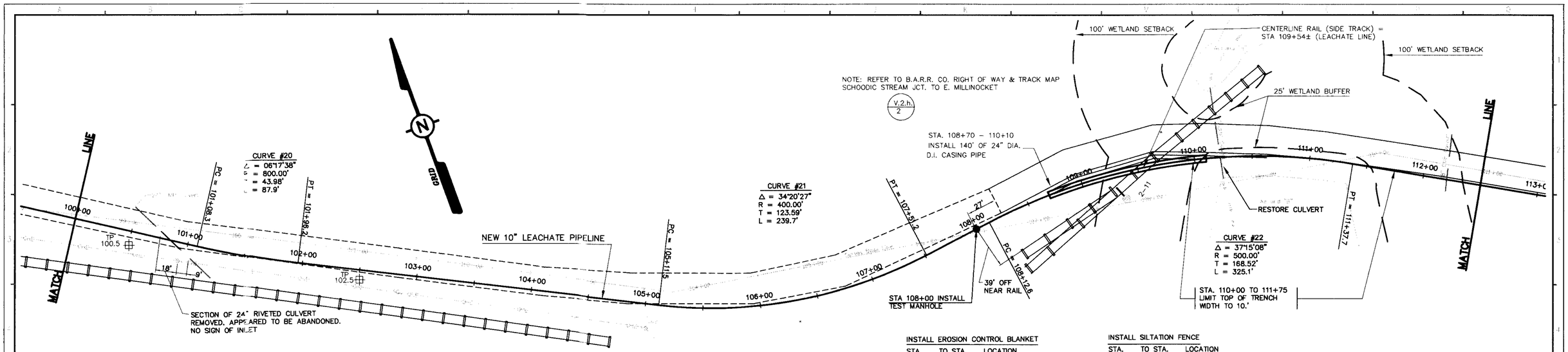
ISSUE CODE: P - Prelim; B - Bids; M - Mtl T.O.; C - Const.
1"=40'H;1"=4'V

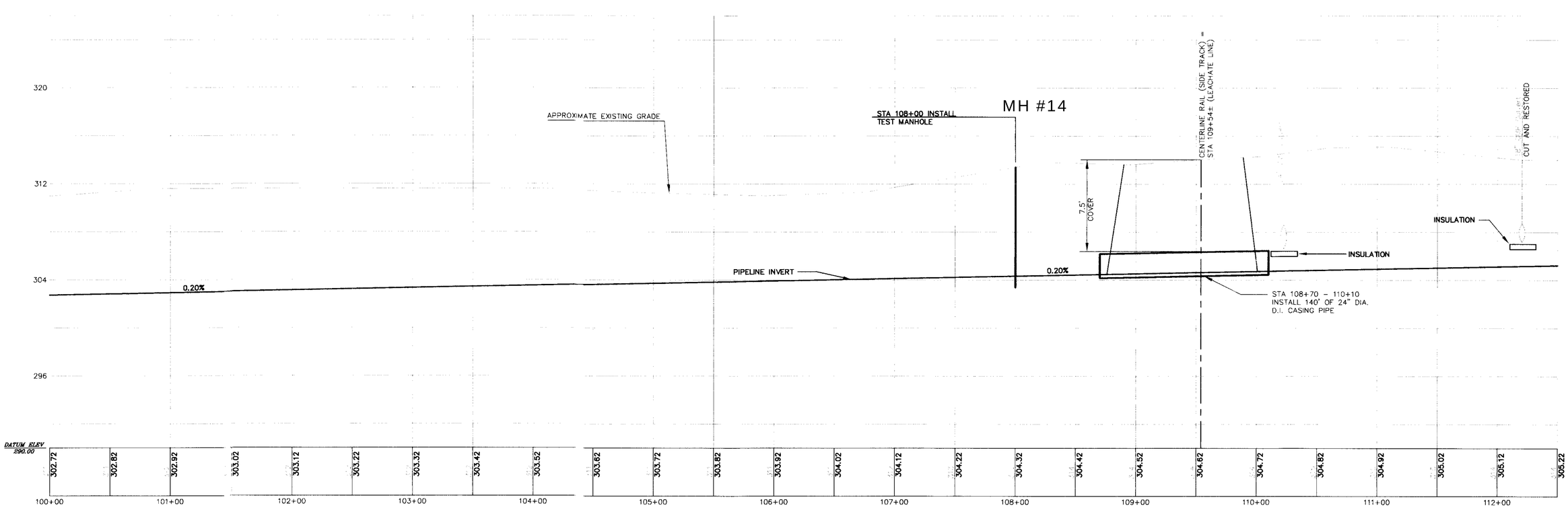
BOWATER
Printed on Recycled Paper

**EAST OPERATION**
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 87+50 TO STA. 100+00
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22968
SHEET 1 OF 1




STATE OF MAINE
PETER B. TIBBS 2678
REGISTERED PROFESSIONAL ENGINEER
3-27-96

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | C | 3/96 | RECORD DRAWING | MSB | PBT | |
| | | | C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| | | | B | 4/95 | ISSUED FOR BIDS | MSB | PBT | |
| | | | P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| | | | | 3/15/95 | SUBMITTED FOR R.R. APPROVAL | JRK | PBT | |
| v2h–2 | B.A.R.R. Co. RIGHT OF WAY & TRACK MAP, SCHOODIC STREAM JCT. TO E. MILLINOCKET | | P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |
| DRAWING NO. | | ITEM/DRAWING TITLE | NOTE | NO | DATE | REVISION | BY | CHK | APPVD | DES No |

**SQUAW BAY CORP**
**CONSULTING ENGINEERS**
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P – Prelim | B – Bids | M – Mill T.O. | C – Const.

SCALE: 1"=40'H; 1"=4'V

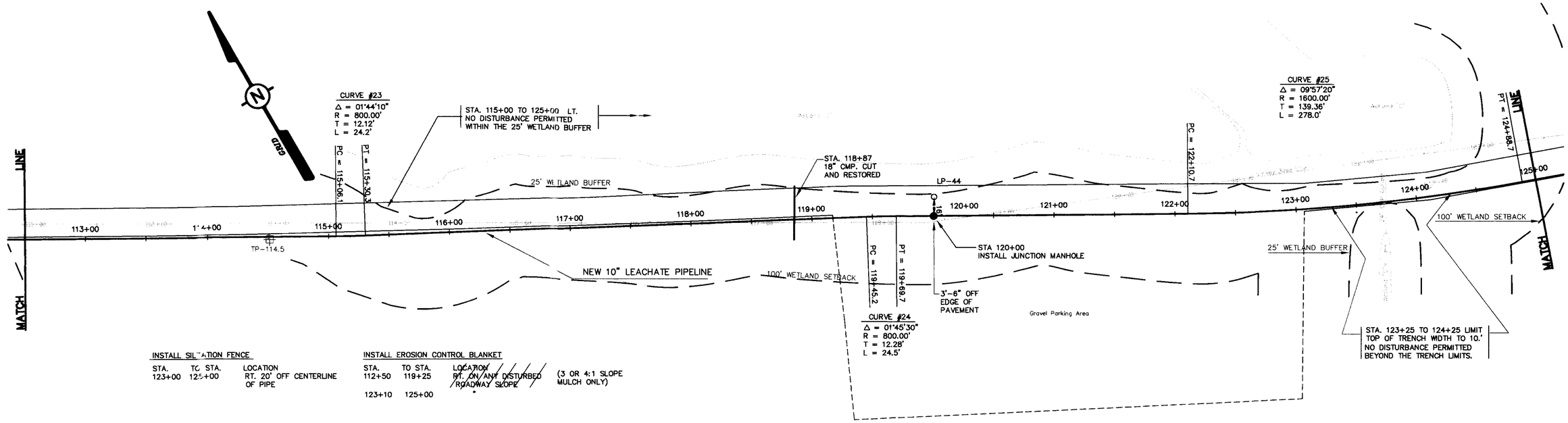
**BOWATER**
Great Northern Paper

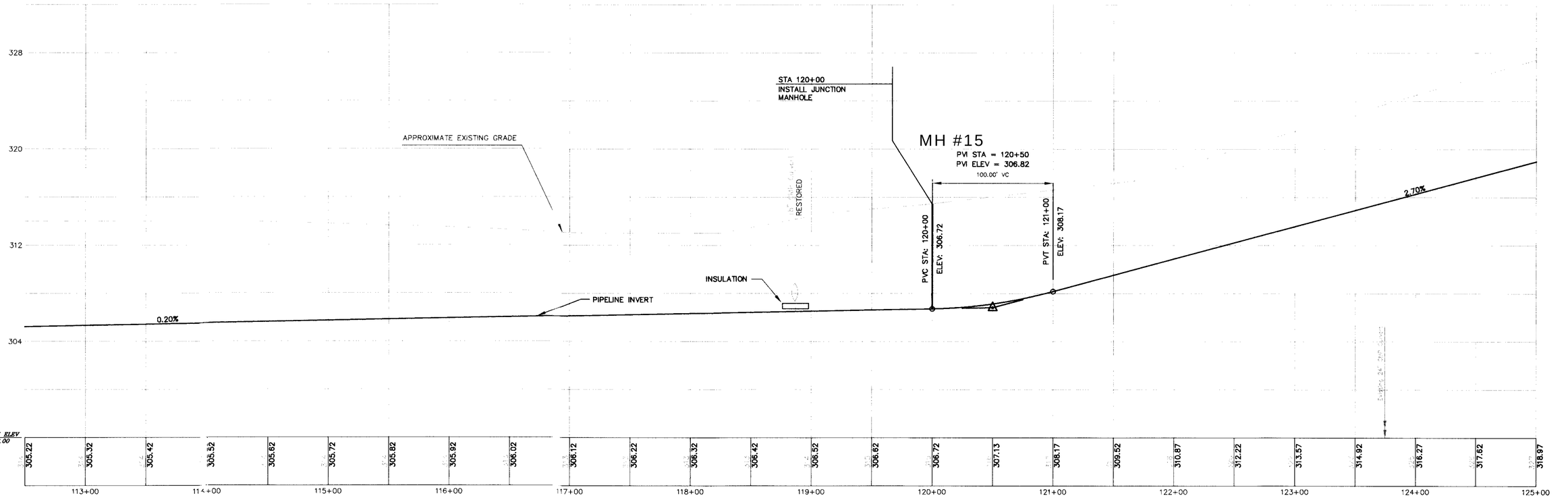
**EAST OPERATION**
**LEACHATE PIPELINE PROJECT**
DOLBY LANDFILL TO THE EAST OPERATION
STA. 100+00 TO STA. 112+50
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2–092–4783

YB–22969
SHEET 1 OF 1

J 94-227.A.ADJ.9422/H12 Thu Mar 28 14:35:52 1996




STATE OF MAINE
PETER B TUBBS 2678
REGISTERED PROFESSIONAL ENGINEER
4-3-96

| | | | | | |
|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT | |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| B | 4/95 | ISSUED FOR BIDS | RMC | PBT | |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

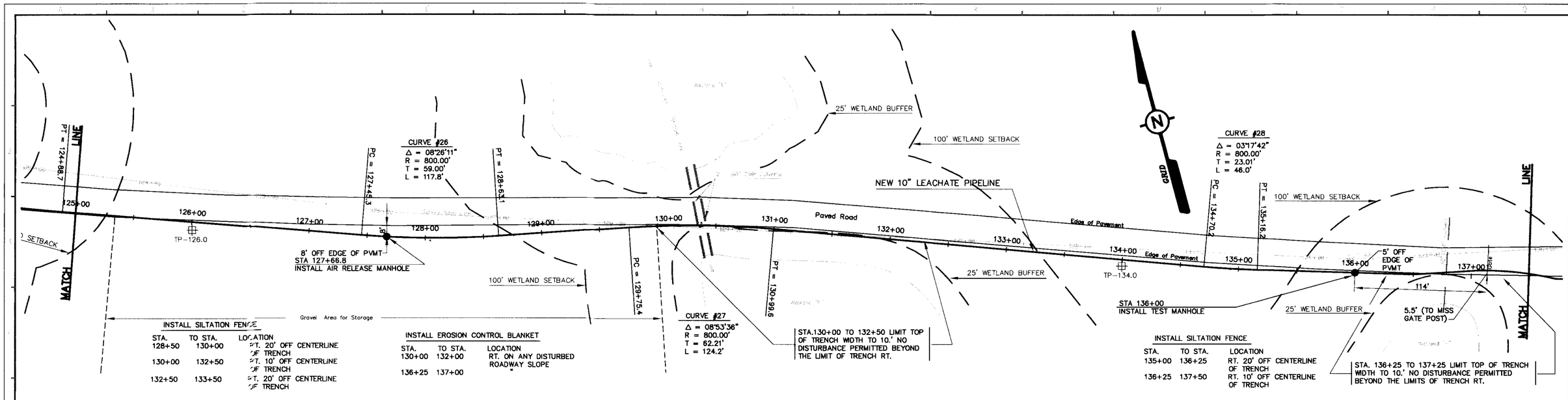
ISSUE CODE
P - Prelim | B - Bids
M - Mtl T.O. | C - Const.
SCALE 1"=40'H;1"=4'V

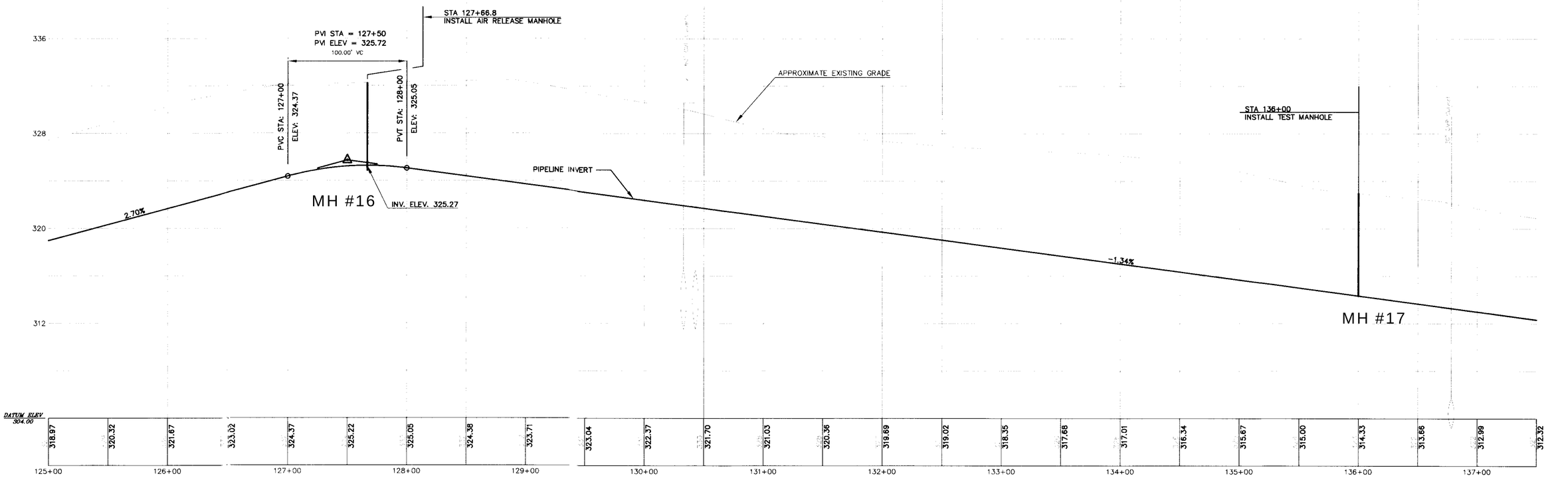
BOWATER
Great Northern Paper

**EAST OPERATION**
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 112+50 TO STA. 125+00
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22970
SHEET 1 OF 1




STATE OF MAINE
PETER B TUBBS
2678
REGISTERED PROFESSIONAL ENGINEER
9-5-96

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT | | | |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | | | |
| B | 4/95 | ISSUED FOR BIDS | RMC | PBT | | | |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | | | |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | | | |
| NO. | BY | DATE | REVISION | BY | CHK | APPVD | ISS. NO. |

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

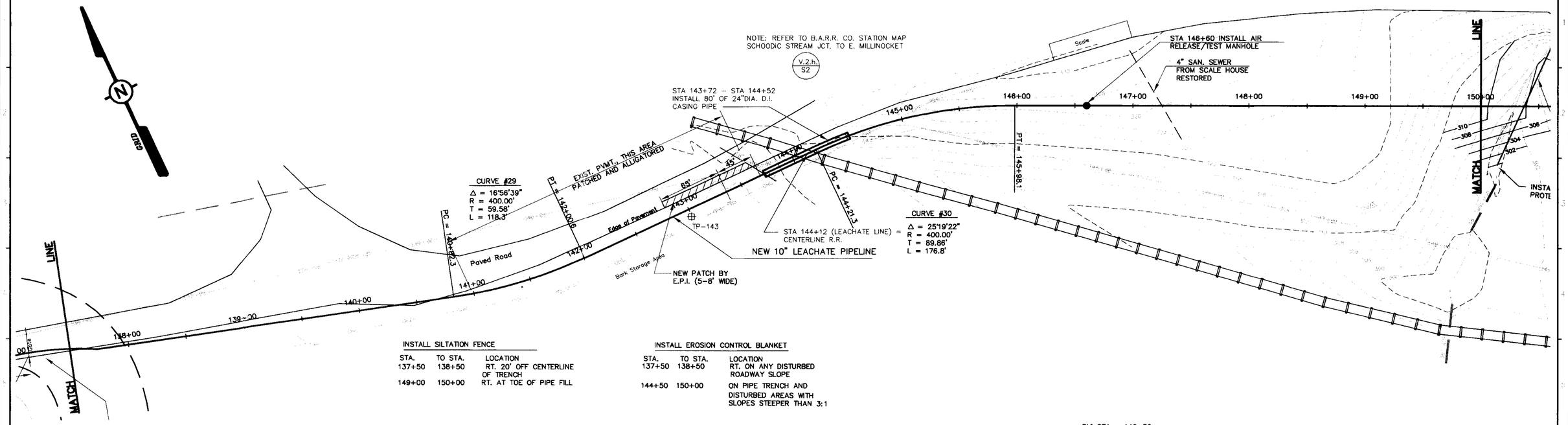
ISSUE CODE
P - Prelim | B - Bids
M - Mtl T.O. | C - Const.
SCALE 1"=40'H;1"=4'V

BOWATER
Great Northern Paper

**EAST OPERATION**
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 125+00 TO STA. 137+50
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22971
SHEET 1 OF 1




| | | | | | |
|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT | |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| B | 4/95 | ISSUED FOR BIDS | RMC | PBT | |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| | 3/15/95 | SUBMITTED FOR R.R. APPROVAL | PBT | PBT | |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |

V2h–S2 B.A.R.R. Co. STATION MAP SCHOODIC STREAM JCT. TO E. MILLINOCKET

STATE OF MAINE PETER G TUBBS 2676 REGISTERED PROFESSIONAL ENGINEER

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
1"=40'H; 1"=4'V

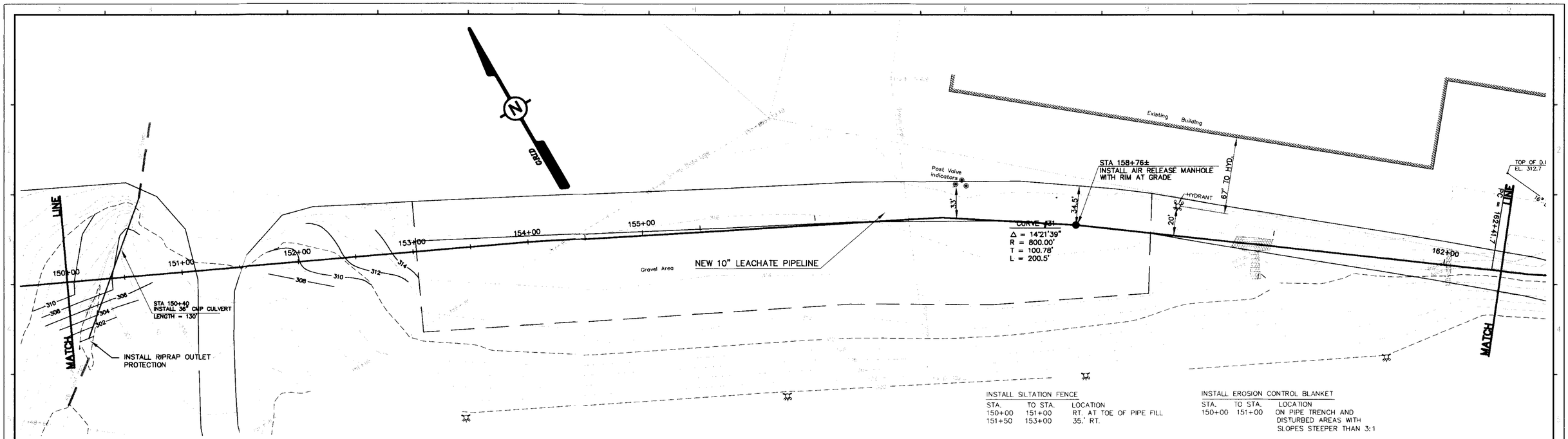
BOWATER
Great Northern Paper

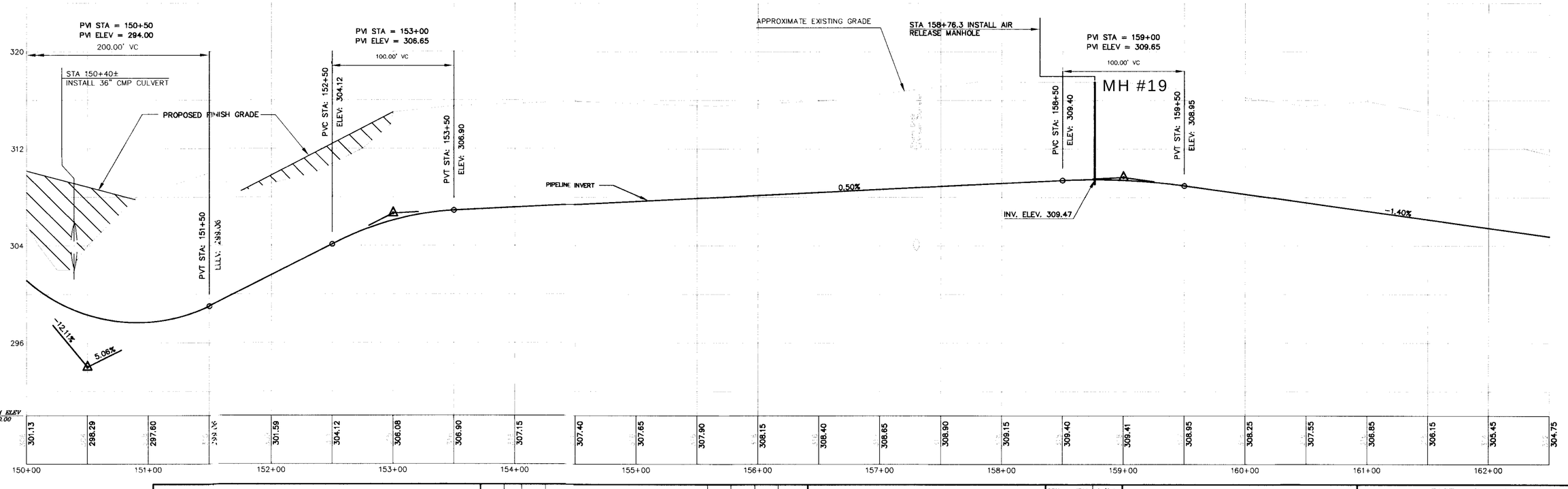
EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 137+50 TO STA. 150+00
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB–22972
SHEET 1 OF 1

34 227\ACAD\9422H12 Thu Mar 28 15:29:33 1996




| | | | | | |
|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT | |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| B | 4/95 | ISSUED FOR BIDS | MSB | PBT | |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |

YB-20978 RECYCLE FIBER PLANT -- UNDERGROUND UTILITIES SHEETS 1-6

STATE OF MAINE
PETER B TUBBS 2878
REGISTERED PROFESSIONAL ENGINEER

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P – Prelim | B – Bids
M – MH T.O. | C – Const.
SCALE 1"=40'H; 1"=4'V

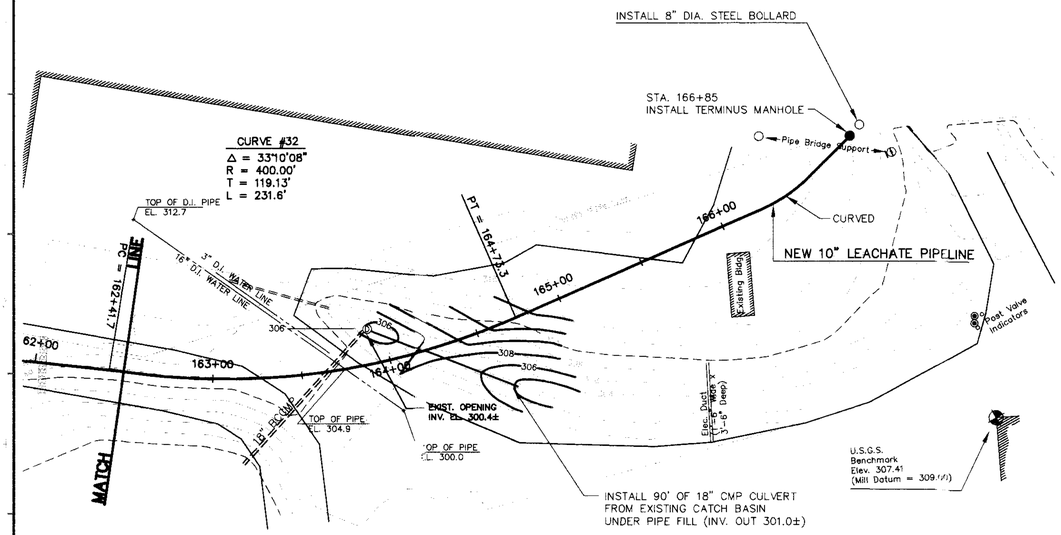
BOWATER
Great Northern Paper

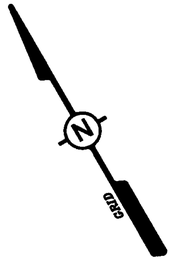
**EAST OPERATION**
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 150+00 TO STA. 162+50
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22973
SHEET 1 OF 1

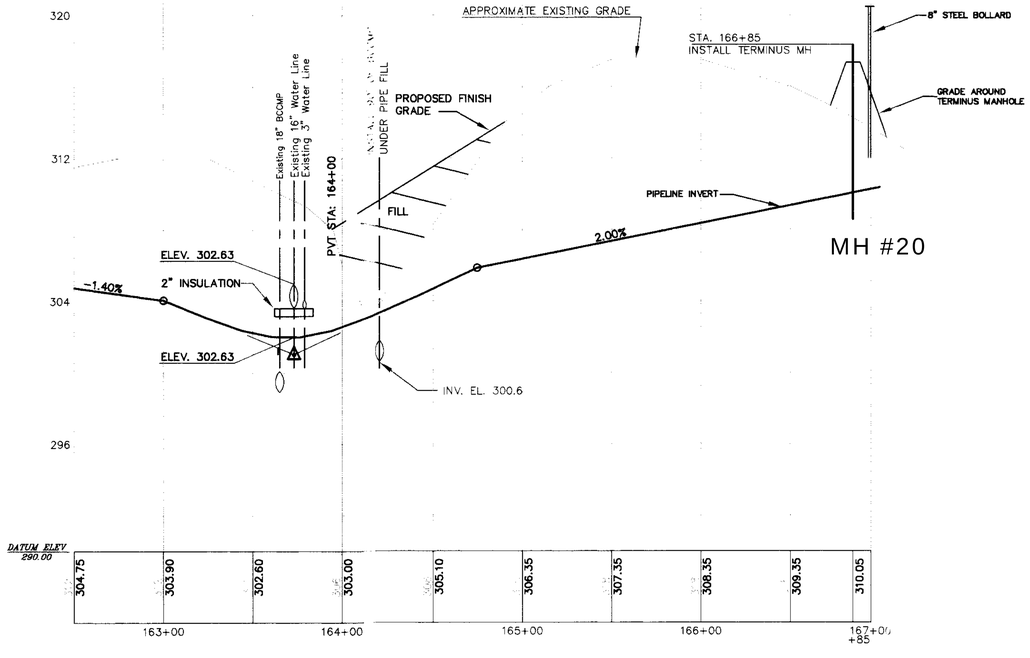
D:\94-227\ACAD\9422PH12 Thu Mar 28 15:34:14 1996




## MANHOLE AND STRUCTURE SCHEDULE

| STATION | TYPE | SIZE | DESCRIPTION |
|---|---|---|---|
| 0+95 | CIRCULAR | 8' DIA. | GATE AND CHECK VALVE |
| 2+41 | CIRCULAR | 6' DIA. | ANGLE |
| 8+31 | CIRCULAR | 6' DIA. | AIR RELEASE |
| 17+46 | CIRCULAR | 8' DIA. | AIR RELEASE / TEST |
| 34+96 | CIRCULAR | 8' DIA. | ANGLE / TEST |
| 38+94 | CIRCULAR | 4' DIA. | ANGLE |
| 41+00 | CIRCULAR | 4' DIA. | ANGLE |
| 51+50 | CIRCULAR | 8' DIA. | TEST |
| 63+40 | CIRCULAR | 8' DIA. | TEST |
| 63+75, 53' LT. | RECTANGULAR | 6' X 12' | FLOW TRANSITION STRUCTURE |
| 64+05 | CIRCULAR | 8' DIA. | TEST |
| 78+35 | CIRCULAR | 4' DIA. | ANGLE |
| 85+30 | CIRCULAR | 8' DIA. | TEST |
| 91+50 | CIRCULAR | 4' DIA. | AIR RELEASE |
| 108+00 | CIRCULAR | 8' DIA. | TEST |
| 127+67 | CIRCULAR | 6' DIA. | AIR RELEASE |
| 136+00 | CIRCULAR | 8' DIA. | TEST |
| 120+00 | CIRCULAR | 4' DIA. | JUNCTION |
| 146+60 | CIRCULAR | 8' DIA. | AIR RELEASE / TEST |
| 158+76 | CIRCULAR | 6' DIA. | AIR RELEASE |
| 166+85 | CIRCULAR | 8' DIA. | VALVE |






| | | | | | | |
|---|---|---|---|---|---|---|
| | | C | 3/96 | RECORD DRAWING | MSB | PBT |
| | | C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT |
| | | B | 4/95 | ISSUED FOR BIDS | RMC | PBT |
| | | P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT |
| YB-20978 | RECYCLE FIBER PLANT AND UNDERGROUND UTILITIES, SHTS. 1-6 | P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT |

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - Prelim | B - Bids | M - Mtl T.O. | C - Const.

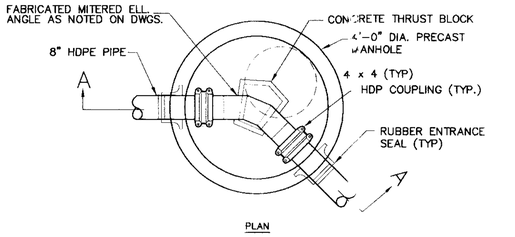
1"=40'H; 1"=4'V

BOWATER
Great Northern Paper

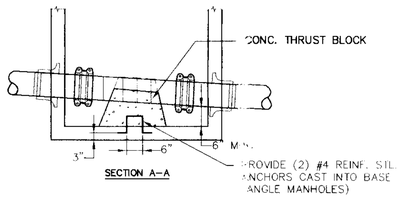
**EAST OPERATION**
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 162+50 TO STA. 167+00
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

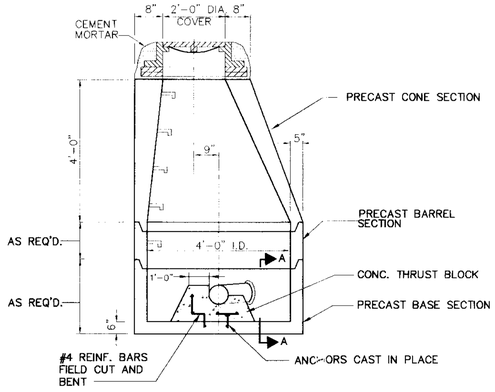
YB-22974
SHEET 1 OF 1



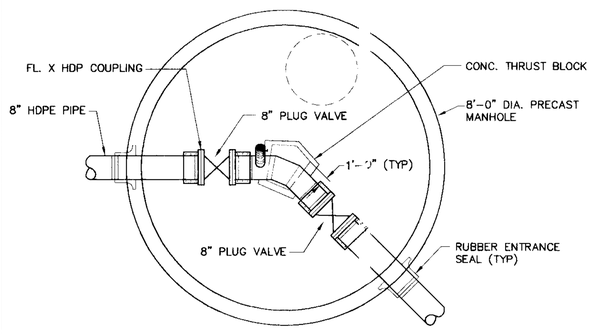

PLAN




SECTION A–A



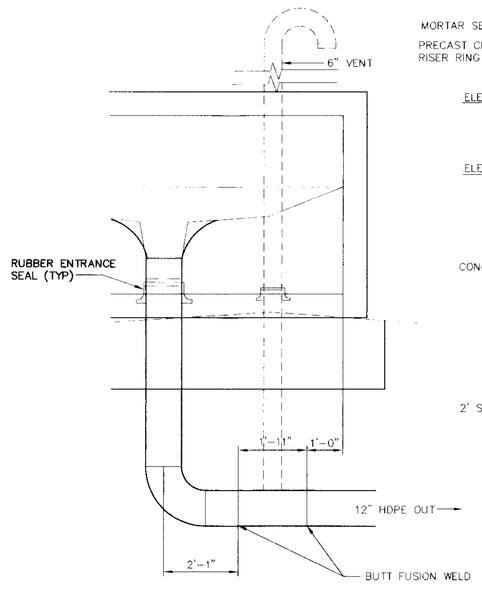

ELEVATION
TYPICAL JUNCTION / ANGLE MANHOLE



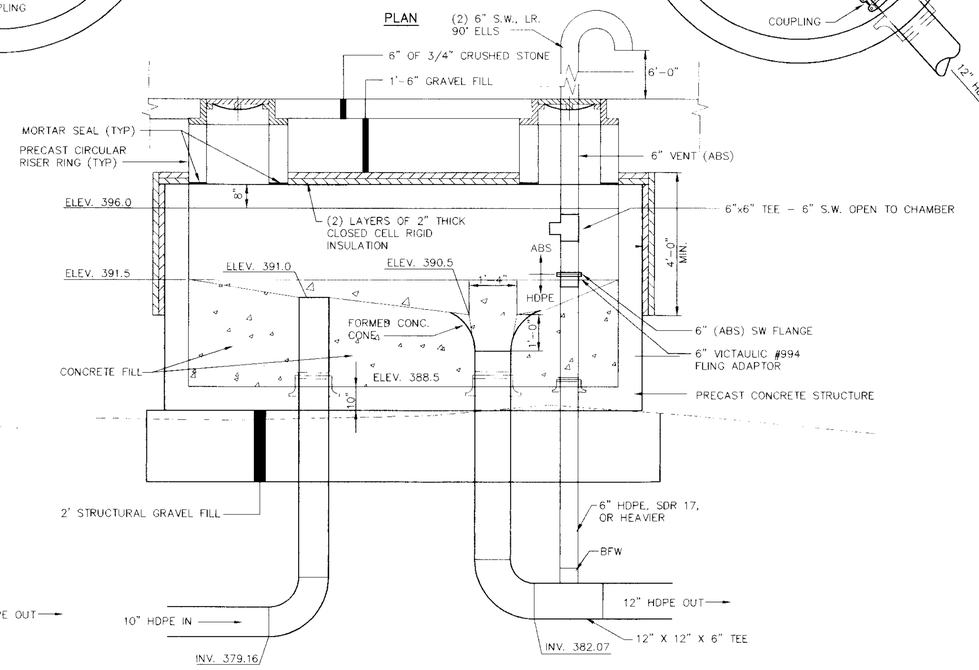

PLAN

ANGLE / TEST CHAMBER
STATION 34+96




DETAIL A
N.T.S.




ELEVATION
FLOW TRANSITION STRUCTURE
N.T.S.

STATE OF MAINE
PETER B TUBBS 2678
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | C | | 3/96 | RECORD DRAWING | MSB | PBT | | |
| | | C | | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | | |
| | | B | | 4/95 | ISSUED FOR BIDS | MSB | PBT | | |
| | | P | | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | MSB | PBT | | |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | | |
|---|---|---|
| DRN | MSB | 4/95 |
| CHK | PBT | 4/95 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P – Prelim. B – Bids M – Mtl T.O. C – Const.

SCALE AS NOTED

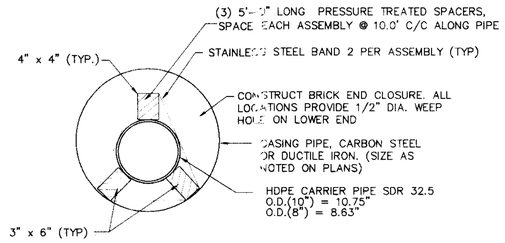
BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
MANHOLES AND STRUCTURES
MISCELLANEOUS DETAILS

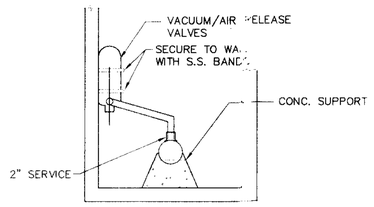
JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22975
SHEET 1 OF 2

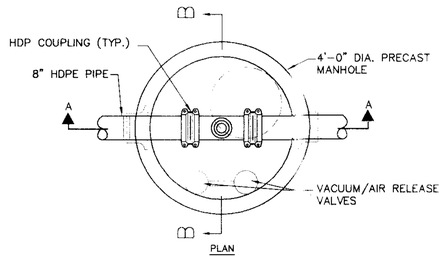
L:\94-227\ACAD\DETAIL-2 Thu Mar 28 07:33:46 1996



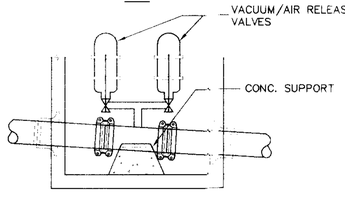

RAILROAD AND ROUTE 157 CROSSINGS
PIPE ENCASEMENT
N.T.S.




SECTION B-B

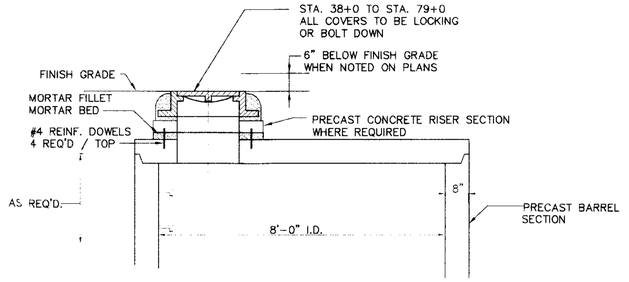



PLAN

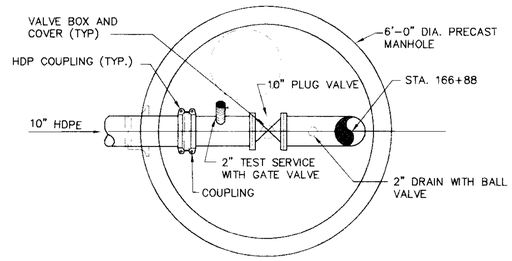



SECTION A-A

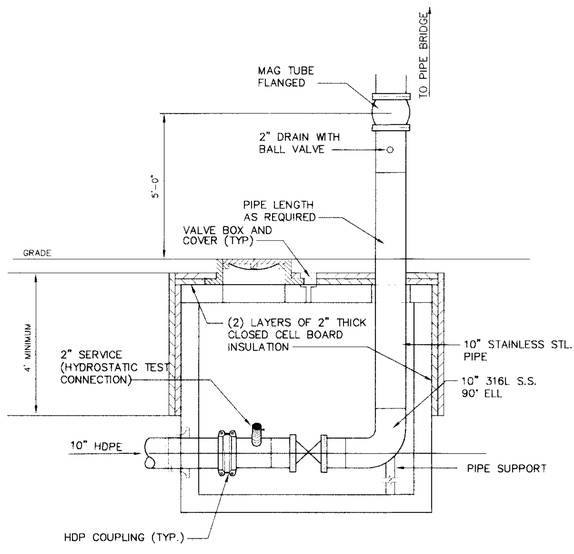
AIR RELEASE MANHOLE
N.T.S.




TYPICAL TOP INSTALLATION
FLAT TOP MANHOLES AND STRUCTURES
N.T.S.




PLAN




ELEVATION

TERMINUS MANHOLE
N.T.S.

STATE OF MAINE
PETER B TUBBS
2678
REGISTERED
PROFESSIONAL ENGINEER

| DRAWING NO. | PREVIOUS DRAWING NO. | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB NO. |
|---|---|---|---|---|---|---|---|---|---|
| | | C | | 3/96 | RECORD DRAWING | MSB | PBT | | |
| | | C | | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | | |
| | | B | | 4/95 | ISSUED FOR BIDS | MSB | PBT | | |

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | MSB | 4/95 |
| CHK | PBT | 4/95 |
| CHK | | |
| CORR | | |
| APPVD | | |

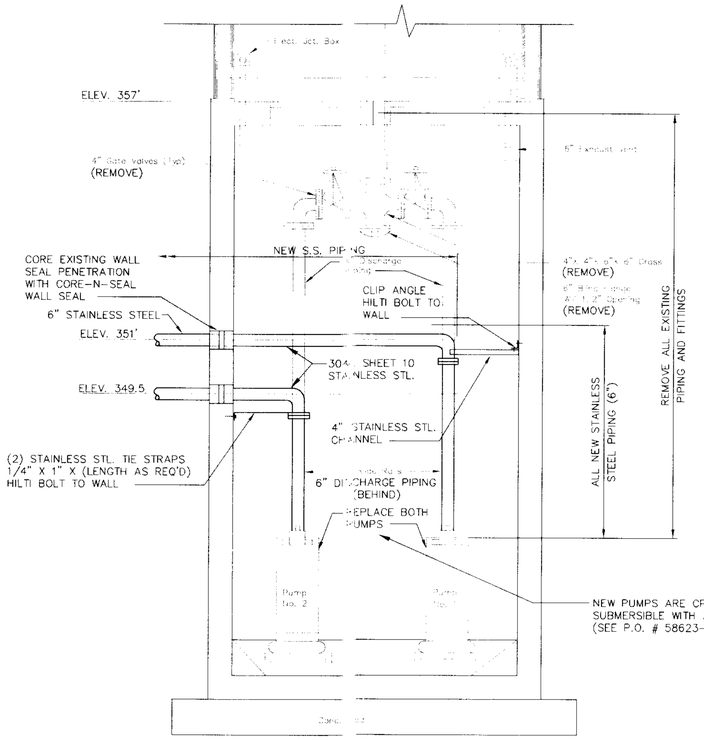
ISSUE CODE: P - Prelim; B - Bids; M - Mtl T.O.; C - Const.
SCALE AS NOTED

BOWATER
Great Northern Paper

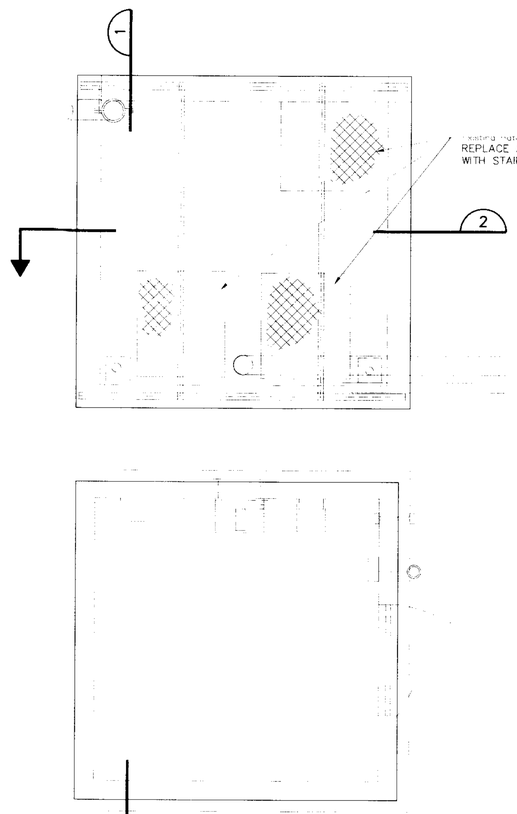
EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
MANHOLES AND STRUCTURES
MISCELLANEOUS DETAILS

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

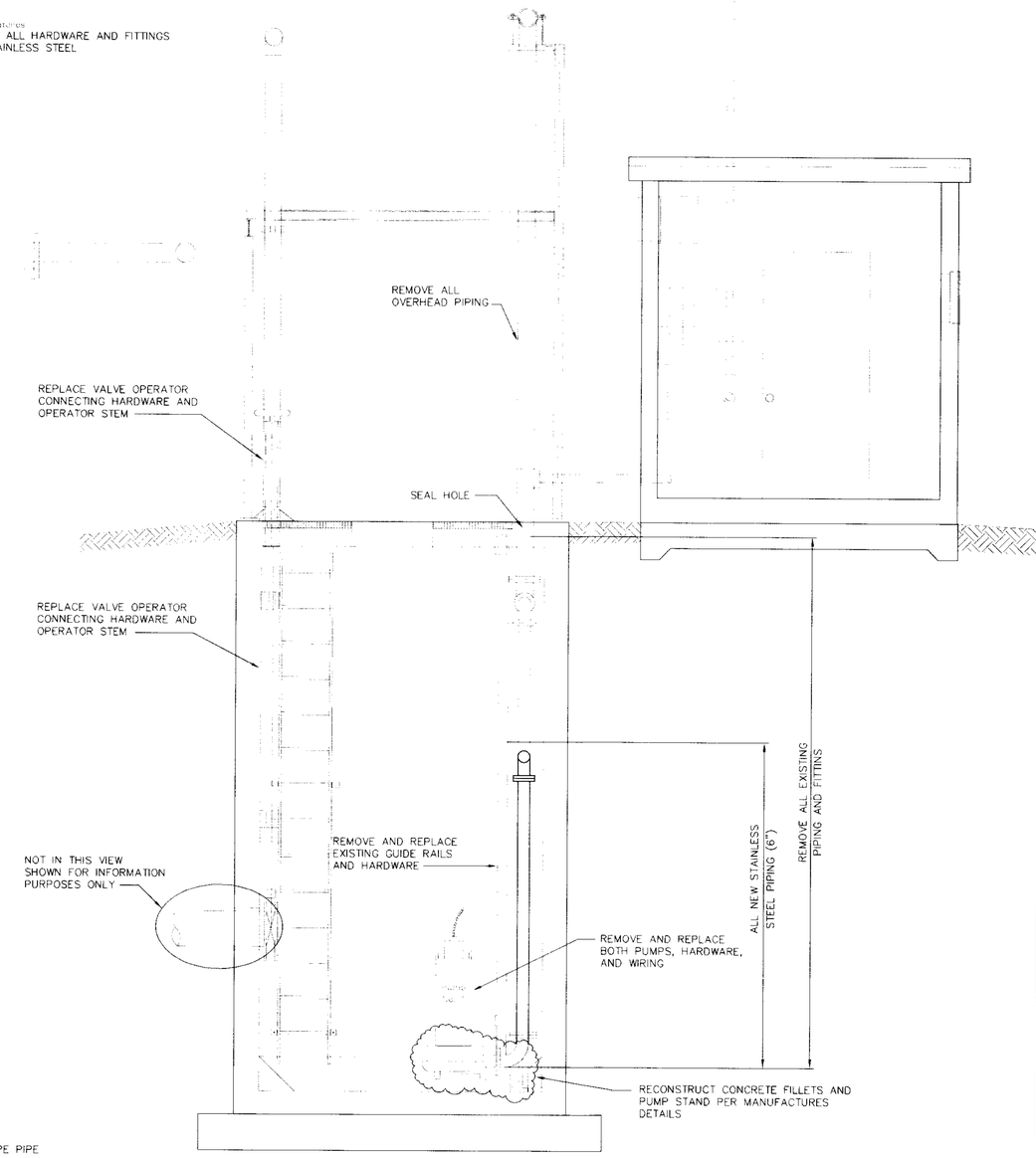
YB-22975
SHEET 2 OF 2



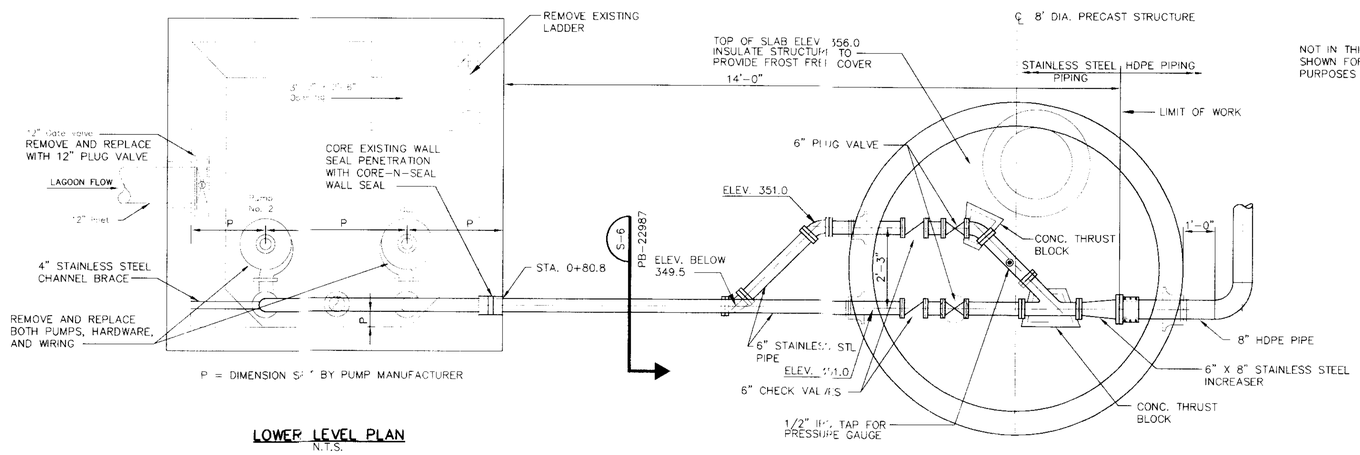

SECTION 2
N.T.S.




PLAN
CONTROL ROOM AND WET WELL




SECTION 1
N.T.S.




P = DIMENSION SET BY PUMP MANUFACTURER

LOWER LEVEL PLAN
N.T.S.

STATE OF MAINE
PETER B. TUBBS 2678
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | DRAWING TITLE |
|---|---|
| SB - 14888 | BDCO - LEACHATE PUMP STATION PLANS AND SECTIONS |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| C | 3 | 3/96 | RECORD DRAWING | MSB | PBT | | |
| C | 5 | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | | |
| B | 6 | 6/95 | ISSUED FOR BIDS | MSB | PBT | | |
| P | 4 | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | MSB | PBT | | |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | | |
|---|---|---|
| DRN | MSB | 4/95 |
| CHK | PBT | 4/95 |
| CHK | | |
| CORR | | |
| APPVD | | |

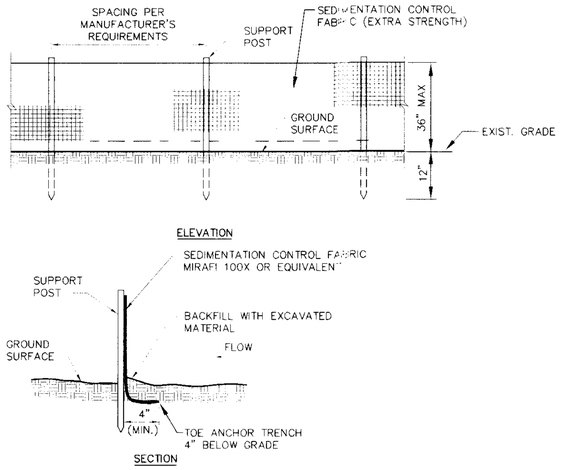
ISSUE CODE
P - Prelim | B - Bids
M - Mill T.O. | C - Const.
SCALE: AS NOTED

BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
EXISTING PUMP STATION MODIFICATIONS
PLANS AND SECTIONS

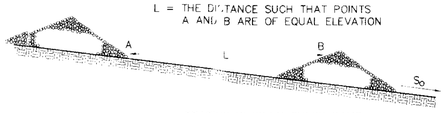
JOB NO. 22846
ENG. REQ. NO. ———
FILE NO. 2-092-4783

YB-22976




## SILTATION FENCE (KEYED IN)

N.T.S.

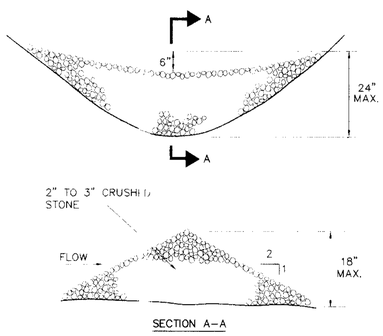


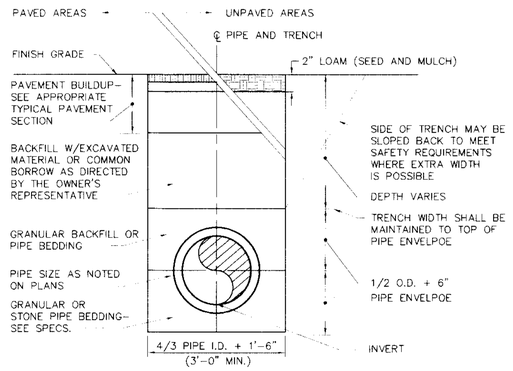

SPACING BETWEEN CHECK DAMS

| So (FT./FT.) | L (FT.) |
|---|---|
| 0.020 | 75 |
| 0.030 | 50 |
| 0.040 | 40 |
| 0.050 | 30 |
| 0.080 | 20 |
| 0.100 | 10 |

## STONE CHECK DAMS

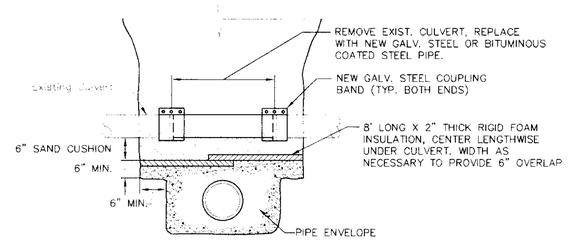
N.T.S.



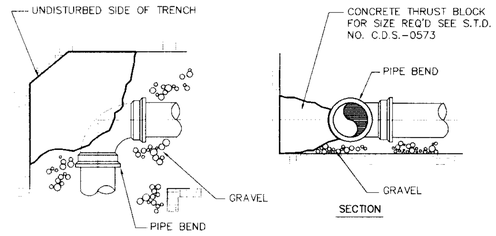

## TYPICAL TRENCH DETAIL

N.T.S.



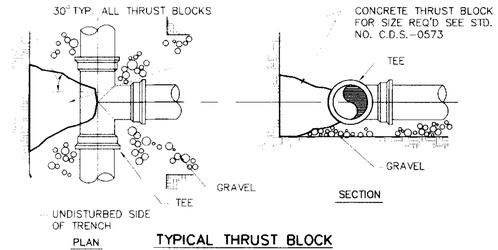

## CULVERT RESTORATION

N.T.S.




## TYPICAL THRUST BLOCK PLACEMENT ON BENDS

N.T.S.

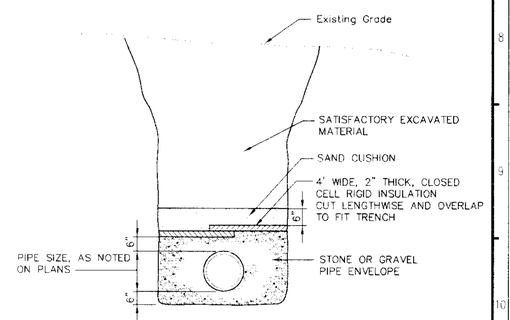



## TYPICAL THRUST BLOCK PLACEMENT ON TEES

N.T.S.

### SIZE REQUIREMENTS FOR CONCRETE THRUST BLOCKS

| | | BEARING ON UNDISTURBED SOIL (SQUARE FT.) | | | |
|---|---|---|---|---|---|
| FITTINGS | | 90° BENDS | 45° BENDS | TEES & PLUGS | HYDRANTS |
| PIPE SIZE | 4" | 2.0 | 1.0 | 1.0 | N/A |
| | 6" | 3.0 | 2.0 | 2.0 | 6.0 |
| | 8" | 5.0 | 3.0 | 4.0 | N/A |
| | 10" | 7.0 | 4.0 | 5.0 | N/A |
| | 12" | 10.0 | 6.0 | 7.0 | N/A |
| | 14" | 13.0 | 7.0 | 10.0 | N/A |
| | 16" | 17.0 | 9.0 | 12.0 | N/A |




## TYPICAL SECTION TRENCH INSULATION

N.T.S.

TEMPORARY AND PERMANENT
EROSION AND SEDIMENTATION CONTROL

A. GENERAL

1. All soil erosion and sediment control will be done in accordance with the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices, Cumberland County Soil and Water Conservation District, Department of Environmental Protection, March 1991, and as currently revised.

2. Drainage or pumping will not be discharged into any stream, brook or drainage course or any wetland. Discharge points shall be established and protected to collect sediments before discharge onto upland areas.

3. Disturbed areas will be permanently stabilized within 15 days of final grading. Disturbed areas not to be worked upon within 14 days of disturbance, shall be temporarily stabilized within 7 days of the disturbance.

4. Removal of trees, bushes and other vegetation as well as disturbance of topsoil will be kept to a minimum in all areas while allowing proper site operations.

5. Stockpiles shall be located in a manner such that natural drainage in not obstructed and no off site sedimentation will result. Silt fence will be installed around the perimeter of all stockpiles. Topsoil stockpiles surrounded with siltation fencing or temporarily mulched

B. TEMPORARY MEASURES

1. Silt Fence

   (a) Silt fence will be installed prior to and down-gradient of all construction activity where soil disturbance may result in erosion.

   (b) Silt fences will be removed when they have served their useful purpose, but not before the upgradient areas have been permanently stabilized.

   (c) Silt fences will be inspected immediately after each rainfall and at least daily during prolonged rainfall. Repairs will be made as necessary, Any required repairs will be made immediately.

   (d) Sediment deposits shall be removed after each storm event if significant buildup has occurred

2. Stone Check Dams

   (a) Stone check dams should be constructed of ½ to 3 inch stone. The stone should be placed according to the configuration shown to ensure that the center of the dam is lower than the edges.

   (b) Sediments will be removed from behind the check dams when it has accumulated to one half of the original height of the dam.

   (d) Check dams will be removed at the completion of the work. The area beneath the check dams will be seeded and mulched immediately after they are removed.

   (e) Regular inspections shall be made to ensure the integrity of the dam. Check dams will be checked for sediment accumulation after each significant rainfall. Repairs will be made as necessary.

C. INSPECTIONS

Inspections will be undertaken by qualified personnel to ensure that temporary and permanent erosion and sedimentation controls are properly installed and correctly functioning, and that additional erosion control measures are installed as needed. Such inspections will occur bi-weekly and after each significant rainfall event (1 inch or more within a 24 hour period) during construction until permanent erosion control measures have been installed and and the site is stabilized.

STATE OF MAINE
PETER B TUBBS 2678
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REVISED DRAWING FILE | DES | DR | DATE | REVISION | BY | CHK | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | C | 3/96 | RECORD DRAWING | MSB | PBT | | |
| | | | C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | | |
| | | | B | 4/95 | ISSUED FOR BIDS | MSB | PBT | | |
| | | | P | 4/25 | PRELIMINARY CONSTRUCTION ISSUE | MSB | PBT | | |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | | |
|---|---|---|
| DRN | MSB | 4/95 |
| CHK | PBT | 4/95 |
| CHK | | |
| CORR | | |
| APPVD | | |

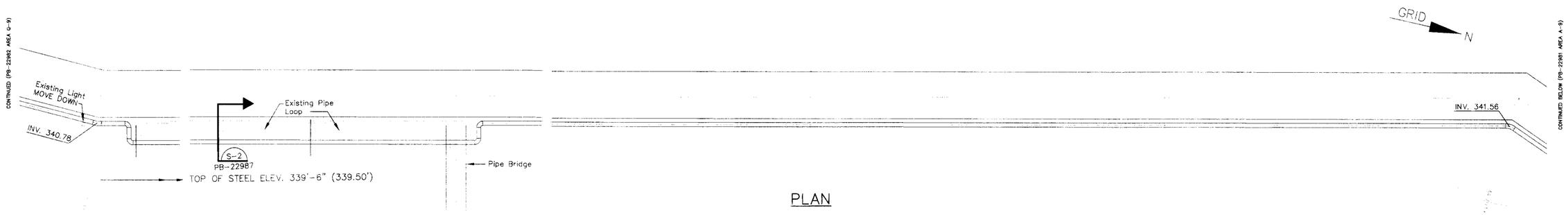
ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
SCALE: AS NOTED

BOWATER
Great Northern Paper

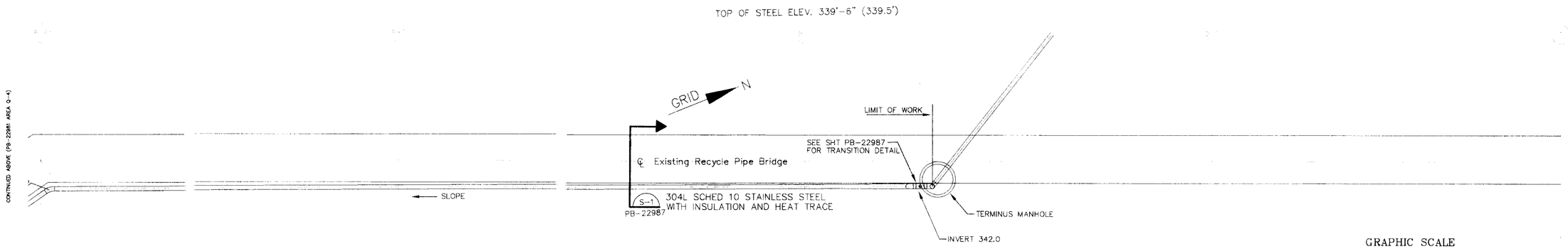
EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
EROSION CONTROL AND MISCELLANEOUS DETAILS

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB–22977
SHEET 1 OF 1




PLAN




PLAN

GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )
1 inch = 10 ft.

STATE OF MAINE
DAVID WILLARD YOUNG
2410
REGISTERED
PROFESSIONAL ENGINEER

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB | DWY |
| PF-01632-C | SimpsONS ENGINEERING/RECYCLE FIBER PLANT | | P | 8/8/95 | FOR CLIENT REVIEW | BDB | DWY |
| PF-01631-D | SimpsONS ENGINEERING/RECYCLE FIBER PLANT | | P | 5/26/95 | FOR CLIENT REVIEW | MSB | DWY |

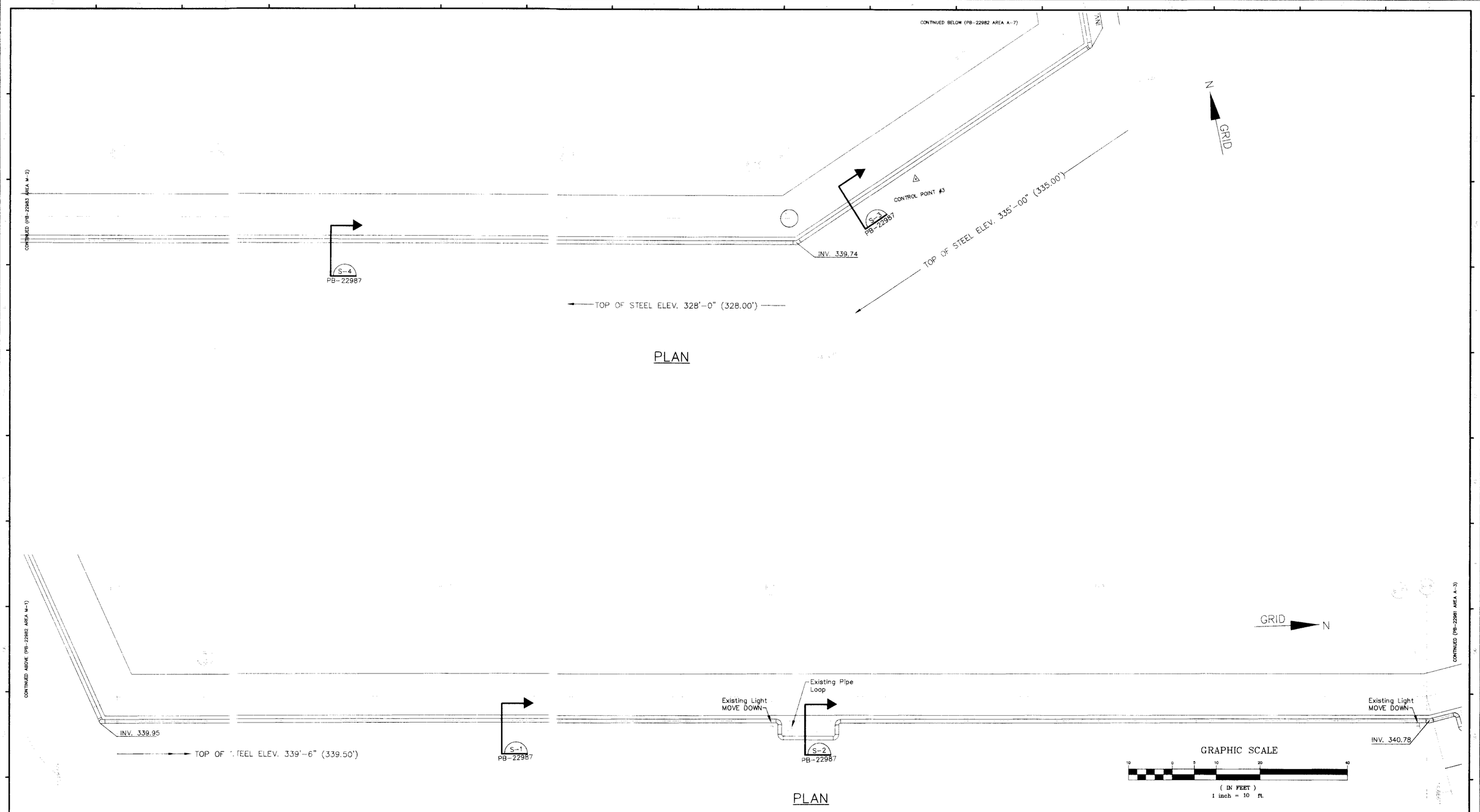
SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | DWY | 5/95 |
| CHK | | |
| CHK | | |
| CORR | | |
| APPVD | | |
| ISSUE CODE | | |
| P – Prelim | B – Bids | |
| M – MU T.O. | C – Const. | |
| 1" = 10' | | |

BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
PIPE BRIDGE
10" GRAVITY SEWER

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783




STATE OF MAINE
DAVID WILLARD YOUNG 2410
REGISTERED PROFESSIONAL ENGINEER

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB | DWY |
| PF-01633-C | SIMMONS ENGINEERING/RECYCLE FIBER PLANT | P | 8/8/95 | FOR CLIENT REVIEW | MSB | DWY |
| PF-01634-B | SIMMONS ENGINEERING/RECYCLE FIBER PLANT | P | 5/26/95 | FOR CLIENT REVIEW | MSB | DWY |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | |
|---|---|
| DRN DWY | 5/95 |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE

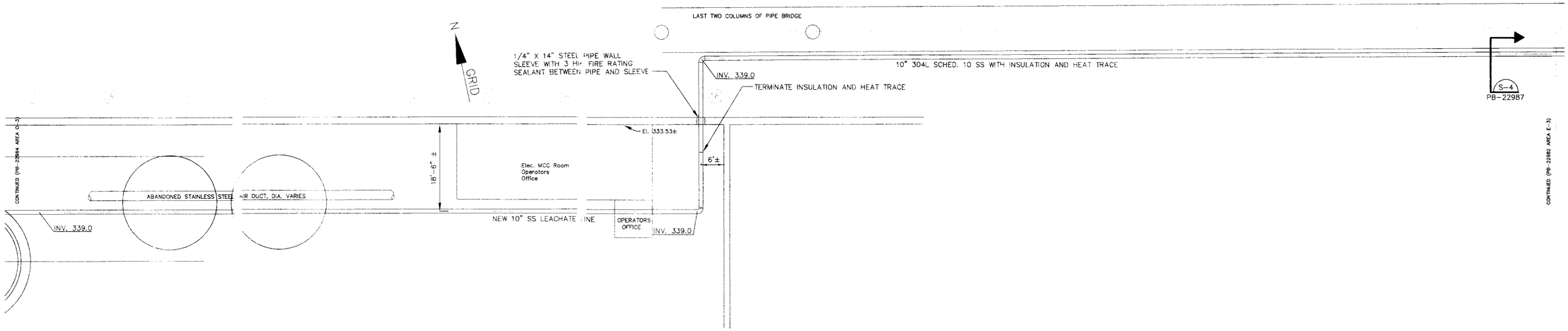
P - Prelim | B - Bids
M - Mtl T.O. | C - Const.

1" = 10'

BOWATER
Great Northern Paper

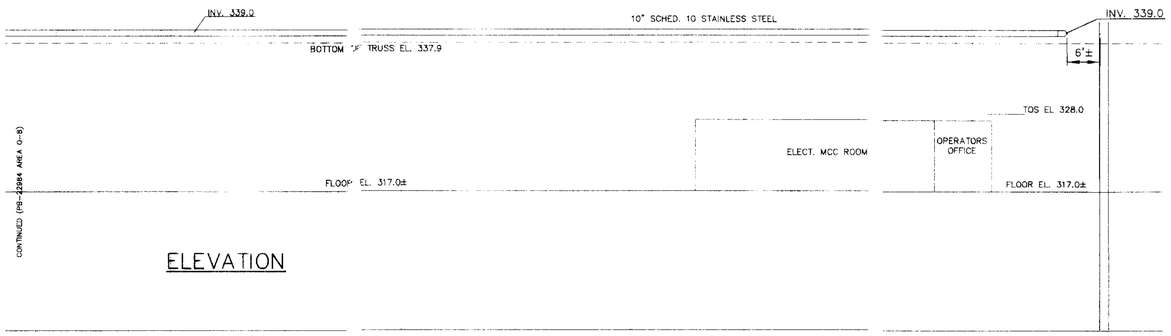
EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
PIPE BRIDGE
10" GRAVITY SEWER

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783




PLAN

Wet Lap Machine Room




ELEVATION

STATE OF MAINE
DAVID WILLARD HOURD
2410
REGISTERED
PROFESSIONAL ENGINEER

| | | | | | |
|---|---|---|---|---|---|
| C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB | DWY | |
| | 8/8/95 | ISSUED FOR CLIENT REVIEW | | | |
| | 5/26/95 | ISSUED FOR CLIENT REVIEW | MSB | DWY | |

PF-01634-8 SIMPKINS ENGINEERING/RECYCLE FIBER PLANT

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

C 8/17/95

| | | |
|---|---|---|
| DRN | DWY | 5/95 |
| CHK | | |
| CHK | | |
| CORR | | |
| APPVD | | |

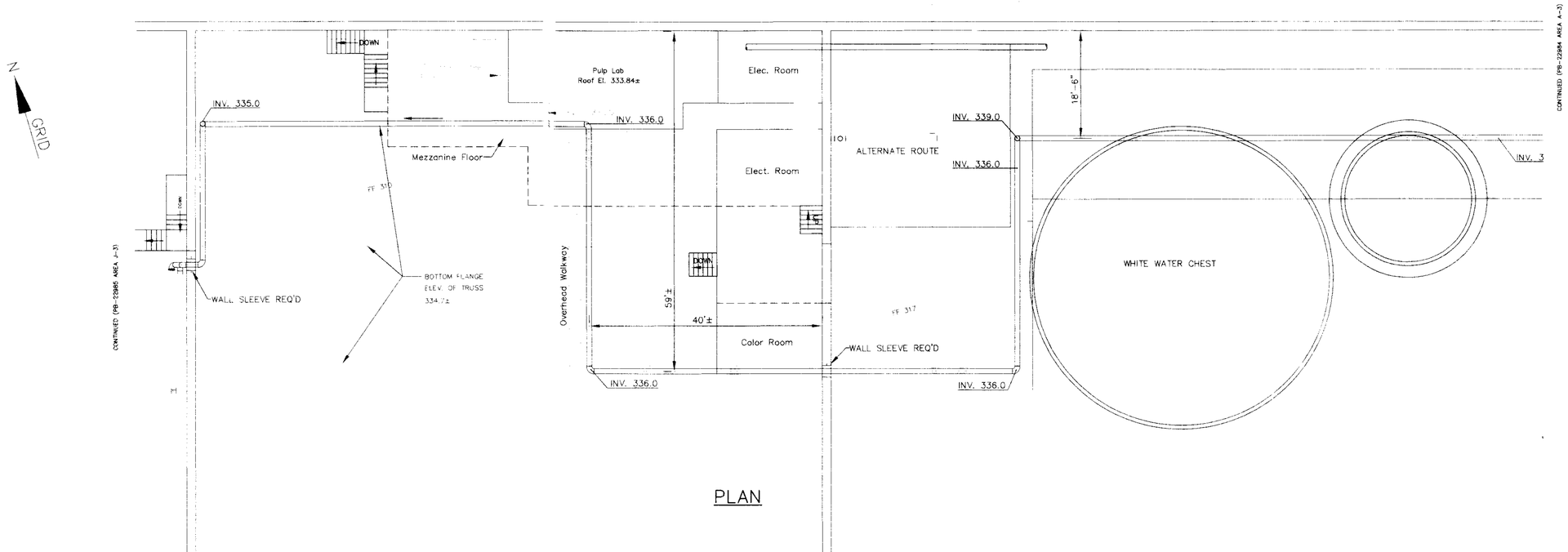
ISSUED FOR: P – Prelim | B – Bids | M – Mtl T.O. | C – Const.

1" = 10'

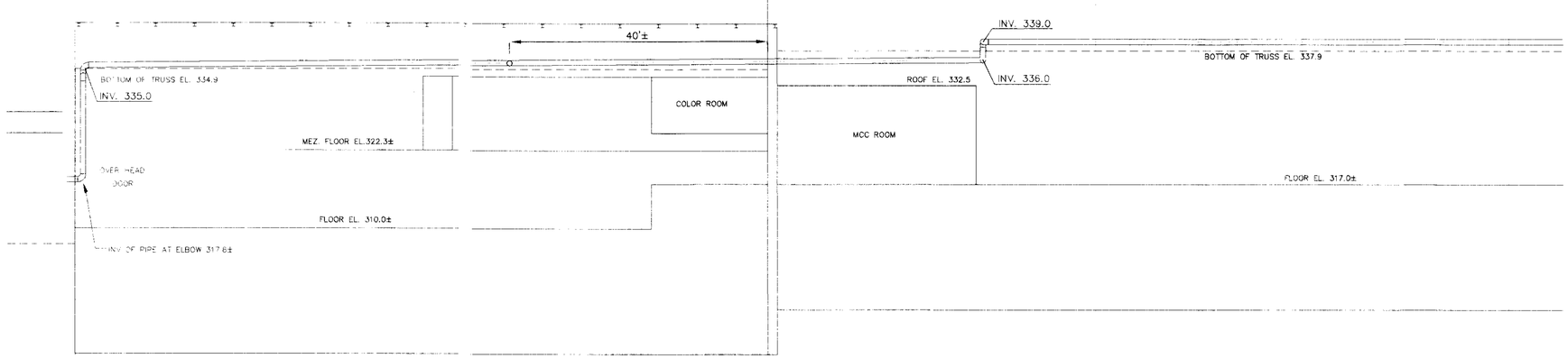
BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
PIPE BRIDGE AND WET LAP ROOM
10" GRAVITY SEWER

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783




PLAN




ELEVATION

STATE OF MAINE
DAVID WILLARD YOUNG
2410
REGISTERED PROFESSIONAL ENGINEER

| | | | |
|---|---|---|---|
| C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB DWY |
| | 8/8/95 | ISSUED FOR CLIENT REVIEW | MSB DWY |
| | 5/26/95 | ISSUED FOR CLIENT REVIEW | MSB DWY |

**SQUAW BAY CORP**
**CONSULTING ENGINEERS**
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | DWY | 5/95 |
| CHK | | |
| CHK | | |
| CORR | | |
| APP'VD | | |

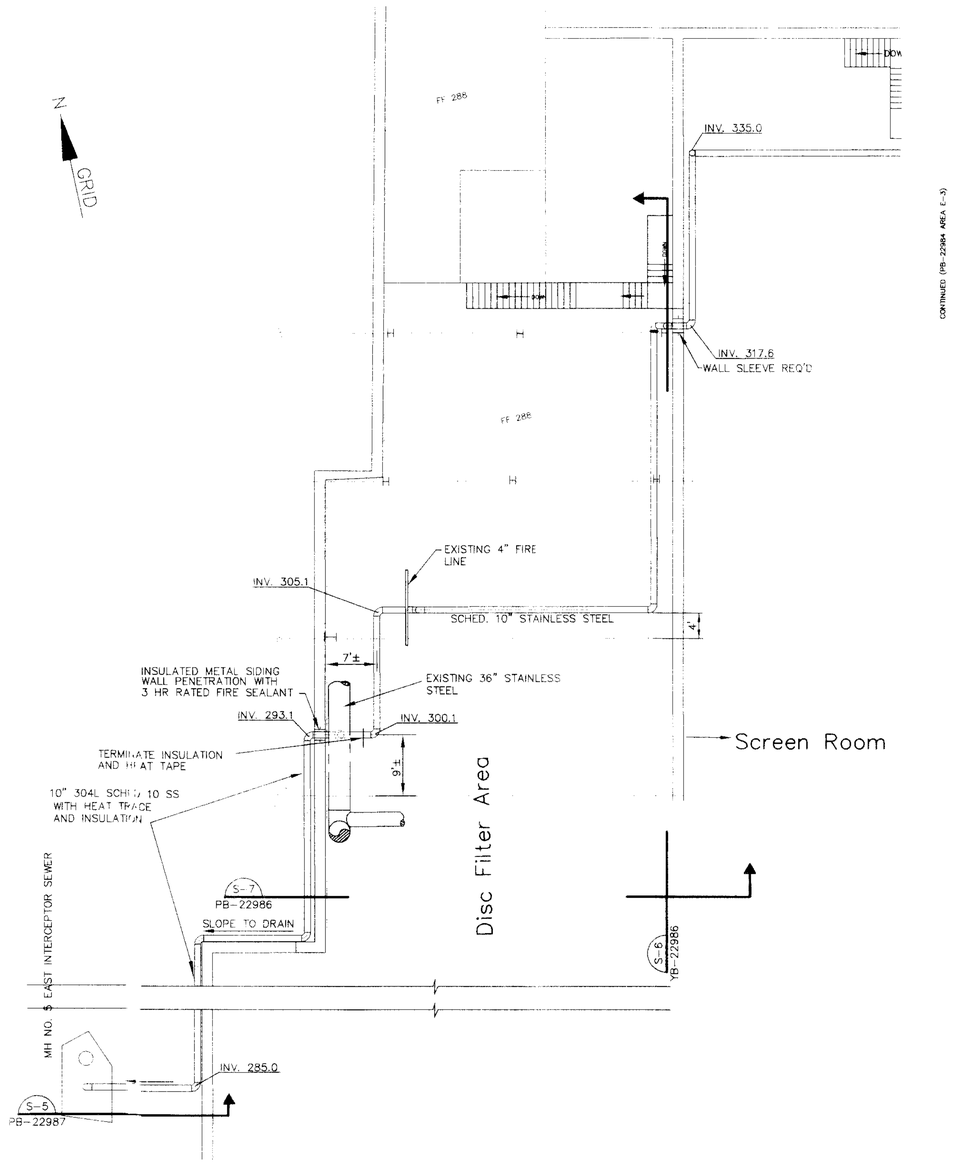
ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
1" = 10'

**BOWATER**
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
WET LAP AND SCREEN ROOM AREA
10" GRAVITY SEWER

JOB NO. 22845
ENG. REQ. NO.
FILE NO. 2-092-4783

SHEET 4 OF 8




PLAN

STATE OF MAINE
DAVID WILLARD YOUNG 2410 REGISTERED PROFESSIONAL ENGINEER

| | | | | | | |
|---|---|---|---|---|---|---|
| AF-375-E | SIMONS ENGINEERING/DISC FILTER BLDG. | | | | | |
| YF-719-F | SIMONS ENGINEERING/GROUND WOOD IMPROVEMENTS STEEL ● EL 310 | C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB | DWY |
| YF-725-B | SIMONS ENGINEERING/EAST INTERCEPTOR SEWER | P | 8/8/95 | ISSUED FOR CLIENT REVIEW | MSB | DWY |
| YF-698-B | SIMONS ENGINEERING/EAST INTERCEPTOR SEWER | P | 5/26/95 | ISSUED FOR CLIENT REVIEW | MSB | DWY |

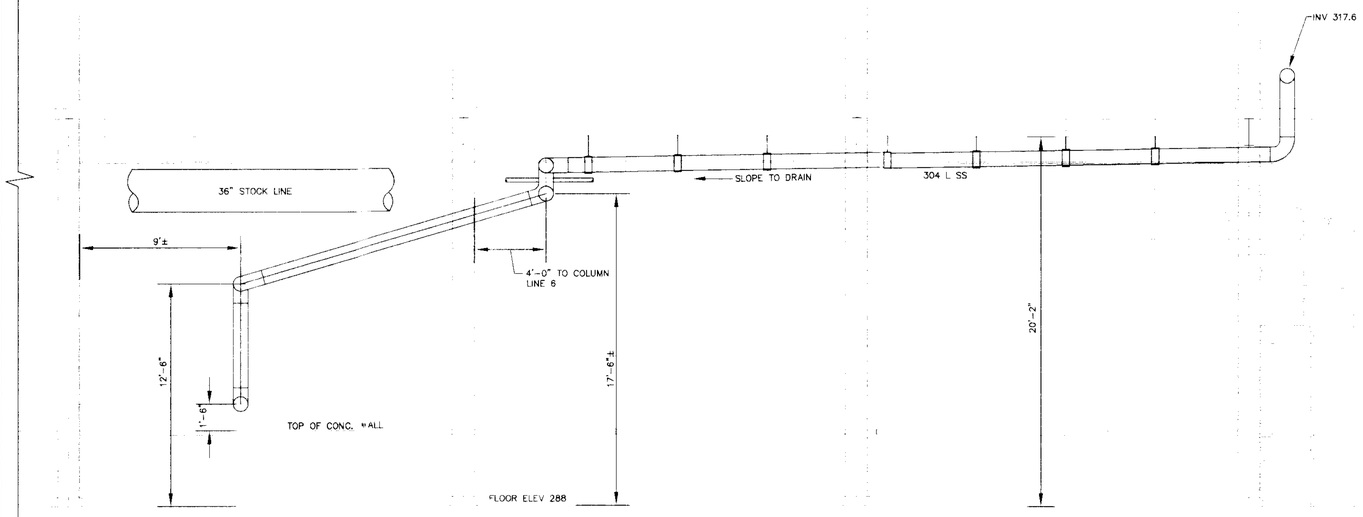
SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | |
|---|---|
| DRN DWY | 5/95 |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - Prelim | B - Bids |
| M - Mtl T.O. | C - Const. |
| 1" = 10' | |

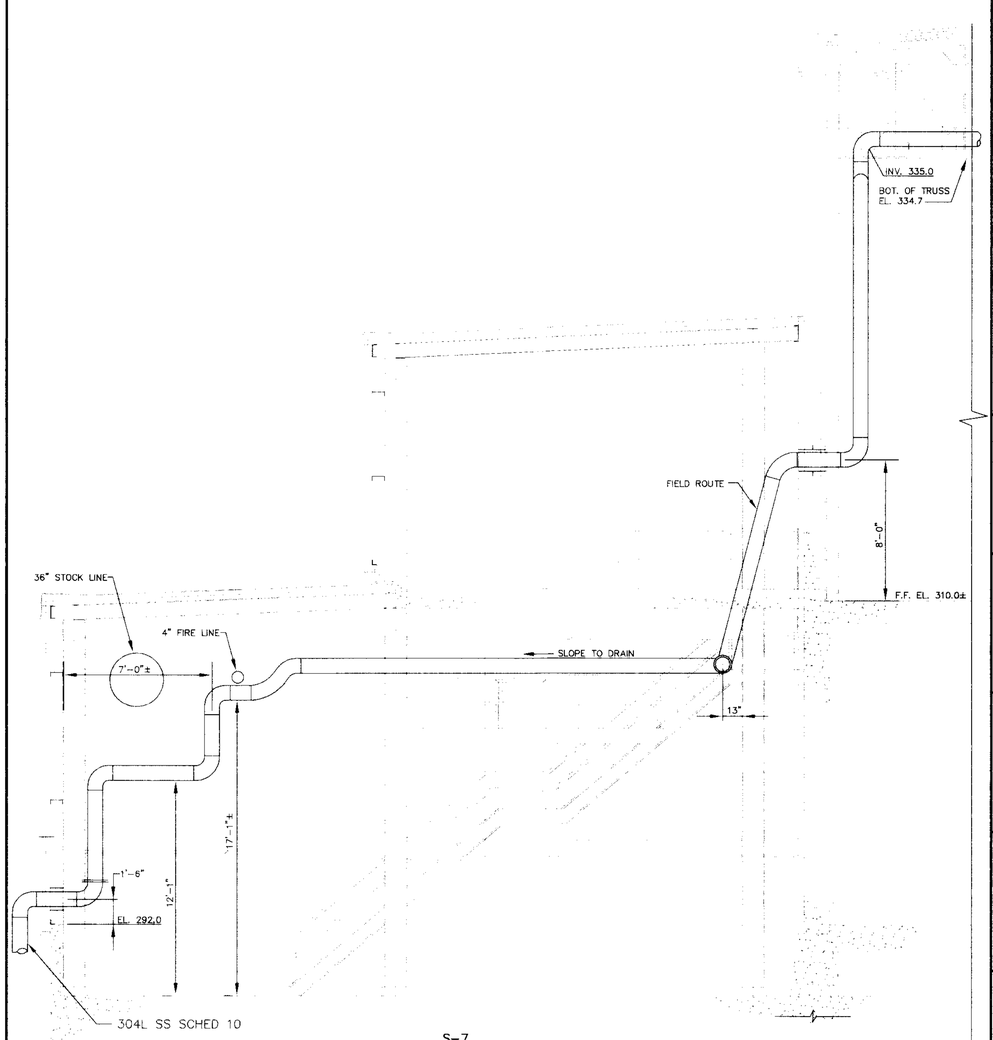
BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
DISC FILTER AREA
10" GRAVITY SEWER

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783




S-6
PB-22985




S-7
PB-22985

STATE OF MAINE
DAVID (WILLARD) YOUNG
2410
REGISTERED PROFESSIONAL ENGINEER

| | | | | | |
|---|---|---|---|---|---|
| | | C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB DWY |
| SF-719-F | CorrONS ENGINEERING GROUND WOOD IMPROVEMENTS -STEEL @ EL 310 | P | 8/8/95 | FOR CLIENT REVIEW | MSB DWY |
| AF-737-B | CorrONS ENGINEERING GROUND WOOD IMPROVEMENTS - DISC FILTER BLDG. | P | 5/26/95 | FOR CLIENT REVIEW | MSB DWY |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - Prelim | B - Bids |
| M - Mill T.O. | C - Const. |

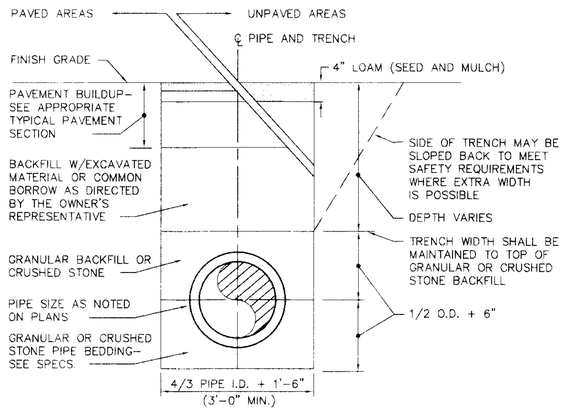
1/4"/FT

BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DISC FILTER AREA

JOB NO. 22846
ENG. REQ NO.
FILE NO. 2-092-4783

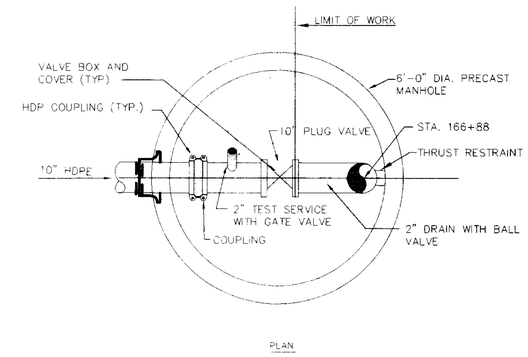
PB-22986
SHEET 6 OF 8



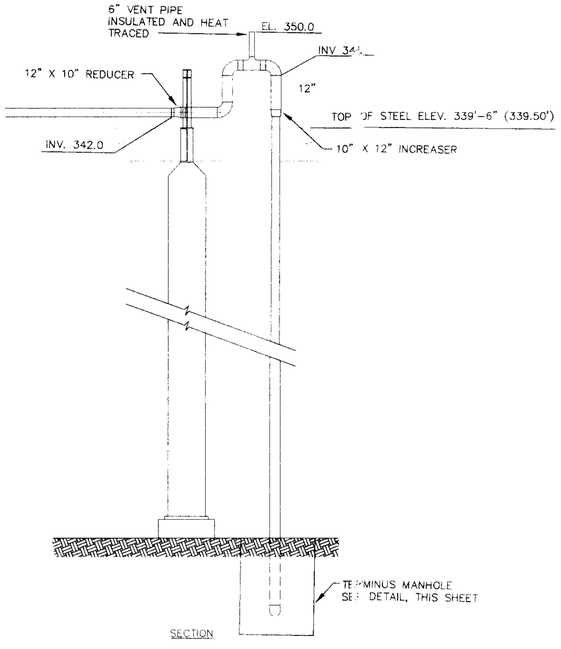

## TYPICAL TRENCH DETAIL

N.T.S.

S-6

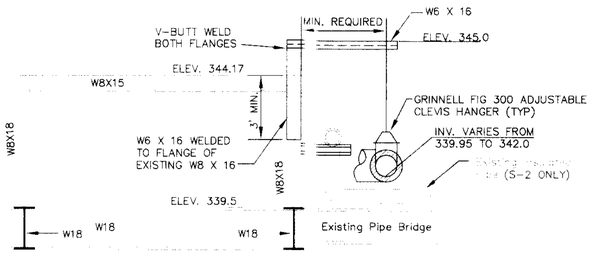


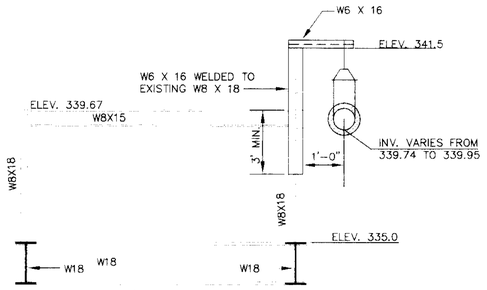

PLAN



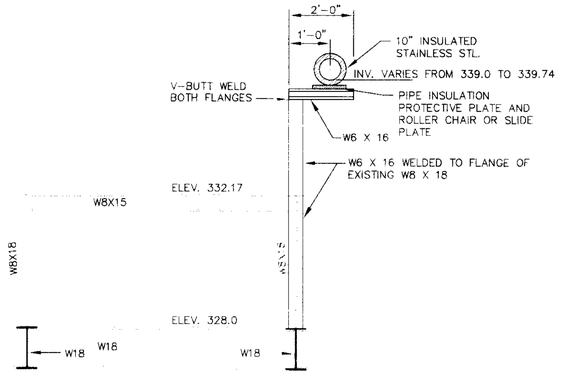

## TRANSITION DETAIL

N.T.S.



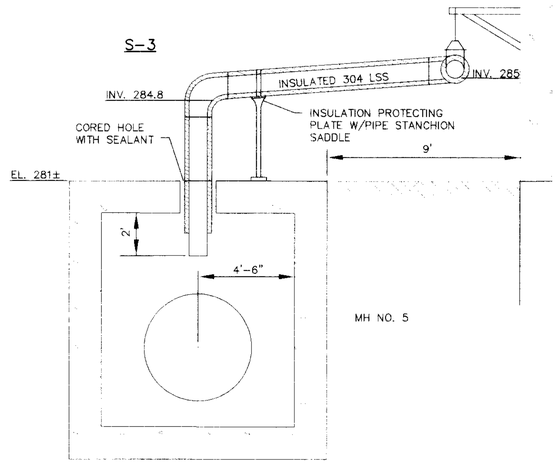




## S-1 AND S-2

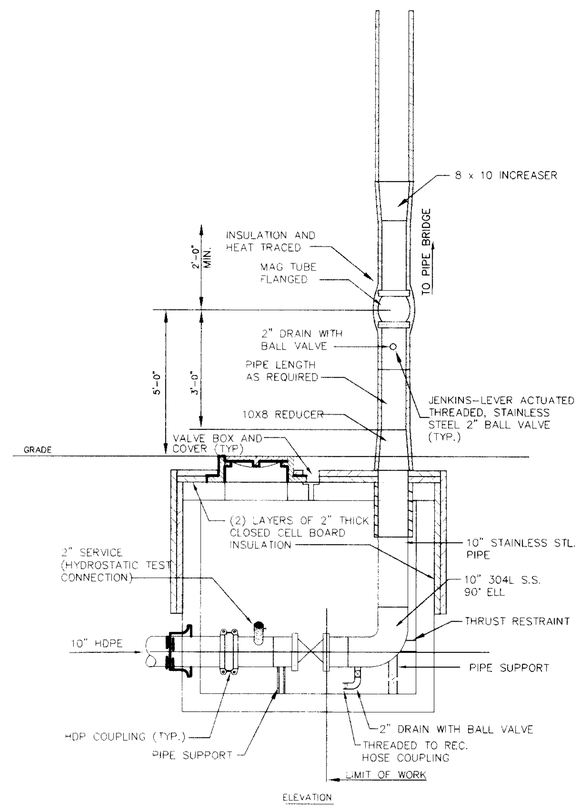



S-4

## S-3




S-5




ELEVATION

## TERMINUS MANHOLE

N.T.S.

STATE OF MAINE
DAVID WILLARD YOUNG
7410
REGISTERED
PROFESSIONAL ENGINEER

| | | | | | |
|---|---|---|---|---|---|
| C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB | DWY |
| P | 8/8/95 | FOR CLIENT REVIEW | MSB | DWY |
| P | 5/28/95 | FOR CLIENT REVIEW | MSB | DWY |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | | |
|---|---|---|
| DRN | DWY | 5/95 |
| CHK | | |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - Prelim | B - Bids
M - Mtl T.O. | C - Const.
N.T.S.

BOWATER
Great Northern Paper

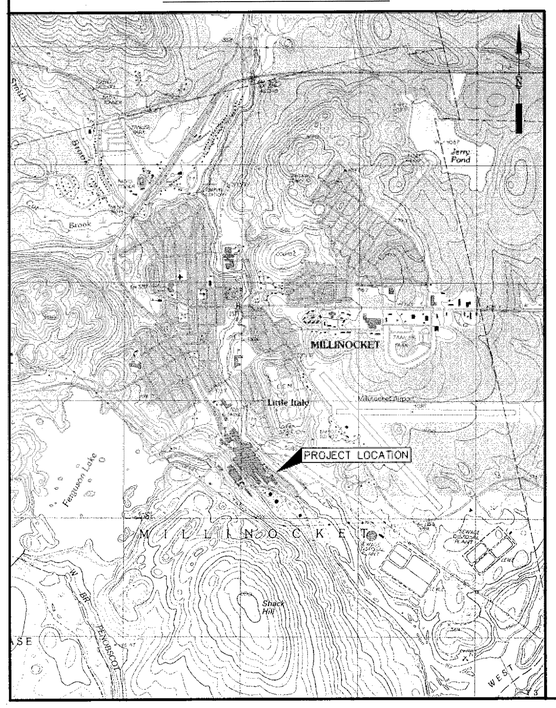
EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
SECTIONS AND DETAILS
10" GRAVITY SEWER

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

# MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
# LEACHATE PIPELINE RELOCATION
# GNP MILL FACILITY
# EAST MILLINOCKET, MAINE

| TITLE | DWG NO |
|---|---|
| COVER SHEET | |
| SYMBOLS & ABBREVIATIONS | C-100 |
| SITE OVERVIEW PLAN | C-101 |
| LEACHATE PIPELINE PLAN AND PROFILE | C-200 |
| LEACHATE PIPELINE PLAN AND PROFILE | C-201 |
| LEACHATE PIPELINE PLAN AND PROFILE | C-202 |
| SECTIONS AND DETAILS | C-300 |
| SECTIONS AND DETAILS | C-301 |
| SECTIONS AND DETAILS | C-302 |
| SECTIONS AND DETAILS | C-303 |
| SECTIONS AND DETAILS | C-304 |
| SECTIONS AND DETAILS | C-305 |
| FLOW METER BUILDING ELECTRICAL PLAN | 6312-14001-E03 |

LOCATION MAP




SME
Sevee & Maher Engineers, Inc.

ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE

4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

STATE OF MAINE
GUY C. COTE JR.
NO. 9444
LICENSED PROFESSIONAL ENGINEER

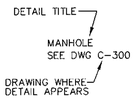
**RECORD DRAWINGS**

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | DRAINAGE COURSE (WITH DIRECTION) | G | UG | UNDERGROUND GAS MAIN |
| DATE | | NORTH ARROW (MAGNETIC) | | | EDGE OF WATER | T | UT | UNDERGROUND TELEPHONE LINE |
| N | | NORTH ARROW (PLAN NORTH) | | | WATER ELEVATION (GROUND OR SURFACE) | E | UE | UNDERGROUND ELECTRICAL LINE |
| 25 | 25 | CONTOUR LINES | | | FENCE LINE (WOOD) | OE | OE | OVERHEAD ELECTRICAL LINE |
| | INV 25.56 | SPOT ELEVATION (INVERT ELEVATION) | | | FENCE LINE (WIRE) | OT | OT | OVERHEAD TELEPHONE LINE |
| | | EXISTING GROUND | | | STONE WALL | 12" SS | 12" SS | SANITARY SEWER |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | RETAINING WALL | 8" FM | 8" FM | FORCE MAIN |
| | | PROPERTY LINE OR R.O.W. | | | GUARD RAIL | 8" W | 8" W | WATER MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | BUILDING AND STRUCTURES | 12" SD | 12" SD | STORM DRAIN |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | | SLOPE RATIO (HORIZONTAL TO VERTICAL) | 8" UD | 8" UD | UNDERDRAIN |
| | | BOUNDARY LINE (State, County, Municipality) | TOP OF SLOPE 2:1 | TOP OF SLOPE 2:1 | SLOPES (WITH SLOPE RATIO) | 6" PD | 6" PD | PERIMETER DRAIN |
| | | SURVEY MONUMENT | | | EDGE OF ROAD | 6" LT | 6" LT | LEACHATE TRANSPORT |
| | | SURVEY CONTROL | | | CUT OR FILL LINE | 6" LC | 6" LC | LEACHATE COLLECTION |
| | | PROPERTY PIN, DRILL HOLE, PK, OR STAKE | | | BITUMINOUS PAVEMENT | LD | 6" LD | LEAK DETECTION |
| | | WOODS OR BRUSH LINE | | | CONCRETE | GC | 6" G | GAS COLLECTION |
| | | INDIVIDUAL TREE | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | REDUCER |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | | MECHANICAL CAP OR PLUG |
| | | GAS VENT | SW-12 | SW-12 | SURFACE WATER SAMPLE LOCATION | | | COUPLING |
| | | GAS VENT (CAPPED) | | | GAS EXTRACTION WELL | | | BEND |
| | | CLEAN OUT STRUCTURE | | | MANHOLE | | | TEE |
| | | CULVERT | | | CATCH BASIN | | | PIPE TO BE ABANDONED |
| | | RAILROAD | | | WATER OR GAS VALVE | | | RISER PIPE & INLET GRATE |
| | | SLOPE INCLINOMETER | | | HYDRANT | | | STORM GRATE |
| | | VIBRATING WIRE SETTLEMENT CELL | | | AIR RELEASE VALVE | | | DRAINAGE INLET STRUCTURE |
| | | VERTICAL/HORIZONTAL DISPLACEMENT MONUMENT | | | SURGE RELEASE VALVE | | | UNDERDRAIN SUMP |
| | | VERTICAL DISPLACEMENT MONUMENT | | | UTILITY POLE | | SF | SILTATION FENCE |
| | | LIQUID SETTLEMENT GAGE | | | LIGHT POLE | | CL | CLEARING OR CONSTRUCTION LIMIT LINE |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACCMP | ASPHALT COATED CMP | ° | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | PERF | PERFORATED |
| ACP | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HORIZ | HORIZONTAL | PP | POWER POLE |
| AC | ACRE | DEG OR ° | DEGREE | HP | HORSEPOWER | PSI | POUNDS PER SQUARE INCH |
| AGG | AGGREGATE | DEPT | DEPARTMENT | HYD | HYDRANT | PVC | POLYVINYL CHLORIDE |
| ALUM | ALUMINUM | DI | DUCTILE IRON | | | PVMT | PAVEMENT |
| APPD | APPROVED | DIA OR ø | DIAMETER | ID | INSIDE DIAMETER | | |
| APPROX | APPROXIMATE | DIM | DIMENSION | IN OR " | INCHES | QTY | QUANTITY |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV | INVERT | | |
| ASB | ASBESTOS | DN | DOWN | INV EL | INVERT ELEVATION | RCP | REINFORCED CONCRETE PIPE |
| ASP | ASPHALT | DR | DRAIN | | | ROW | RIGHT OF WAY |
| AUTO | AUTOMATIC | DWG | DRAWING | LB | POUND | RAD | RADIUS |
| AUX | AUXILIARY | | | LC | LEACHATE COLLECTION | REQD | REQUIRED |
| AVE | AVENUE | EA | EACH | LD | LEAK DETECTION | RT | RIGHT |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LF | LINEAR FEET | RTE | ROUTE |
| | | ELEC | ELECTRIC | LOC | LOCATION | | |
| BCCMP | BITUMINOUS COATED CMP | EL | ELEVATION | LT | LEACHATE TRANSPORT | S | SLOPE |
| BM | BENCH MARK | ELB | ELBOW | | | SCH | SCHEDULE |
| BIT | BITUMINOUS | EOP | EDGE OF PAVEMENT | MH | MANHOLE | SF | SQUARE FEET |
| BLDG | BUILDING | EQUIP | EQUIPMENT | MJ | MECHANICAL JOINT | SHT | SHEET |
| BOT | BOTTOM | EST | ESTIMATED | MATL | MATERIAL | SMH | SANITARY MANHOLE |
| BRG | BEARING | EXC | EXCAVATE | MAX | MAXIMUM | ST | STREET |
| BV | BALL VALVE | EXIST | EXISTING | MFR | MANUFACTURE | STA | STATION |
| | | | | MIN | MINIMUM | SY | SQUARE YARD |
| CB | CATCH BASIN | FG | FINISH GRADE | MISC | MISCELLANEOUS | | |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT | TAN | TANGENT |
| CEM LIN | CEMENT LINED | FDN | FOUNDATION | | | TDH | TOTAL DYNAMIC HEAD |
| CMP | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | NITC | NOT IN THIS CONTRACT | TEMP | TEMPORARY |
| CO | CLEAN OUT | FLG | FLANGE | NTS | NOT TO SCALE | TYP | TYPICAL |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY | UD | UNDERDRAIN |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO OR # | NUMBER | | |
| CI | CAST IRON | FT OR ' | FEET | | | V | VOLTS |
| CL | CLASS | FTG | FOOTING | OC | ON CENTER | VA TEE | VALVE ANCHORING TEE |
| CONC | CONCRETE | | | OD | OUTSIDE DIAMETER | VERT | VERTICAL |
| CONST | CONSTRUCTION | GA | GAUGE | | | | |
| CONTR | CONTRACTOR | GAL | GALLON | PC | POINT OF CURVE | WG | WATER GATE |
| CS | CURB STOP | GALV | GALVANIZED | PD | PERIMETER DRAIN | W/ | WITH |
| CTR | CENTER | GPD | GALLONS PER DAY | PI | POINT OF INTERSECTION | W/O | WITHOUT |
| CU | COPPER | GPM | GALLONS PER MINUTE | PIV | POST INDICATOR VALVE | | |
| CY | CUBIC YARD | | | PT | POINT OF TANGENT | YD | YARD |

## VIEW MARKERS & IDENTIFICATION




| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | BDP | 12/15 | RECORD DRAWING |
| | BDP | 7/15 | ISSUED FOR CONSTRUCTION |
| | BDP | 6/15 | ISSUED FOR BID |

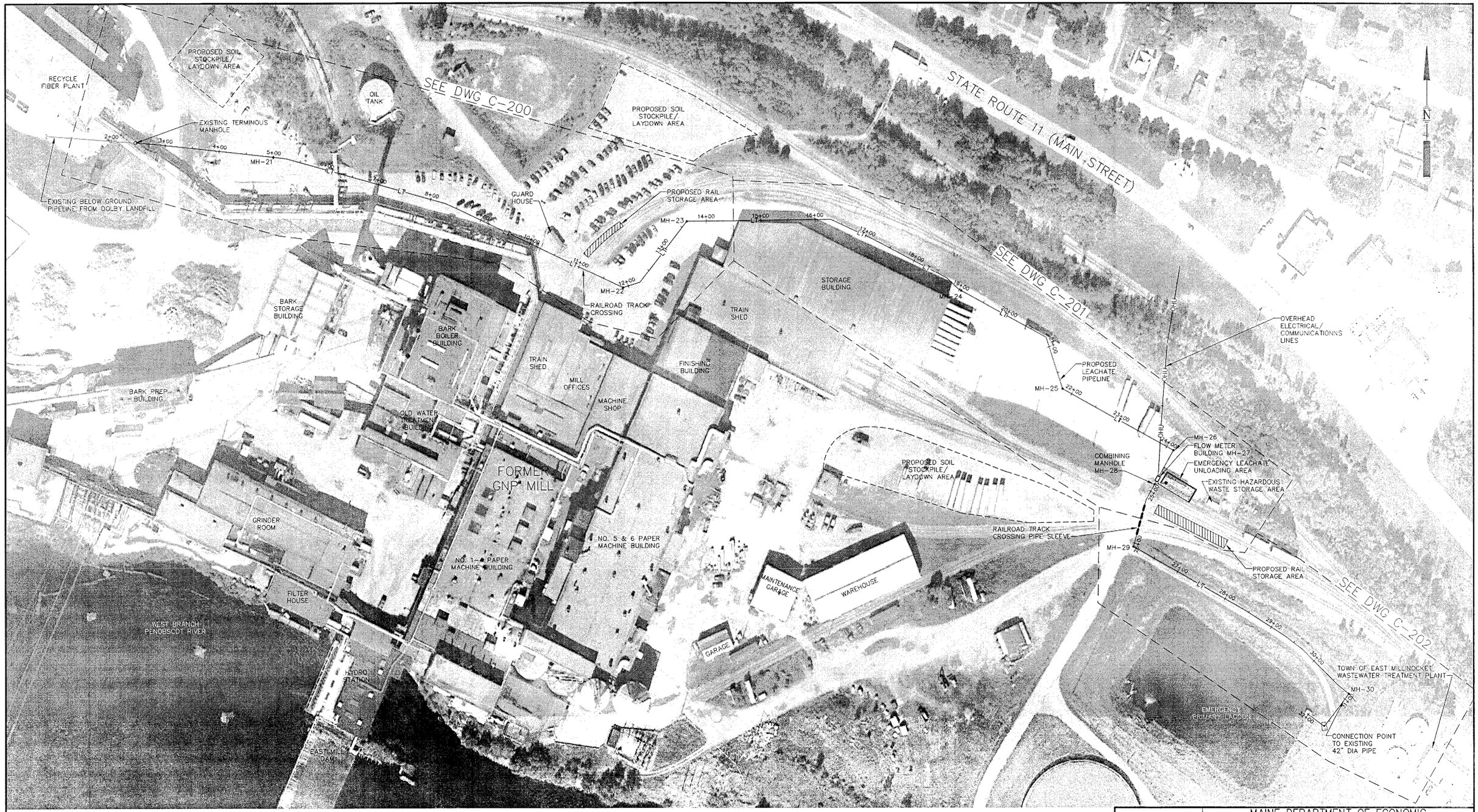
STATE OF MAINE — JUSTIN H. MATE — No. 5144 — LICENSED PROFESSIONAL ENGINEER

MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
EAST MILLINOCKET, MAINE

SYMBOLS AND ABBREVIATIONS


SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com


| | |
|---|---|
| DESIGN BY: | BDP |
| DRAWN BY: | SJM |
| DATE: | 5/2015 |
| CHECKED BY: | BDP |
| LMN: | NONE |
| CTB: | SME-STD |
| JOB NO. 14134.09 DWG FILE SYMSHT | C-100 |




NOTES

1. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.
2. AERIAL PHOTO FROM GOOGLE EARTH PRO, DATED SEPTEMBER 17, 2013. IMAGE ALIGNMENT ADJUSTED TO MATCH EXISTING GROUND SURVEY BY SEVEE & MAHER ENGINEERS, INC.

40 0 80 160

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | BDP | 12/15 | RECORD DRAWING |
| | BDP | 8/15 | REVISED PER CHANGE ORDER 1 |
| | BDP | 7/15 | ISSUED FOR CONSTRUCTION |
| | BDP | 6/15 | ISSUED FOR BID |

STATE OF MAINE — BRIAN D. POTE JR. — No. 5144 — LICENSED PROFESSIONAL ENGINEER

# MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
# LEACHATE PIPELINE RELOCATION
# GNP MILL FACILITY
# EAST MILLINOCKET, MAINE

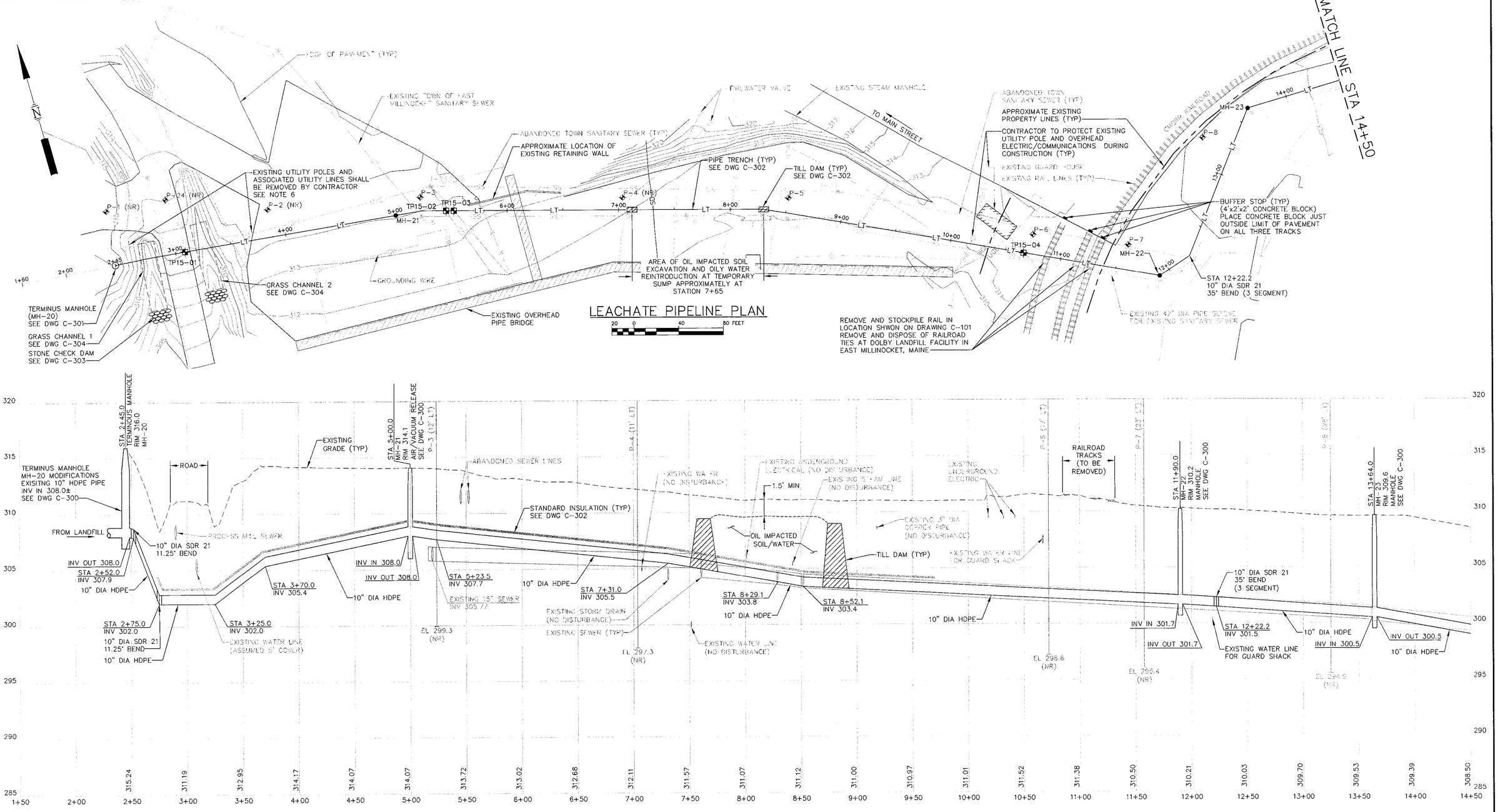
## SITE OVERVIEW PLAN

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

| | |
|---|---|
| DESIGN BY: | BDP |
| DRAWN BY: | SJM |
| DATE: | 5/2015 |
| CHECKED BY: | BDP |
| LMN: | SITE-OVER |
| CTB: | SME-STD |

JOB NO. 14134.09 DWG FILE BASE

C-101







LEACHATE PIPELINE PROFILE

20 0 40 80 FEET (HORZ)
2 0 4 8 FEET (VERT)

NOTES

1. BASE MAP PREPARED BY SEVEE & MAHER ENGINEERS, INC, CUMBERLAND, MAINE. HORIZONTAL DATUM MAINE STATE COORDINATE SYSTEM EAST ZONE, SPC 1801. VERTICAL DATUM IS NAVD 88, GEOID 12.
2. BORING LOCATIONS AND TOWN OF EAST MILLINOCKET SANITARY SEWER PIPE INVERTS FIELD SURVEYED BY SEVEE & MAHER ENGINEERS, INC. OF CUMBERLAND MAINE. BORING DESIGNATION NR=NO REFUSAL. LOCATIONS OF ALL OTHERS IS APPROXIMATE AND ARE BASED ON HISTORICAL PLANS AND ON UTILITY SURVEY BY DIGSMART.
3. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.
4. CONTRACTOR SHALL TEST PIT TO A DEPTH OF 15-FEET BELOW GROUND SURFACE OR TO UNKNOWN UTILITY AT ALL TEST PIT LOCATIONS SHOWN.
5. UTILITIES AND STRUCTURES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER AT NO ADDITIONAL COST TO THE OWNER.
6. THE PROPERTY OWNER HAS EXPRESSED NO OBJECTION TO REMOVAL OF POWER LINES AND POLES. CONTRACTOR SHALL CONFIRM ALL LINES TO BE REMOVED ARE DEENERGIZED PRIOR TO REMOVAL.

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | BDP | 12/15 | RECORD DRAWING |
| | BDP | 8/15 | REVISED PER CHANGE ORDER 1 |
| | BDP | 7/15 | ISSUED FOR CONSTRUCTION |
| | BDP | 7/15 | REVISED PER ADDENDUM 1 |
| | BDP | 6/15 | ISSUED FOR BID |

STATE OF MAINE
SCOTT J. HUNT
No. 5148
LICENSED PROFESSIONAL ENGINEER

MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
EAST MILLINOCKET, MAINE

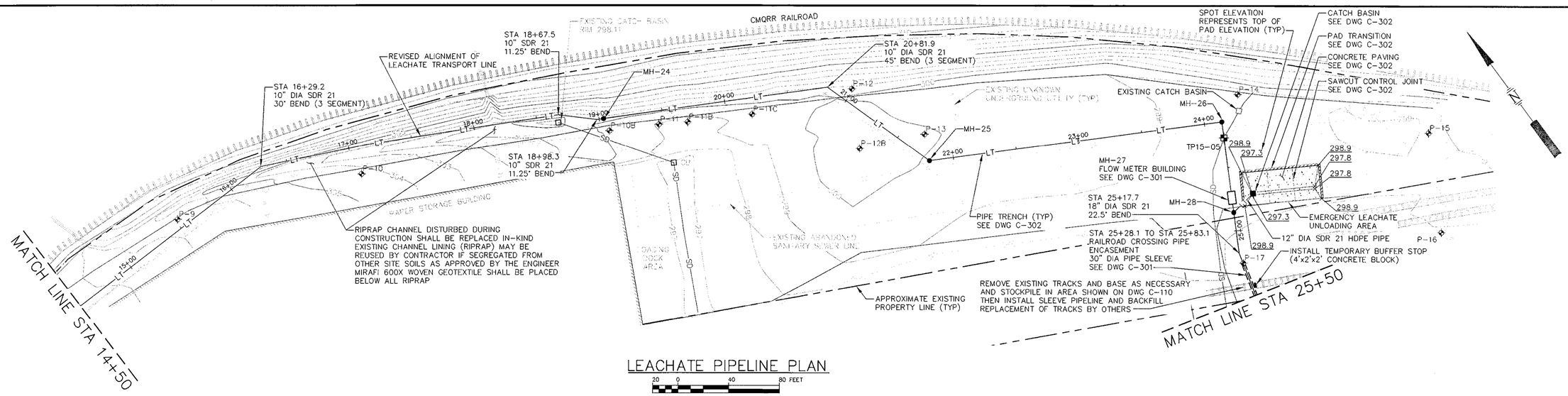
LEACHATE PIPELINE PLAN AND PROFILE

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

| | |
|---|---|
| DESIGN BY: | BDP |
| DRAWN BY: | SJM |
| DATE: | 5/2015 |
| CHECKED BY: | BDP |
| LMN: | LT-PLAN-PROF |
| CTB: | SME-STD |

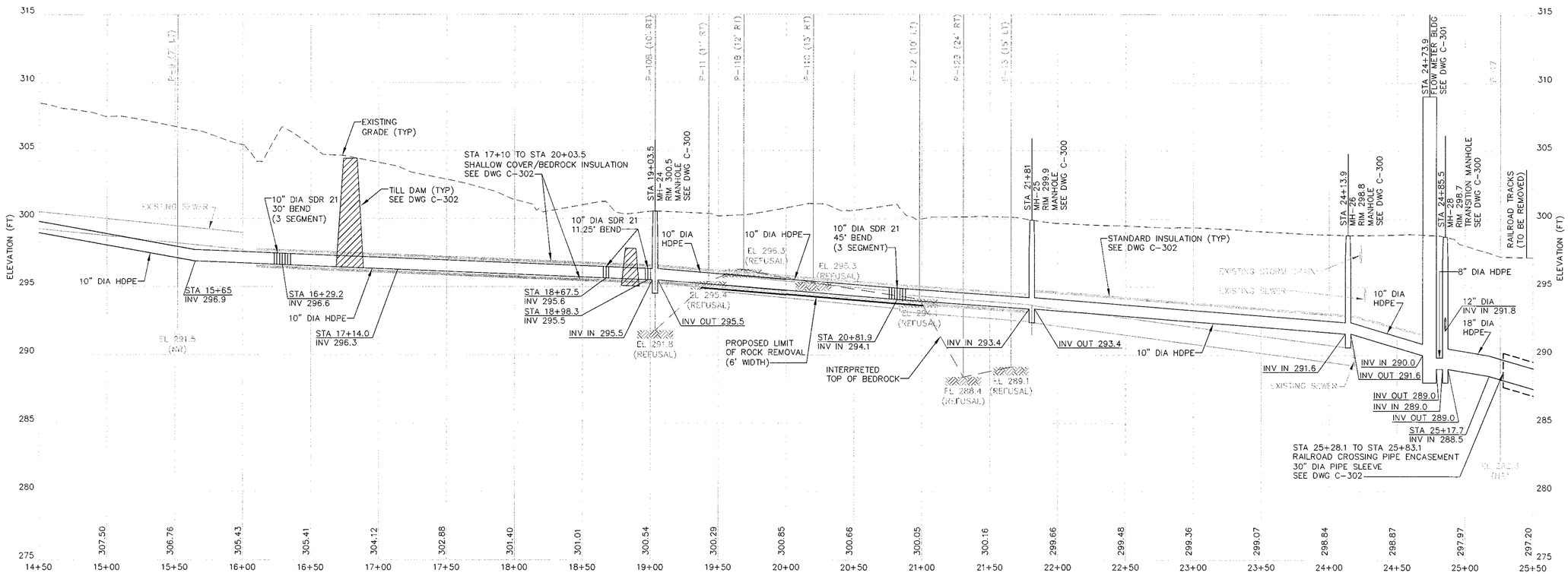
JOB NO. 14134.09 DWG FILE BASE

C-200




## LEACHATE PIPELINE PLAN

20 0 40 80 FEET




## LEACHATE PIPELINE PROFILE

20 0 40 80 FEET (HORZ)
2 0 4 8 FEET (VERT)

NOTES

1. BASE MAP PREPARED BY SEVEE & MAHER ENGINEERS, INC, CUMBERLAND, MAINE. HORIZONTAL DATUM MAINE STATE COORDINATE SYSTEM EAST ZONE, SPC 1801. VERTICAL DATUM IS NAVD 88, GEOID 12.
2. BORING LOCATIONS AND TOWN OF EAST MILLINOCKET SANITARY SEWER PIPE INVERTS FIELD SURVEYED BY SEVEE & MAHER ENGINEERS, INC. OF CUMBERLAND MAINE. BORING DESIGNATION NR=NO REFUSAL. LOCATIONS OF ALL OTHERS IS APPROXIMATE AND ARE BASED ON HISTORICAL PLANS AND ON UTILITY SURVEY BY DIGSMART.
3. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.
4. CONTRACTOR SHALL TEST PIT TO A DEPTH OF 15-FEET BELOW GROUND SURFACE OR TO UNKNOWN UTILITY AT ALL TEST PIT LOCATIONS SHOWN.
5. UTILITIES AND STRUCTURES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER AT NO ADDITIONAL COST TO THE OWNER.

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | BDP | 12/15 | RECORD DRAWING |
| | BDP | 8/15 | REVISED PER CHANGE ORDER 2 |
| | BDP | 8/15 | REVISED PER CHANGE ORDER 1 |
| | BDP | 7/15 | ISSUED FOR CONSTRUCTION |
| | BDP | 6/15 | ISSUED FOR BID |

STATE OF MAINE
TIMOTHY H. WHITE, JR.
No. 5144
LICENSED PROFESSIONAL ENGINEER

MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
EAST MILLINOCKET, MAINE

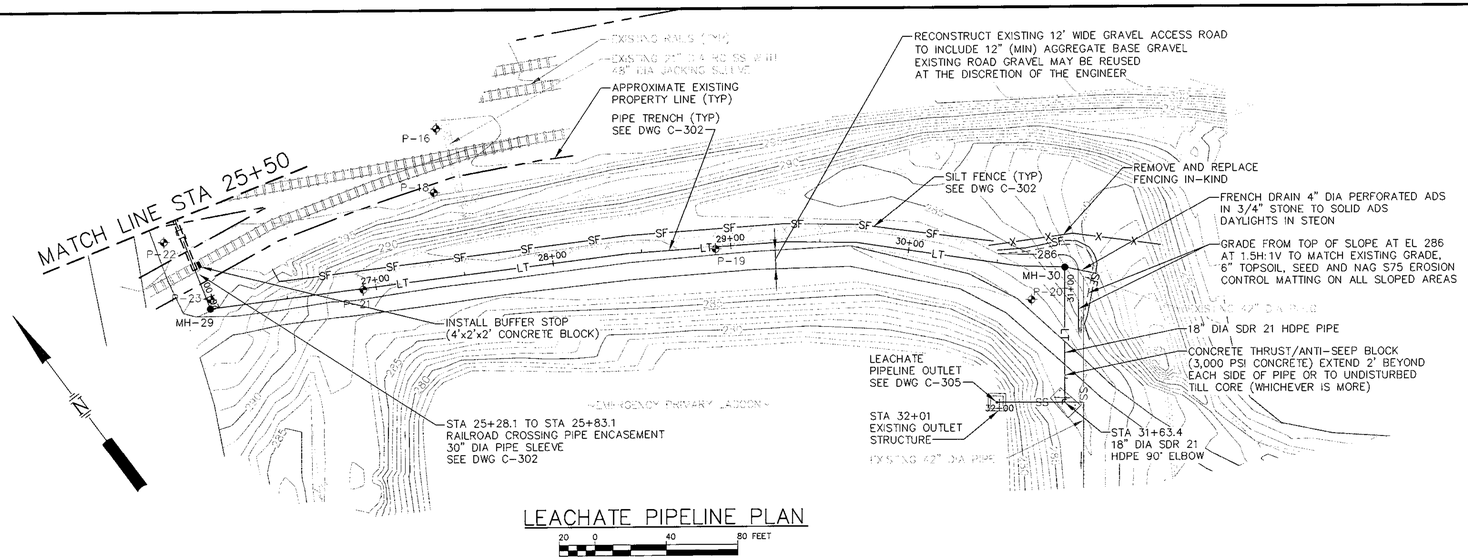
LEACHATE PIPELINE PLAN AND PROFILE

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

| | |
|---|---|
| DESIGN BY: | BDP |
| DRAWN BY: | SJM |
| DATE: | 5/2015 |
| CHECKED BY: | BDP |
| LMN: | LT-PLAN-PROF |
| CTB: | SME-STD |

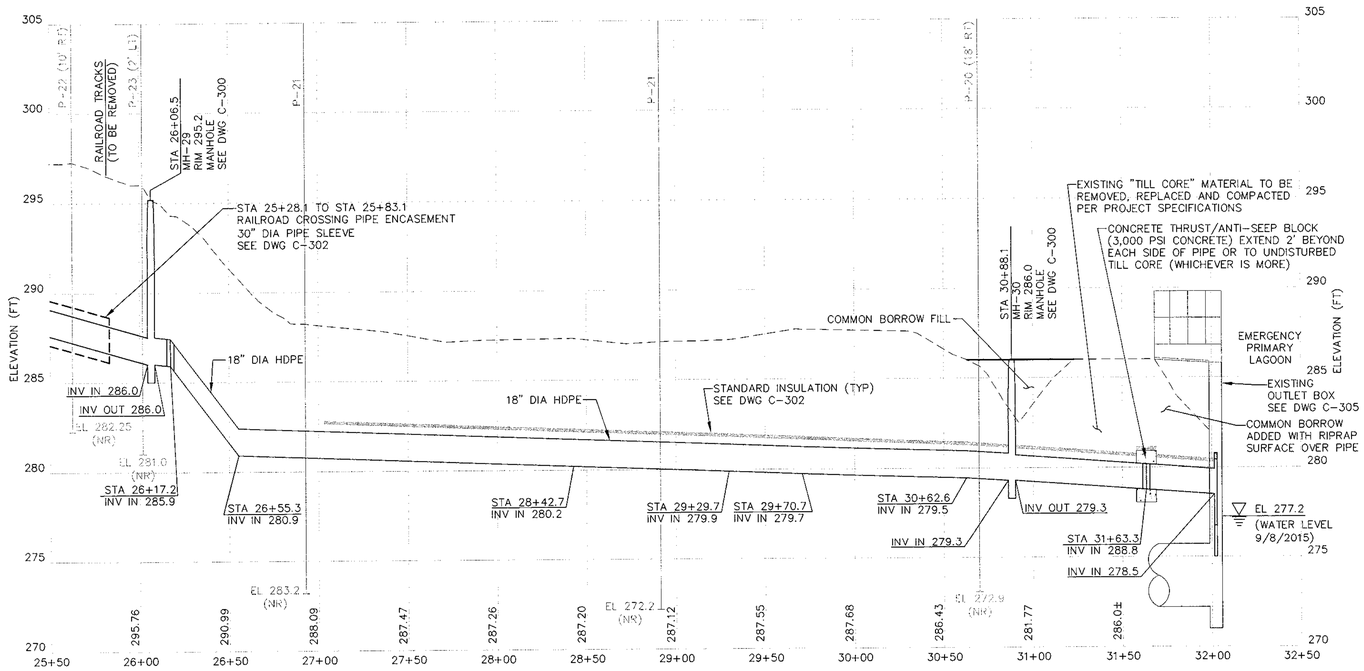
JOB NO. 14134.09 DWG FILE BASE

C-201




## LEACHATE PIPELINE PLAN

20 0 40 80 FEET




## LEACHATE PIPELINE PROFILE

20 0 40 80 FEET (HORZ)
2 0 4 8 FEET (VERT)

NOTES

1. BASE MAP PREPARED BY SEVEE & MAHER ENGINEERS, INC, CUMBERLAND, MAINE. HORIZONTAL DATUM MAINE STATE COORDINATE SYSTEM EAST ZONE, SPC 1801. VERTICAL DATUM IS NAVD 88, GEOID 12.
2. BORING LOCATIONS AND TOWN OF EAST MILLINOCKET SANITARY SEWER PIPE INVERTS FIELD SURVEYED BY SEVEE & MAHER ENGINEERS, INC. OF CUMBERLAND MAINE. BORING DESIGNATION NR=NO REFUSAL. LOCATIONS OF ALL OTHERS IS APPROXIMATE AND ARE BASED ON HISTORICAL PLANS AND ON UTILITY SURVEY BY DIGSMART.
3. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.
4. CONTRACTOR SHALL TEST PIT TO A DEPTH OF 15-FEET BELOW GROUND SURFACE OR TO UNKNOWN UTILITY AT ALL TEST PIT LOCATIONS SHOWN.
5. UTILITIES AND STRUCTURES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER AT NO ADDITIONAL COST TO THE OWNER.

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | BDP | 12/15 | RECORD DRAWING |
| | BDP | 9/15 | REVISED PER CHANGE ORDER 3 |
| | BDP | 8/15 | REVISED PER CHANGE ORDER 1 |
| | BDP | 7/15 | ISSUED FOR CONSTRUCTION |
| | BDP | 6/15 | ISSUED FOR BID |

STATE OF MAINE — GARY E. MOTE, JR. — No. 5144 — LICENSED PROFESSIONAL ENGINEER

MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
EAST MILLINOCKET, MAINE

# LEACHATE PIPELINE PLAN AND PROFILE

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

DESIGN BY: BDP
DRAWN BY: SJM
DATE: 5/2015
CHECKED BY: BDP
LMN: LT-PLAN-PROF
CTB: SME-STD

JOB NO. 14134.09 DWG FILE BASE

C-202

## MANHOLE AND CATCH BASIN NOTES:

THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO THE ENGINEER FOR APPROVAL. SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING:

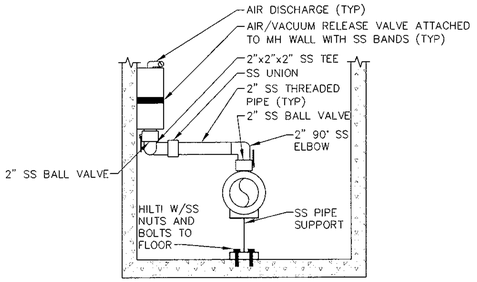
PRODUCT DATA: SUBMIT PRODUCT DATA FOR ALL MATERIALS USED ON THE JOB FOR REVIEW FOR LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH INFORMATION GIVEN AND DESIGN CONCEPT EXPRESSED IN CONTRACT DOCUMENTS.

SHOP DRAWINGS: SUBMIT FOR REVIEW SHOP DRAWINGS OF ALL PRECAST UNITS. MANUFACTURER'S INFORMATION SHALL BE SUBMITTED FOR JOINT SEALANTS AND WATERPROOFING. MANUFACTURE SHALL PROVIDE ANTI-FLOTATION DESIGN SHOP DRAWINGS AND CALCULATIONS, INCLUDING ANY EXTENDED BASE SLABS AS NECESSARY, FOR PROPOSED MANHOLES. MANUFACTURER SHALL ASSUME GROUNDWATER LEVELS EQUAL TOP OF GROUND ELEVATIONS AND PROVIDE FOR A 1.2 FACTOR OF SAFETY AGAINST FLOTATION.

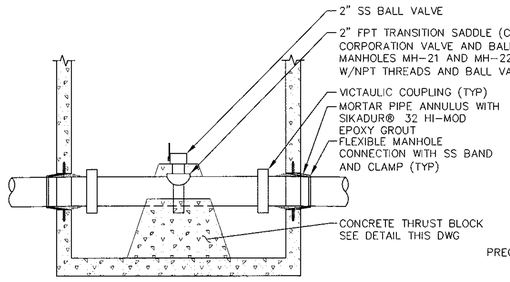
LOAD RATING: ALL MANHOLES AND CATCH BASINS SHALL BE H-20 LOAD RATED.

## MANHOLE SCHEDULE

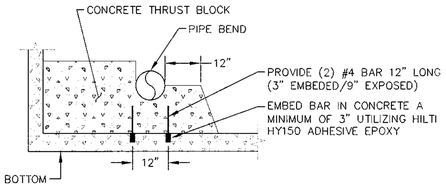
| MANHOLE | PIPE ANGLE (DEGREES) | STATION | INSIDE DIA (FEET) | RIM EL (FEET) | INVERT IN | | INVERT OUT | | BOTTOM EL |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | PIPE DIA (INCHES) | PIPE INV EL (FEET) | PIPE DIA (INCHES) | PIPE INV EL (FEET) | |
| MH-20 | NONE | 2+45 | 8 | 316.0 | 10 (EXIST) | 308.0 (EXIST) | 10 | 308.0 | 307.0+/- |
| MH-21 | NONE | 5+00 | 6 | 314.1 | 10 | 308.0 | 10 | 308.0 | 307.0 |
| MH-22 | 45 (3-SEGMENT) | 11+90 | 6 | 310.2 | 10 | 301.7 | 10 | 301.7 | 300.7 |
| MH-23 | 52 (3-SEGMENT) | 13+64 | 6 | 309.6 | 10 | 300.5 | 10 | 300.5 | 299.5 |
| MH-24 | NA | 19+03.5 | 6 | 300.5 | 10 | 295.5 | 10 | 295.5 | 294.5 |
| MH-25 | 45 (3-SEGMENT) | 21+81 | 6 | 299.9 | 10 | 293.4 | 10 | 293.4 | 292.4 |
| MH-26 | 90 (5-SEGMENT) | 24+13.9 | 6 | 298.8 | 10 | 291.6 | 10 | 291.6 | 290.6 |
| FLOW METER BLDG | SEE DETAIL ON DWG C-301 | 24+73.9 | NA (6' x 10') | NA | 10 | 290.0 | 8 | 289.0 | 288.0 |
| MH-28 | NA | 24+85.5 | 6 | 298.7 | 8 | 289.0 | 18 | 289.0 | 288.0 |
| | | | | | 12 | 291.8 | | | |
| MH-29 | 75 (5-SEGMENT) | 26+06.5 | 8 | 295.2 | 18 | 286.0 | 18 | 286.0 | 285.0 |
| MH-30 | 90 (5-SEGMENT) | 30+88.1 | 8 | 286.0 | 18 | 279.3 | 18 | 279.3 | 278.3 |
| ECB | NA | NA | 6 | NA | NA | NA | 12 | 287.5 | NA |




SECTION B-B'



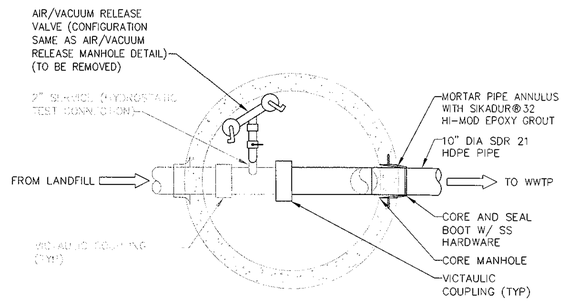

SECTION C-C'



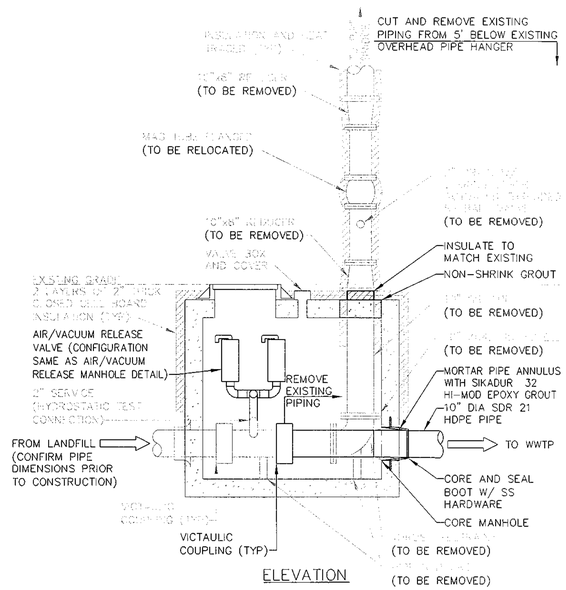

SECTION D-D'

## MANHOLE THRUST BLOCK

NTS




PLAN

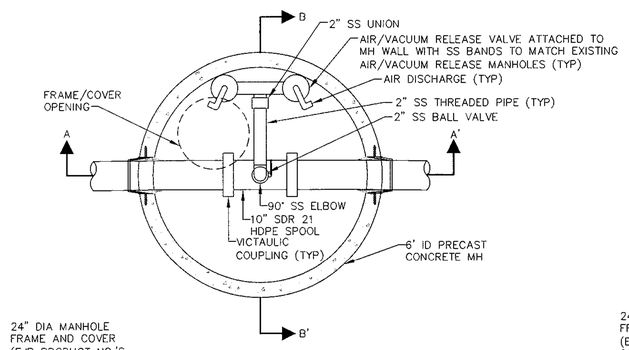



ELEVATION

NOTES:
1. CONFIRM PIPE DIMENSIONS PRIOR TO CONSTRUCTION
2. TERMINUS MANHOLE PIPING SHALL BE DEWATERED PRIOR TO TIE-IN. ALL LEACHATE FROM THE SYSTEM SHALL BE DISPOSED OF IN GNP MILL SEWER MANHOLE AT LOCATION DETERMINED BY ENGINEER. ANTICIPATED LEACHATE VOLUME FROM DEWATERING IS 20,000 GALLONS.

## TERMINUS MANHOLE (MH 20)

NTS




PLAN

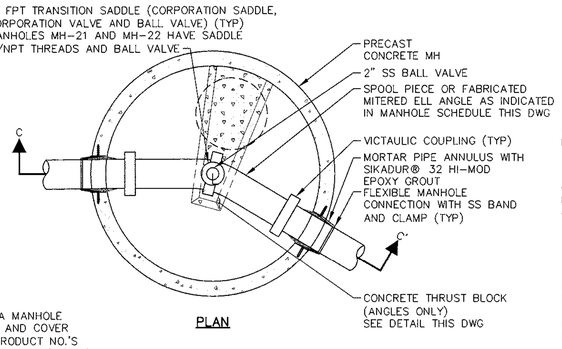



NOTE:
SEE MANHOLE SCHEDULE THIS DWG.

SECTION A-A'

## AIR/VACUUM RELEASE MANHOLE

NTS




PLAN

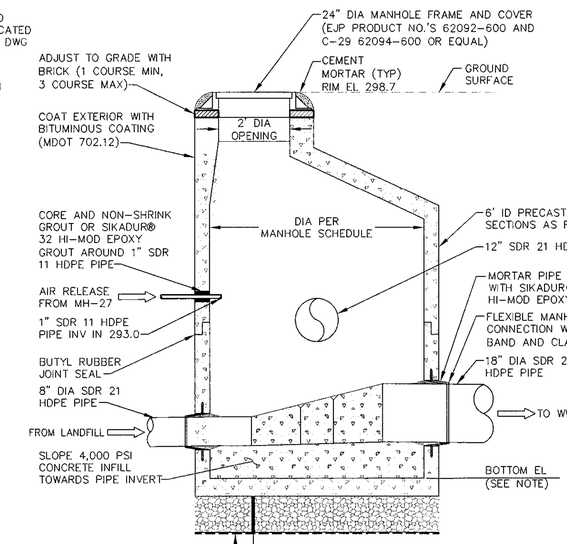



NOTE:
SEE MANHOLE SCHEDULE THIS DWG.

ELEVATION

## MANHOLE

NTS




NOTE:
SEE MANHOLE SCHEDULE THIS DWG.

ELEVATION

## MANHOLE 28

NTS

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | BDP | 12/15 | RECORD DRAWING |
| | BDP | 8/15 | REVISED PER CHANGE ORDER 1 |
| | BDP | 7/15 | ISSUED FOR CONSTRUCTION |
| | BDP | 7/15 | REVISED PER ADDENDUM 1 |
| | BDP | 6/15 | ISSUED FOR BID |

STATE OF MAINE — JOHN R. LEVE, JR. — No. 5144 — LICENSED PROFESSIONAL ENGINEER

MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
EAST MILLINOCKET, MAINE

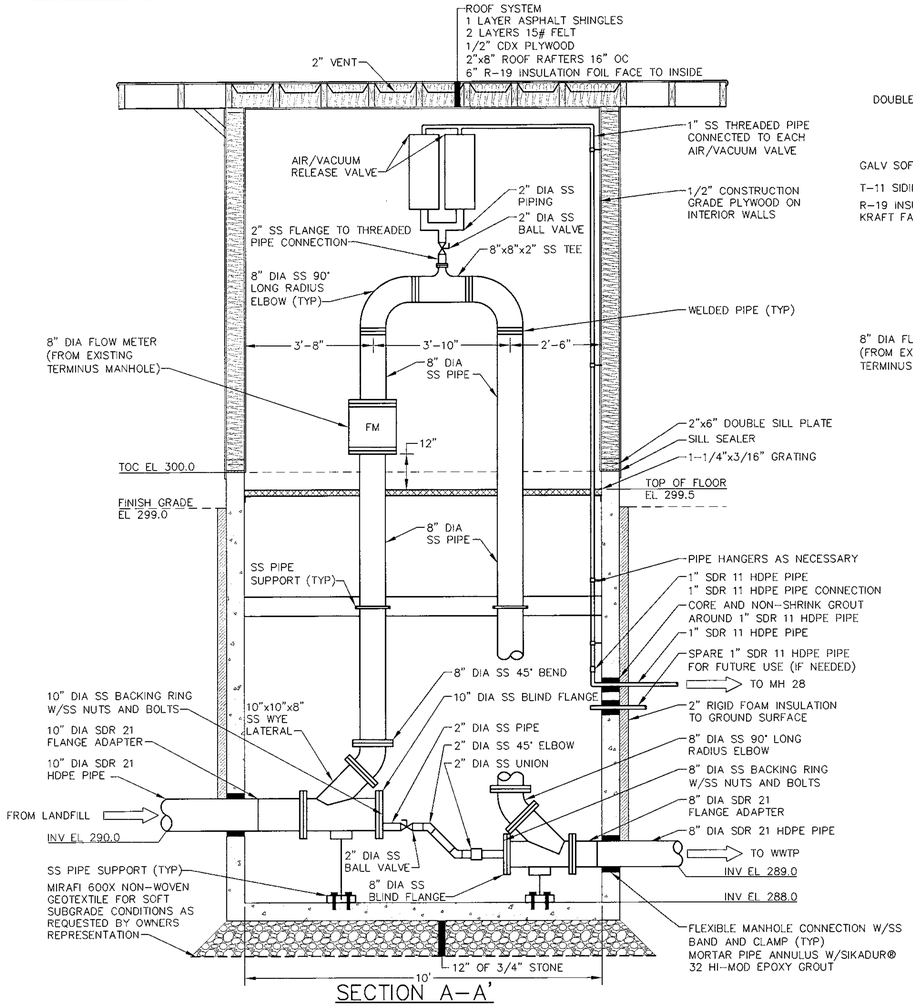
SECTIONS AND DETAILS


SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

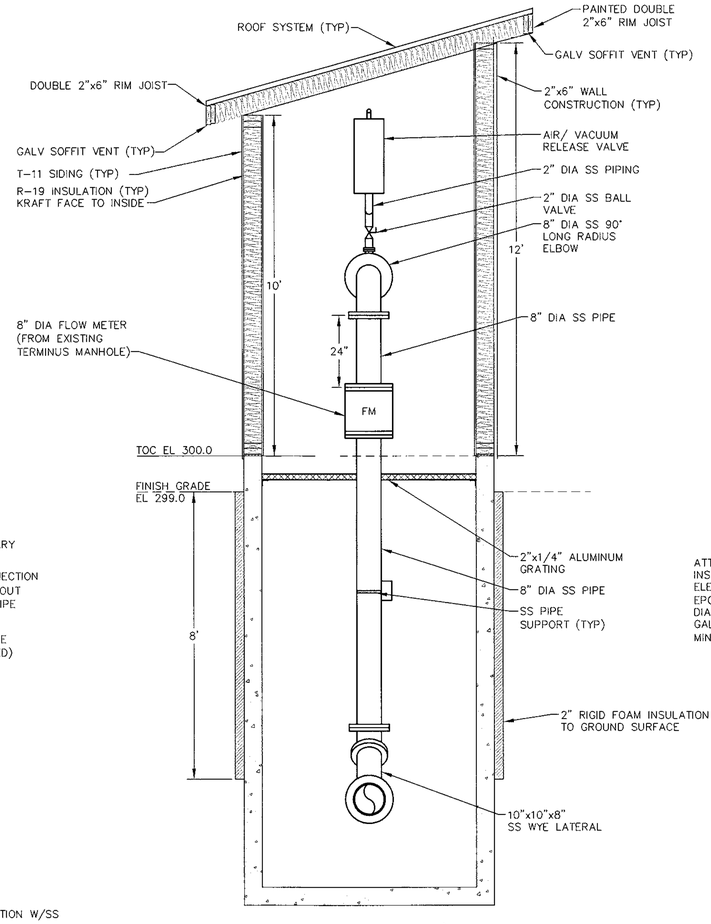

| | |
|---|---|
| DESIGN BY: | BDP |
| DRAWN BY: | JRL |
| DATE: | 5/28/2015 |
| CHECKED BY: | BDP |
| LMN: | LMN |
| CTB: | SME-STD |

JOB NO. 14134.09 DWG FILE DETAILS C-300

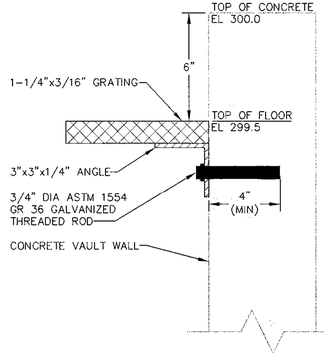
I:\Projects\Projects\GNP\Drawings\Plotted\14134.09 - 10/12/2015 - 12:34:14 AM - dpm



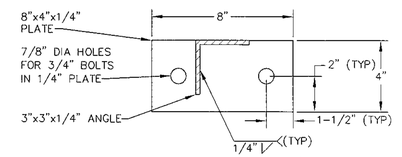

## SECTION A-A'
NTS



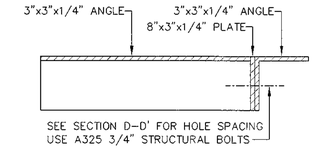

## SECTION B-B'
NTS



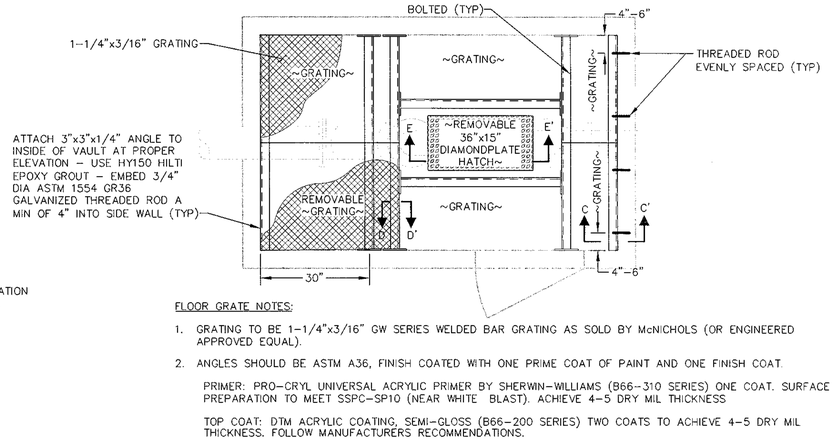

## SECTION C-C'
NTS




## SECTION D-D'
NTS




## SECTION E-E'
NTS



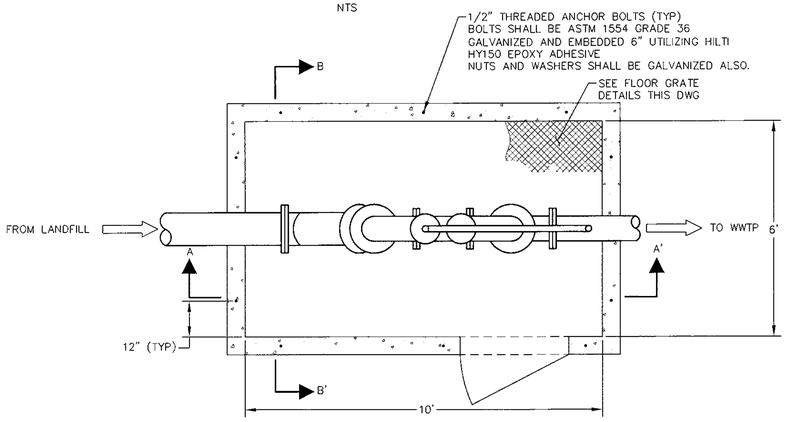

FLOOR GRATE NOTES:

1. GRATING TO BE 1-1/4"x3/16" GW SERIES WELDED BAR GRATING AS SOLD BY McNICHOLS (OR ENGINEERED APPROVED EQUAL).
2. ANGLES SHOULD BE ASTM A36, FINISH COATED WITH ONE PRIME COAT OF PAINT AND ONE FINISH COAT.

   PRIMER: PRO-CRYL UNIVERSAL ACRYLIC PRIMER BY SHERWIN-WILLIAMS (B66-310 SERIES) ONE COAT. SURFACE PREPARATION TO MEET SSPC-SP10 (NEAR WHITE BLAST). ACHIEVE 4-5 DRY MIL THICKNESS

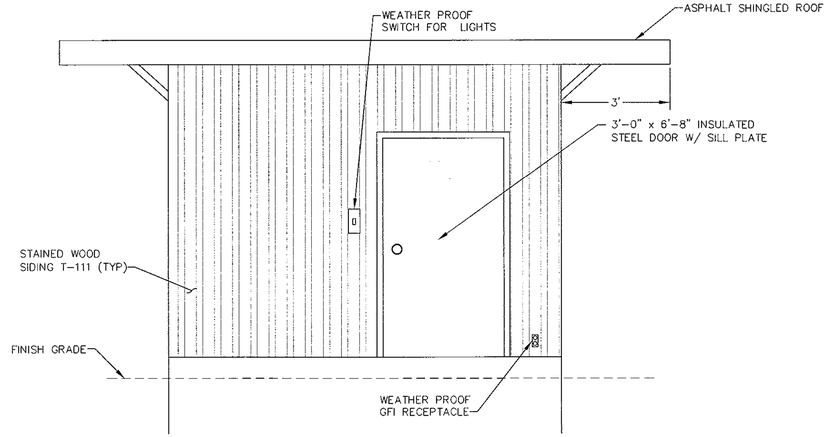
   TOP COAT: DTM ACRYLIC COATING, SEMI-GLOSS (B66-200 SERIES) TWO COATS TO ACHIEVE 4-5 DRY MIL THICKNESS. FOLLOW MANUFACTURERS RECOMMENDATIONS.
3. ALL WELDING TO BE E-70XX.
4. ALL LOOSE STRUCTURAL BOLTS TO BE ASTM A325 WITH STANDARD WASHERS AND NUTS.
5. ANCHOR BOLTS TO BE EMBEDDED IN CONCRETE TO BE ASTM 1554 GRADE 36 GALVANIZED THREADED ROD, EMBEDDED A MINIMUM OF 4" UTILIZING HILTI HY150 EPOXY ADHESIVE. NUTS AND WASHERS SHALL BE GALVANIZED ALSO.
6. USE OF ALL PAINT AND EPOXY PRODUCTS ARE TO BE PER THE MANUFACTURERS DIRECTIONS.

## FLOOR GRATE DETAIL
NTS




FLOW METER BUILDING NOTE:
ALL 8" AND 16" DIA SS PIPING AND FITTINGS SHALL BE SCHD 10 304L SS

## FLOW METER BUILDING (MH27)
NTS




## FRONT ELEVATION
NTS

FLOW METER BUILDING NOTES:

1. ALL FLANGE FITTINGS SHALL HAVE SS NUTS AND BOLTS (TYP).
2. ALL PIPING SHALL BE PAINTED PER SPECIFICATIONS (SEE FLOOR GRATE NOTES).
3. THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO THE ENGINEER FOR APPROVAL. SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING:

   PRODUCT DATA: SUBMIT PRODUCT DATA FOR ALL MATERIALS USED ON THE JOB FOR REVIEW FOR LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH INFORMATION GIVEN AND DESIGN CONCEPT EXPRESSED IN CONTRACT DOCUMENTS.

   SHOP DRAWINGS: SUBMIT FOR REVIEW SHOP DRAWINGS OF ALL PRECAST UNITS. MANUFACTURER'S INFORMATION SHALL BE SUBMITTED FOR JOINT SEALANTS AND WATERPROOFING. MANUFACTURE SHALL PROVIDE ANTI-FLOTATION DESIGN SHOP DRAWINGS AND CALCULATIONS, INCLUDING ANY EXTENDED BASE SLABS AS NECESSARY, FOR PROPOSED MANHOLES. MANUFACTURER SHALL ASSUME GROUNDWATER LEVELS EQUAL TOP OF GROUND ELEVATIONS AND PROVIDE FOR A 1.2 FACTOR OF SAFETY AGAINST FLOTATION.

   SHOP DRAWINGS FOR ALUMINUM GRATING AND STRUCTURAL SUPPORTS SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER (AT CONTRACTORS EXPENSE). SHOP DRAWINGS MUST BE SUBMITTED PRIOR TO FABRICATION OF SUPPORT FRAMES AND GRATING. CONTRACTOR IS RESPONSIBLE FOR GRATING DIMENSIONS.

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | BDP | 12/15 | RECORD DRAWING |
| | BDP | 8/15 | REVISED PER CHANGE ORDER 1 |
| | BDP | 7/15 | ISSUED FOR CONSTRUCTION |
| | BDP | 6/15 | ISSUED FOR BID |

STATE OF MAINE — JOHN R. LROTE, JR. — No. 5144 — LICENSED PROFESSIONAL ENGINEER

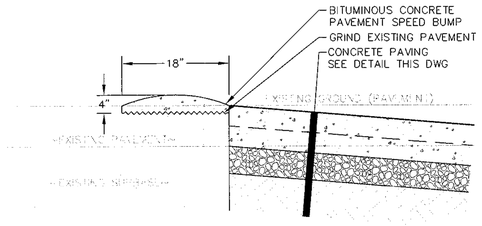
MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
EAST MILLINOCKET, MAINE

SECTIONS AND DETAILS

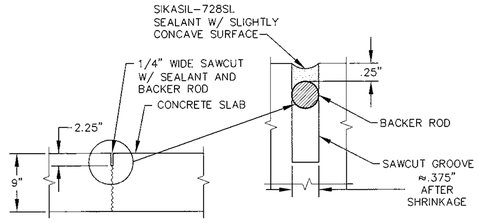
SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

| | |
|---|---|
| DESIGN BY: | BDP |
| DRAWN BY: | JRL |
| DATE: | 5/28/2015 |
| CHECKED BY: | BDP |
| LMN: | LMN |
| CTB: | SME-STD |

JOB NO. 14134.09 DWG FILE DETAILS C-301

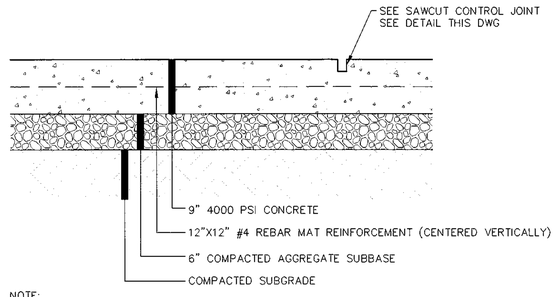



## PAD TRANSITION
NTS



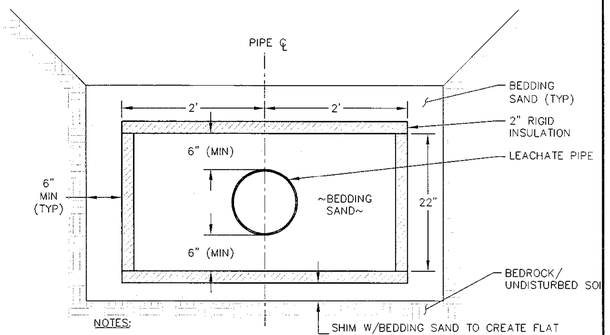

NOTE:
SAW CUT CONTROL JOINTS SHALL BE SPACED NO FURTHER THAN 20 FEET APART.

## SAWCUT CONTROL JOINT
NTS



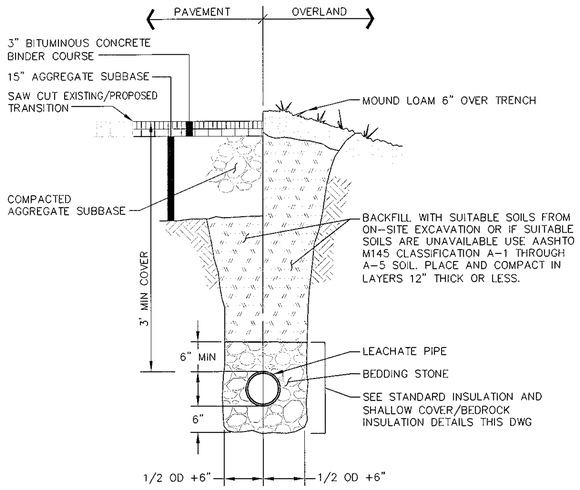

NOTE:
IMMEDIATELY AFTER FLOAT FINISHING, ROUGHEN TRAFFICKED SURFACE BY BROOMING WITH FIBER-BRISTLE BROOM PERPENDICULAR TO MAIN TRAFFIC DIRECTION.

## CONCRETE PAVING
NTS

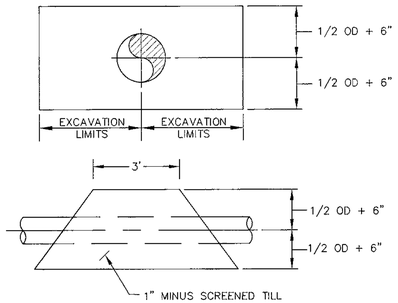



NOTES:
1. PAY WIDTH IN BEDROCK IS 5'
2. INSULATION SHALL BE 2" STYROFOAM BRAND SM EXTRUDED POLYSTYRENE FOAM INSULATION BY DOW BUILDING SOLUTIONS, INC. OR ENGINEER APPROVED EQUAL.

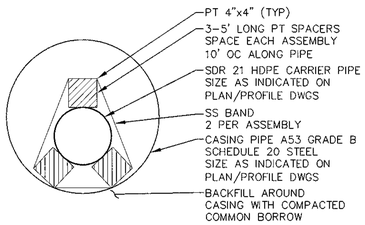
## SHALLOW COVER/BEDROCK INSULATION
NTS



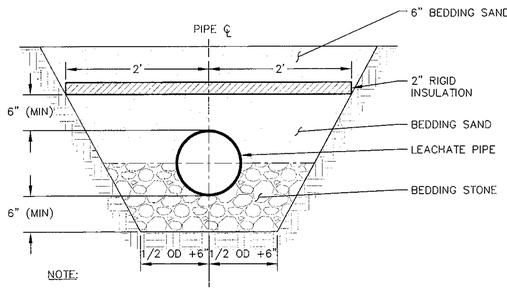

## PIPE TRENCH
NTS




## TILL DAM
NTS

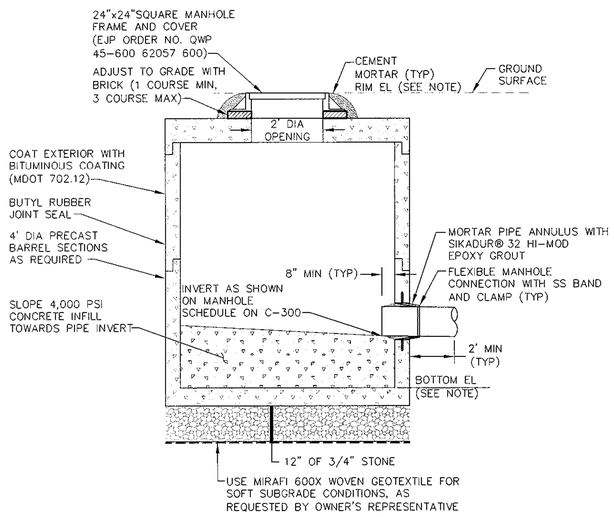



## RAILROAD CROSSING PIPE ENCASEMENT
NTS




NOTE:
1. INSULATION SHALL BE 2" STYROFOAM BRAND SM EXTRUDED POLYSTYRENE FOAM INSULATION BY DOW BUILDING SOLUTIONS, INC. OR ENGINEER APPROVED EQUAL.

## STANDARD INSULATION
NTS




NOTE:
SEE MANHOLE SCHEDULE DWG C-300.

## EMERGENCY CATCH BASIN (ECB)
NTS

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | BDP | 12/15 | RECORD DRAWING |
| | BDP | 7/15 | ISSUED FOR CONSTRUCTION |
| | BDP | 6/15 | ISSUED FOR BID |

STATE OF MAINE — JOHN H. ROWE JR. — No. 5144 — LICENSED PROFESSIONAL ENGINEER

MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
EAST MILLINOCKET, MAINE

SECTIONS AND DETAILS

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

| | |
|---|---|
| DESIGN BY: | BDP |
| DRAWN BY: | JRL |
| DATE: | 5/28/2015 |
| CHECKED BY: | BDP |
| LMN: | LMN |
| CTB: | SME-STD |

JOB NO. 14134.09 DWG FILE DETAILS — C-302

A. GENERAL

1. All soil erosion and sediment control will be done in accordance with: (1) the Maine Erosion and Sediment Control Handbook: Best Management Practices, Maine Department of Environmental Protection (MEDEP), March 2003. (2) The project Erosion and Sediment Control Plan.

2. The Maine Department of Economic & Community Development (MEDECD) or their agent will be responsible for the repair/replacement/maintenance of all erosion control measures until all disturbed areas are stabilized.

3. Disturbed areas will be permanently stabilized within 7 days of final grading. Disturbed areas not to be worked upon within 14 days of disturbance will be temporarily stabilized within 7 days of the disturbance.

4. In all areas, removal of trees, bushes and other vegetation, as well as disturbance of topsoil will be kept to a minimum while allowing proper site operations.

5. Any suitable topsoil will be stripped and stockpiled for reuse as directed by the owner. Topsoil will be stockpiled in a manner such that natural drainage is not obstructed and no off-site sediment damage will result. In any event, stockpiles will not be located within 100 feet of wetlands and will be at least 50 feet upgradient of the stockpile's perimeter silt fence. The sideslopes of the topsoil stockpile will not exceed 2:1. Silt fence will be installed around the perimeter of all topsoil stockpiles. Topsoil stockpiles will be surrounded with siltation fencing and will be temporarily seeded with Aroostook rye, annual or perennial ryegrass within 7 days of formation, or temporarily mulched.

B. TEMPORARY MEASURES

1. SILT FENCE

a. Silt fence will be installed prior to all construction activity, where soil disturbance may result in erosion. Silt fence will be erected at locations shown on the plans and/or downgradient of all construction activity.

b. Silt fences will be removed when they have served their useful purpose, but not before the upgradient areas have been permanently stabilized.

c. Silt fences will be inspected immediately after each rainfall of 0.5 inches or more and at least daily during prolonged rainfall. They will be inspected if there are any signs of erosion or sedimentation below them. Any required repairs will be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind them, they will be replaced with a temporary crushed stone check dam.

d. Sediment deposits will be removed after each storm event if significant build-up has occurred or if deposits exceed half the height of the barrier.

2. STONE CHECK DAMS

Stone check dams will be installed in grass-lined swales and ditches during construction.

3. BARK MULCH SEDIMENT BARRIER

a. Where approved, bark mulch sediment barriers may be used as a substitute for silt fence. See the details in this drawing set for specifications.

b. Rock Filter Berms: To provide more filtering capacity or to act as a velocity check dam, a berm's center can be composed of clean crushed rock ranging in size from the french drain stone to riprap.

4. TEMPORARY SEEDING

Stabilize disturbed areas that will not be brought to final grade for a year or less and reduce problems associated with mud and dust production from exposed soil surface during construction with temporary vegetation.

5. TEMPORARY MULCHING

Use temporary mulch in the following locations and/or circumstances:
- Temporary mulch will be applied within 7 days of exposing spill or prior to any storm event.
- Apply temporary mulch within 14 days of disturbance or prior to any storm event in all other areas.
- Areas, which have been temporarily or permanently seeded, will be mulched immediately following seeding.
- Areas which cannot be seeded within the growing season will be mulched for over-winter protection and the area will be seeded at the beginning of the growing season.
- Mulch anchoring will be used on slopes greater than 5 percent in late fall (past October 15), and over-winter (October 15 - April 15).

The following materials may be used for temporary mulch:

a. Hay or Straw material shall be air-dried, free of seeds and coarse material. Apply 2 bales/1,000 sf or 1.5 to 2 tons/acre to cover 90% of ground surface.

b. Erosion Control Mix: It can be used as a stand-alone reinforcement:
- on slopes 2 horizontal to 1 vertical or less;
- on frozen ground or forested areas; and
- at the edge of gravel parking areas and areas under construction.

c. Erosion control mix alone is not suitable:
- on slopes with groundwater seepage;
- at low points with concentrated flows and in gullies;
- at the bottom of steep perimeter slopes exceeding 100 feet in length;
- below culvert outlet aprons; and around catch basins and closed storm systems.

d. Chemical Mulches and Soil Binders: Wide ranges of synthetic spray-on materials are marketed to protect the soil surface. These are emulsions that are mixed with water and applied to the soil. They may be used alone, but most often are used to hold wood fiber, hydro-mulches or straw to the soil surface.

e. Erosion Control Blankets and Mats: Mats are manufactured combinations of mulch and netting designed to retain soil moisture and modify soil temperature. During the growing season (April 15 to September 15) use mats indicated on drawings or North American Green (NAG) S75 (or mulch and netting) on:
- the base of grassed waterways;
- steep slopes (15 percent or greater); and
- any disturbed soil within 100 feet of lakes, streams, or wetlands.

During the late fall and winter (September 15 to April 15) use heavy grade mats indicated on drawings for NAG SC250 on all areas noted above plus use lighter grade mats NAG S75 (or mulch and netting) on:
- sideslopes of grassed waterways; and
- moderate slopes (between 8 and 15 percent).

6. TEMPORARY DUST CONTROL

To prevent the blowing and movement of dust from exposed soil surfaces, and reduce the presence of dust, use water or calcium chloride to control dusting by preserving the moisture level in the road surface materials.

7. CONSTRUCTION DE-WATERING

a. Water from construction de-watering operations shall be cleaned of sediment before reaching wetlands, catch basins, water bodies, streams or site boundaries. Utilize temporary sediment basins, erosion control soil filter berms backed by staked hay bales, ADirt Bag 55" sediment filter bag, or other approved Best Management Practices (BMP's). De-watering liquids shall not be discharged to Town of East Millinocket Sanitary Sewer System.

C. PERMANENT MEASURES

1. Topsoil, Seed, and Mulch: All areas disturbed during construction, but not subject to other restoration (paving ,riprap, etc.) will be loamed, limed, fertilized, seeded, and mulched.

a. Seeded Preparation: Use stockpiled materials spread to the depths shown on the plans, if available. Approved topsoil substitutes may be used. Grade the site as needed.

b. Seeding will be completed by August 15 of each year. Late season seeding may be done between August 15 and September 15. Areas not seeded or which do not obtain satisfactory growth by September 15, will be seeded with Winter Rye and mulched. After October 1, or the first killing frost, disturbed areas will be seeded at double the specified application rates, mulched, and anchored.

PERMANENT SEEDING SPECIFICATIONS

| Mixture: | (lbs/acre) |
|---|---|
| Kentucky Bluegrass | 55 |
| White Clover | 5 |
| Creeping Red Fescue | 55 |
| Perennial Ryegrass | 15 |

c. Mulch in accordance with specifications for temporary mulching.

d. If permanent vegetated stabilization cannot be established due to the season of the year, all exposed and disturbed areas not to undergo further disturbance are to have dormant seeding applied and be temporarily mulched to protect the site.

2. Ditches and Channels: All ditches on-site will be lined with North American Green S75 erosion control mesh (or an approved equal) upon installation of loam and seed.

D. WINTER CONSTRUCTION AND STABILIZATION

1. Winter excavation and earthwork will be completed so as to minimize exposed areas while satisfactorily completing the project. Limit exposed areas to those areas in which work is to occur during the following 15 days and that can be mulched in one day prior to any snow event. All areas will be considered denuded until the subbase gravel is installed in roadway areas or the areas of future loam and seed have been loamed, seeded, and mulched.

Install any added measures necessary to control erosion/sedimentation. The particular measure used will be dependent upon site conditions, the size of the area to be protected, and weather conditions.

To minimize areas without erosion control protection, continuation of earthwork operations on additional areas will not begin until the exposed soil surface on the area being worked has been stabilized.

2. Natural Resource Protection: During winter construction, a double-row of sediment barriers (i.e., silt fence backed with hay bales or erosion control mix) will be placed between any natural resource and the disturbed area. Projects crossing the natural resource will be protected a minimum distance of 100 feet on either side from the resource.

3. Sediment Barriers: During frozen conditions, sediment barriers may consist of erosion control mix berms or any other recognized sediment barriers as frozen soil prevents the proper installation of hay bales or silt fences.

4. Mulching: All areas will be considered to be denuded until seeded and mulched. Hay and straw mulch will be applied at a rate of twice the normal accepted rate.

Mulch will not be spread on top of snow.

After each day of final grading, the area will be properly stabilized with anchored hay or straw or erosion control matting.

Between the dates of November 1 and April 15, all mulch will be anchored by either mulch netting, emulsion chemical, tracking or wood cellulose fiber.

5. Soil Stockpiling: Stockpiles of soil or subsoil will be mulched for over-winter protection with hay or straw at twice the normal rate or with a 4-inch layer of erosion control mix. This will be done within 24 hours of stocking and re-established prior to any rainfall or snowfall. Any soil stockpiles shall not be placed (even covered with mulch) within 100 feet from any natural resources.

6. Seeding: Dormant seeding may be placed prior to the placement of mulch or erosion control blankets. If dormant seeding is used for the site, all disturbed areas will receive 4 inches of loam and seed at an application rate of two times the rate for permanent seeding. All areas seeded during the winter will be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 75 percent catch) will be revegetated by replacing loam, seed, and mulch.

If dormant seeding is not used for the site, all disturbed areas will be revegetated in the spring.

7. Maintenance: Maintenance measures will be applied as needed during the entire construction season. After each rainfall, snow storm, or period of thawing and runoff, the site contractor will perform a visual inspection of all installed erosion control measures and perform repairs as needed to ensure their continuous function.

Following the temporary and/or final seeding and mulching, the contractor will, in the spring, inspect and repair any damages and/or bare spots. An established vegetative cover means a minimum of 85 to 90 percent of areas vegetated with vigorous growth.

E. OVER-WINTER CONSTRUCTION EROSION CONTROL MEASURES

1. Stabilization of Disturbed Soil: By September 15, all disturbed soils on areas having a slope less than 15 percent will be seeded and mulched. If the contractor fails to stabilize these soils by this date, then the contractor shall stabilize the soil for late fall and winter, by using either temporary seeding or mulching.

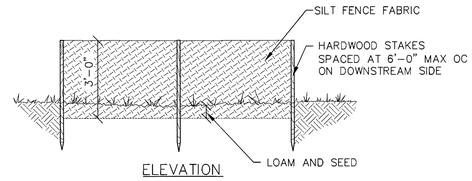
2. Stabilization of Disturbed Slopes: All slopes to be vegetated will be completed by September 15. The owner will consider any area having a grade greater than 15 percent (6.5H:1V) to be a slope. Slopes not vegetated by October 15 will receive one of the following actions to stabilize the slope for late fall and winter:

a. Stabilize the soil with temporary vegetation and erosion control mesh.
b. Stabilize the slope with erosion control mix.
c. Stabilize the slope with stone riprap.

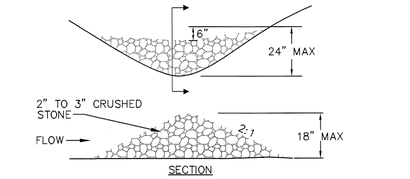
3. Stabilization of Ditches and Channels: All stone-lined ditches and channels to be used to convey runoff through the winter will be constructed and stabilized by October 15. Grass-lined ditches and channels will be complete by September 15. Grass-lined ditches not stabilized by September 15 shall be lined with either sod or riprap.

F. MAINTENANCE PLAN

1. Routine Maintenance: Inspection will be by a qualified person during wet weather to ensure that the facility performs as intended. Inspection priorities will include checking erosion controls for accumulation of sediments.




## SILT FENCE
NTS

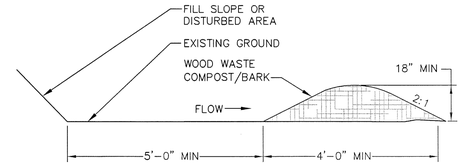



SPACING BETWEEN CHECK DAMS

| So (FT/FT) | L (FT) |
|---|---|
| 0.020 | 75 |
| 0.030 | 50 |
| 0.040 | 40 |
| 0.050 | 30 |
| 0.080 | 20 |
| 0.100 | 10 |

NOTE:
USE AT ALL NEWLY CONSTRUCTED GRASS LINED DITCHES AS A TEMPORARY EROSION CONTROL MEASURE AND WHERE OTHERWISE NOTED ON PLANS.

## STONE CHECK DAM
NTS




NOTE:
BARK MULCH SEDIMENT BARRIERS MAY BE USED AS AN ALTERNATE TO SILT FENCE WHEN APPROVED BY THE ENGINEER.

## BARK MULCH SEDIMENT BARRIER
NTS

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | BDP | 12/15 | RECORD DRAWING |
| | BDP | 7/15 | ISSUED FOR CONSTRUCTION |
| | BDP | 6/15 | ISSUED FOR BID |

STATE OF MAINE — GUY H. COTE, JR. — No. 5144 — LICENSED PROFESSIONAL ENGINEER

MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
EAST MILLINOCKET, MAINE

SECTIONS AND DETAILS


SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

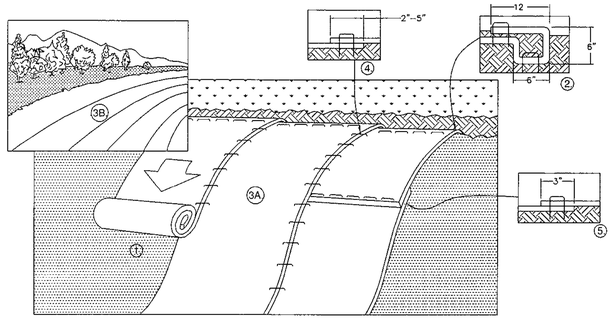

| | |
|---|---|
| DESIGN BY: | BDP |
| DRAWN BY: | JRL |
| DATE: | 5/28/2015 |
| CHECKED BY: | BDP |
| LMN: | LMN |
| CTB: | SME-STD |

JOB NO. 14134.09 DWG FILE DETAILS

C-303

NORTH AMERICAN GREEN
EROSION CONTROL *Products*
*Guaranteed* SOLUTIONS

14649 HIGHWAY 41 NORTH
EVANSVILLE, IN 47725
800-772-2040
www.nagreen.com



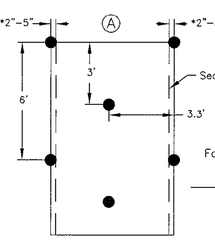

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6"DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP's WIDTH.

NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.

## SLOPE INSTALLATION
NTS

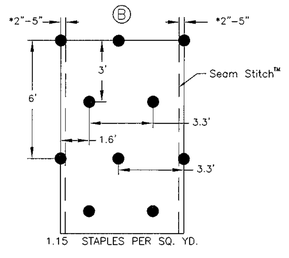
NORTH AMERICAN GREEN
EROSION CONTROL *Products*
*Guaranteed* SOLUTIONS

14649 HIGHWAY 41 NORTH
EVANSVILLE, IN 47725
800-772-2040
www.nagreen.com



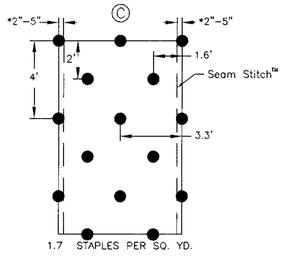

0.7 STAPLES PER SQ. YD.

For blankets with the North American Green DOT System™ place staples through each of the dots.



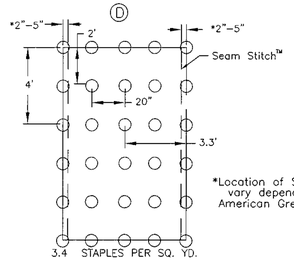

1.15 STAPLES PER SQ. YD.

For blankets with the North American Green DOT System™ place staples through each of the dots.




1.7 STAPLES PER SQ. YD.

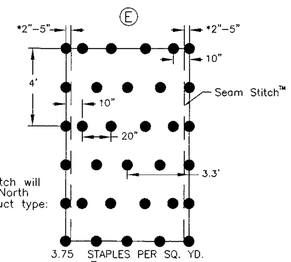
For blankets with the North American Green DOT System™ place staples through each of the dots.




*Location of Seam Stitch will vary depending on North American Green product type:

3.4 STAPLES PER SQ. YD.

For blankets with the North American Green DOT System™ place staples through each of the dots.



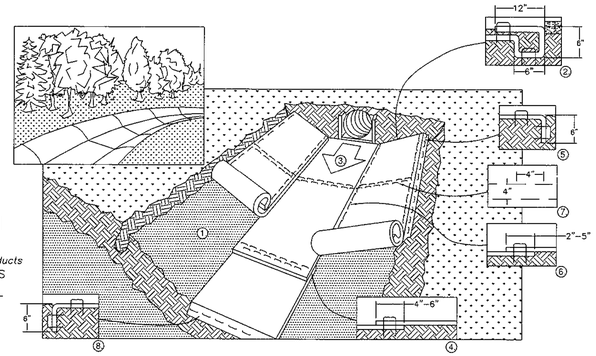

3.75 STAPLES PER SQ. YD.

For blankets with the North American Green DOT System™ place staples through each of the dots.

## DOT SYSTEM™ STAPLE PATTERN GUIDE
NTS

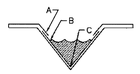
NORTH AMERICAN GREEN
EROSION CONTROL *Products*
*Guaranteed* SOLUTIONS

14649 HIGHWAY 41 NORTH
EVANSVILLE, IN 47725
800-772-2040
www.nagreen.com




1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMAPCT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES SPACED APPROXIMATELY 12" ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4" - 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" - 5" (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

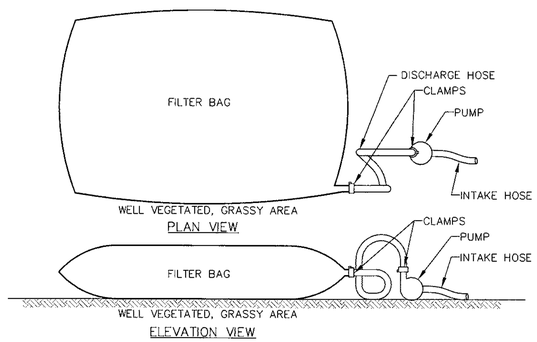
NOTE:
* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.




CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

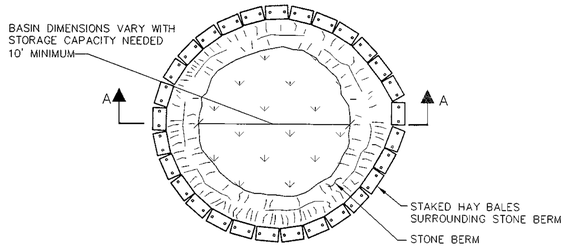
NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

## CHANNEL INSTALLATION
NTS

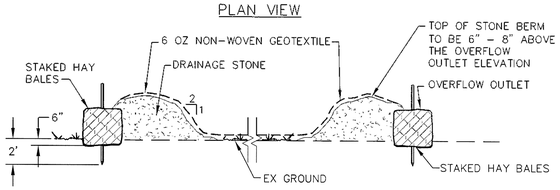



NOTES:
1. FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.
2. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.
3. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%.
4. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED.
5. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.

## PUMPED WATER FILTER BAG
NTS

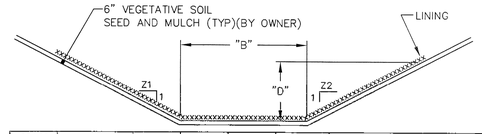



PLAN VIEW




SECTION A-A

## DEWATERING FILTER
NTS




| GRASS CHANNEL | TYPE | B (FT) | D (FT) | Z1 | Z2 | LINING |
|---|---|---|---|---|---|---|
| 1 | ROAD DITCH | 2 | 2 | 2 | 2 | NAG SC250 W/STAPLE D |
| 2 | ROAD DITCH | 2 | 2 | 2 | 2 | NAG SC250 W/STAPLE D |

*SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, AND VEGETATIVE STABILIZATION SPECIFICATIONS FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION.

## GRASS CHANNEL
NTS

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | BDP | 12/15 | RECORD DRAWING |
| | BDP | 7/15 | ISSUED FOR CONSTRUCTION |
| | BDP | 6/15 | ISSUED FOR BID |

STATE OF MAINE — JOHN E. JOYCE, JR. — No. 5144 — LICENSED PROFESSIONAL ENGINEER

MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
EAST MILLINOCKET, MAINE

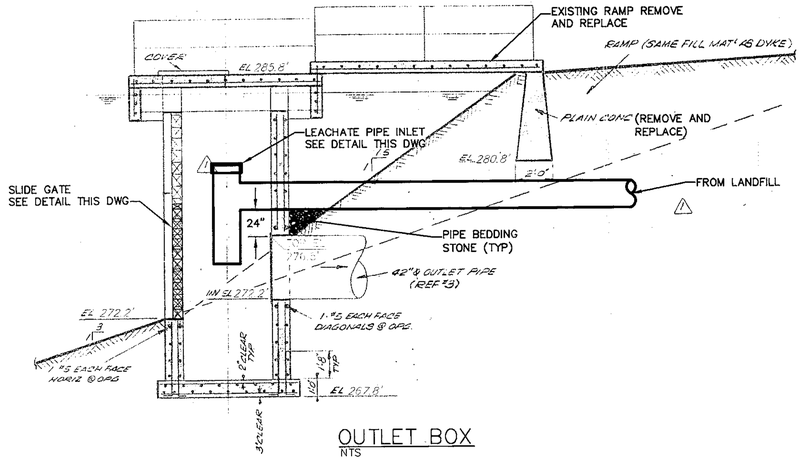
SECTIONS AND DETAILS


SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

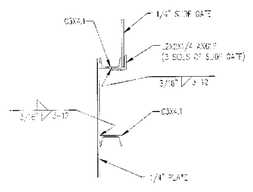

DESIGN BY: BDP
DRAWN BY: JRL
DATE: 5/28/2015
CHECKED BY: BDP
LMN: LMN
CTB: SME-STD

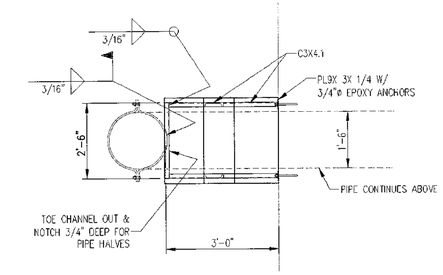
JOB NO. 14134.09 DWG FILE DETAILS

C-304

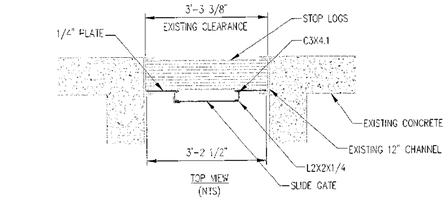



## OUTLET BOX
NTS

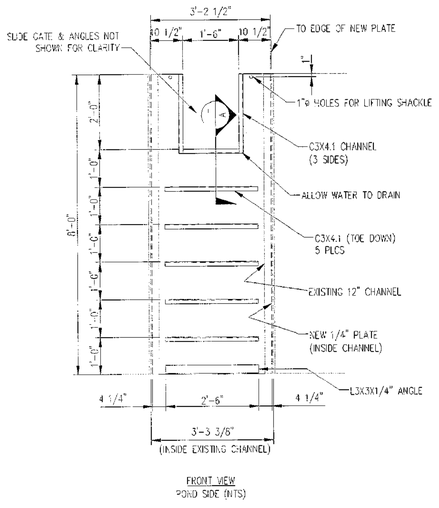



SECTION A
NTS

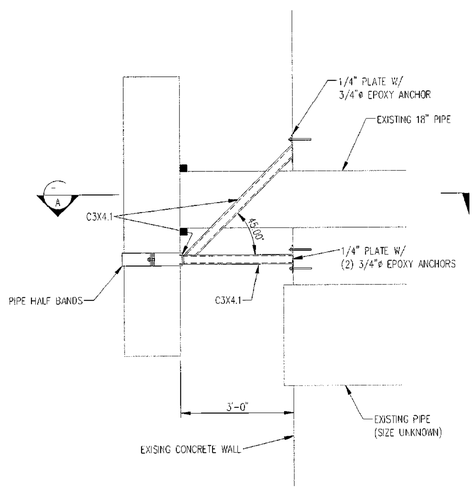



TOP VIEW
(NTS)

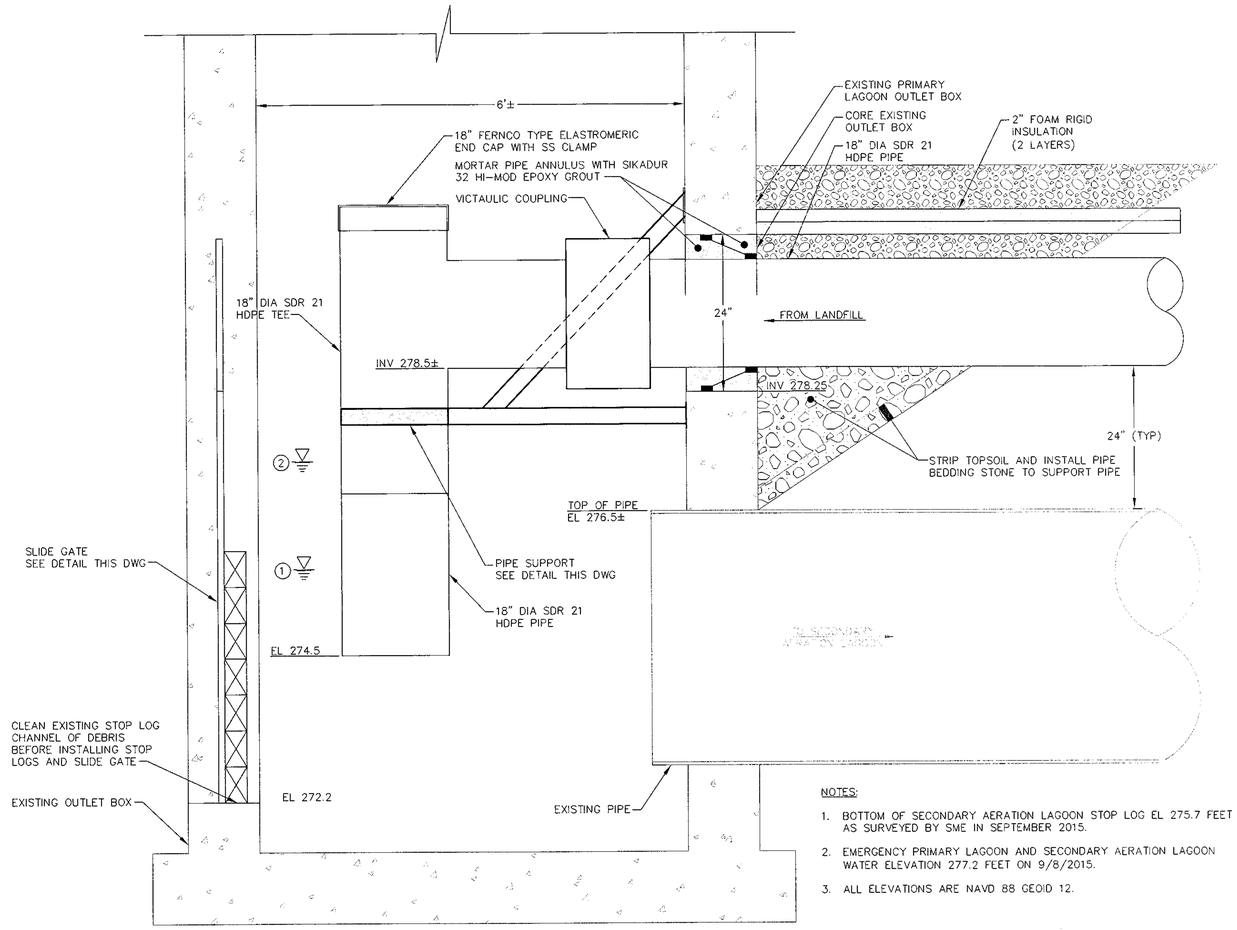



FRONT VIEW
POND SIDE (NTS)

## SLIDE GATE
NTS




## PIPE SUPPORT
NTS




## LEACAHTE PIPE INLET
NTS

NOTES:

1. BOTTOM OF SECONDARY AERATION LAGOON STOP LOG EL 275.7 FEET AS SURVEYED BY SME IN SEPTEMBER 2015.
2. EMERGENCY PRIMARY LAGOON AND SECONDARY AERATION LAGOON WATER ELEVATION 277.2 FEET ON 9/8/2015.
3. ALL ELEVATIONS ARE NAVD 88 GEOID 12.

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | BDP | 12/15 | RECORD DRAWING |
| | BDP | 9/15 | ISSUED PER CHANGE ORDER 3 |

STATE OF MAINE — JOHN R. LEVITE, JR. — No. 5144 — LICENSED PROFESSIONAL ENGINEER

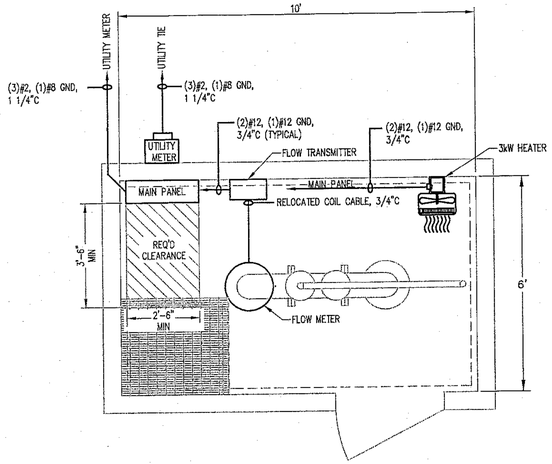
MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
EAST MILLINOCKET, MAINE

SECTIONS AND DETAILS

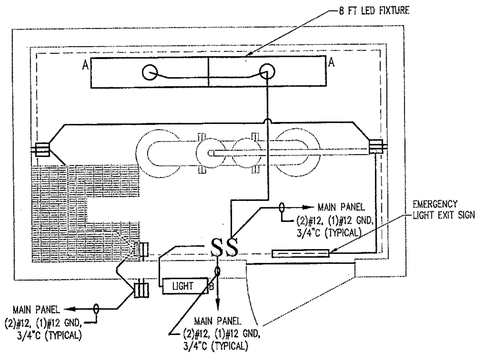

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com


| | |
|---|---|
| DESIGN BY: | BDP |
| DRAWN BY: | JRL |
| DATE: | 5/28/2015 |
| CHECKED BY: | BDP |
| LMN: | LMN |
| CTB: | SME-STD |

JOB NO. 14134.09 DWG FILE DETAILS C-305



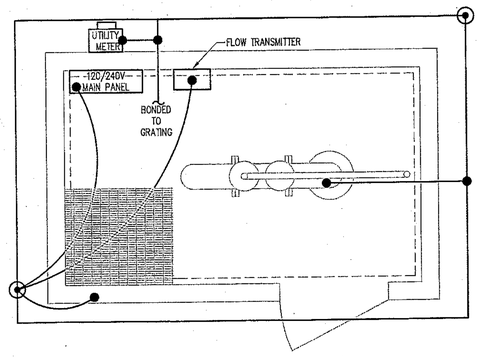

POWER PLAN – UPPER
FLOW METER BUILDING (MH27)
SCALE: NTS



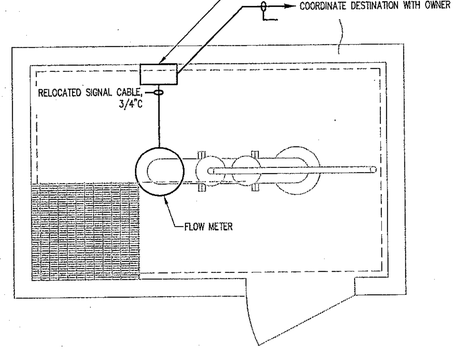

LIGHTING PLAN
FLOW METER BUILDING (MH27)
SCALE: NTS

| CIRCUIT DIRECTORY | | | |
|---|---|---|---|
| 1 | LEFT OF PANEL - RECEPTICLES TOWNSIDE | 2 | INSIDE & OUTSIDE LIGHTS |
| | | | |
| 3 | | 4 | RIGHT OF PANEL RECEPTICLES |
| | | | EXIT-EMERGENCY LIGHT |
| 5 | | 6 | ELECTRIC SPACE HEATER |
| | | | |
| 7 | | 8 | ELECTRIC SPACE HEATER |
| | | | |
| 9 | | 10 | FLOW METER |
| | | | |
| 11 | | 12 | |
| | | | |
| 13 | | 14 | |

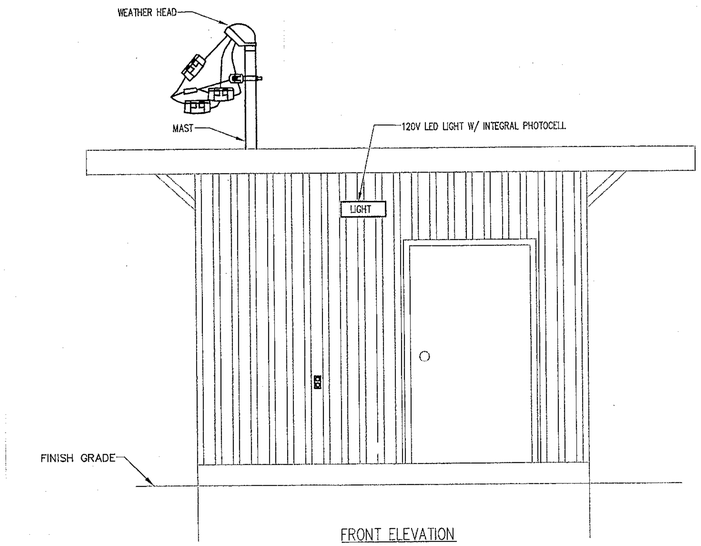
PANEL SCHEDULE
MAIN PANEL




GROUNDING PLAN
FLOW METER BUILDING (MH27)
SCALE: NTS




I&C PLAN
FLOW METER BUILDING (MH27)
SCALE: NTS




FRONT ELEVATION
SCALE: NTS

NOTES:

1. TYPE "A" FIXTURES SHOWN SHALL BE MODEL NUMBER LUN4-248TBHO-EU-PEBA AS MANUFACTURED BY COLUMBIA LIGHTING, OR APPROVED EQUAL. PROVIDE BACKUP BATTERY PACK FOR EGRESS LIGHTING REQUIREMENTS.
2. TYPE "B" FIXTURE SHOWN SHALL BE MODEL NUMBER LMC-18LU-SK-E-2-PC(1) WITH PHOTOCELL AND POLYCARBONATE SHIELD AS MANUFACTURED BY HUBBELL OUTDOOR LIGHTING, OR APPROVED EQUAL.
3. PROVIDE ELECTRICAL SERVICE AND UTILITY METER PER ALL ELECTRICAL UTILITY (EMERA) REQUIREMENTS. COORDINATE WITH EMERA FOR ALL ELECTRICAL SERVICE WORK.
4. MAINTAIN MINIMUM REQUIRED CLEARANCE IN FRONT OF MAIN PANEL AS INDICATED.
5. GFCI RECEPTACLES SHOWN SHALL BE PROVIDED WITH WEATHERPROOF IN-USE RATED COVERS.
6. ELECTRICAL EQUIPMENT SHALL BE SURFACE MOUNTED.
7. MAIN PANEL SHALL HAVE 100A RATED MAIN CIRCUIT BREAKER AND 100A RATED BUSES. IT SHALL HAVE 16 CIRCUITS MINIMUM AND BE RATED NEMA 12.
8. BOND BUILDING REBAR, UTILITY METER, TRANSMITTER, PIPE AND PANEL TO SINGLE GROUND ROD ADJACENT TO BUILDING.
9. RELOCATE EXISTING FLOW TRANSMITTER FROM PRESENT LOCATION. LOCATE TRANSMITTER ADJACENT TO FLOW METER SUCH THAT EXISTING CABLE CAN BE RE-PURPOSED. COORDINATE FLOW TRANSMITTER OUTPUT SIGNAL REQUIREMENTS WITH OWNER.

DISCLAIMER:

EXISTING BUILDING INFORMATION REPRODUCED FROM ORIGINAL PRINT.

MID-SOUTH ENGINEERING HAS NOT VERIFIED THE ACCURACY OF THE INFORMATION SUPPLIED FROM THIS DRAWING.

**RECORD DRAWING**

THIS DRAWING DEPICTS INFORMATION BASED ON OWNER'S RECORD COPY OF DRAWINGS, SPECIFICATIONS, CHANGE ORDERS, WORK CHANGE DIRECTIVES, FIELD ORDERS, AND OTHER WRITTEN INTERPRETATIONS AND CLARIFICATIONS, AS DELIVERED TO MID-SOUTH ENGINEERING AND ANNOTATED BY OWNER TO SHOW CHANGES MADE DURING CONSTRUCTION. THESE CHANGES MADE DURING CONSTRUCTION HAVE NOT BEEN VERIFIED BY MID-SOUTH ENGINEERING; THEREFORE MID SOUTH ENGINEERING CANNOT SEAL THIS DRAWING. USE OF THIS INFORMATION SHALL BE AT THE USER'S RISK.

| NO. | DATE | BY | DESCRIPTION |
|---|---|---|---|
| 1 | 12/23/15 | CJB | ISSUED RECORD DRAWING |
| 0 | 6/23/15 | GAG | ISSUED FOR CONSTRUCTION |

REVISIONS

MID-SOUTH ENGINEERING
1658 Malvern Ave.
Hot Springs, Arkansas 71901
200 Mackenan Drive
Cary, North Carolina 27511
70 Spring Street, Suite 3
Millinocket, Maine 04462
WWW.MSECO.COM

LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
ELECTRICAL PLAN

SEVEE & MAHER ENGINEERS, INC.
EAST MILLINOCKET, MAINE

| SCALE | | | | DRAWING NO. |
|---|---|---|---|---|
| NTS | DRN. | GAC | 6/17/15 | 6312-14001-E03 |
| | CHD. | EDM | 6/17/15 | |
| | APP. | EDM | 8/18/15 | |

## GENERAL NOTES

1. UTILITIES AND AGENCIES

BANGOR AND AROOSTOOK RAILROAD
MAINE DEPARTMENT OF TRANSPORTATION - DIVISION OFFICE, BANGOR, MAINE
BANGOR HYDRO-ELECTRIC CO. – ROUTE 2, LINCOLN, MAINE
NYNEX
DIG SAFE

2. NOTES

–REFER TO DRAWING YB–22974 FOR MANHOLE AND STRUCTURE SCHEDULE
–PAVEMENT AND BASES REMOVED BY THE PIPELINE CONSTRUCTION SHALL BE REPLACED TO THE SAME THICKNESS OF THE ADJACENT LAYERS.
–ALL AREAS DISTURBED BY THE PIPELINE CONSTRUCTION AND NOT RESURFACED SHALL BE COVERED WITH TWO (2") INCHES OF LOAM, GRADED, SEEDED, AND MULCHED.
–THRUST RESTRAINT REQUIRED ON ALL FORCE MAIN BENDS GREATER THAN 22.5°. SEE DETAIL YB–22977

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| STRUCTURES | | |
| MANHOLE | | |
| CONTOUR | 211 | 211 |
| WETLAND EDGE | | |
| LEACHATE LINE | | |
| SURVEY BASELINE | | |
| TREE LINE | | |
| OVERHEAD TELEPHONE | O.T. | |
| UTILITY POLE | | |
| TEST PIT | 37 | 37 |
| WETLAND SETBACK BUFFER | | |
| RAILROAD | | |
| FILL OR CUT AREA (PROFILE) | | |

## DATUM

HORIZONTAL DATUM FROM STATION 0+20 TO STATION 167+00 IS BASED ON MAINE STATE GRID (EAST ZONE) 1927 NORTH AMERICAN DATUM.

VERTICAL DATUM FROM STATION 0+00 TO STATION 167+00 IS BASED ON NGVD29.

HORIZONTAL AND VERTICAL CONTROL

SQUAW BAY CONTROL POINT #1 = BRASS DISK IN TOP OF CONCRETE MANHOLE ON WESTERLY SIDE OF LEACHATE POND.

COORDINATES: NORTH 664363.732
EAST 473676.782

ELEVATION: 348.59

IDENTIFICATION: "MON.#1"

SQUAW BAY CONTROL POINT #2 = BRASS DISK IN TOP OF CONCRETE PUMP STATION ON SOUTHERLY SIDE OF LEACHATE POND.

COORDINATES: NORTH 663871.733
EAST 473715.008

ELEVATION: 356.99

IDENTIFICATION: "MON.#2"

SQUAW BAY CONTROL POINT #29 = BRASS DISK IN TOP OF CONCRETE CYLINDER ON NORTHWEST CORNER OF FIBER RECYCLE BUILDING.

COORDINATES: NORTH 653349.381
EAST 478333.704

ELEVATION: 318.24

IDENTIFICATION: CONTROL MON. 705A

VERTICAL DATUM CONVERSION FACTOR

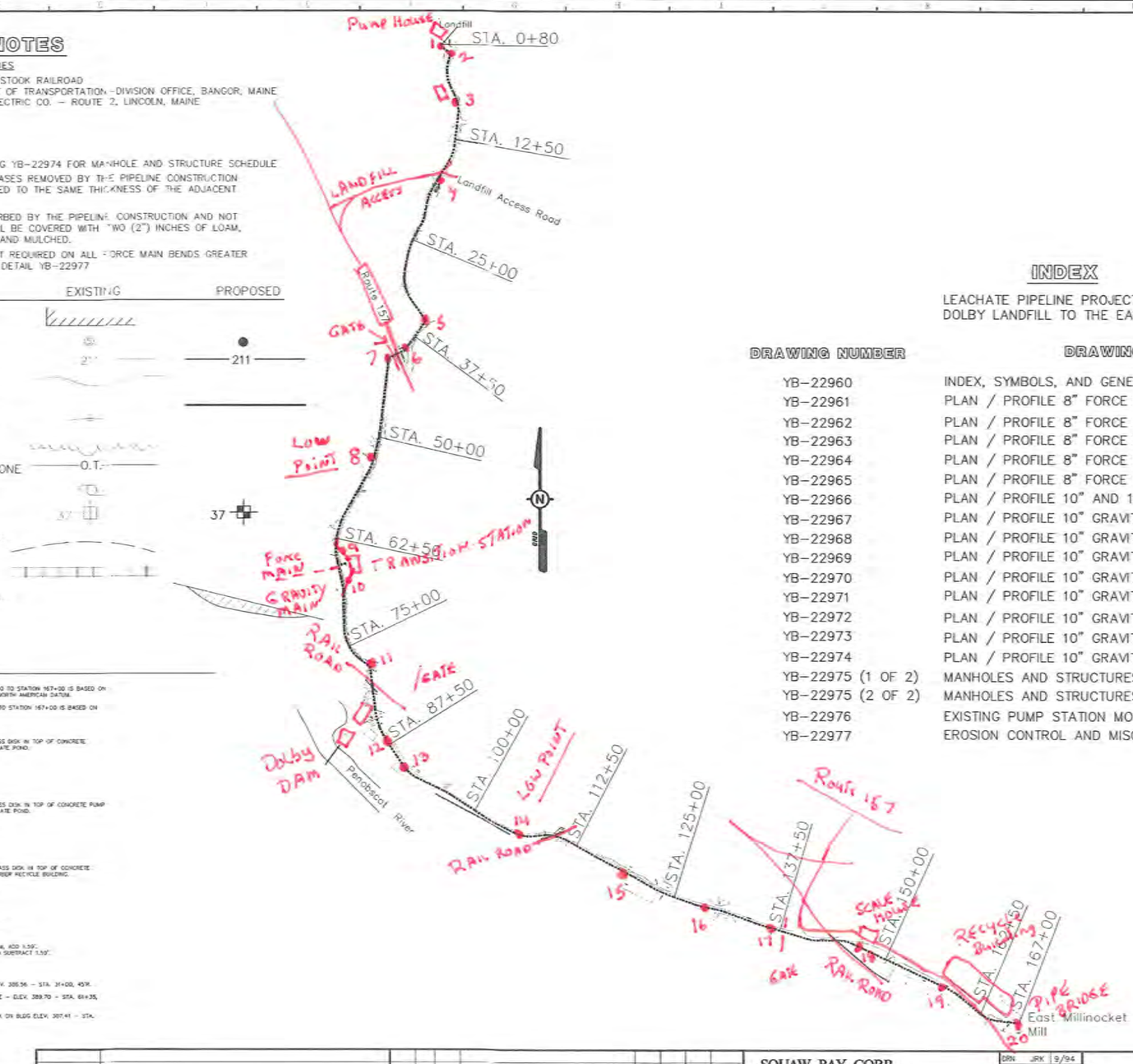
TO CONVERT NGVD (29) TO "MILL DATUM, ADD 11.59'.
TO CONVERT MILL DATUM TO NGVD (29) SUBTRACT 11.59'.

TEMPORARY BENCHMARKS (TBM)

TBM, PL-13 – TOP OF BOULDER – ELEV. 386.56 – STA. 31+00, 45'W.

TBM, SCOUT RD – TOP OF GRIND STONE – ELEV. 389.70 – STA. 64+35, 50'W.

TBM, GROUNDWOOD BLDG – PAINT MARK ON BLDG ELEV. 307.41 – STA. 167+00 165'W.




## INDEX

LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION



STATE OF MAINE
PETER J. TUBBS
2879
REGISTERED PROFESSIONAL ENGINEER
4-3-96

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C | 3/96 | RECVD DRAWING | MSB | PBT | | | |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | | 22846 | |
| B | 4/95 | ISSUED FOR BIDS | MSB | PBT | | 22846 | |
| P | 4/25 | PRELIMINARY CONSTRUCTION ISSUE | MSB | JRK | | 22846 | |
| ISSUE | NO. | DATE | REVISION | BY | CHK | APPVD | JOB NO. |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - Prelim. B - Bids
W - WE T.O. C - Const.
SCALE N.T.S.

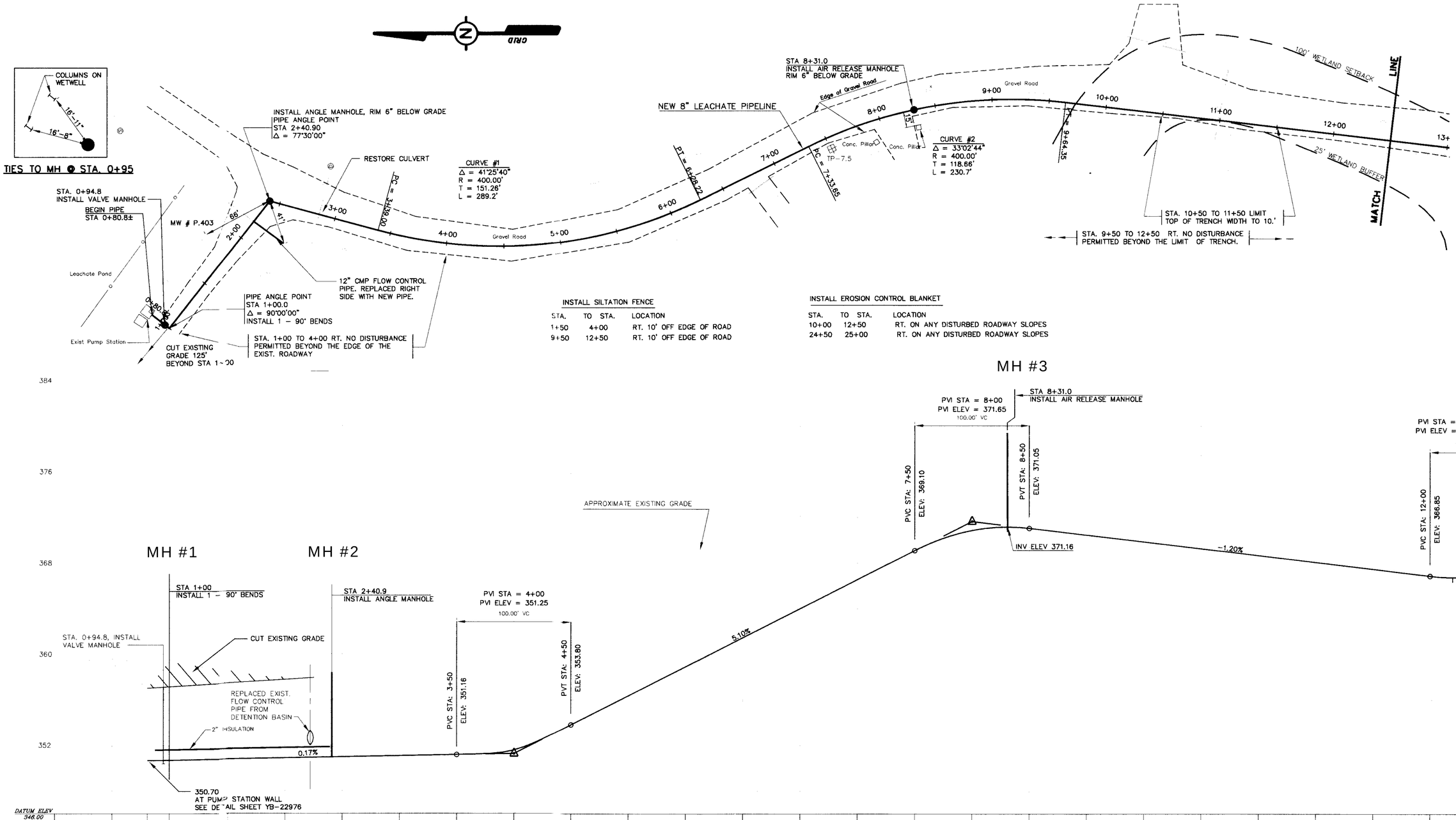
BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 0+80. TO STA. 167+00
8" FORCE MAIN
INDEX, SYMBOLS, AND GENERAL NOTES

JOB NO. 22846
ENG. REQ. NO. ____
FILE NO. 2-092-4783

YB–22960
SHEET 1 OF 1

D:\94-227\ACAD\DWGS\ Thu Mar 28 07:56:55 1996




384

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| YB-14801 | DOLBY 3 LANDFILL, INTERPRETIVE GEOLOGIC PROFILES | | | | | | |
| YB-14800 | DOLBY 3 LANDFILL, PHREATIC SURFACE MAP | | | | | | |
| YB-14799 | DOLBY 3 LANDFILL, BEDROCK SURFACE TOPOGRAPHY MAP | C | 3/96 | RECORD DRAWING | MSB | PBT | |
| YB-14797 | DOLBY 3 LANDFILL, SITE DEVELOPMENT | C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| YB-14796-A | DOLBY 3 LANDFILL, SITE DEVELOPMENT DETAILS | B | 4/95 | ISSUED FOR BIDS | MSB | PBT | |
| YB-14795 | DOLBY 3 LANDFILL, LEACHATE POND DETAILS | P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| SB-14888 | DOLBY LANDFILL LEACHATE PUMP STATION, PLANS & SECTIONS | P | 12/94 | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |

STATE OF MAINE
PETER B TUBBS 2678
REGISTERED PROFESSIONAL ENGINEER

SQUAW BAY CORP
CONSULTING ENGINEERS

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - Prelim | B - Bids
M - MH T.O. | C - Const.
1"=40'H;1'=4'V

BOWATER

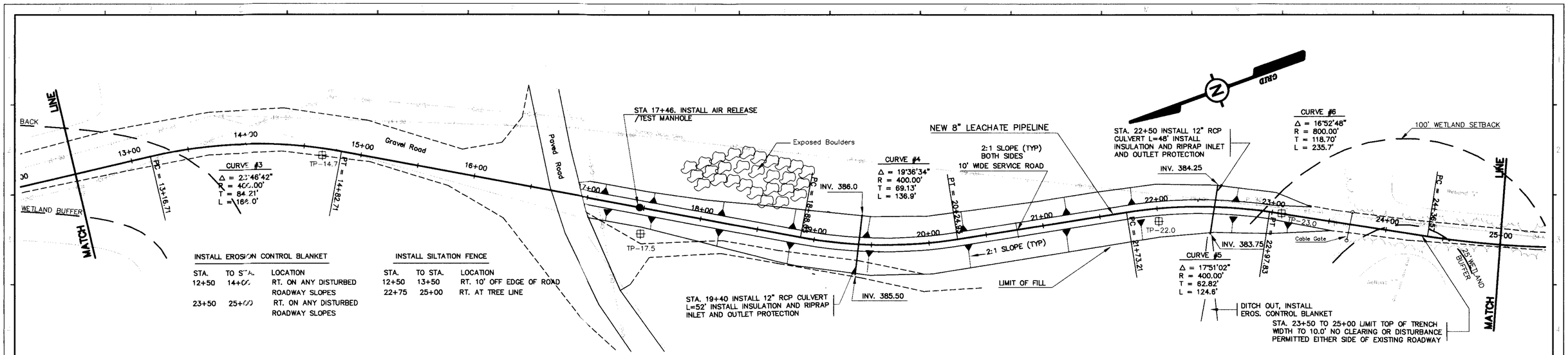
**EAST OPERATION**

LEACHATE PIPELINE PROJECT

DOLBY LANDFILL TO THE EAST OPERATION
STA. 0+80.8 TO STA. 12+50
8" FORCE MAIN
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22961
SHEET 1 OF 1




STATE OF MAINE
PETER B TUBBS
2878
REGISTERED PROFESSIONAL ENGINEER

| | | | | | | |
|---|---|---|---|---|---|---|
| C | | 3/96 | RECORD DRAWING | MSB | PBT | |
| C | | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| B | | 4/95 | ISSUED FOR BIDS | RMC | PBT | |
| P | | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| P | | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |
| DRAWING NO. | | | REVISION | BY | CHK | APPVD JOB NO |

**SQUAW BAY CORP**
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
SCALE 1"=40'H;1"=4'V

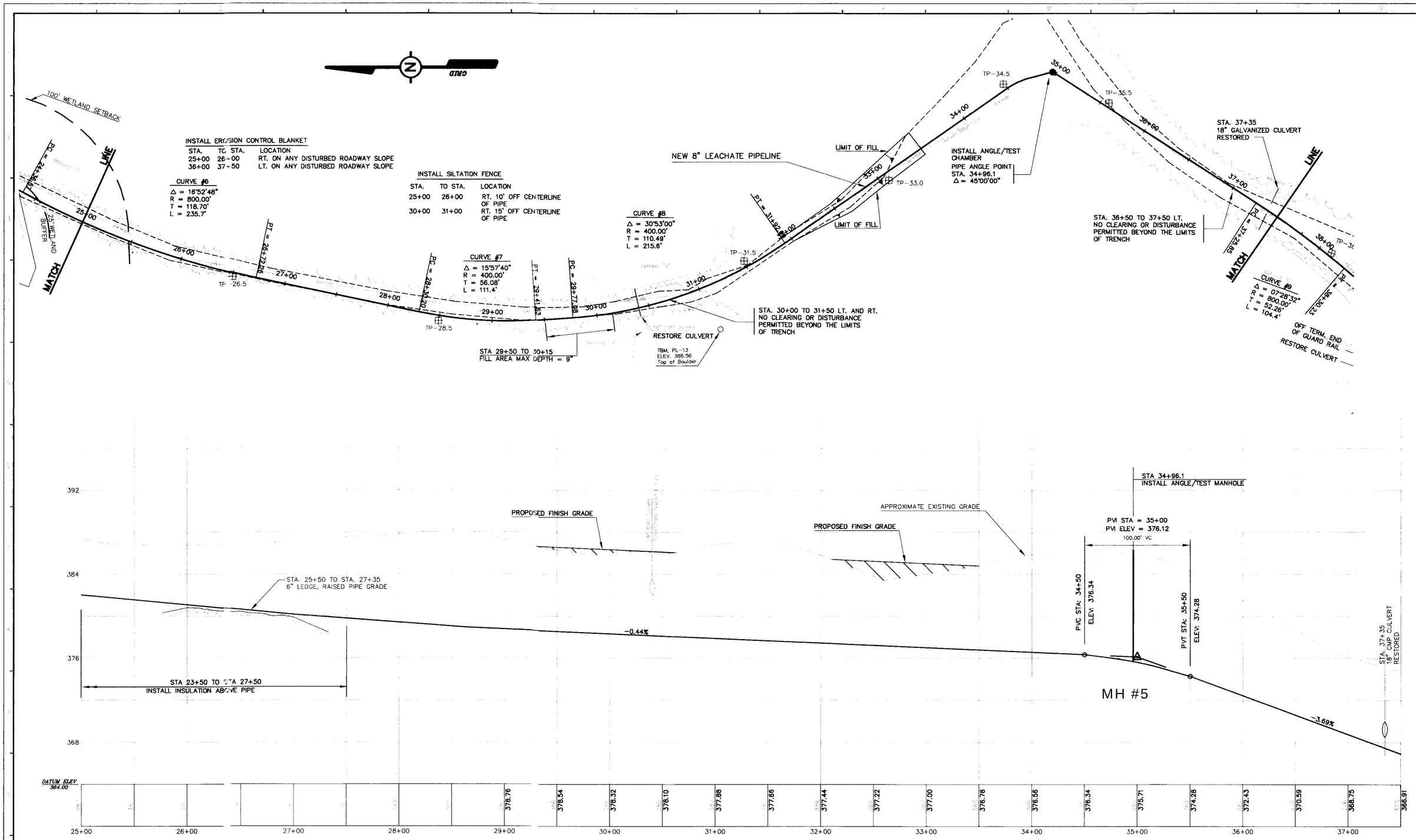
BOWATER
Great Northern Paper

**EAST OPERATION**
**LEACHATE PIPELINE PROJECT**
DOLBY LANDFILL TO THE EAST OPERATION
STA. 12+50 TO STA. 25+00
8" FORCE MAIN
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22962
SHEET 1 OF 1

L:\94227\ACAD\94226PH12 Thu Mar 28 14:07:37 1996




STATE OF MAINE
PETER B TUBBS 2678
REGISTERED PROFESSIONAL ENGINEER

| | | | | | |
|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT | |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| B | 4/95 | ISSUED FOR BIDS | RMC | PBT | |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 864 CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - Prelim | B - Bids
M - MH T.O. | C - Const.
SCALE 1"=40'H;1"=4'V

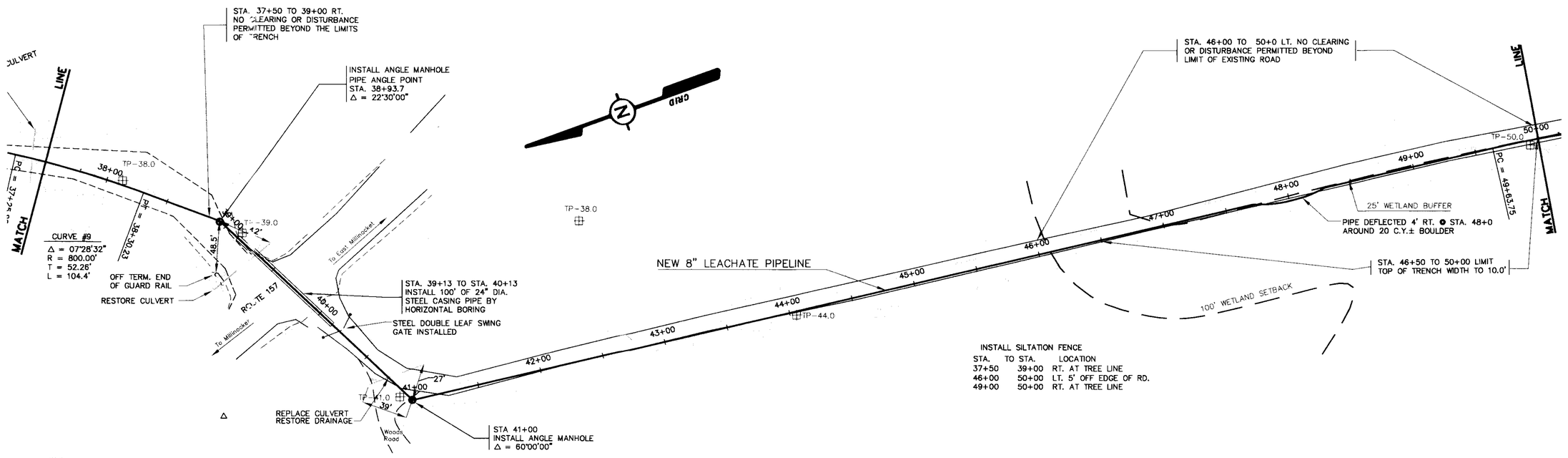
BOWATER
Great Northern Paper

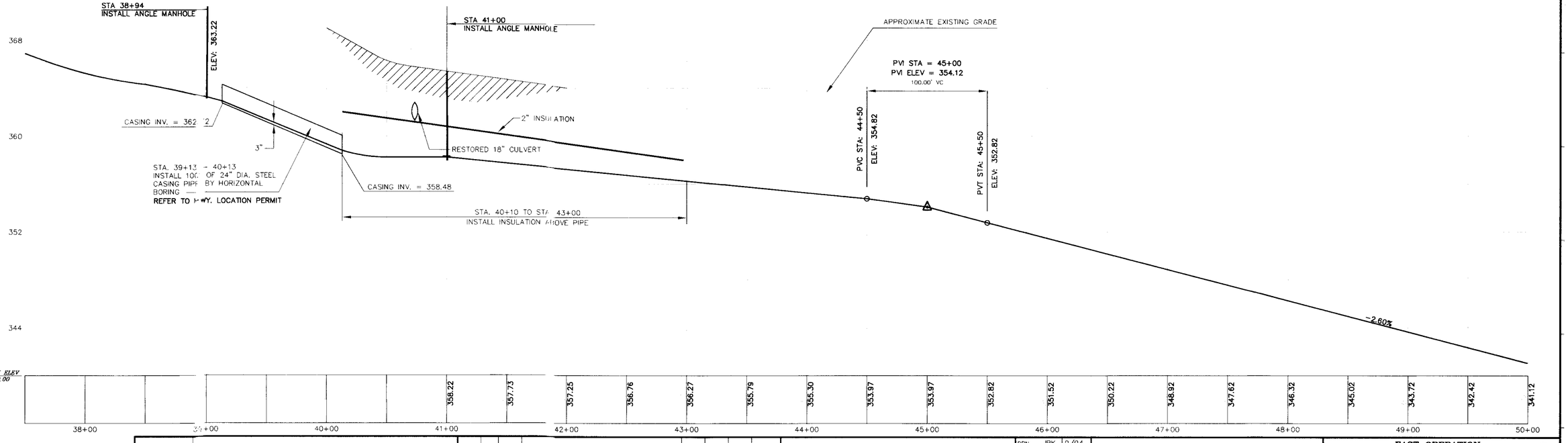
**EAST OPERATION**
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 25+00 TO STA. 37+50
8" FORCE MAIN
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22963
SHEET 1 OF 1

U: \94-227\ACAD\94227H12 Thu Mar 28 14:50:42 1996




| | | | | | | |
|---|---|---|---|---|---|---|
| | C | 3/96 | RECORD DRAWING | MSB | PBT | |
| | C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| | P | 4/95 | ISSUED FOR BIDS | RMC | PBT | |
| | P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| 18 | | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |

18 STATE HIGHWAY COMMISSION – PROJECT NO. S-0315(2)

PETER B TUBBS 2678 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE

SQUAW BAY CORP
CONSULTING ENGINEERS
CUMBERLAND CO., MAINE

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
1"=40'H;1"=4'V

BOWATER

**EAST OPERATION**

# LEACHATE PIPELINE PROJECT

DOLBY LANDFILL TO THE EAST OPERATION
STA. 37+50 TO STA. 50+00
8" FORCE MAIN
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22964
SHEET 1 OF 1

STA. 50+00 TO 56+00 LT. NO CLEARING OR DISTURBANCE PERMITTED BEYOND THE EXISTING ROAD

(Cedar post) property line marker

STA 51+50
INSTALL TEST MANHOLE

NEW POLE # 6

RESTORE CULVERT

CURVE #10
Δ = 07°35'58"
R = 800.00'
T = 53.13'
L = 106.1'

CURVE #11
Δ = 15°03'36"
R = 800.00'
T = 105.75'
L = 210.3'

CURVE #12
Δ = 41°46'55"
R = 800.00'
T = 305.35'
L = 583.39'

NEW 8" LEACHATE PIPELINE

Woods Road

Bituminous Paved Roadway

Gravel Parking Area

TP-55.2 TP-58.5 TP-59.5 TP-61.5

PC = 49+63.75
PT = 50+69.86
PC = 52+28.96
PT = 54+32.5
PC = 59+44.26

50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00

MATCH LINE

16" INSULA
10"

STA. 50+00 TO 55+50 LIMIT TOP OF TRENCH WIDTH TO 10'

STA.50+00 TO 56+00 RT. NO CLEARING OR DISTURBANCE PERMITTED BEYOND THE EXISTING TREE LINE

STA. 62+00 TO 62+50 RT. NO CLEARING OR DISTURBANCE BEYOND THE TREE LINE

18.5' 2.7'
NEW POLE # 6
TIES TO MH @ STA. 51+50

0'

25' WETLAND BUFFER

100' WETLAND SETBACK

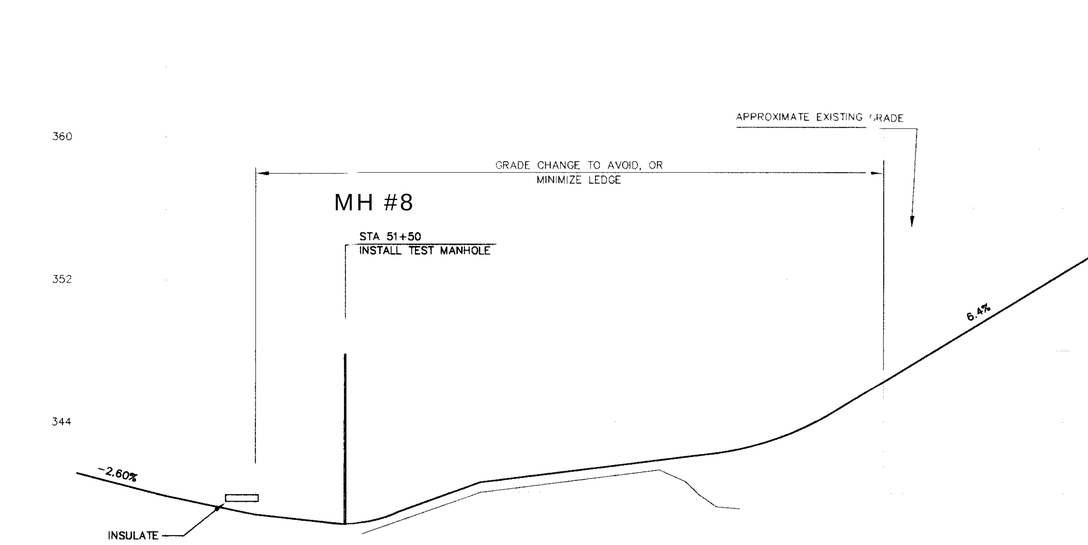
TBM-SCOUT RD.
ELEV 389.70

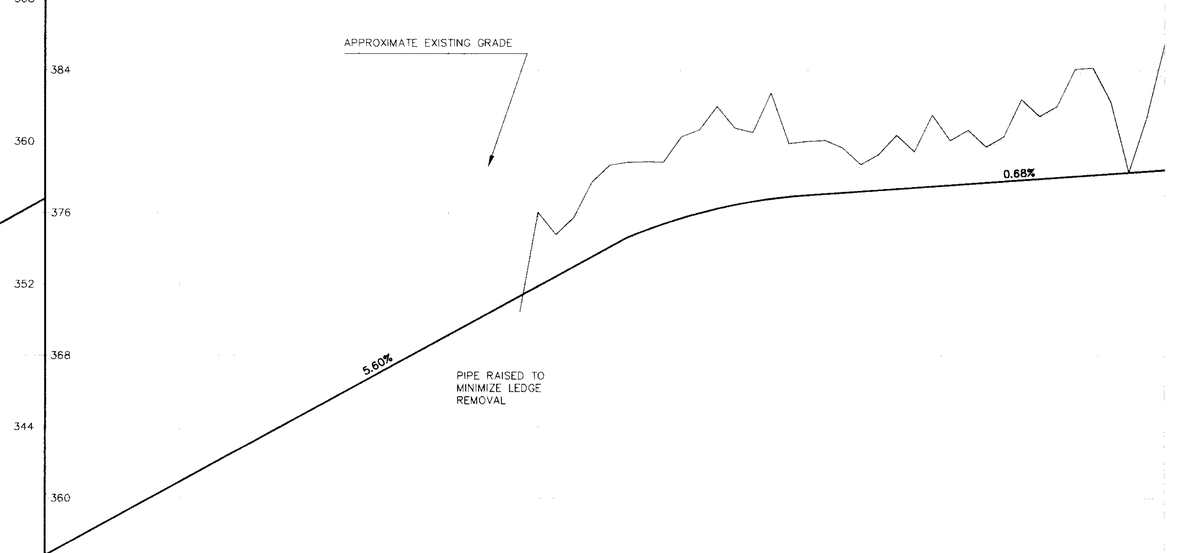
INSTALL SILTATION FENCE

| STA. | TO STA. | LOCATION |
|---|---|---|
| 50+00 | 55+50 | RT. AT THE TREE LINE |
| 62+00 | 62+50 | RT. AT THE TREE LINE |

INSTALL EROSION CONTROL BLANKET

| STA. | TO STA. | LOCATION |
|---|---|---|
| 50+00 | 55+50 | RT. ON ANY DISTURBED ROADWAY SLOPE |




PETER B TUBBS 2678 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE

| | | | | | |
|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT |
| B | 4/95 | ISSUED FOR BIDS | MSB | PBT |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT |

SQUAW BAY CORP
CONSULTING ENGINEERS

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - Prelim B - Bids
M - Mtl T.O. C - Const.

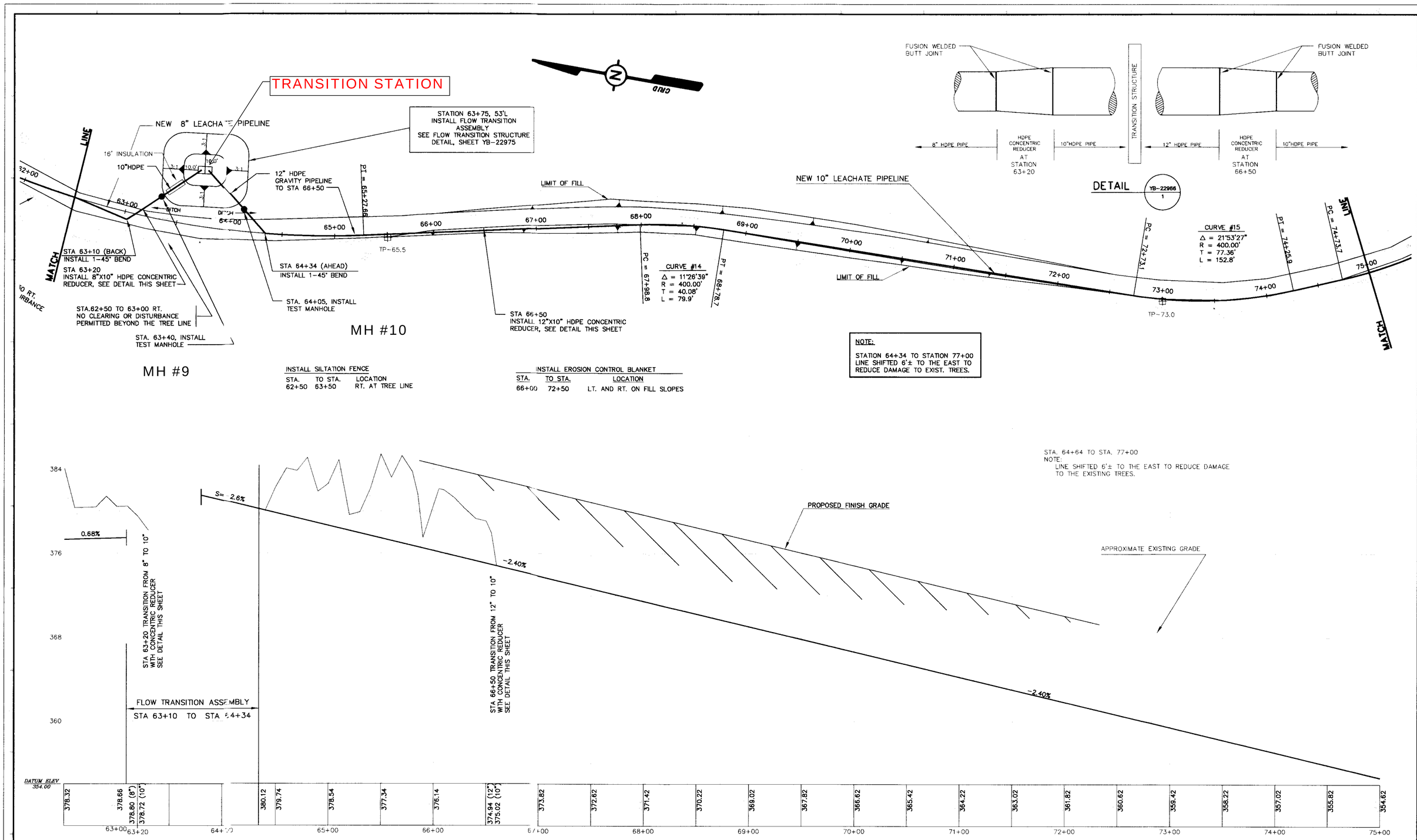
1"=40'-0"; 1"=4'-0"

BOWATER

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 50+00 TO STA. 62+50
8" FORCE MAIN
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22965
SHEET 1 OF 1




INSTALL SILTATION FENCE

| STA. | TO STA. | LOCATION |
|---|---|---|
| 62+50 | 63+50 | RT. AT TREE LINE |

INSTALL EROSION CONTROL BLANKET

| STA. | TO STA. | LOCATION |
|---|---|---|
| 66+00 | 72+50 | LT. AND RT. ON FILL SLOPES |

**NOTE:**

STATION 64+34 TO STATION 77+00 LINE SHIFTED 6'± TO THE EAST TO REDUCE DAMAGE TO EXIST. TREES.

STA. 64+64 TO STA. 77+00
NOTE:
LINE SHIFTED 6'± TO THE EAST TO REDUCE DAMAGE TO THE EXISTING TREES.




| | | | | | |
|---|---|---|---|---|---|
| C | | 3/96 | RECORD DRAWING | MSB | PBT |
| C | | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT |
| B | | 4/95 | ISSUED FOR BIDS | RMC | PBT |
| P | | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT |
| P | | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT |

STATE OF MAINE
PETER B. TURBS
3678
REGISTERED
PROFESSIONAL ENGINEER

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 1258 WISCASSET, MAINE 04578

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - Prelim | B - Bids
M - Mtl T.O. | C - Const.
1"=40'H;1"=4'V

BOWATER

**EAST OPERATION**

LEACHATE PIPELINE PROJECT

DOLBY LANDFILL TO THE EAST OPERATION
STA. 62+50 TO STA. 75+00
8" FORCE MAIN/12" & 10" GRAVITY TRANSITION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22966
SHEET 1 OF 1

NOTE: REFER TO B.A.R.R. CO.RIGHT OF WAY & TRACK MAP,SCHOODIC STREAM JCT. TO E. MILLINOCKET (V.2.h. / 2)

FUSION WELDED BUTT JOINT

PIPE

PIPE ANGLE POINT
STA 78+35.3
Δ = 45°00'00"
INSTALL ANGLE MANHOLE

STEEL DOUBLE LEAF SWING GATE INSTALLED

GRID

CURVE #16
Δ = 29°06'25"
R = 400.00'
T = 103.85'
L = 203.2'

PT = 76+15.9

PC = 74+13.7

TP-78.5

TP-76

AREA TO BE FILLED

NEW 10" LEACHATE PIPELINE

STA 272+70± (CENTERLINE TRACK) = STA 80+67± (LEACHATE LINE)

STA 80+22 – STA 81+22
INSTALL 100' OF 24" D.I. CASING PIPE

PC = 83+23.0

TEST PIT REQUIRED TO LOCATE 2" WATER (MAINTAIN IN SERVICE)

CURVE #17
Δ = 26°55'47"
R = 800.00'
T = 191.54'
L = 376.0'

PT = 86+99.0

BM 1

48'

107'

STA. 85+30
INSTALL TEST M.H.

Elec. Substation

MATCH LINE

MATCH LINE

75+00 76+00 77+00 78+00 79+00 80+00 81+00 82+00 83+00 84+00 85+00 86+00 87+00 88+00

APPROXIMATE EXISTING GRADE

MH #11

STA 78+35.3
INSTALL ANGLE MANHOLE

PROPOSED FINISH GRADE

GRADE CHANGE OVER UNBLASTED LEDGE 8-4-95

9.0'± COVER

-4.50%

STA 272+70± (CENTERLINE TRACK) = STA 80+67± (LEACHATE LINE)

STA 80+22 – STA 81+22
INSTALL 100' OF 24"DIA. D.I. CASING PIPE

360 352 344 336

100' VC
PVI STA = 82+00
PVI ELEV = 329.42

PVC STA: 81+50
ELEV: 331.67

PVT STA: 82+50
ELEV: 325.49

-7.86%

PVI STA = 84+50
PVI ELEV = 309.77
100.00' VC

PVC STA: 84+00 ELEV: 313.70

PVT STA: 85+00
ELEV: 309.34

MH #12
STA 85+30
INSTALL TEST MANHOLE

APPROXIMATE EXISTING GRADE

-0.86%

360 352 328 320 312 336

DATUM ELEV. 330.00

354.62 353.42 352.22 351.02 350.50 350.00 348.20 345.17 342.92 340.67 338.42 336.17 333.92

75+00 76+00 77+00 78+00 79+00 80+00 81+00 +25 +50

DATUM ELEV. 306.00

331.67 329.00 325.49 321.56 317.63 313.70 310.64 309.34 308.91 308.48 308.05 307.62 307.19

82+00 83+00 84+00 85+00 86+00 87+00

PETER B TUBBS 2878 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE

| | | | | | | |
|---|---|---|---|---|---|---|
| | | C | 3/96 | RECORD DRAWING | MSB | PBT |
| | | C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT |
| | | B | 4/95 | ISSUED FOR BIDS | MSB | PBT |
| | | | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT |
| | | | 3/15/95 | SUBMITTED FOR R.R. APPROVAL | PBT | PBT |
| V2h-2 | B.A.R.R. Co. RIGHT OF WAY & TRACK MAP, SCHOODIC STREAM JCT. TO E. MILLINOCKET | P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT |

SQUAW BAY CORP
CONSULTING ENGINEERS

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - Prelim | B - Bids | M - Mtl T.O. | C - Const.

1"=40'H; 1"=4'V

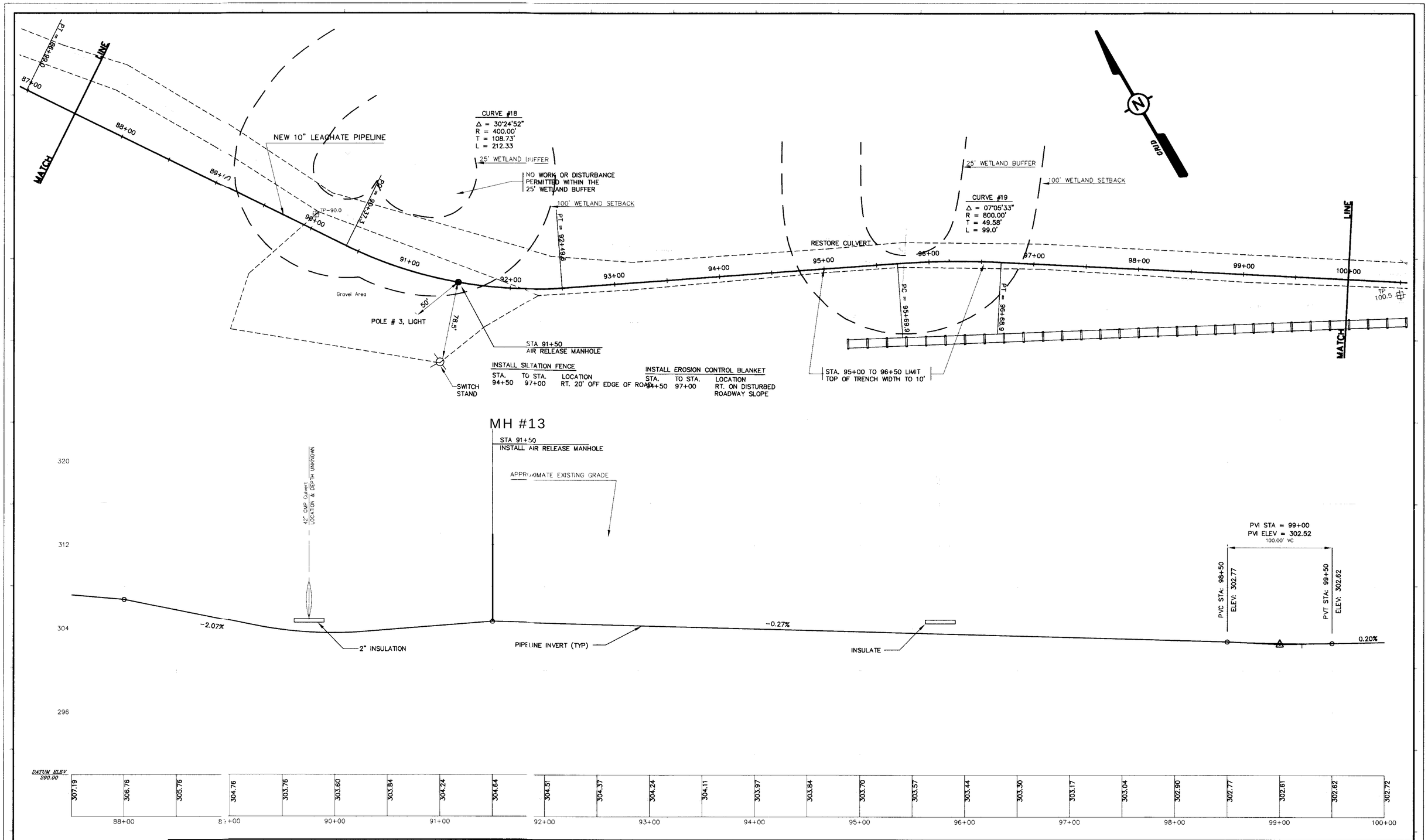
BOWATER

Forest Fiber Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 75+00 TO STA. 87+50
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22967
SHEET 1 OF 1




STATE OF MAINE
PETER B TUBBS 7678
REGISTERED PROFESSIONAL ENGINEER

| | | | | | |
|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT |
| B | 4/95 | ISSUED FOR BIDS | RMC | PBT |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT |

SQUAW BAY CORP
CONSULTING ENGINEERS
PORTLAND, MAINE

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

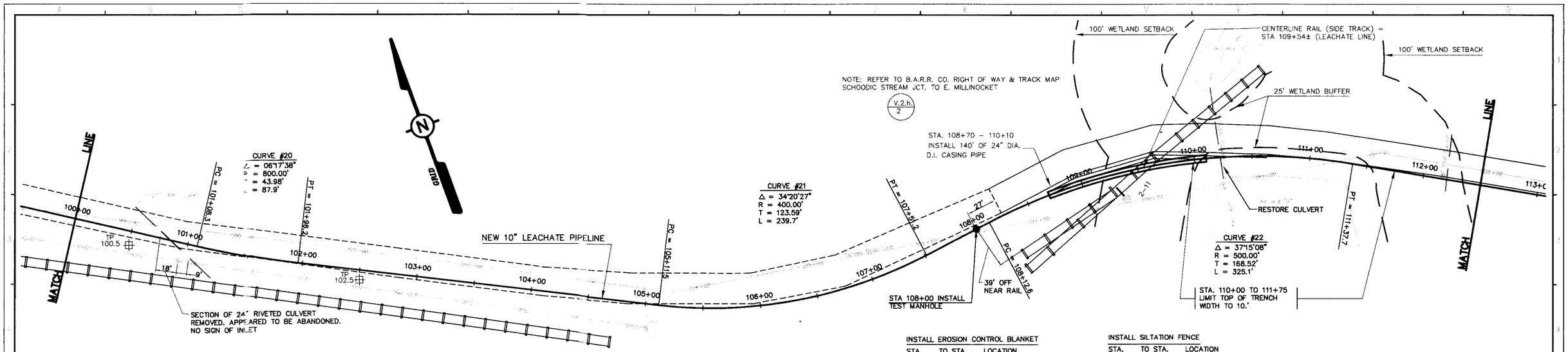
ISSUE CODE: P - Prelim; B - Bids; M - Mtl T.O.; C - Const.
1"=40'H;1"=4'V

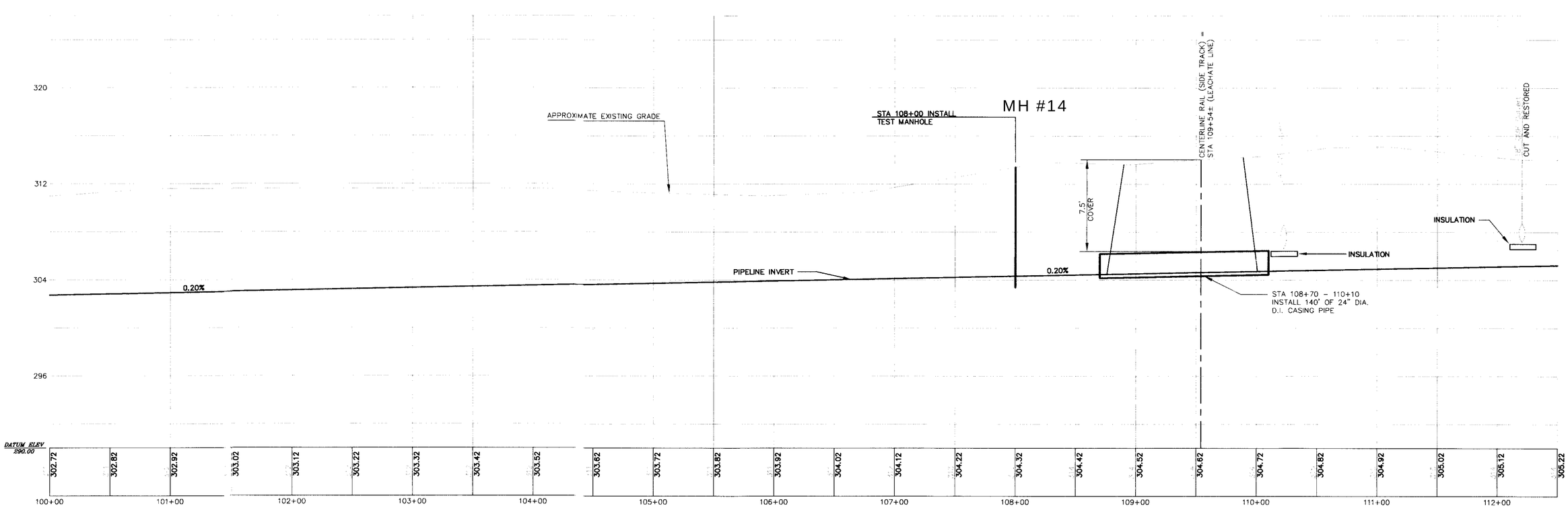
BOWATER
Printed on Recycled Paper

**EAST OPERATION**
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 87+50 TO STA. 100+00
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22968
SHEET 1 OF 1




STATE OF MAINE
PETER B. TIBBS 2678
REGISTERED PROFESSIONAL ENGINEER
3-27-96

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | C | 3/96 | RECORD DRAWING | MSB | PBT | |
| | | | C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| | | | B | 4/95 | ISSUED FOR BIDS | MSB | PBT | |
| | | | P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| | | | | 3/15/95 | SUBMITTED FOR R.R. APPROVAL | JRK | PBT | |
| v2h–2 | B.A.R.R. Co. RIGHT OF WAY & TRACK MAP, SCHOODIC STREAM JCT. TO E. MILLINOCKET | | P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |
| DRAWING NO. | | ITEM/DRAWING TITLE | NOTE | NO | DATE | REVISION | BY | CHK | APPVD | DES No |

**SQUAW BAY CORP**
**CONSULTING ENGINEERS**
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P – Prelim | B – Bids | M – Mill T.O. | C – Const.

SCALE: 1"=40'H; 1"=4'V

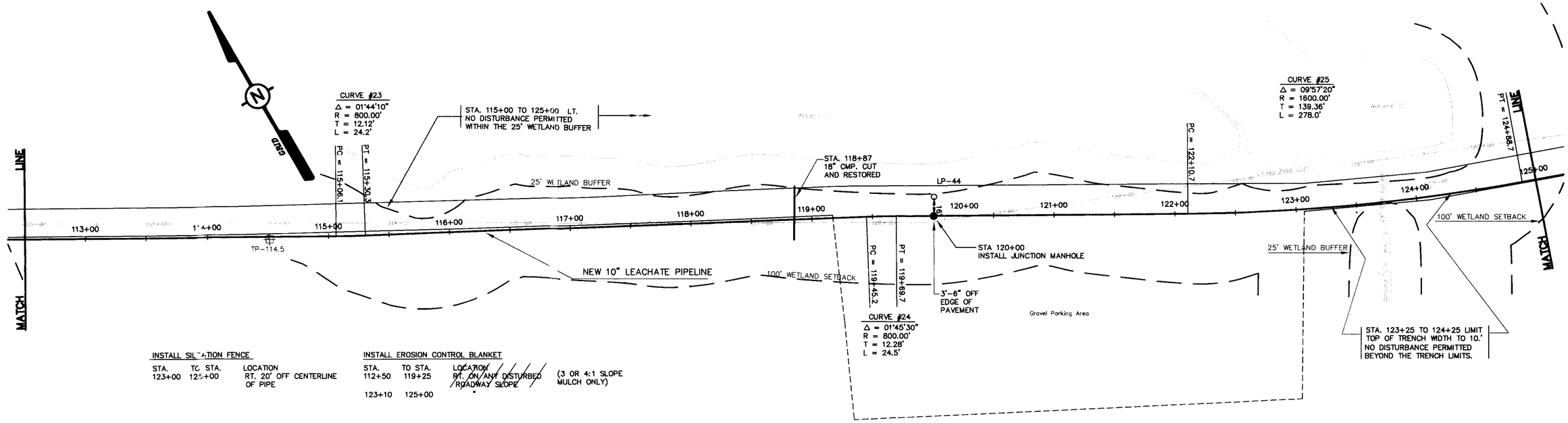
**BOWATER**
Great Northern Paper

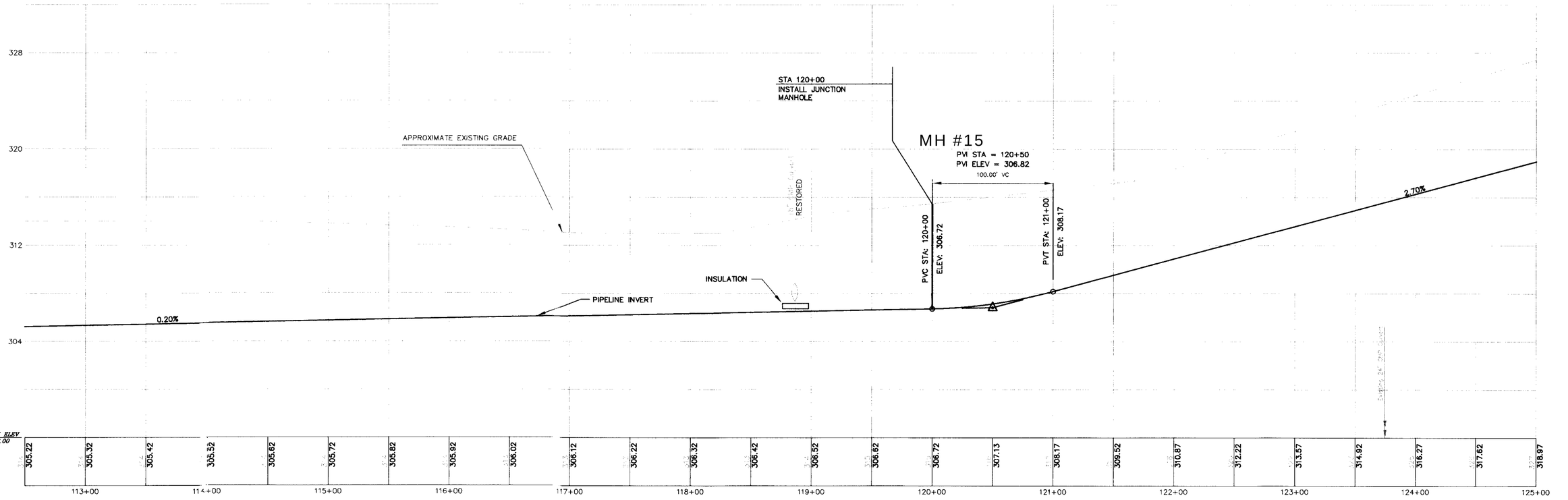
**EAST OPERATION**
**LEACHATE PIPELINE PROJECT**
DOLBY LANDFILL TO THE EAST OPERATION
STA. 100+00 TO STA. 112+50
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2–092–4783

YB–22969
SHEET 1 OF 1

J 94-227.A.ADJ.9422/H12 Thu Mar 28 14:35:52 1996




STATE OF MAINE
PETER B TUBBS 2678
REGISTERED PROFESSIONAL ENGINEER
4-3-96

| | | | | | |
|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT | |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| B | 4/95 | ISSUED FOR BIDS | RMC | PBT | |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

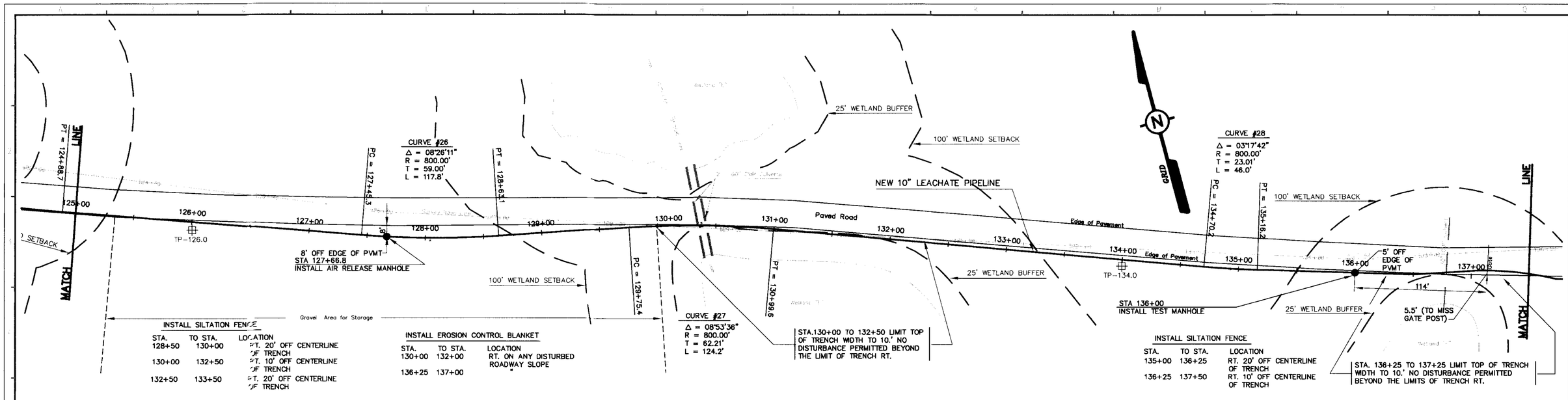
ISSUE CODE
P - Prelim | B - Bids
M - Mtl T.O. | C - Const.
SCALE 1"=40'H;1"=4'V

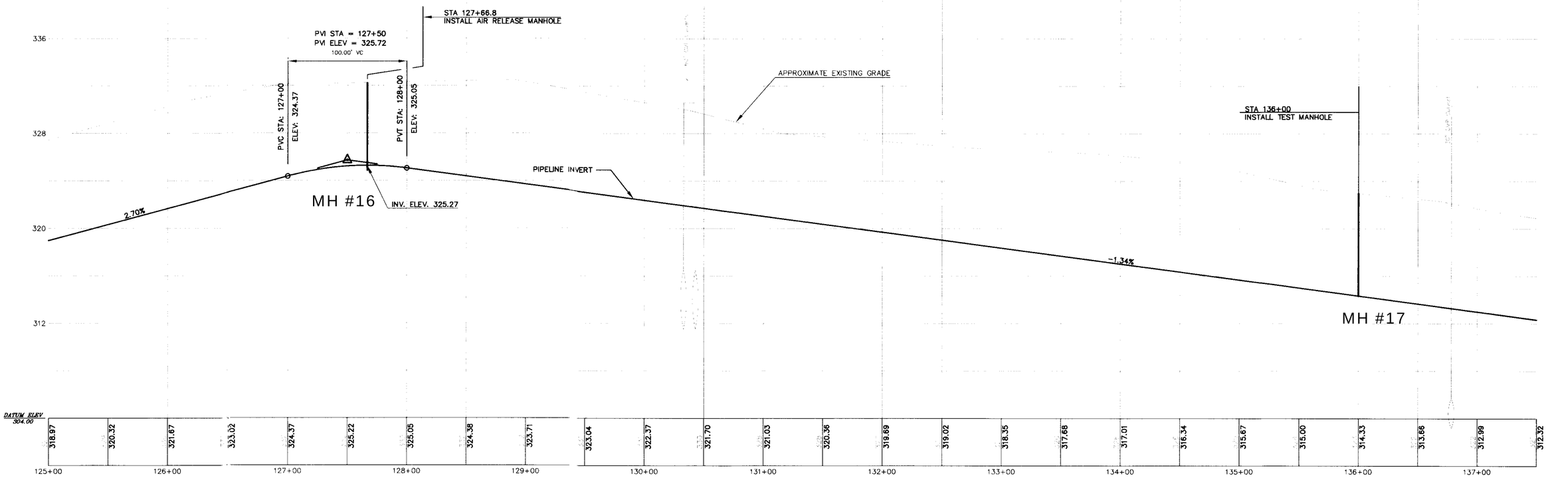
BOWATER
Great Northern Paper

**EAST OPERATION**
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 112+50 TO STA. 125+00
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22970
SHEET 1 OF 1




STATE OF MAINE
PETER B TUBBS
2678
REGISTERED PROFESSIONAL ENGINEER
9-5-96

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT | | | |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | | | |
| B | 4/95 | ISSUED FOR BIDS | RMC | PBT | | | |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | | | |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | | | |
| NO. | BY | DATE | REVISION | BY | CHK | APPVD | ISS. NO. |

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

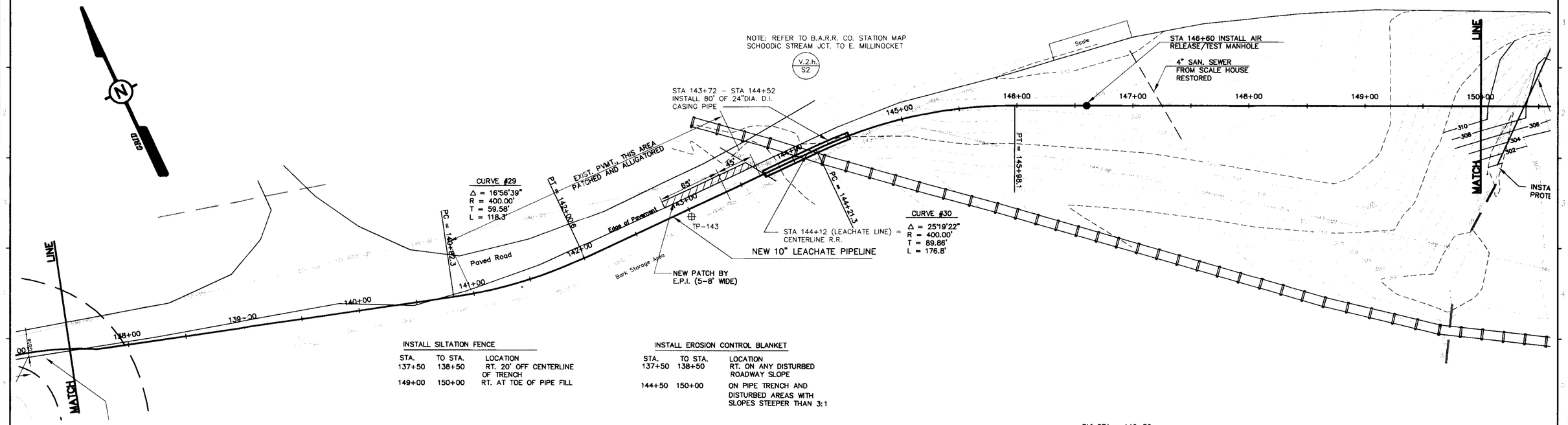
ISSUE CODE
P - Prelim | B - Bids
M - Mtl T.O. | C - Const.
SCALE 1"=40'H;1"=4'V

BOWATER
Great Northern Paper

**EAST OPERATION**
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 125+00 TO STA. 137+50
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22971
SHEET 1 OF 1




| | | | | | |
|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT | |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| B | 4/95 | ISSUED FOR BIDS | RMC | PBT | |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| | 3/15/95 | SUBMITTED FOR R.R. APPROVAL | PBT | PBT | |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |

V2h–S2 B.A.R.R. Co. STATION MAP SCHOODIC STREAM JCT. TO E. MILLINOCKET

STATE OF MAINE PETER G TUBBS 2676 REGISTERED PROFESSIONAL ENGINEER

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
1"=40'H; 1"=4'V

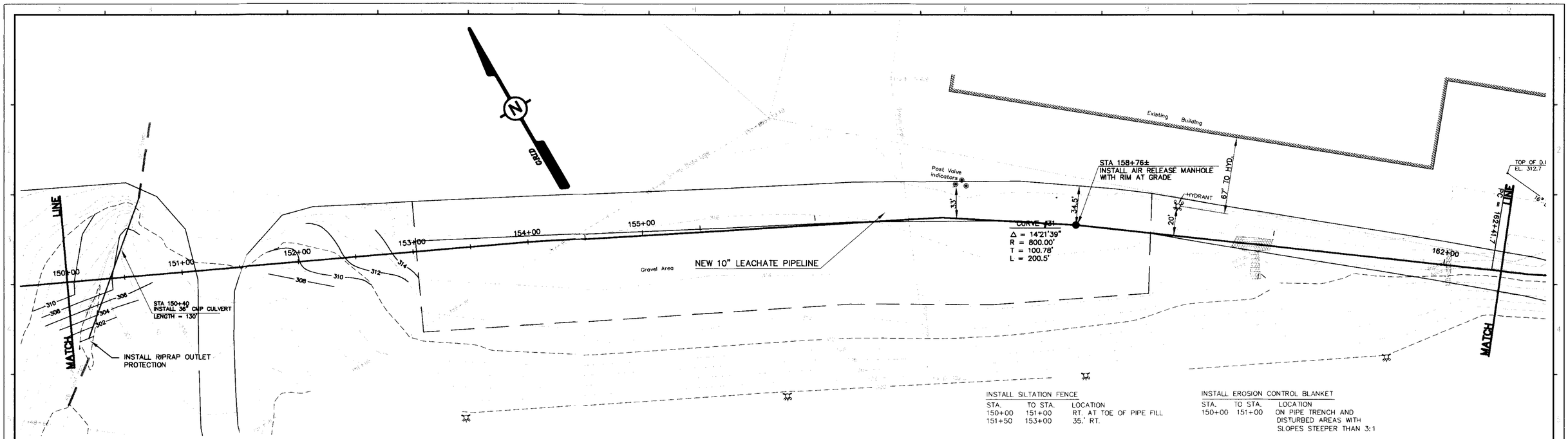
BOWATER
Great Northern Paper

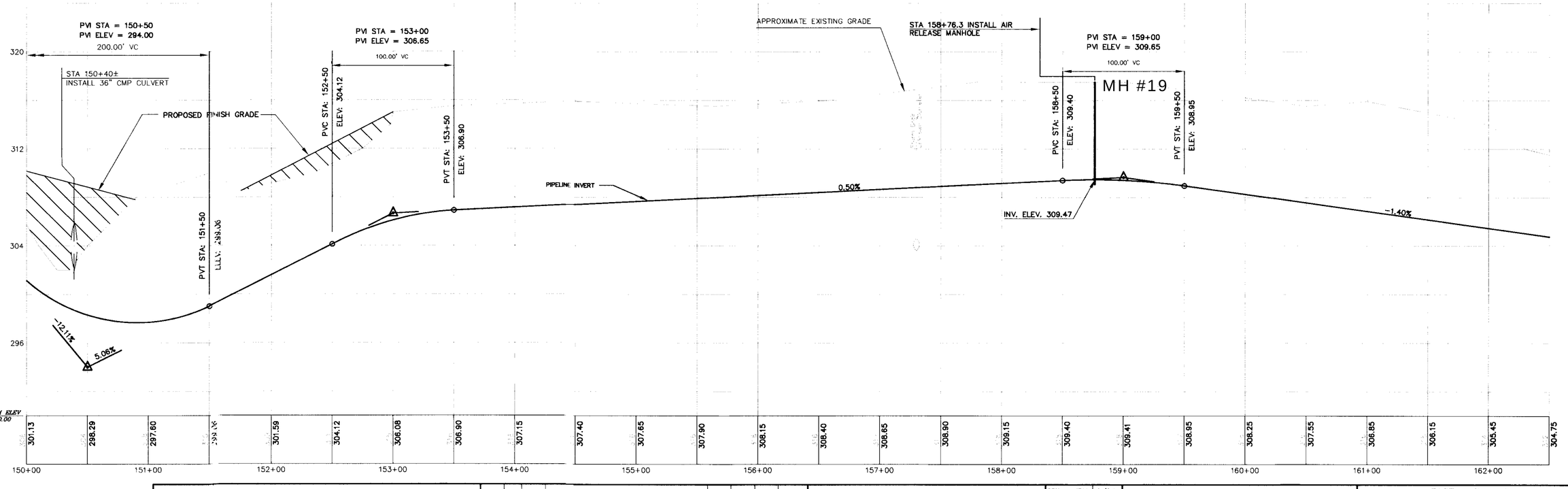
EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 137+50 TO STA. 150+00
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB–22972
SHEET 1 OF 1

34 227\ACAD\9422H12 Thu Mar 28 15:29:33 1996




| | | | | | |
|---|---|---|---|---|---|
| C | 3/96 | RECORD DRAWING | MSB | PBT | |
| C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | |
| B | 4/95 | ISSUED FOR BIDS | MSB | PBT | |
| P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT | |
| P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT | |

YB-20978 RECYCLE FIBER PLANT -- UNDERGROUND UTILITIES SHEETS 1-6

STATE OF MAINE
PETER B TUBBS 2878
REGISTERED PROFESSIONAL ENGINEER

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P – Prelim | B – Bids
M – MH T.O. | C – Const.
SCALE 1"=40'H; 1"=4'V

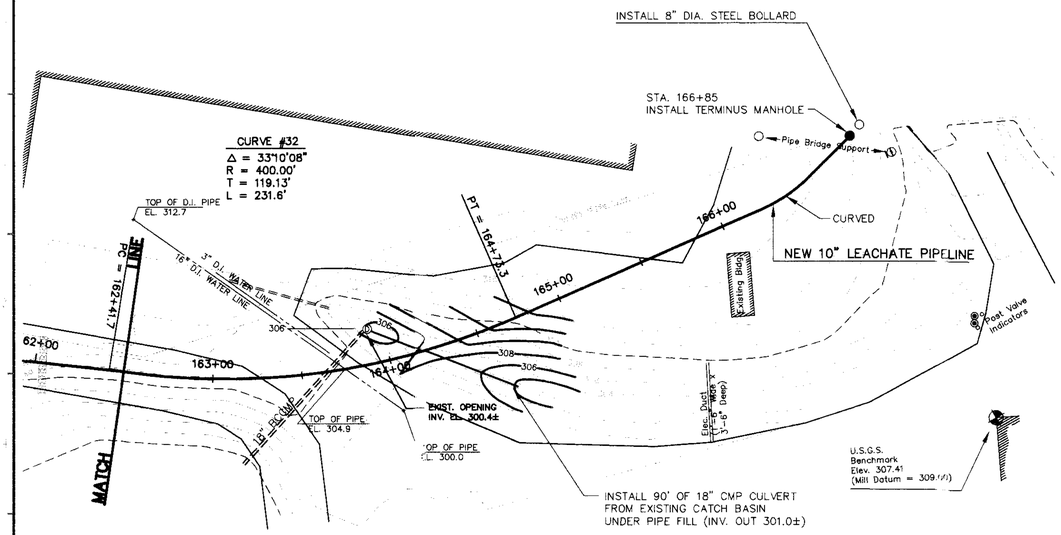
BOWATER
Great Northern Paper

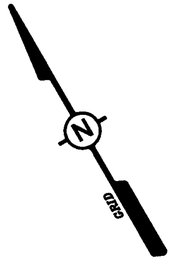
**EAST OPERATION**
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 150+00 TO STA. 162+50
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22973
SHEET 1 OF 1

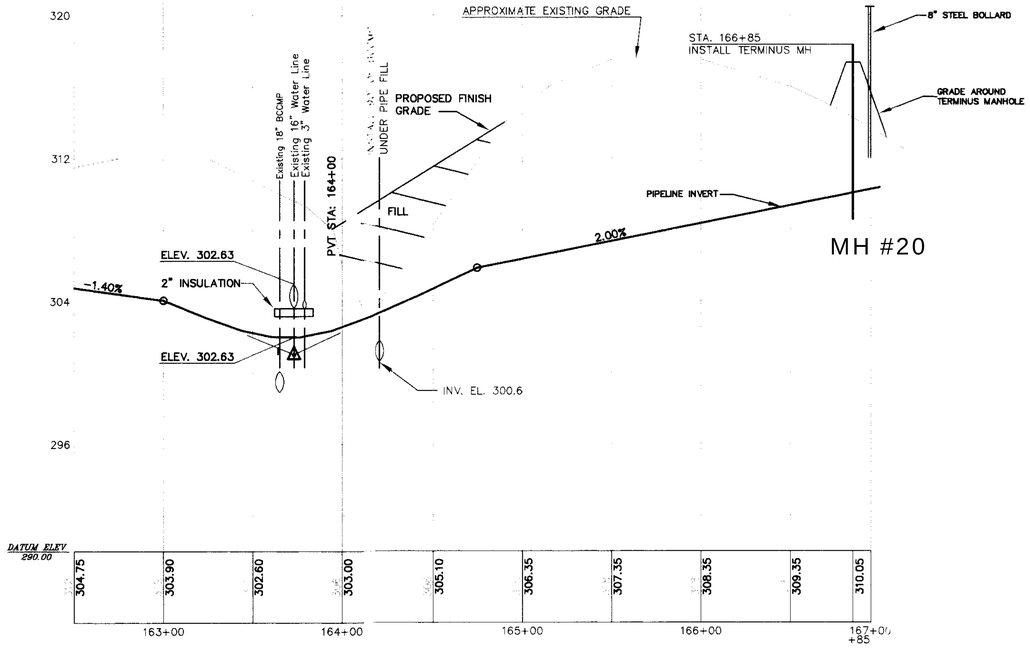
D:\94-227\ACAD\9422PH12 Thu Mar 28 15:34:14 1996




## MANHOLE AND STRUCTURE SCHEDULE

| STATION | TYPE | SIZE | DESCRIPTION |
|---|---|---|---|
| 0+95 | CIRCULAR | 8' DIA. | GATE AND CHECK VALVE |
| 2+41 | CIRCULAR | 6' DIA. | ANGLE |
| 8+31 | CIRCULAR | 6' DIA. | AIR RELEASE |
| 17+46 | CIRCULAR | 8' DIA. | AIR RELEASE / TEST |
| 34+96 | CIRCULAR | 8' DIA. | ANGLE / TEST |
| 38+94 | CIRCULAR | 4' DIA. | ANGLE |
| 41+00 | CIRCULAR | 4' DIA. | ANGLE |
| 51+50 | CIRCULAR | 8' DIA. | TEST |
| 63+40 | CIRCULAR | 8' DIA. | TEST |
| 63+75, 53' LT. | RECTANGULAR | 6' X 12' | FLOW TRANSITION STRUCTURE |
| 64+05 | CIRCULAR | 8' DIA. | TEST |
| 78+35 | CIRCULAR | 4' DIA. | ANGLE |
| 85+30 | CIRCULAR | 8' DIA. | TEST |
| 91+50 | CIRCULAR | 4' DIA. | AIR RELEASE |
| 108+00 | CIRCULAR | 8' DIA. | TEST |
| 127+67 | CIRCULAR | 6' DIA. | AIR RELEASE |
| 136+00 | CIRCULAR | 8' DIA. | TEST |
| 120+00 | CIRCULAR | 4' DIA. | JUNCTION |
| 146+60 | CIRCULAR | 8' DIA. | AIR RELEASE / TEST |
| 158+76 | CIRCULAR | 6' DIA. | AIR RELEASE |
| 166+85 | CIRCULAR | 8' DIA. | VALVE |






| | | | | | | |
|---|---|---|---|---|---|---|
| | | C | 3/96 | RECORD DRAWING | MSB | PBT |
| | | C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT |
| | | B | 4/95 | ISSUED FOR BIDS | RMC | PBT |
| | | P | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | RMC | PBT |
| YB-20978 | RECYCLE FIBER PLANT AND UNDERGROUND UTILITIES, SHTS. 1-6 | P | | SUBMITTED W/ PERMIT APPLICATION | JRK | PBT |

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | JRK | 9/94 |
| CHK | PBT | 10/94 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - Prelim | B - Bids | M - Mtl T.O. | C - Const.

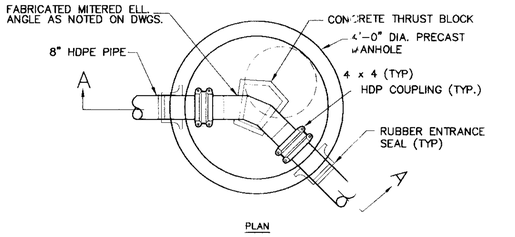
1"=40'H; 1"=4'V

BOWATER
Great Northern Paper

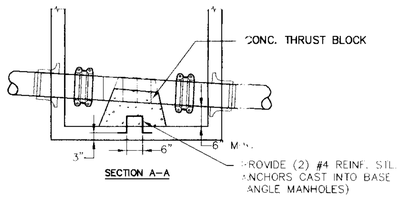
**EAST OPERATION**
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
STA. 162+50 TO STA. 167+00
10" GRAVITY SECTION
PLAN & PROFILE

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

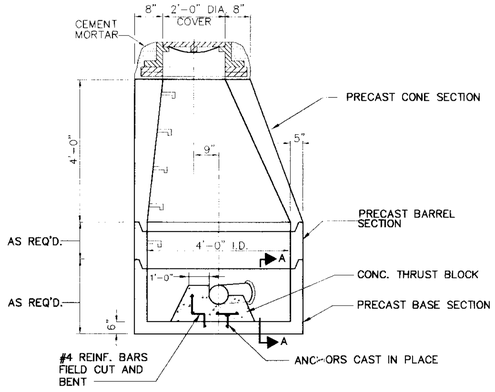
YB-22974
SHEET 1 OF 1



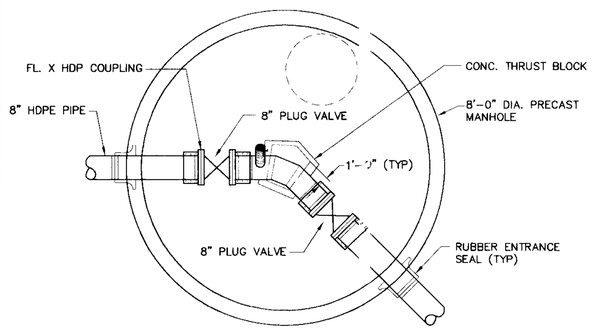

PLAN




SECTION A–A



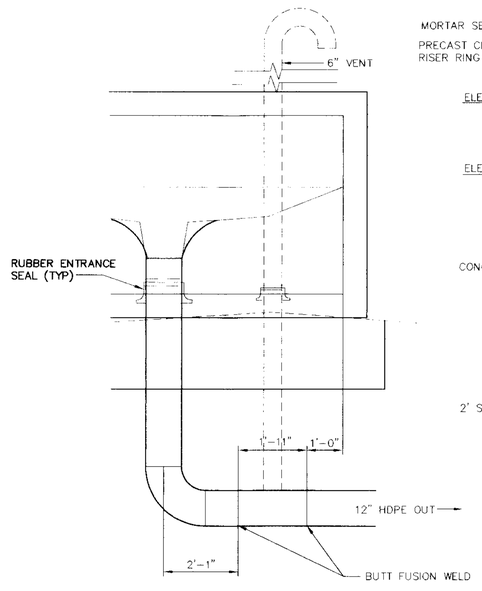

ELEVATION
TYPICAL JUNCTION / ANGLE MANHOLE



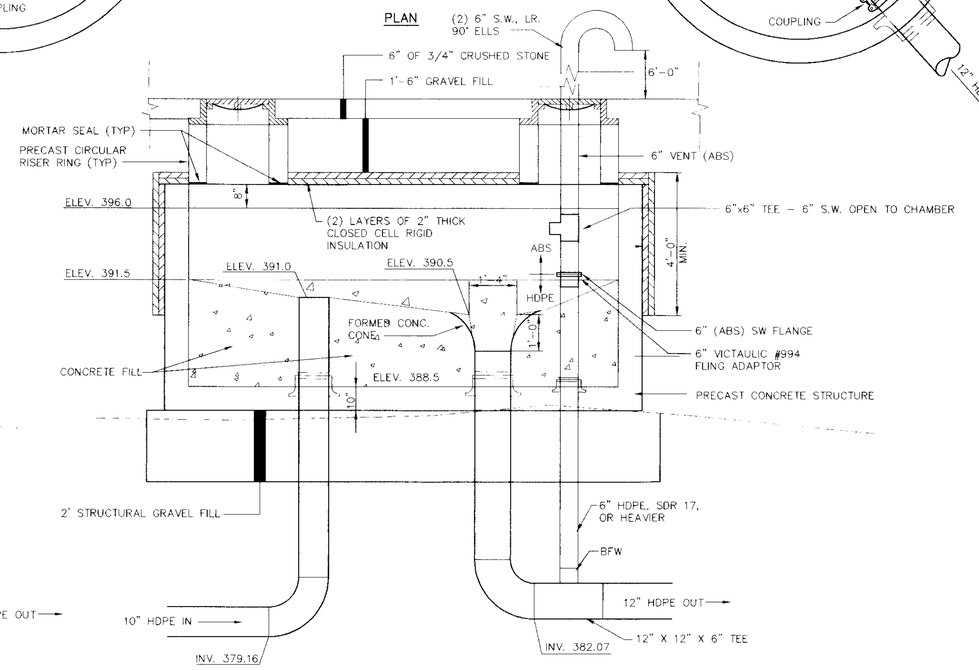

PLAN

ANGLE / TEST CHAMBER
STATION 34+96




DETAIL A
N.T.S.




ELEVATION
FLOW TRANSITION STRUCTURE
N.T.S.

STATE OF MAINE
PETER B TUBBS 2678
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | C | | 3/96 | RECORD DRAWING | MSB | PBT | | |
| | | C | | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | | |
| | | B | | 4/95 | ISSUED FOR BIDS | MSB | PBT | | |
| | | P | | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | MSB | PBT | | |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | | |
|---|---|---|
| DRN | MSB | 4/95 |
| CHK | PBT | 4/95 |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P – Prelim. B – Bids M – Mtl T.O. C – Const.

SCALE AS NOTED

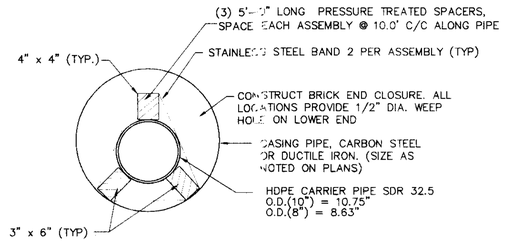
BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
MANHOLES AND STRUCTURES
MISCELLANEOUS DETAILS

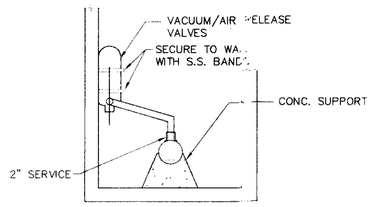
JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB-22975
SHEET 1 OF 2

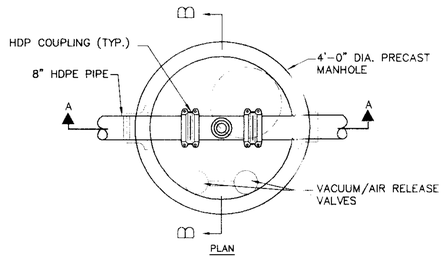
L:\94-227\ACAD\DETAIL-2 Thu Mar 28 07:33:46 1996



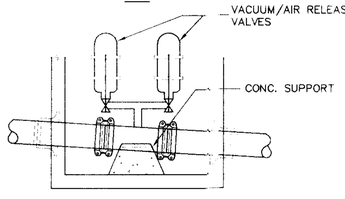

RAILROAD AND ROUTE 157 CROSSINGS
PIPE ENCASEMENT
N.T.S.




SECTION B-B

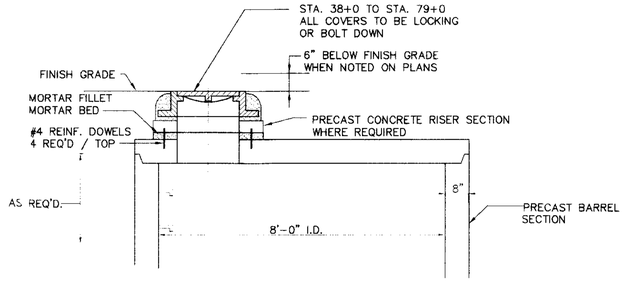



PLAN

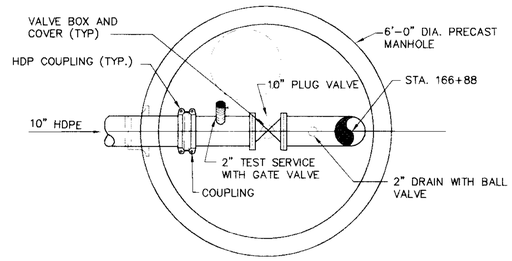



SECTION A-A

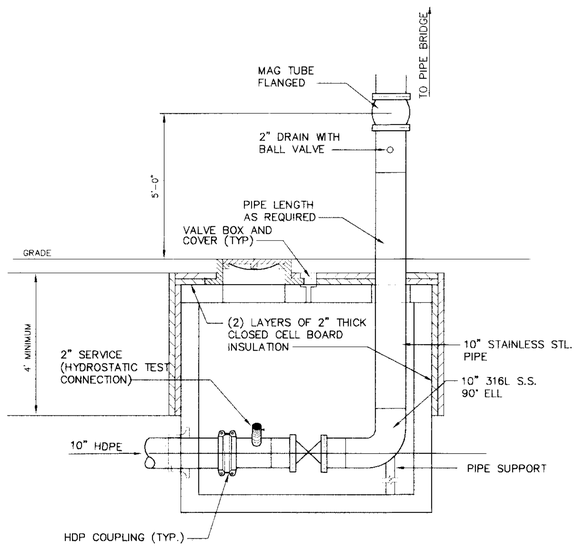
AIR RELEASE MANHOLE
N.T.S.




TYPICAL TOP INSTALLATION
FLAT TOP MANHOLES AND STRUCTURES
N.T.S.




PLAN




ELEVATION

TERMINUS MANHOLE
N.T.S.

STATE OF MAINE
PETER B TUBBS
2678
REGISTERED
PROFESSIONAL ENGINEER

| DRAWING NO. | PREVIOUS DRAWING NO. | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB NO. |
|---|---|---|---|---|---|---|---|---|---|
| | | C | | 3/96 | RECORD DRAWING | MSB | PBT | | |
| | | C | | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | | |
| | | B | | 4/95 | ISSUED FOR BIDS | MSB | PBT | | |

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | MSB | 4/95 |
| CHK | PBT | 4/95 |
| CHK | | |
| CORR | | |
| APPVD | | |

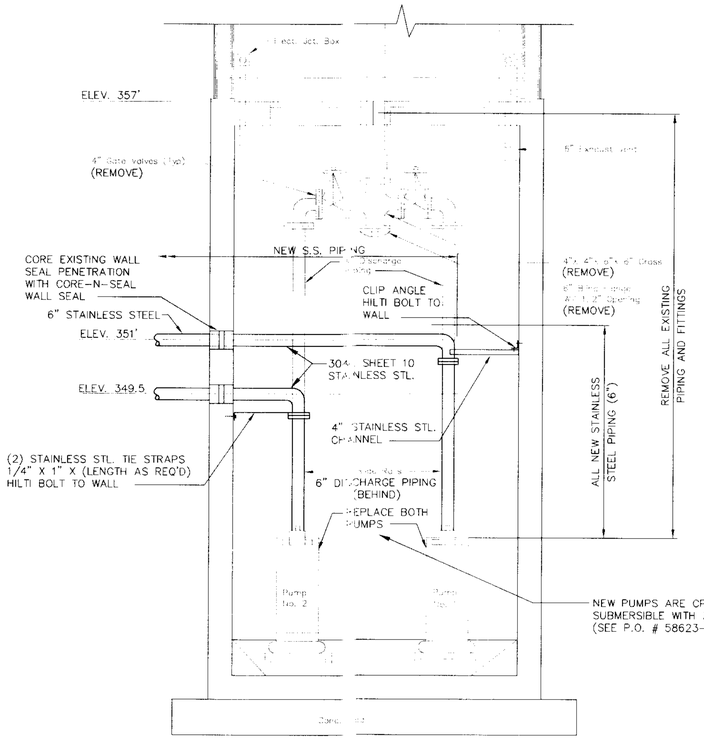
ISSUE CODE: P - Prelim; B - Bids; M - Mtl T.O.; C - Const.
SCALE AS NOTED

BOWATER
Great Northern Paper

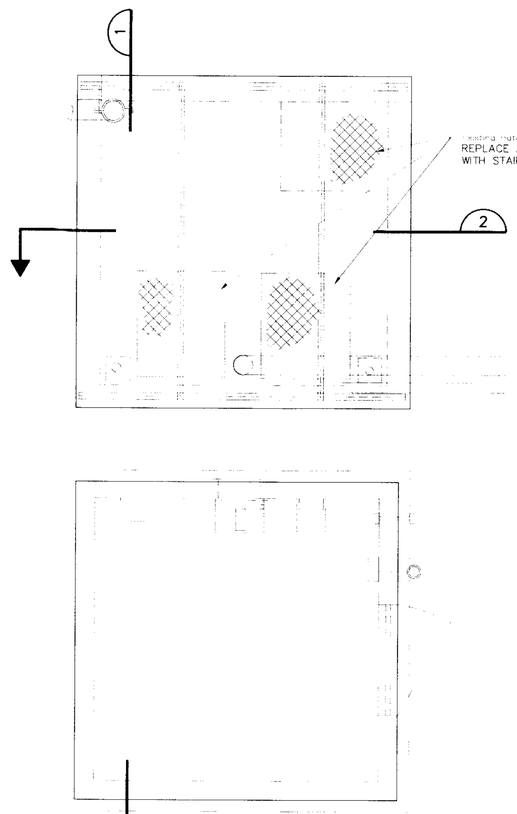
EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
MANHOLES AND STRUCTURES
MISCELLANEOUS DETAILS

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

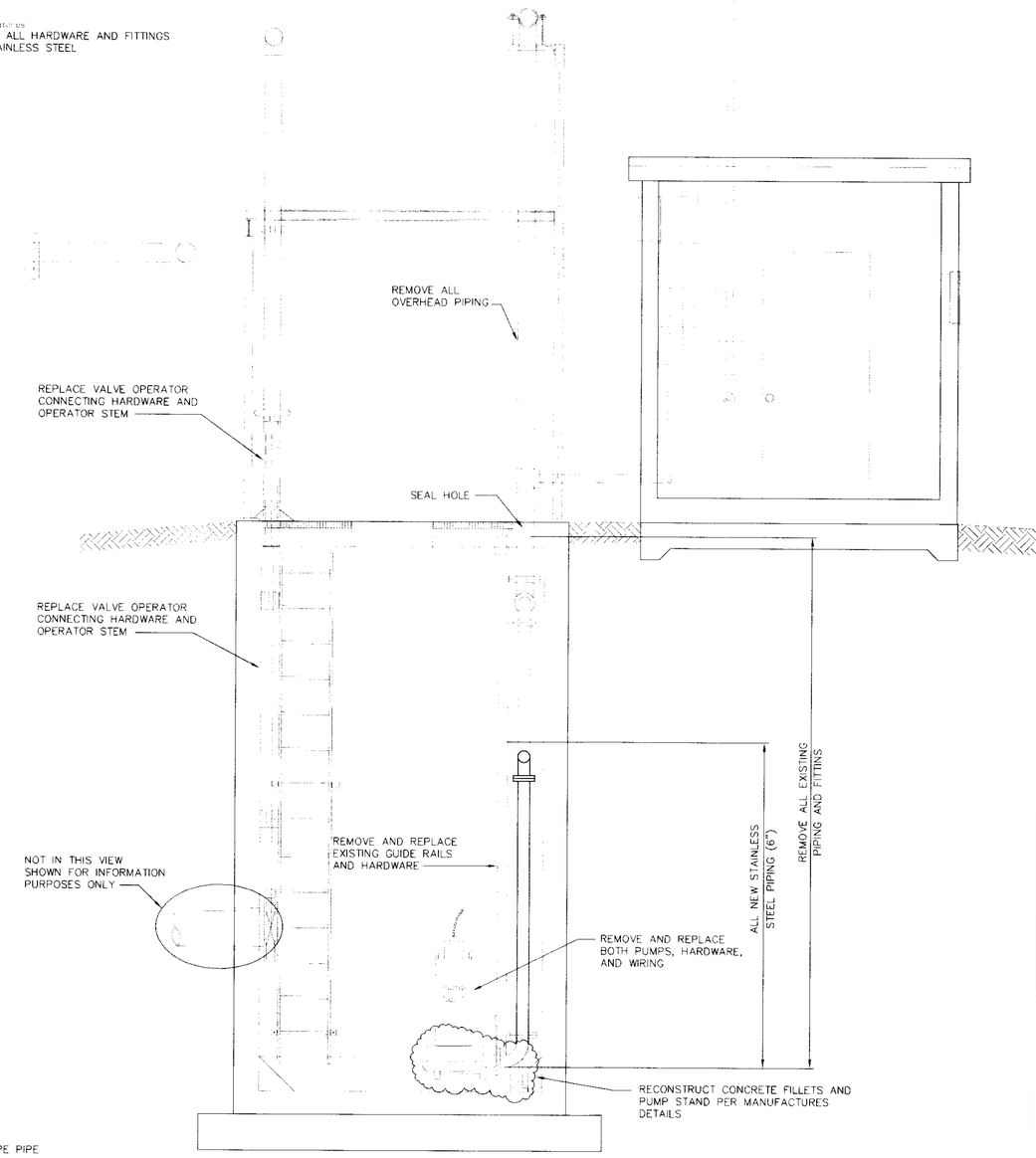
YB-22975
SHEET 2 OF 2



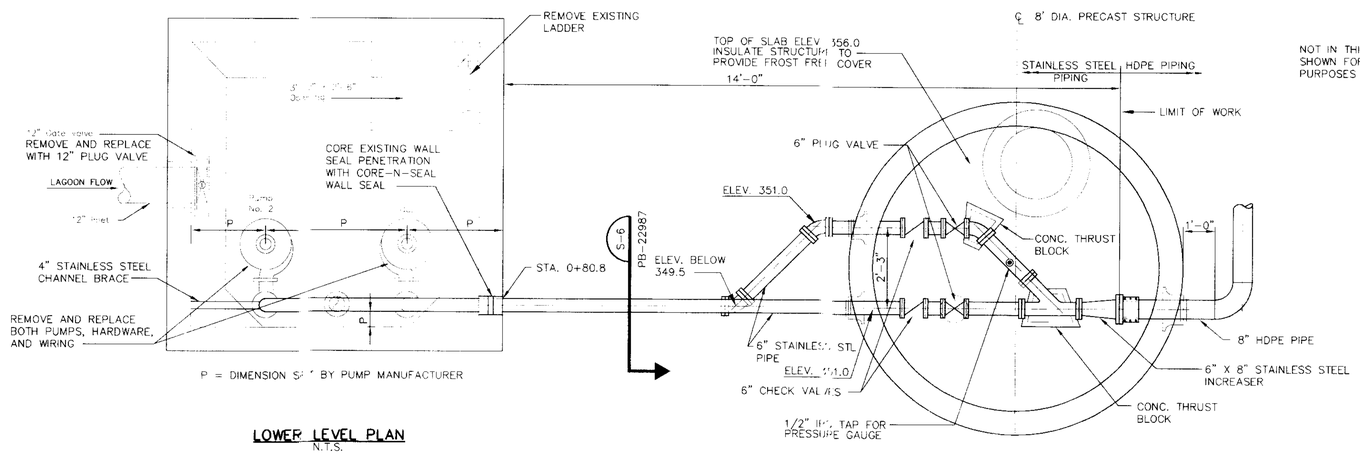

SECTION 2
N.T.S.




PLAN
CONTROL ROOM AND WET WELL




SECTION 1
N.T.S.




P = DIMENSION SET BY PUMP MANUFACTURER

LOWER LEVEL PLAN
N.T.S.

STATE OF MAINE
PETER B. TUBBS 2678
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | DRAWING TITLE |
|---|---|
| SB - 14888 | BDCO - LEACHATE PUMP STATION PLANS AND SECTIONS |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| C | 3 | 3/96 | RECORD DRAWING | MSB | PBT | | |
| C | 5 | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | | |
| B | 6 | 6/95 | ISSUED FOR BIDS | MSB | PBT | | |
| P | 4 | 4/95 | PRELIMINARY CONSTRUCTION ISSUE | MSB | PBT | | |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | | |
|---|---|---|
| DRN | MSB | 4/95 |
| CHK | PBT | 4/95 |
| CHK | | |
| CORR | | |
| APPVD | | |

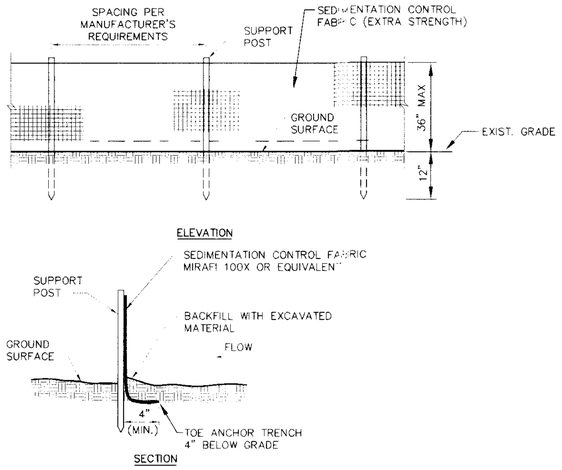
ISSUE CODE
P - Prelim | B - Bids
M - Mill T.O. | C - Const.
SCALE: AS NOTED

BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
EXISTING PUMP STATION MODIFICATIONS
PLANS AND SECTIONS

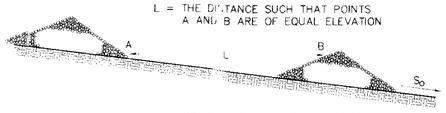
JOB NO. 22846
ENG. REQ. NO. ———
FILE NO. 2-092-4783

YB-22976




## SILTATION FENCE (KEYED IN)

N.T.S.

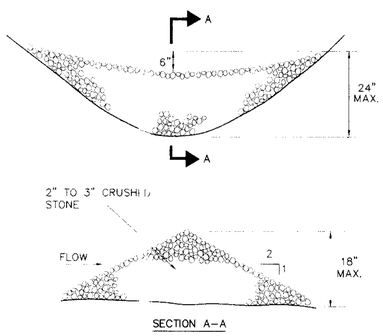


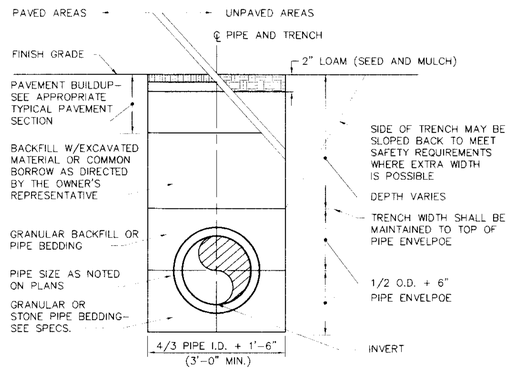

SPACING BETWEEN CHECK DAMS

| So (FT./FT.) | L (FT.) |
|---|---|
| 0.020 | 75 |
| 0.030 | 50 |
| 0.040 | 40 |
| 0.050 | 30 |
| 0.080 | 20 |
| 0.100 | 10 |

## STONE CHECK DAMS

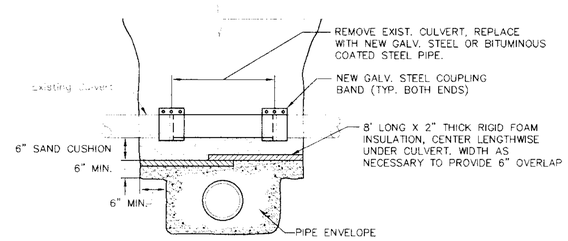
N.T.S.



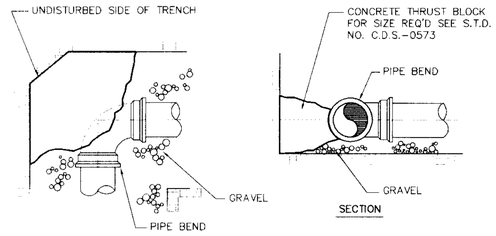

## TYPICAL TRENCH DETAIL

N.T.S.



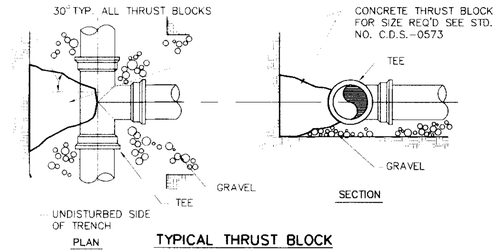

## CULVERT RESTORATION

N.T.S.




## TYPICAL THRUST BLOCK PLACEMENT ON BENDS

N.T.S.

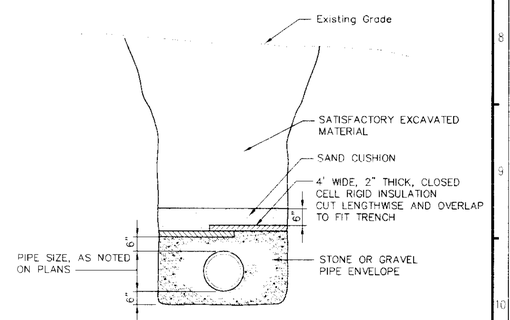



## TYPICAL THRUST BLOCK PLACEMENT ON TEES

N.T.S.

### SIZE REQUIREMENTS FOR CONCRETE THRUST BLOCKS

| | | BEARING ON UNDISTURBED SOIL (SQUARE FT.) | | | |
|---|---|---|---|---|---|
| FITTINGS | | 90° BENDS | 45° BENDS | TEES & PLUGS | HYDRANTS |
| PIPE SIZE | 4" | 2.0 | 1.0 | 1.0 | N/A |
| | 6" | 3.0 | 2.0 | 2.0 | 6.0 |
| | 8" | 5.0 | 3.0 | 4.0 | N/A |
| | 10" | 7.0 | 4.0 | 5.0 | N/A |
| | 12" | 10.0 | 6.0 | 7.0 | N/A |
| | 14" | 13.0 | 7.0 | 10.0 | N/A |
| | 16" | 17.0 | 9.0 | 12.0 | N/A |




## TYPICAL SECTION TRENCH INSULATION

N.T.S.

TEMPORARY AND PERMANENT
EROSION AND SEDIMENTATION CONTROL

A. GENERAL

1. All soil erosion and sediment control will be done in accordance with the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices, Cumberland County Soil and Water Conservation District, Department of Environmental Protection, March 1991, and as currently revised.

2. Drainage or pumping will not be discharged into any stream, brook or drainage course or any wetland. Discharge points shall be established and protected to collect sediments before discharge onto upland areas.

3. Disturbed areas will be permanently stabilized within 15 days of final grading. Disturbed areas not to be worked upon within 14 days of disturbance, shall be temporarily stabilized within 7 days of the disturbance.

4. Removal of trees, bushes and other vegetation as well as disturbance of topsoil will be kept to a minimum in all areas while allowing proper site operations.

5. Stockpiles shall be located in a manner such that natural drainage in not obstructed and no off site sedimentation will result. Silt fence will be installed around the perimeter of all stockpiles. Topsoil stockpiles surrounded with siltation fencing or temporarily mulched

B. TEMPORARY MEASURES

1. Silt Fence

   (a) Silt fence will be installed prior to and down-gradient of all construction activity where soil disturbance may result in erosion.

   (b) Silt fences will be removed when they have served their useful purpose, but not before the upgradient areas have been permanently stabilized.

   (c) Silt fences will be inspected immediately after each rainfall and at least daily during prolonged rainfall. Repairs will be made as necessary, Any required repairs will be made immediately.

   (d) Sediment deposits shall be removed after each storm event if significant buildup has occurred

2. Stone Check Dams

   (a) Stone check dams should be constructed of ½ to 3 inch stone. The stone should be placed according to the configuration shown to ensure that the center of the dam is lower than the edges.

   (b) Sediments will be removed from behind the check dams when it has accumulated to one half of the original height of the dam.

   (d) Check dams will be removed at the completion of the work. The area beneath the check dams will be seeded and mulched immediately after they are removed.

   (e) Regular inspections shall be made to ensure the integrity of the dam. Check dams will be checked for sediment accumulation after each significant rainfall. Repairs will be made as necessary.

C. INSPECTIONS

Inspections will be undertaken by qualified personnel to ensure that temporary and permanent erosion and sedimentation controls are properly installed and correctly functioning, and that additional erosion control measures are installed as needed. Such inspections will occur bi-weekly and after each significant rainfall event (1 inch or more within a 24 hour period) during construction until permanent erosion control measures have been installed and and the site is stabilized.

STATE OF MAINE
PETER B TUBBS 2678
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REVISED DRAWING FILE | DES | DR | DATE | REVISION | BY | CHK | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | C | 3/96 | RECORD DRAWING | MSB | PBT | | |
| | | | C | 6/95 | ISSUED FOR CONSTRUCTION | BAK | PBT | | |
| | | | B | 4/95 | ISSUED FOR BIDS | MSB | PBT | | |
| | | | P | 4/25 | PRELIMINARY CONSTRUCTION ISSUE | MSB | PBT | | |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | | |
|---|---|---|
| DRN | MSB | 4/95 |
| CHK | PBT | 4/95 |
| CHK | | |
| CORR | | |
| APPVD | | |

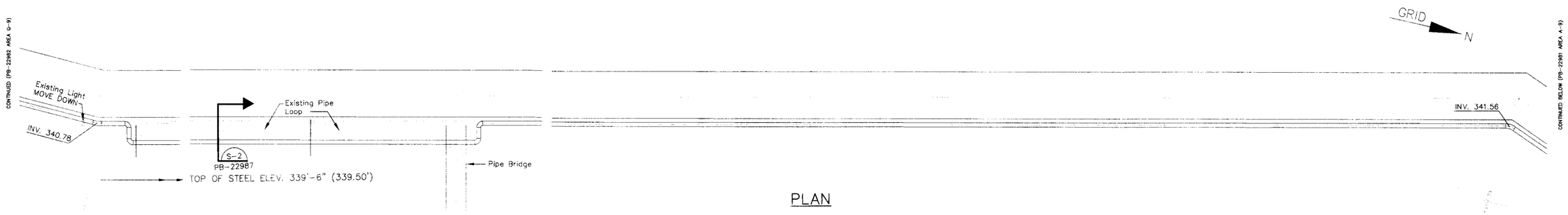
ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
SCALE: AS NOTED

BOWATER
Great Northern Paper

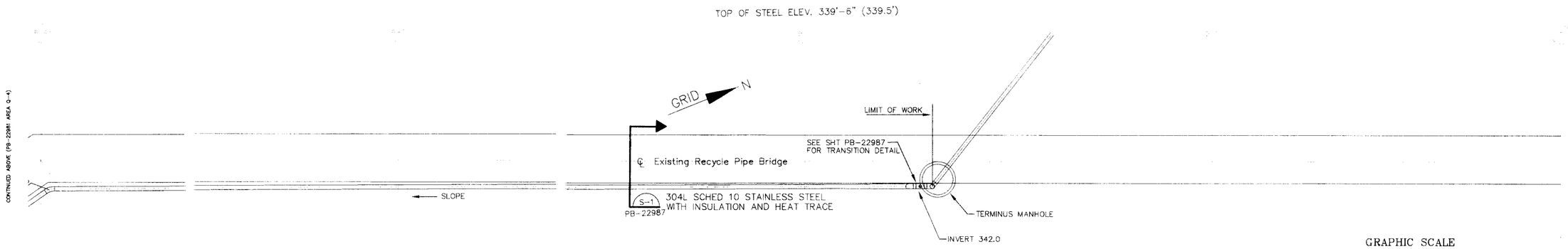
EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
EROSION CONTROL AND MISCELLANEOUS DETAILS

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783

YB–22977
SHEET 1 OF 1




PLAN




PLAN

GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )
1 inch = 10 ft.

STATE OF MAINE
DAVID WILLARD YOUNG
2410
REGISTERED
PROFESSIONAL ENGINEER

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB | DWY |
| PF-01632-C | SimpsONS ENGINEERING/RECYCLE FIBER PLANT | | P | 8/8/95 | FOR CLIENT REVIEW | BDB | DWY |
| PF-01631-D | SimpsONS ENGINEERING/RECYCLE FIBER PLANT | | P | 5/26/95 | FOR CLIENT REVIEW | MSB | DWY |

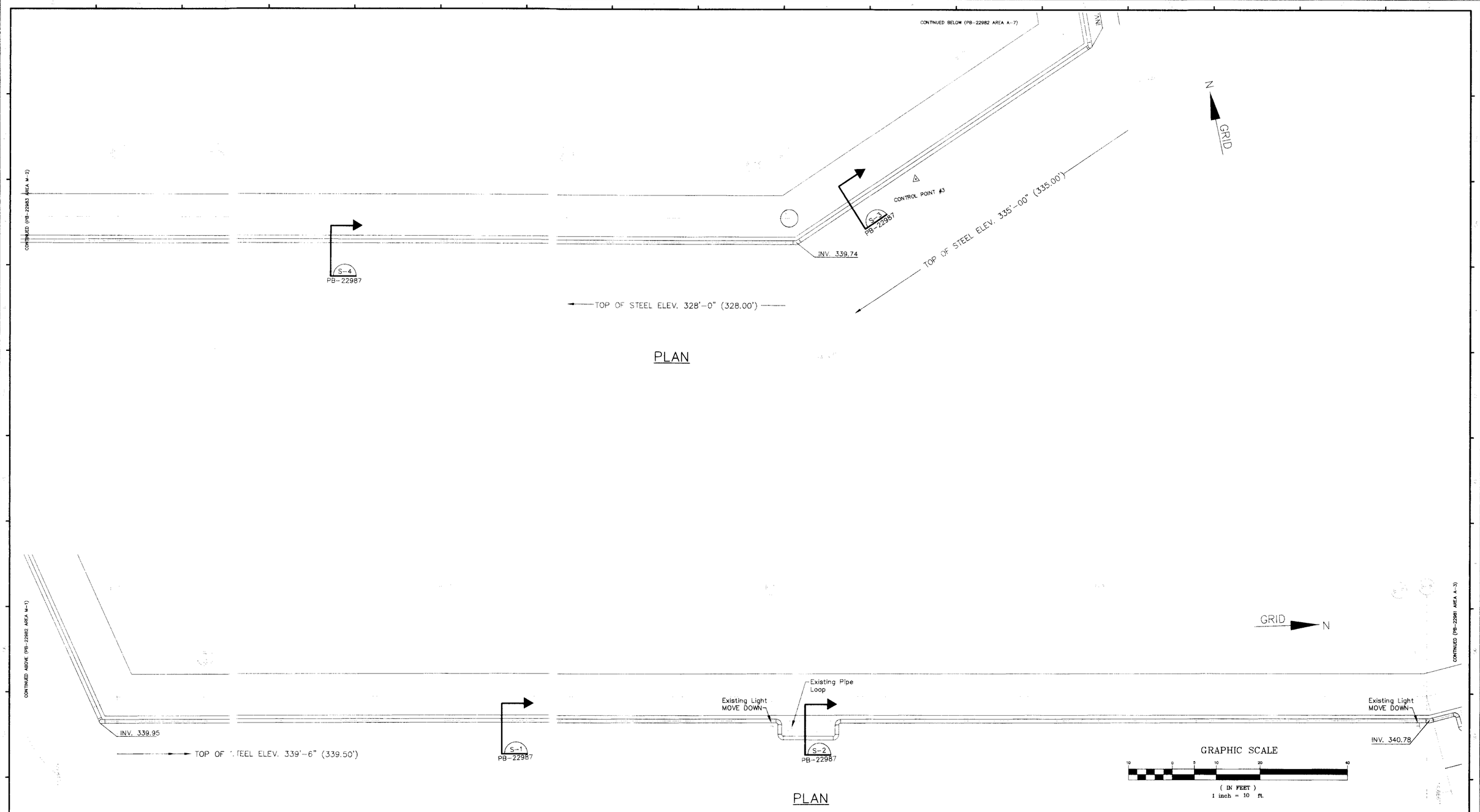
SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | DWY | 5/95 |
| CHK | | |
| CHK | | |
| CORR | | |
| APPVD | | |
| ISSUE CODE | | |
| P – Prelim | B – Bids | |
| M – MU T.O. | C – Const. | |
| 1" = 10' | | |

BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
PIPE BRIDGE
10" GRAVITY SEWER

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783




STATE OF MAINE
DAVID WILLARD YOUNG 2410
REGISTERED PROFESSIONAL ENGINEER

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB | DWY |
| PF-01633-C | SIMMONS ENGINEERING/RECYCLE FIBER PLANT | P | 8/8/95 | FOR CLIENT REVIEW | MSB | DWY |
| PF-01634-B | SIMMONS ENGINEERING/RECYCLE FIBER PLANT | P | 5/26/95 | FOR CLIENT REVIEW | MSB | DWY |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | |
|---|---|
| DRN DWY | 5/95 |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE

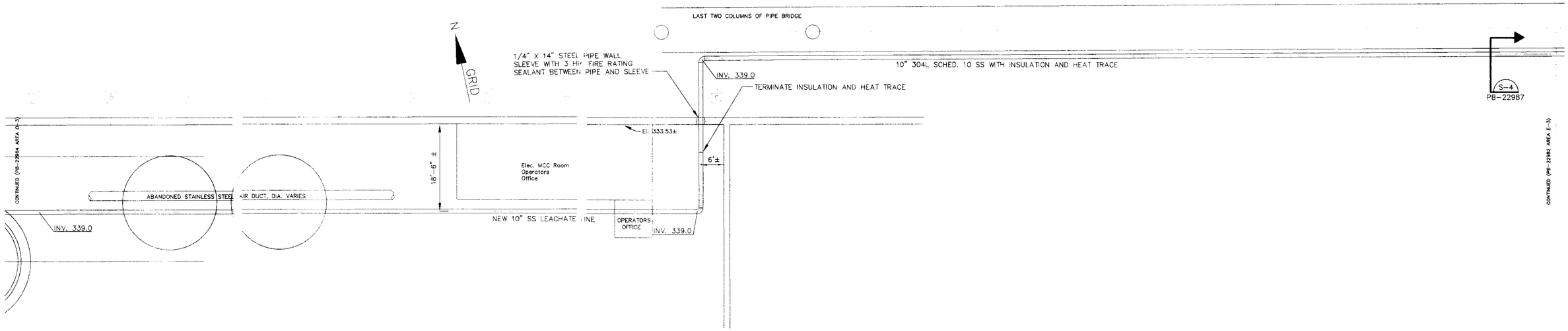
P - Prelim | B - Bids
M - Mtl T.O. | C - Const.

1" = 10'

BOWATER
Great Northern Paper

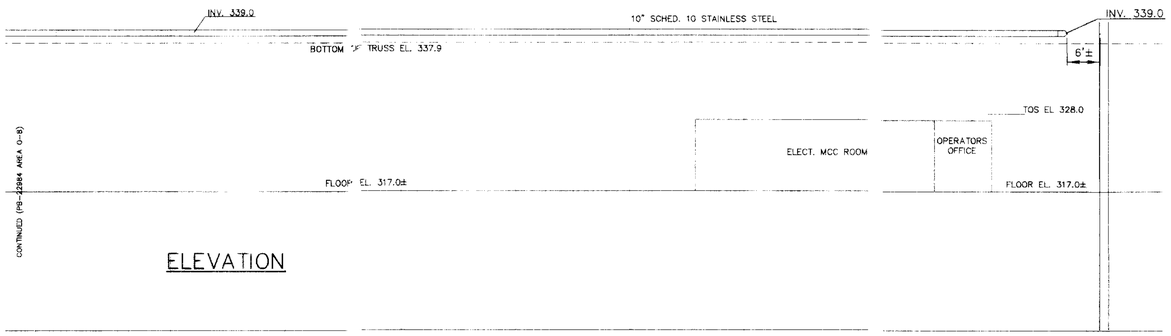
EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
PIPE BRIDGE
10" GRAVITY SEWER

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783




PLAN

Wet Lap Machine Room




ELEVATION

STATE OF MAINE
DAVID WILLARD HOURD
2410
REGISTERED
PROFESSIONAL ENGINEER

| | | | | | |
|---|---|---|---|---|---|
| C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB | DWY | |
| | 8/8/95 | ISSUED FOR CLIENT REVIEW | | | |
| | 5/26/95 | ISSUED FOR CLIENT REVIEW | MSB | DWY | |

PF-01634-8 SIMPKINS ENGINEERING/RECYCLE FIBER PLANT

SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

C 8/17/95

| | | |
|---|---|---|
| DRN | DWY | 5/95 |
| CHK | | |
| CHK | | |
| CORR | | |
| APPVD | | |

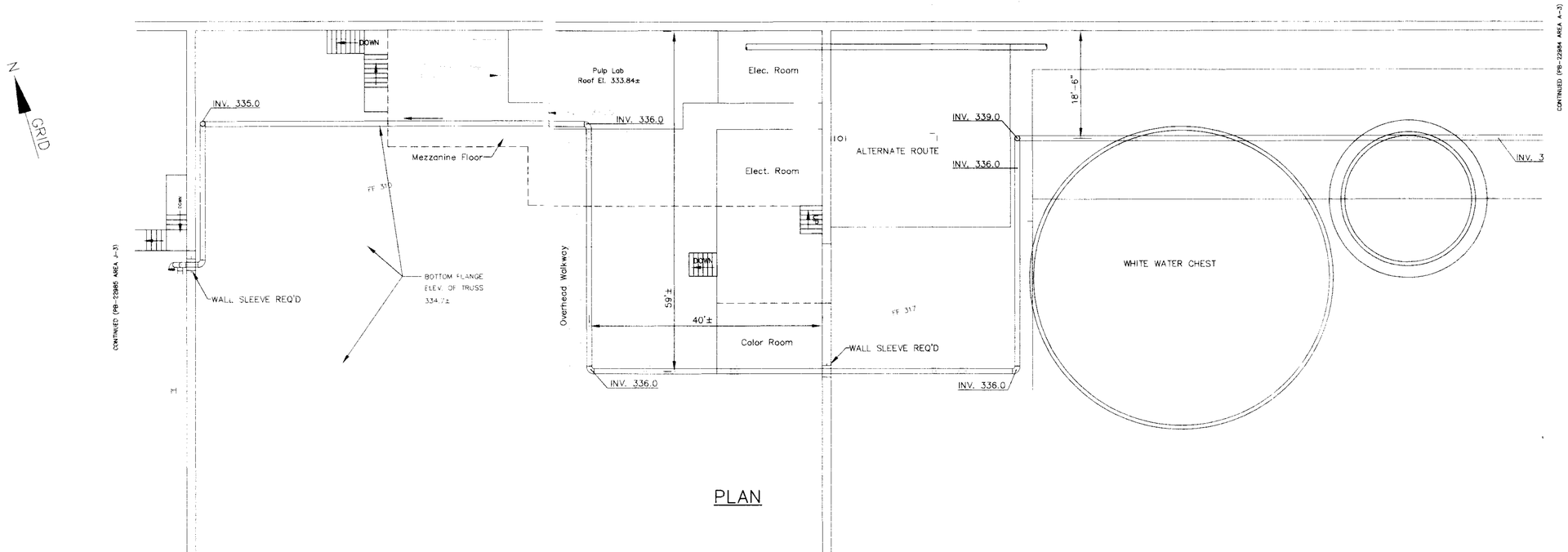
ISSUED FOR: P – Prelim | B – Bids | M – Mtl T.O. | C – Const.

1" = 10'

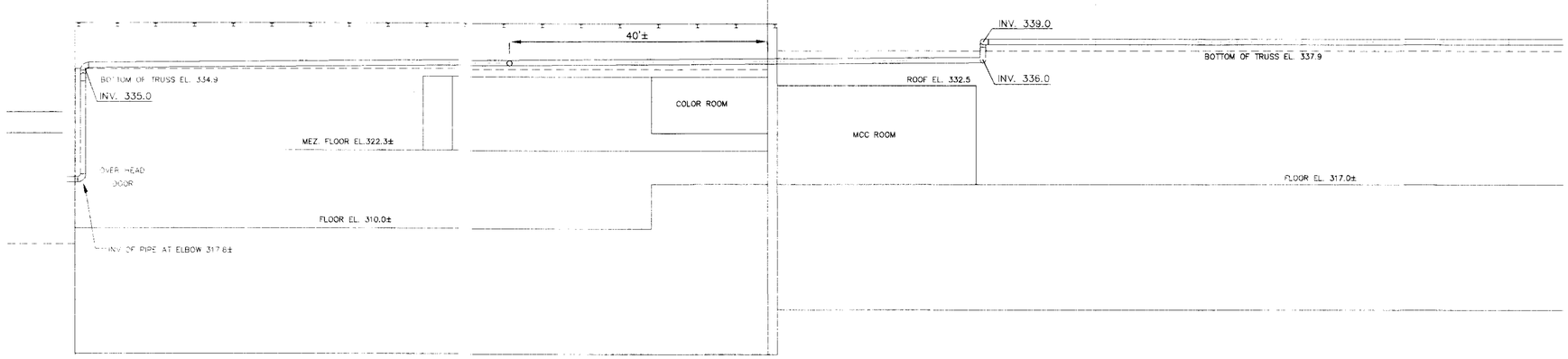
BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
PIPE BRIDGE AND WET LAP ROOM
10" GRAVITY SEWER

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783




PLAN




ELEVATION

STATE OF MAINE
DAVID WILLARD YOUNG
2410
REGISTERED PROFESSIONAL ENGINEER

| | | | |
|---|---|---|---|
| C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB DWY |
| | 8/8/95 | ISSUED FOR CLIENT REVIEW | MSB DWY |
| | 5/26/95 | ISSUED FOR CLIENT REVIEW | MSB DWY |

**SQUAW BAY CORP**
**CONSULTING ENGINEERS**
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | | |
|---|---|---|
| DRN | DWY | 5/95 |
| CHK | | |
| CHK | | |
| CORR | | |
| APP'VD | | |

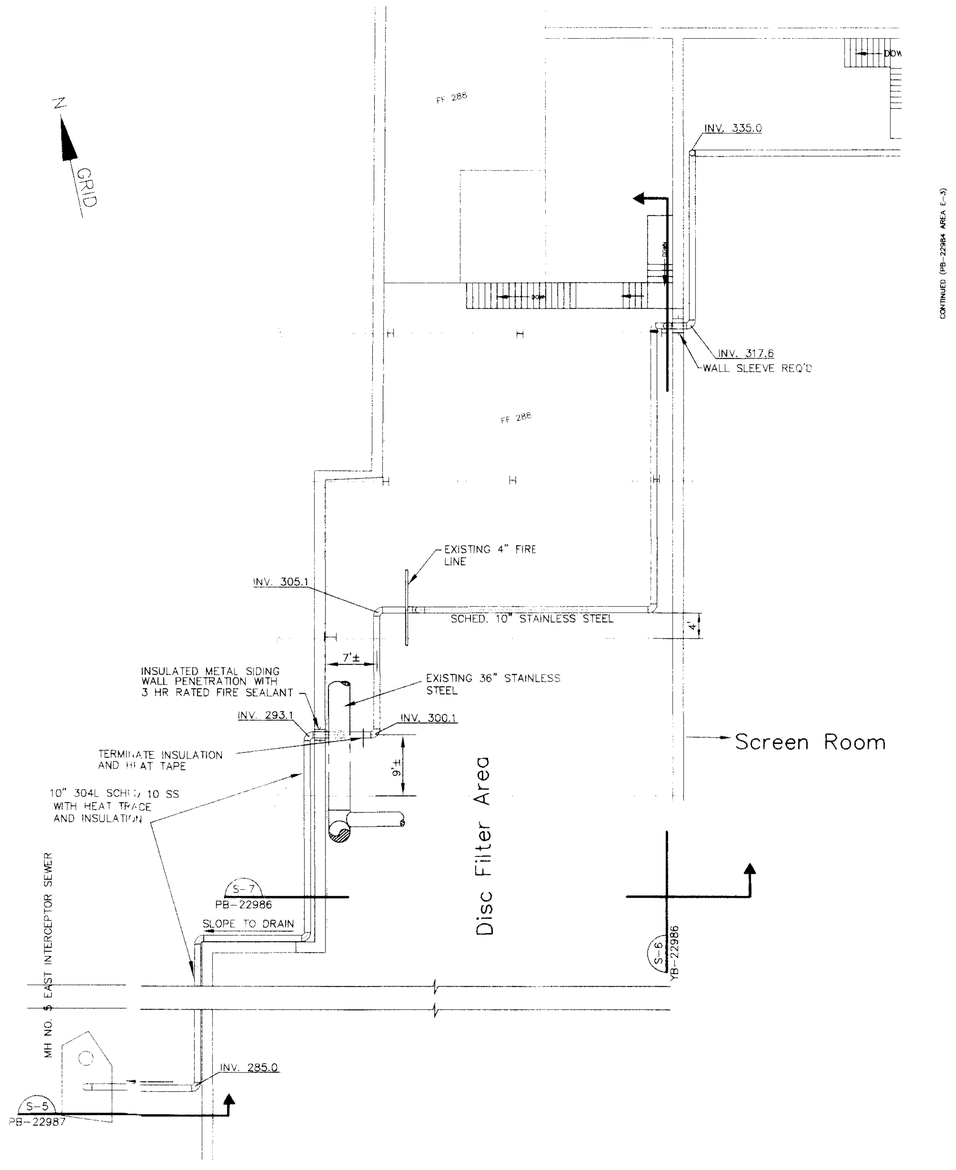
ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
1" = 10'

**BOWATER**
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
WET LAP AND SCREEN ROOM AREA
10" GRAVITY SEWER

JOB NO. 22845
ENG. REQ. NO.
FILE NO. 2-092-4783

SHEET 4 OF 8




PLAN

STATE OF MAINE
DAVID WILLARD YOUNG 2410 REGISTERED PROFESSIONAL ENGINEER

| | | | | | | |
|---|---|---|---|---|---|---|
| AF-375-E | SIMONS ENGINEERING/DISC FILTER BLDG. | | | | | |
| YF-719-F | SIMONS ENGINEERING/GROUND WOOD IMPROVEMENTS STEEL ● EL 310 | C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB | DWY |
| YF-725-B | SIMONS ENGINEERING/EAST INTERCEPTOR SEWER | P | 8/8/95 | ISSUED FOR CLIENT REVIEW | MSB | DWY |
| YF-698-B | SIMONS ENGINEERING/EAST INTERCEPTOR SEWER | P | 5/26/95 | ISSUED FOR CLIENT REVIEW | MSB | DWY |

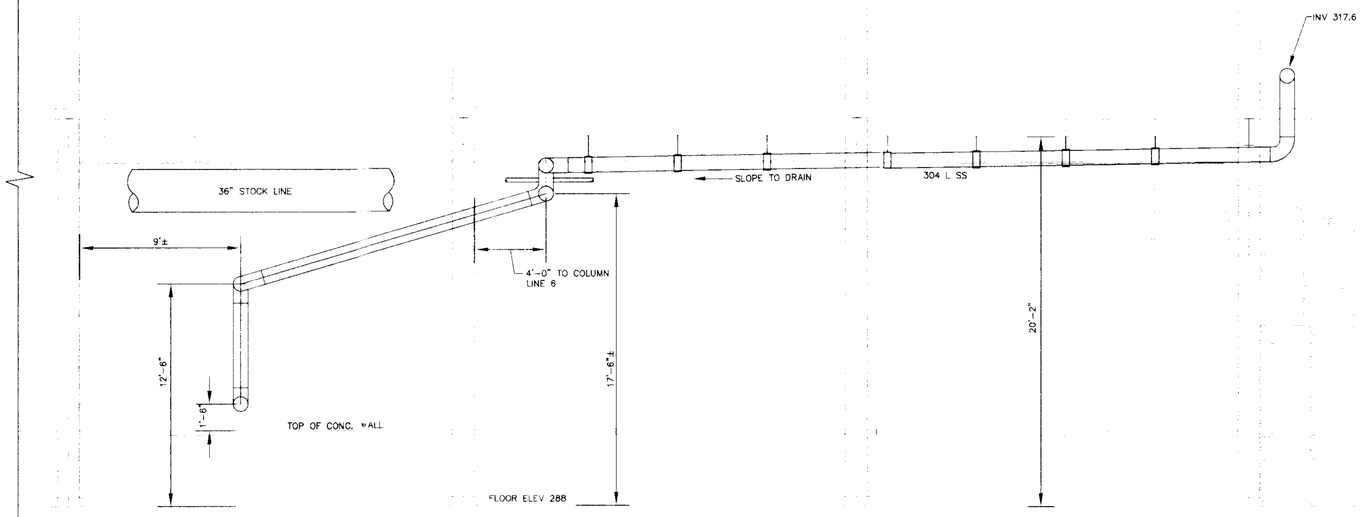
SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

| | |
|---|---|
| DRN DWY | 5/95 |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - Prelim | B - Bids |
| M - Mtl T.O. | C - Const. |
| 1" = 10' | |

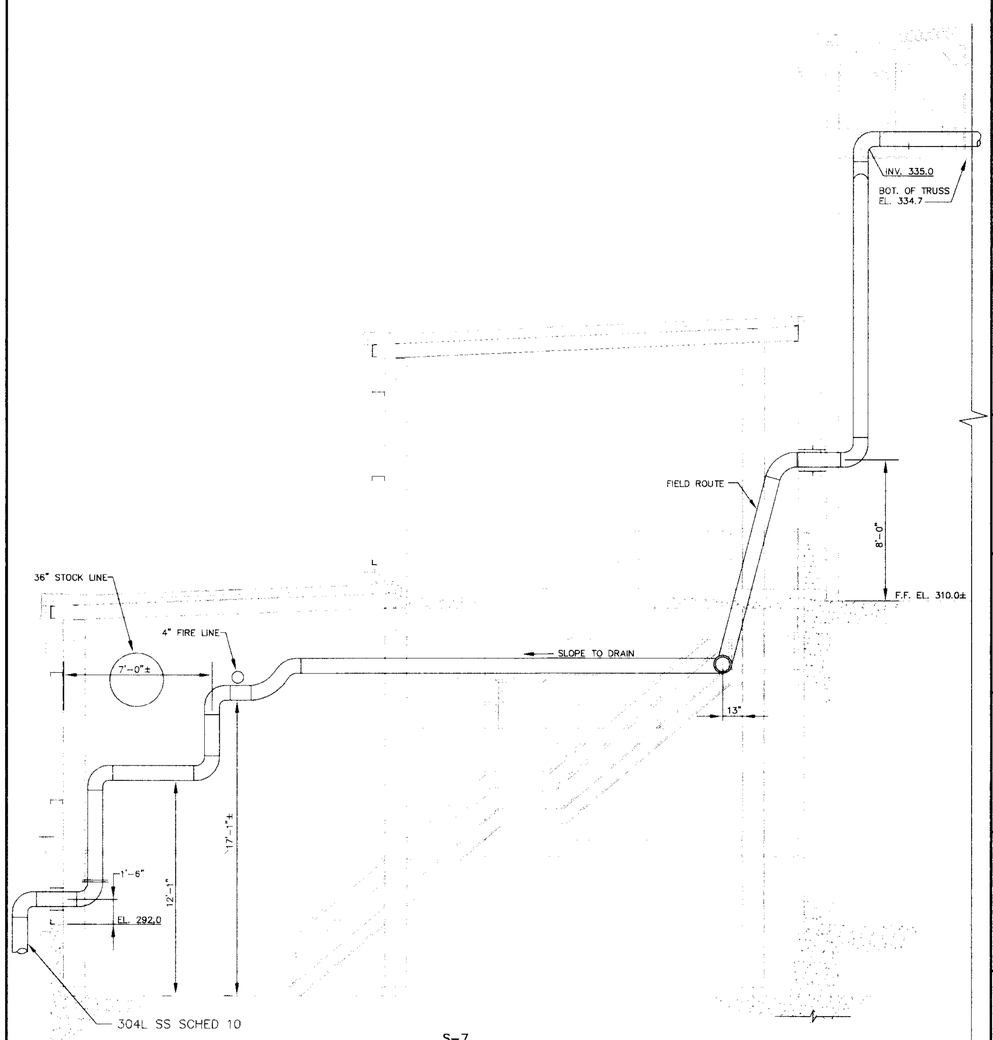
BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
DISC FILTER AREA
10" GRAVITY SEWER

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783




S-6
PB-22985




S-7
PB-22985

STATE OF MAINE
DAVID (WILLARD) YOUNG
2410
REGISTERED PROFESSIONAL ENGINEER

| | | | | | |
|---|---|---|---|---|---|
| | | C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB DWY |
| SF-719-F | CorrONS ENGINEERING GROUND WOOD IMPROVEMENTS -STEEL @ EL 310 | P | 8/8/95 | FOR CLIENT REVIEW | MSB DWY |
| AF-737-B | CorrONS ENGINEERING GROUND WOOD IMPROVEMENTS - DISC FILTER BLDG. | P | 5/26/95 | FOR CLIENT REVIEW | MSB DWY |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021


| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - Prelim | B - Bids |
| M - Mill T.O. | C - Const. |

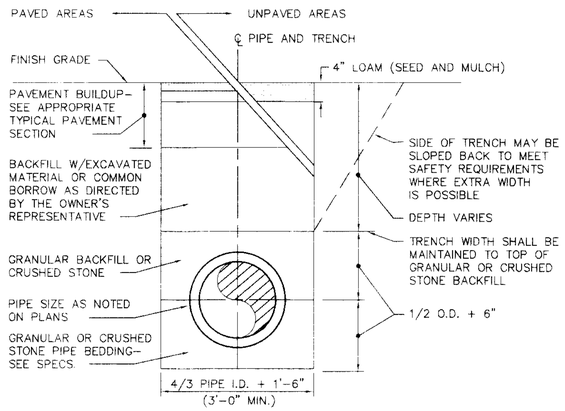
1/4"/FT

BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DISC FILTER AREA

JOB NO. 22846
ENG. REQ NO.
FILE NO. 2-092-4783

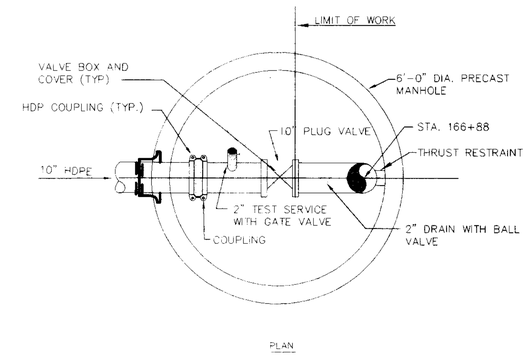
PB-22986
SHEET 6 OF 8



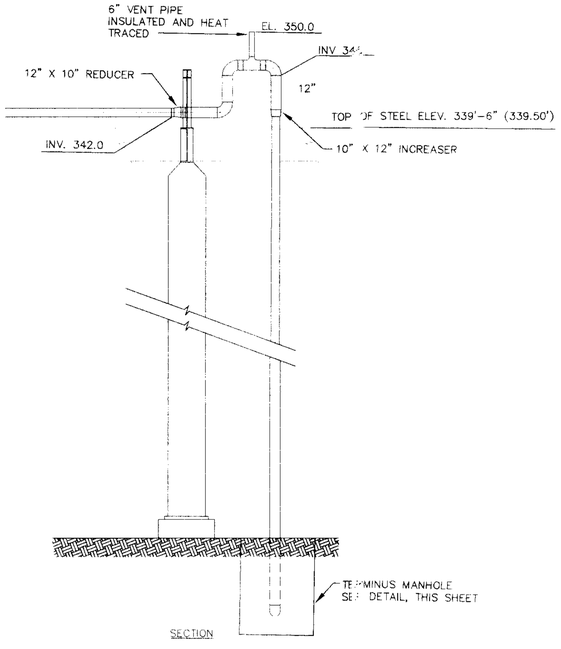

## TYPICAL TRENCH DETAIL

N.T.S.

S-6

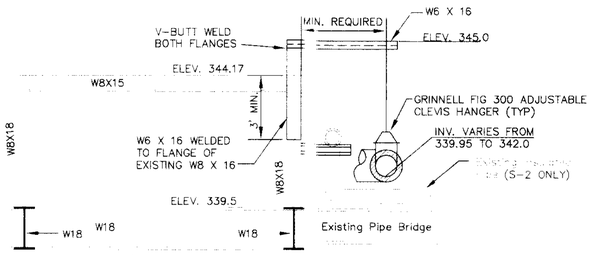


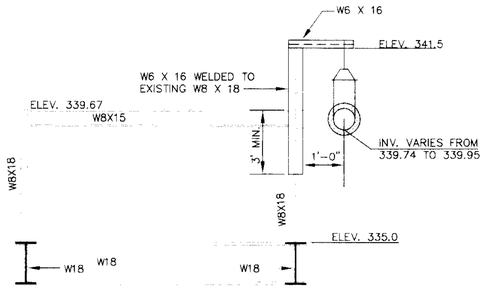

PLAN



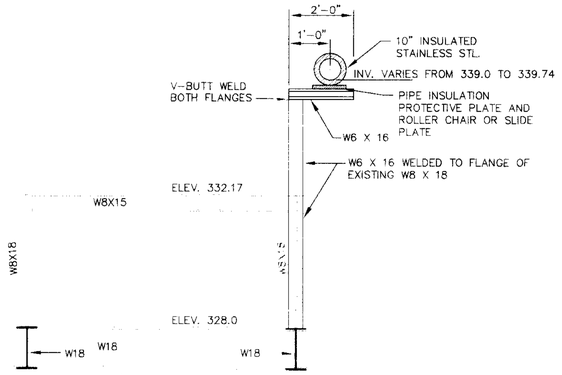

## TRANSITION DETAIL

N.T.S.



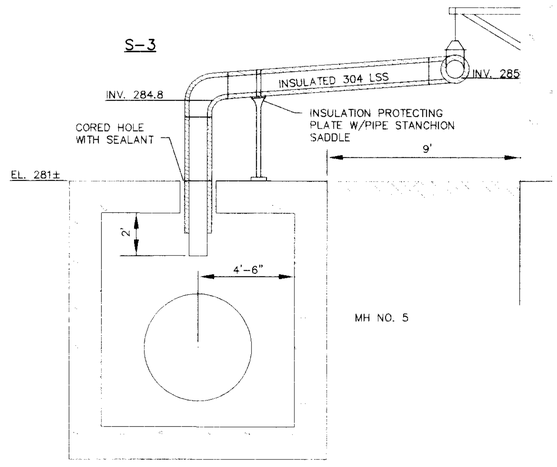




## S-1 AND S-2

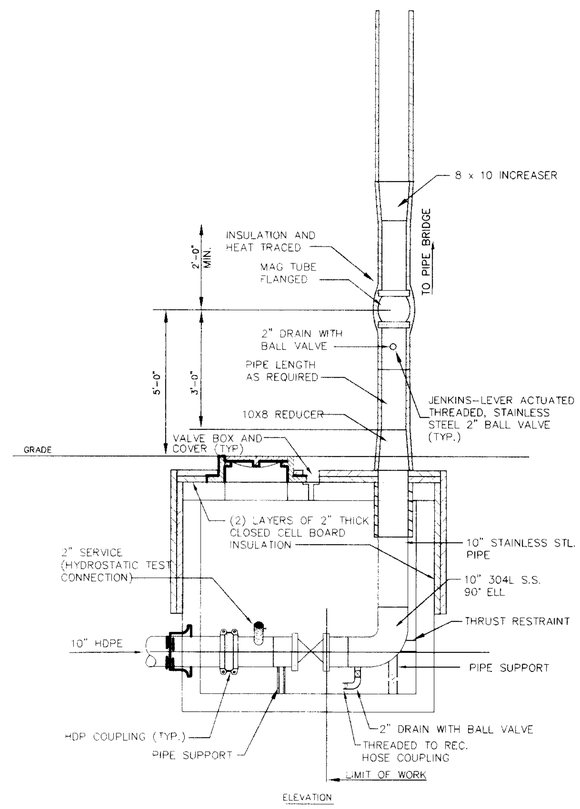



S-4

## S-3




S-5




ELEVATION

## TERMINUS MANHOLE

N.T.S.

STATE OF MAINE
DAVID WILLARD YOUNG
7410
REGISTERED
PROFESSIONAL ENGINEER

| | | | | | |
|---|---|---|---|---|---|
| C | 8/17/95 | ISSUED FOR CONSTRUCTION | BDB | DWY |
| P | 8/8/95 | FOR CLIENT REVIEW | MSB | DWY |
| P | 5/28/95 | FOR CLIENT REVIEW | MSB | DWY |


SQUAW BAY CORP
CONSULTING ENGINEERS
P.O. BOX 86A CUMBERLAND CENTER, MAINE 04021

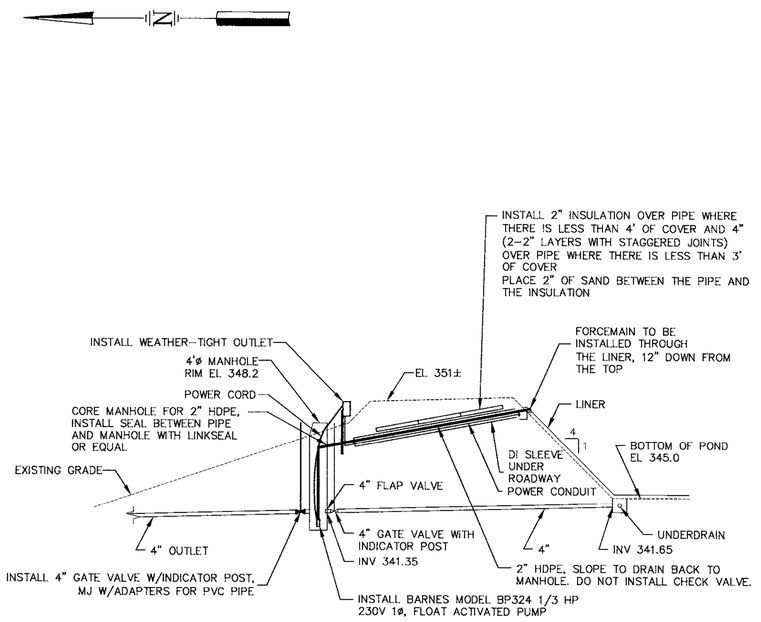

| | | |
|---|---|---|
| DRN | DWY | 5/95 |
| CHK | | |
| CHK | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - Prelim | B - Bids
M - Mtl T.O. | C - Const.
N.T.S.

BOWATER
Great Northern Paper

EAST OPERATION
LEACHATE PIPELINE PROJECT
DOLBY LANDFILL TO THE EAST OPERATION
SECTIONS AND DETAILS
10" GRAVITY SEWER

JOB NO. 22846
ENG. REQ. NO.
FILE NO. 2-092-4783




SECTION 1
NTS

STATE OF MAINE
GREGORY H. CROCKETT
10150
REGISTERED PROFESSIONAL ENGINEER
8/30/02

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE |
|---|---|---|---|---|
| 6 | - | | | - - |
| 5 | - | | | - - |
| 4 | - | BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. | | - - |
| 3 | - | NORRIDGEWOCK, MAINE -- PHOTO DATE 10/23/95. GROUND CONTROL BY PLISGA & DAY, | | - - |
| 2 | - | BANGOR, MAINE. STANDARD PRACTICE DICTATES THAT PLANS | | - - |
| 1 | - | COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY CONTRACTOR BEFORE CONSTRUCTION. | 8/13/02 | SUBMITTED TO MDEP |

| REVISION | BY | CKD | APPVD | JOB | CODE | DATE |
|---|---|---|---|---|---|---|
| | | | | | | - - |
| | | | | | | - - |
| | | | | | | - - |
| | | | | | | - - |
| | | | | | | - - |
| | | | | | | - - |

| REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|
| | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 02005

| | | |
|---|---|---|
| DRN | DRD | 7/27/02 |
| CHKD | GHC | 7/27/02 |
| APPVD | | |
| ISSUE CODE | | |
| P - Preliminary | | |
| B - Bids | | |
| C - Construction | | |
| ASB - As Built | | |
| SCALE | NONE | |

Great Northern PAPER, INC.

CAD FILE: AS9548.DWG

# EAST OPERATION

## DOLBY III LANDFILL
## LEACHATE POND
## REPIPING OF UNDERDRAIN DISCHARGE

JOB NO.
FILE NO.
LOC. NO.

YB-26109

G:\GMP\Dol1\ACAD\as9548\YB-26109.dwg Mon Aug 19 14:29:07 2002 DRD

# KATAHDIN PAPER COMPANY LLC.
# EAST MILLINOCKET, MAINE
# DOLBY III LANDFILL
# LEACHATE POND REDEVELOPMENT

| SHT NO | TITLE | DWG NO |
|---|---|---|
| 1 | COVER SHEET | YB–26187 |
| 2 | SYMBOLS & ABBREVIATIONS | YB–26188 |
| 3 | SITE LOCATION PLAN | YB–26189 |
| 4 | EXISTING CONDITIONS PLAN | YB–26190 |
| 5 | BASE GRADING AND UNDERDRAIN PLAN | YB–26191 |
| 6 | LEAK DETECTION PLAN | YB–26192 |
| 7 | SECTIONS & DETAILS (SHEET 1 OF 3) | YB–26193 |
| 8 | SECTIONS & DETAILS (SHEET 2 OF 3) | YB–26193 |
| 9 | SECTIONS & DETAILS (SHEET 3 OF 3) | YB–26193 |


SME

*Sevee & Maher Engineers, Inc.*

*Waste Management and Hydrogeologic Consultants*

*Cumberland Center, Maine*


STATE OF MAINE — JOHN E. SEVEE NO. 2150 — LICENSED PROFESSIONAL ENGINEER

| REF. NO | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | |
| | – – | | | | | | |
| ASB | 11/26/07 | | RECORD DRAWING | | GHC | | |
| B | 10/31/06 | | ISSUED FOR BID | | GHC | | |
| P | 5/17/06 | | REVISED PER MEDEP COMMENTS | | GHC | | |
| P | 12/9/05 | | SUBMITTED TO MEDEP | | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |

05034.01

| | | |
|---|---|---|
| DRN | JRD | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | – – |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: LPOND–COVER.DWG

EAST OPERATION

DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
COVER SHEET

JOB NO. 00000
FILE NO. 0–000–0000
LOC. NO.

YB–26187

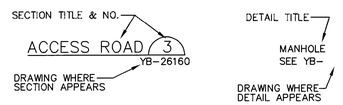
G:\PROJDOS\ACAD\LPOND\PRINT\LPOND-COVER.DWG, 11/29/2007 4:37:09 PM, LDeSoup

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | DRAINAGE COURSE (WITH DIRECTION) | | UG | UNDERGROUND GAS MAIN |
| DATE | | NORTH ARROW (MAGNETIC) | | | EDGE OF WATER | | UT | UNDERGROUND TELEPHONE LINE |
| N | | NORTH ARROW (PLAN NORTH) | | | WATER ELEVATION (GROUND OR SURFACE) | | UE | UNDERGROUND ELECTRICAL LINE |
| | 25 | CONTOUR LINES | | | FENCE LINE (WOOD) | | OE | OVERHEAD ELECTRICAL LINE |
| | INV 25.56 | SPOT ELEVATION (INVERT ELEVATION) | | | FENCE LINE (WIRE) | | OT | OVERHEAD TELEPHONE LINE |
| | | EXISTING GROUND | | | STONE WALL | | 12" SS | SANITARY SEWER |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | RETAINING WALL | | 8" FM | FORCE MAIN |
| | | PROPERTY LINE OR R.O.W. | | | GUARD RAIL | | 8" W | WATER MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | BUILDING AND STRUCTURES | | 12" SD | STORM DRAIN |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | 2 1F OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | | 8" UD | UNDERDRAIN |
| | | BOUNDARY LINE (State, County, Municipality) | TOP OF SLOPE 2 1 | TOP OF SLOPE 2 1 | SLOPES (WITH SLOPE RATIO) | | 6" PD | PERIMETER DRAIN |
| | | SURVEY MONUMENT | | | EDGE OF ROAD | | 6" LT | LEACHATE TRANSPORT |
| | | SURVEY CONTROL | | P | CUT OR FILL LINE | | 6" LC | LEACHATE COLLECTION |
| | | PROPERTY PIN, DRILL HOLE, PK, OR STAKE | | | BITUMINOUS PAVEMENT | | 6" LD | LEAK DETECTION |
| | | WOODS OR BRUSH LINE | | | CONCRETE | | 6" G | GAS COLLECTION |
| | | INDIVIDUAL TREE | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | REDUCER |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | | MECHANICAL CAP OR PLUG |
| | | GAS VENT | SW-12 | SW-12 | SURFACE WATER SAMPLE LOCATION | | | COUPLING |
| | | GAS VENT (CAPPED) | | | GAS EXTRACTION WELL | | | BEND |
| | | CLEAN OUT STRUCTURE | | | MANHOLE | | | TEE |
| | | CULVERT | | | CATCH BASIN | | | PIPE TO BE ABANDONED |
| | | RAILROAD | | | WATER OR GAS VALVE | | | RISER PIPE & INLET GRATE |
| | | SLOPE INCLINOMETER | | | HYDRANT | | | STORM GRATE |
| | | VIBRATING WIRE SETTLEMENT CELL | | | AIR RELEASE VALVE | | | DRAINAGE INLET STRUCTURE |
| | | VERTICAL/HORIZONTAL DISPLACEMENT MONUMENT | | | SURGE RELEASE VALVE | | | UNDERDRAIN SUMP |
| | | VERTICAL DISPLACEMENT MONUMENT | | | UTILITY POLE | | SF | SILTATION FENCE |
| | | LIQUID SETTLEMENT GAGE | | | LIGHT POLE | | CL | CLEARING OR CONSTRUCTION LIMIT LINE |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACCMP | ASPHALT COATED CMP | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | PERF | PERFORATED |
| ACP | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HORIZ | HORIZONTAL | PP | POWER POLE |
| AC | ACRE | DEG OR ° | DEGREE | HP | HORSEPOWER | PSI | POUNDS PER SQUARE INCH |
| AGG | AGGREGATE | DEPT | DEPARTMENT | HYD | HYDRANT | PVC | POLYVINYL CHLORIDE |
| ALUM | ALUMINUM | DI | DUCTILE IRON | | | PVMT | PAVEMENT |
| APPD | APPROVED | DIA OR ø | DIAMETER | ID | INSIDE DIAMETER | | |
| APPROX | APPROXIMATE | DIM | DIMENSION | IN OR " | INCHES | QTY | QUANTITY |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV | INVERT | | |
| ASB | ASBESTOS | DN | DOWN | INV EL | INVERT ELEVATION | RCP | REINFORCED CONCRETE PIPE |
| ASP | ASPHALT | DR | DRAIN | | | ROW | RIGHT OF WAY |
| AUTO | AUTOMATIC | DWG | DRAWING | LB | POUND | RAD | RADIUS |
| AUX | AUXILIARY | | | LC | LEACHATE COLLECTION | REQD | REQUIRED |
| AVE | AVENUE | EA | EACH | LD | LEAK DETECTION | RT | RIGHT |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LF | LINEAR FEET | RTE | ROUTE |
| | | ELEC | ELECTRIC | LOC | LOCATION | | |
| BCCMP | BITUMINOUS COATED CMP | EL | ELEVATION | LT | LEACHATE TRANSPORT | S | SLOPE |
| BM | BENCH MARK | ELB | ELBOW | | | SCH | SCHEDULE |
| BIT | BITUMINOUS | EOP | EDGE OF PAVEMENT | MH | MANHOLE | SF | SQUARE FEET |
| BLDG | BUILDING | EQUIP | EQUIPMENT | MJ | MECHANICAL JOINT | SHT | SHEET |
| BOT | BOTTOM | EST | ESTIMATED | MATL | MATERIAL | SMH | SANITARY MANHOLE |
| BRG | BEARING | EXC | EXCAVATE | MAX | MAXIMUM | ST | STREET |
| BV | BALL VALVE | EXIST | EXISTING | MFR | MANUFACTURE | STA | STATION |
| | | | | MIN | MINIMUM | SY | SQUARE YARD |
| CB | CATCH BASIN | FG | FINISH GRADE | MISC | MISCELLANEOUS | | |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT | TAN | TANGENT |
| CEM LIN | CEMENT LINED | FDN | FOUNDATION | | | TDH | TOTAL DYNAMIC HEAD |
| CMP | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | NITC | NOT IN THIS CONTRACT | TEMP | TEMPORARY |
| CO | CLEAN OUT | FL | FLANGE | NTS | NOT TO SCALE | TYP | TYPICAL |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY | | |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO OR # | NUMBER | UD | UNDERDRAIN |
| CI | CAST IRON | FT OR ' | FEET | | | V | VOLTS |
| CL | CLASS | FTG | FOOTING | OC | ON CENTER | VA TEE | VALVE ANCHORING TEE |
| CONC | CONCRETE | | | OD | OUTSIDE DIAMETER | VERT | VERTICAL |
| CONST | CONSTRUCTION | GA | GAUGE | | | | |
| CONTR | CONTRACTOR | GAL | GALLON | PC | POINT OF CURVE | WG | WATER GATE |
| CS | CURB STOP | GALV | GALVANIZED | PD | PERIMETER DRAIN | W/ | WITH |
| CTR | CENTER | GPD | GALLONS PER DAY | PI | POINT OF INTERSECTION | W/O | WITHOUT |
| CU | COPPER | GPM | GALLONS PER MINUTE | PIV | POST INDICATOR VALVE | | |
| CY | CUBIC YARD | | | PT | POINT OF TANGENT | YD | YARD |

## VIEW MARKERS & IDENTIFICATION




GENERAL NOTES:

THE DOLBY LANDFILL IS AN ACTIVE FACILITY THAT RECEIVES WASTE ON A DAILY BASIS IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE OWNER WITH REGARDS TO USE OF PREMISES, INCLUDING HAUL ROUTES AND VEHICULAR ACCESS. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES SO AS NOT TO INTERFERE WITH ACTIVE LANDFILLING OPERATIONS. THE CONTRACTOR SHALL OBEY ALL TRAFFIC, NOISE, AND DUST CONTROL POLICIES OF THE DOLBY LANDFILL.

THE CONTRACTOR SHALL COMPLY FULLY WITH CONDITIONS OF THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, (MEDEP), NRPA PERMIT BY RULE CONDITIONS, MEDEP CONSTRUCTION GENERAL PERMIT, AND MEDEP "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES", AS APPLICABLE, AND SHALL TAKE EVERY PRECAUTION TO INSURE THAT NO SILTATION OF STORMWATER DRAINAGE COURSES OCCURS AS A RESULT OF SOIL DISTURBANCE ASSOCIATED WITH THE CONTRACT SCOPE OF WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING COMPLETE PROTECTION OF THE PROJECT DURING CONSTRUCTION FROM ANY ACTS OF NATURE OR MAN, SUCH AS, BUT NOT LIMITED TO, FLOODS, WIND DAMAGE, EARTHEN SLIDES, AND SLOPE FAILURES. DAMAGE TO THE PROJECT CAUSED BY SUCH ACTS WILL NOT BE SUFFICIENT CAUSE TO INCREASE CONTRACTOR COSTS TO THE OWNER.

THE CONTRACTOR SHALL PROTECT EXISTING ON-SITE STRUCTURES FROM DAMAGE DURING CONSTRUCTION, INCLUDING: MONITORING WELLS, POWER LINES, SURVEY POINTS, AND EXISTING LEACHATE COLLECTION AND TRANSPORT FACILITIES AND SYSTEMS, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS REQUIRED TO CORRECT DAMAGE MADE TO EXISTING ON-SITE STRUCTURES DESCRIBED ABOVE RESULTING FROM ANY CONSTRUCTION ACTIVITY.

THE CONTRACTOR AND ITS SUBCONTRACTORS MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES AND REQUIREMENTS UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE. CONTRACTOR SHALL FIELD VERIFY CONDITIONS PRIOR TO CONSTRUCTION.

MATERIAL SPECIFICATIONS: (SEE TECHNICAL SPECIFICATIONS FOR MORE INFORMATION)

SCREENED TILL: SHALL BE EARTH, SUITABLE FOR EMBANKMENT CONSTRUCTION. SCREENED TILL SHALL BE GLACIAL TILL FREE OF FROZEN MATERIALS, PERISHABLE RUBBISH, PEAT, ORGANIC MATTER, LARGE ROCK FRAGMENTS, OR OTHER UNSUITABLE MATERIAL AND SHALL BE SCREENED TO LESS THAN 1" IN DIAMETER WITH GREATER THAN 20 PERCENT FINES. THE FINAL SURFACE OF THE SCREENED TILL SHALL BE FREE FROM PROTRUDING ROCKS GREATER THAN 1-INCH IN DIAMETER.

COMMON BORROW – MDOT SPECIFICATION 703.18

CLAY – THE CLAY FOR POND LINER BASE SHALL BE SILTY CLAY SOIL FREE OF ORGANIC MATTER, DEBRIS, AND ROCK FRAGMENTS LARGER THAN 1 INCH IN DIAMETER. CLAY SHALL MEET A GRADATION AND HYDRAULIC CONDUCTIVITY REQUIREMENT AS FOLLOWS:

| a. SIEVE DESIGNATION | PERCENT BY WEIGHT PASSING SQUARE MESH SIEVE |
|---|---|
| 1" | 100 |
| #40 | 90-100 |
| #200 | 75-100 |

b. REMOLDED HYDRAULIC CONDUCTIVITY (ASTM D 5084-90) MAXIMUM ≤ 1X10-7 cm/sec

c. LIQUID LIMIT: > 20
PLASTICITY INDEX: 8 ≤ P.E. <30

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

3/4" STONE - THE PIPE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

2" SOLID SDR 11 PVC LEAK DETECTION FORCE MAIN
4" PERFORATED SDR 15.5 HDPE PIPE
6" SOLID AND PERFORATED SDR 17 HDPE PIPE
12" SOLID SDR 17 HDPE PIPE
24" SOLID SDR 17 HDPE PIPE

SEED AND FERTILIZER:
AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

| SEED: | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.


| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | - | | | - - | | | | | | - - |
| 5 | - | | | - - | | | | | | - - |
| 4 | - | | | 11/26/07 | ASB | RECORD DRAWING | | GHC | | - - |
| 3 | - | | | 10/31/06 | B | ISSUED FOR BID | | GHC | | - - |
| 2 | - | | | 5/17/06 | P | REVISED PER MEDEP COMMENTS | | GHC | | - - |
| 1 | - | | | 12/9/05 | P | SUBMITTED TO MEDEP | | GHC | | - - |

SME
*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*
JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | DRD | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | - - |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

CAD FILE: SYMSHT.DWG

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

EAST OPERATION

DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
SYMBOLS & ABBREVIATIONS

JOB NO. 00000
FILE NO. 0-000-0000
LOC. NO.

YB-26188

K:\pro\DOLACAD\Leachate Pond\RecDwg\LPOND_DETAILS.dwg, 11/29/2007 4:53:04 PM, mbiskup

CELL 14

DOLBY III

CELLS 1–8

TBM NO. 1
N 665004.19
E 474154.03
EL 358.19

SEDIMENT POND

TBM NO. 2
N 664313.43
E 473976.09
EL 352.25

LEACHATE POND

BRASS DISK
N 663871.73
E 473715.06
EL 356.99

SEDIMENT POND

TBM NO. 5
N 663018.29
E 473989.32
EL 377.69

SEDIMENT POND

OPERATOR SHACK

N

NOTE:

1. PLAN COMPILED FROM AERIAL PHOTOGRAPH DATED AUGUST 18, 2005.

2. AERIAL PHOTOGRAPHY AND BASE MAP PERFORMED BY AERIAL SURVEY & PHOTO, INC. OF NORRIDGEWOCK, MAINE. GROUND CONTROL PROVIDED BY PLISGA & DAY OF BANGOR, MAINE. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

3. EXISTING TOPOGRAPHY SHOWN AT 2–FOOT INTERVALS AND REPRESENT GRADES AT THE TIME OF THE SURVEY.

4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MAINE DEP AND BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE AND LOCAL PERMITS.

50 0 100 200 FEET

STATE OF MAINE
JOHN E. SEVEE NO. 4480
LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | |
| | – – | | | | | | |
| ASB | 11/26/07 | | RECORD DRAWING | | | | |
| B | 10/31/06 | | ISSUED FOR BID | | GHC | | |
| P | 5/17/06 | | REVISED PER MEDEP COMMENTS | | GHC | | |
| P | 12/9/05 | | SUBMITTED TO MEDEP | | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*

JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | DRD | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | – | – |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE AS NOTED

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: LPOND.DWG

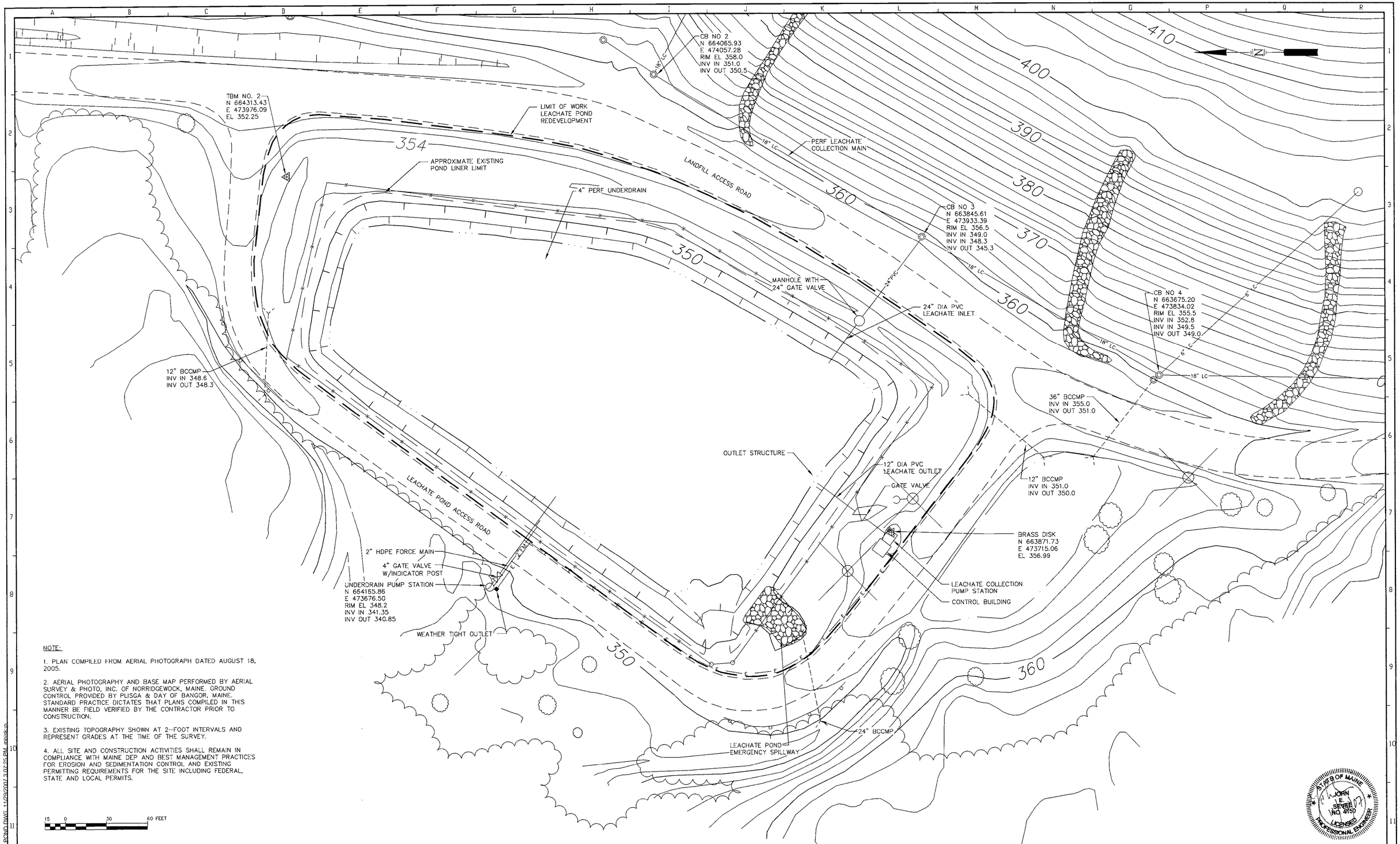
# EAST OPERATION

## DOLBY III LANDFILL
## LEACHATE POND REDEVELOPMENT
## SITE LOCATION PLAN

JOB NO. 00000
FILE NO. G-000-0000
LOC. NO.

YB–26189

G:\PROJOBS\ACAD\EngFiles\Forms\REDWG\LPOND.DWG, 11/2/2007 8:38:14 AM, DWGsetup




NOTE:

1. PLAN COMPILED FROM AERIAL PHOTOGRAPH DATED AUGUST 18, 2005.

2. AERIAL PHOTOGRAPHY AND BASE MAP PERFORMED BY AERIAL SURVEY & PHOTO, INC. OF NORRIDGEWOCK, MAINE. GROUND CONTROL PROVIDED BY PLISGA & DAY OF BANGOR, MAINE. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

3. EXISTING TOPOGRAPHY SHOWN AT 2--FOOT INTERVALS AND REPRESENT GRADES AT THE TIME OF THE SURVEY.

4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MAINE DEP AND BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE AND LOCAL PERMITS.

STATE OF MAINE
JOHN E. SEVERE
NO. 9150
LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | | | | | | | |
| - - | | | | | | | |
| | 11/26/07 | ASB | RECORD DRAWING | | | | |
| | 10/31/06 | B | ISSUED FOR BID | GHC | | | |
| | 5/17/06 | P | REVISED PER MEDEP COMMENTS | GHC | | | |
| | 12/9/05 | P | SUBMITTED TO MEDEP | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |

*SME*

*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*

JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | MBISK | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | - - |
| ISSUE CODE | | |
| P - Preliminary | | |
| B - Bids | | |
| C - Construction | | |
| ASB - As Built | | |
| SCALE | AS NOTED | |

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: LPOND.DWG

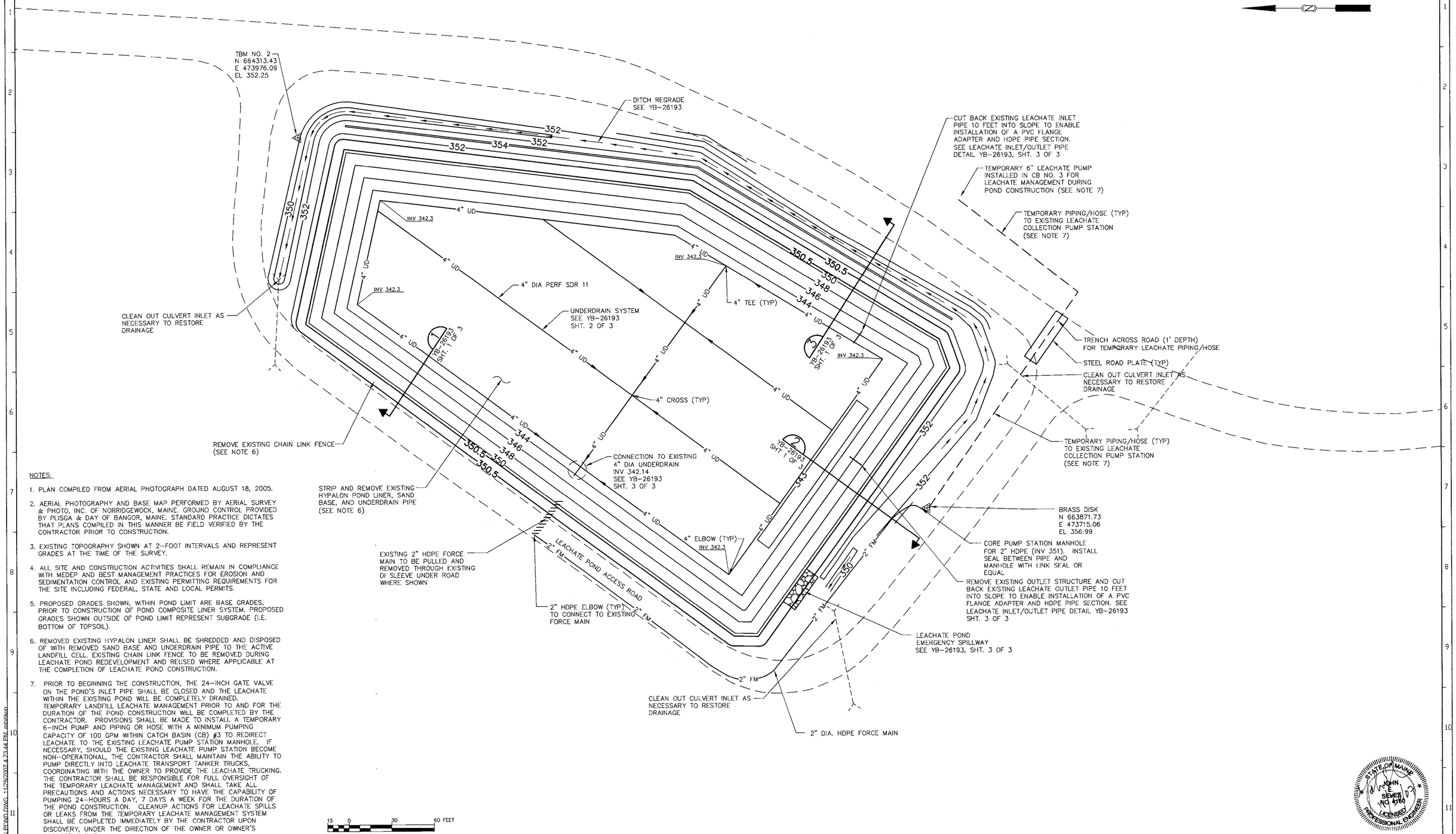
EAST OPERATION

DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
EXISTING CONDITIONS PLAN

JOB NO. 000000
FILE NO. 0-000-0000
LDC. NO. ____

YB-26190

C:\Cad\Job\ACAD\Leachate Pond\Redev\Dwg\LPOND.DWG, 11/29/2007 3:07:25 PM, rdaskin




NOTES:

1. PLAN COMPILED FROM AERIAL PHOTOGRAPH DATED AUGUST 18, 2005.
2. AERIAL PHOTOGRAPHY AND BASE MAP PERFORMED BY AERIAL SURVEY & PHOTO, INC. OF NORRIDGEWOCK, MAINE. GROUND CONTROL PROVIDED BY PLISGA & DAY OF BANGOR, MAINE. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
3. EXISTING TOPOGRAPHY SHOWN AT 2--FOOT INTERVALS AND REPRESENT GRADES AT THE TIME OF THE SURVEY.
4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MEDEP AND BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE AND LOCAL PERMITS.
5. PROPOSED GRADES SHOWN, WITHIN POND LIMIT ARE BASE GRADES, PRIOR TO CONSTRUCTION OF POND COMPOSITE LINER SYSTEM. PROPOSED GRADES SHOWN OUTSIDE OF POND LIMIT REPRESENT SUBGRADE (I.E. BOTTOM OF TOPSOIL).
6. REMOVED EXISTING HYPALON LINER SHALL BE SHREDDED AND DISPOSED OF WITH REMOVED SAND BASE AND UNDERDRAIN PIPE TO THE ACTIVE LANDFILL CELL. EXISTING CHAIN LINK FENCE TO BE REMOVED DURING LEACHATE POND REDEVELOPMENT AND REUSED WHERE APPLICABLE AT THE COMPLETION OF LEACHATE POND CONSTRUCTION.
7. PRIOR TO BEGINNING THE CONSTRUCTION, THE 24--INCH GATE VALVE ON THE POND'S INLET PIPE SHALL BE CLOSED AND THE LEACHATE WITHIN THE EXISTING POND WILL BE COMPLETELY DRAINED. TEMPORARY LANDFILL LEACHATE MANAGEMENT PRIOR TO AND FOR THE DURATION OF THE POND CONSTRUCTION WILL BE COMPLETED BY THE CONTRACTOR. PROVISIONS SHALL BE MADE TO INSTALL A TEMPORARY 6--INCH PUMP AND PIPING OR HOSE WITH A MINIMUM PUMPING CAPACITY OF 100 GPM WITHIN CATCH BASIN (CB) #3 TO REDIRECT LEACHATE TO THE EXISTING LEACHATE PUMP STATION MANHOLE. IF NECESSARY, SHOULD THE EXISTING LEACHATE PUMP STATION BECOME NON--OPERATIONAL, THE CONTRACTOR SHALL MAINTAIN THE ABILITY TO PUMP DIRECTLY INTO LEACHATE TRANSPORT TANKER TRUCKS, COORDINATING WITH THE OWNER TO PROVIDE THE LEACHATE TRUCKING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULL OVERSIGHT OF THE TEMPORARY LEACHATE MANAGEMENT AND SHALL TAKE ALL PRECAUTIONS AND ACTIONS NECESSARY TO HAVE THE CAPABILITY OF PUMPING 24--HOURS A DAY, 7 DAYS A WEEK FOR THE DURATION OF THE POND CONSTRUCTION. CLEANUP ACTIONS FOR LEACHATE SPILLS OR LEAKS FROM THE TEMPORARY LEACHATE MANAGEMENT SYSTEM SHALL BE COMPLETED IMMEDIATELY BY THE CONTRACTOR UPON DISCOVERY, UNDER THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE.

STATE OF MAINE JOHN E. SEVEE NO. 5160 LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| ASB | 11/26/07 | ASB | RECORD DRAWING | | GHC | | |
| B | 12/5/06 | B | ADDENDUM NO. 2 | | GHC | | |
| B | 10/31/06 | B | ISSUED FOR BID | | GHC | | |
| P | 5/17/06 | P | REVISED PER MEDEP COMMENTS | | GHC | | |
| P | 12/9/05 | P | SUBMITTED TO MEDEP | | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

SME

*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*

JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | MBISK | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | - - |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE AS NOTED

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

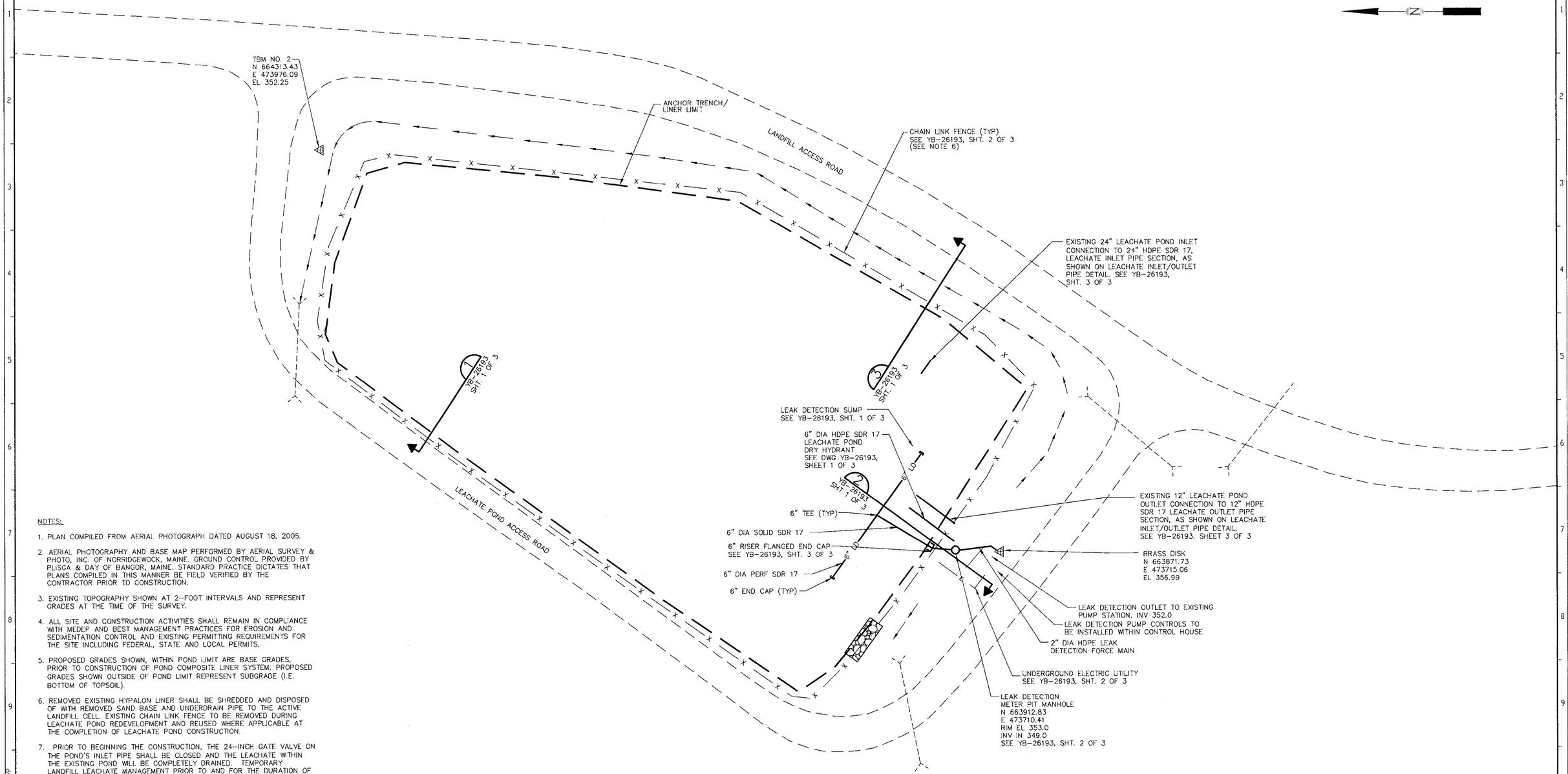
CAD FILE: LPOND.DWG

EAST OPERATION
DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
BASE GRADING AND
UNDERDRAIN PLAN

JOB NO. 000000
FILE NO. 0-000-0000
LOC. NO.

YB-26191

G:\Jobs\Data\ACAD\Leachate Pond\Dwgs\LPOND.DWG, 11/29/2007 4:23:44 PM, mbisku




NOTES:

1. PLAN COMPILED FROM AERIAL PHOTOGRAPH DATED AUGUST 18, 2005.
2. AERIAL PHOTOGRAPHY AND BASE MAP PERFORMED BY AERIAL SURVEY & PHOTO, INC. OF NORRIDGEWOCK, MAINE. GROUND CONTROL PROVIDED BY PLISGA & DAY OF BANGOR, MAINE. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
3. EXISTING TOPOGRAPHY SHOWN AT 2-FOOT INTERVALS AND REPRESENT GRADES AT THE TIME OF THE SURVEY.
4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MEDEP AND BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE AND LOCAL PERMITS.
5. PROPOSED GRADES SHOWN, WITHIN POND LIMIT ARE BASE GRADES, PRIOR TO CONSTRUCTION OF POND COMPOSITE LINER SYSTEM. PROPOSED GRADES SHOWN OUTSIDE OF POND LIMIT REPRESENT SUBGRADE (I.E. BOTTOM OF TOPSOIL).
6. REMOVED EXISTING HYPALON LINER SHALL BE SHREDDED AND DISPOSED OF WITH REMOVED SAND BASE AND UNDERDRAIN PIPE TO THE ACTIVE LANDFILL CELL. EXISTING CHAIN LINK FENCE TO BE REMOVED DURING LEACHATE POND REDEVELOPMENT AND REUSED WHERE APPLICABLE AT THE COMPLETION OF LEACHATE POND CONSTRUCTION.
7. PRIOR TO BEGINNING THE CONSTRUCTION, THE 24-INCH GATE VALVE ON THE POND'S INLET PIPE SHALL BE CLOSED AND THE LEACHATE WITHIN THE EXISTING POND WILL BE COMPLETELY DRAINED. TEMPORARY LANDFILL LEACHATE MANAGEMENT PRIOR TO AND FOR THE DURATION OF THE POND CONSTRUCTION WILL BE COMPLETED BY THE CONTRACTOR. PROVISIONS SHALL BE MADE TO INSTALL A TEMPORARY 6-INCH PUMP AND PIPING OR HOSE WITH A MINIMUM PUMPING CAPACITY OF 100 GPM WITHIN CATCH BASIN (CB) #3 TO REDIRECT LEACHATE TO THE EXISTING LEACHATE PUMP STATION MANHOLE. IF NECESSARY, SHOULD THE EXISTING LEACHATE PUMP STATION BECOME NON-OPERATIONAL, THE CONTRACTOR SHALL MAINTAIN THE ABILITY TO PUMP DIRECTLY INTO LEACHATE TRANSPORT TANKER TRUCKS, COORDINATING WITH THE OWNER TO PROVIDE THE LEACHATE TRUCKING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULL OVERSIGHT OF THE TEMPORARY LEACHATE MANAGEMENT AND SHALL TAKE ALL PRECAUTIONS AND ACTIONS NECESSARY TO HAVE THE CAPABILITY OF PUMPING 24-HOURS A DAY, 7 DAYS A WEEK FOR THE DURATION OF THE POND CONSTRUCTION. CLEANUP ACTIONS FOR LEACHATE SPILLS OR LEAKS FROM THE TEMPORARY LEACHATE MANAGEMENT SYSTEM SHALL BE COMPLETED IMMEDIATELY BY THE CONTRACTOR UPON DISCOVERY, UNDER THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE.

STATE OF MAINE
JOHN E. SEVEE
No. 4750
LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| ASB | 11/26/07 | | RECORD DRAWING | | | | |
| B | 10/31/06 | | ISSUED FOR BID | | GHC | | |
| P | 5/17/06 | | REVISED PER MEDEP COMMENTS | | GHC | | |
| P | 12/9/05 | | SUBMITTED TO MEDEP | | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |

SME
Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine
JOB NO. 05043.01

| | |
|---|---|
| DRN MBISK | 11/05 |
| CHKD GHC | 11/05 |
| APPVD | - - |
| ISSUE CODE | |
| P - Preliminary | |
| B - Bids | |
| C - Construction | |
| ASB - As Built | |
| SCALE AS NOTED | |

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: LPOND.DWG

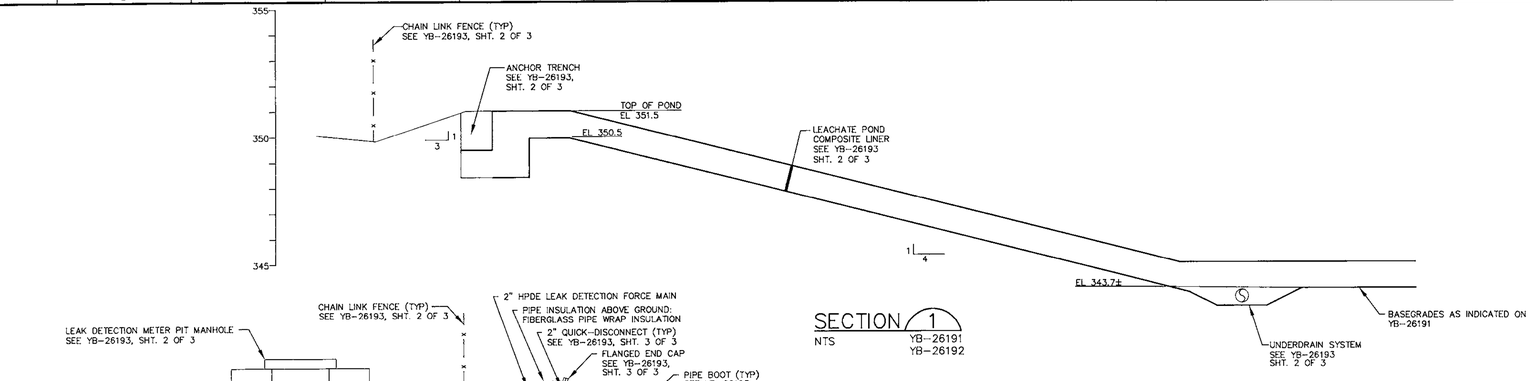
EAST OPERATION

DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
LEAK DETECTION PLAN

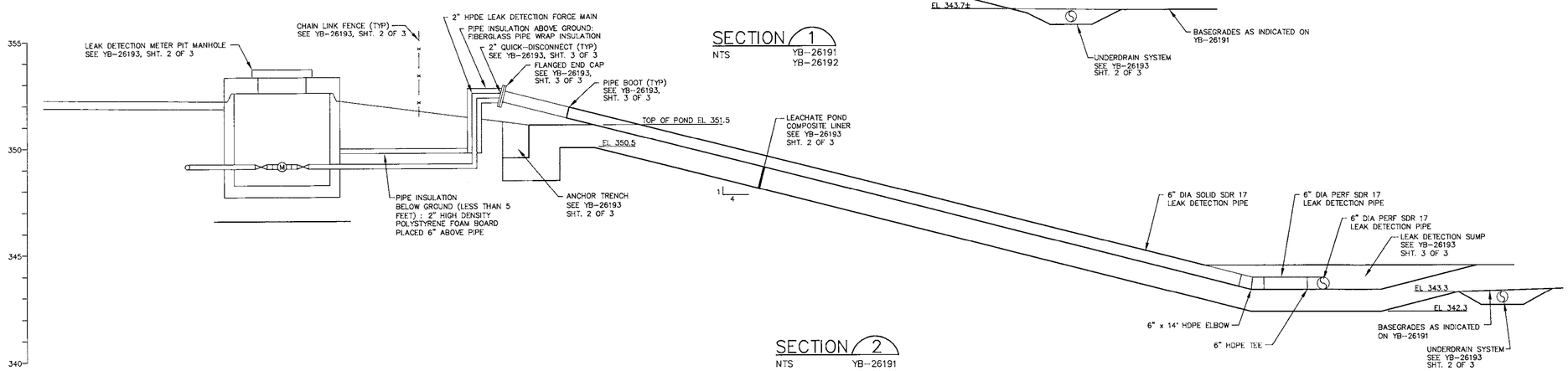
JOB NO. 00000
FILE NO. 0-000-0000
LOC. NO.

YB-26192

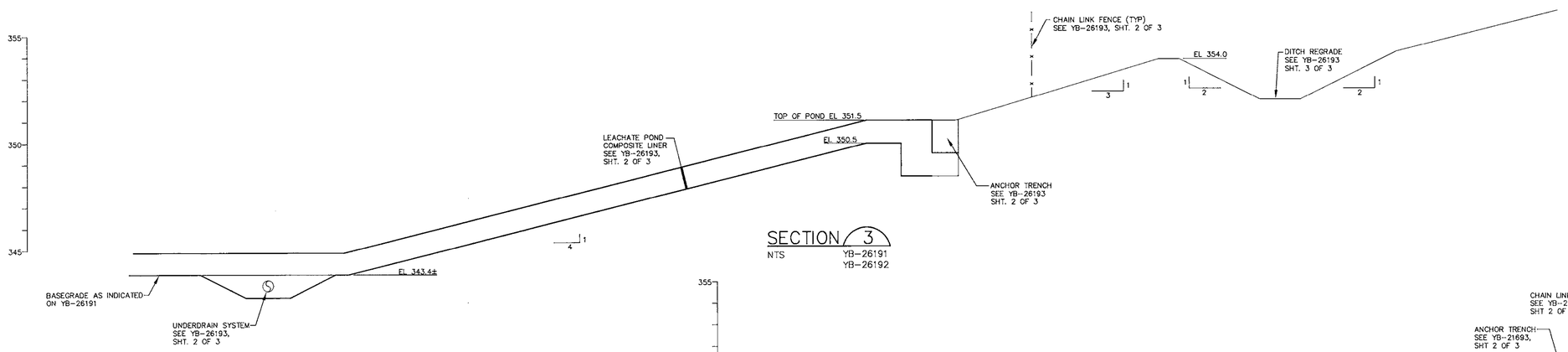
G:\projects\DWG\ACAD\Katahdin Pond\redwg\LPOND.DWG, 11/29/2007 4:01:08 PM, mbissop



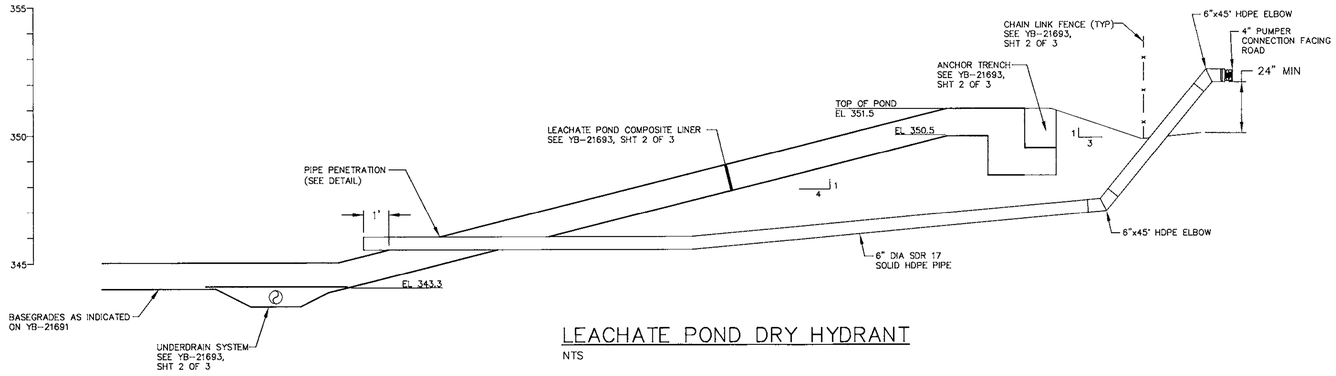

SECTION 1
NTS
YB-26191
YB-26192




SECTION 2
NTS
YB-26191
YB-26192




SECTION 3
NTS
YB-26191
YB-26192




LEACHATE POND DRY HYDRANT
NTS

STATE OF MAINE
JOHN
E
SEVEE
NO. 4150
LICENSED
PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | | | | | | | |
| - - | | | | | | | |
| ASB | 11/26/07 | | RECORD DRAWING | | | | |
| B | 10/31/06 | | ISSUED FOR BID | GHC | | | |
| P | 5/17/06 | | REVISED PER MEDEP COMMENTS | GHC | | | |
| P | 12/9/05 | | SUBMITTED TO MEDEP | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |

*SME*

*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*

JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | DRD | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | - - |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE AS NOTED

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

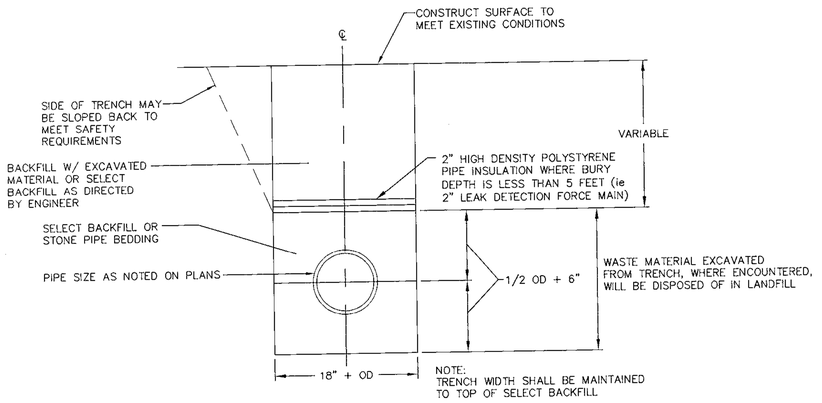
CAD FILE: YB-26193 B0

EAST OPERATION
DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
SECTIONS AND DETAILS
(SHEET 1 OF 3)

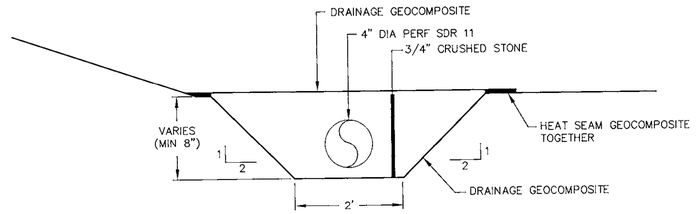
JOB NO. 00000
FILE NO. 0-000-0000
LOC. NO.

YB-26193

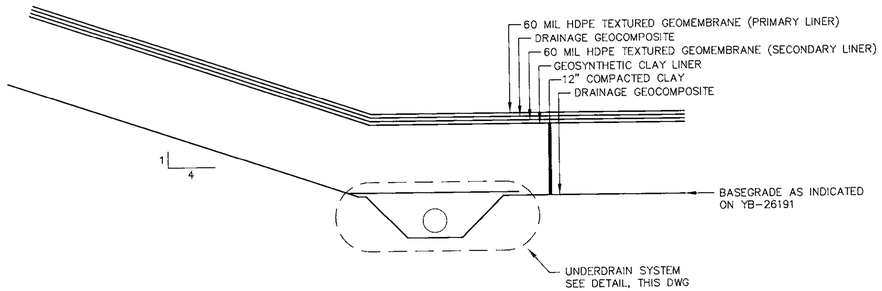
G:\Kpcd\Dolt\ACAD\Leachate Pond\Rocl\wg\LPOND-DETAILS.dwg, 11/29/2007 4:26:06 PM, mbiskup



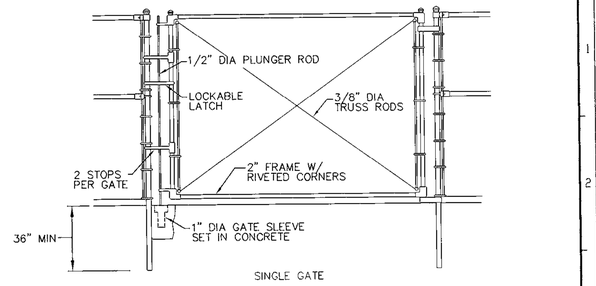

PIPE TRENCH
NTS



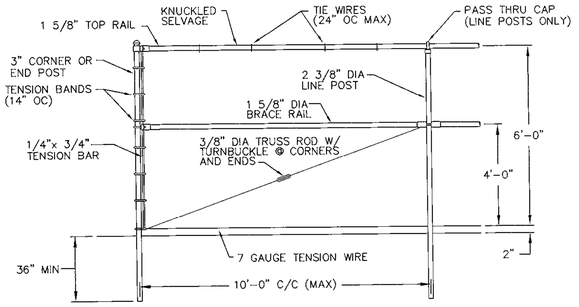

UNDERDRAIN SYSTEM
NTS




LEACHATE POND COMPOSITE LINER (BASE & SIDESLOPE)
NTS

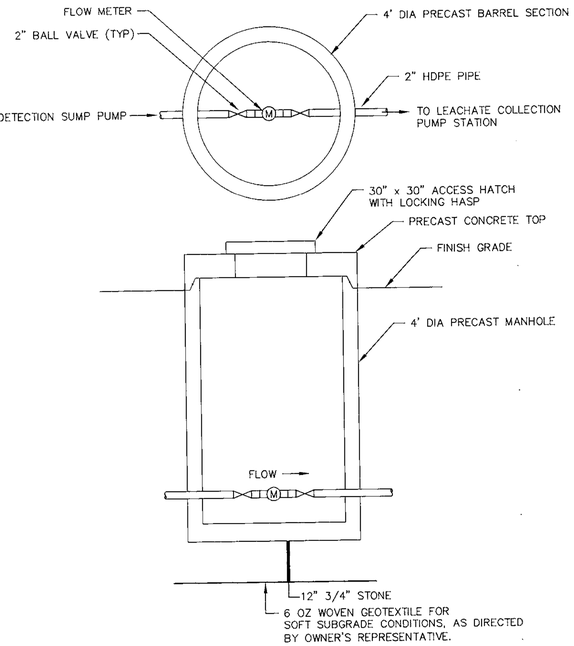



SINGLE GATE

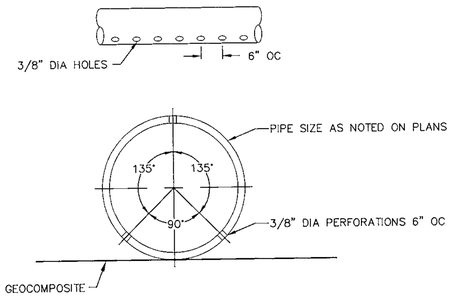



FENCE

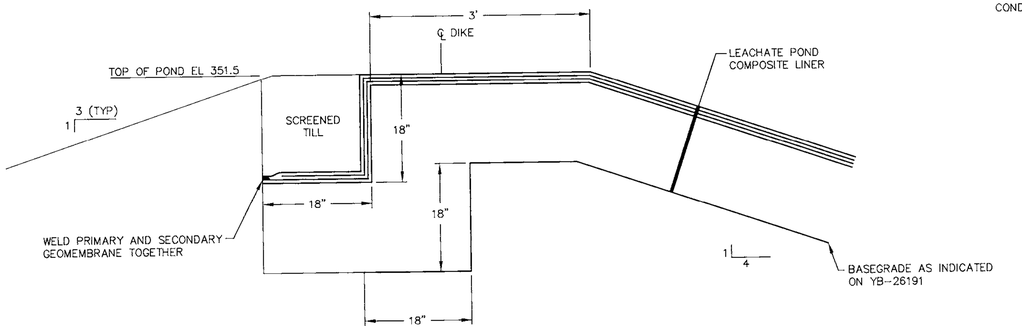
TYPICAL CHAIN LINK FENCE
NTS



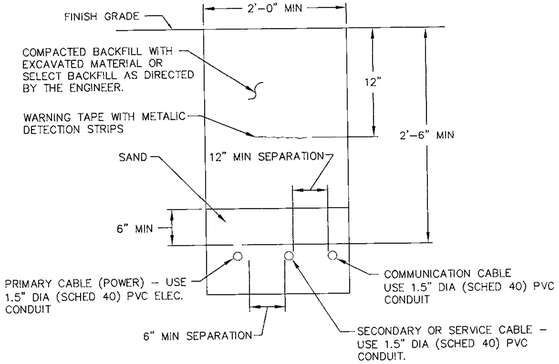

METER PIT
NTS




PERFORATED PIPE
NTS




ANCHOR TRENCH
NTS




UNDERGROUND ELECTRIC UTILITY
NTS

STATE OF MAINE
JOHN E. SEVEE
No. 4190
LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| ASB | 11/26/07 | | RECORD DRAWING | | | | |
| B | 10/31/06 | | ISSUED FOR BID | | GHC | | |
| P | 5/17/06 | | REVISED PER MEDEP COMMENTS | | GHC | | |
| P | 12/9/05 | | SUBMITTED TO MEDEP | | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |

SME
Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine
JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | DRD | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | -- -- |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE: AS NOTED

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

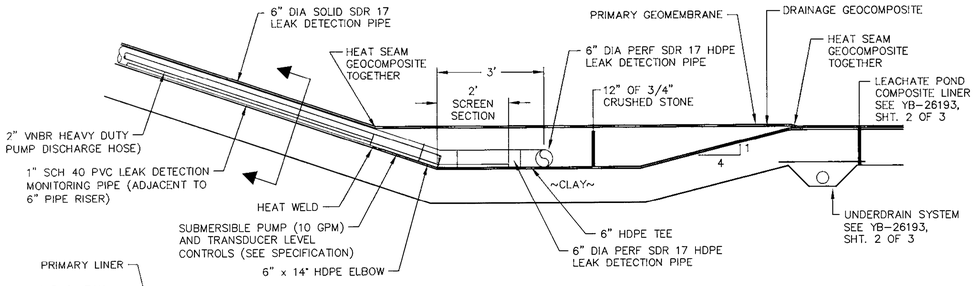
CAD FILE: YB-26193 B1

EAST OPERATION
DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
SECTIONS AND DETAILS
(SHEET 2 OF 3)

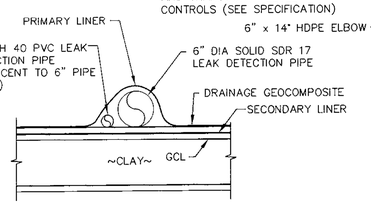
JOB NO. 00000
FILE NO. 0-000-0000
LOC. NO.

YB-26193

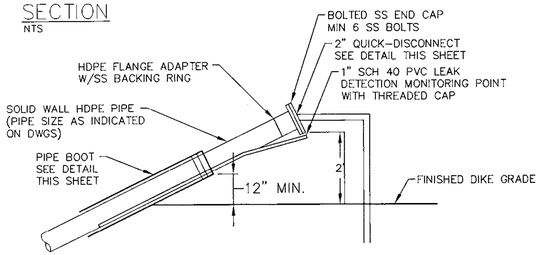
G:\PROJECTS\PAC\AUTOCAD\Plotting Forms\PRECDWG\LPONDDETAILS.dwg, 11/29/2007 3:01:02 PM, rhoskup



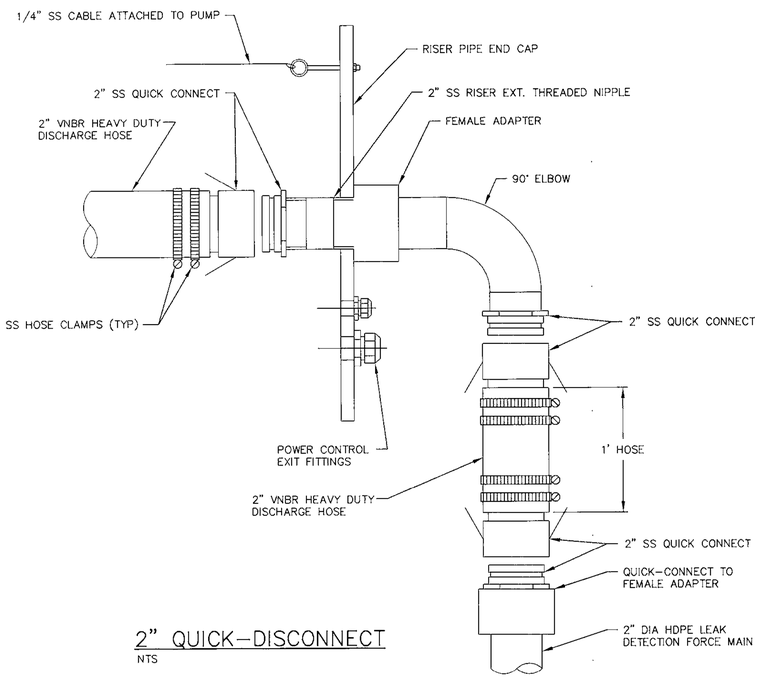

## LEAK DETECTION SUMP
NTS



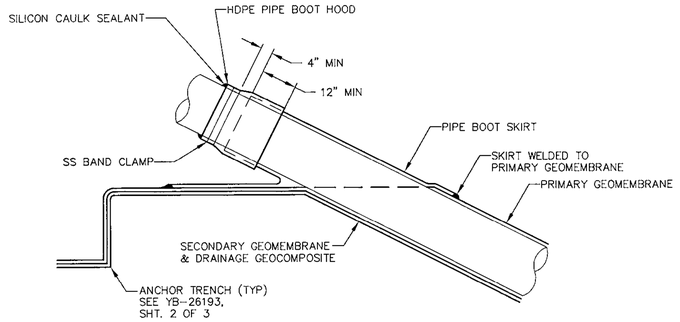

## SECTION
NTS



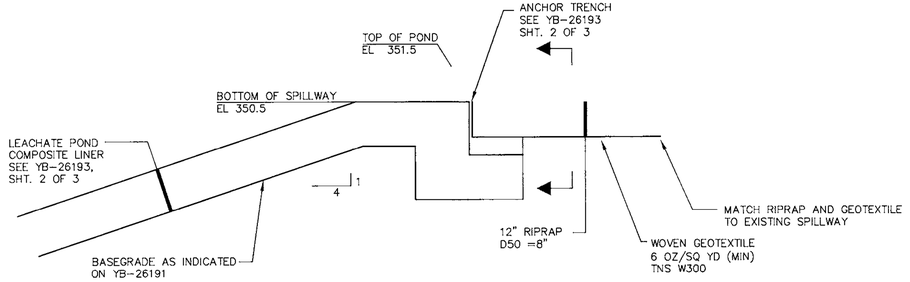

## FLANGED END CAP
NTS

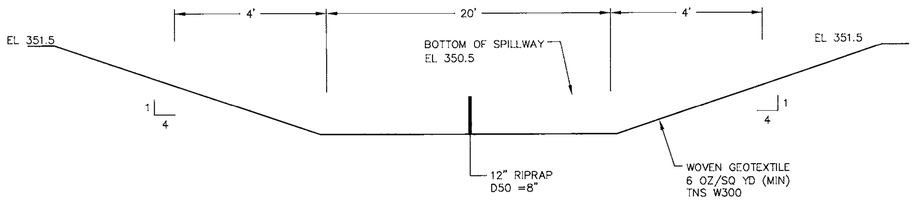



## 2" QUICK-DISCONNECT
NTS

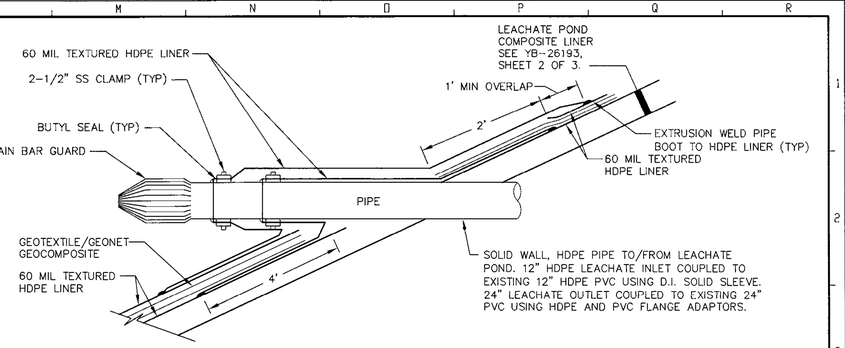



## LEAK DETECTION PUMP CONDUIT PIPE BOOT
NTS

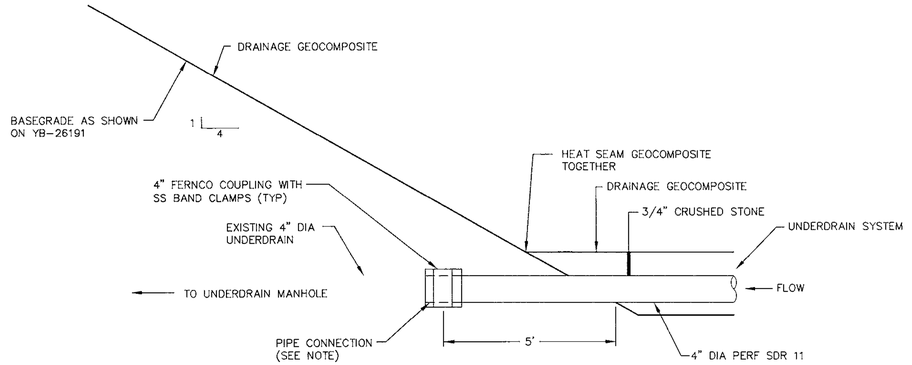



## SECTION
## LEACHATE POND EMERGENCY SPILLWAY
NTS



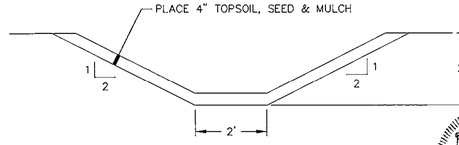

## LEACHATE INLET/OUTLET PIPE
NTS




NOTE:

CUT BACK EXISTING UNDERDRAIN 5 FT INTO SLOPE TO CONNECT. MATCH EXISTING INVERT AND DRAINAGE MEDIA FROM PIPE CONNECTIONS TO BASEGRADE.

## CONNECTION TO EXISTING 4" UNDERDRAIN
NTS




## DITCH REGRADE
NTS

STATE OF MAINE — JOHN E. SEVEE NO. 4162 — LICENSED PROFESSIONAL ENGINEER

| REF. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | | | | | | | |
| - - | | | | | | | |
| ASB | 11/26/07 | A | RECORD DRAWING | GHC | | | |
| B | 10/31/06 | B | ISSUED FOR BID | GHC | | | |
| P | 5/17/06 | P | REVISED PER MEDEP COMMENTS | GHC | | | |
| P | 12/9/05 | P | SUBMITTED TO MEDEP | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |
| - - | | | | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*
JOB NO. 05043.01

| | | |
|---|---|---|
| DRN | DRD | 11/05 |
| CHKD | GHC | 11/05 |
| APPVD | | - - |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE AS NOTED

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

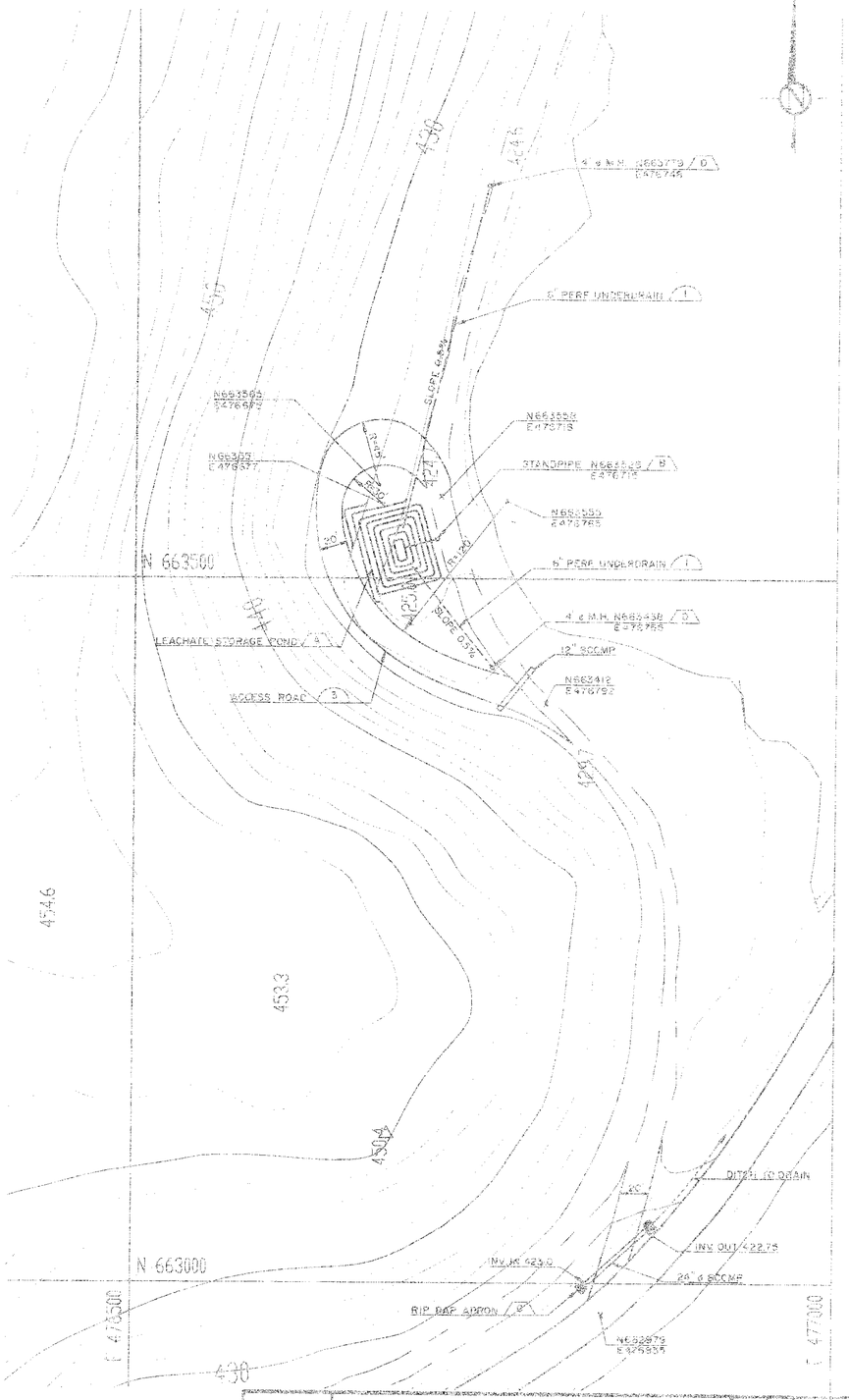
CAD FILE: YB-26193 B2

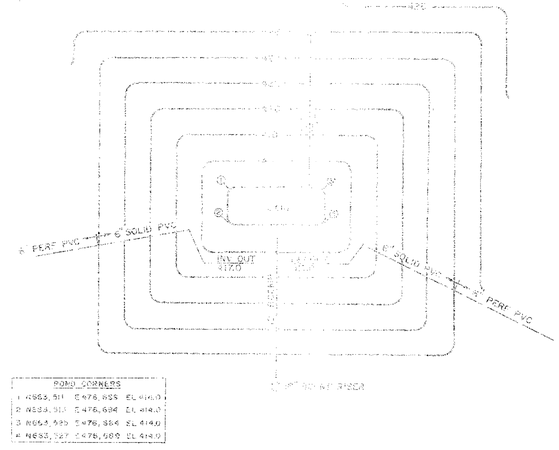
EAST OPERATION
DOLBY III LANDFILL
LEACHATE POND REDEVELOPMENT
SECTIONS AND DETAILS
(SHEET 3 OF 3)

JOB NO. 00000
FILE NO. 0-000-0000
LOC. NO.

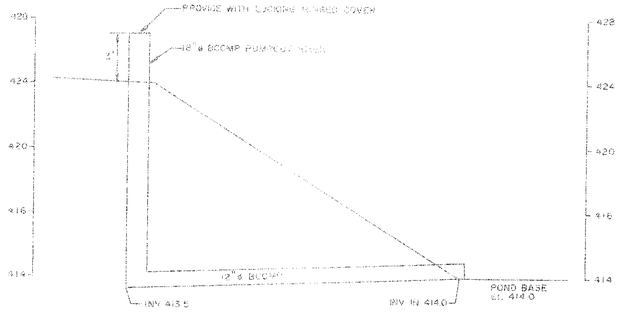
YB-26193

G:\PROJ\DOLBY\CAD\LEACHATE Pond\Rdd\Dwg\LPOND_DETAILS.dwg, 11/29/2007 4:22:39 PM, mcskup

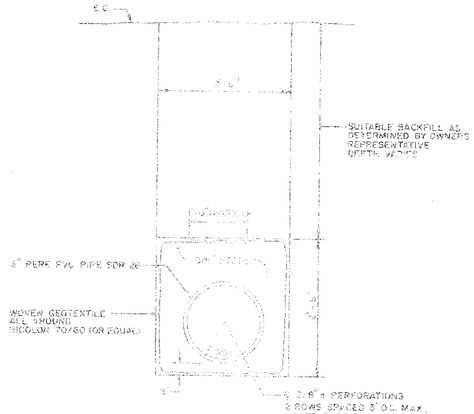


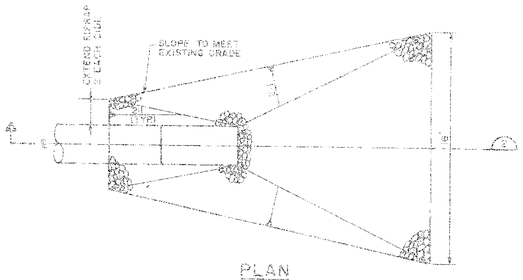

LEACHATE STORAGE POND / A
N.T.S.

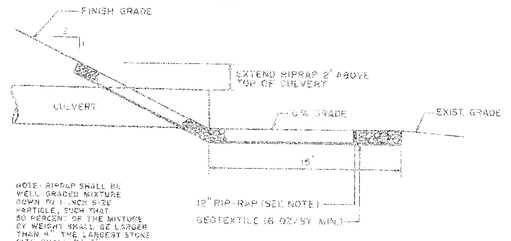



STANDPIPE / B
N.T.S.



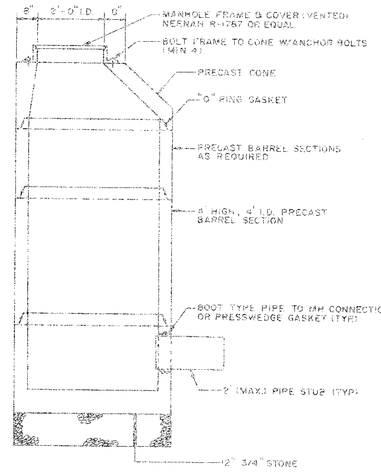

PERF LEACHATE UNDERDRAIN / 1
N.T.S.



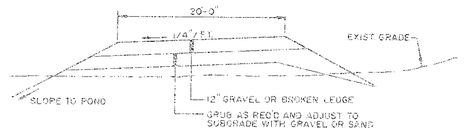




SECTION / 2
N.T.S.

RIP RAP APRON / C




TYPICAL LEACHATE TRANSPORT MANHOLE / D
N.T.S.




ACCESS ROAD / 3
N.T.S.

| | | |
|---|---|---|
| DRAWING NO. | 2-092-4702-70182 | |
| 12/90 | RECORD DRAWING | BLL |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

| | | |
|---|---|---|
| DSN | PF | 11/90 |
| DWN | Blk | 11/90 |
| CHKD | | |
| APPD | | |
| ISSUE CODE | | |
| C - CONST. | | |
| SCALE AS SHOWN | | |

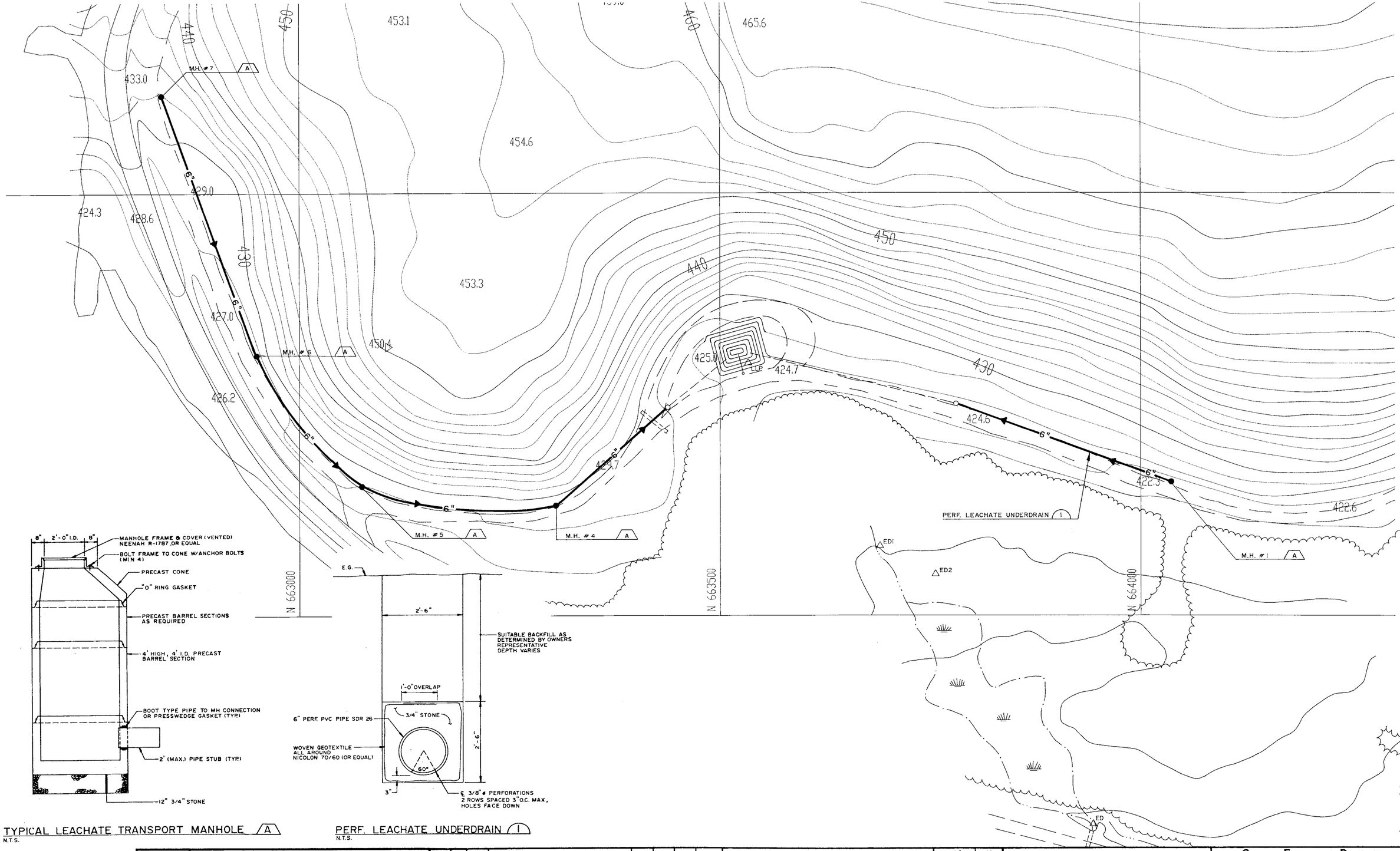
Great Northern Paper
A subsidiary of Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

TEMPORARY LEACHATE POND
DOLBY II LANDFILL

JOB NO. 94552
EWS REQ. NO.
FILE NO. 2-092-4702-70182

YB-19328







TYPICAL LEACHATE TRANSPORT MANHOLE (A)
N.T.S.




PERF. LEACHATE UNDERDRAIN (1)
N.T.S.

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| YB-19328 | TEMPORARY LEACHATE POND, DOLBY II LANDFILL | | | 11/91 | RECORD DRAWING | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

| | | |
|---|---|---|
| DRN | RR | 6/91 |
| CKD | 6/30/91 | |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL T.O. | C - CONST

SCALE 1" = 50'

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

**CENTRAL ENGINEERING DEPARTMENT**
EAST MILLINOCKET MILL
DOLBY II LANDFILL
NORTHEAST INTERCEPTOR
TRENCH EXTENSION

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703, 7082

YB-20021

# GREAT NORTHERN PAPER, INC.
# A SUBSIDIARY OF BOWATER INCORPORATED
# MILLINOCKET, MAINE
# DOLBY II LANDFILL REGRADING

| SHT. NO. | TITLE | DWG. NO. | |
|---|---|---|---|
| 1 | COVER SHEET | YB-23586 | |
| 2 | SYMBOLS & ABBREVIATIONS | YB-23587 | |
| 3 | SITE LOCATION PLAN | YB-23588 | |
| 4 | SITE DEVELOPMENT PLAN | YB-23589 | |
| 5 | DOLBY II NORTH SITE DEVELOPMENT PLAN | YB-23590 | |
| 6 | DOLBY II SOUTH SITE DEVELOPMENT PLAN | YB-23591 | N.I.T.C. |
| 7 | FINAL GRADING PLAN | YB-23592 | |
| 8 | SECTIONS & DETAILS | YB-23593 | |

## SEVEE & MAHER ENGINEERS, INC.
## CUMBERLAND, MAINE

## 1996

STATE OF MAINE
PETER M. MAHER
#4107
REGISTERED PROFESSIONAL ENGINEER

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | PAF |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - Prelim | B - Bids |
| M - MU T.O. | C - Const. |
| SCALE | |

BOWATER
Great Northern Paper

EAST OPERATION

DOLBY II LANDFILL REGRADING
COVER SHEET

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

YB-23586

C D E F G H I L M N O P Q

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (MAGNETIC) | | | STONE WALL | ○ | ● | MANHOLE |
| | | NORTH ARROW (PLAN NORTH) | | | DRAINAGE COURSE (WITH DIRECTION) | ◎ | ○ | CATCH BASIN |
| 25 | 25 | CONTOUR LINES | SHORE SIDE | | EDGE OF WATER | ⋈ | ⋈ | WATER VALVE |
| 25 x 63 | 25.56 | SPOT ELEVATION (GRADE) | | | WATER ELEVATION (GROUND OR SURFACE) | | | HYDRANT |
| | | EXISTING GROUND | | | FENCE LINE (WOOD) | | | UTILITY POLE |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | FENCE LINE (WIRE) | | ⊘ | CLEAN OUT STRUCTURE |
| | | PROPERTY LINE OR R.O.W. | | | RETAINING WALL | G | G | UNDERGROUND GAS MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE LINE |
| 0+00 | 1+00 | CONSTRUCTION BASELINE | | | BUILDING AND STRUCTURES | E | E | UNDERGROUND ELECTRICAL LINE |
| | | BOUNDARY LINE (State, County, Municipality) | | 2 / 1 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | OE | OE | OVERHEAD ELECTRICAL LINE |
| ⊡ | ■ | SURVEY MONUMENT | | TOP OF SLOPE / 2 | SLOPES (WITH SLOPE RATIO) | | 12" ACP | SANITARY SEWER (SIZE & TYPE) |
| ○IF | ●IF | SURVEY IRON | | | EDGE OF TRAVELED WAY | FM | 8" PVC | FORCE MAIN (SIZE & TYPE) |
| ○ | ● | DRILL HOLE, PK, OR STAKE | | C F | CUT OR FILL LINE | W | 8" D.I. | WATER MAIN (SIZE & TYPE) |
| | | WOODS OR BRUSH LINE | | | CLEARING LIMIT LINE | | 12" RCP | STORM DRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Deciduous) | | | BITUMINOUS PAVEMENT | UD | 8" UD | UNDERDRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Coniferous) | | | CONCRETE | | | CULVERT |
| | | TREE, TO BE REMOVED | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | RAILROAD |
| | | MARSH AREA | TP-12 | TP-12 | TEST PIT AND NUMBER | | S | SILTATION FENCE |
| | | | | | | PD | 6" PD | PERIMETER DRAIN (SIZE & TYPE) |
| | | | | | | LT | 6" LD | LEACHATE TRANSPORT (SIZE & TYPE) |
| | | | | | | LC | 6" LC | LEACHATE COLLECTION (SIZE & TYPE) |
| | | | | | | LD | 6" LD | LEAK DETECTION, SIZE & TYPE |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A.C.C.M.P | ASPHALT COATED C.M.P. | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | P.C. | POINT ON CURVE |
| A.C.P. | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HP | HORSEPOWER | PD | PERIMETER DRAIN |
| AC | ACRE | DEG OR ° | DIAMETER | HYD | HYDRANT | P.I. | POINT OF INTERSECTION |
| AGG | AGGREGATE | DEPT | DEPARTMENT | | | P.T. | POINT OF TANGENT |
| ALUM | ALUMINUM | DI | DUCTILE IRON | I.D. | INSIDE DIAMETER | PERF | PERFORATED |
| APPD | APPROVED | DIA OR ø | DIAMETER | IN OR " | INCHES | PSI | POUNDS PER SQUARE INCH |
| APPROX | APPROXIMATE | DIM | DIMENSION | INV | INVERT | PVC | POLYVINYL CHLORIDE |
| ASB | ASBESTOS | DIST | DISTANCE | INV. EL | INVERT ELEVATION | PVMT | PAVEMENT |
| ASPH | ASPHALT | DN | DOWN | | | | |
| AUTO | AUTOMATIC | DR | DRAIN | LB | POUND | QTY | QUANTITY |
| AUX | AUXILIARY | DWG | DRAWING | LC | LEACHATE COLLECTION | | |
| AVE | AVENUE | | | LD | LEAK DETECTION | R.O.W. | RIGHT OF WAY |
| AZ | AZIMUTH | EA | EACH | LIN FT. | LINEAR FEET | RAD | RADIUS |
| | | EG | EXISTING GROUND OR GRADE | LOC | LOCATION | REQD | REQUIRED |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | ELEC | ELECTRIC | LT | LEACHATE TRANSPORT | RT | RIGHT |
| B.M. | BENCH MARK | EL | ELEVATION | | | RTE | ROUTE |
| BIT | BITUMINOUS | ELB | ELBOW | M.H. | MANHOLE | | |
| BLDG | BUILDING | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT | S | SLOPE |
| BOT | BOTTOM | EST | ESTIMATED | MATL | MATERIAL | SCH | SCHEDULE |
| BRG | BEARING | EXC | EXCAVATE | MAX | MAXIMUM | SF | SQUARE FEET |
| | | EXIST | EXISTING | MFR | MANUFACTURE | SHT | SHEET |
| C.B. | CATCH BASIN | | | MIN | MINIMUM | STA | STATION |
| CEN | CENTER | F.G. | FINISH GRADE | MISC | MISCELLANEOUS | SY | SQUARE YARD |
| CEM. LIN. | CEMENT LINED | FBRGL | FIBERGLASS | MON | MONUMENT | | |
| C.M.P. | CORRUGATED METAL PIPE | FDN | FOUNDATION | | | TAN | TANGENT |
| C.O. | CLEAN OUT | FLEX | FLEXIBLE | N.I.T.C. | NOT IN THIS CONTRACT | TDH | TOTAL DYNAMIC HEAD |
| CF | CUBIC FEET | FLG | FLANGE | N.T.S. | NOT TO SCALE | TEMP | TEMPORARY |
| CFS | CUBIC FEET PER SECOND | FLR | FLOOR | N/F | NOW OR FORMERLY | TYP | TYPICAL |
| CI | CAST IRON | FPS | FEET PER SECOND | NO. OR # | NUMBER | | |
| CL | CLASS | FT OR ' | FEET | | | V | VOLTS |
| CONC | CONCRETE | FTG | FOOTING | O.C. | ON CENTER | | |
| CONST | CONSTRUCTION | | | O.D. | OUTSIDE DIAMETER | W/ | WITH |
| CONTR | CONTRACTOR | GA | GAUGE | | | W/O | WITHOUT |
| CTR | CENTER | GAL | GALLON | | | | |
| CY | CUBIC YARD | GALV | GALVANIZED | | | YD | YARD |
| | | GPD | GALLONS PER DAY | | | | |
| | | GPM | GALLONS PER MINUTE | | | | |

## VIEW MARKERS & IDENTIFICATION

SECTION TITLE & NO. — ACCESS ROAD / 3 / C-100 — DRAWING WHERE SECTION APPEARS

DETAIL TITLE & LETTER — MANHOLE / A / C-100 — DRAWING WHERE DETAIL APPEARS

GENERAL NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.
3. EXCAVATIONS ENCOUNTERING WASTE MATERIALS, I.E. SLUDGE, WILL BE DISPOSED OF IN THE ACTIVE DISPOSAL AREA.

MATERIAL SPECIFICATIONS:

DIKE EMBANKMENT SOIL:

COMPACTION – THE DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 85 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR).

STONE BEDDING – THE STONE BEDDING MATERIAL SHALL BE SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL. THE BEDDING MATERIAL SHALL MEET THE FOLLOWING GRADATION:

| SIEVE DESIGNATION | PERCENT PASSING BY WEIGHT |
|---|---|
| 1 INCH | 100 |
| 1/4 INCH | <5 |

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM WORK AREA PRIOR TO PLACING THE EMBANKMENT MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING LANDFILL.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIALS –

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K)

10 LBS PER UNIT

| SEED: | | |
|---|---|---|
| | TALL FESCUE | 59% |
| | RED FESCUE | 25% |
| | RED TOP | 5% |
| | LADINO CLOVER | 3% |
| | ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

STATE OF MAINE — PETER M. MAHER #4107 — REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 2/20/96 | ISSUED FOR BID | | | | |
| | | | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | PAF |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE: P – Prelim | B – Bids | M – MII T.O. | C – Const.

SCALE AS SHOWN

BOWATER — Great Northern Paper

EAST OPERATION

DOLBY II LANDFILL REGRADING
SYMBOLS & ABBREVIATIONS

JOB NO. 67996
ENG. REQ. NO. _____
FILE NO. 2--092--4603,7082

YB-23587

L:\SHEET\ACAD\SYMSHT Wed Feb 12 10:45:47 1997


STATE OF MAINE
PETER M. MAHER
#4107
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|
| | BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. |
| | NORRIDGEWOCK, MAINE – PHOTO DATE 10/23/95. |
| | GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE |
| | |
| | STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS |
| | MANNER SHOULD BE FIELD VERIFIED BY CONTRACTOR BEFORE |
| | CONSTRUCTION. |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 2/20/96 | ISSUED FOR BID | | | | |
| | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P – Prelim | B – Bids |
| M – MU T.O. | C – Const. |
| SCALE AS SHOWN | |

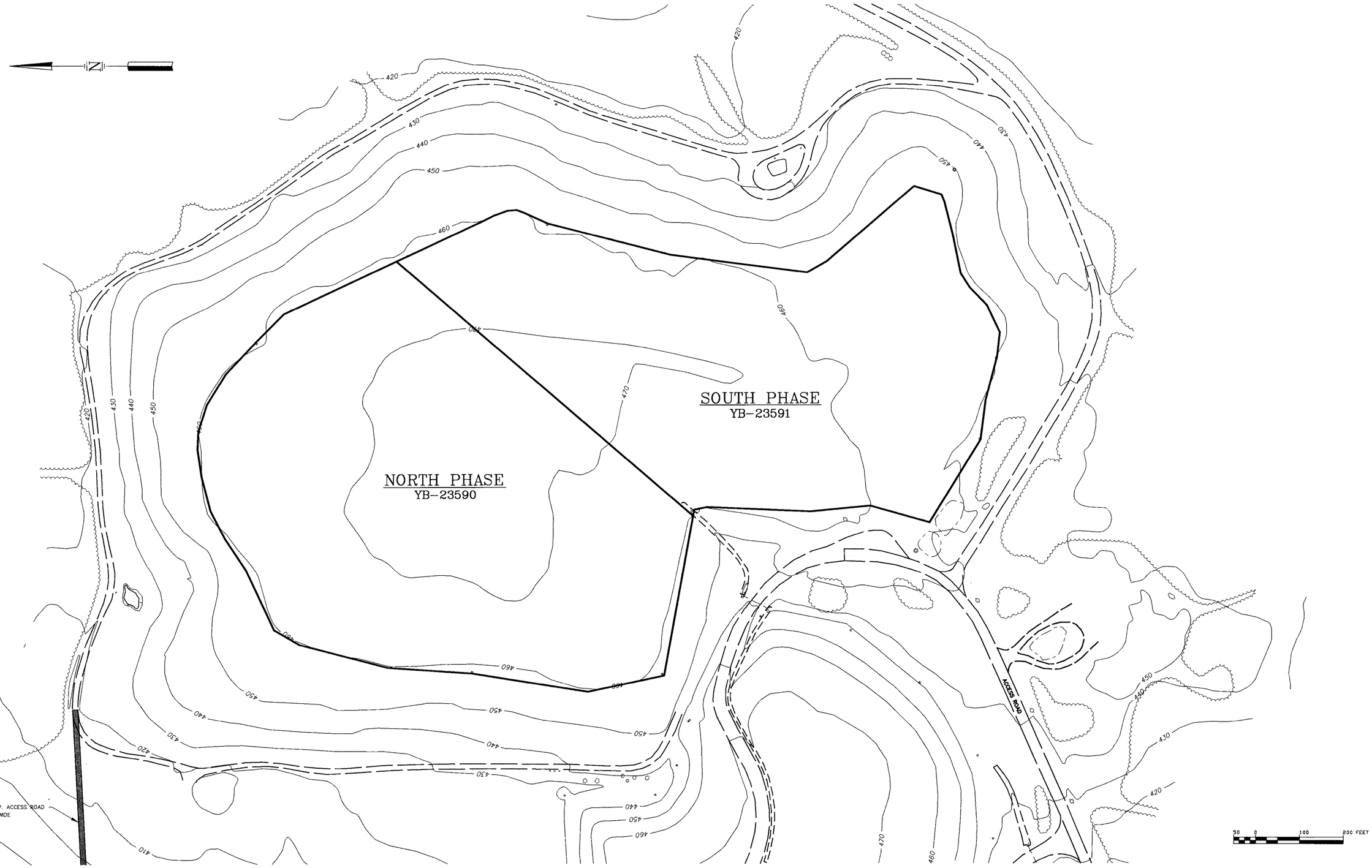
BOWATER
Great Northern Paper

EAST OPERATION

DOLBY II LANDFILL REGRADING
SITE LOCATION PLAN

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB–23588




STATE OF MAINE
PETER M. MAHER
#4107
REGISTERED PROFESSIONAL ENGINEER

BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC.
NORRIDGEWOCK, MAINE – PHOTO DATE 10/23/95.
GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE

STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY CONTRACTOR BEFORE CONSTRUCTION.

DRAWING NO. | REFERENCE DRAWING TITLE

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 2/20/96 | ISSUED FOR BID | | | | |
| | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
SCALE AS SHOWN

BOWATER
Great Northern Paper

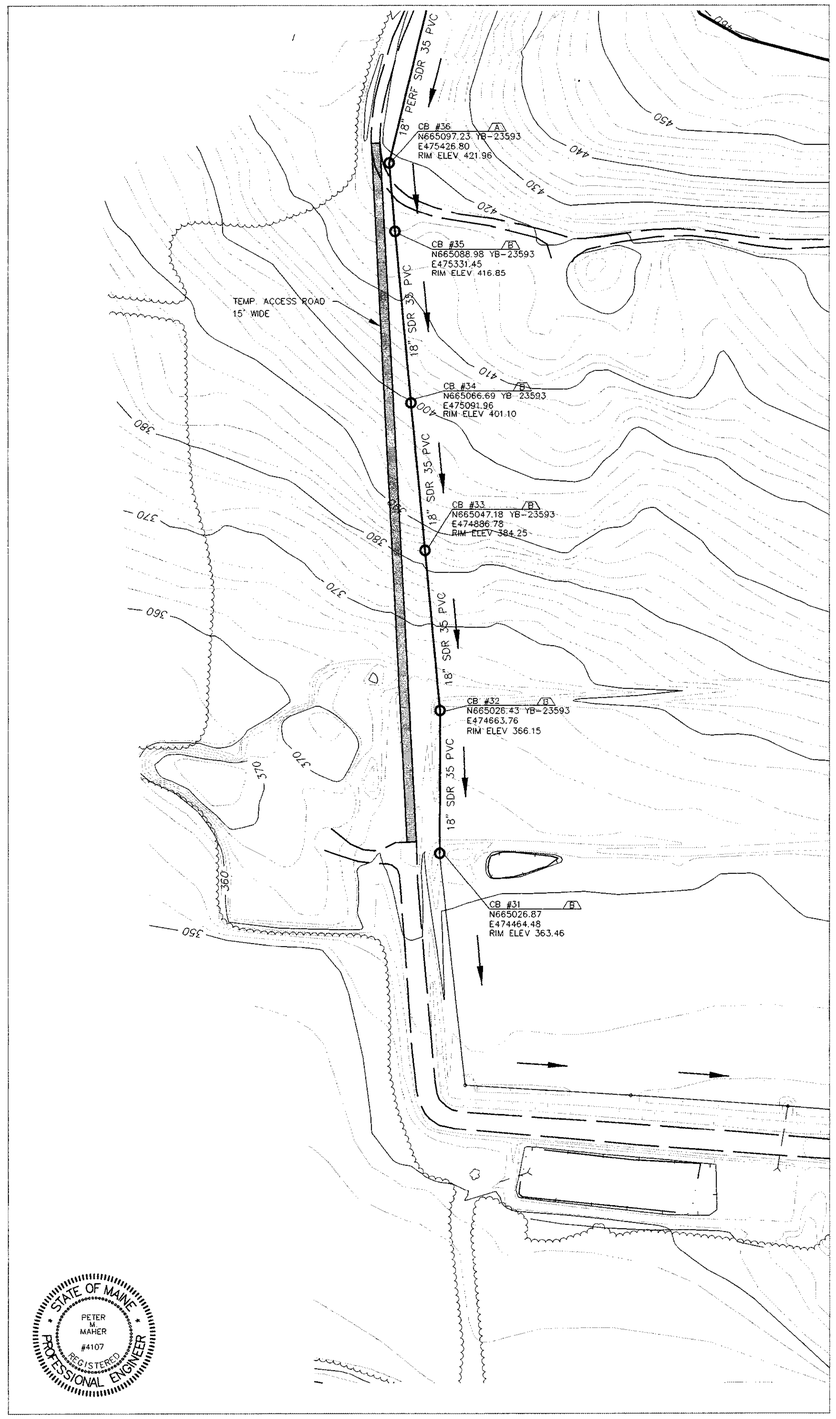
EAST OPERATION

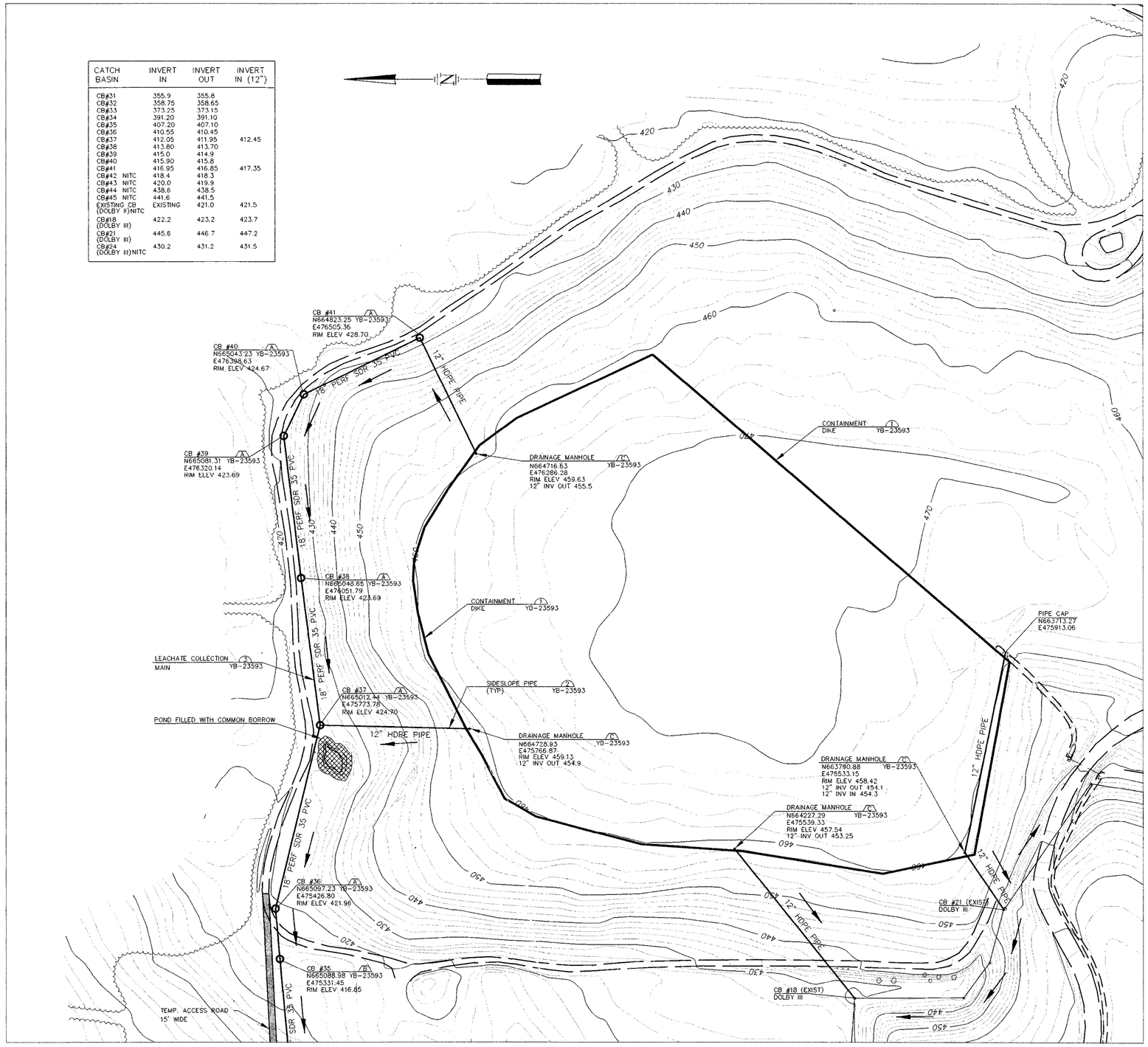
DOLBY II LANDFILL REGRADING
SITE DEVELOPMENT PLAN

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-23589

| CATCH BASIN | INVERT IN | INVERT OUT | INVERT IN (12") |
|---|---|---|---|
| CB#31 | 355.9 | 355.8 | |
| CB#32 | 358.75 | 358.65 | |
| CB#33 | 373.25 | 373.15 | |
| CB#34 | 391.20 | 391.10 | |
| CB#35 | 407.20 | 407.10 | |
| CB#36 | 410.55 | 410.45 | |
| CB#37 | 412.05 | 411.95 | 412.45 |
| CB#38 | 413.80 | 413.70 | |
| CB#39 | 415.0 | 414.9 | |
| CB#40 | 415.90 | 415.8 | |
| CB#41 | 416.95 | 416.85 | 417.35 |
| CB#42 NITC | 418.4 | 418.3 | |
| CB#43 NITC | 420.0 | 419.9 | |
| CB#44 NITC | 438.6 | 438.5 | |
| CB#45 NITC | 441.6 | 441.5 | |
| EXISTING CB (DOLBY II)NITC | EXISTING | 421.0 | 421.5 |
| CB#18 (DOLBY III) | 422.2 | 423.2 | 423.7 |
| CB#21 (DOLBY III) | 445.6 | 446.7 | 447.2 |
| CB#24 (DOLBY III)NITC | 430.2 | 431.2 | 431.5 |




50 0 100 200 FEET

BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC.
NORRIDGEWOCK, MAINE – PHOTO DATE 10/23/95.
GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE

STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY CONTRACTOR BEFORE CONSTRUCTION.

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 1/16/97 | RECORD DRAWING | | | | |
| | | 2/20/96 | ISSUED FOR BID | | | | |
| | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P – Prelim | B – Bids |
| M – Mtl T.O. | C – Const. |
| SCALE: AS SHOWN | |

BOWATER
Great Northern Paper

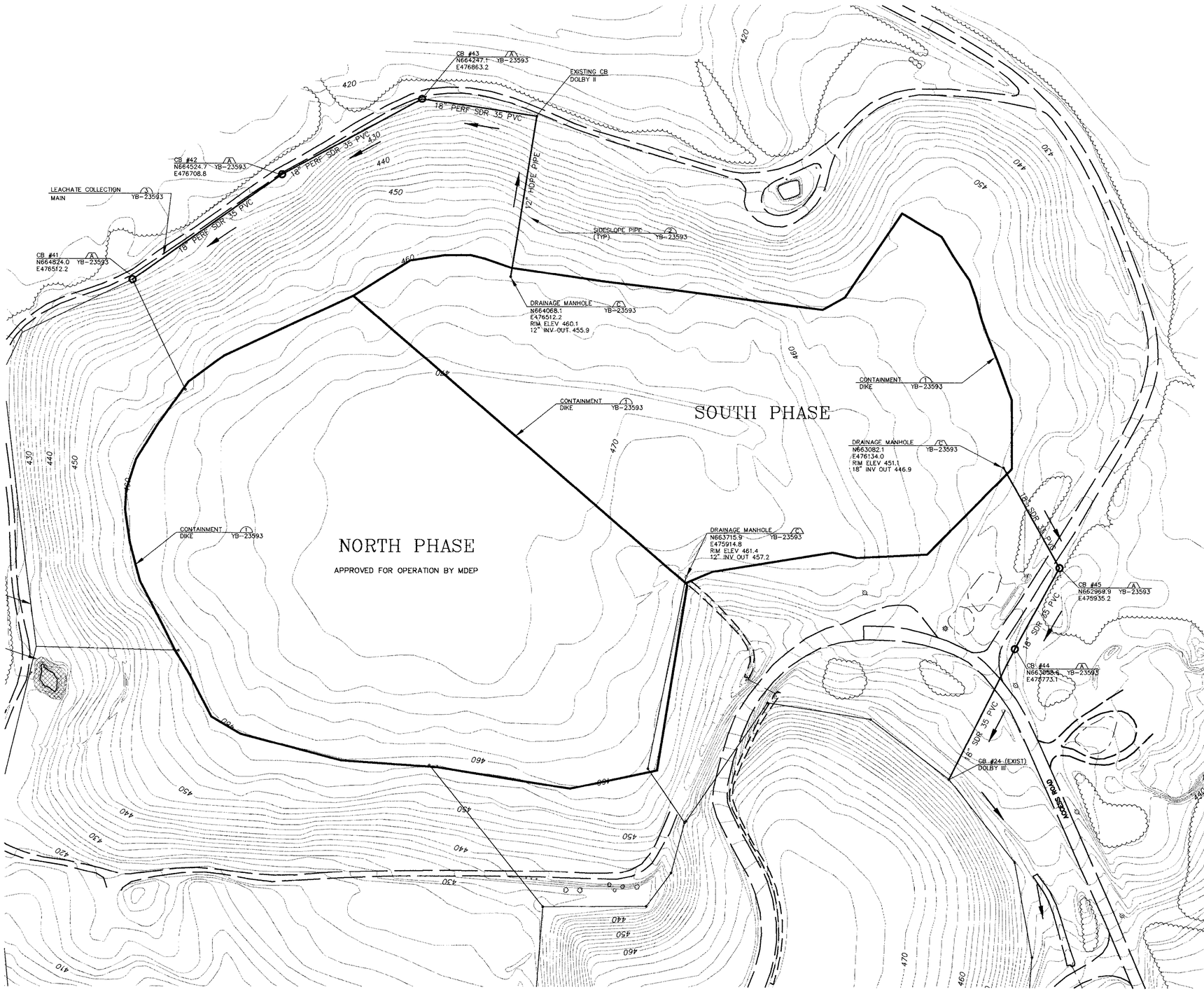
EAST OPERATION

DOLBY II LANDFILL REGRADING
DOLBY II NORTH SITE DEVELOPMENT PLAN

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-23590

D:\GNP\ACAD\A95540 Fri Jan 31 11:14:22 1997




| CATCH BASIN | INVERT IN | INVERT OUT | INVERT IN (12") |
|---|---|---|---|
| CB#31 | 355.6 | 355.5 | |
| CB#32 | 358.6 | 358.5 | |
| CB#33 | 373.1 | 373.0 | |
| CB#34 | 391.1 | 391.0 | |
| CB#35 | 407.1 | 407.0 | |
| CB#36 | 410.4 | 410.3 | |
| CB#37 | 411.9 | 411.8 | 412.3 |
| CB#38 | 413.5 | 413.4 | |
| CB#39 | 414.9 | 414.8 | |
| CB#40 | 415.4 | 415.3 | |
| CB#41 | 416.6 | 416.5 | 417.0 |
| CB#42 | 418.7 | 418.6 | |
| CB#43 | 419.8 | 419.7 | |
| CB#44 | 438.8 | 438.6 | |
| CB#45 | 441.7 | 441.6 | |
| EXISTING CB (DOLBY II) | EXISTING | 421.2 | 421.5 |
| CB#18 (DOLBY III) | 422.2 | 423.2 | 423.7 |
| CB#21 (DOLBY III) | 445.6 | 446.7 | 447.2 |
| CB#24 (DOLBY III) | 430.2 | 431.2 | 431.5 |

STATE OF MAINE
PETER J. MAHER
14107
REGISTERED PROFESSIONAL ENGINEER

BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC.
NORRIDGEWOCK, MAINE – PHOTO DATE 10/23/95.
GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE

STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY CONTRACTOR BEFORE CONSTRUCTION.

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 12/29/97 | RECORD DRAWING | | | | |
| | | | | 3/14/97 | PROJECT STATUS TO MDEP | GHC | | | |
| | | | | 2/20/96 | ISSUED FOR BID | | | | |
| | | | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE: P – Prelim; B – Bids; M – MH T.O.; C – Const.

SCALE AS SHOWN

BOWATER
Great Northern Paper

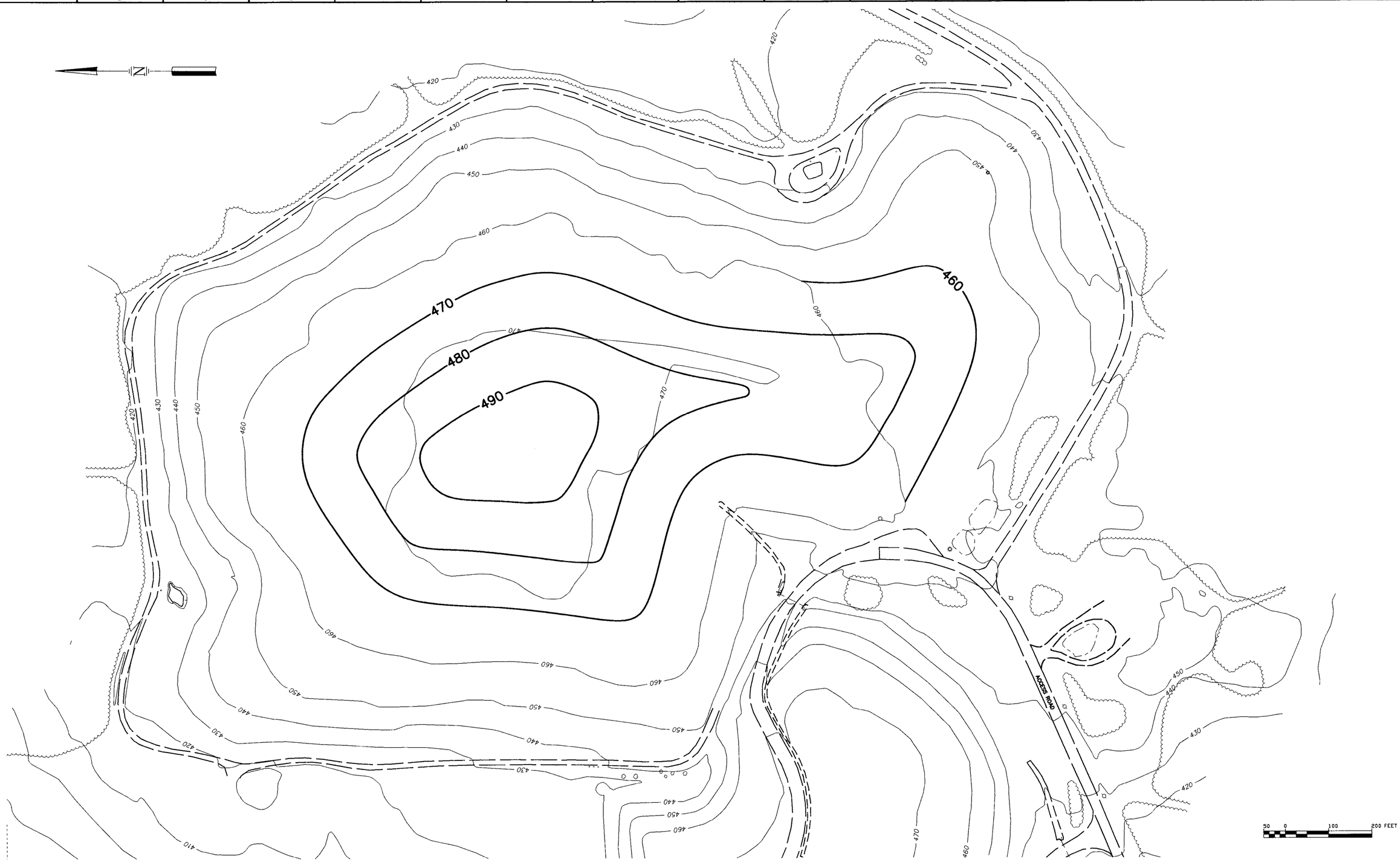
EAST OPERATION

DOLBY II LANDFILL REGRADING
DOLBY II SOUTH SITE DEVELOPMENT PLAN

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

YB-23591

F:\GNP\ACAD\43586-48.DWG Mon Dec 29 11:15:50 1997




STATE OF MAINE
PETER M. MAHER
#4107
REGISTERED
PROFESSIONAL ENGINEER

BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC.
NORRIDGEWOCK, MAINE – PHOTO DATE 10/23/95.
GROUND CONTROL BY PLISGA & DAY, BANGOR, MAINE

STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER SHOULD BE FIELD VERIFIED BY CONTRACTOR BEFORE CONSTRUCTION.

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 2/20/96 | ISSUED FOR BID | | | | |
| | | | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P – Prelim | B – Bids |
| M – Mtl T.O. | C – Const. |
| SCALE AS SHOWN | |

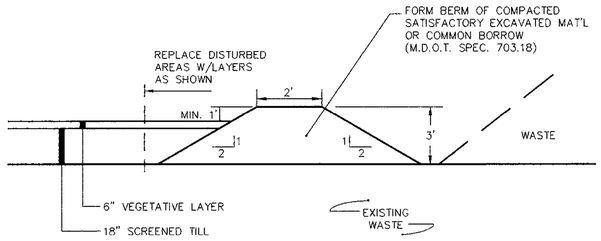
BOWATER
Great Northern Paper

EAST OPERATION

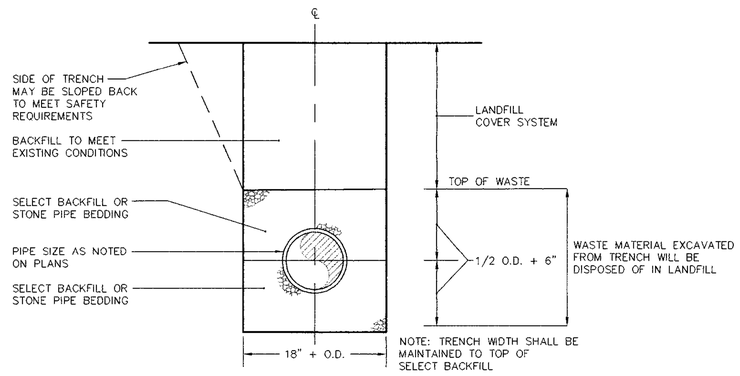
# DOLBY II LANDFILL REGRADING FINAL GRADING PLAN

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

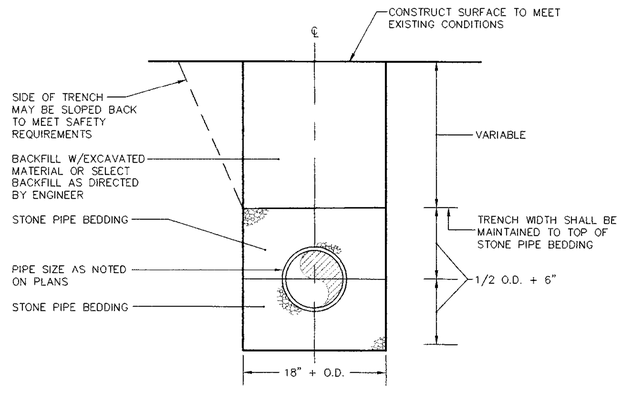
YB-23592



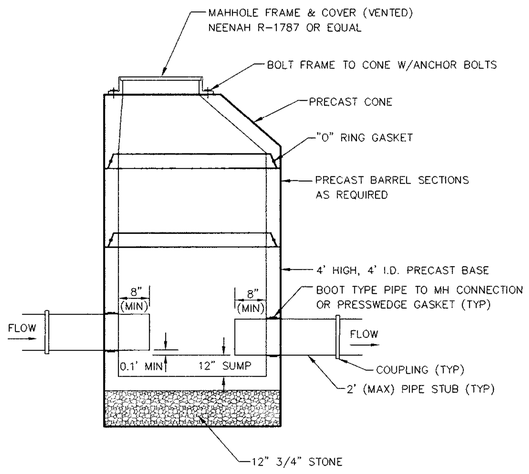

DIKE SECTION 1
NTS
YB-23590
YB-23591



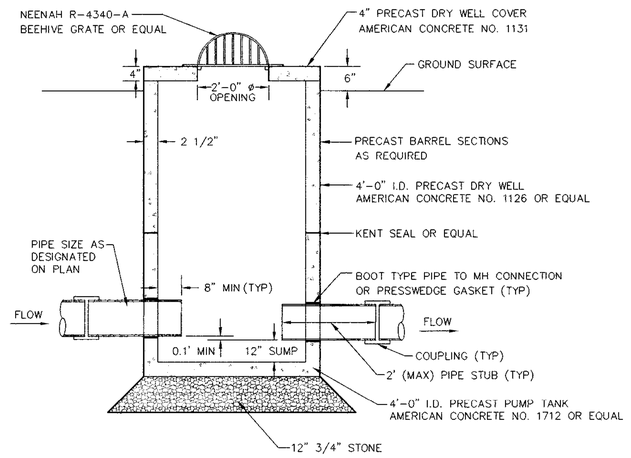

SIDESLOPE PIPE TRENCH 2
NTS
YB-23590
YB-23591



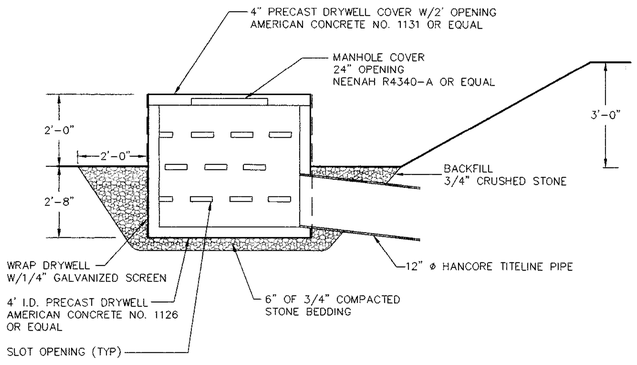

LEACHATE COLLECTION MAIN PIPE TRENCH 3
NTS
YB-23590
YB-23591




TYPICAL MANHOLE A
NTS
YB-23590
YB-23591




CATCH BASIN B
NTS
YB-23590




DRAINAGE MANHOLE C
NTS
YB-23590
YB-23591

STATE OF MAINE — PETER D. MAHER — REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 1/16/97 | RECORD DRAWING | | | | |
| | | | | 2/20/96 | ISSUED FOR BID | | | | |
| | | | | 2/9/96 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95068

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE: P – Prelim; B – Bids; M – Mtl T.O.; C – Const.

SCALE AS SHOWN

BOWATER
Great Northern Paper

EAST OPERATION

DOLBY II LANDFILL REGRADING
SECTIONS & DETAILS

JOB NO. 67996
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

YB-23593

D:\MAP\ACAD\DBII\DBIISD Mon Feb 10 14:03:57 1997

LEGEND

△ TEMPORARY BENCH MARK

APPROXIMATE CONSTRUCTION LIMIT

APPROXIMATE LANDFILL LIMIT

N

MW-202 (A,B)

PROPOSED FINAL GRADE
DOLBY # 2 LANDFILL

TP-319

TP-318

B-33

TP-320

B-32

B-31

TP-9

B-30

MW-201

TP-315

TP-317

DOLBY NO.2

DOLBY NO.3

LANDFILL LIMIT

430 440 450 460 470 420

E 476,000

E 475,500

N 665,000

N 664,000

N 663,500

N 662,500

MATCH LINE

100 50 0 100 200 FEET

| | |
|---|---|
| YB-14634 | TOPOGRAPHIC MAP PROPOSED DOLBY 3 LANDFILL AREA |

E.C. JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02 DWG. NO.

ISSUE CODE
P PRELIM B BIDS
M MYLAR C CONST
SCALE 1"=100'

Great Northern Paper

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
EXISTING TOPOGRAPHY MAP

JOB NO. 2668
ENG. 2-6313
FILE 4-092-7082

YB-14790
SHEET 1 OF 2

MATCH LINE

N665,500 N664,000 N663,500 N663,000 N662,500

E475,000 E474,500 E474,000 E473,500

MW-303(A,B) MW-106(A,B) B-27 B-28 TP-313 MW-105(A,B) TP-316 TP-312 TP-310 TP-306 TP-305 TP-304 B-308(A,B) TP-311 TP-307 B-307(A,B,C) TP-303 LANDFILL LIMIT TP-308 TP-302 B-306(A,B) MW-302(A,B) P-302 TP-309 MW-301 MW-107(A,B) MW-304(A,B,C) B-70 B-69

TEMPORARY BENCH MARK
N 662 34 .239
E 474 48 .296
ELEV. 399.89

LEGEND

- △ TEMPORARY BENCH MARK
- APPROXIMATE CONSTRUCTION LIMIT
- APPROXIMATE LANDFILL LIMIT

NOTES:

1. SEE GENERAL NOTES ON SHEET 1.

NOTE :
PARTRIDGE BROOK FLOWAGE
WATER LEVEL 539.3 MAY 10, 1985

50 0 100 200 FEET

YB-14634 TOPOGRAPHIC MAP PROPOSED DOLBY 3 LANDFILL AREA

E.C. JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02 DWG. NO.

| | | |
|---|---|---|
| DRN | LEDUC | 11/10/83 |
| CKD | MAHER | 12/16/83 |
| CKD | R.S.T. | 12/16/83 |
| CONF | W.E.N. | 12-17-83 |
| APPVD | O.J.L. | 12.19.83 |

ISSUE CODE

| | |
|---|---|
| P. PRELIM | B. BIDS |
| M. MTL.T.O. | C. CONST |

SCALE 1"=100'

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL

EXISTING TOPOGRAPHY MAP

JOB NO. 2668
ENG REQ NO. 2-8313
FILE NO 2-092-7082

YB-14790
SHEET 2 OF 2

NOTES:

1. [illegible]

2. [illegible]

3. [illegible]

4. EXISTING TOPOGRAPHY [illegible]

5. [illegible]

E.C.JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02

DWG. NO.

DSGN B/S&JP

ISSUE CODE

Great Northern Paper

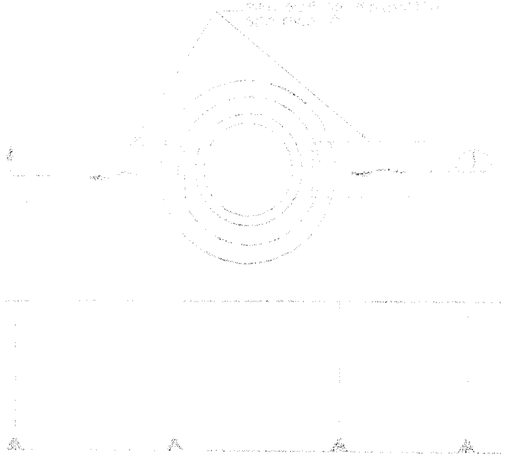
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

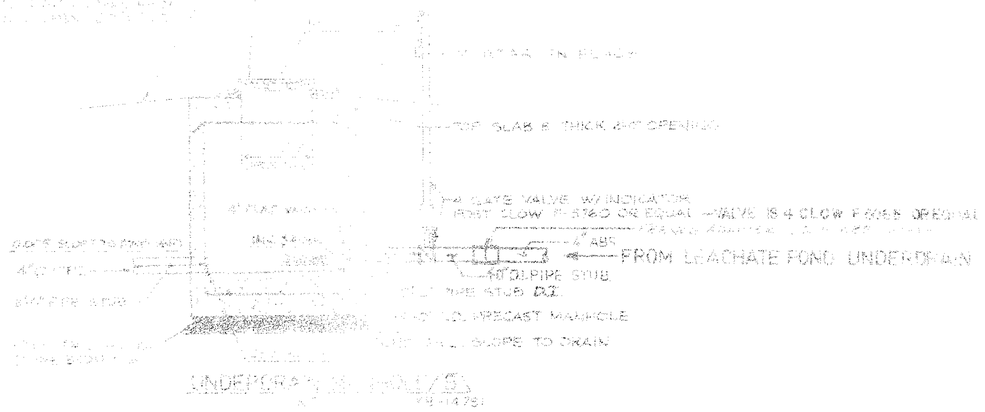
JOB NO. 2666

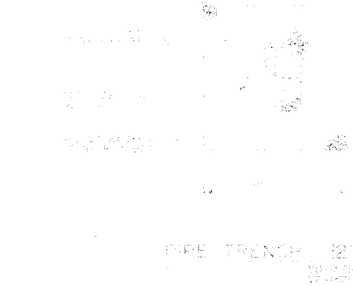
ENG REG NO.

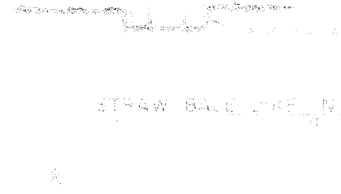
FILE NO.

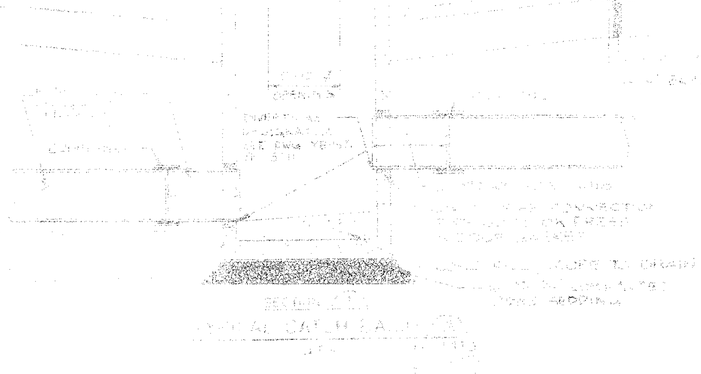
YB-14791

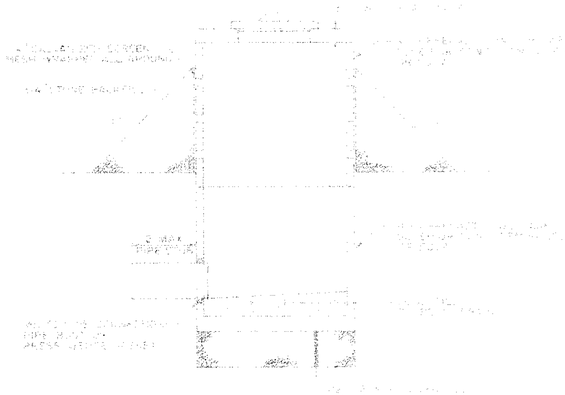






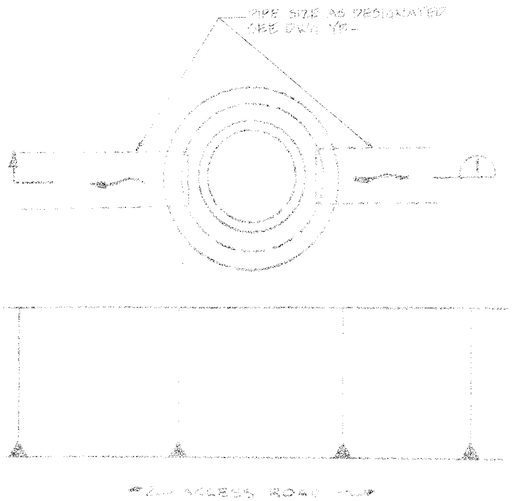


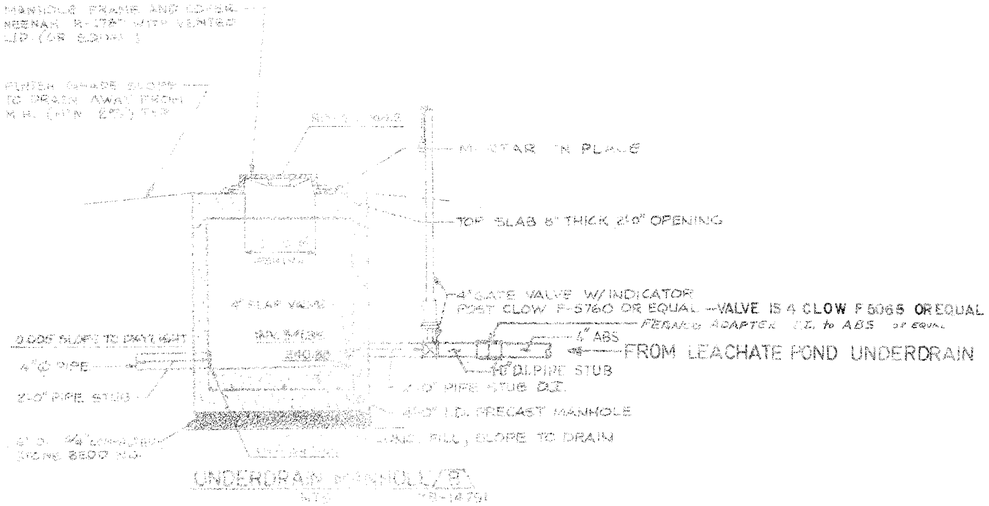


SEWALL & MAHER ENGINEERS, PA
WESTBROOK, MAINE
E.C. JORDAN CO.
CONSULTING ENGINEERS

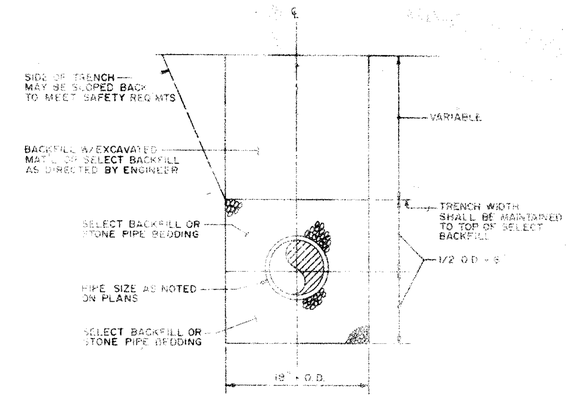
Great Northern Paper
Millinocket, Maine

CENTRAL ENGINEERING DEPARTMENT

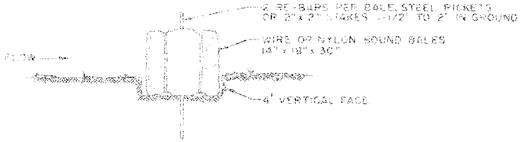



UNDERDRAIN MANHOLE /E
YB-14791

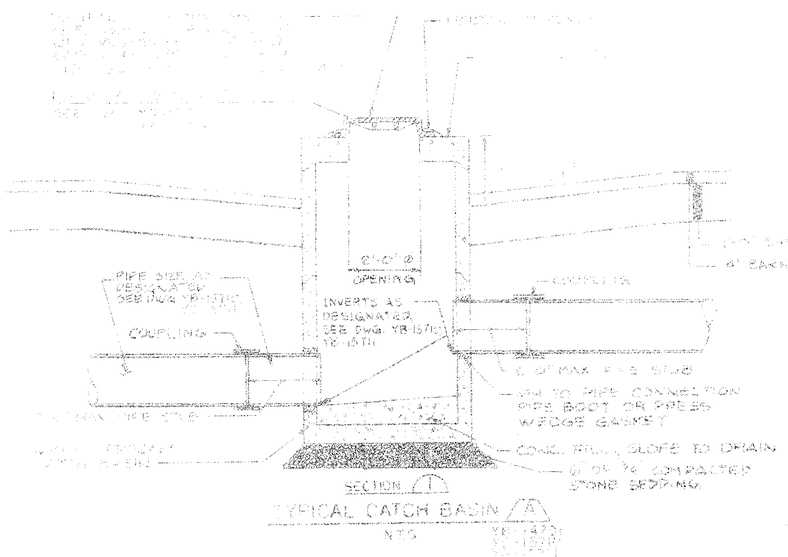



PIPE TRENCH /R
N.T.S. YB-15710 YB-15711



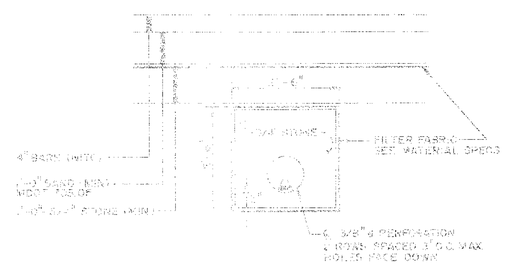

STRAW BALE DIKE /N
N.T.S. YB-15711

PLAN

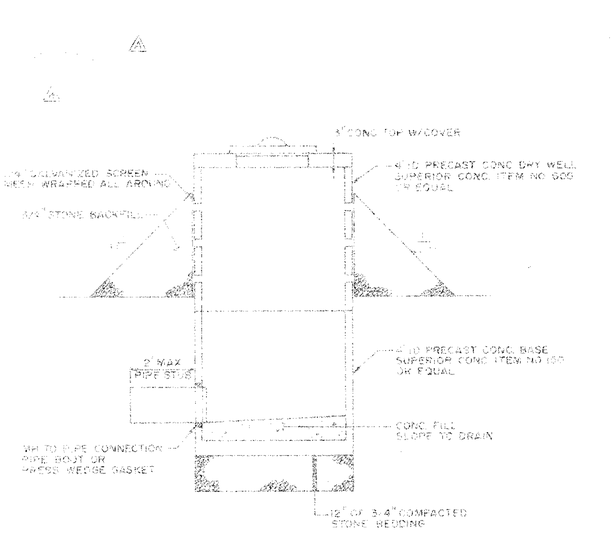



TYPICAL CATCH BASIN /A
N.T.S. YB-14792


TEMPORARY CULVERT CAP /S
N.T.S. YB-14791




AREA DRAIN CELL 2 /T
N.T.S. YB-14792




POND INLET /P
N.T.S. YB-15710

| NO. | REVISIONS | DATE | BY |
|---|---|---|---|
| 2 | ISSUED FOR RECORD DRAWING | 12/97 | JLP |
| 1 | ISSUED FOR APPROVAL AS PER 3 WAY MEETING 6/97 | 7/97 | JLP |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE
E.C. JORDAN CO.
CONSULTING ENGINEERS
JOB NO. 4187-02 DWG. NO.

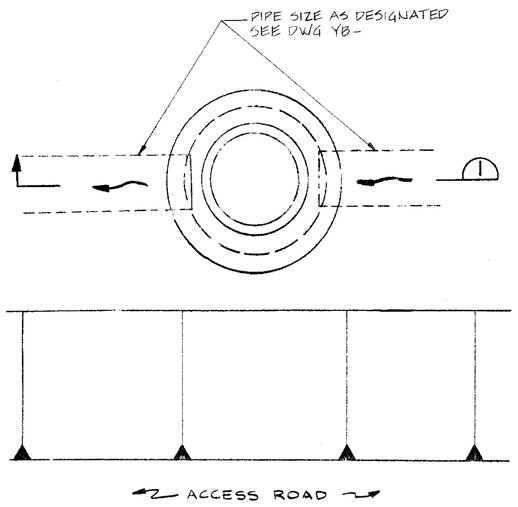
DRAWN JLP 12/97
DES. RJC
DET. JLP
CHK. RJC
APPD. RJC
ISSUE CODE
F - FINAL 12-1997
R - INFO. TO CONST.
SCALE AS NOTED

Great Northern Paper
a company of Great Northern Nekoosa Corporation

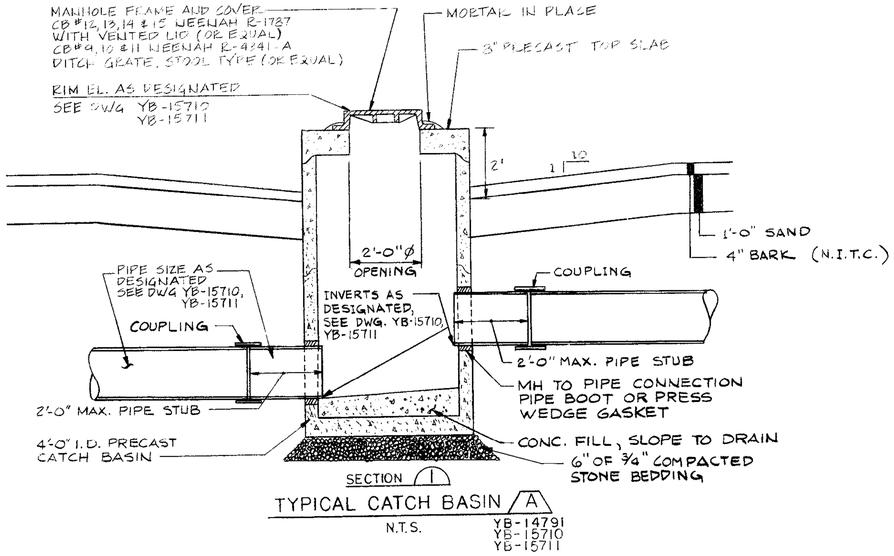
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET, MAINE
DELEY 3 LANDFILL
LANDFILL AREA
DRAINAGE DETAILS

Job No. 2865
Dwg. Rec. No.
File No. 2

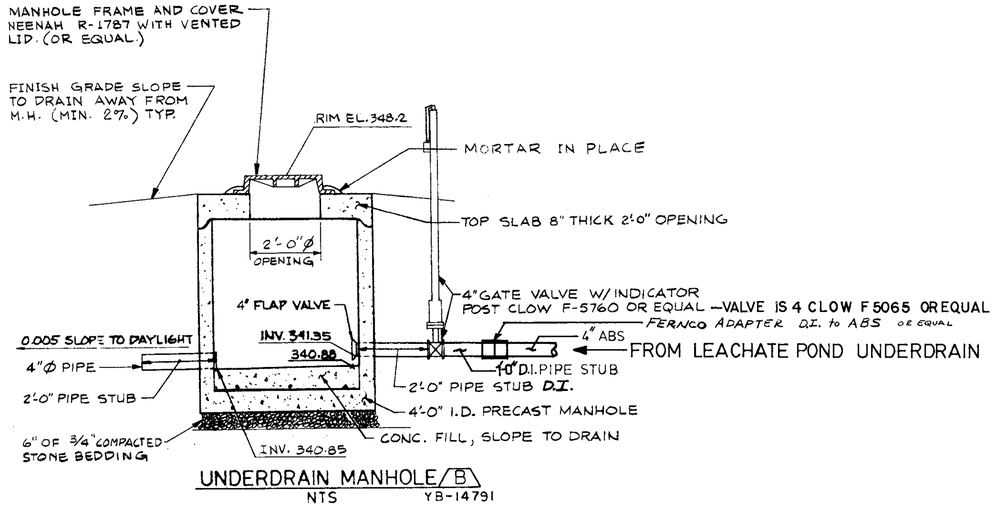
YB-14793-B



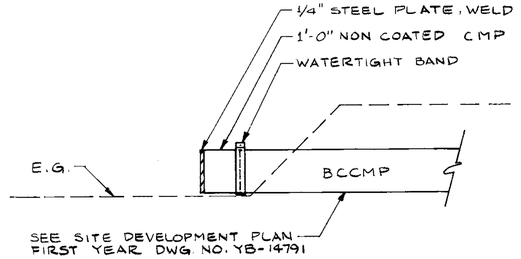

PLAN



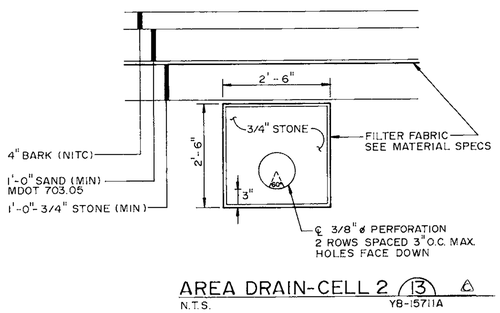

TYPICAL CATCH BASIN A
N.T.S. YB-14791 YB-15710 YB-15711



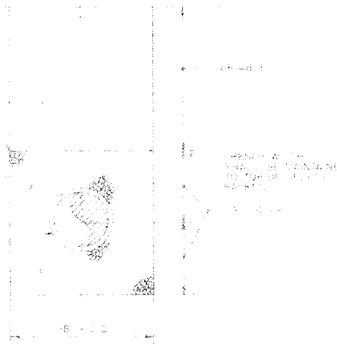

UNDERDRAIN MANHOLE B
NTS YB-14791

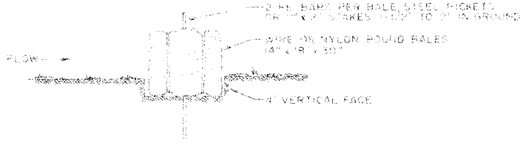



TEMPORARY CULVERT CAP C
N.T.S. YB-14791

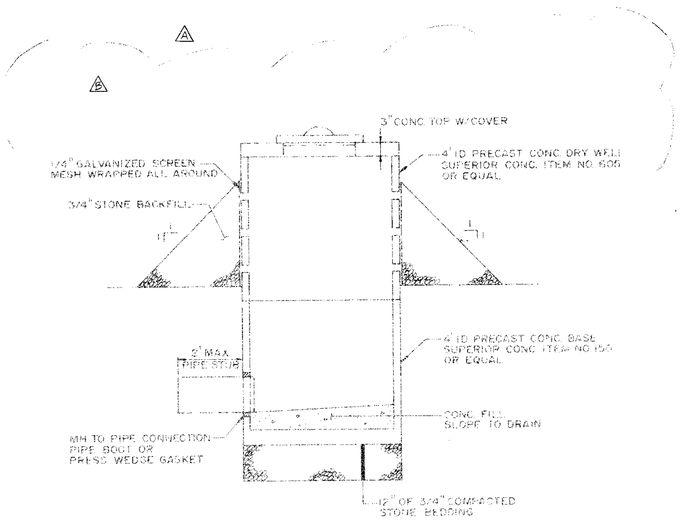



AREA DRAIN-CELL 2 13 Δ
N.T.S. YB-15711A




STRAW BALE DIKE N
N.T.S. YB-15711




POND INLET P
N.T.S. YB-15710

STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER — 4/19/87

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| C | C | 10/20/87 | RECORD DRAWING | MJC | BRS | | 94473 |
| C | B | 7/14/87 | NOT IN THIS CONTRACT | MJC | BRS | | 94473 |
| C | A | 5/26/87 | GENERAL REVISION FOR JOB # 94473 CELL 2 | MJC | ECS | WAN | 94473 |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

E.C. JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02 DWG. NO.

| | |
|---|---|
| DRN MB/RDC | 12/1/83 |
| CKD MAHER | 12/16/83 |
| CKD RSSR | 12/16/83 |
| CORR WAN | 12-17-83 |
| APPVD CJL | 12-19-83 |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL.T.O. | C - CONST |
| SCALE AS NOTED | |

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
LANDFILL AREA
DRAINAGE DETAILS

JOB NO. 2668
ENG. REQ. NO. 2-8313
FILE NO. 2-092-7082

YB-14793-C

# GREAT NORTHERN PAPER CO.
# MILLINOCKET, MAINE

# DOLBY 3 LANDFILL
# CELL 2 CONSTRUCTION

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

DEVEL & MAHER ENGINEERS, P.A.

WESTBROOK, MAINE

E.C. JORDAN CO.

CONSULTING ENGINEERS

JOB NO. 4107-02 | DWG. NO.

| CODE | NO. | DATE | REVISION | BY |
|---|---|---|---|---|
| C | A | 7/14/87 | CONTRACT | |

DRAWING NO. | REFERENCE DRAWING TITLE

6/4/87

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

JOB NO. 8717

| | |
|---|---|
| CHD | 6-4-87 |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL. T.O. | C - CONST |
| SCALE 1" = 100' | |

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
CELL 2
SITE LOCATION PLAN

IOS NO. 94475
ENG. REQ. NO. 2-9518
FILE NO.

YB-15710A
SHEET 1 OF 2

DOLBY II LANDFILL

POND INLET MH #2 N664984.0 E475700.0 YB-14793A
INV. OUT = 413.0
RIM EL. = 420.0

N665110.0
E475660.0

6" ABS 45° BEND N665090.0
E475640.0

CLL 6"

AREA TO BE FINAL COVERED & SEEDED (AS OF APRIL 1987)

CB #15 N665132.0 E475353.0 YB-14793A
INV. IN = 410.3
INV. OUT = 410.2
RIM EL. = 416.0

6" ø ABS PIPE 12 YB-14793A

POND INLET MH #1 N664540.0 E475330.0 YB-14793A
INV. OUT = 414.0
RIM EL. = 422.0

N665160.0
E475330.0

CLL 6"

CLL 6"

N664485.0
E475280.0

CB #14 N664540.0 E4752920 YB-14793A
EAST INV. IN = 413.0
NORTH INV. IN = 409.1
INV. OUT = 409.0
RIM EL. = 420.5

N664552.0
E475270.0

CLL 6"

CLL

MATCH LINE SHEET 1

| DRAWING NO | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB NO. |
|---|---|---|---|---|---|---|---|
| C | A | 7/16/87 | NOT IN THIS CONTRACT | | | | |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

JOB NO. 8717

| | | |
|---|---|---|
| DRN | PAT | 6/87 |
| CKD | MHC | 6/87 |
| CKD | ECS | 6/87 |
| CORR | WAN | 6/87 |
| APPVD | | |

ISSUE CODE
P - PRELIM | B - BIDS
M - MTLY. O.A. | C - CONST
SCALE 1" = 100'

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
CELL 2
SITE LOCATION PLAN

JOB NO. 94473
ENG. REQ. NO. 2-6516
FILE NO. 2-092-4703, 7082

YB-15710 A
SHEET 2 OF 2

12"ø SOLID PVC PIPE (12) YB-14793A

CORNER OF DIKE N664046.0 E474531.0

DIKE AND DRAINAGE DIVERSION DITCH SEE DWG. YB-14794B FOR TYPICAL SECTION

PIPE STUB W/TEMP CAP

380

200' MAX.

STRAW BALE DIKE (N) (TYPICAL) YB-14793A

10:1 SLOPE TO EXIST. GRADE

CORNER OF DIKE N663023.0 E474662.0

PIPE STUB W/TEMP CAP

CB #11 (A) N664032.5 E474520.6
INV. IN=365.5
2" INV. IN = 369.7
6" INV. OUT = 368.7
INV. OUT = 365.9
RIM ELEV. = 372.2
YB-14793A

RIP-RAP DITCH

30' TO ℄ OF DITCH

PIPE CAP (TYPICAL)

GRUB CELL 2 AND PROVIDE BASAL DRAINAGE BLANKET

6"ø ABS LEACHATE(Perf.) (9) COLLECTION PIPE YB-14795A

12"ø SOLID PVC LEACHATE (12) COLLECTION MAIN YB-14793A

12"ø PERF PVC LEACHATE (11) COLLECTION MAIN YB-14795A

BRANCH CONNECTION (TYPICAL) (M) YB-14796A

90' (TYPICAL)

2"ø PE LEACHATE(Perf.) (9) COLLECTION PIPES YB-14796A

CB #9 (A) N663016.0 E474370.0
2" INV.=381.3
INV. IN = 378.7
INV.OUT=378.1
RIM ELEV.=385.6

REMOVE 18" PLUG INSTALL 18"x12" C.I. REDUCER

AREA DRAIN (13) 8'x 30' YB-14793B

CB #1
INV. IN = 356.6
INV. OUT = 356.39
6" INV. IN = 356.5
RIM ELEV. = 362.08

8"-45° C.I. BEND

CB #8
INV. IN = 375.60
INV. OUT = 375.13
RIM ELEV. = 386.80

℄ OF DIKE N664055.0 E474223.0

℄ ACCESS ROAD N662995.0 EL 402.0 E474670.0

CB #10 (A) N663031.0 E474652.0
INV. IN=392.8
INV. OUT = 392.5
RIM ELEV.= 399.0
YB-14793A

LANDFILL ACCESS ROAD, S= 4.5% SEE DWG YB-14794B FOR TYPICAL SECTION

12"ø BCCMP N662980.0 E474371.5
INV. IN = 385.0
INV. OUT = 384.5

℄ ACCESS ROAD N662980.0 EL 388.0 E474360.0

REMOVE 18" PLUG

CB #2
INV. IN = 350.85
INV. IN W/CAP = 350.88
INV. OUT = 350.48

CB #3
INV. IN (NORTH) = 348.58
INV. IN (SOUTH) = 348.34
INV. OUT = 345.36

CB #4
INV. IN 6" = 352.73
INV. IN 18" = 349.44
INV. OUT = 349.23

CB #5
INV. IN = 361.91
INV. OUT = 354.10

CB #6
INV. IN = 368.10
INV. OUT = 362.18

CB #7
INV. IN = 371.18
INV. OUT = 370.96

CELL 1 (EXISTING)

LEACHATE COLLECTION POND

24" GATE VALVE

BENCH MARK N663871.735
BRASS PLUG EL. 356.99 E473715.959

WET WELL & PUMP STATION

RETENTION POND

ACCESS ROAD

LANDFILL ACCESS ROAD

MAIN

CLL

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CHD | APPRD | JOB NO. |
|---|---|---|---|---|---|---|---|---|---|
| YB-15283 | DOLBY 3 LANDFILL AREA TOPOGRAPHIC SURVEY & DIGITIZATION AS OF 12-5-85 | C | | 6/14/87 | RECORD DRAWING | MHC | | | |
| | | C | A | 7/16/87 | NOT IN THIS CONTRACT | MHC | | | |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

JOB NO. 8717

| | | |
|---|---|---|
| DRN. | PAF | 6-4-87 |
| CHD. | MHC | 6-4-87 |
| DES. | BCS | 6-3-87 |
| CORR. | MAN | 6-3-87 |
| APPVD. | | |

ISSUE CODE

| | |
|---|---|
| P - PRELIM | B - BIDS |
| M - MYLT.O.S. | C - CONST. |

SCALE 1" = 50'

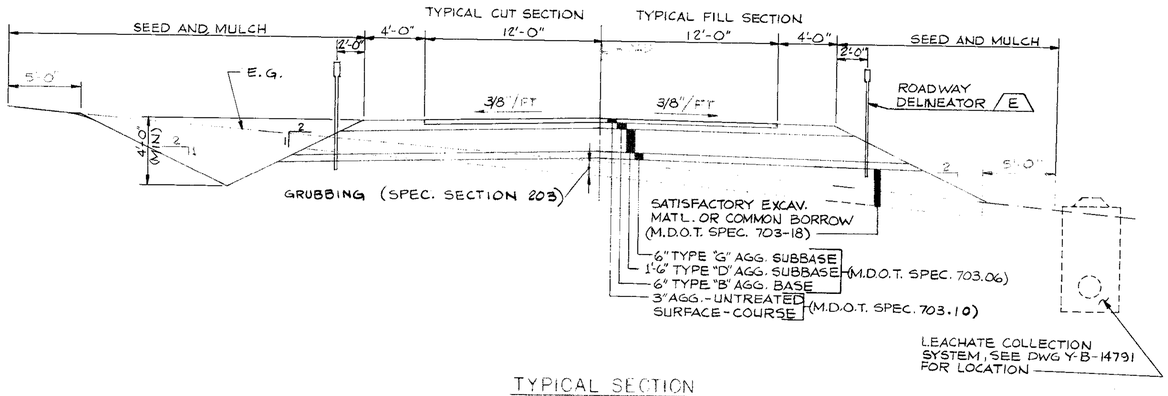
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

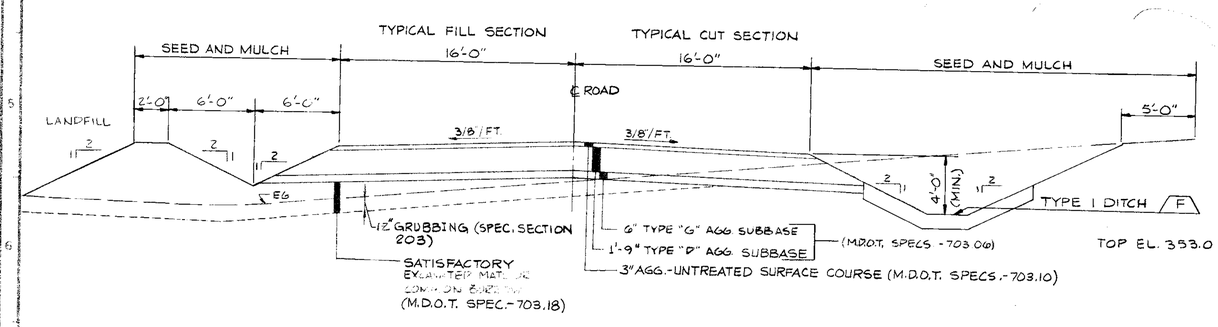
DOLBY 3 LANDFILL
SITE DEVELOPMENT PLAN
CELL 2

JOB NO. 84473
ENG. REQ. NO. 2-8516
FILE NO. 2-092-7088

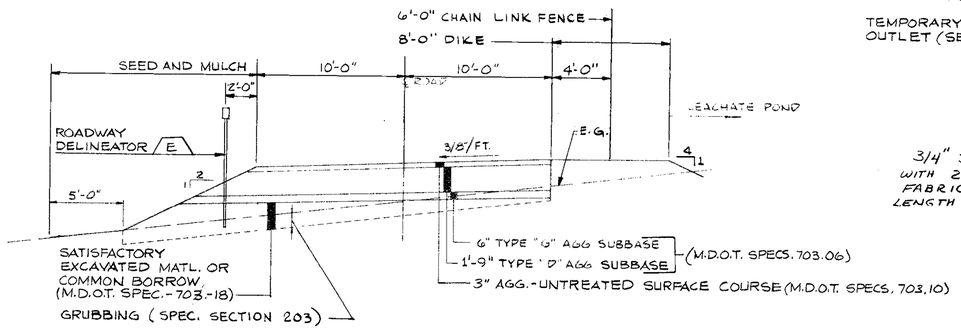
YB-15711A



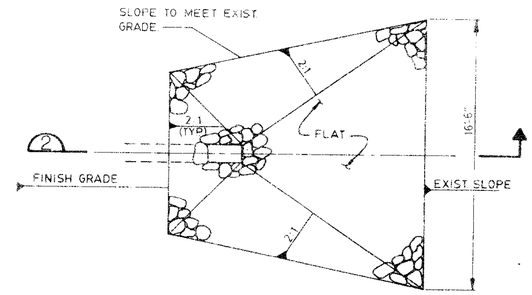

TYPICAL SECTION
MAIN ACCESS ROAD
N.T.S.



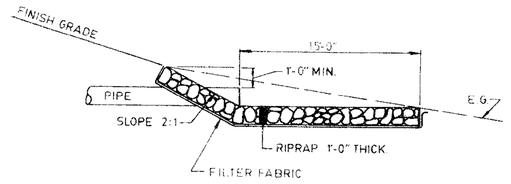

TYPICAL SECTION
LANDFILL ACCESS ROAD
N.T.S.




TYPICAL SECTION
LEACHATE POND ACCESS ROAD
N.T.S.

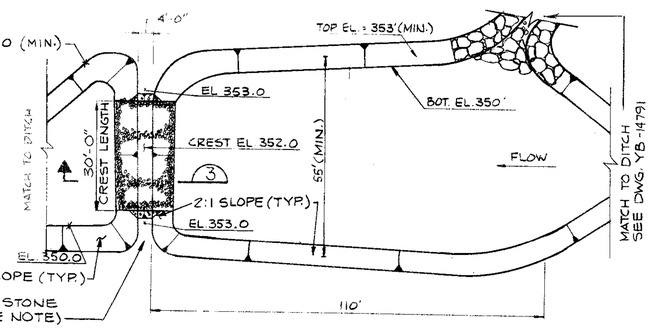



PLAN

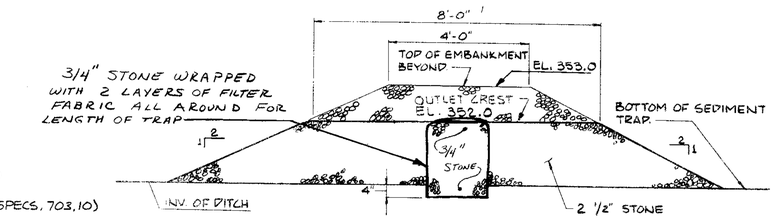



SECTION (2)

RIPRAP APRON (C)
NTS YB-14791

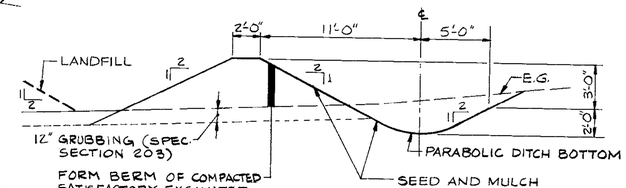



PLAN

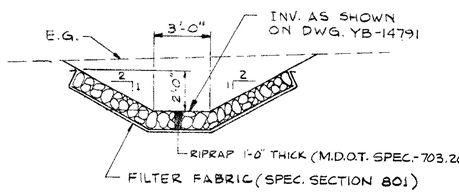



SECTION (3)

STONE OUTLET SEDIMENT TRAP (D)
NTS YB-14791




TYPICAL SECTION
DIKE AND TYPE 2 DRAINAGE DITCH
SCALE: 1"= 5'




TYPE I DITCH (F)
N.T.S. YB-14791
YB-15711

NOTE: STONE OUTLET TO BECOME PERMANENT FIXTURE. ACCUMULATED SEDIMENT TO BE REMOVED AND PLACED IN LANDFILL WHEN CONSTRUCTION COMPLETE AND TRIBUTARY AREA IS STABILIZED WITH VEGETATION, GRAVEL SURFACE OR RIPRAP. AREA TO BE SEEDED AND MULCHED WHEN CONSTRUCTION COMPLETE.

STATE OF MAINE — JOHN L. DOLBY JR. — REGISTERED PROFESSIONAL ENGINEER — 6/1/87

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| C | B | 5/24/87 | GENERAL REVISION FOR JOB #94473 CELL 2 | MJC | ECS | WAN | 94473 |
| C | A | 10/5/84 | NOTES & 3/4" STONE AND FILTER FABRIC | RS JR | | WAN | 2668 |

DRAWING NO. — REFERENCE DRAWING TITLE

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

E.C. JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02 — DWG. NO.

| | |
|---|---|
| DRN LEDOC | 10/12/83 |
| CKD MAHER | 12/14/83 |
| CKD RS JR | 12/16/83 |
| CORR WAN | 12/17/83 |
| APPVD OJL | 12-19-83 |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MYLT O.J. | C - CONST |
| SCALE NOTED | |

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

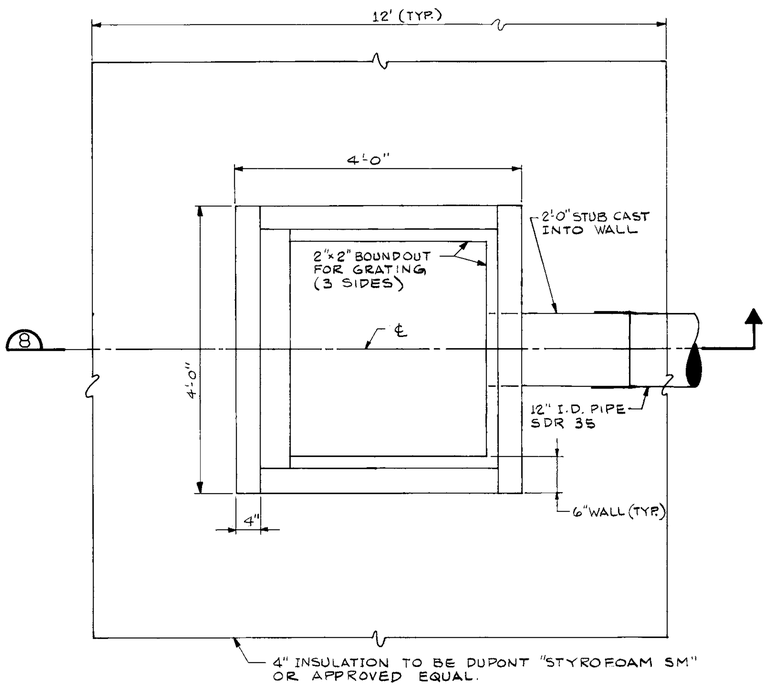
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
ACCESS ROAD
TYPICAL SECTIONS & DETAILS

JOB NO. 2668
ENG. REQ. NO. E-E313
FILE NO 2-032-7082

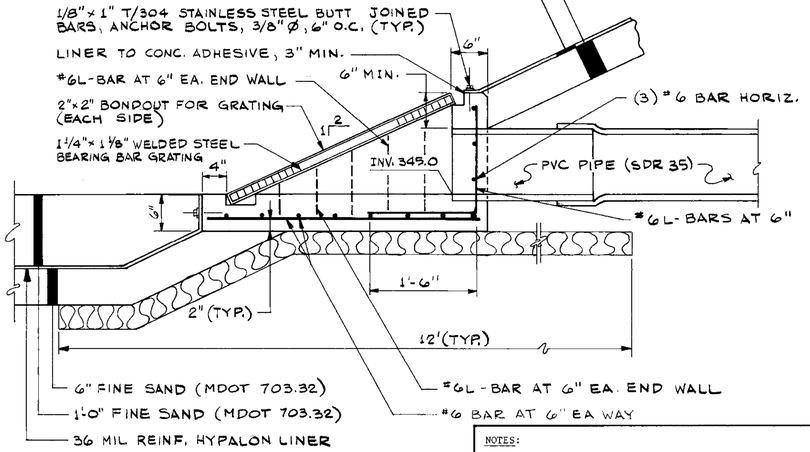
YB-14794-B

SEVEE & MAHER ENGINEERS, PA

E.C. JORDANCO
CONSULTING ENGINEERS




PLAN



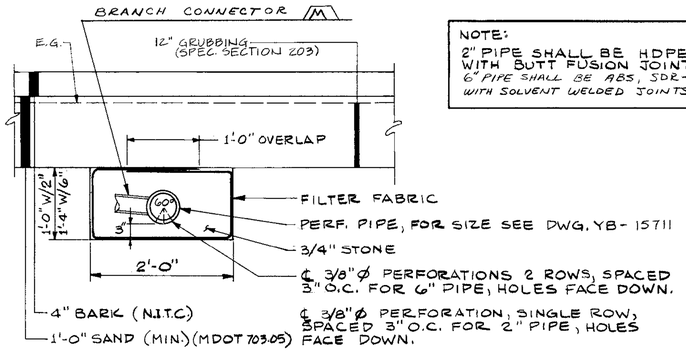

SECTION (8)

NOTES:

1. PENETRATIONS SHALL BE SEALED PER THE MANUFACTURER'S RECOMMENDATION.
2. CONTACT BOND OF LINER TO ALL CONCRETE SURFACES SHALL BE PER THE LINER MANUFACTURER'S APPROVED BONDING METHODS.

## OUTLET STRUCTURE (TYP.) (K)

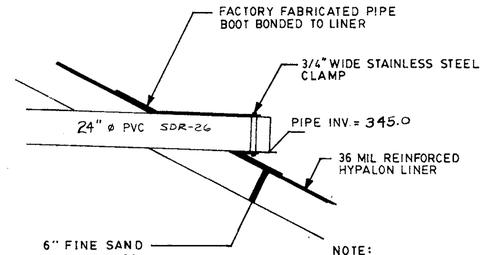
SCALE: 1"= 1'-0" YB-14791




NOTE:
2" PIPE SHALL BE HDPE, SDR-17 WITH BUTT FUSION JOINTS.
6" PIPE SHALL BE ABS, SDR-23.5 WITH SOLVENT WELDED JOINTS.

## 2-IN. 6-IN. LEACHATE COLLECTION PIPES (9)

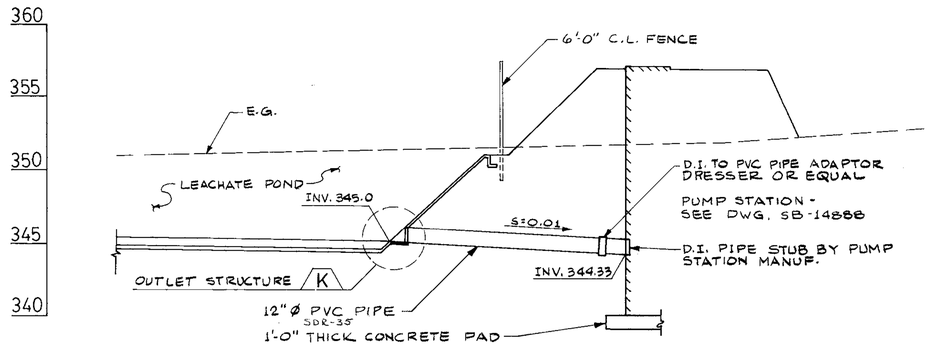
SCALE: 1"= 1'-0" YB-14791 YB-15711




NOTE:
PIPE PENETRATIONS SHALL BE SEALED PER THE LINER MANUFACTURES RECOMMENDED METHODS

## POND INLET AND PIPE BOOT (L)

N.T.S. YB-14791




NOTES:

| | | |
|---|---|---|
| 2" PIPE | HDPE | SDR-17 W/BUTT FUSION JOINTS |
| 4" PIPE | ABS | SDR-23.5 W/SOLVENT JOINTS |
| 6" PIPE | ABS | SDR-23.5 W/SOLVENT JOINTS (A) |
| 12" PIPE | PVC | SDR-35 |
| 18" PIPE | PVC | SDR-26 (A) |
| 24" PIPE | PVC | SDR-26 |

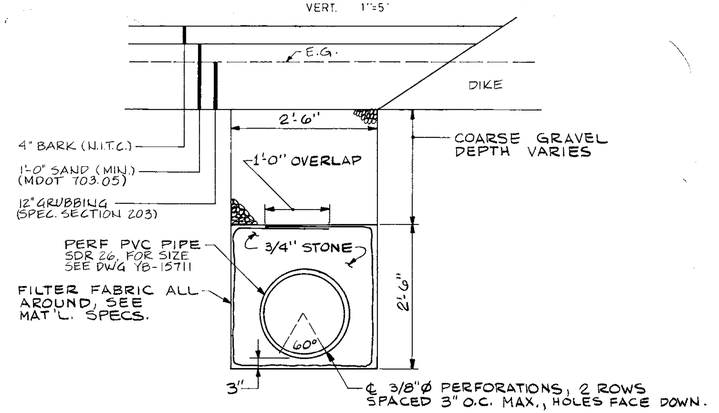
GATE VALVES - CLOW F5065 MECH. JOINT, NON RISING STEM FOR 4" & 24" PIPE OR EQUAL

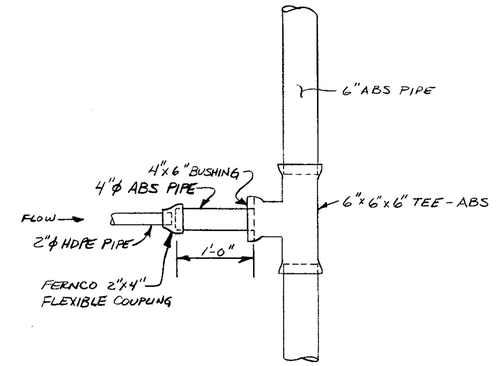
INDICATOR POST - CLOW F5760 OR EQUAL

12" PIPE PVC SDR-26 (A)

## PUMP STATION AND INLET PIPE (10)

SCALE: HORIZ. 1"=20' VERT. 1"=5' YB-14791




BRANCH CONNECTOR (M)

N.T.S. YB-15711

## PERF. LEACHATE COLLECTION MAIN (11)

YB-14791 YB-15711

STATE OF MAINE — JOHN E. MAHER — REGISTERED ENGINEER — 6/14/87

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| C | A | 5/26/87 | GENERAL REVISION FOR JOB # 94473 CELL 2 | RHC | ECS | WBN | 94473 |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE

E.C. JORDAN CO.
CONSULTING ENGINEERS

JOB NO. 4187-02 DWG. NO.

| | | |
|---|---|---|
| DRN | D.E.D. | 11/22/83 |
| CKD | MAHER | 12/16/83 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P-PRELIM | B-BIDS | M-MTL.T.O. | C-CONST

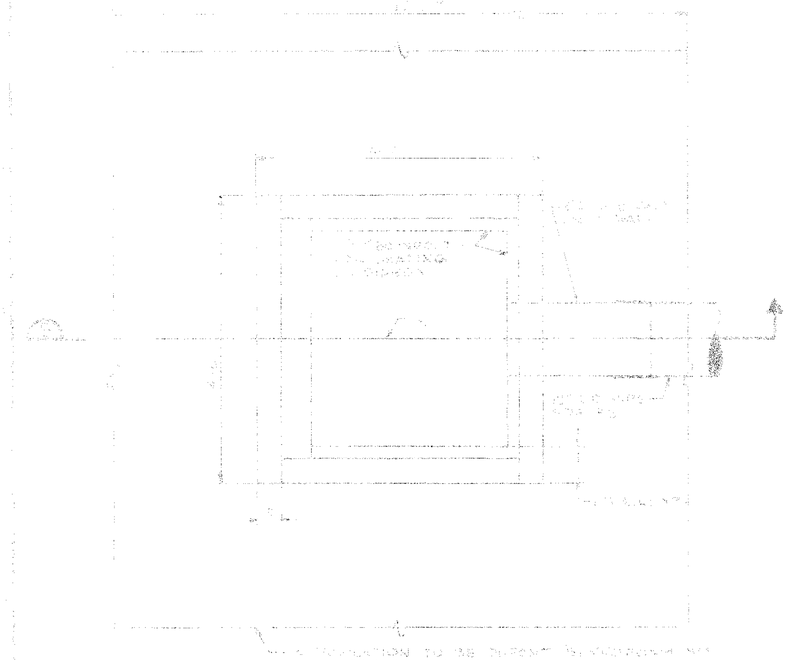
SCALE NOTED

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

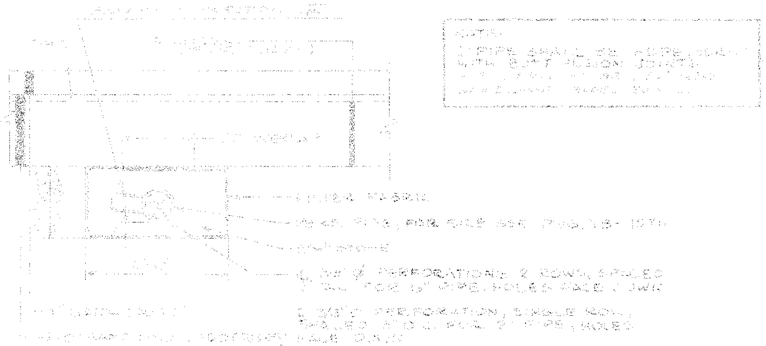
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY 3 LANDFILL
SITE DEVELOPMENT
DETAILS

JOB NO. 2668
ENG. REQ. NO. 2-8313
FILE NO. 2-0927082

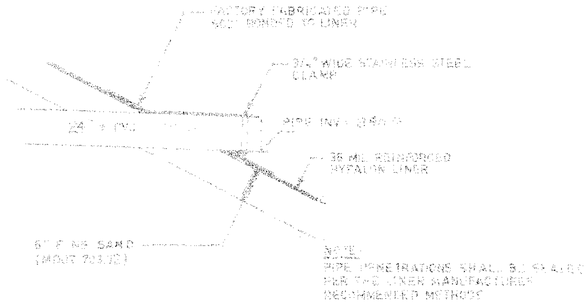
YB-14796-A



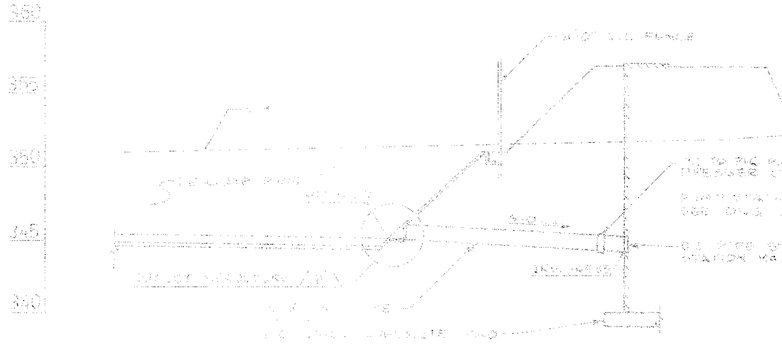
PLAN

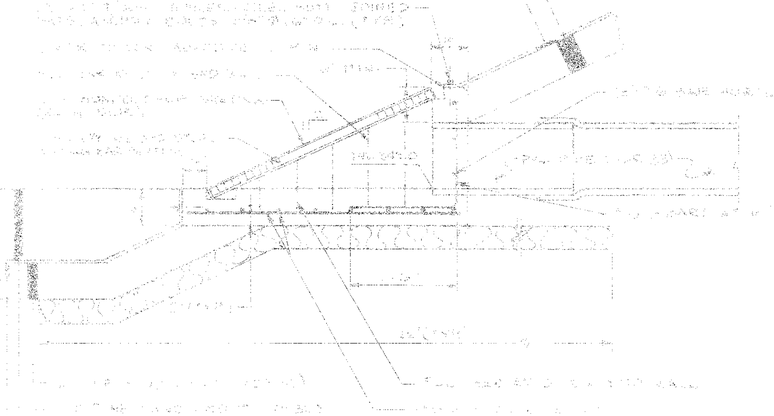


2 IN. DIA. LEACHATE COLLECTION PIPES (9)

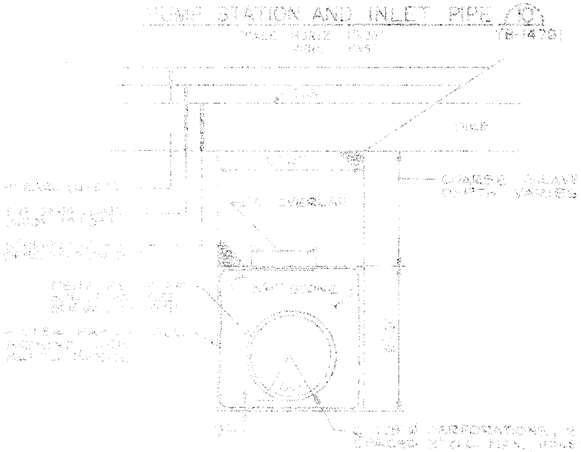


POND INLET AND PIPE BOOT (7)

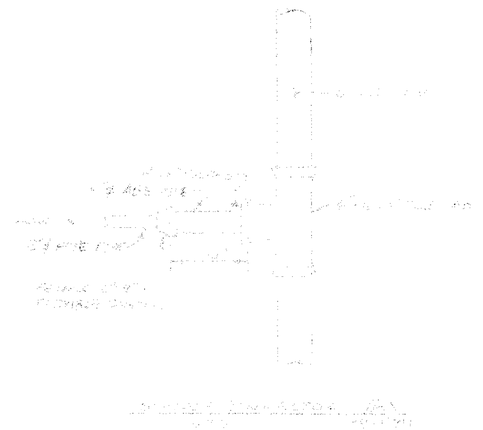




OUTLET STRUCTURE (TYP.) (6)



GAS LEACHATE COLLECTION MAIN (1)



| | | | |
|---|---|---|---|
| | | | |

SEVEE & MAHER ENGINEERS, PA
WESTBROOK, MAINE
E.C. JORDAN CO.
CONSULTING ENGINEERS

Great Northern Paper
Maine

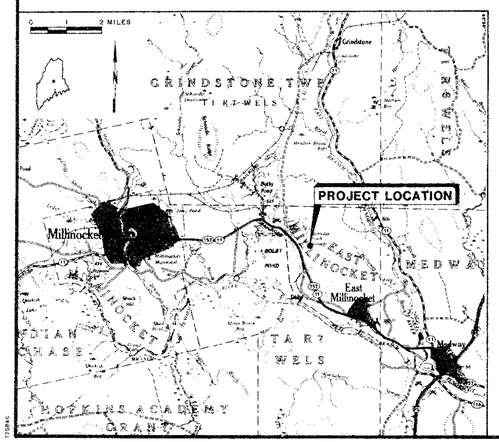
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET, MAINE
LANDFILL EXPANSION
SITE DEVELOPMENT
DETAILS

# GREAT NORTHERN PAPER CO.
# MILLINOCKET, MAINE

# DOLBY 3 LANDFILL
# CELL 3 CONSTRUCTION

**RECORD DRAWINGS**

| TITLE | DWG. NO. |
|---|---|
| COVER SHEET | YB-15911 |
| DOLBY 3 LANDFILL SYMBOLS & ABBREVIATIONS | YB-15912 |
| DOLBY 3 LANDFILL SITE LOCATION PLAN | YB-15913 |
| DOLBY 3 LANDFILL SITE DEVELOPMENT PLAN | YB-15914 |
| DOLBY 3 LANDFILL SECTIONS & DETAILS | YB-15915 |




SEVEE & MAHER ENGINEERS, INC.
WESTBROOK, MAINE

1988

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY 3 LANDFILL
CELLS 3A AND 3B
COVER SHEET

JOB NO.
ENG. REQ. NO. 2-8627
FILE NO. 2-092-4703.7082

YB-15911

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | STONE WALL | TP-103 | TP-103 | TEST PIT & NUMBER |
| | | NORTH ARROW (MAGNETIC) | | | DRAINAGE COURSES W/DIRECTION & DITCH | | | CLEAN OUT STRUCTURES |
| | | NORTH ARROW (PLAN NORTH) | SHORE SIDE | | EDGE OF WATER | | | MANHOLE |
| 25 | 25 | CONTOUR LINES | | | WATER ELEVATION (GROUND OR SURFACE) | | | WATER VALVE |
| 25.63 | 25.56 | SPOT ELEVATION (GRADE) | | | ROCK OUTCROP OR LEDGE | | | HYDRANT |
| E.G. | | EXISTING GROUND (PROFILES & SECTIONS) | | | FENCE LINE (WOOD) | | | TELEPHONE OR POWER POLE |
| S.B. | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT | | | FENCE LINE (WIRE) | | | CATCH BASIN |
| 0+00 | 1+00 | CONSTRUCTION BASELINE | (STONE) | (CONC) FACE | RETAINING WALL (TYPE) | G | 8" G | UNDERGROUND GAS MAIN & SIZE |
| P.L. | | PROPERTY OR DEED LINE (NOT SURVEYED) | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE CABLE/CONDUIT |
| 525.14' N35°-10'-41"E | 525.14' N35°-10'-41"E | PROPERTY LINE W/BEARING & DISTANCE | | | BUILDING & STRUCTURES | E | E | UNDERGROUND ELECTRIC CABLE/CONDUIT |
| | | ROADS, EASEMENTS OR RIGHT OF WAY LINE | | | STEPS W/TYPE (WOOD/CONCRETE) | OE | OE | OVERHEAD ELECTRICAL LINE |
| | | BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY) | | 1' C. OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | | 12"ACP | SANITARY SEWER, SIZE & TYPE |
| MON. | MON. | SURVEY MONUMENT | | TOP OF SLOPE | SLOPES (W/SLOPE RATIO) | | 8" PVC | FORCE MAIN, SIZE & TYPE |
| I.F. | I.F. | SURVEY IRON (FOUND) | | | EDGE OF TRAVELED WAY (TYPE) | | 8" DI | WATER MAIN, SIZE & TYPE |
| D.H. PK. STK. | D.H. PK. STK. | DRILL HOLE, PK OR STAKE | C | F | CUT OR FILL LINE | | 12" RCP | STORM DRAIN, SIZE & TYPE |
| | | WOODS OR BRUSH LINE | CLL | | CONSTRUCTION LIMIT LINE | UD | 8" PVC UD | UNDERDRAIN, SIZE & TYPE |
| | | INDIVIDUAL TREE (DECIDUOUS) | | | BITUMINOUS PAVEMENT | | 12" BCCMP | CULVERT, SIZE & TYPE |
| | | INDIVIDUAL TREE (CONIFEROUS) | | | GRAVEL ROAD | | | RAILROAD |
| | | TREE, TO BE REMOVED | | | CONCRETE | S | S | SILTATION FENCE |
| | | MARSH AREA | B-12 MW-2 P-20 | B-12 MW-2 P-20 | TEST BORING, MONITORING WELL OR PROBE & NUMBER | | | |
| | | | | | | | | |

PIPE SCHEDULE

2" HDPE SHALL BE SDR 17 WITH BUTT FUSED JOINTS.

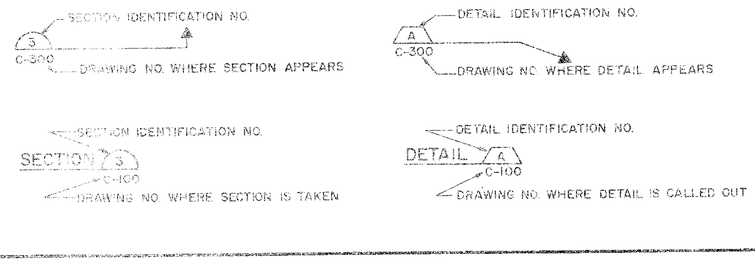
6" PVC SHALL BE SDR 21 WITH PUSH-ON JOINTS.

12" PVC SHALL BE SDR 26 WITH PUSH-ON JOINTS.

# ABBREVIATIONS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A.C.C.M.P. | ASPHALT COATED C.M.P. | CONC | CONCRETE | FPS | FEET PER SECOND | NO | NUMBER |
| A.C.P. | ASBESTOS CEMENT PIPE | CONST | CONSTRUCTION | FT OR ' | FEET | O.C. | ON CENTER |
| AC | ACRE | CONTR | CONTRACTOR | FTG | FOOTING | O.D. | OUTSIDE DIAMETER |
| AGG. | AGGREGATE | CTR | CENTER | GA. | GAUGE | P.C. | POINT OF CURVE |
| ALUM | ALUMINUM | CY | CUBIC YARD | GAL | GALLON | P.I. | POINT OF INTERSECTION |
| APPD | APPROVED | D | DEGREE OF CURVE (ARC DEF.) | GALV | GALVANIZED | P.T. | POINT OF TANGENT |
| APPROX | APPROXIMATE | DBL | DOUBLE | GPD | GALLONS PER DAY | PERF | PERFORATED |
| ASB | ASBESTOS | DEG OR ° | DEGREE | GPM | GALLONS PER MINUTE | PSI | POUNDS PER SQUARE INCH |
| ASPH | ASPHALT | DEPT | DEPARTMENT | HDPE | HIGH DENSITY POLYETHYLENE | PVC | POLYVINYL CHLORIDE |
| ATP C.M.P. | ALUMINUM TYPE 2 C.M.P. | DI | DUCTILE IRON | HP | HORSEPOWER | PVMT | PAVEMENT |
| AUTO | AUTOMATIC | DIA OR Ø | DIAMETER | HYD | HYDRANT | QTY | QUANTITY |
| AUX | AUXILIARY | DIM | DIMENSION | I.D. | INSIDE DIAMETER | R.O.W. | RIGHT OF WAY |
| AVE | AVENUE | DIST | DISTANCE | IN OR " | INCHES | RAD | RADIUS |
| AVG | AVERAGE | DR | DOWN | INVERT | INVERT | REQ'D | REQUIRED |
| AZ | AZIMUTH | DR | DRAIN | INV. EL. | INVERT ELEVATION | RT | RIGHT |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | DRG | DRAWING | LB | POUND | RTE | ROUTE |
| B.M. | BENCH MARK | EA | EACH | LIN. FT. | LINEAR FEET | S | SLOPE |
| BIT | BITUMINOUS | EG | EXISTING GROUND | LOC | LOCATION | SCH | SCHEDULE |
| BLDG | BUILDING | ELEC | ELECTRIC | LT | LEFT | SF | SQUARE FEET |
| BOT | BOTTOM | ELL | ELBOW | MH | MANHOLE | SHT | SHEET |
| BRG | BEARING | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT | STA | STATION |
| C.B. | CATCH BASIN | EST | ESTIMATED | MATL | MATERIAL | SY | SQUARE YARD |
| C.M.P. | CORRUGATED METAL PIPE | EXC | EXCAVATE | MAX. | MAXIMUM | TAN | TANGENT |
| C.O. | CLEAN OUT | EXIST | EXISTING | MFR | MANUFACTURER | TOB | TOP OF ORGANIC MAT |
| CEM. LIN. | CEMENT LINED | F.G. | FINISH GRADE | MIN. | MINIMUM | TEMP | TEMPORARY |
| CEN | CENTRAL ANGLE OF CURVE | FBRGL | FIBERGLASS | MISC | MISCELLANEOUS | TYP | TYPICAL |
| CF | CUBIC FEET | FDN | FOUNDATION | MON | MONUMENT | V | VOLTS |
| CFS | CUBIC FEET PER SECOND | FLEX | FLEXIBLE | N.I.C. | NOT IN THIS CONTRACT | W/ | WITH |
| CI | CAST IRON | FLG | FLANGE | N.T.S. | NOT TO SCALE | W/O | WITHOUT |
| CL | CLASS | FLR | FLOOR | N/F | NOW OR FORMERLY | YD | YARD |

# VIEW MARKERS & IDENTIFICATION




**SEVEE & MAHER ENGINEERS, INC.**
WESTBROOK, MAINE

JOB NO. 8804

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY 3 LANDFILL
CELLS 3A AND 3B
SYMBOLS & ABBREVIATIONS

JOB NO.
ENG. REQ. NO. 2-8627
FILE NO. 2-092-4703,7082

Y88-15912

| DRAWING NO | REFERENCE DRAWING TITLE |
|---|---|
| YB-15263<br>SHEET 1 of 2 | DOLBY III LANDFILL AREA TOPOGRAPHIC SURVEY<br>AND DIGITIZATION AS OF DECEMBER 5, 1985 |

| CODE | NO. | DATE | REVISION | BY | CHD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | | RECORD DRAWING | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
WESTBROOK, MAINE

JOB NO. 8804

| | | |
|---|---|---|
| DSN | P.A.F. | 3/88 |
| CKD | [illegible] | 3/88 |
| CHD | | |
| CONS | | |
| APPVD | | |

ISSUE CODE
P - PRELIM  B - BIDS
M - MTL. T.O.  C - CONST
SCALE 1" = 100'

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY 3 LANDFILL
CELLS 3A AND 3B
SITE LOCATION PLAN

JOB NO.
ENG. REQ. NO. 2-3627
FILE NO. 2-032-4703, 7082

YB-15913

**CONSTRUCTION NOTES**

1. RODENT GUARD SHALL CONSIST OF 1/2" MESH GALVANIZED SCREEN CLAMPED TO OUTLET OF PIPE.
2. 6-INCH PIPE CAPS SHALL BE FERNCO QC106 PIPE CAPS OR EQUIVALENT.

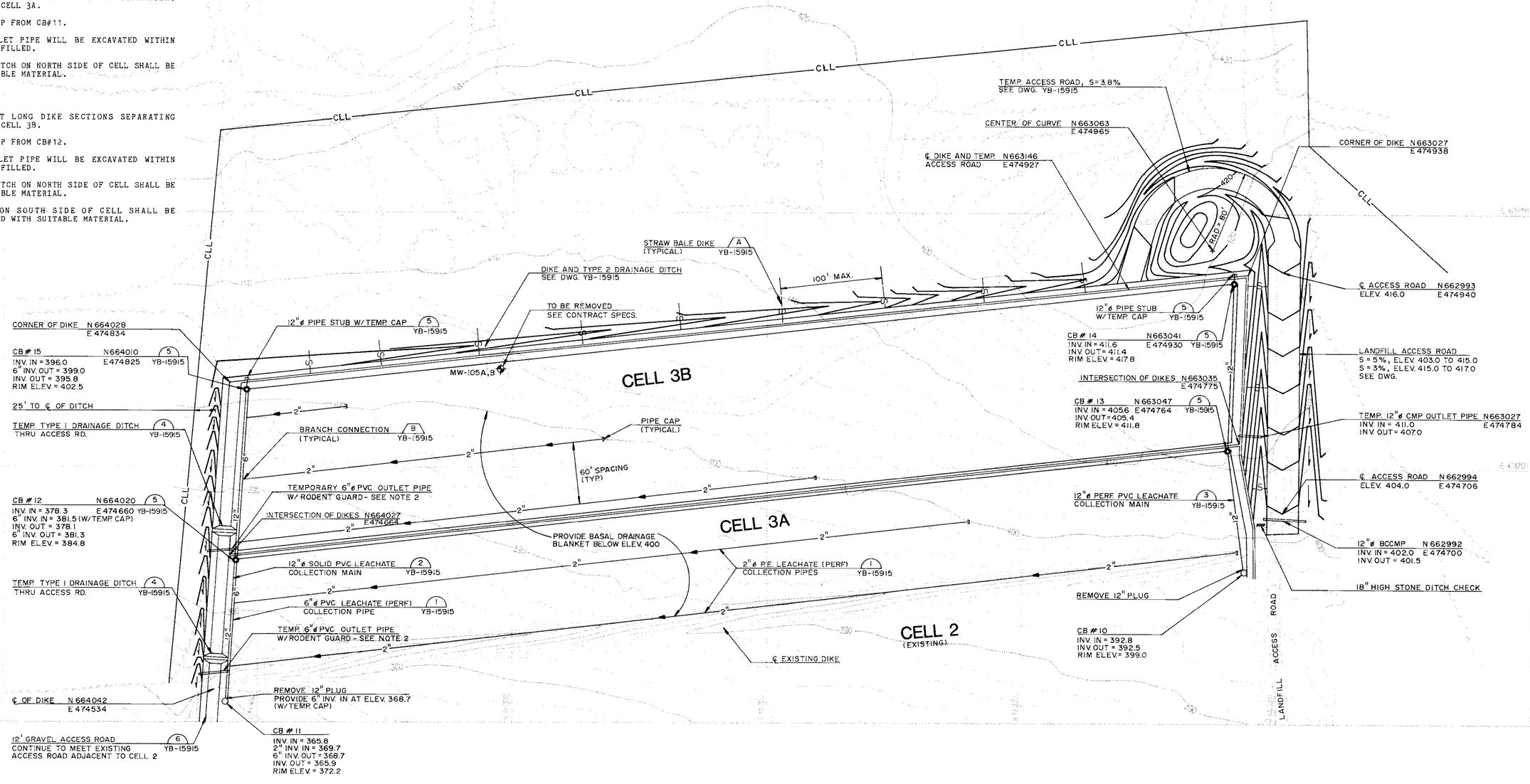
**OPERATION NOTES**

**CELL 3A**

1. REMOVE MINIMUM 15 FT LONG DIKE SECTIONS SEPARATING CB#10 AND CB#11 FROM CELL 3A.
2. REMOVE 6-INCH PIPE CAP FROM CB#11.
3. TEMPORARY 6-INCH OUTLET PIPE WILL BE EXCAVATED WITHIN DIKE, CAPPED AND BACKFILLED.
4. TEMPORARY DRAINAGE DITCH ON NORTH SIDE OF CELL SHALL BE BACKFILLED WITH SUITABLE MATERIAL.

**CELL 3B**

1. REMOVE MINIMUM 15 FT LONG DIKE SECTIONS SEPARATING CB#12 AND CB#13 FROM CELL 3B.
2. REMOVE 6-INCH PIPE CAP FROM CB#12.
3. TEMPORARY 6-INCH OUTLET PIPE WILL BE EXCAVATED WITHIN DIKE, CAPPED AND BACKFILLED.
4. TEMPORARY DRAINAGE DITCH ON NORTH SIDE OF CELL SHALL BE BACKFILLED WITH SUITABLE MATERIAL.
5. TEMPORARY CULVERT ON SOUTH SIDE OF CELL SHALL BE REMOVED AND BACKFILLED WITH SUITABLE MATERIAL.




| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | INIT. | DATE | REVISION | BY | CKD | APPVD | JOB NO. |
|---|---|---|---|---|---|---|---|---|---|
| YB-15800 | DOLBY III LANDFILL - CELL III TOPOGRAPHIC SURVEY AND DIGITIZATION AS OF SEPTEMBER 4, 1987 | | | | | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
WESTBROOK, MAINE

JOB NO. 8804

DSN PAF 3/88
DRD MyCh 3/88
CKD
CORR.
APPVD

ISSUE CODE
P - PRELIM | B - BIDS
M - MTL T.O. | C - CONST

SCALE 1" = 50'

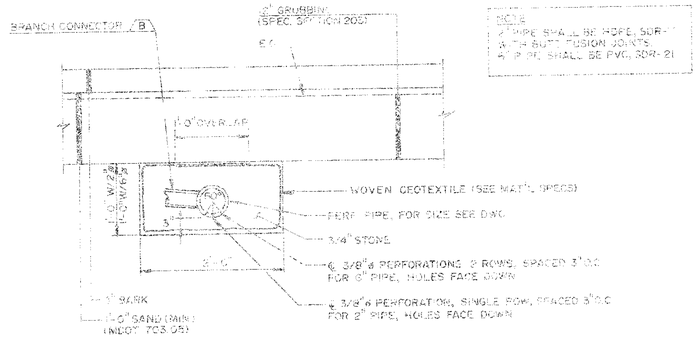
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY 3 LANDFILL
CELLS 3A AND 3B
SITE DEVELOPMENT PLAN

JOB NO.
ENG. REC. NO. 2-8627
FILE NO. 2-092-4703, 7082

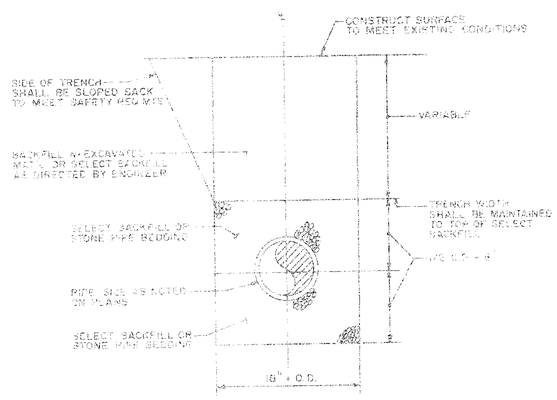
YB-15914




NOTE
4" PIPE SHALL BE HDPE, SDR-17 WITH BUTT FUSION JOINTS
6" & 8" PIPE SHALL BE PVC, SDR-21

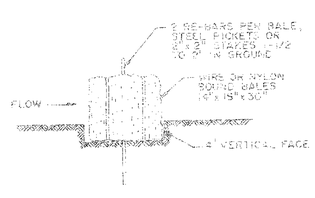
## 2-IN. & 6-IN. LEACHATE COLLECTION PIPES (1)

SCALE: 1" = 1'-0"



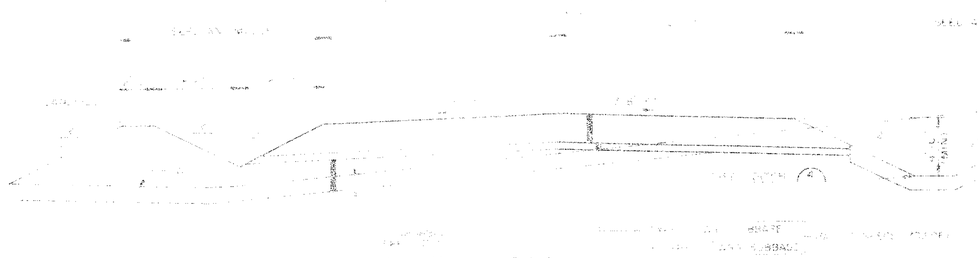

## PIPE TRENCH (2)

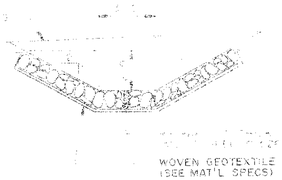
NTS




## STRAW BALE DIKE (A)

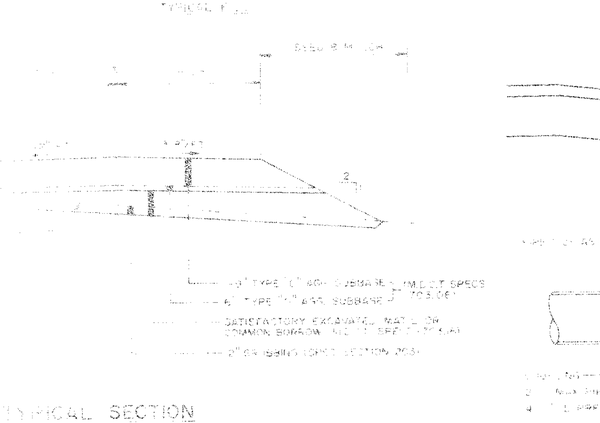
NTS

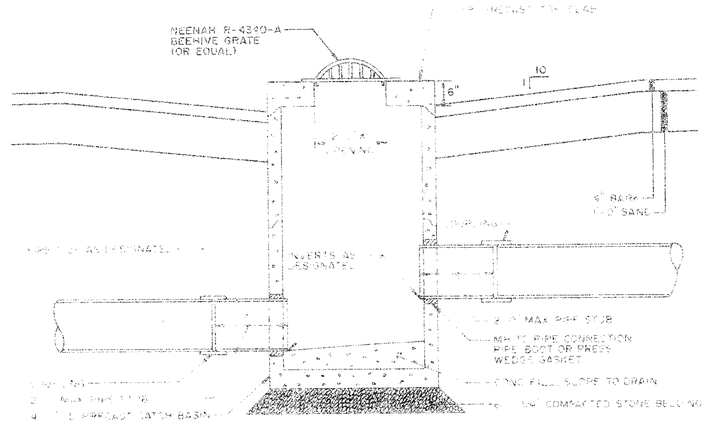



## TYPE 1 DITCH (4)

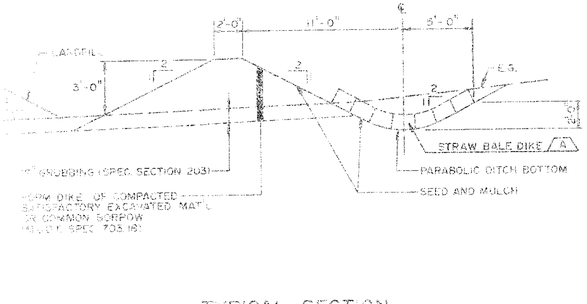
NTS



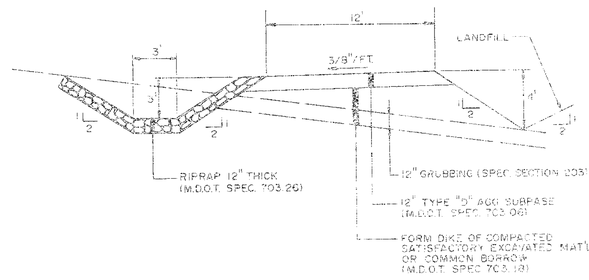

## TYPICAL CATCH BASIN (5)

NTS

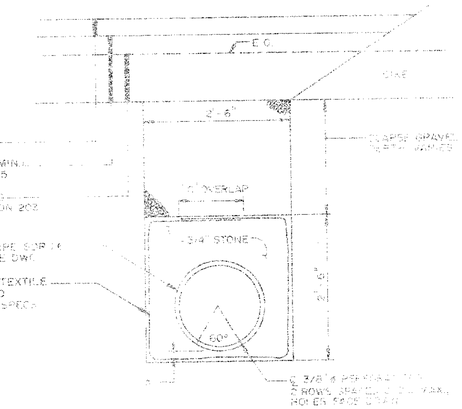



## TYPICAL SECTION
## DIKE AND TYPE 2 DRAINAGE DITCH

SCALE: 1" = 5'

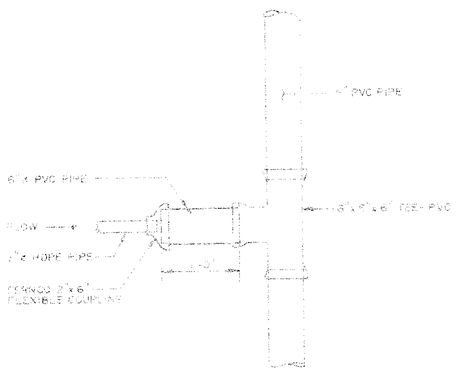



## DIKE ACCESS ROAD (6)




## PERF. LEACHATE COLLECTION MAIN (3)

NTS




## BRANCH CONNECTOR (B)

NTS

RECORD DRAWING

| DATE | BY | REVISION |
|---|---|---|

SEVEE & MAHER ENGINEERS, INC.
WESTBROOK, MAINE

JOB NO. 8804

| | |
|---|---|
| DSN. P.A.F. | 5/88 |
| DRN. M.A.S. | 3/89 |
| CHK. | |
| APPR. | |
| ISSUE CODE | |
| P - PRELIM. | B - BIDS |
| F - FINAL | C - CONST. |
| SCALE: AS SHOWN | |

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

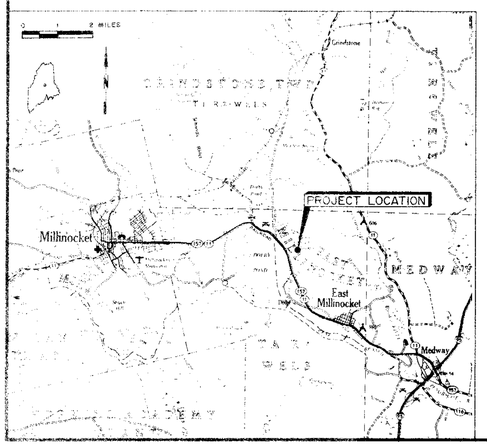
CENTRAL ENGINEERING DEPARTMENT

DOLBY 3 LANDFILL
CELLS 3A AND 3B
SECTIONS AND DETAILS

DRG. NO. Y8-1591
DRG. REF. NO. C-3864
FILE NO. C-298, 1703, 7062

# GREAT NORTHERN PAPER CO.
# MILLINOCKET, MAINE

# DOLBY III LANDFILL
# CELL 4 CONSTRUCTION




SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

1989

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY III LANDFILL
CELL 4
COVER SHEET

JOB NO. 94528
ENG. REQ. NO.
FILE NO 2-092-4703.7082

YB-19000

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | STONE WALL |
| | | NORTH ARROW (MAGNETIC) | | | DRAINAGE COURSES W/DIRECTION & DITCH |
| N | | NORTH ARROW (PLAN NORTH) | SHORE SIDE | | EDGE OF WATER |
| 25 | 25 | CONTOUR LINES | | | WATER ELEVATION (GROUND OR SURFACE) |
| 25.63 | 25.56 | SPOT ELEVATION (GRADE) | | | ROCK OUTCROP OR LEDGE |
| E.G. | | EXISTING GROUND (PROFILES & SECTIONS) | | | FENCE LINE (WOOD) |
| S ℄ | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT | | | FENCE LINE (WIRE) |
| 0+00 | 1+00 | CONSTRUCTION BASELINE | (STONE) | (CONC) FACE | RETAINING WALL (TYPE) |
| | ℄ | PROPERTY OR DEED LINE (NOT SURVEYED) | | | GUARD RAIL |
| 525.14' N35°-10'-41"E | 525.14' N35°-10'-41"E | PROPERTY LINE W/BEARING & DISTANCE | | | BUILDING & STRUCTURES |
| | | ROADS, EASEMENTS OR RIGHT OF WAY LINE | | | STEPS W/ TYPE (WOOD/CONCRETE) |
| | | BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY) | | 2 1 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) |
| MON. | MON. | SURVEY MONUMENT | | TOP OF SLOPE 2 1 | SLOPES (W/SLOPE RATIO) |
| I.F. | I.F. | SURVEY IRON (FOUND) | | | EDGE OF TRAVELED WAY (TYPE) |
| D.H. PK. STK. | D.H. RK. STK. | DRILL HOLE, PK OR STAKE | | C F | CUT OR FILL LINE |
| | | WOODS OR BRUSH LINE | | CLL | CONSTRUCTION LIMIT LINE |
| | | INDIVIDUAL TREE (DECIDUOUS) | | | BITUMINOUS PAVEMENT |
| | | INDIVIDUAL TREE (CONIFEROUS) | | | GRAVEL ROAD |
| | | TREE, TO BE REMOVED | | | CONCRETE |
| | | MARSH AREA | B-12 MW-2 P-20 | B-12 MW-2 P-20 | TEST BORING, MONITORING WELL OR PROBE & NUMBER |

| EXISTING | PROPOSED | |
|---|---|---|
| TP-103 | TP-103 | TEST PIT & NUMBER |
| □ | ■ | CLEAN OUT STRUCTURES |
| ○ | ● | MANHOLE |
| ⌑ | ⌑ | WATER VALVE |
| ⌑ | ⌑ | HYDRANT |
| ⌽ | ⌽ | TELEPHONE OR POWER POLE |
| ◎ | ◎ | CATCH BASIN |
| G | 8" G | UNDERGROUND GAS MAIN & SIZE |
| T | T | UNDERGROUND TELEPHONE CABLE/CONDUIT |
| E | E | UNDERGROUND ELECTRIC CABLE/CONDUIT |
| OE | OE | OVERHEAD ELECTRICAL LINE |
| | 12"ACP | SANITARY SEWER, SIZE & TYPE |
| | 6" PVC | FORCE MAIN, SIZE & TYPE |
| | 8" DI | WATER MAIN, SIZE & TYPE |
| | 12" RCP | STORM DRAIN, SIZE & TYPE |
| UD | 6" PVC UD | UNDERDRAIN, SIZE & TYPE |
| | 12" BCCMP | CULVERT, SIZE & TYPE |
| | | RAILROAD |
| | S S | SILTATION FENCE |

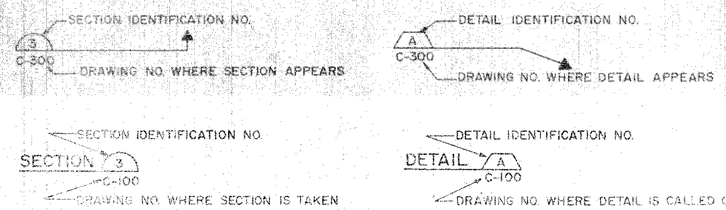
PIPE SCHEDULE

12" PVC SHALL BE SDR 26 WITH PUSH-ON JOINT

## ABBREVIATIONS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A.C.C.M.P. | ASPHALT COATED C.M.P. | CONC | CONCRETE | FPS | FEET PER SECOND | NO. | NUMBER |
| A.C.M.P. | ASPHALTED CEMENT PIPE | CONST | CONSTRUCTION | FT OR ' | FEET | O.C. | ON CENTER |
| AC | ACRE | CONTR | CONTRACTOR | FTG | FOOTING | O.D. | OUTSIDE DIAMETER |
| AGG. | AGGREGATE | CTR | CENTER | GA | GAUGE | P.C. | POINT OF CURVE |
| ALUM | ALUMINUM | CY | CUBIC YARD | GAL | GALLON | P.I. | POINT OF INTERSECTION |
| APPR | APPROVED | D | DEGREE OF CURVE (ARC DEF.) | GALV | GALVANIZED | P.T. | POINT OF TANGENT |
| APPROX | APPROXIMATE | DBL | DOUBLE | GPD | GALLONS PER DAY | PERF | PERFORATED |
| ASB | ASBESTOS | DEG OR ° | DEGREE | GPM | GALLONS PER MINUTE | PSI | POUNDS PER SQUARE INCH |
| ASPH | ASPHALT | DEPT | DEPARTMENT | HDPE | HIGH DENSITY POLYETHYLENE | PVC | POLYVINYL CHLORIDE |
| AVG. C.M.P. | ALUMINUM TYPE 2 C.M.P. | DI | DUCTILE IRON | HP | HORSEPOWER | PVMT | PAVEMENT |
| AUTO | AUTOMATIC | DIA OR ⌀ | DIAMETER | HYD | HYDRANT | QTY | QUANTITY |
| AVE | AVENUE | DIM | DIMENSION | I.D. | INSIDE DIAMETER | R.O.W | RIGHT OF WAY |
| BIT | BITUMEN | DIST | DISTANCE | IN OR " | INCHES | RAD | RADIUS |
| BITG | BITUMINOUS | DR | DOOR | INV | INVERT | RECD | RECEIVED |
| BIT. C.M.P. | BITUMINOUS COATED C.M.P. | DRNG | DRAINING | INV. EL. | INVERT ELEVATION | RT | RIGHT |
| BM | BENCH MARK | EA | EACH | LB | POUND | RTE | ROUTE |
| BOT | BOTTOM | EG | EXISTING GROUND | LIN. FT | LINEAR FEET | S | SLOPE |
| BTWN | BETWEEN | ELEC | ELECTRIC | LOC | LOCATION | SCH | SCHEDULE |
| BVEN | BEVELED | ELEV | ELEVATION | LT | LEFT | SF | SQUARE FEET |
| CAP | CAPACITY | EMBED | EMBEDMENT | M.H. | MANHOLE | SHT | SHEET |
| CATCH BASIN | CB | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT | STA | STATION |
| CENTER LINE | CL | EST | ESTIMATED | MATL | MATERIAL | SY | SQUARE YARD |
| CORRUGATED METAL PIPE | CMP | ESQ | ESQUARE | MAX. | MAXIMUM | TAN | TANGENT |
| CUBIC FOOT | CF | EXIST | EXISTING | MFR | MANUFACTURE | TDH | TOTAL DYNAMIC HEAD |
| CUBIC YARD | CY | F.G. | FINISH GRADE | MIN. | MINIMUM | TEMP | TEMPORARY |
| CENTRAL ANGLE OF CURVE | Δ | FBGLS | FIBERGLASS | MISC | MISCELLANEOUS | TYP | TYPICAL |
| CUBIC FEET | CF | FDN | FOUNDATION | MON | MONUMENT | V | VOLTS |
| CUBIC FEET PER SECOND | CFS | FLEX | FLEXIBLE | N.I.T.C. | NOT IN THIS CONTRACT | W/ | WITH |
| CENTER LINE | CL | FLG | FLANGE | N.T.S. | NOT TO SCALE | W/O | WITHOUT |
| CLEAR | CLR | FLR | FLOOR | N/F | NOW OR FORMERLY | YRD | YARD |

## VIEW MARKERS & IDENTIFICATION





SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE


JOB NO. 8932

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY DAM FALL
CELL 4
SYMBOLS & ABBREVIATIONS

JOB NO. 9852R
ENG. REF. NO.
FILE NO. 2-[illegible]

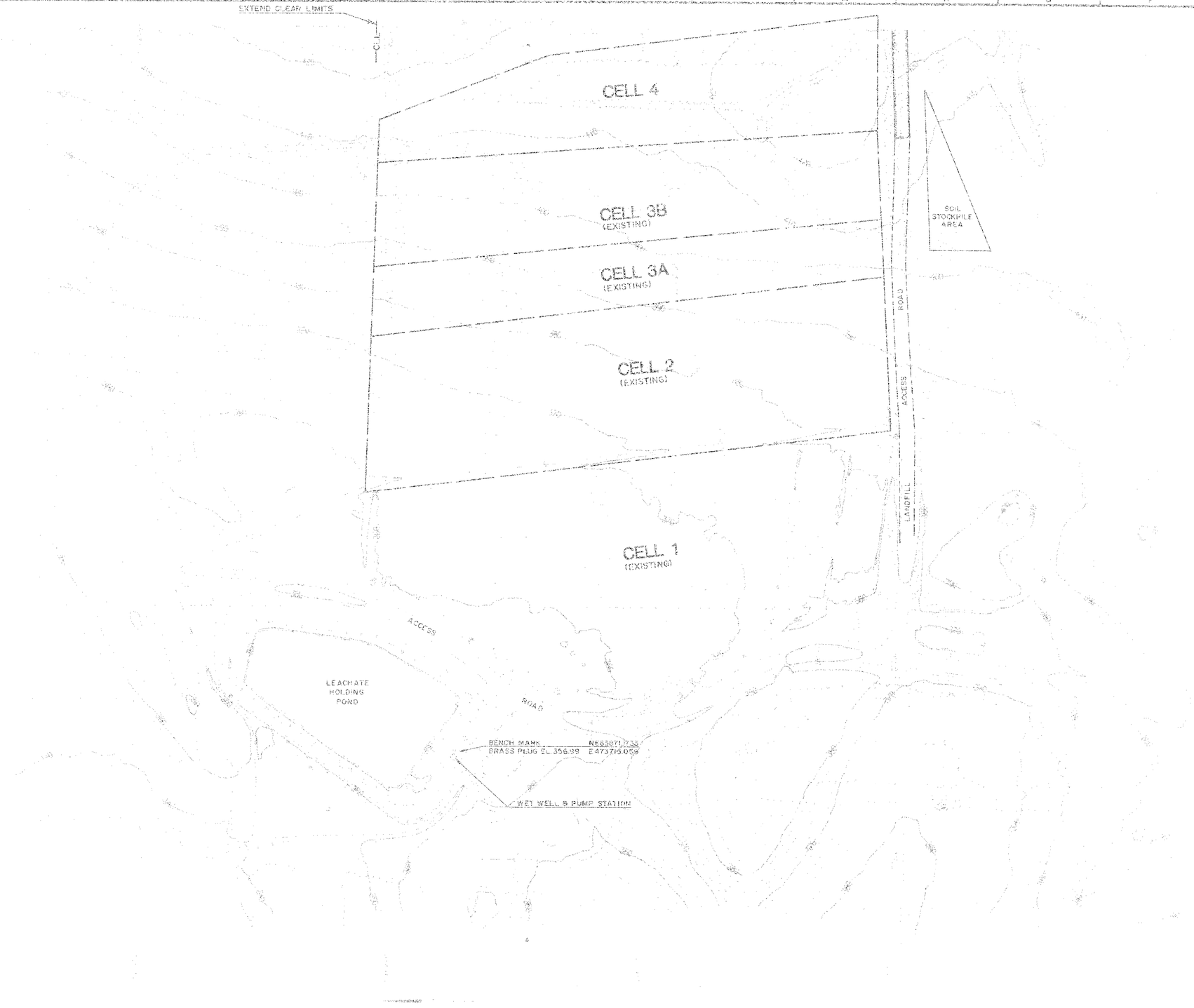
STATE OF MAINE — JOHN M. PEIER — No. 5082 — REGISTERED PROFESSIONAL ENGINEER

5


| | | |
|---|---|---|
| | RECORD DRAWING<br>PLAN OF SOIL SAMPLE POINTS (REF.)<br>CELL 3B EAST BASIN MODIFICATIONS & RELATED<br>CHERRYFIELD | |

SEVEY & MAYER ENGINEERS, INC.
CHERRYFIELD, MAINE

Great Northern Paper




| NO. | REVISED | DATE | BY | CHKD | APPVD |
|---|---|---|---|---|---|
| 0 | RELEASED FOR CONSTRUCTION | 12-5-90 | PAF | | |
| 1 | RECORD DRAWING | 12-5-90 | PAF | | |

DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION
AS OF DECEMBER 5, 1990

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

JOB No. 8932

| | | |
|---|---|---|
| DRAWN | PAF | 8/89 |
| CHKD | PAF | 8/89 |
| DES. | PAF | 9/89 |
| CORR. | | |
| APPD. | | |
| ISSUE CODE | | |
| P - PRELIM | B - BIDS | |
| M - MYLAR | C - CONST | |
| SCALE | 1" = 200' | |

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

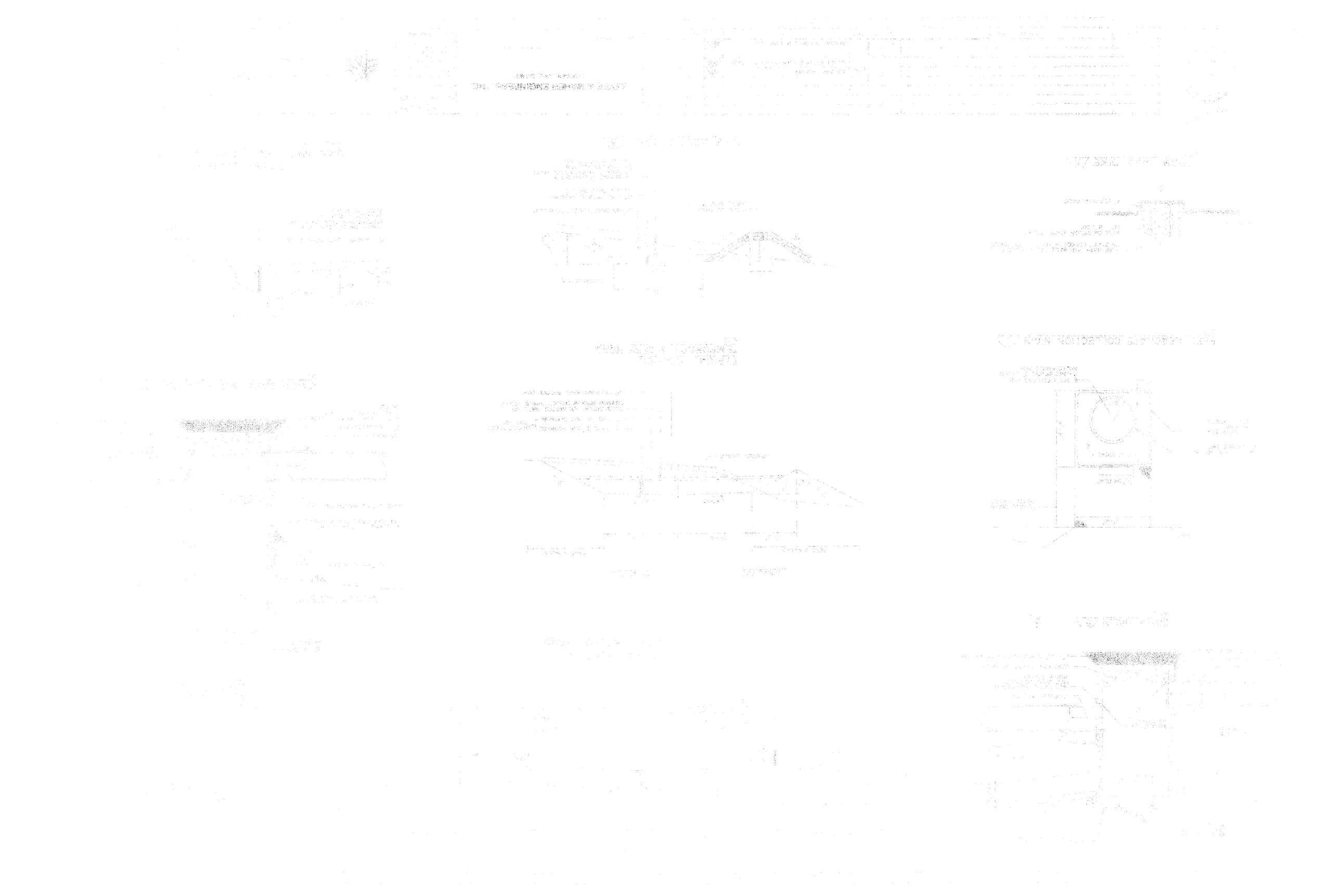
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET, ME.

DOLBY III LANDFILL
CELL 4
SITE LOCATION PLAN

JOB NO. 94529
DWG. NO. 2
FILE NO. E-094-4752-D-R2

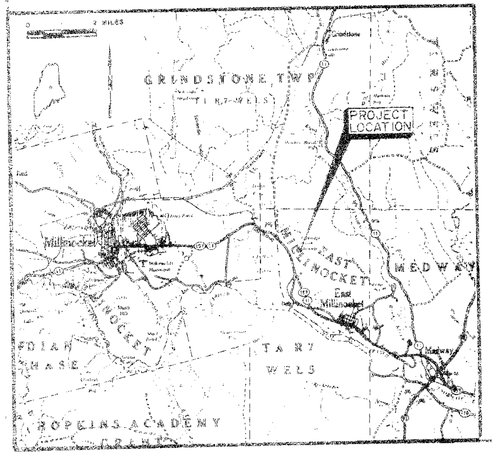
SCALE 1" = 200'

Y2-0002



# GEORGIA-PACIFIC, NORTHERN PAPERS DIVISION
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# REMEDIAL ACTIONS CELLS 1 AND 2

| SHT NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-19176 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-19177 |
| 3 | SITE LOCATION PLAN | YB-19178 |
| 4 | EXISTING TOPOGRAPHY PLAN - CELL 1 | YB-19179 |
| 5 | EXISTING TOPOGRAPHY PLAN - CELL 2 | YB-19180 |
| 6 | SECTIONS & DETAILS | YB-19181 |




## SEVEE & MAHER ENGINEERS, INC.
## CUMBERLAND, MAINE
## 1990

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
COVER SHEET

JOB NO.
ENG. REQ. NO.
FILE NO. Z-092-430(7 7089

YB-19176

# SYMBOLS

EXISTING | PROPOSED

- DOWN ARROW (TRUE)
- NORTH ARROW (MAGNETIC)
- NORTH ARROW (PLAN NORTH)
- CONTOUR LINES
- SPOT ELEVATION (GRADE)
- EXISTING GROUND (MAJOR (5' INTERVAL) MINOR (1' INTERVAL))
- SURVEY BASELINE WITH STATIONING AND INTERSECTION POINT
- CONSTRUCTION BASELINE
- PROPERTY OR DEED LINE (IF SURVEYED)
- PROPERTY LINE W/BEARING & DISTANCE
- ROADS, EASEMENTS OR RIGHT OF WAY LINE
- BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY)
- SURVEY MONUMENT
- SURVEY IRON (FOUND)
- DRILL HOLE, PK OR STAKE
- WOODS OR BRUSH LINE
- INDIVIDUAL TREE (DECIDUOUS)
- INDIVIDUAL TREE (CONIFEROUS)
- TREE TO BE REMOVED
- MARSH AREA

- STONE WALL
- DRAINAGE COURSES W/DIRECTION & DITCH
- EDGE OF WATER
- WATER ELEVATION (FEMA OR U.S. SURVEY)
- ROCK OUTCROP OR LEDGE
- FENCE LINE (WOOD)
- FENCE LINE (WIRE)
- RETAINING WALL (TYPE)
- GUARD RAIL
- BUILDING & STRUCTURES
- STEPS W/TYPE (WOOD, CONCRETE)
- SLOPE RATIO (HORIZONTAL : 1 VERTICAL)
- SLOPES (W/SLOPE RATIO)
- EDGE OF TRAVELED WAY (TYP.)
- CUT OR FILL LINE
- CONSTRUCTION LIMIT LINE
- BITUMINOUS PAVEMENT
- GRAVEL ROAD
- CONCRETE
- TEST BORING, MONITORING WELL OR PROBE & NUMBER

- TEST PIT & NUMBER
- CLEAN OUT STRUCTURES
- MANHOLE
- WATER VALVE
- HYDRANT
- TELEPHONE OR POWER POLE
- CATCH BASIN
- UNDERGROUND GAS MAIN & SIZE
- UNDERGROUND TELEPHONE CABLE / CONDUIT
- UNDERGROUND ELECTRIC CABLE / CONDUIT
- OVERHEAD ELECTRICAL LINE
- SANITARY SEWER, SIZE & TYPE
- FORCE MAIN, SIZE & TYPE
- WATER MAIN, SIZE & TYPE
- STORM DRAIN, SIZE & TYPE
- UNDERDRAIN, SIZE & TYPE
- CULVERT, SIZE & TYPE
- RAILROAD
- SILTATION FENCE

## MATERIAL SPECIFICATIONS

| | |
|---|---|
| SAND - | MDOT SPECIFICATION 703.06b, TYPE F (AGGREGATE FOR SAND LEVELING) PERMEABILITY $2 \times 10^{-3}$ cm/sec |
| COVER SOIL | WELL GRADED TILL SOIL WITH GREATER THAN 15 PERCENT PASSING A NO. 200 SIEVE, NO STONES GREATER THAN 4 INCHES IN DIAMETER (COMPACTED 95 PERCENT STANDARD PROCTOR) |
| TOP COVER SOIL - | A MIXTURE OF WELL GRADED TILL SOIL WITH GREATER THAN 15 PERCENT PASSING A NO. 200 SIEVE AND SECONDARY SLUDGE. NO STONES GREATER THAN 3 INCHES IN DIAMETER |
| SLUDGE - | HOMOGENEOUS SECONDARY SLUDGE AS RECEIVED FROM MILL |

## MATERIAL TESTING SCHEDULE

| BORROW SOURCE | TEST | FREQUENCY |
|---|---|---|
| COVER SOIL | GRAIN SIZE | 4 TEST |
| SAND | GRAIN SIZE | 2 TEST |
| SAND | PERMEABILITY | 2 TEST |
| **ON-SITE** | | |
| COVER SOIL | GRAIN SIZE | 1/2000 CY |
| SAND | GRAIN SIZE | 4 TEST |
| SAND | PERMEABILITY | 1/5000 CY |

TEST METHODS

| | |
|---|---|
| GRAIN SIZE | ASTM D422 |
| PERMEABILITY | ASTM D2434 |

## VIEW MARKERS & IDENTIFICATION

SECTION NO & LOCATION — 3 / C-102 — DRAWING WHERE SECTION OR DETAIL APPEARS

DETAIL IDENTIFICATION & LETTER — MANHOLE A / C-102

SECTION TITLE & NO — ACCESS ROAD 3 / C-100 — DRAWING WHERE SECTION IS TAKEN

DETAIL TITLE & LETTER — MANHOLE A / C-102 — DRAWING WHERE DETAIL IS CALLED OUT

# ABBREVIATIONS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACP | ASPHALT CONCR. PAVE. | C.M.P. | CORRUGATED METAL PIPE | DR | DRAIN | GPD | GALLONS PER DAY |
| A.C.P. | ASBESTOS CEMENT PIPE | C.O. | CLEAN OUT | DWG | DRAWING | GPM | GALLONS PER MINUTE |
| AB | ABOVE | CEM. LIN. | CEMENT LINED | EA | EACH | HDPE | HIGH DENSITY POLYETHYLENE |
| AGG | AGGREGATE | CEN. | CENTRAL ANGLE OF CURVE | EG | EXISTING GROUND OR GRADE | HP | HORSEPOWER |
| ALUM | ALUMINUM | CF | CUBIC FEET | ELEV | ELEVATION | HYD | HYDRANT |
| APPR | APPROVED | CFS | CUBIC FEET PER SECOND | EL | ELBOW | I.D. | INSIDE DIAMETER |
| APPROX | APPROXIMATE | CI | CAST IRON | EQUIP | EQUIPMENT | IN | INCHES |
| ASB | ASBESTOS | CL | CLASS | EST | ESTIMATED | INV | INVERT |
| ASPH | ASPHALT | CONC | CONCRETE | EXC | EXCAVATE | INV. EL. | INVERT ELEVATION |
| ATP (C.M.P.) | ASPHALT COATED (C.M.P.) | CONST | CONSTRUCTION | EXIST | EXISTING | LB | POUND |
| AUTO | AUTOMATIC | CONTR | CONTRACTOR | F.G. | FINISH GRADE | LC | LEACHATE COLLECTION |
| AUX | AUXILLIARY | CTR | CENTER | FRAGL | FIBERGLASS | LD | LEAK DETECTION |
| AVE | AVENUE | CY | CUBIC YARD | FDN | FOUNDATION | LIN. FT. | LINEAR FEET |
| AVG | AVERAGE | D | DEGREE OF CURVE (ARC DEF.) | FLEX | FLEXIBLE | LOC | LOCATION |
| BIT | BITUMEN | DBL | DOUBLE | FLG | FLANGE | LT | LEFT |
| BIT. (C.M.P.) | BITUMINOUS COATED (C.M.P.) | DEG OR ° | DEGREE | FLR | FLOOR | MAX | MAXIMUM |
| B.M. | BENCH MARK | DEPT | DEPARTMENT | FPS | FEET PER SECOND | MH | MANHOLE |
| BIT | BITUMINOUS | DI | DUCTILE IRON | FT OR ' | FEET | MECH. JOINT | MECHANICAL JOINT |
| BLDG | BUILDING | DIA OR Ø | DIAMETER | FTG | FOOTING | MATL | MATERIAL |
| BOT | BOTTOM | DIM | DIMENSION | GA | GAUGE | MFR | MANUFACTURER |
| BRG | BEARING | DIST | DISTANCE | GAL | GALLON | MIN | MINIMUM |
| BSN | BENCH BASIN | DN | DOWN | GALV | GALVANIZED | MISC | MISCELLANEOUS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MON | MONUMENT | SF | SQUARE FEET |
| N.I.C. | NOT IN THIS CONTRACT | SHT | SHEET |
| N.T.S. | NOT TO SCALE | STA | STATION |
| N/F | NOW OR FORMERLY | SY | SQUARE YARD |
| NO. OR # | NUMBER | TAN | TANGENT |
| O.C. | ON CENTER | TDH | TOTAL DYNAMIC HEAD |
| O.D. | OUTSIDE DIAMETER | TEMP | TEMPORARY |
| P.C. | POINT OF CURVE | TYP | TYPICAL |
| P.I. | POINT OF INTERSECTION | V | VOLTS |
| P.T. | POINT OF TANGENT | W/ | WITH |
| PERF | PERFORATED | W/O | WITHOUT |
| PSI | POUNDS PER SQUARE INCH | YD | YARD |
| PVC | POLYVINYL CHLORIDE | | |
| PVMT | PAVEMENT | | |
| QTY | QUANTITY | | |
| R.O.W. | RIGHT OF WAY | | |
| RAD | RADIUS | | |
| REQ'D | REQUIRED | | |
| RT | RIGHT | | |
| RTE | ROUTE | | |
| S | SLOPE | | |
| SCH | SCHEDULE | | |

| NO. | BY | DATE | REVISION |
|---|---|---|---|
| 5 | A. BOOKS | 10/5/07 | ISSUED FOR BID - ADDENDUM 1 |

DES. | DRN. | CHKD. | APPD. | DATE | SCALE | JOB NO.

SEVEE & MAHER ENGINEERS, INC.
COMBERLAND, MAINE

Great Northern Paper
A Company of Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
SOLID WASTE LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
SYMBOLS & ABBREVIATIONS

DWG. NO. Y8-10177
FAC. REF. NO.
FILE NO. 1064-4228.010

CELL 5

CELL 4

CELL 3B

CELL 3A

CELL 2

CELL 1

MATCH LINE SHEET 2

NOTE: CONTOURS SHOWN E 475000 MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE

BOULDER STOCKPILE AREA

ROAD

ACCESS

LANDFILL

LIMITS OF CONSTRUCTION

ACCESS

LEACHATE HOLDING POND

36" BCCMP

BENCH MARK
N663871.733
E473715.059
3" BRASS PLUG EL. 356.99

WET WELL & PUMP STATION

SEDIMENT POND OUTLET STRUCTURE C YB-19181

LEVEL SPREADER (TYP) D YB-19131

E 475500
E 475000
E 474500
E 474000
E 473500
E 473250
N 665500
N 665000
N 664500
N 664000
N 663500
N 663000
N 662500

STATE OF MAINE
PETER M. MAHER
#6107
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO | REFERENCE DRAWING TITLE |
|---|---|
| YB-15263 | DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 12/90 | RECORD DRAWING | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CUMBERLAND, MAINE

| | |
|---|---|
| DRN | R.L.B. 1/90 |
| CKD | M.G.C. 8/90 |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| C-CONST | |
| SCALE | 1" = 100' |

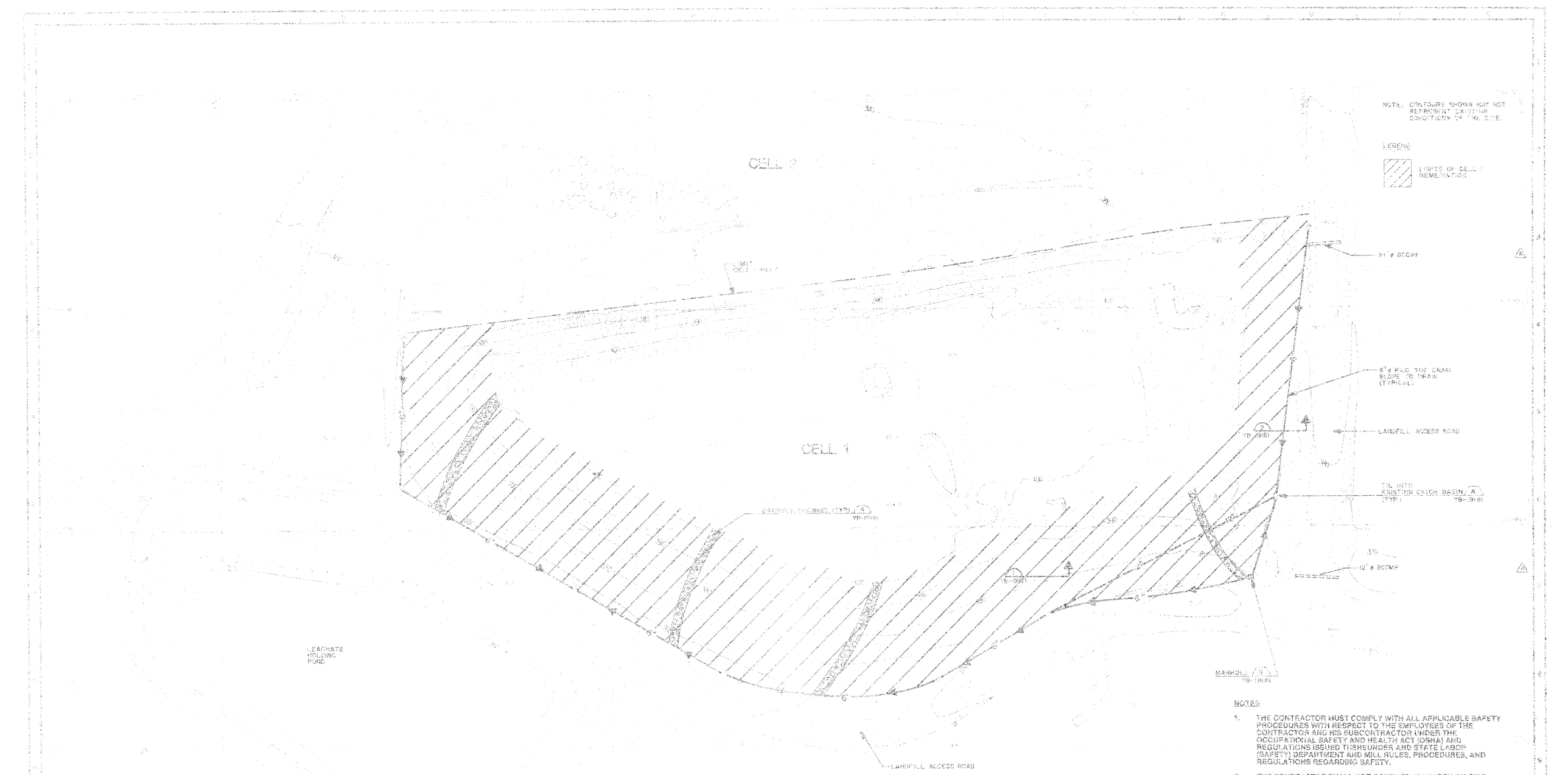
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
SITE LOCATION PLAN

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703.7092

YB-19178




NOTES

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.

| | | | |
|---|---|---|---|
| 15 | 1979B | DOLBY JR LANDFILL-CELL 1 TOPOGRAPHIC SURVEY & CONTOURING | 6/92 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | |
|---|---|
| | RECORD DRAWING |
| B | ADDENDUM ISSUED FOR BID - ADDENDUM 1 |

SEVEE & MAHER ENGINEERS, INC.

COMBERLAND, MAINE

| | |
|---|---|
| DES. | KLL |
| DR. | JAS |
| CK'D | |
| APP'D | |
| ISSUE DATE | 7/92 |
| SCALE | 1" = 50' |

Great Northern Paper

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

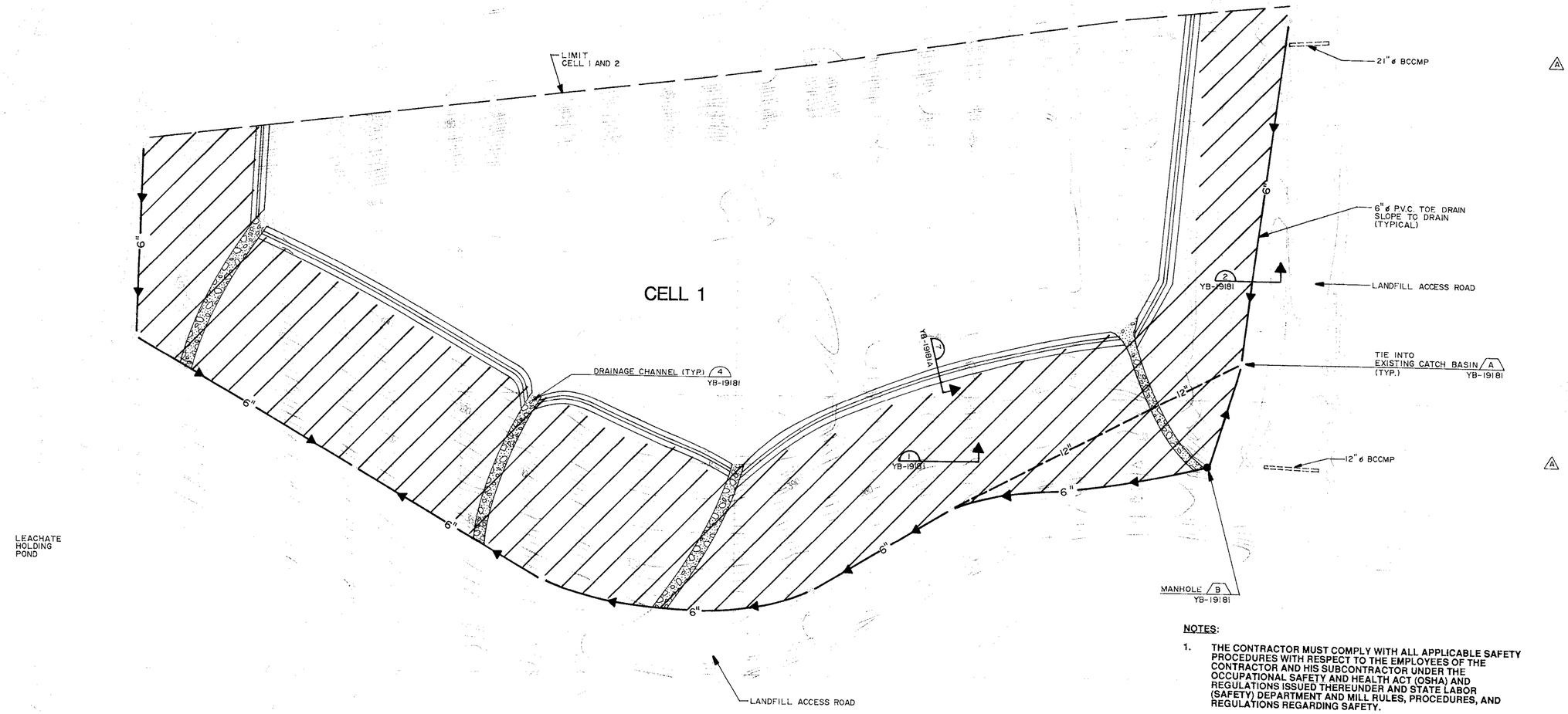
DOLBY JR. LANDFILL
REMEDIAL ACTIONS - CELLS 1 & 2
EXISTING TOPOGRAPHY PLAN - CELL 1

JOB NO. 15-1979
DWG. NO. YB-1917
CONTRACT NO. YB-1917

NOTE: CONTOURS SHOWN MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

LEGEND

LIMITS OF CELL I REMEDIATION




NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.

STATE OF MAINE PETER A. MAHER 14107 REGISTERED PROFESSIONAL ENGINEER

YB-15798 DOLBY III LANDFILL-CELL I, TOPOGRAPHIC SURVEY & DIGITIZ.(9/4/87)

B 12/90 RECORD DRAWING

A 8/20/90 ISSUED FOR BID - ADDENDUM I

**SEVEE & MAHER ENGINEERS, INC.**

**CUMBERLAND, MAINE**

RLR 7/90
M.G.B. 8/90

1" = 50'

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL I & 2
EXISTING TOPOGRAPHY PLAN - CELL I

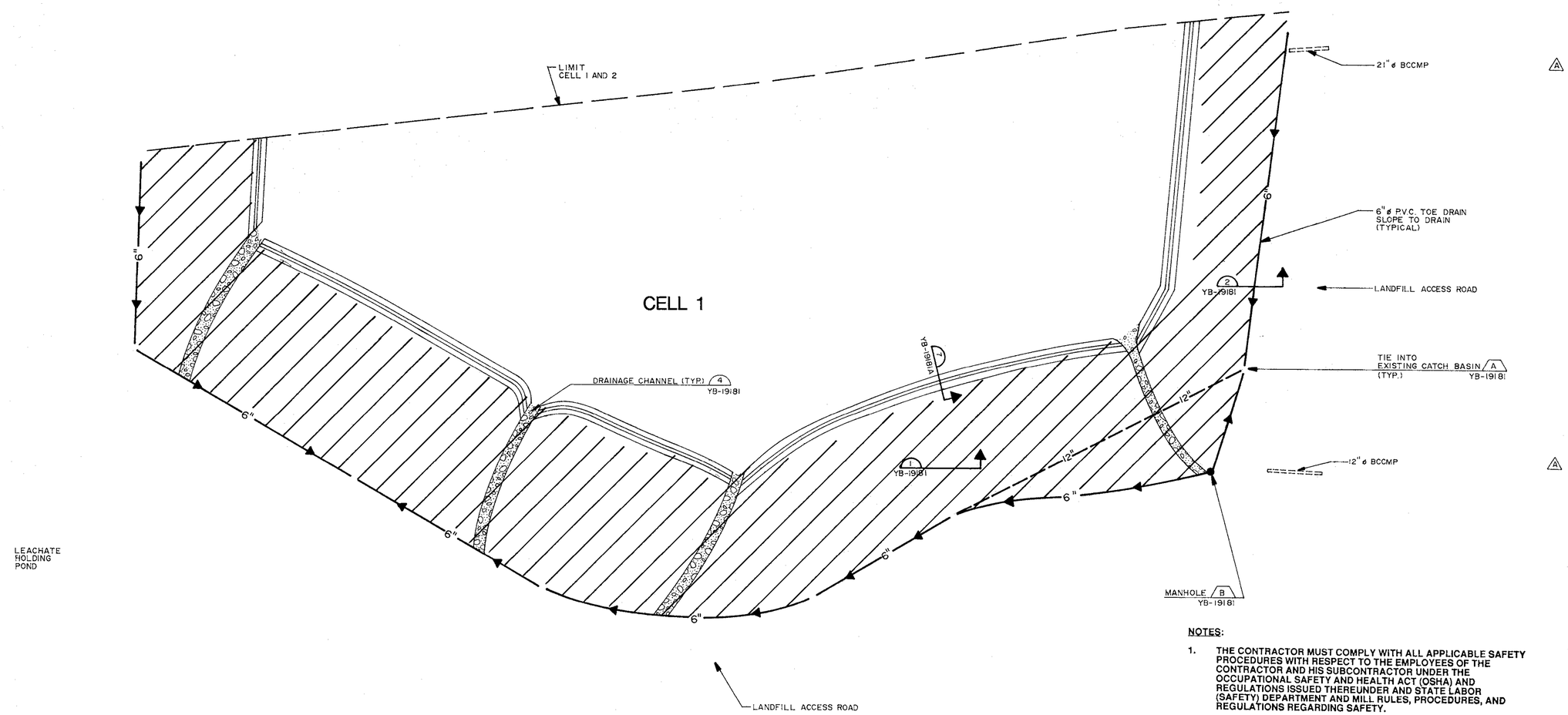
2-092-4703,7082

Y 19179A

NOTE: CONTOURS SHOWN MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

LEGEND

LIMITS OF CELL 1 REMEDIATION




NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.

STATE OF MAINE · PEVEAR · MAHER 14107 · REGISTERED PROFESSIONAL ENGINEER

**SEVEE & MAHER ENGINEERS, INC.**

**CUMBERLAND, MAINE**

RLP 7/90
M. Ø6 8/90

1" = 50'

YB-15798 DOLBY III LANDFILL-CELL 1, TOPOGRAPHIC SURVEY & DIGITIZ.(9/4/87)

| | | |
|---|---|---|
| | 12/90 | RECORD DRAWING |
| B | A 8/20/90 | ISSUED FOR BID - ADDENDUM 1 |

DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
EXISTING TOPOGRAPHY PLAN - CELL 1

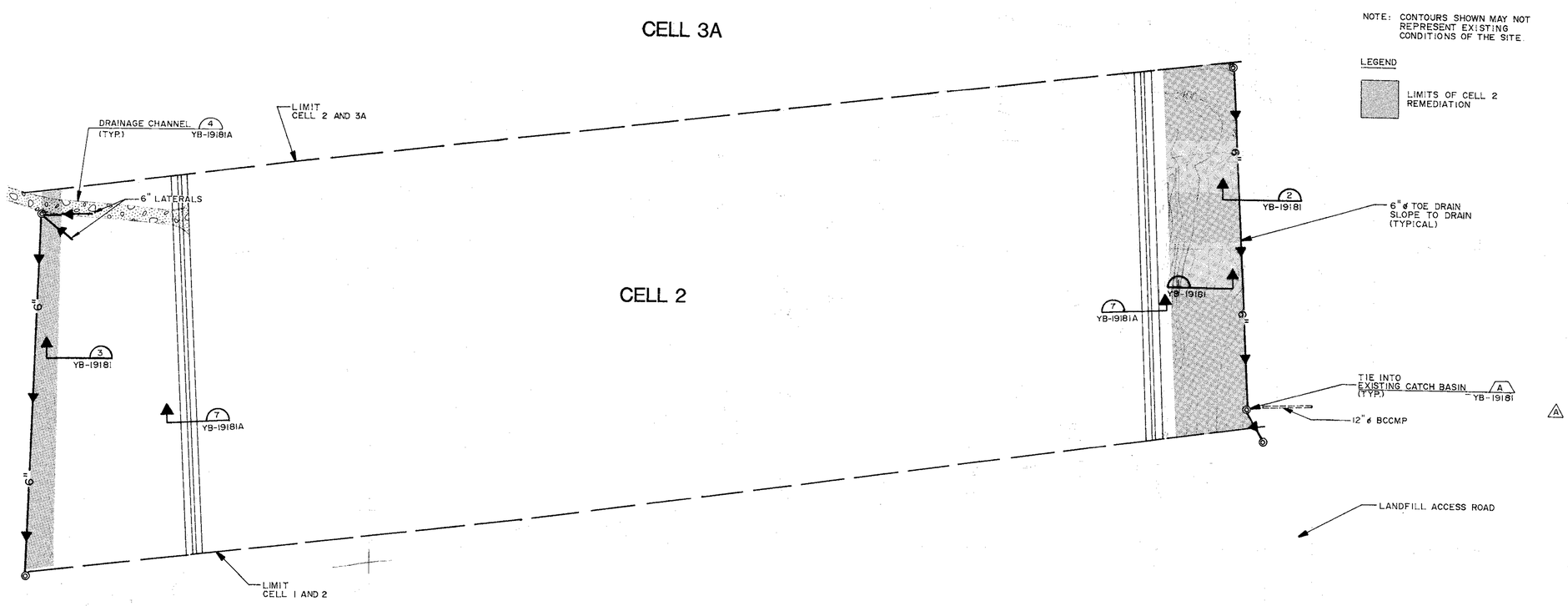
2-092-4703,7082

Y 19179A

NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.




STATE OF MAINE — PETER M. MAHER #4107 — REGISTERED PROFESSIONAL ENGINEER

YB-15799 DOLBY III LANDFILL-CELL 2, TOPOGRAPHIC SURVEY & DIGITIZ. (9/4/87)

| | | |
|---|---|---|
| | 12/90 | RECORD DRAWING |
| B | A 8/20/90 | ISSUED FOR BID - ADDENDUM I |

**SEVEE & MAHER ENGINEERS, INC.**

**CUMBERLAND, MAINE**

RCR 7/90
M. Gits 8/90

[redacted]

△A

# EAST MILLINOCKET MILL

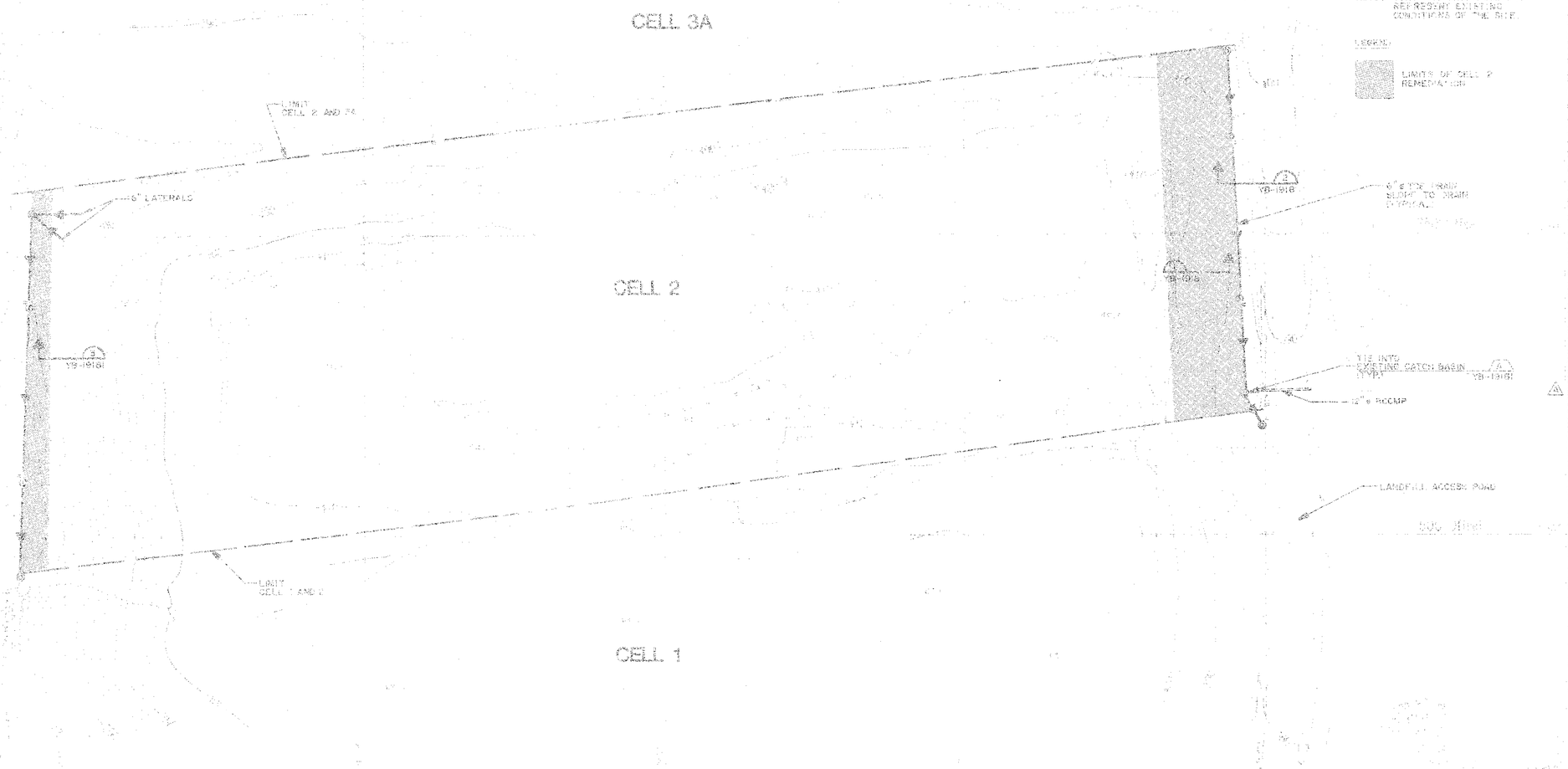
DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
EXISTING TOPOGRAPHY PLAN - CELL 2

2-092-4703, 7082

Y -19180A

NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.



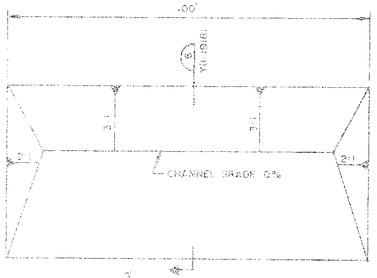

| | | | |
|---|---|---|---|
| YB-1925 | DOLBY III LANDFILL CELL 2 TOPOGRAPHIC SURVEY & PLAN (3/4/21) | B | 10/19/21 RECORD DRAWING |
| | | A | 9/20/00 ISSUED FOR BID - ADDENDUM 1 |

SEVEE & MAHER ENGINEERS, INC.
COMBERLAND, MAINE

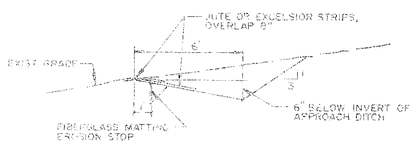
Great Northern Paper

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
DOLBY III LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
EXISTING TOPOGRAPHY PLAN - CELL 2

YB-1912C

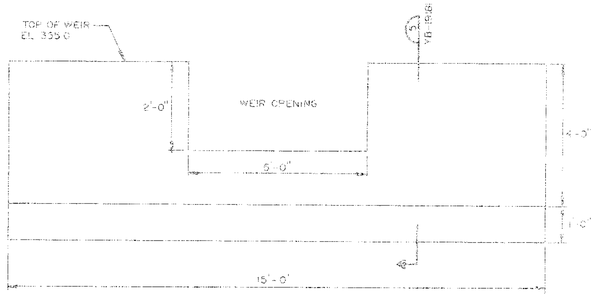


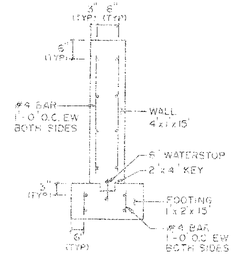

NOTE: LAST 20 FT. OF DRAINAGE FLOW NOT TO EXCEED 3% GRADE




SECTION (6) YB-19181

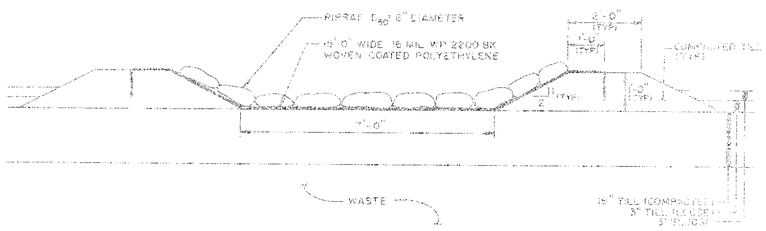
LEVEL SPREADER (D)
N.T.S. YB-19178



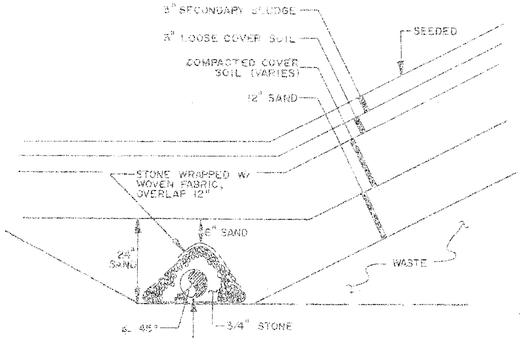




SECTION (5) YB-19181

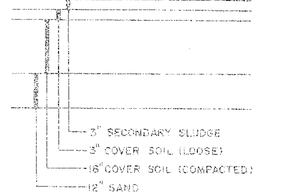
WEIR DETAIL (C)
SCALE: 1"=2'-0" YB-19178




SIDESLOPE DRAINAGE CHANNELS (4)
SCALE: 1"=2'-0" YB-19179




TOE DRAIN SECTION (2)
N.T.S. YB-19179 YB-19180



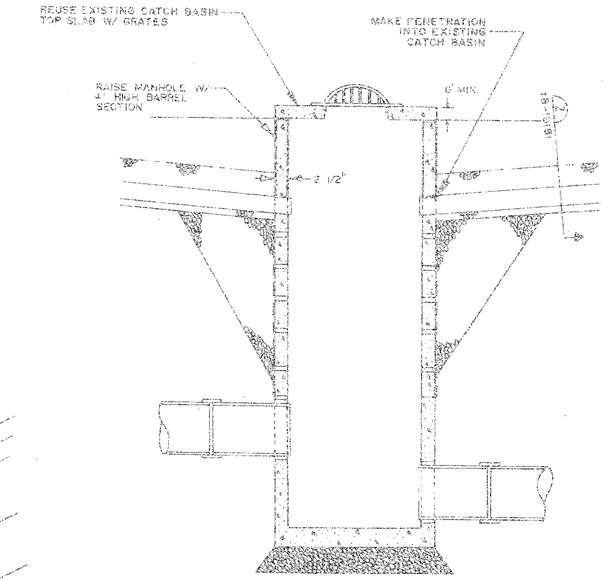

NOTE: SOUTHERN SIDE OF CELL 2 AND ALONG ENTIRE FACE OF CELL 1 AS SHOWN ON EXISTING TOPOGRAPHY PLANS.

FINAL COVER SECTION (1)
SCALE: 1"=2'-0" YB-19179 YB-19180

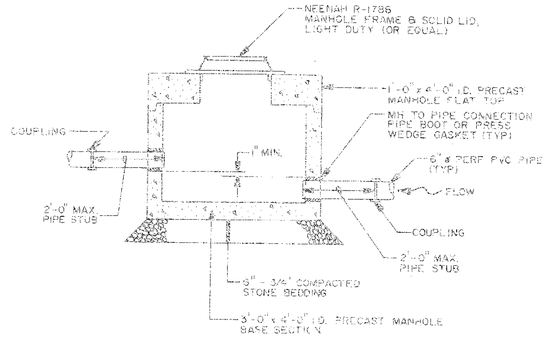



NOTE: NORTHERN SIDE OF CELL 2 SHOWN ON EXISTING TOPOGRAPHY PLAN.

INTERMEDIATE SLOPE COVER SECTION (3)
SCALE: 1"=2'-0" YB-19180




CATCH BASIN (A)
N.T.S. (EXISTING) YB-19179 YB-19180




MANHOLE (B)
SCALE: 1"=2'-0" YB-19179

| NO. | BY | DATE | REVISION | CK | APP |
|---|---|---|---|---|---|
| 0 | | 12/90 | RECORD DRAWING | | |
| A | | 9/20/89 | ISSUED FOR BID - ADDENDUM 1 | | |

ORIGINAL SCALE: AS NOTED
REFERENCE DRAWING NUMBERS:

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

| | |
|---|---|
| DES | J.D.C. |
| DRN | J.D.C. |
| CHKD | R.P.M. |
| QA/QC | |
| APPVD | |
| ISSUE CODE | |
| SCALE | AS SHOWN |

Great Northern Paper
A company of Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

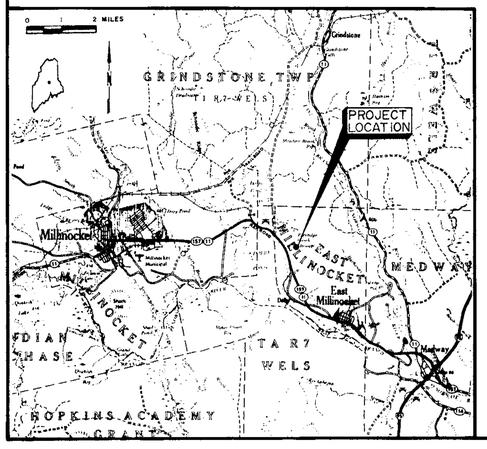
DOLBY B LANDFILL
REMEDIAL ACTIONS - CELL 1 & 2
SECTIONS & DETAILS

JOB NO.
WORK ORDER NO.
FILE NO. E-092-4203.7082

YB-19181

# GEORGIA-PACIFIC, NORTHERN PAPERS DIVISION
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# FINAL COVER OF CELLS 3A, 3B AND 4

| SHT NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-19167 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-19168 |
| 3 | SITE LOCATION PLAN | YB-19169 |
| 4 | EXISTING TOPOGRAPHY PLAN | YB-19170 |
| 5 | SECTIONS & DETAILS | YB-19171 |




## SEVEE & MAHER ENGINEERS, INC.
## CUMBERLAND, MAINE
## 1990

STATE OF MAINE PETER J. MAHER 5107 REGISTERED PROFESSIONAL ENGINEER

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
FINAL COVER - CELLS 3A, 3B, & 4
COVER SHEET

JOB NO.
ENG. REQ. NO.
FILE NO 2-092-4703, 7082

YB-19167

# SYMBOLS

| EXISTING | PROPOSED | |
|---|---|---|
| | | NORTH ARROW (TRUE) |
| | | NORTH ARROW (MAGNETIC) |
| N | | NORTH ARROW (PLAN NORTH) |
| 25 | 25 | CONTOUR LINES |
| 25.63 | 25.56 | SPOT ELEVATION (GRADE) |
| E.G. | | EXISTING GROUND (PROFILES & SECTIONS) |
| SB | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT |
| 0+00 | 10+00 | CONSTRUCTION BASELINE |
| P | | PROPERTY OR DEED LINE (NOT SURVEYED) |
| 525.14 N35°-10'-41"E | 525.14 N35°-10'-41"E | PROPERTY LINE W/BEARING & DISTANCE |
| | | ROADS, EASEMENTS OR RIGHT OF WAY LINE |
| | | BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY) |
| MON | MON | SURVEY MONUMENT |
| | | SURVEY IRON (FOUND) |
| DH PK STK | DH PK STK | DRILL HOLE, PK OR STAKE |
| | | WOODS OR BRUSH LINE |
| | | INDIVIDUAL TREE (DECIDUOUS) |
| | | INDIVIDUAL TREE (CONIFEROUS) |
| | | TREE, TO BE REMOVED |
| | | MARSH AREA |

| EXISTING | PROPOSED | |
|---|---|---|
| | | STONE WALL |
| | | DRAINAGE COURSES W/DIRECTION & DITCH |
| SHORE SIDE | | EDGE OF WATER |
| | | WATER ELEVATION (GROUND OR SURFACE) |
| | | ROCK OUTCROP OR LEDGE |
| | | FENCE LINE (WOOD) |
| | | FENCE LINE (WIRE) |
| (STONE) | (CONC) FACE | RETAINING WALL (TYPE) |
| | | GUARD RAIL |
| | | BUILDING & STRUCTURES |
| | | STEPS W/TYPE (WOOD/CONCRETE) |
| | 1 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) |
| TOP OF SLOPE | | SLOPES (W/SLOPE RATIO) |
| | | EDGE OF TRAVELED WAY (TYPE) |
| C F | | CUT OR FILL LINE |
| CLL | | CONSTRUCTION LIMIT LINE |
| | | BITUMINOUS PAVEMENT |
| | | GRAVEL ROAD |
| | | CONCRETE |
| B-12 MW-2 P-20 | B-12 MW-2 P-20 | TEST BORING, MONITORING WELL OR PROBE & NUMBER |

| EXISTING | PROPOSED | |
|---|---|---|
| TP-103 | TP-103 | TEST PIT & NUMBER |
| | | CLEAN OUT STRUCTURES |
| | | MANHOLE |
| | | WATER VALVE |
| | | HYDRANT |
| | | TELEPHONE OR POWER POLE |
| | | CATCH BASIN |
| G | 8" G | UNDERGROUND GAS MAIN & SIZE |
| T | T | UNDERGROUND TELEPHONE CABLE/CONDUIT |
| E | E | UNDERGROUND ELECTRIC CABLE/CONDUIT |
| OE | OE | OVERHEAD ELECTRICAL LINE |
| | 12"ACP | SANITARY SEWER, SIZE & TYPE |
| | 8"PVC | FORCE MAIN, SIZE & TYPE |
| | 8"DI | WATER MAIN, SIZE & TYPE |
| | 12"RCP | STORM DRAIN, SIZE & TYPE |
| UD | 8"PVC UD | UNDERDRAIN, SIZE & TYPE |
| | 12"BCCMP | CULVERT, SIZE & TYPE |
| | | RAILROAD |
| S | S | SILTATION FENCE |

## MATERIAL SPECIFICATIONS

FINAL COVER

SAND - MDOT SPECIFICATION 703.06b, TYPE F (AGGREGATE FOR SAND LEVELING) PERMEABILITY $\geq 1 \times 10^{-3}$ cm/sec

COVER SOIL - WELL GRADED TILL SOIL WITH GREATER THAN 15 PERCENT PASSING A NO. 200 SIEVE. NO STONES GREATER THAN 4 INCHES IN DIAMETER (COMPACTED 95 PERCENT STANDARD PROCTOR) A4

TOP COVER SOIL - A MIXTURE OF WELL GRADED TILL SOIL WITH GREATER THAN 15 PERCENT PASSING A NO. 200 SIEVE AND SECONDARY SLUDGE. NO STONES GREATER THAN 3 INCHES IN DIAMETER A4

SLUDGE - HOMOGENEOUS SECONDARY SLUDGE AS RECEIVED FROM MILL.

## MATERIAL TESTING SCHEDULE A4

| BORROW SOURCE | TEST | FREQUENCY |
|---|---|---|
| COVER SOIL | GRAIN SIZE | 4 TEST |
| SAND | GRAIN SIZE | 2 TEST |
| SAND | PERMEABILITY | 2 TEST |
| ON-SITE | | |
| COVER SOIL | GRAIN SIZE | 1/2000 CY |
| SAND | GRAIN SIZE | 4 TEST |
| SAND | PERMEABILITY | 1/5000 CY |

TEST METHODS

| | |
|---|---|
| GRAIN SIZE | ASTM D422 |
| PERMEABILITY | ASTM D2434 |

## VIEW MARKERS & IDENTIFICATION

SECTION NO. & LOCATION: 3 / C-300 — DRAWING WHERE SECTION OR DETAIL APPEARS

DETAIL IDENTIFICATION & LETTER: MANHOLE A — C-300

SECTION TITLE & NO.: ACCESS ROAD 3 — DRAWING WHERE SECTION IS TAKEN C-100

DETAIL TITLE & LETTER: MANHOLE A — DRAWING WHERE DETAIL IS CALLED OUT C-100

## ABBREVIATIONS

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A.C.C.M.P. | ASPHALT COATED C.M.P. | C.M.P. | CORRUGATED METAL PIPE | DR | DRAIN | GPD | GALLONS PER DAY | MON | MONUMENT | SF | SQUARE FEET |
| A.C.P. | ASBESTOS CEMENT PIPE | C.O. | CLEAN OUT | DWG | DRAWING | GPM | GALLONS PER MINUTE | N.I.T.C. | NOT IN THIS CONTRACT | SHT | SHEET |
| AC | ACRE | CEM. LIN. | CEMENT LINED | EA | EACH | HDPE | HIGH DENSITY POLYETHYLENE | N.T.S. | NOT TO SCALE | STA | STATION |
| AGG | AGGREGATE | CEN | CENTRAL ANGLE OF CURVE | EG | EXISTING GROUND OR GRADE | HP | HORSEPOWER | N/F | NOW OR FORMERLY | SY | SQUARE YARD |
| ALUM | ALUMINUM | CF | CUBIC FEET | ELEC | ELECTRIC | HYD | HYDRANT | NO. OR # | NUMBER | TAN | TANGENT |
| APPD | APPROVED | CFS | CUBIC FEET PER SECOND | ELL | ELBOW | I.D. | INSIDE DIAMETER | O.C. | ON CENTER | TDH | TOTAL DYNAMIC HEAD |
| APPROX | APPROXIMATE | CI | CAST IRON | EQUIP | EQUIPMENT | IN OR " | INCHES | O.D. | OUTSIDE DIAMETER | TEMP | TEMPORARY |
| ASB | ASBESTOS | CL | CLASS | EST | ESTIMATED | INV | INVERT | P.C. | POINT OF CURVE | TYP | TYPICAL |
| ASPH | ASPHALT | CONC | CONCRETE | EXC | EXCAVATE | INV. EL. | INVERT ELEVATION | P.I. | POINT OF INTERSECTION | V | VOLTS |
| AT2 C.M.P. | ALUMINUM TYPE 2 C.M.P. | CONST | CONSTRUCTION | EXIST | EXISTING | LB | POUND | P.T. | POINT OF TANGENT | W/ | WITH |
| AUTO | AUTOMATIC | CONTR | CONTRACTOR | F.G. | FINISH GRADE | LC | LEACHATE COLLECTION | PERF | PERFORATED | W/O | WITHOUT |
| AUX | AUXILIARY | CTR | CENTER | FBRGL | FIBERGLASS | LD | LEAK DETECTION | PSI | POUNDS PER SQUARE INCH | YD | YARD |
| AVE | AVENUE | CY | CUBIC YARD | FDN | FOUNDATION | LIN. FT. | LINEAR FEET | PVC | POLYVINYL CHLORIDE | | |
| AVG | AVERAGE | D | DEGREE OF CURVE (ARC DEF.) | FLEX | FLEXIBLE | LOC | LOCATION | PVMT | PAVEMENT | | |
| AZ | AZIMUTH | DBL | DOUBLE | FLG | FLANGE | LT | LEFT | QTY | QUANTITY | | |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | DEG OR ° | DEGREE | FLR | FLOOR | M.H. | MANHOLE | R.O.W. | RIGHT OF WAY | | |
| B.M. | BENCH MARK | DEPT | DEPARTMENT | FPS | FEET PER SECOND | M.J. | MECHANICAL JOINT | RAD | RADIUS | | |
| BIT | BITUMINOUS | DI | DUCTILE IRON | FT OR ' | FEET | MATL | MATERIAL | REQD | REQUIRED | | |
| BLDG | BUILDING | DIA OR Ø | DIAMETER | FTG | FOOTING | MAX. | MAXIMUM | RT | RIGHT | | |
| BOT | BOTTOM | DIM | DIMENSION | GA | GAUGE | MFR | MANUFACTURE | RTE | ROUTE | | |
| BRG | BEARING | DIST | DISTANCE | GAL | GALLON | MIN. | MINIMUM | S | SLOPE | | |
| C.B. | CATCH BASIN | DN | DOWN | GALV | GALVANIZED | MISC | MISCELLANEOUS | SCH | SCHEDULE | | |

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB NO. |
|---|---|---|---|---|---|---|---|
| B | A | 8/20/90 | ISSUED FOR BID - ADDENDUM 1 | | | | |

JOB NO.

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

DRN SLR 7/90
CKD [illegible] 6/90
CKD —
CURR —
APPVD —
ISSUE CODE: 2-BIDS
SCALE

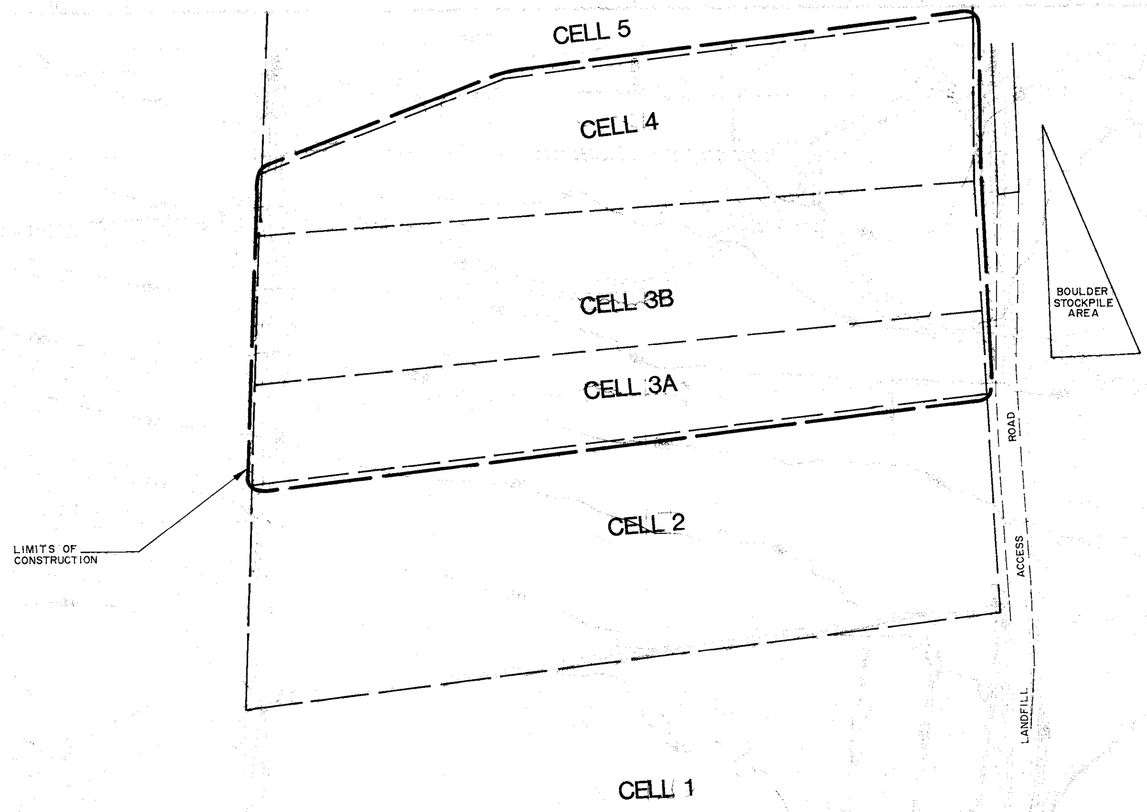
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

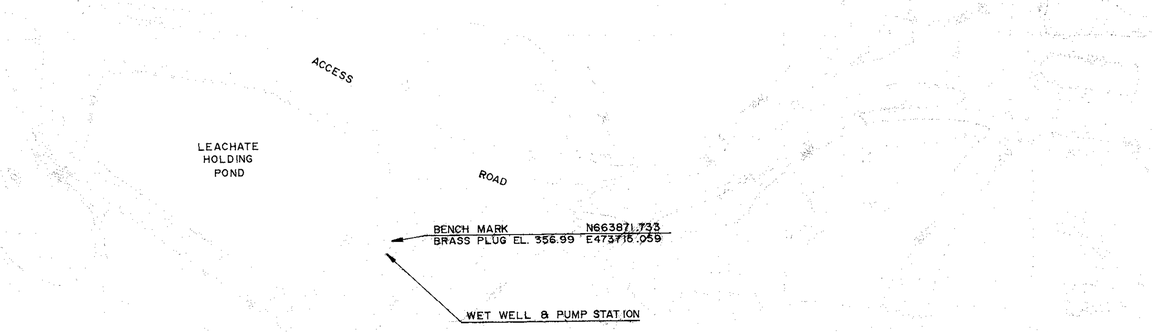
CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
FINAL COVER - CELLS 3A, 3B, & 4
SYMBOLS & ABBREVIATIONS

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703, 70R2

YB-19168




STATE OF MAINE
PETER M. MAHER
#4107
REGISTERED PROFESSIONAL ENGINEER

YB-15263 DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION

RCR 7/90
M. Cote 8/90

[redacted]

DOLBY III LANDFILL
FINAL COVER-CELLS 3A, 3B, & 4
SITE LOCATION PLAN

2-092-4703,7082

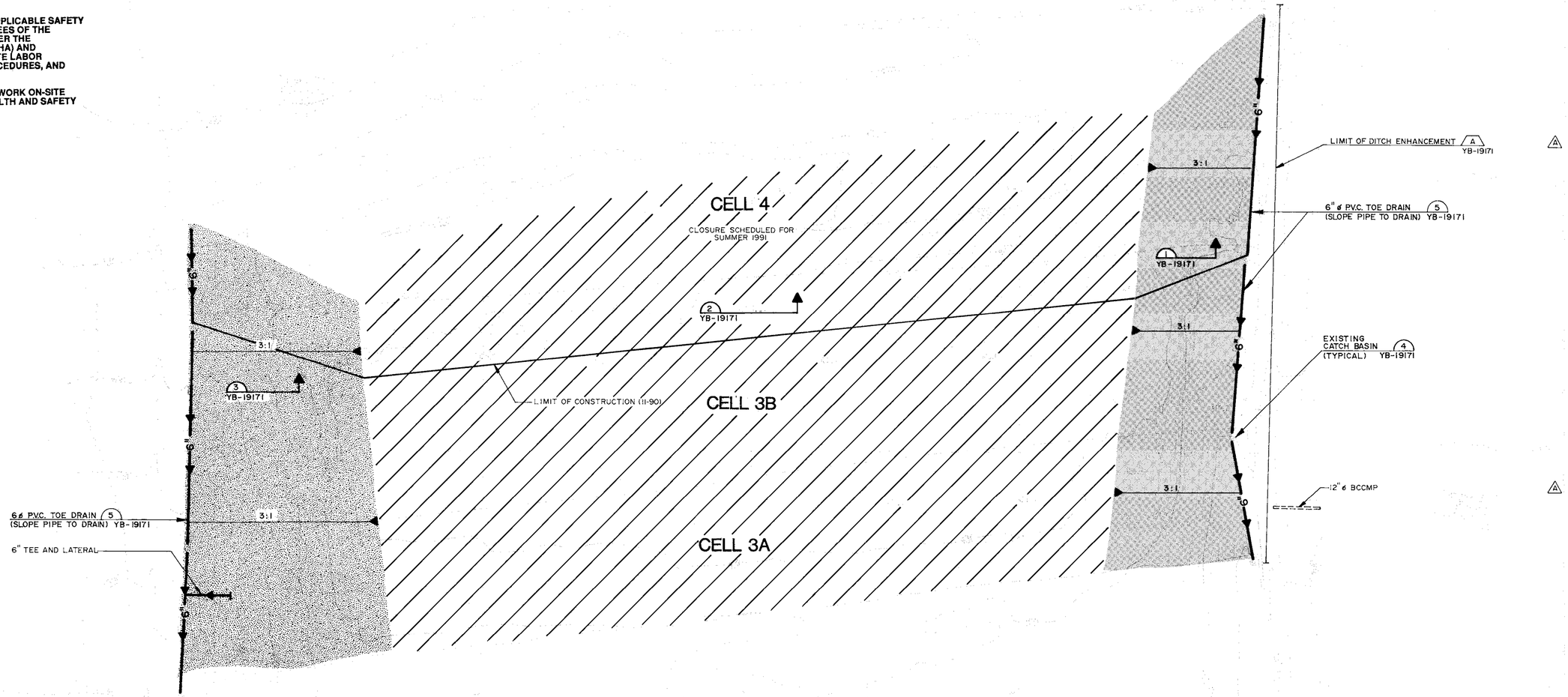
Y-19169

**NOTES:**

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

2. THE CONTRACTOR SHALL NOT CONDUCT ANY WORK ON-SITE WITHOUT THE PRESENCE OF A QUALIFIED HEALTH AND SAFETY SUPERVISOR APPROVED BY THE OWNER.

NOTE: CONTOURS SHOWN MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.




| | | | | |
|---|---|---|---|---|
| YB-16476 | DOLBY III LANDFILL-CELLS 3A, 3B, & 4 TOPO. SURVEY & DIGITIZ.(4/18/90) | B | 12/90 | RECORD DRAWING |
| | | A | 8/20/90 | ISSUED FOR BID - ADDENDUM 1 |

STATE OF MAINE — PETER A. MAHER — 5102 — REGISTERED PROFESSIONAL ENGINEER

RLR 7/90
AP Cote 8/90

CUMBERLAND, MAINE

JOB NO.

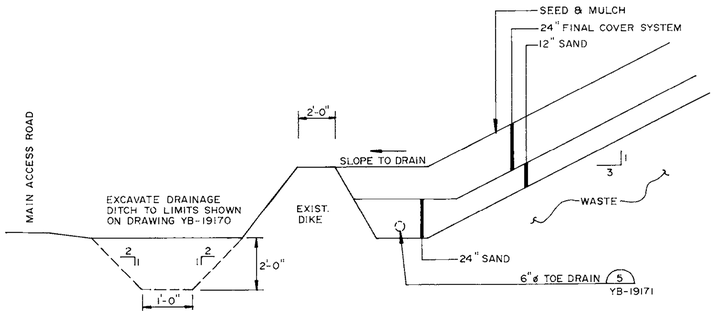
1" = 50'

EAST MILLINOCKET MILL

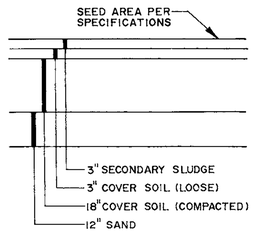
DOLBY III LANDFILL
FINAL COVER-CELLS 3A, 3B, & 4
EXISTING TOPOGRAPHY PLAN

2-092-4703,7082

YB-19170

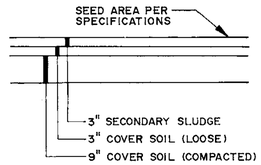



DITCH ENHANCEMENT DETAIL (A)
N.T.S. YB-19170



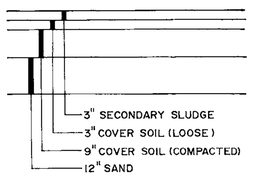

NOTE: SOUTHERN SIDE OF LANDFILL AS SHOWN ON EXISTING TOPOGRAPHY PLAN.

FINAL COVER SECTION (1)
SCALE: 1" = 2'-0" YB-19170



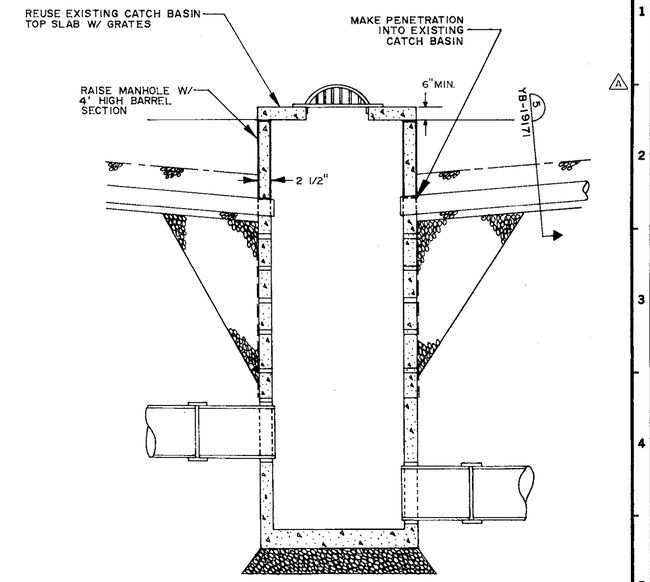

NOTE: TOP OF LANDFILL AS SHOWN ON EXISTING TOPOGRAPHY PLAN.

INTERMEDIATE TOP COVER SECTION (2)
SCALE: 1" = 2'-0" YB-19170

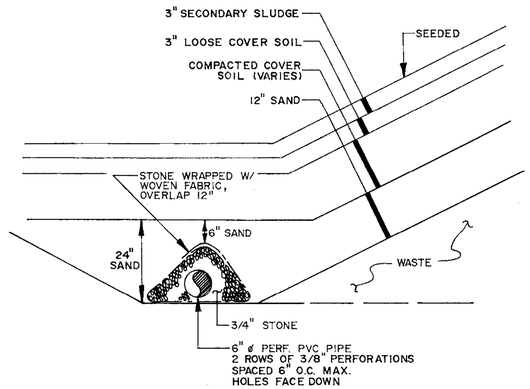



NOTE: NORTHERN SIDE OF LANDFILL AS SHOWN ON EXISTING TOPOGRAPHY PLAN.

INTERMEDIATE SLOPE COVER SECTION (3)
SCALE: 1" = 2'-0" YB-19170




CATCH BASIN (4)
N.T.S. (EXISTING) YB-19170




SECTION (5)
N.T.S. YB-19170 YB-19171

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 12/90 | RECORD DRAWING | | | | |
| | | B | A | 8/20/90 | ISSUED FOR BID - ADDENDUM 1 | | | | |

STATE OF MAINE — 26 FEB 1991 — REGISTERED PROFESSIONAL ENGINEER

**SEVEE & MAHER ENGINEERS, INC.**
**CUMBERLAND, MAINE**

JOB NO.

| | | |
|---|---|---|
| DRN | RLR | 7/90 |
| CKD | A. Cote | 8/90 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: C-CONST
SCALE AS SHOWN

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

**CENTRAL ENGINEERING DEPARTMENT**
EAST MILLINOCKET MILL

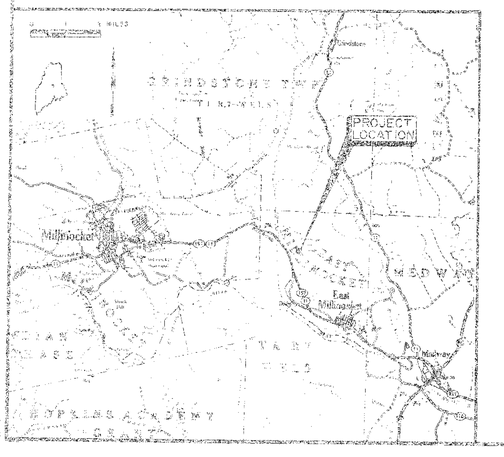
DOLBY III LANDFILL
FINAL COVER-CELLS 3A, 3B, & 4
SECTIONS & DETAILS

JOB NO.
ENG. REQ. NO.
FILE NO 2-092-4703, 7082

**YB-19171**

# GREAT NORTHERN PAPER CO.
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 5 CONSTRUCTION

| SHT NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-19086 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-19087 |
| 3 | SITE LOCATION PLAN SHEET 1 OF 2 | YB-19088 |
| 4 | SITE LOCATION PLAN SHEET 2 OF 2 | YB-19088 |
| 5 | SITE DEVELOPMENT PLAN | YB-19089 |
| 6 | SECTIONS & DETAILS | YB-19090 |
| 7 | FINAL GRADING PLAN | YB-19091 (N.I.T.C.) |




## SEVEE & MAHER ENGINEERS, INC.
## CUMBERLAND, MAINE
## 1990

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY III LANDFILL
CELL 5
COVER SHEET

JOB NO. 93-49
DWG. REQ. NO.
FILE NO. 2-092-4703.70B2

YB-19086

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | STONE WALL | TP-103 | TP-103 | TEST PIT & NUMBER |
| | | NORTH ARROW (MAGNETIC) | | | DRAINAGE COURSES W/DIRECTION & DITCH | □ | ■ | CLEAN OUT STRUCTURES |
| N | | NORTH ARROW (PLAN NORTH) | SHORE SIDE | | EDGE OF WATER | ○ | ● | MANHOLE |
| 25 | 25 | CONTOUR LINES | | | WATER ELEVATION (GROUND OR SURFACE) | ⌑ | ⌑ | WATER VALVE |
| 25.63 | 25.56 | SPOT ELEVATION (GRADE) | | | ROCK OUTCROP OR LEDGE | ⌑ | ⌑ | HYDRANT |
| E.G. | | EXISTING GROUND (PROFILES & SECTIONS) | | | FENCE LINE (WOOD) | ⌑ | ⌑ | TELEPHONE OR POWER POLE |
| SB | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT | | | FENCE LINE (WIRE) | ⌑ | ⌑ | CATCH BASIN |
| 0+00 | 1+00 | CONSTRUCTION BASELINE | (STONE) | (CONC) FACE | RETAINING WALL (TYPE) | G | 9" G | UNDERGROUND GAS MAIN & SIZE |
| | | PROPERTY OR DEED LINE (NOT SURVEYED) | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE CABLE / CONDUIT |
| 525.14' N35°-10'-41"E | 525.14' N35°-10'-41"E | PROPERTY LINE W/BEARING & DISTANCE | | | BUILDING & STRUCTURES | E | E | UNDERGROUND ELECTRIC CABLE / CONDUIT |
| | | ROADS, EASEMENTS OR RIGHT OF WAY LINE | | | STEPS W/ TYPE (WOOD / CONCRETE) | OE | OE | OVERHEAD ELECTRICAL LINE |
| | | BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY) | | 1' 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | | 12"ACP | SANITARY SEWER, SIZE & TYPE |
| MON. | MON. | SURVEY MONUMENT | | TOP OF SLOPE 2 | SLOPES (W/SLOPE RATIO) | | 8" PVC | FORCE MAIN, SIZE & TYPE |
| I.F. | I.F. | SURVEY IRON (FOUND) | | | EDGE OF TRAVELED WAY (TYPE) | | 8" DI | WATER MAIN, SIZE & TYPE |
| D.H. PK STK | D.H. PK STK | DRILL HOLE, PK OR STAKE | C | F | CUT OR FILL LINE | | 12" RCP | STORM DRAIN, SIZE & TYPE |
| | | WOODS OR BRUSH LINE | | CLL | CONSTRUCTION LIMIT LINE | UD | 8" PVC UD | UNDERDRAIN, SIZE & TYPE |
| | | INDIVIDUAL TREE (DECIDUOUS) | | | BITUMINOUS PAVEMENT | | 12" BCCMP | CULVERT, SIZE & TYPE |
| | | INDIVIDUAL TREE (CONIFEROUS) | | | GRAVEL ROAD | | | RAILROAD |
| | | TREE, TO BE REMOVED | | | CONCRETE | | S S | SILTATION FENCE |
| | | MARSH AREA | B-12 MW-2 P-20 | B-12 MW-2 P-20 | TEST BORING, MONITORING WELL OR PROBE & NUMBER | | | |

# ABBREVIATIONS

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A.C.C.M.P. | ASPHALT COATED C.M.P. | C.M.P. | CORRUGATED METAL PIPE | DR | DRAIN | GPD | GALLONS PER DAY | MON | MONUMENT | SF | SQUARE FEET |
| A.C.P. | ASBESTOS CEMENT PIPE | C.O. | CLEAN OUT | DWG | DRAWING | GPM | GALLONS PER MINUTE | N.I.T.C. | NOT IN THIS CONTRACT | SHT | SHEET |
| AC | ACRE | CEM. LIN. | CEMENT LINED | EA | EACH | HDPE | HIGH DENSITY POLYETHYLENE | N.T.S. | NOT TO SCALE | STA | STATION |
| AGG | AGGREGATE | CEN | CENTRAL ANGLE OF CURVE | EG | EXISTING GROUND OR GRADE | HP | HORSEPOWER | N/F | NOW OR FORMERLY | SY | SQUARE YARD |
| ALUM | ALUMINUM | CF | CUBIC FEET | ELEC | ELECTRIC | HYD | HYDRANT | NO. OR # | NUMBER | TAN | TANGENT |
| APPD | APPROVED | CFS | CUBIC FEET PER SECOND | ELL | ELBOW | I.D. | INSIDE DIAMETER | O.C. | ON CENTER | TDH | TOTAL DYNAMIC HEAD |
| APPROX | APPROXIMATE | CI | CAST IRON | EQUIP | EQUIPMENT | IN OR " | INCHES | O.D. | OUTSIDE DIAMETER | TEMP | TEMPORARY |
| ASB | ASBESTOS | CL | CLASS | EST | ESTIMATED | INV | INVERT | P.C. | POINT OF CURVE | TYP | TYPICAL |
| ASPH | ASPHALT | CONC | CONCRETE | EXC | EXCAVATE | INV. EL. | INVERT ELEVATION | P.I. | POINT OF INTERSECTION | V | VOLTS |
| AT2 C.M.P. | ALUMINUM TYPE 2 C.M.P. | CONST | CONSTRUCTION | EXIST | EXISTING | LB | POUND | P.T. | POINT OF TANGENT | W/ | WITH |
| AUTO | AUTOMATIC | CONTR | CONTRACTOR | F.G. | FINISH GRADE | LC | LEACHATE COLLECTION | PERF | PERFORATED | W/O | WITHOUT |
| AUX | AUXILIARY | CTR | CENTER | FBRGL | FIBERGLASS | LD | LEAK DETECTION | PSI | POUNDS PER SQUARE INCH | YD | YARD |
| AVE | AVENUE | CY | CUBIC YARD | FDN | FOUNDATION | LIN. FT. | LINEAR FEET | PVC | POLYVINYL CHLORIDE | | |
| AVG | AVERAGE | D | DEGREE OF CURVE (ARC DEF.) | FLEX | FLEXIBLE | LOC | LOCATION | PVMT | PAVEMENT | | |
| AZ | AZIMUTH | DBL | DOUBLE | FLG | FLANGE | LT | LEFT | QTY | QUANTITY | | |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | DEG OR ° | DEGREE | FLR | FLOOR | M.H. | MANHOLE | R.O.W. | RIGHT OF WAY | | |
| B.M. | BENCH MARK | DEPT | DEPARTMENT | FPS | FEET PER SECOND | M.J. | MECHANICAL JOINT | RAD | RADIUS | | |
| BIT | BITUMINOUS | DI | DUCTILE IRON | FT OR ' | FEET | MATL | MATERIAL | REQD | REQUIRED | | |
| BLDG | BUILDING | DIA OR Ø | DIAMETER | FTG | FOOTING | MAX. | MAXIMUM | RT | RIGHT | | |
| BOT | BOTTOM | DIM | DIMENSION | GA | GAUGE | MFR | MANUFACTURE | RTE | ROUTE | | |
| BRG | BEARING | DIST | DISTANCE | GAL | GALLON | MIN. | MINIMUM | S | SLOPE | | |
| C.B. | CATCH BASIN | DN | DOWN | GALV | GALVANIZED | MISC | MISCELLANEOUS | SCH | SCHEDULE | | |

# VIEW MARKERS & IDENTIFICATION

SECTION NO. & LOCATION

3 / C-300 — DRAWING WHERE SECTION OR DETAIL APPEARS

DETAIL IDENTIFICATION & LETTER

MANHOLE / A — C-300

SECTION TITLE & NO.

ACCESS ROAD / 3 — C-100

DRAWING WHERE SECTION IS TAKEN

DETAIL TITLE & LETTER

MANHOLE / A — C-100

DRAWING WHERE DETAIL IS CALLED OUT

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APP'D | JOB NO. |
|---|---|---|---|---|---|---|---|

**SEVEE & MAHER ENGINEERS, INC.**
CUMBERLAND, MAINE

JOB NO. 9019

| | | |
|---|---|---|
| DRN | RLR | |
| CKD | [illegible] | 5/90 |
| CKD | DKE | 5/90 |
| CORR | [illegible] | 5/15/90 |
| APP'D | BAP | 5/22/90 |

ISSUE CODE: B-BIDS

SCALE

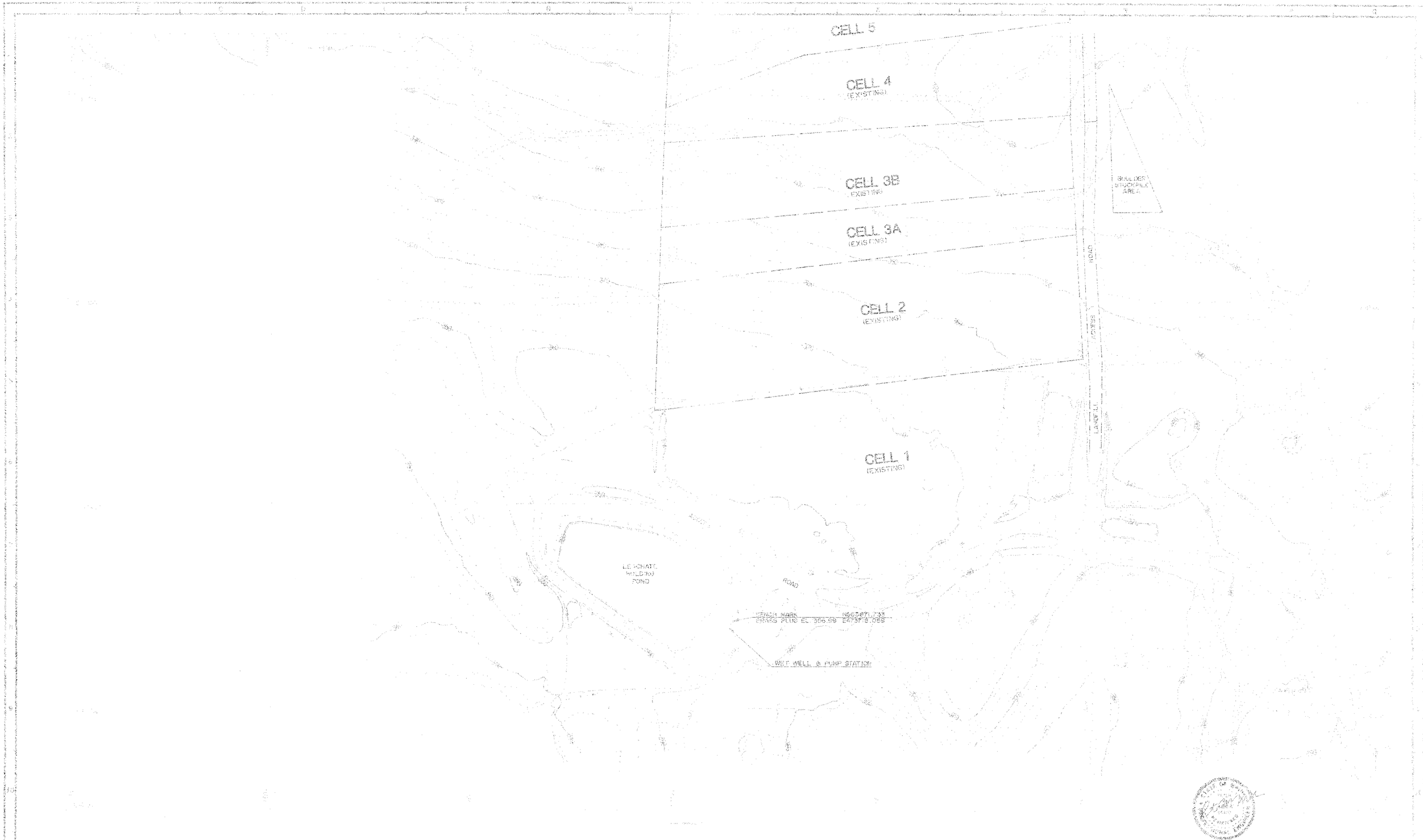
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
CELL 5
SYMBOLS & ABBREVIATIONS

JOB NO. 94545
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

YB-19087




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| YE-5287 | DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION | | | | | | |
| DRAWING NO. | REFERENCE DRAWING NO.'S | CODE | NO. | DATE | REVISION | BY | APP'D |

SEVEE & MAHER ENGINEERS, INC.
COMBERLAND, MAINE

JOB NO. 9019

DES. RLS
DR. SWE 6/9/98
CHK'D RLS 6/9/98
APP'D [illegible] 7/7/98
SURV. [illegible] 6/9/98
ISSUE CODE
S - DWG
SCALE 1"=50'

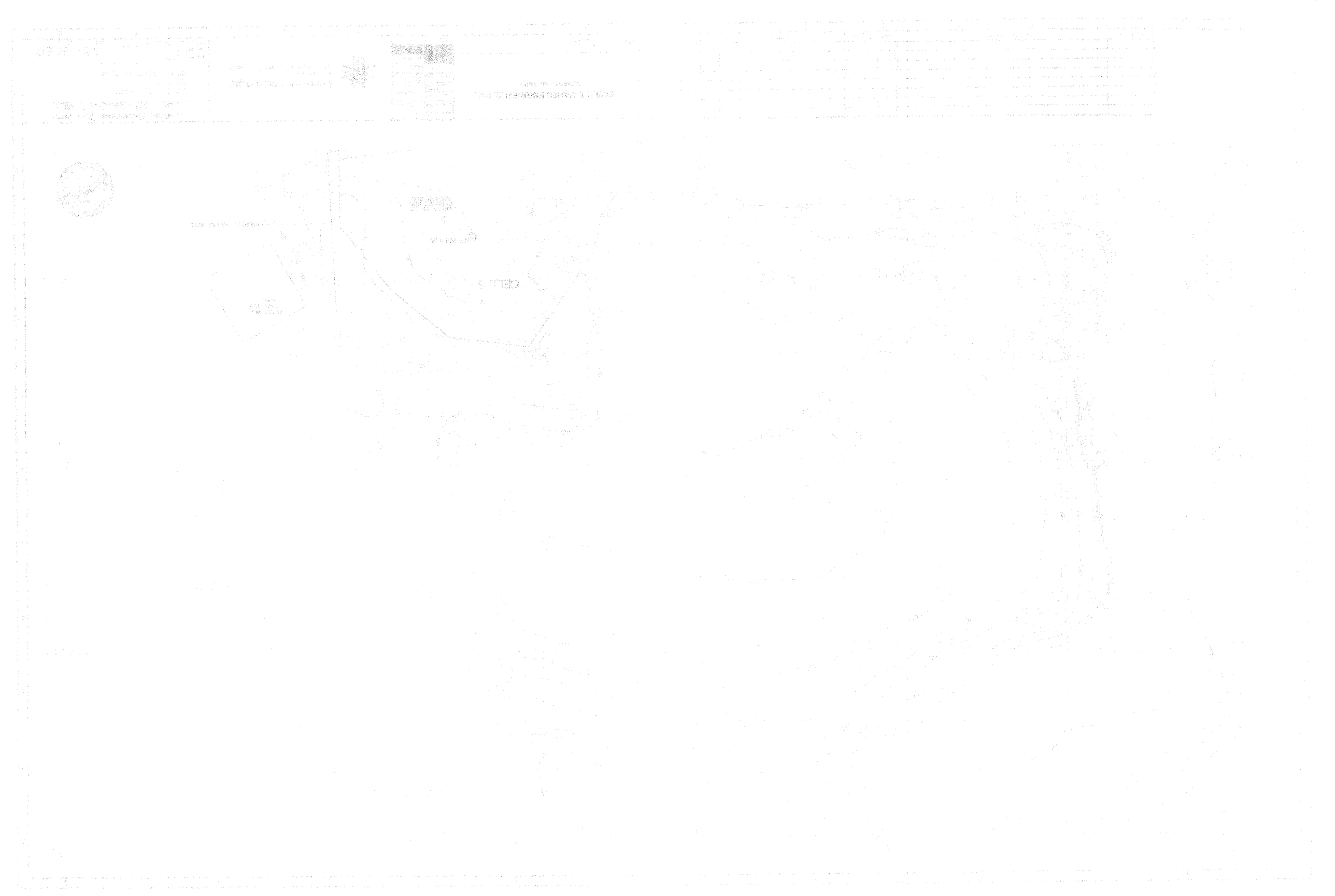
Great Northern Paper
A Subsidiary of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET, MAINE

DOLBY III LANDFILL
CELL 5
SITE LOCATION PLAN

SCALE: 1"=50'
FILE NO. 4-0-5-1-5-4-7-0-4a

YE-5088
SHEET 1 OF 2



OPERATION NOTES:

CELL 4

1. REMOVE MINIMUM 15 FT LONG DIKE SECTIONS SEPARATING CB #16 AND NORTH FROM CELL 5.

CULVERT SCHEDULE

| | TYPE | DIAMETER | MIDPOINT CENTERLINE LENGTH | MIDPOINT CENTERLINE NORTH COORD. | MIDPOINT CENTERLINE EAST COORD. |
|---|---|---|---|---|---|
| CULVERT #1 | CMP | 24" | 40' | 683005 | 475287 |
| CULVERT #2 | CMP | 15" | 40' | 684018 | 475082 |
| CULVERT #3 | CMP | 24" | 40' | 682800 | 475219 |


DOLBY III LANDFILL CELL 5 SITE DEVELOPMENT PLAN

DEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

JOB NO. 303

| | | |
|---|---|---|
| DWN | RLB | |
| CHK | JAS | 5/30 |
| DES | DJS | 5/30 |
| CHK | JAS | |
| APP | JAS | 5/30 |

ISSUE CODE
S = SUP.
SCALE 1" = 50'

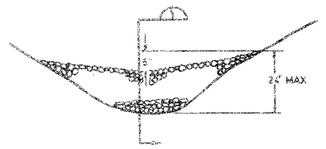
Great Northern Paper
a corporation of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
CELL 5
SITE DEVELOPMENT PLAN

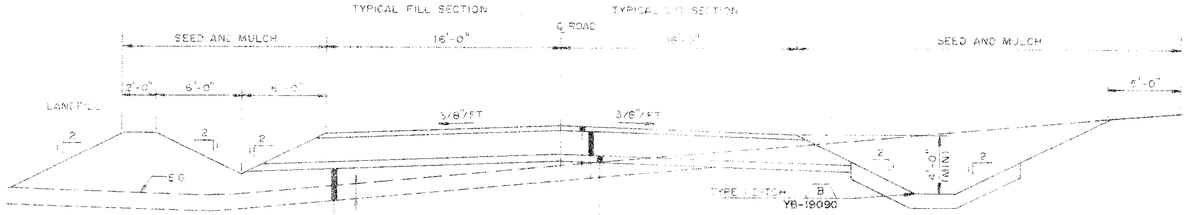
JOB NO. 94545
FWG REG. NO.
FILE NO. 3-082-4209/7092

YB-19089

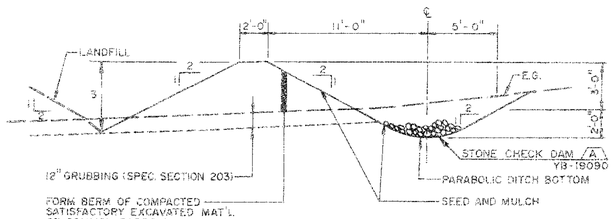


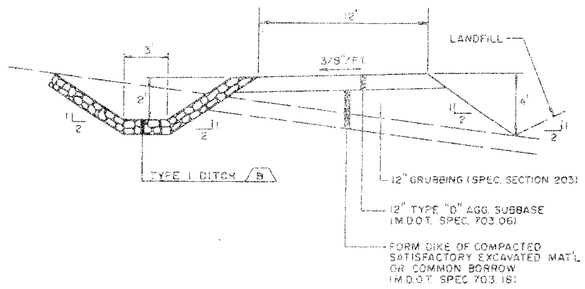

STONE CHECK DAM (A)
N.T.S. YB-19089

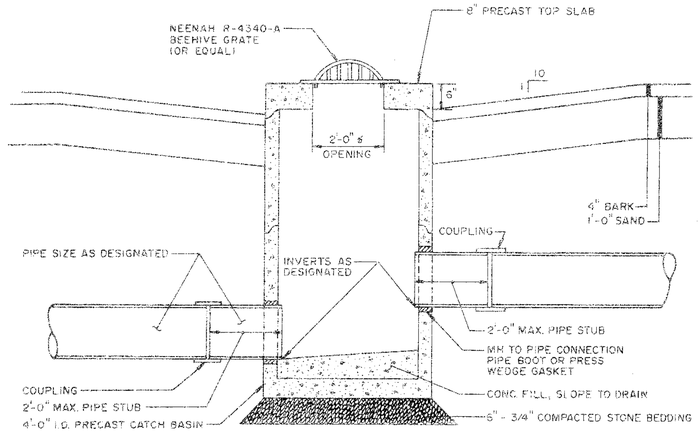

SECTION (1)
N.T.S.




TYPICAL SECTION
LANDFILL ACCESS ROAD (3)
N.T.S. YB-19089

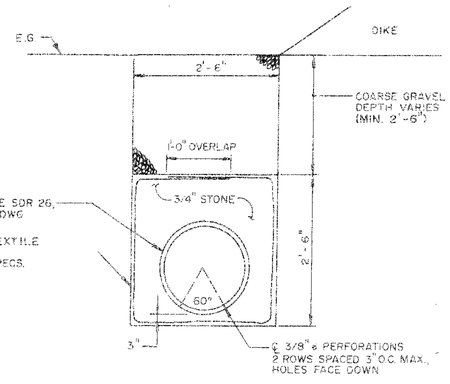


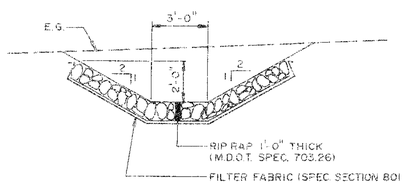

TYPICAL CATCH BASIN (5)
N.T.S. (EXISTING) YB-19089

TYPICAL SECTION
DIKE AND TYPE 2 DRAINAGE DITCH (2)
SCALE: 1"=5' YB-19089



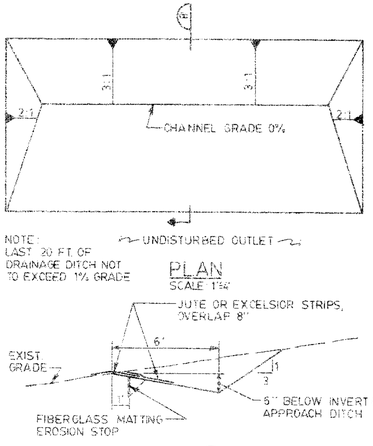

PERF LEACHATE COLLECTION MAIN (7)
N.T.S. YB-19089

DIKE ACCESS ROAD (4)
N.T.S. YB-19089

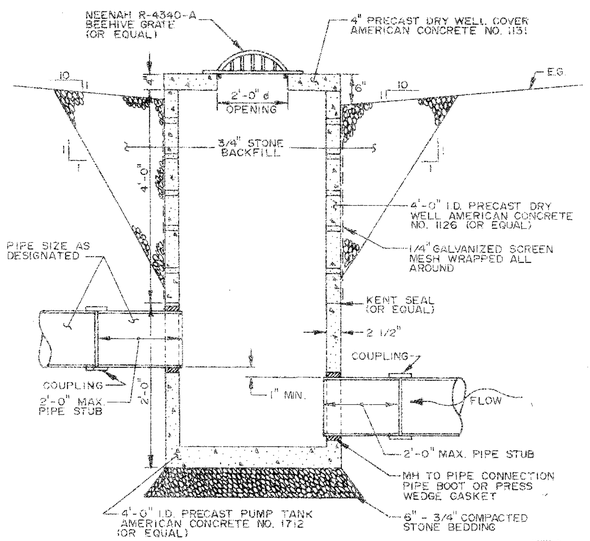



TYPE I DITCH (B)
N.T.S. YB-19090

NOTE: STONE OUTLET TO BECOME PERMANENT FIXTURE. ACCUMULATED SEDIMENT TO BE REMOVED AND PLACED IN LANDFILL WHEN CONSTRUCTION COMPLETE AND TRIBUTARY AREA IS STABILIZED WITH VEGETATION, GRAVEL SURFACE OR RIP RAP. AREA TO BE SEEDED AND MULCHED WHEN CONSTRUCTION COMPLETE.




SECTION (8)
LEVEL SPREADER (C)
N.T.S. YB-19089




CATCH BASIN (6)
N.T.S. YB-19089

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | REL | DATE | REVISION | BY | CKD | APP'D | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

JOB NO. 9019

| | | |
|---|---|---|
| DRN | RLR | |
| CKD | [illegible] | 5/90 |
| CKD | [illegible] | 5/1/90 |
| CORR. | [illegible] | 5/17/90 |
| APPVD | BHP | 5/24/90 |

ISSUE CODE
B - BIDS
SCALE AS SHOWN

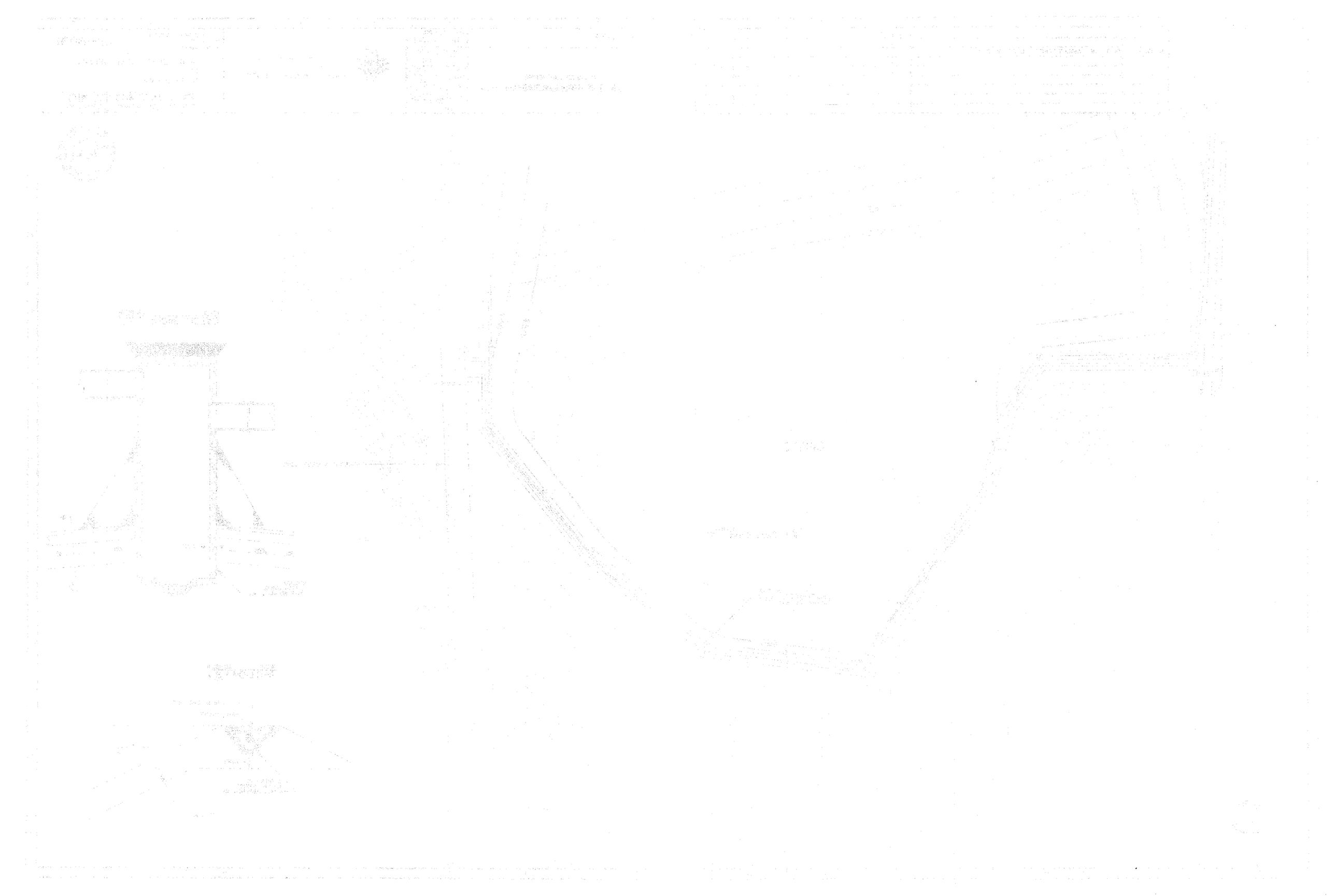
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

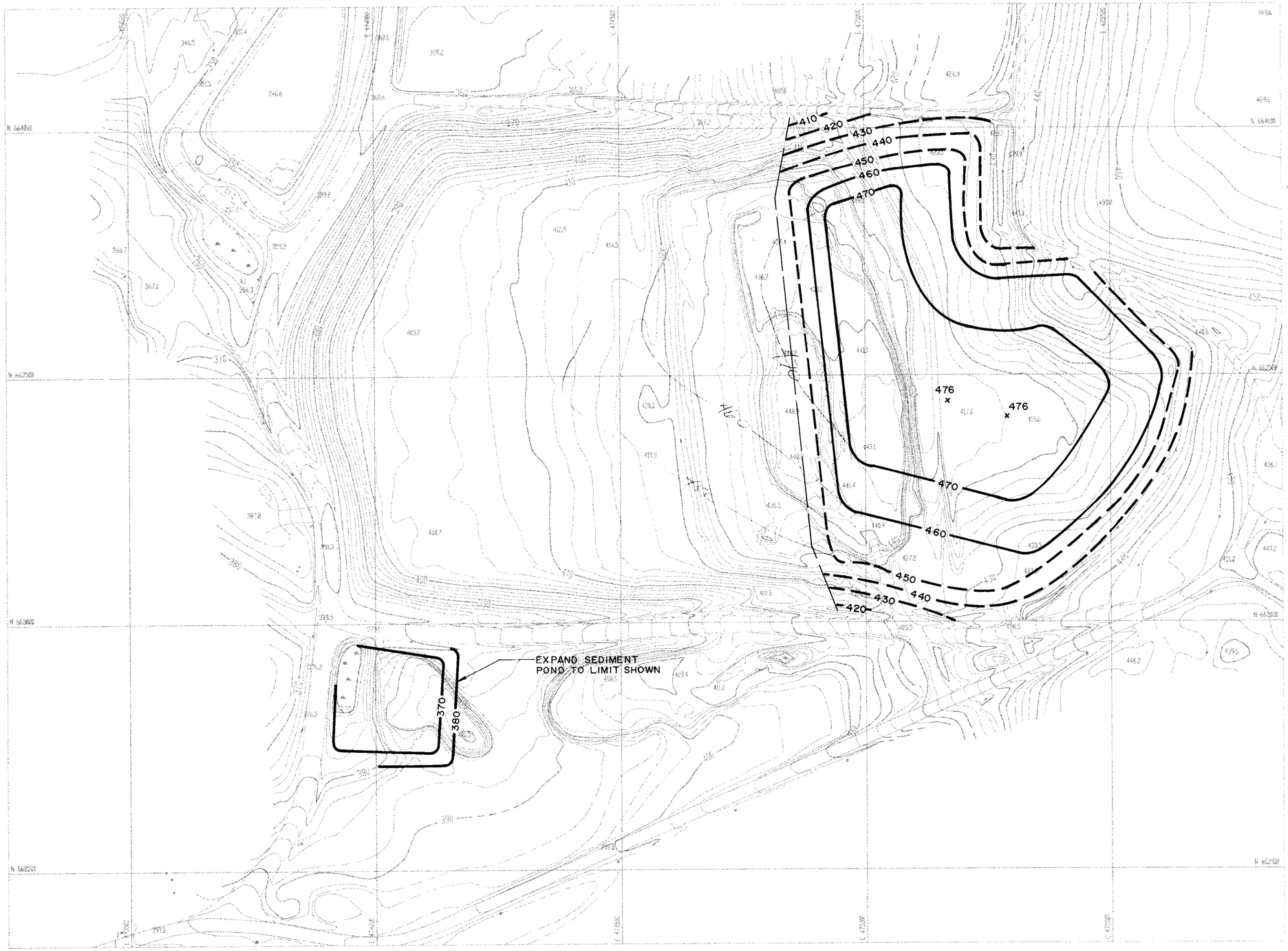
CENTRAL ENGINEERING DEPARTMENT

DOLBY III LANDFILL
CELL 5
SECTIONS & DETAILS

JOB NO. 94545
ENG. REQ. NO. [illegible]
FILE NO. 2-092-4702.7089

YB-19090






| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 8-5-91 | SUBMITTED TO MDEP | | MHC | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

| | | |
|---|---|---|
| DRN | | |
| CKD | 7/91 | MHC |
| CKD | | |
| CORR | | |
| APPVD | | |
| ISSUE CODE | | |
| P - PRELIM | B - BIDS | |
| M - MTL T.O. | C - CONSY | |
| SCALE | 1" = 100' | |

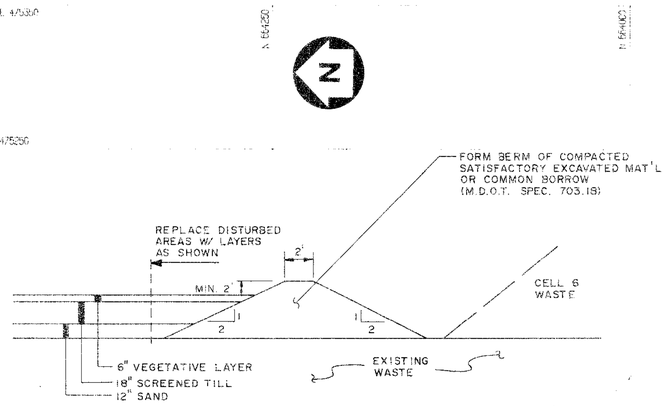
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

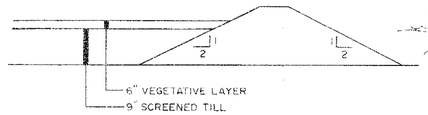
# DOLBY III LANDFILL
# CELL 6
# FINAL GRADING PLAN

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703, 7082

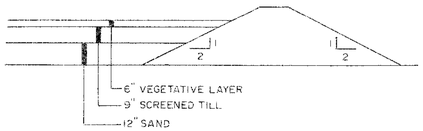
YB-20023



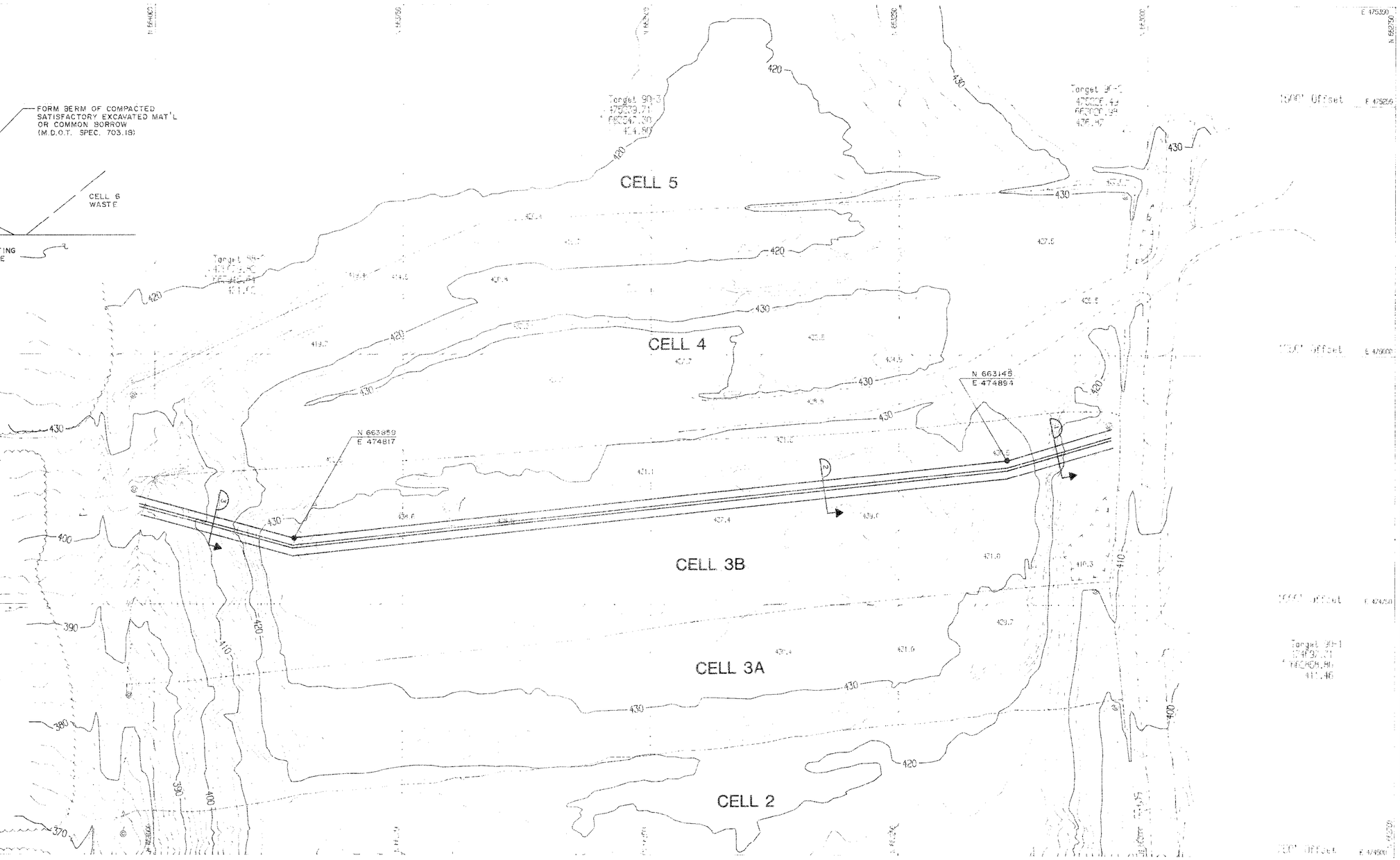

DIKE SECTION (1)
N.T.S.




DIKE SECTION (2)
N.T.S.




DIKE SECTION (3)
N.T.S.




0 25 50 100 150 200 FEET

NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING ASBESTOS HANDLING.
2. CONTOURS SHOWN MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL QUANTITIES

| | |
|---|---|
| BORROW | 1500 CY |
| SEEDING | 20 UNITS |

| DRAWING NO | REFERENCE DRAWING TITLE |
|---|---|
| YB-16476 | DOLBY III LANDFILL - CELLS 3A, 3B, & 4 TOPO SURVEY & DIGITIZ. 14/16/90) |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | 1 | 1-8-92 | RECORD DRAWING | | | | |
| | 0 | 8-5-91 | SUBMITTED TO MDEP | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

| | | |
|---|---|---|
| DRN | | |
| CKD | 7/91 | |
| CRD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL.T.O. | C - CONST

SCALE AS SHOWN

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL

DOLBY III LANDFILL
CELL 6
SITE DEVELOPMENT PLAN

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092.4703.7062

YB-20024

E 475000

E 474500

CELL 7

REMOVE 15" OF COVER SOIL AND STOCKPILE ON CELL 6

CELL 6 LIMIT

CB#17

CB#16

CB#15

CB#14

CB#13

CB#12

CB#11

CB#10

CB#9

CB#8

CB#1

ROAD

ACCESS

DRAINAGE MANHOLE A
N 663863.90
E 474386.57
RIM EL = 411.79
YB-20546

DRAINAGE MANHOLE A
N 663125.20
E 474358.66
RIM EL = 410.12
YB-20546

N663879.00
E474369.57

N663108.98
E474350.33

22-1/2° ELBOW
TURN TO MATCH SLOPE

22-1/2° ELBOW
TURN TO MATCH SLOPE

CONTAINMENT DIKE

12"ø HANCORE TITELINE PIPE 4 YB-20546

12"ø HANCORE TITELINE PIPE 4 YB-20546

TIE 12"ø PIPE INTO EXISTING CATCH BASIN #1

TIE 12"ø PIPE INTO EXISTING CATCH BASIN #9

3 YB-20546

2 YB-20546

1 YB-20546

△ 4748218
E 474710.53
469.51

COMPILED AND CONTROLLED BY JAMES W. SEWALL CO.
OLD TOWN, ME BY PHOTOGRAMMETRIC METHODS
FROM AERIAL PHOTOGRAPHS DATED 8/9/90

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 1/93 | RECORD DRAWING | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE
JOB NO. 92051

| | | |
|---|---|---|
| DRN | PAF | 9-92 |
| CKD | | 9-92 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - PRELIM | B - BIDS
M - MTL T.O. | C - CONST
SCALE 1" = 50'

**BOWATER**
GREAT NORTHERN PAPER, INC.

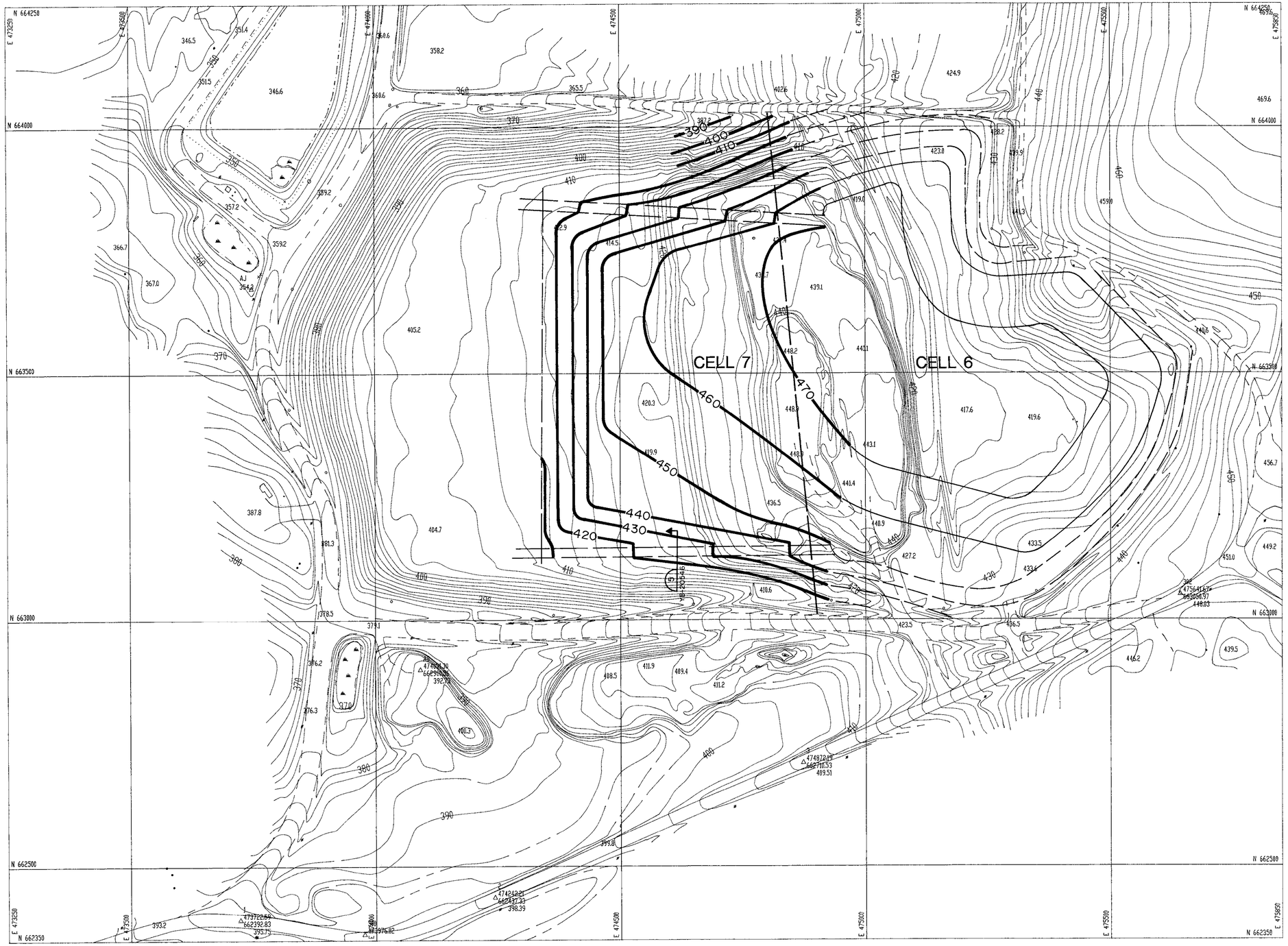
CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 7
SITE DEVELOPMENT PLAN

JOB NO.
ENG. REQ. NO. 95-6249
FILE NO. 2-092-4703,7082

**YB-20544**

SPILLER'S




| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | COMPILED AND CONTROLLED BY JAMES W. SEWALL CO. | | | | | | | | |
| | OLD TOWN, ME BY PHOTOGRAMMETRIC METHODS | | | | | | | | |
| | FROM AERIAL PHOTOGRAPHS DATED 8/9/90 | | | | | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 9205!

| | | |
|---|---|---|
| DRN | PAF | 9-92 |
| CKD | [illegible] | 9-92 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL T.O. | C - CONST

SCALE 1" = 100'

**BOWATER**
GREAT NORTHERN PAPER, INC.

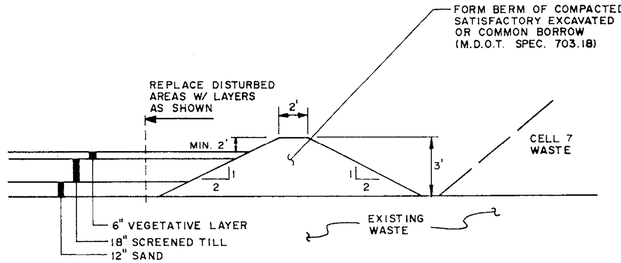
CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

# DOLBY III LANDFILL
# CELL 7
# FINAL GRADING PLAN

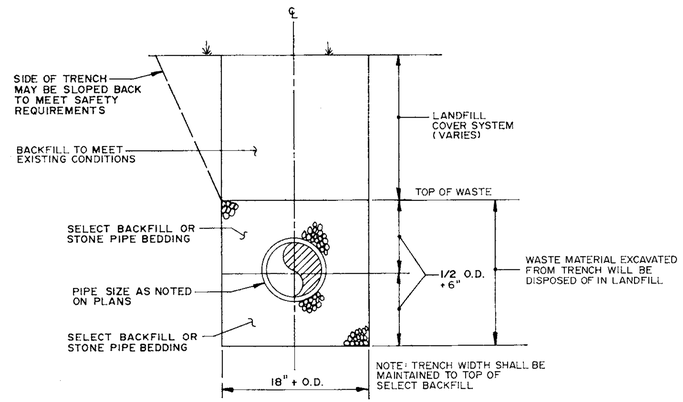
JOB NO. _____
ENG. REQ. NO. 95-6249
FILE NO. 2-092-4703,7082

**YB-20545**

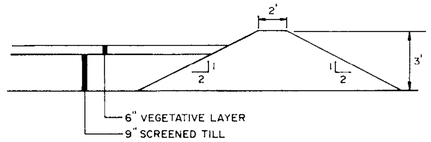
SPILLER'S



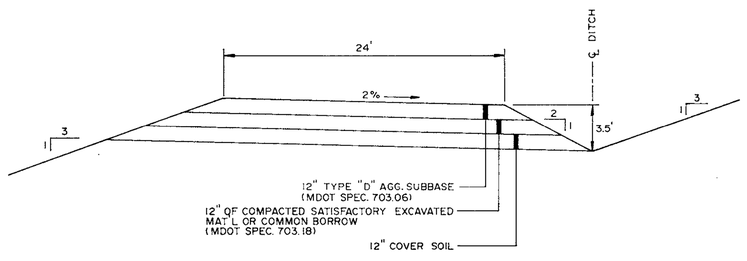

DIKE SECTION 1
N.T.S. YB-20544




PIPE TRENCH 4
N.T.S. YB-20544

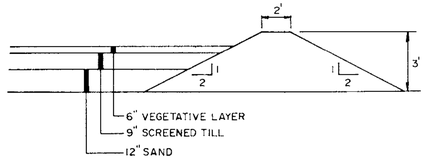



DIKE SECTION 2
N.T.S. YB-20544

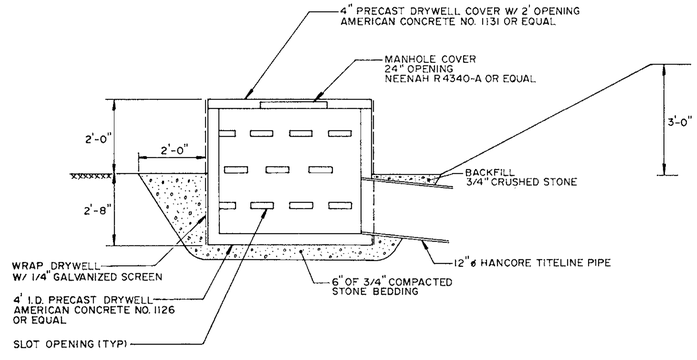



N.T.S.

ROAD TERRACE 5
NTS YB-20545




DIKE SECTION 3
N.T.S. YB-20544




DRAINAGE MANHOLE A
NTS YB-20544

GENERAL NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.
3. EXCAVATIONS ENCOUNTERING WASTE MATERIALS, I.E. SLUDGE, WILL BE DISPOSED OF IN THE ACTIVE DISPOSAL AREA.

MATERIAL SPECIFICATIONS:

DIKE EMBANKMENT SOIL:

COMPACTION - THE DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR).

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL. THE BEDDING MATERIAL SHALL MEET THE FOLLOWING GRADATION:

| SIEVE DESIGNATION | PERCENT PASSING BY WEIGHT |
|---|---|
| 1 INCH | 100 |
| 1/4 INCH | ≤5 |

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM CELL 7 AREA PRIOR TO PLACING THE DRAINAGE OR EMBANKMENT MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING LANDFILL.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIALS -

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

| SEED: | | |
|---|---|---|
| | TALL FESCUE | 59% |
| | RED FESCUE | 25% |
| | RED TOP | 5% |
| | LADINO CLOVER | 3% |
| | ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

MATERIAL QUANTITIES:

| | |
|---|---|
| GRUBBING | 17,000 CY |
| DIKE SOIL | 1,600 CY |
| 12" DIA. PIPE | 355 LF |
| 3/4" STONE | 74 CY |
| DRYWELLS WITH COVERS, GRATES & FRAMES | 2 |

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | 1 | 1/93 | RECORD DRAWING | | | | |

JOB NO. 92051

**SEVEE & MAHER ENGINEERS, INC.**
**CONSULTING ENGINEERS**
**CUMBERLAND, MAINE**

| | | |
|---|---|---|
| DRN | PAF | 9-92 |
| CKD | | 9-92 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL T.O. | C - CONST

SCALE NTS

**BOWATER**
**GREAT NORTHERN PAPER, INC.**

**CENTRAL ENGINEERING DEPARTMENT**
EAST OPERATION
DOLBY III LANDFILL
CELL 7
DETAILS, SECTIONS & MATERIAL SPECIFICATIONS

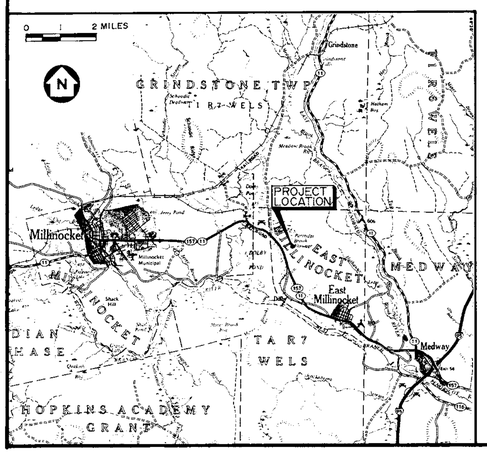
JOB NO.
ENG. REQ. NO. 95-6249
FILE NO. 2-092-4703.7082

**Y B-20546**

SPILLER S

# GREAT NORTHERN PAPER, INC.
# A SUBSIDIARY OF BOWATER INCORPORATED
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 6 CLOSURE,
# CELLS 8 & 9 CONSTRUCTION

| SHT NO. | TITLE | DWG NO. |
|---|---|---|
| 1 | COVER SHEET | YB-21000 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-21001 |
| 3 | SITE LOCATION PLAN | YB-21002 |
| 4 | CELL 8 - SITE DEVELOPMENT PLAN | YB-21003 |
| 5 | CELL 9 - SITE DEVELOPMENT PLAN | YB-21004 |
| 6 | CELLS 6 & 8 - FINAL GRADING PLAN | YB-21005 |
| 7 | SECTIONS & DETAILS | YB-21006 |




# SEVEE & MAHER ENGINEERS, INC.
# CUMBERLAND, MAINE
# 1993

BOWATER
GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION
DOLBY III LANDFILL
CELL 6 CLOSURE,
CELLS 8 & 9 CONSTRUCTION
COVER SHEET

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

YB-21000

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | STONE WALL | TP-103 | TP-103 | TEST PIT & NUMBER |
| | | NORTH ARROW (MAGNETIC) | | | DRAINAGE COURSES W/DIRECTION & DITCH | □ | ■ | CLEAN OUT STRUCTURES |
| N | | NORTH ARROW (PLAN NORTH) | SHORE SIDE | | EDGE OF WATER | ○ | ● | MANHOLE |
| 25 | 25 | CONTOUR LINES | | | WATER ELEVATION (GROUND OR SURFACE) | ⌑ | ⌑ | WATER VALVE |
| 25.63 | 25.56 | SPOT ELEVATION (GRADE) | | | ROCK OUTCROP OR LEDGE | ☼ | ☼ | HYDRANT |
| E.G. | | EXISTING GROUND (PROFILES & SECTIONS) | | | FENCE LINE (WOOD) | ⌽ | ⌽ | TELEPHONE OR POWER POLE |
| S.B.L. | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION POINT | | | FENCE LINE (WIRE) | ◎ | ◎ | CATCH BASIN |
| | 0+00 1+00 | CONSTRUCTION BASELINE | (STONE) | (CONC) FACE | RETAINING WALL (TYPE) | G | 8" G | UNDERGROUND GAS MAIN & SIZE |
| PL | | PROPERTY OR DEED LINE (NOT SURVEYED) | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE CABLE/CONDUIT |
| 525.14' N35°-10'-41"E | 525.14' N35°-10'-41"E | PROPERTY LINE W/BEARING & DISTANCE | | | BUILDING & STRUCTURES | E | E | UNDERGROUND ELECTRIC CABLE/CONDUIT |
| | | ROADS, EASEMENTS OR RIGHT OF WAY LINE | | | STEPS W/TYPE (WOOD/CONCRETE) | OE | OE | OVERHEAD ELECTRICAL LINE |
| | | BOUNDARY LINE (STATE, COUNTY, MUNICIPALITY) | | 1' 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | | 12" ACP | SANITARY SEWER, SIZE & TYPE |
| MON. | MON. | SURVEY MONUMENT | | TOP OF SLOPE 2 1 | SLOPES (W/SLOPE RATIO) | | 8" PVC | FORCE MAIN, SIZE & TYPE |
| I.F. | I.F. | SURVEY IRON (FOUND) | | | EDGE OF TRAVELED WAY (TYPE) | | 8" DI | WATER MAIN, SIZE & TYPE |
| D.H. PK. STK. | D.H. PK. STK. | DRILL HOLE, PK OR STAKE | C F | | CUT OR FILL LINE | | 12" RCP | STORM DRAIN, SIZE & TYPE |
| | | WOODS OR BRUSH LINE | CLL | | CONSTRUCTION LIMIT LINE | UD | 8" PVC UD | UNDERDRAIN, SIZE & TYPE |
| | | INDIVIDUAL TREE (DECIDUOUS) | | | BITUMINOUS PAVEMENT | | 12" BCCMP | CULVERT, SIZE & TYPE |
| | | INDIVIDUAL TREE (CONIFEROUS) | | | GRAVEL ROAD | | | RAILROAD |
| | | TREE, TO BE REMOVED | | | CONCRETE | S S | S S | SILTATION FENCE |
| | | MARSH AREA | B-12 MW-2 P-20 | B-12 MW-2 P-20 | TEST BORING, MONITORING WELL OR PROBE & NUMBER | | | |

## ABBREVIATIONS

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A.C.C.M.P. | ASPHALT COATED C.M.P. | C.M.P. | CORRUGATED METAL PIPE | DR | DRAIN | GPD | GALLONS PER DAY | MON | MONUMENT | SF | SQUARE FEET |
| A.C.P. | ASBESTOS CEMENT PIPE | C.O. | CLEAN OUT | DWG | DRAWING | GPM | GALLONS PER MINUTE | N.I.T.C. | NOT IN THIS CONTRACT | SHT | SHEET |
| AC | ACRE | CEM. LIN. | CEMENT LINED | EA | EACH | HDPE | HIGH DENSITY POLYETHYLENE | N.T.S. | NOT TO SCALE | STA | STATION |
| AGG | AGGREGATE | CEN | CENTRAL ANGLE OF CURVE | EG | EXISTING GROUND OR GRADE | HP | HORSEPOWER | N/F | NOW OR FORMERLY | SY | SQUARE YARD |
| ALUM | ALUMINUM | CF | CUBIC FEET | ELEC | ELECTRIC | HYD | HYDRANT | NO. OR # | NUMBER | TAN | TANGENT |
| APPD | APPROVED | CFS | CUBIC FEET PER SECOND | ELL | ELBOW | I.D. | INSIDE DIAMETER | O.C. | ON CENTER | TDH | TOTAL DYNAMIC HEAD |
| APPROX | APPROXIMATE | CI | CAST IRON | EQUIP | EQUIPMENT | IN OR " | INCHES | O.D. | OUTSIDE DIAMETER | TEMP | TEMPORARY |
| ASB | ASBESTOS | CL | CLASS | EST | ESTIMATED | INV | INVERT | P.C. | POINT OF CURVE | TYP | TYPICAL |
| ASPH | ASPHALT | CONC | CONCRETE | EXC | EXCAVATE | INV. EL. | INVERT ELEVATION | P.I. | POINT OF INTERSECTION | V | VOLTS |
| AT2 C.M.P. | ALUMINUM TYPE 2 C.M.P. | CONST | CONSTRUCTION | EXIST | EXISTING | LB | POUND | P.T. | POINT OF TANGENT | W/ | WITH |
| AUTO | AUTOMATIC | CONTR | CONTRACTOR | F.G. | FINISH GRADE | LC | LEACHATE COLLECTION | PERF | PERFORATED | W/O | WITHOUT |
| AUX | AUXILIARY | CTR | CENTER | FBRGL | FIBERGLASS | LD | LEAK DETECTION | PSI | POUNDS PER SQUARE INCH | YD | YARD |
| AVE | AVENUE | CY | CUBIC YARD | FDN | FOUNDATION | LF | LINEAR FEET | PVC | POLYVINYL CHLORIDE | | |
| AVG | AVERAGE | D | DEGREE OF CURVE (ARC DEF.) | FLEX | FLEXIBLE | LOC | LOCATION | PVMT | PAVEMENT | | |
| AZ | AZIMUTH | DBL | DOUBLE | FLG | FLANGE | LT | LEFT | QTY | QUANTITY | | |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | DEG OR ° | DEGREE | FLR | FLOOR | M.H. | MANHOLE | R.O.W. | RIGHT OF WAY | | |
| B.M. | BENCH MARK | DEPT | DEPARTMENT | FPS | FEET PER SECOND | M.J. | MECHANICAL JOINT | RAD | RADIUS | | |
| BIT | BITUMINOUS | DI | DUCTILE IRON | FT OR ' | FEET | MATL | MATERIAL | REQD | REQUIRED | | |
| BLDG | BUILDING | DIA OR Ø | DIAMETER | FTG | FOOTING | MAX. | MAXIMUM | RT | RIGHT | | |
| BOT | BOTTOM | DIM | DIMENSION | GA | GAUGE | MFR | MANUFACTURE | RTE | ROUTE | | |
| BRG | BEARING | DIST | DISTANCE | GAL | GALLON | MIN. | MINIMUM | S | SLOPE | | |
| C.B. | CATCH BASIN | DN | DOWN | GALV | GALVANIZED | MISC | MISCELLANEOUS | SCH | SCHEDULE | | |

GENERAL NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.
3. EXCAVATIONS ENCOUNTERING WASTE MATERIALS, I.E. SLUDGE, WILL BE DISPOSED OF IN THE ACTIVE DISPOSAL AREA.

**MATERIAL SPECIFICATIONS:**

DIKE EMBANKMENT SOIL:

COMPACTION - THE DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR).

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL. THE BEDDING MATERIAL SHALL MEET THE FOLLOWING GRADATION:

| SIEVE DESIGNATION | PERCENT PASSING BY WEIGHT |
|---|---|
| 1 INCH | 100 |
| 1/4 INCH | ≤5 |

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM CELL 8 AREA PRIOR TO PLACING THE DRAINAGE OR EMBANKMENT MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING LANDFILL.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIALS -

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

## VIEW MARKERS & IDENTIFICATION

SECTION NO. & LOCATION: 3 / C-300 — DRAWING WHERE SECTION OR DETAIL APPEARS

DETAIL IDENTIFICATION & LETTER: MANHOLE A — C-300

SECTION TITLE & NO.: ACCESS ROAD 3 — DRAWING WHERE SECTION IS TAKEN C-100

DETAIL TITLE & LETTER: MANHOLE A — DRAWING WHERE DETAIL IS CALLED OUT C-100

PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | B | 1 | 8-4-93 | ISSUED FOR BID | MAC | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CUMBERLAND, MAINE

JOB NO. 93028

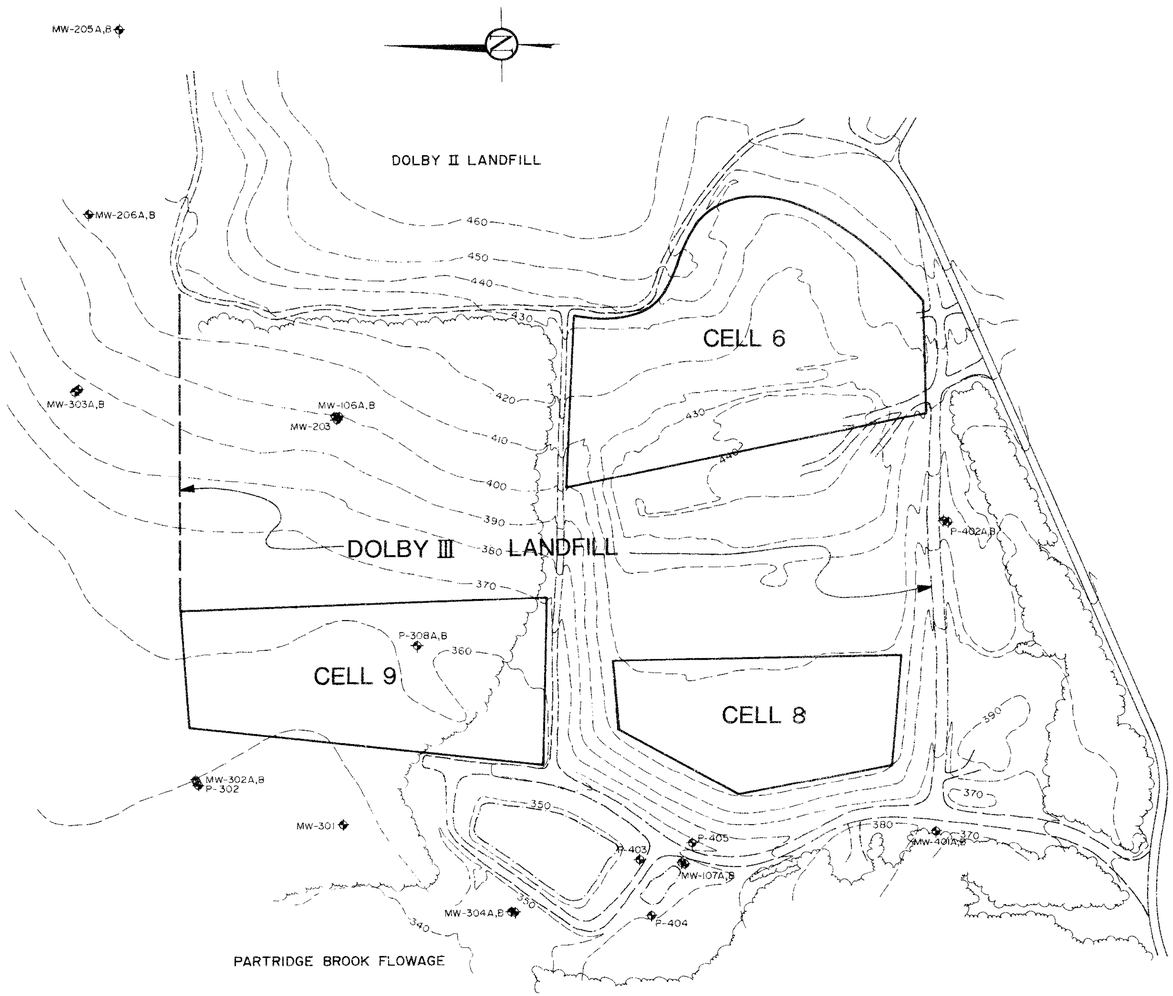
| | | |
|---|---|---|
| DRN | PAF | 6/93 |
| CKD | MAC | 6/93 |
| CKD | | |
| CORR | | |
| APPVD | | |
| ISSUE CODE | B-BIDS | |
| SCALE | | |

**BOWATER**
GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION
DOLBY III LANDFILL
CELL 6 CLOSURE,
CELLS 8 & 9 CONSTRUCTION
SYMBOLS & ABBREVIATIONS

JOB NO.
ENG. REQ. NO.
FILE NO 2-092-4703,7082

YB-21001




| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| B | 1 | 8-4-93 | ISSUED FOR BID | MC | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

| | | |
|---|---|---|
| DRN | PAF | 6/93 |
| CKD | PAF | 6/93 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL.T.O. | C - CONST

SCALE 1" = 200'

BOWATER
GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

# DOLBY III LANDFILL CELL 6 CLOSURE, CELLS 8 & 9 CONSTRUCTION SITE LOCATION PLAN

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703,7092

YB-21002

SPILLER'S

E 474500

E474000

N 664000

N 663500

CELL 7

CELL 8
REMOVE 15" OF COVER SOIL
(5.6 ACRES)

EXISTING 12"ø PIPE
12"
CB#1

EXISTING 12"ø PIPE
12"
CB#9
CB#8

4 YB-21006

DRAINAGE MANHOLE
INV. OUT 397.2
RIM 400.9
A YB-21006

22-1/2° ELBOW
TURN TO MATCH SLOPE

12"ø PIPE INSTALLED
INTO EXISTING CB#3

CB#2

12"

CB#3

CONTAINMENT DIKE

DRAINAGE MANHOLE
INV. OUT 396.4
RIM 400.1
A YB-21006

22-1/2° ELBOW
TURN TO MATCH SLOPE

12"

12"ø PIPE INSTALLED
INTO EXISTING CB#5

CB#4

CB#5

ACCESS ROAD

DRAINAGE MANHOLE
INV. OUT 398.7
RIM 402.4
A YB-21006

12"ø HANCORE TITELINE PIPE
(TYP)
5 YB-21006

12"
CB#7

22-1/2° ELBOW
TURN TO MATCH SLOPE

12"ø PIPE INSTALLED INTO
EXISTING CB#7

CB#6A

CB#6

ACCESS ROAD

0 25 50 100 150 200 FEET

COMPILED AND CONTROLLED BY JAMES W. SEWALL CO.
OLD TOWN, ME BY PHOTOGRAMMETRIC METHODS
FROM AERIAL PHOTOGRAPHS DATED 8/9/90

| DRAWING NO | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 8-18-94 | RECORD DRAWING/CELL 8 CONSTRUCTION | CJB | | | |
| | | B | 1 | 8-4-93 | ISSUED FOR BID | AHC | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

| | | |
|---|---|---|
| DRN | PAF | 6-93 |
| CKD | [illegible] | 6-93 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE
P - PRELIM | B - BIDS
M - MYLT. | C - CONST
SCALE 1" = 50'

BOWATER
GREAT NORTHERN PAPER, INC.

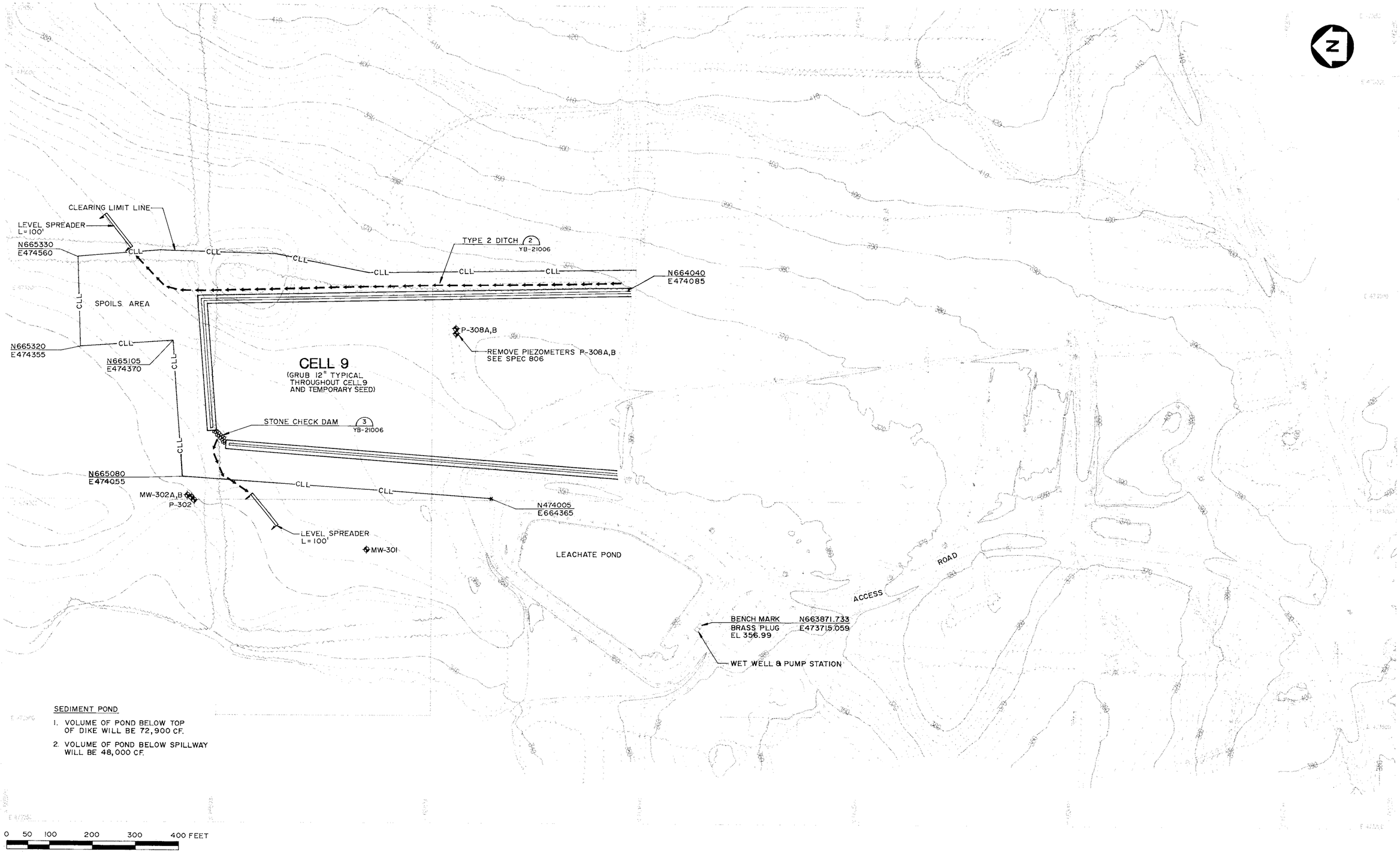
CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 8
SITE DEVELOPMENT PLAN

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703, 7082

YB-21003

SPILLERS




SEDIMENT POND

1. VOLUME OF POND BELOW TOP OF DIKE WILL BE 72,900 CF.
2. VOLUME OF POND BELOW SPILLWAY WILL BE 48,000 CF.

PAUL A. MAHER
No. 5711
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|
| YB-15263 | DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| B | 1 | 8-4-93 | ISSUED FOR BID | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

| | | |
|---|---|---|
| DRN | PAF | 6-93 |
| DES | | 6-93 |
| CKD | | |
| CURR | | |
| APPVD | | |

ISSUE CODE
P - PRELIM | B - BIDS
M - MTL T.O. | C - CONST
SCALE 1" = 100'

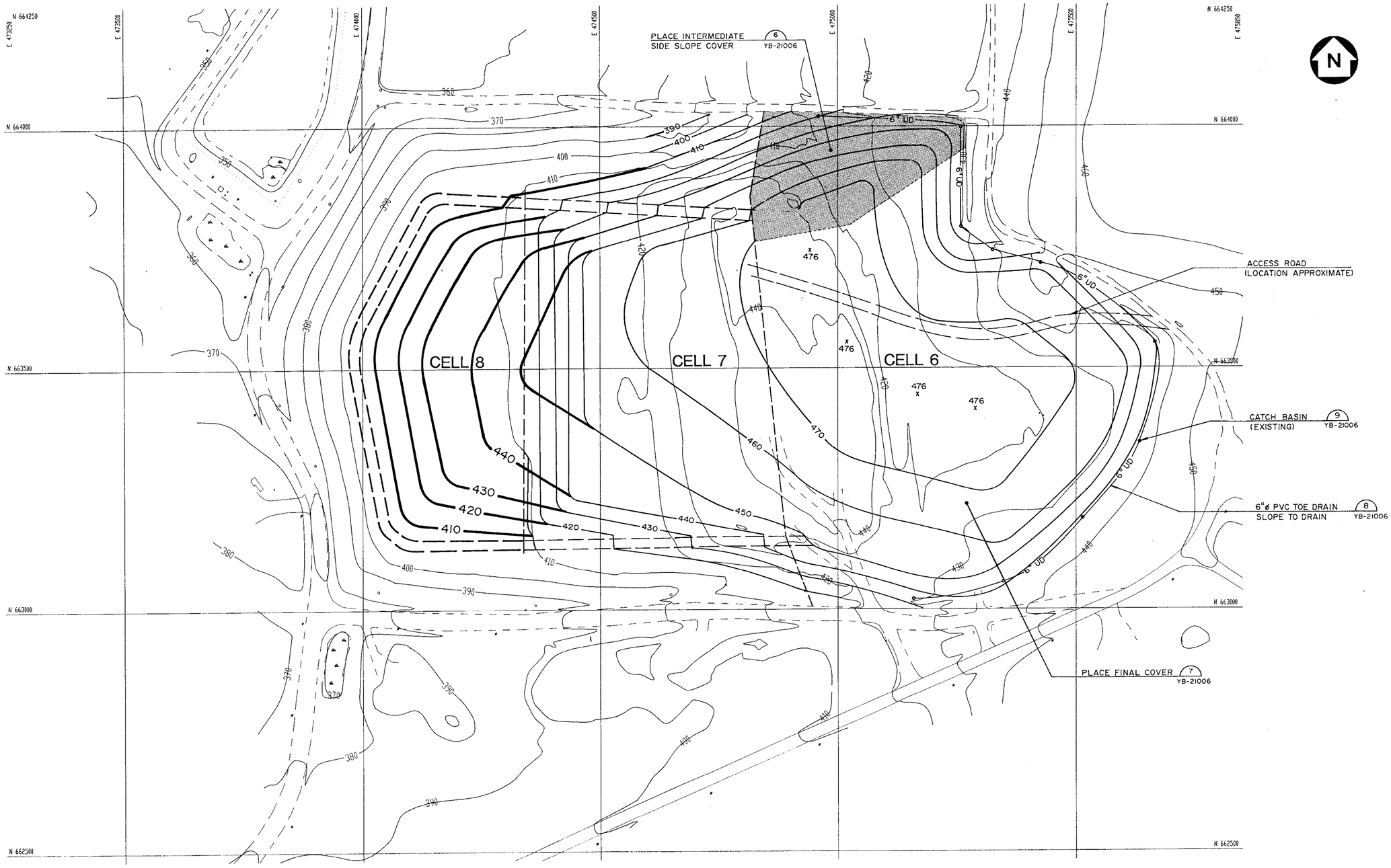
BOWATER
GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 9
SITE DEVELOPMENT PLAN

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-21004




STATE OF MAINE PETER A. MAHER 11107 REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO | REFERENCE DRAWING TITLE |
|---|---|
| | COMPILED AND CONTROLLED BY JAMES W. SEWALL CO. |
| | OLD TOWN, ME BY PHOTOGRAMMETRIC METHODS |
| | FROM AERIAL PHOTOGRAPHS DATED 8/9/90 |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| B | 1 | 8-4-93 | ISSUED FOR BID | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

| | |
|---|---|
| DRN PAF | 6-93 |
| CKD | 6-93 |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL T.O. | C - CONST |
| SCALE 1" = 100' | |

**BOWATER**
GREAT NORTHERN PAPER, INC.

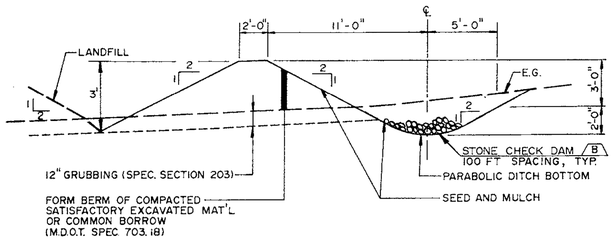
**CENTRAL ENGINEERING DEPARTMENT**
EAST OPERATION

# DOLBY III LANDFILL
# CELL 6 CLOSURE, CELL 8
# FINAL GRADING PLAN

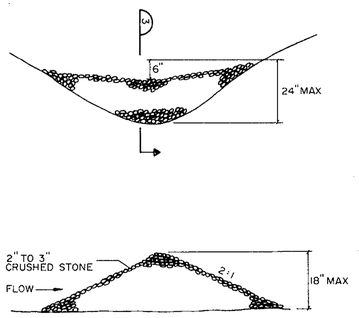
JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703,7082

YB-21005

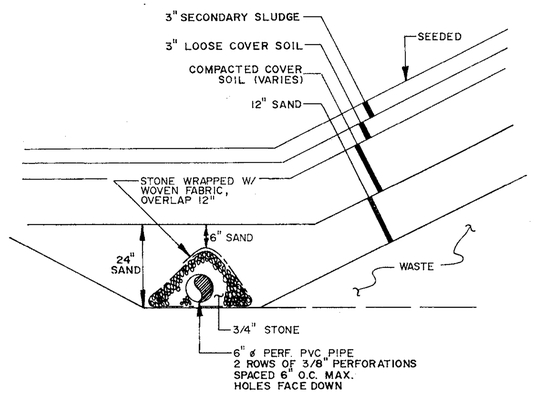
187674
BRILLER'S



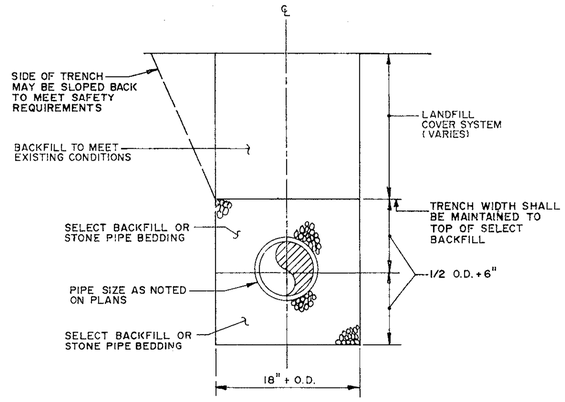

DIKE AND TYPE 2 DRAINAGE DITCH 2
YB-21004



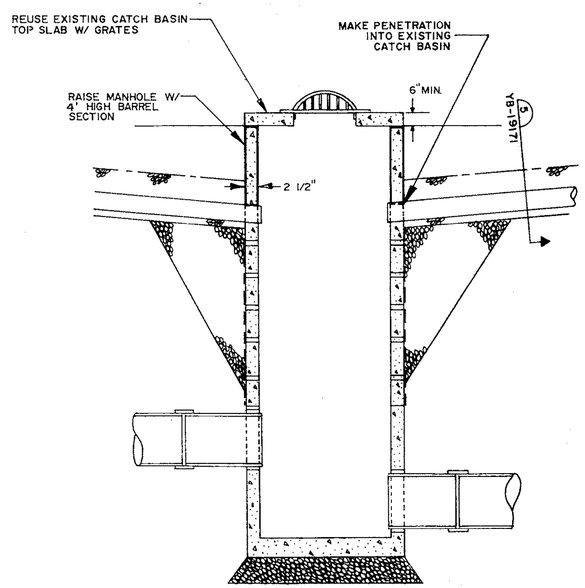

SECTION 3
STONE CHECK DAM B
NTS
YB-21006
YB-21004



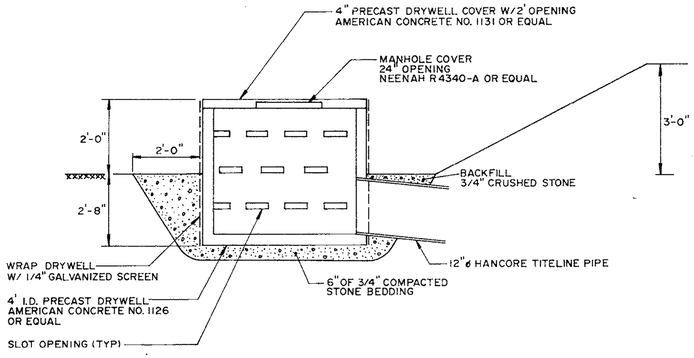

SECTION 8
N.T.S.
YB-21006
YB-21005



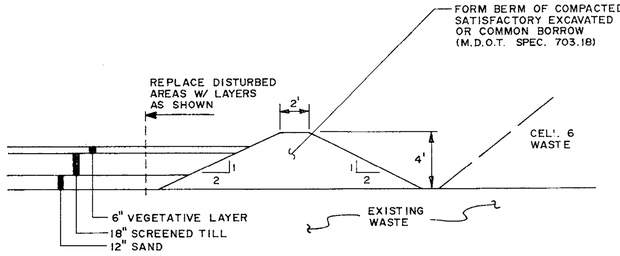

PIPE TRENCH 5
N.T.S.
YB-21003



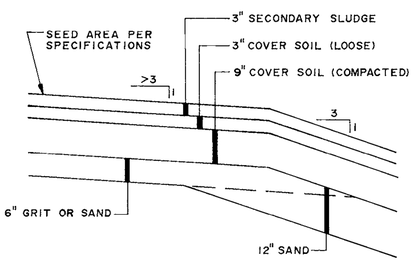

CATCH BASIN 9
N.T.S. (EXISTING)
YB-21005



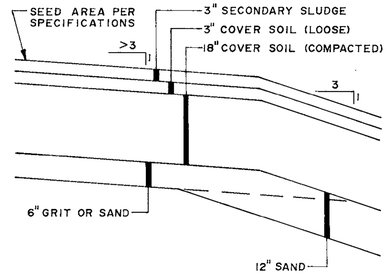

DRAINAGE MANHOLE A
NTS
YB-21003




TYPICAL DIKE SECTION 4
N.T.S.
YB-21003




INTERMEDIATE SLOPE COVER SECTION 6
NTS
YB-21005




FINAL COVER SECTION 7
NTS
YB-21005

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 8-18-94 | RECORD DRAWING/CELL 8 CONSTRUCTION | CSB | | | |
| | | B | 1 | 8-4-93 | ISSUED FOR BID | MC | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 93028

| | | |
|---|---|---|
| DRN | PAF | 6-93 |
| CKD | MC | 6-93 |
| CKD | | |
| CORR | | |
| APPVD | | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MYLT.O. | C - CONST
SCALE NTS

BOWATER
GREAT NORTHERN PAPER, INC.

CENTRAL ENGINEERING DEPARTMENT
EAST OPERATION

DOLBY III LANDFILL
CELL 6 CLOSURE,
CELLS 8 & 9 CONSTRUCTION
SECTIONS & DETAILS

JOB NO.
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-21006

STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER

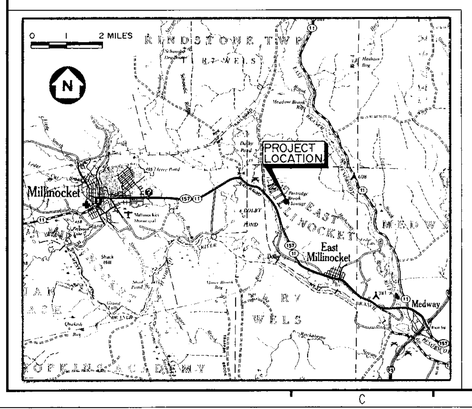
17202
SPILLER'S

# GREAT NORTHERN PAPER, INC.
# A SUBSIDIARY OF BOWATER INCORPORATED
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 9 CONSTRUCTION

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-23039 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-23040 |
| 3 | SITE LOCATION PLAN | YB-23041 |
| 4 | CELL 9 - SITE DEVELOPMENT PLAN | YB-23042 |
| 5 | CELL 9 - FINAL GRADING PLAN | YB-23043 |
| 6 | SECTIONS & DETAILS | YB-23044 SHEET 1 OF 2 |
| 7 | SECTIONS & DETAILS | YB-23044 SHEET 2 OF 2 |

## SEVEE & MAHER ENGINEERS, INC.
## CUMBERLAND, MAINE

## 1994




STATE OF MAINE PETER M. MAHER #4107 REGISTERED PROFESSIONAL ENGINEER

**RECORD DRAWING**

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 94028

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - Prelim | B - Bids |
| M - Mtl T.O. | C - Const. |
| SCALE | |

BOWATER
Great Northern Paper

EAST OPERATION

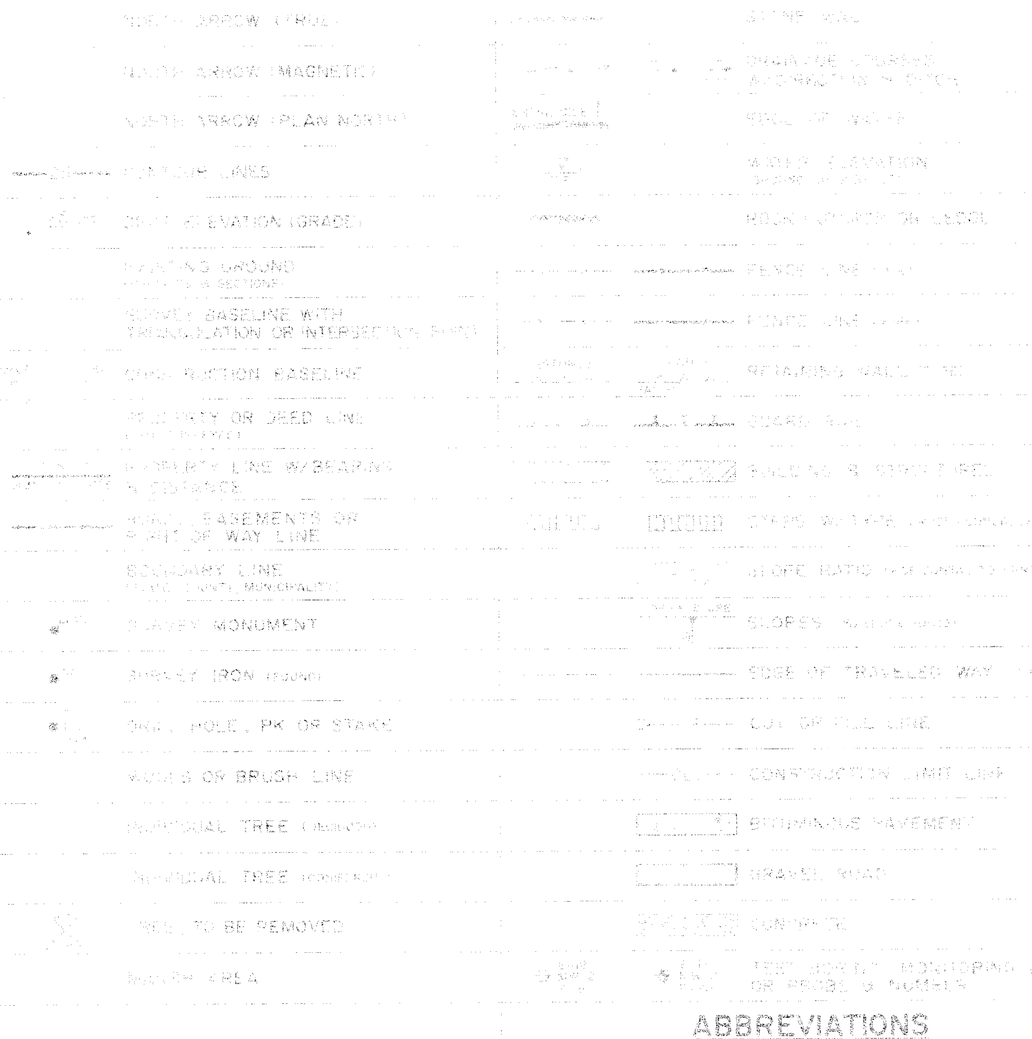
DOLBY III LANDFILL
CELL 9 CONSTRUCTION
COVER SHEET

JOB NO. 94654
ENG. REQ. NO. ——— YB-23039
FILE NO. 2-092-4703.7082

J:\CNSTR\CAD\CONF.DW Thu Sep 8 09:05:39 1994

C D E F G H I L M N O P Q

# SYMBOLS




# ABBREVIATIONS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A.C.M.P. | ASPHALT COATED C.M.P. | C.M.P. | CORRUGATED METAL PIPE | DR. | DRAIN | GPM | GALLONS PER MIN. |
| A.C.P. | ASBESTOS CEMENT PIPE | C.O. | CLEAN OUT | DWG | DRAWING | GPM | GALLONS PER MINUTE (MIN. DENSITY) |
| ACRE | ACRE | CEM. LIN. | CEMENT LINED | EA | EACH | GSPS | GALVANIZED SPIRAL PIPE |
| AGG. | AGGREGATE | CEN | CENTRAL ANGLE OF CURVE | EG | EXISTING GROUND OR GRADE | HP | HORSEPOWER |
| ALUM | ALUMINUM | CF | CUBIC FEET | ELEC | ELECTRIC | HYD | HYDRANT |
| APPD | APPROVED | CFS | CUBIC FEET PER SECOND | ELL | ELBOW | INSIDE DIAM. | INSIDE DIAMETER |
| APPROX | APPROXIMATE | CI | CAST IRON | EQUIP | EQUIPMENT | INCHES | INCHES |
| ASB | ASBESTOS | CL | CLASS | EST | ESTIMATED | INVERT | INVERT |
| ASPH | ASPHALT | CONC | CONCRETE | EXC | EXCAVATE | INVERT ELEV. | INVERT ELEVATION |
| ATTN. C.M.P. | ALUMINUM TYPE 2 C.M.P. | CONST | CONSTRUCTION | EXIST | EXISTING | POUND | POUND |
| AUTO | AUTOMATIC | CONTR | CONTRACTOR | FG | FINISH GRADE | LB | LEAK DETECTOR |
| AUX | AUXILIARY | CTR | CENTER | FIBERGLASS | FIBERGLASS | LD | LEACHATE COLLECTION |
| AVE | AVENUE | CY | CUBIC YARD | FORMATION | FORMATION | LIN. FT | LINEAR FEET |
| AVG | AVERAGE | D | DEGREE OF CURVE (ARC DEF.) | FLEX | FLEXIBLE | LOC | LOCATION |
| AZ | AZIMUTH | DBL | DOUBLE | FLNG | FLANGE | QTY | QUANTITY |
| B.C.M.P. | BITUMINOUS COATED C.M.P. | DEG OR ° | DEGREE | FLR | FLOOR | R.O.W. | RIGHT OF WAY |
| BCM | BENCH MARK | DEPT | DEPARTMENT | FPS | FEET PER SECOND | MECH | MECHANICAL |
| BIT | BITUMINOUS | DI | DUCTILE IRON | FT OR ' | FEET | MATL | MATERIAL |
| BLDG | BUILDING | DIA OR Ø | DIAMETER | FTG | FOOTING | MAX | MAXIMUM |
| BOT | BOTTOM | DIM | DIMENSION | GA | GAUGE | MFR | MANUFACTURE |
| BRG | BEARING | DIST | DISTANCE | GAL | GALLON | MIN | MINIMUM |
| CB | CATCH BASIN | DN | DOWN | GALV | GALVANIZED | MISCELLANEOUS | MISCELLANEOUS |
| | | | | | | MON | MONUMENT |
| | | | | | | N.I.C.O. | NOT IN THIS CONTRACT |
| | | | | | | N.T.S. | NOT TO SCALE |
| | | | | | | N/F | NOW OR FORMERLY |
| | | | | | | NO. OR # | NUMBER |
| | | | | | | O.C. | ON CENTER |
| | | | | | | O.D. | OUTSIDE DIAMETER |
| | | | | | | P.C. | POINT OF CURVE |
| | | | | | | P.I. | POINT OF INTERSECTION |
| | | | | | | P.T. | POINT OF TANGENT |
| | | | | | | PERF | PERFORATED |
| | | | | | | PSF | POUNDS PER SQUARE FOOT |
| | | | | | | PVC | POLYVINYL CHLORIDE |
| | | | | | | PVMT | PAVEMENT |
| | | | | | | QTY | QUANTITY |
| | | | | | | R.O.W. | RIGHT OF WAY |
| | | | | | | RAD | RADIUS |
| | | | | | | REQD | REQUIRED |
| | | | | | | RT | RIGHT |
| | | | | | | RTE | ROUTE |
| | | | | | | S | SLOPE |
| | | | | | | SCH | SCHEDULE |
| | | | | | | SF | SQUARE FEET |
| | | | | | | SHT | SHEET |
| | | | | | | STA | STATION |
| | | | | | | SY | SQUARE YARD |
| | | | | | | TAN | TANGENT |
| | | | | | | TDH | TOTAL DYNAMIC HEAD |
| | | | | | | TEMP | TEMPORARY |
| | | | | | | TYP | TYPICAL |
| | | | | | | V | VOLTS |
| | | | | | | W/ | WITH |
| | | | | | | W/O | WITHOUT |
| | | | | | | YD | YARD |

## GENERAL NOTES:

1. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.
2. CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

## MATERIAL SPECIFICATION:

COMMON BORROW - MDOT SPECIFICATION - 703.18

ROADWAY SUBBASE - MDOT SPECIFICATION - 703.06 TYPE "D"

ROADWAY SUBBASE - MDOT SPECIFICATION - 703.06 TYPE "G"

ROADWAY SURFACE COURSE - MDOT SPECIFICATION - 703.10

STONE BEDDING - THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

PIPE BEDDING - THE PIPE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

BASAL BLANKET - MDOT SPECIFICATION - 703.05

COMPACTION - DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR).

6" AND 8" PVC PIPE - SDR 21

18" PVC PIPE - SDR 26

## GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 9 ROADWAY AND SEDIMENTATION POND AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING LANDFILL.

## SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIALS -

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

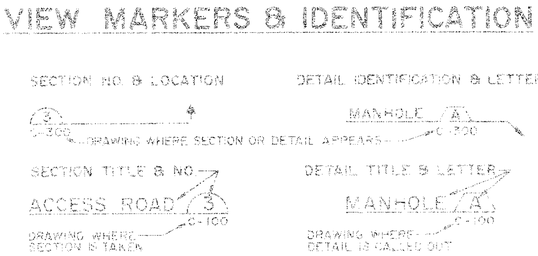
THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH - THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE.

INSTALLATION - MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

## VIEW MARKERS & IDENTIFICATION




STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER

| | |
|---|---|
| 7/95 | RECORD DRAWING |
| 9/8/94 | ISSUED FOR BID |
| 9/7/94 | SUBMITTED TO CLIENT |

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND, MAINE

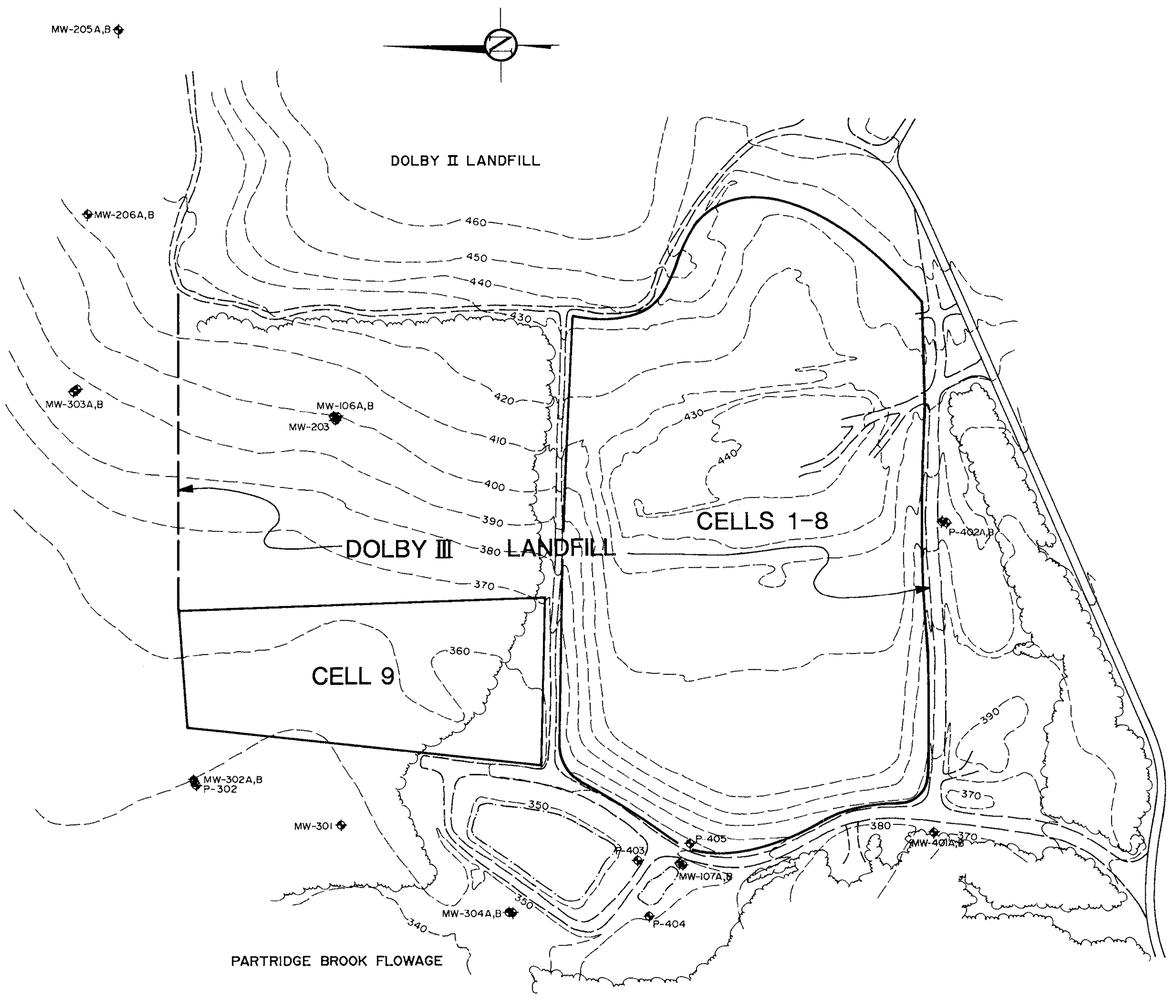
JOB NO. 94028

BOWATER
GREAT NORTHERN PAPER, INC.

EAST OPERATION
DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SYMBOLS & ABBREVIATIONS

JOB NO. 94654
FILE NO. 2-092-470-2792

YD-23040




0 100 200 400 600 800 FEET

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 7/95 | RECORD DRAWING | | | | |
| | | | | 9/8/94 | ISSUED FOR BID | | | | |
| | | | | 9/7/94 | SUBMITTED TO CLIENT | | | | |

REGISTERED PROFESSIONAL ENGINEER

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 94028

| | |
|---|---|
| DRN | |
| CKD | |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL T.O. | C - CONST |
| SCALE 1" = 200' | |

**BOWATER**
GREAT NORTHERN PAPER, INC.

EAST OPERATION
DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SITE LOCATION PLAN

JOB NO. 94654
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-23041

172202
SPILLER'S

# CELL 9

END CAP
INV 356.5

N 665000

N 665115.61
E 474452.50

EXISTING TYPE 1 DITCH

EXISTING
SPOIL
STOCKPILE

CLL

370

360

358

356

355

350

N 664000

E 474500

E 474000

CONTAINMENT DIKES TO BE BUILT
PRIOR TO LANDFILLING IN CELL 9

NTC

END CAP (TYP)

REMOVE EXISTING ROAD PRIOR TO
LANDFILLING IN CELL 9

STRIP EXISTING COVER MATERIAL
PRIOR TO LANDFILLING IN CELL 9

REMOVE EXISTING CATCH BASIN COVER
REPLACE WITH SOLID H-20 LOADING
MANHOLE COVER AS MANUF. BY AMERICAN
CONCRETE, OR EQUAL

BRANCH CONNECTOR A YB-23044

TYPE 1 DRAINAGE DITCH 5 YB-23044

6-IN AND 8-IN LEACHATE COLLECTION PIPES 6 YB-23044

PERFORATED LEACHATE COLLECTION PIPE 4 YB-23044

PERFORATED LEACHATE COLLECTION MAIN 4 YB-23044

STONE CHECK DAM F (TYP) YB-23044

LANDFILL ACCESS ROAD 1 YB-23044

SILTATION FENCE E YB-23044

LEVEL SPREADER D L= 35 FEET YB-23044

CB #30
18" INV IN 353.03
18" INV OUT 353.03
RIM ELEV 359.7

CB #29
18" INV IN 352.55
18" INV OUT 352.55
RIM ELEV 359.2

CB #28
18" INV IN 352.03
8" INV IN 353.65
18" INV OUT 352.03
8" INV OUT 353.65
RIM ELEV 359.7

CB #27
18" INV IN 351.55
18" INV OUT 351.55
RIM ELEV 358.2

CB #26
18" INV IN 351.08
18" INV OUT 351.08
RIM ELEV 357.75

CATCH BASIN 2 YB-23044

STONE CHECK DAM (TYP)

18"

8" PVC (SOLID)

48" BCCMP W/ RIPRAP
INV IN 352.0
INV OUT 349.5
B YB-23044

REMOVE EXISTING STUB AND INSTALL
18" LC PIPE
18" INV IN 350.88

GATE VALVE MANHOLE 3 YB-23044
SHUT OFF UNTIL CELL 9
LANDFILLING BEGINS
INV IN 350.88
INV OUT 350.88

INV 348.3
BASE AT 347.5

RIPRAP
(TYP)

SEDIMENT POND

30" BCCMP

N 665074.47
E 473997.07

N 665094.05
E 473997.07

N 665094.05
E 473978.61

N 665003.13
E 473955.71

N 664498.11
E 474037.88

N 664506.62
E 473930.55

N 664351.47
E 474018.42

POND SPILLWAY C YB-23044

STATE OF MAINE
PETER
MAHER
#4107
REGISTERED
PROFESSIONAL ENGINEER

25 0 50 100 FEET

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 7/95 | RECORD DRAWING | MAK | | | |
| | | 9/8/94 | ISSUED FOR BID | | | | |
| | | 9/7/94 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 94028

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE
P - Prelim | B - Bids
M - Mtl T.O. | C - Const.
SCALE AS SHOWN

BOWATER
Great Northern Paper

EAST OPERATION

# DOLBY III LANDFILL
# CELL 9 CONSTRUCTION
# SITE DEVELOPMENT PLAN

JOB NO. 94654
ENG. REQ. NO. _____ YB-23042
FILE NO. 2-092-4703.7082

D:\GMP\ACAD\CELL9\GNPCELL9 Wed Jul 12 15:21:49 1995

EXISTING
SPOIL
STOCKPILE

370

360

350

FINAL CONTOURS

# CELL 9

400

390

380

370

360

350

25 0 50 100 FEET

STATE OF MAINE
PETER M. MAHER
#4107
REGISTERED
PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 7/95 | RECORD DRAWING | | | | |
| | | 9/8/94 | ISSUED FOR BID | | | | |
| | | 9/7/94 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 94028

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE
P – Prelim | B – Bids
M – Mtl T.O. | C – Const.
SCALE AS SHOWN

BOWATER
Great Northern Paper

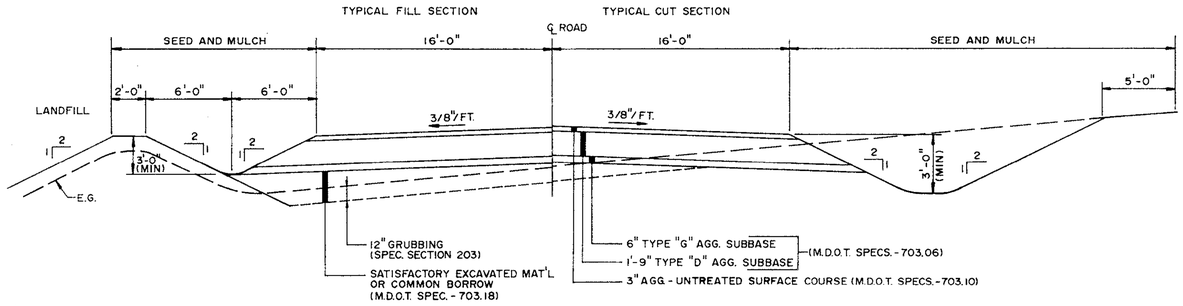
EAST OPERATION

# DOLBY III LANDFILL
# CELL 9 CONSTRUCTION

## FINAL GRADING PLAN

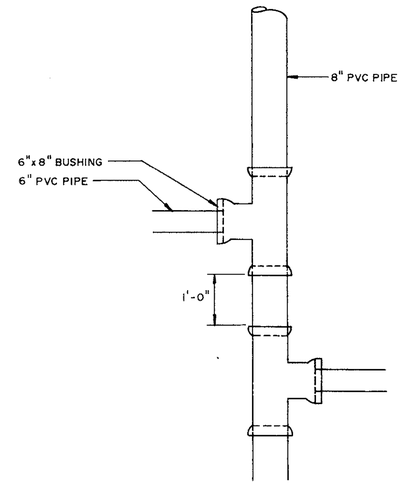
JOB NO. 94654
ENG. REQ. NO. _____ YB-23043
FILE NO. 2-092-4703.7082

D:\GIS\PLAGRID\CELL9 Thu Sep 8 09:31:36 1994



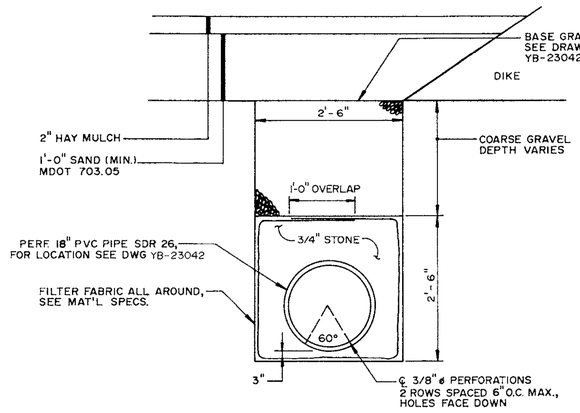

## TYPICAL SECTION LANDFILL ACCESS ROAD (1)

N.T.S. YB-23042



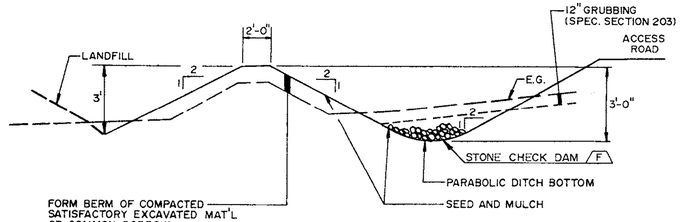

## BRANCH CONNECTOR (A)

N.T.S. YB-23042



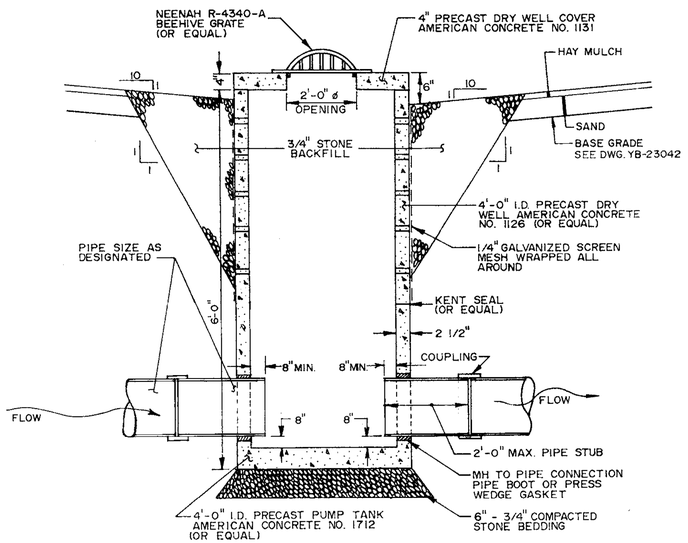

## PERF. LEACHATE COLLECTION MAIN (4)

N.T.S. YB-23042



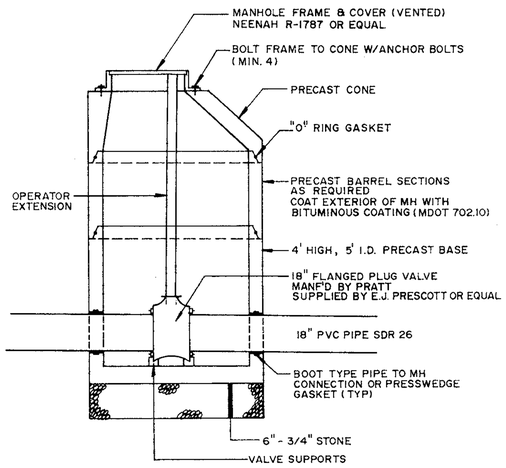

## DIKE AND TYPE I DRAINAGE DITCH (5)

N.T.S. YB-23042



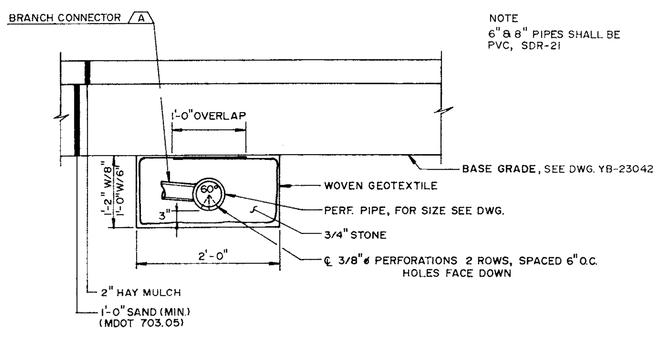

## CATCH BASIN (2)

N.T.S. YB-23042




## VALVE MANHOLE (3)

N.T.S. YB-23042




## 6-IN. 8-IN. LEACHATE COLLECTION PIPES (6)

N.T.S. YB-23042

STATE OF MAINE — PETER M. MAHER #4107 — REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 7/95 | RECORD DRAWING | | | | |
| | | | | 9/8/94 | ISSUED FOR BID | | | | |
| | | | | 9/7/94 | SUBMITTED TO CLIENT | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 94028

| | |
|---|---|
| DRN | |
| CKD | |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL T.O. | C - CONST |
| SCALE N.T.S. | |

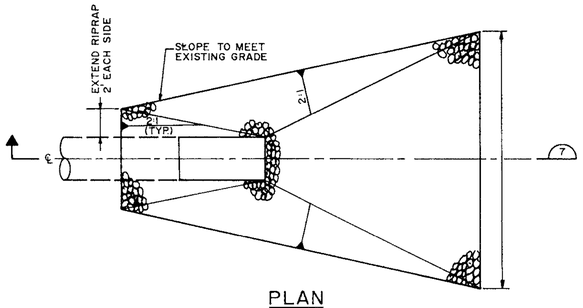
**BOWATER**
GREAT NORTHERN PAPER, INC.

EAST OPERATION
DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SECTIONS & DETAILS

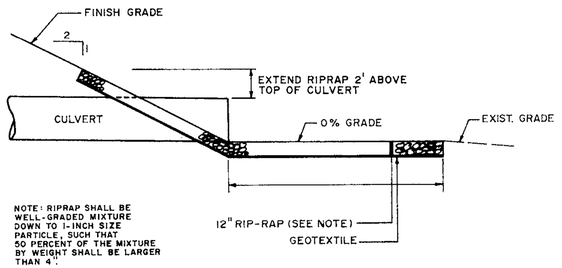
JOB NO. 94654
ENG. REQ. NO.
FILE NO. 2-092-4703.7082

YB-23044
SHEET 1 OF 2

172202
SPILLER'S

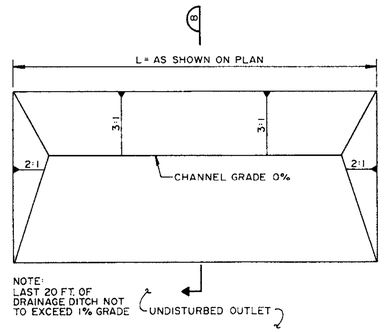



PLAN
N.T.S.

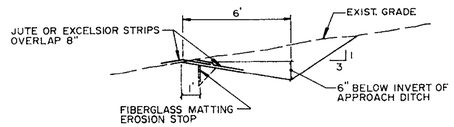



SECTION 7
N.T.S.

CULVERT W/RIPRAP B
YB-23042

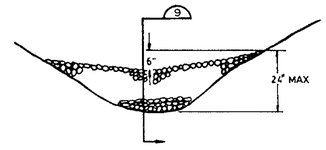



PLAN
NTS



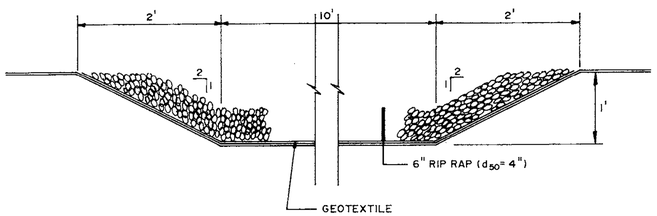

SECTION 8

LEVEL SPREADER D
NTS
YB-23042

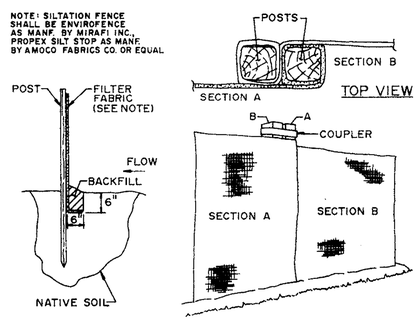



STONE CHECK DAM F
N.T.S.
YB-23042


SECTION 9
N.T.S.




POND SPILLWAY C
N.T.S.
YB-23042




SILTATION FENCE E
N.T.S.
YB-23042

STATE OF MAINE
PETER M. MAHER
8107
REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 7/95 | RECORD DRAWING | | | | |
| | | 9/8/94 | ISSUED FOR BID | | | | |
| | | 9/7/94 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 94028

| | |
|---|---|
| DRN | |
| CKD | |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL T.O. | C - CONST |
| SCALE N.T.S. | |

BOWATER
GREAT NORTHERN PAPER, INC.

EAST OPERATION

DOLBY III LANDFILL
CELL 9 CONSTRUCTION
SECTIONS & DETAILS

JOB NO. 94654
ENG. REQ. NO.
FILE NO. 2-092-4703, 7082

YB-23044
SHEET 2 OF 2

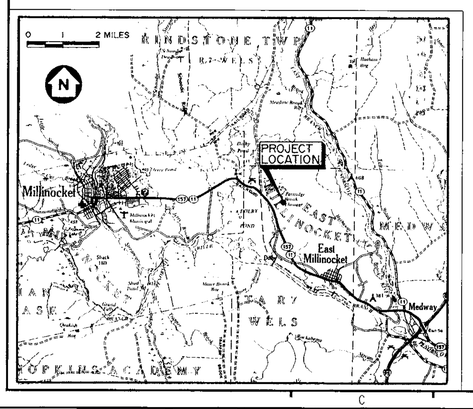
17230
SPILLER'S

# GREAT NORTHERN PAPER, INC.
# A SUBSIDIARY OF BOWATER INCORPORATED
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 10 CONSTRUCTION

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-23378 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-23379 |
| 3 | SITE LOCATION PLAN | YB-23380 |
| 4 | CELL 10 – SITE DEVELOPMENT PLAN | YB-23381 |
| 5 | CELLS 7 & 8 CLOSURE – FINAL GRADING PLAN | YB-23382 |
| 6 | CELL 10 – FINAL GRADING PLAN | YB-23383 |
| 7 | SECTIONS & DETAILS | YB-23384 SHEET 1 OF 2 |
| 8 | SECTIONS & DETAILS | YB-23384 SHEET 2 OF 2 |

## SEVEE & MAHER ENGINEERS, INC.
## CUMBERLAND, MAINE

## 1995




STATE OF MAINE
PETER MAHER
#4107
REGISTERED
PROFESSIONAL ENGINEER

| | |
|---|---|
| SEVEE & MAHER ENGINEERS, INC.<br>CONSULTING ENGINEERS<br>CUMBERLAND CENTER, MAINE | DRN<br>CHK<br>CHK<br>CORR<br>APPVD<br>ISSUE CODE: P – Prelim, B – Bids, M – MTI T.O., C – Const.<br>SCALE |
| JOB NO. 95019 | BOWATER<br>Great Northern Paper |
| EAST OPERATION<br>DOLBY III LANDFILL<br>CELL 10 CONSTRUCTION<br>COVER SHEET<br>JOB NO. _____ YB-23378<br>ENG. REQ. NO. _____<br>FILE NO. 2-092-4703.7082 | |

D:\GNP\ACAD\DFL...10\SMD010 Tue May 23 09:25:02 1995

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (MAGNETIC) | | | STONE WALL | ○ | ● | MANHOLE |
| | | NORTH ARROW (PLAN NORTH) | | | DRAINAGE COURSE (WITH DIRECTION) | ◎ | ○ | CATCH BASIN |
| 25 | 25 | CONTOUR LINES | SHORE SIDE | | EDGE OF WATER | ⋈ | ⋈ | WATER VALVE |
| 25 x 63 | 25.56 x | SPOT ELEVATION (GRADE) | | | WATER ELEVATION (GROUND OR SURFACE) | | | HYDRANT |
| | | EXISTING GROUND | | | FENCE LINE (WOOD) | | | UTILITY POLE |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | FENCE LINE (WIRE) | | ⊘ | CLEAN OUT STRUCTURE |
| | | PROPERTY LINE OR R.O.W. | | | RETAINING WALL | G | G | UNDERGROUND GAS MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE LINE |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | | BUILDING AND STRUCTURES | E | E | UNDERGROUND ELECTRICAL LINE |
| | | BOUNDARY LINE (State, County, Municipality) | | 2 1 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | OE | OE | OVERHEAD ELECTRICAL LINE |
| ⊡ | ■ | SURVEY MONUMENT | | TOP OF SLOPE | SLOPES (WITH SLOPE RATIO) | | 12" ACP | SANITARY SEWER, SIZE & TYPE |
| ○IF | ●IF | SURVEY IRON | | | EDGE OF TRAVELLED WAY | FM | 8" PVC | FORCE MAIN, SIZE & TYPE |
| ○ | ● | DRILL HOLE, PK, OR STAKE | | C F | CUT OR FILL LINE | W | 8" D.I. | WATER MAIN, SIZE & TYPE |
| | | WOODS OR BRUSH LINE | | CLL | CONSTRUCTION LIMIT LINE | | 12" RCP | STORM DRAIN, SIZE & TYPE |
| | | INDIVIDUAL TREE (Deciduous) | | | BITUMINOUS PAVEMENT | UD | 8" UD | UNDERDRAIN, SIZE & TYPE |
| | | INDIVIDUAL TREE (Coniferous) | | | CONCRETE | | | CULVERT |
| | | TREE, TO BE REMOVED | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | RAILROAD |
| | | MARSH AREA | TP-12 | TP-12 | TEST PIT AND NUMBER | | S | SILTATION FENCE |

GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18
ROADWAY SUBBASE – MDOT SPECIFICATION 703.06 TYPE "D"
ROADWAY SUBBASE – MDOT SPECIFICATION 703.06 TYPE "G"
ROADWAY SURFACE COURSE – MDOT SPECIFICATION 703.10

STONE BEDDING – THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE – THE PIPE BEDDING MATERIAL SHALL BE 3/4-INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

BASAL BLANKET – MDOT SPECIFICATION 703.05

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" AND 8" PVC PIPE – SDR 21

12" PVC PIPE – SDR 26

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 10 ROADWAY AND CELL AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING SPOIL PILE.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

## VIEW MARKERS & IDENTIFICATION


| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A.C.C.M.P | ASPHALT COATED C.M.P. | D | DEGREE OF CURVE (ARC DEF.) | HDPE | HIGH DENSITY POLYETHYLENE | P.C. | POINT ON CURVE |
| A.C.P. | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HP | HORSEPOWER | P.I. | POINT OF INTERSECTION |
| AC | ACRE | DEG OR ° | DEGREE | HYD | HYDRANT | P.T. | POINT OF TANGENT |
| AGG | AGGREGATE | DEPT | DEPARTMENT | | | PERF | PERFORATED |
| ALUM | ALUMINUM | DI | DUCTILE IRON | I.D. | INSIDE DIAMETER | PSI | POUNDS PER SQUARE INCH |
| APPD | APPROVED | DIA OR ø | DIAMETER | IN OR " | INCHES | PVC | POLYVINYL CHLORIDE |
| APPROX | APPROXIMATE | DIM | DIMENSION | INV | INVERT | PVMT | PAVEMENT |
| ASB | ASBESTOS | DIST | DISTANCE | INV. EL | INVERT ELEVATION | | |
| ASPH | ASPHALT | DN | DOWN | | | QTY | QUANTITY |
| AUTO | AUTOMATIC | DR | DRAIN | LB | POUND | | |
| AUX | AUXILIARY | DWG | DRAWING | LC | LEACHATE COLLECTION | R.O.W. | RIGHT OF WAY |
| AVE | AVENUE | | | LD | LEAK DETECTION | RAD | RADIUS |
| AZ | AZIMUTH | EA | EACH | LIN FT. | LINEAR FEET | REQD | REQUIRED |
| | | EG | EXISTING GROUND OR GRADE | LOC | LOCATION | RT | RIGHT |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | ELEC | ELECTRIC | LT | LEFT | RTE | ROUTE |
| B.M. | BENCH MARK | EL | ELEVATION | | | | |
| BIT | BITUMINOUS | ELB | ELBOW | M.H. | MANHOLE | S | SLOPE |
| BLDG | BUILDING | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT | SCH | SCHEDULE |
| BOT | BOTTOM | EST | ESTIMATED | MATL | MATERIAL | SF | SQUARE FEET |
| BRG | BEARING | EXC | EXCAVATE | MAX | MAXIMUM | SD | STORM DRAIN |
| | | EXIST | EXISTING | MFR | MANUFACTURE | SDR | STANDARD DIMENSION RATIO |
| C.B. | CATCH BASIN | | | MIN | MINIMUM | SHT | SHEET |
| CEN | CENTER | F.G. | FINISH GRADE | MISC | MISCELLANEOUS | STA | STATION |
| CEM. LIN. | CEMENT LINED | FBRGL | FIBERGLASS | MON | MONUMENT | SY | SQUARE YARD |
| C.M.P. | CORRUGATED METAL PIPE | FDN | FOUNDATION | | | | |
| C.O. | CLEAN OUT | FLEX | FLEXIBLE | N.I.T.C. | NOT IN THIS CONTRACT | TAN | TANGENT |
| CF | CUBIC FEET | FLG | FLANGE | N.T.S. | NOT TO SCALE | TDH | TOTAL DYNAMIC HEAD |
| CFS | CUBIC FEET PER SECOND | FLR | FLOOR | N/F | NOW OR FORMERLY | TEMP | TEMPORARY |
| CI | CAST IRON | FPS | FEET PER SECOND | NO. OR # | NUMBER | TYP | TYPICAL |
| CL | CLASS | FT OR ' | FEET | | | | |
| CONC | CONCRETE | FTG | FOOTING | O.C. | ON CENTER | V | VOLTS |
| CONST | CONSTRUCTION | | | O.D. | OUTSIDE DIAMETER | | |
| CONTR | CONTRACTOR | GA | GAUGE | | | W/ | WITH |
| CTR | CENTER | GAL | GALLON | | | W/O | WITHOUT |
| CY | CUBIC YARD | GALV | GALVANIZED | | | | |
| | | GPD | GALLONS PER DAY | | | YD | YARD |
| | | GPM | GALLONS PER MINUTE | | | | |

STATE OF MAINE — PETER M. J. MAHER #4107 — REGISTERED PROFESSIONAL ENGINEER

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

| ISSUE CODE | |
|---|---|
| P – Prelim | B – Bids |
| M – Mtl T.O. | C – Const. |
| SCALE | |

BOWATER
Great Northern Paper

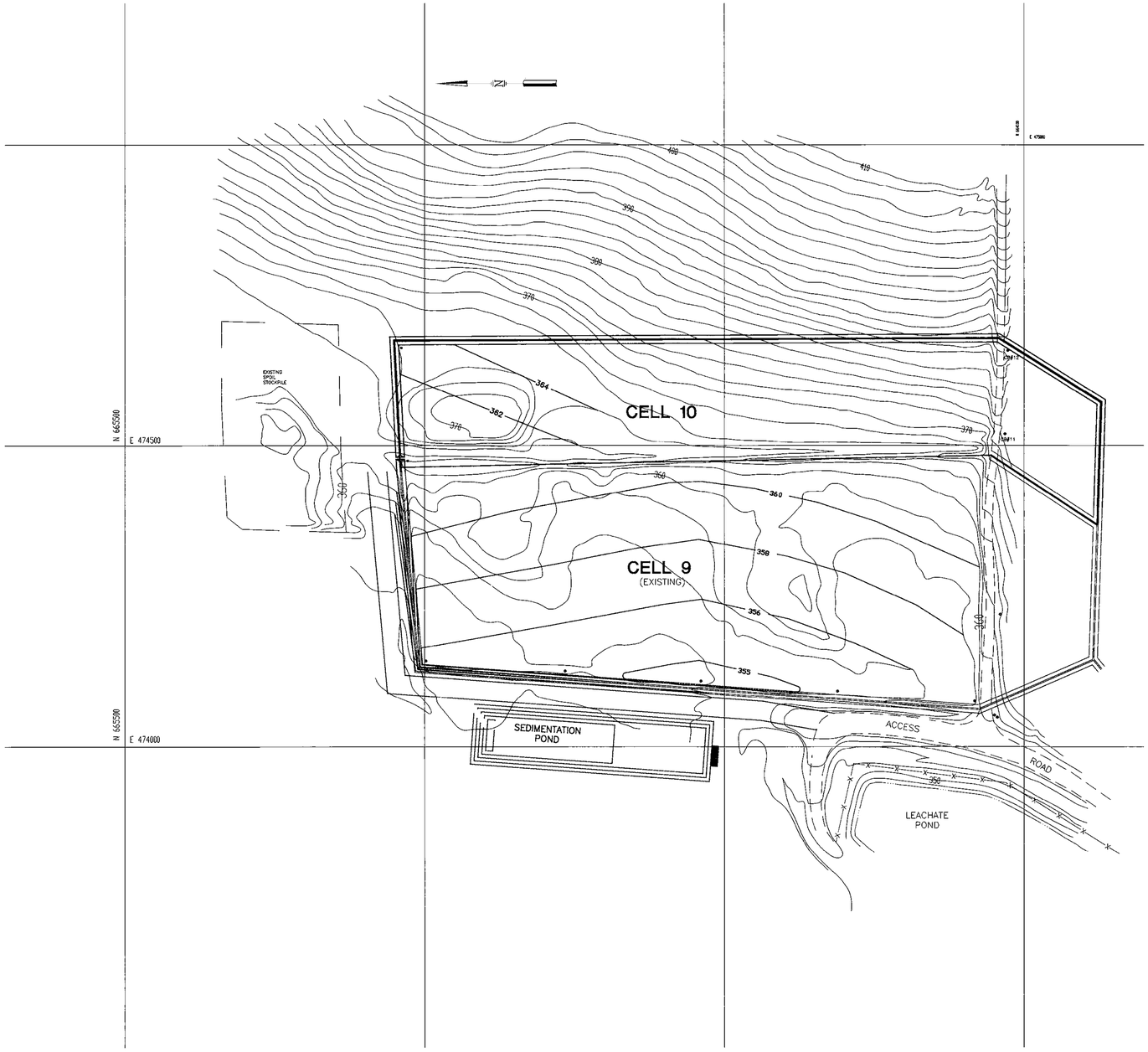
EAST OPERATION

DOLBY III LANDFILL
CELL 10 CONSTRUCTION
SYMBOLS & ABBREVIATIONS

JOB NO. _____
ENG. REQ. NO. _____
FILE NO. 2-092-4703.7082

YB-23379

D:\SME\CAD\SYMS4.* Tue May 23 05:46:48 1995




50 0 100 200 FEET

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| YB-15263 | DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION | | | | | | | | |
| YB-23042 | DOLBY III LANDFILL AREA, CELL 9 CONSTRUCTION, SITE DEVELOPMENT PLAN | | | | | | | | |
| | | | | 5/95 | SUBMITTED FOR BID | | | | |
| | | | | 4/95 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P – Prelim | B – Bids |
| M – Mtl T.O. | C – Const. |
| SCALE AS SHOWN | |

STATE OF MAINE
PETER W. MAHER
#4107
REGISTERED
PROFESSIONAL ENGINEER

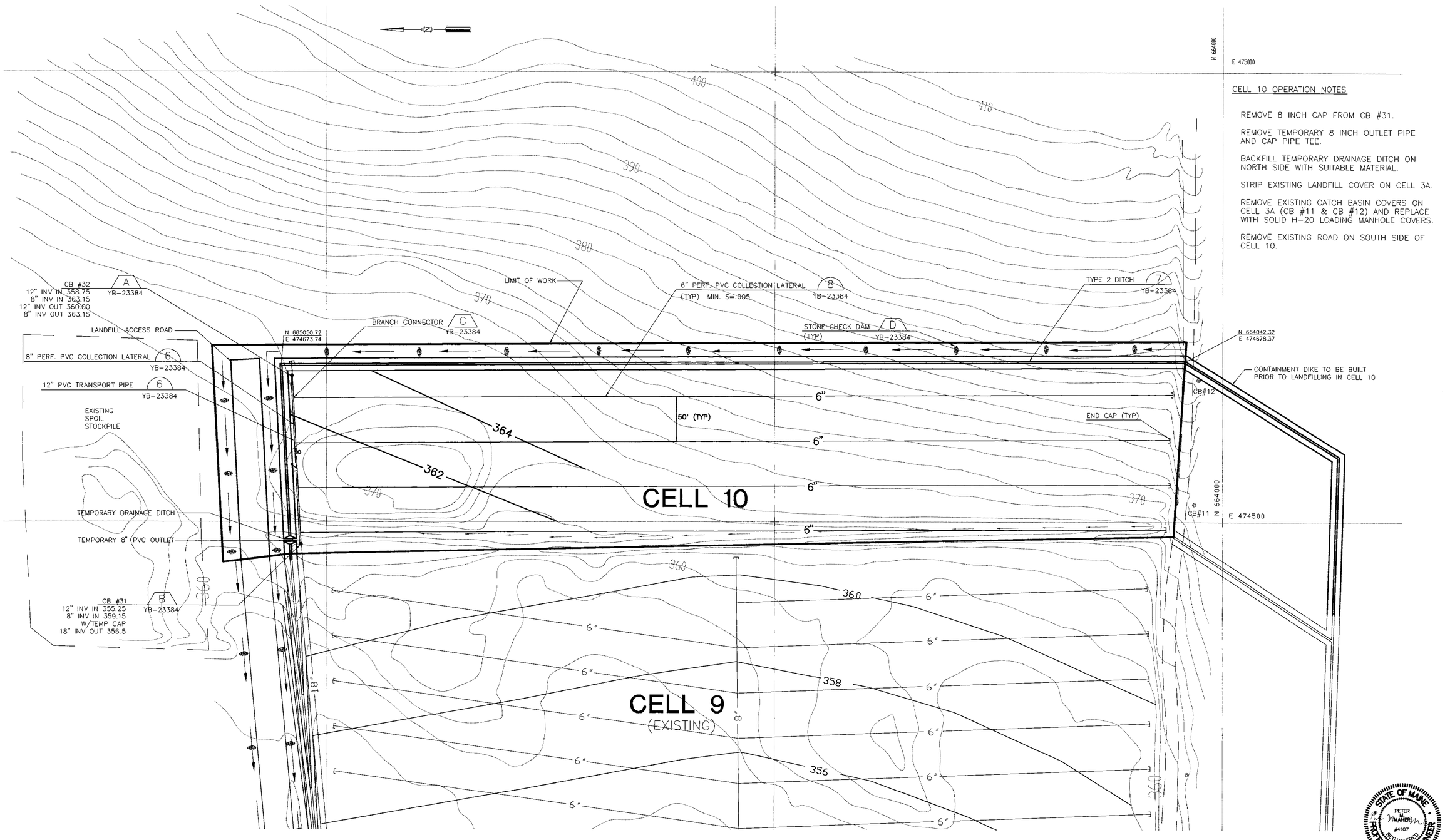
BOWATER
Great Northern Paper

EAST OPERATION

# DOLBY III LANDFILL CELL 10 CONSTRUCTION SITE LOCATION PLAN

JOB NO. _____ YB-23380
ENG. REQ. NO. _____
FILE NO. 2-092-4703.7082

D:\MAP\ACAD\CELL10\DWPCELL10 Tue May 23 10:11:21 1995




| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|
| YB-15263 | DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION |
| YB-23042 | DOLBY III LANDFILL AREA, CELL 9 CONSTRUCTION, SITE DEVELOPMENT PLAN |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 5/95 | SUBMITTED FOR BID | | | | |
| | | 4/95 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE: P – Prelim; B – Bids; M – Mtl T.O.; C – Const.

SCALE AS SHOWN

BOWATER
Great Northern Paper

EAST OPERATION

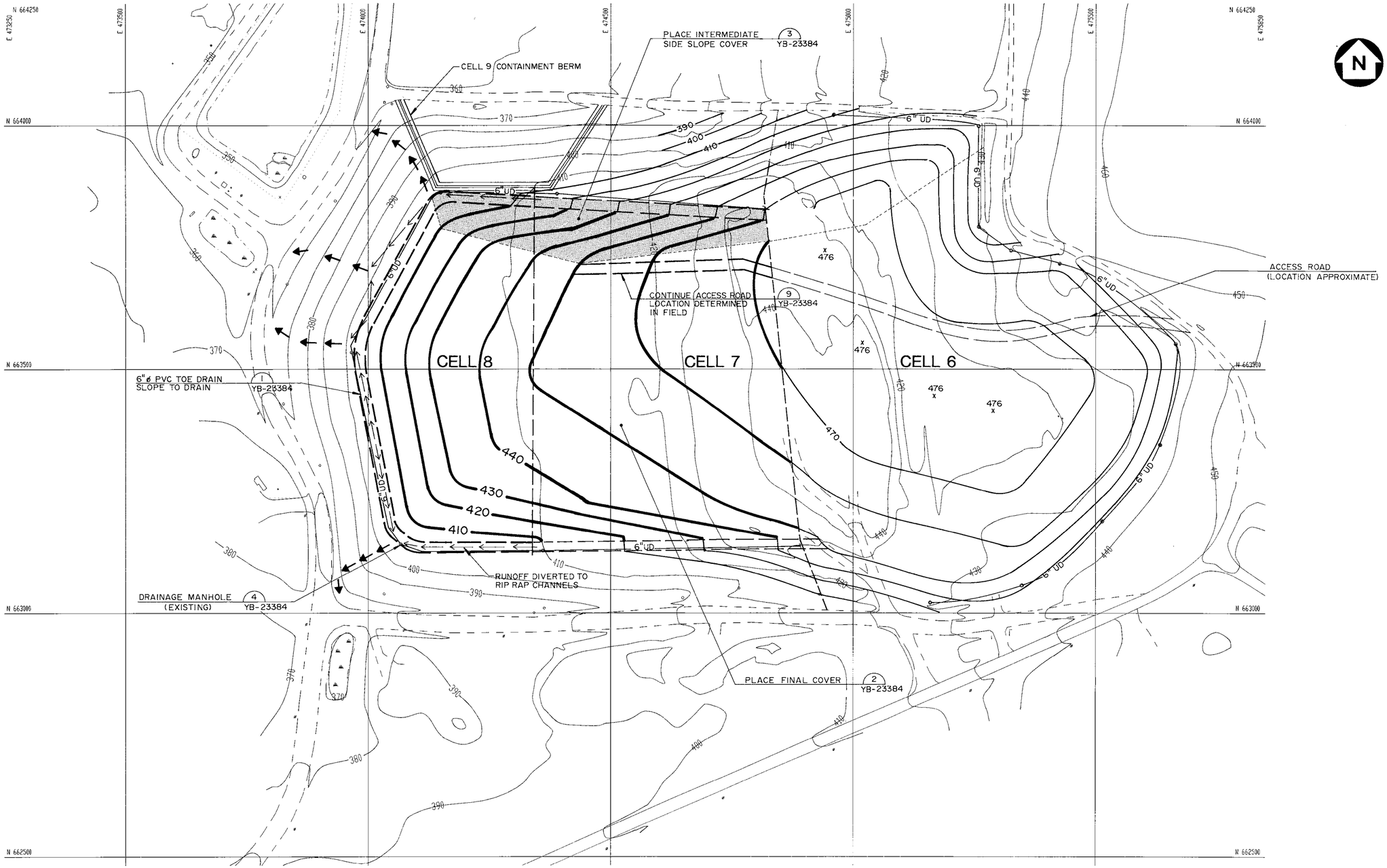
# DOLBY III LANDFILL CELL 10 CONSTRUCTION SITE DEVELOPMENT PLAN

JOB NO. _____ YB-23381
ENG. REQ. NO. _____
FILE NO. 2-092-4703.7082

STATE OF MAINE · PETER M. MAHER #4107 · REGISTERED PROFESSIONAL ENGINEER

85 0 50 100 FEET

D:\DWP\ACAD\CELL10\GNPSCL10 Tue May 23 09:56:58 1995




COMPILED AND CONTROLLED BY JAMES W. SEWALL CO.
OLD TOWN, ME BY PHOTOGRAMMETRIC METHODS
FROM AERIAL PHOTOGRAPHS DATED 8/9/90

| DRAWING NO. | REFERENCE DRAWING TITLE | CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 10/97 | RECORD DRAWING | MHC | | | |
| | | C | | 8/95 | ISSUED FOR CONSTRUCTION | MHC | | | |
| | | B | | 5/95 | SUBMITTED FOR BID | | | | |

STATE OF MAINE — PETER W. MAHER — 9417 — REGISTERED PROFESSIONAL ENGINEER

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | PAE |
| CKD | MHC |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL T.O. | C - CONST |
| SCALE | 1" = 100' |

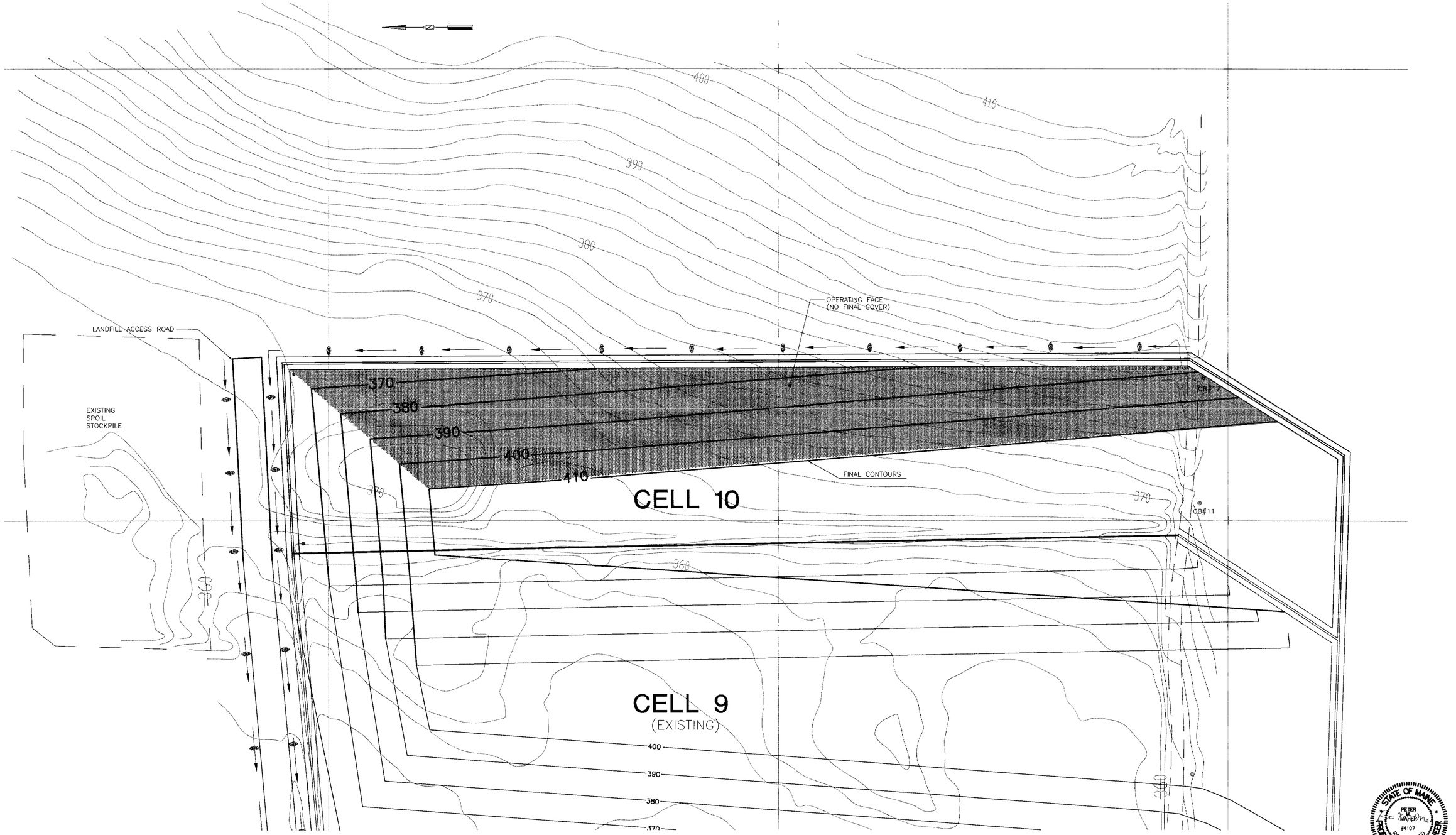
**BOWATER**
GREAT NORTHERN PAPER

EAST OPERATION
DOLBY III LANDFILL
CELLS 7 & 8 CLOSURE
FINAL GRADING PLAN

JOB NO. 94678
ENG. REQ. NO.
FILE NO. 2-092-4703, 7082

YB-23382

SPILLER'S




25 0 50 100 FEET

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|
| YB-15263 | DOLBY III LANDFILL AREA, TOPOGRAPHIC SURVEY AND DIGITIZATION |
| YB-23042 | DOLBY III LANDFILL AREA, CELL 9 CONSTRUCTION, SITE DEVELOPMENT PLAN |

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 5/95 | SUBMITTED FOR BID | | | | |
| | | 4/95 | SUBMITTED TO CLIENT | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND CENTER, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | |
| CHK | |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE: P – Prelim; B – Bids; M – Mtl T.O.; C – Const.

SCALE AS SHOWN

STATE OF MAINE · PETER C. MAHER · #4107 · REGISTERED PROFESSIONAL ENGINEER

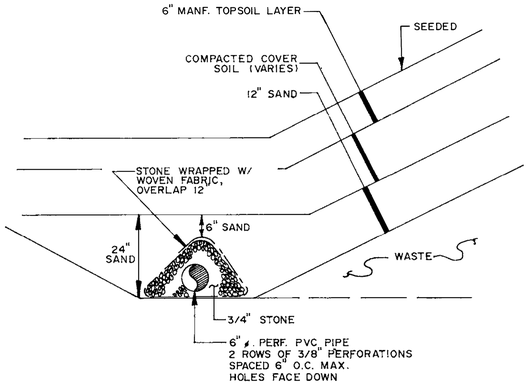
BOWATER
Great Northern Paper

EAST OPERATION

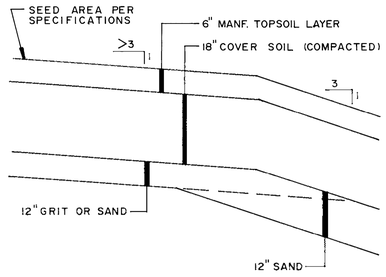
# DOLBY III LANDFILL
# CELL 10 CONSTRUCTION
## FINAL GRADING PLAN

JOB NO. _____ YB-23383
ENG. REQ. NO. _____
FILE NO. 2-092-4703.7082

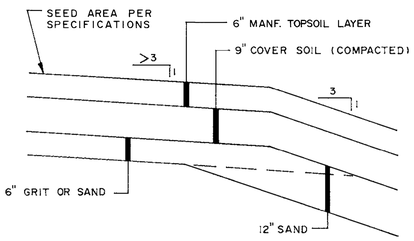
D:\SM\ACAD\CELL10\GNPCEL10 Tue May 23 11:19:14 1995




SECTION 1
N.T.S. YB-23382



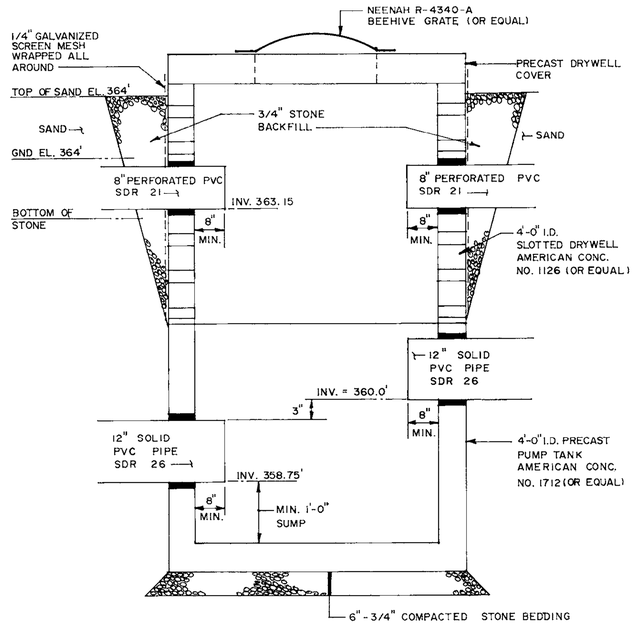

FINAL COVER SECTION 2
N.T.S. YB-23382



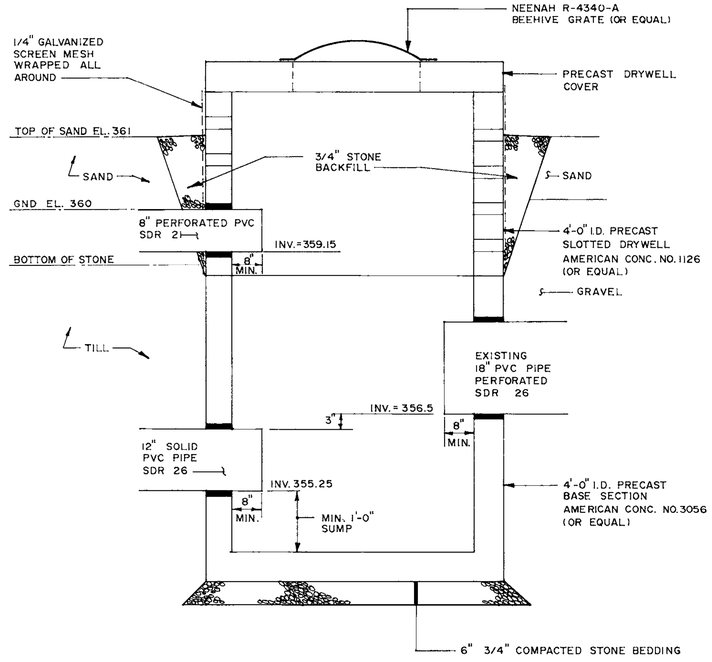

INTERMEDIATE SLOPE COVER SECTION 3
N.T.S. YB-23382




DRAINAGE MANHOLE 4
N.T.S. (EXISTING) YB-23382




CATCH BASIN # 32 A
N.T.S. YB-23381




CATCH BASIN # 31 B
N.T.S. YB-23381

STATE OF MAINE PETER MAHER

| DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| C | | 8/95 | ISSUED FOR CONSTRUCTION | | | | |
| B | | 5/95 | SUBMITTED FOR BID | | | | |

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | HAH |
| CKD | |
| CKD | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - PRELIM | B - BIDS |
| M - MTL T.O. | C - CONST |
| SCALE N.T.S. | |

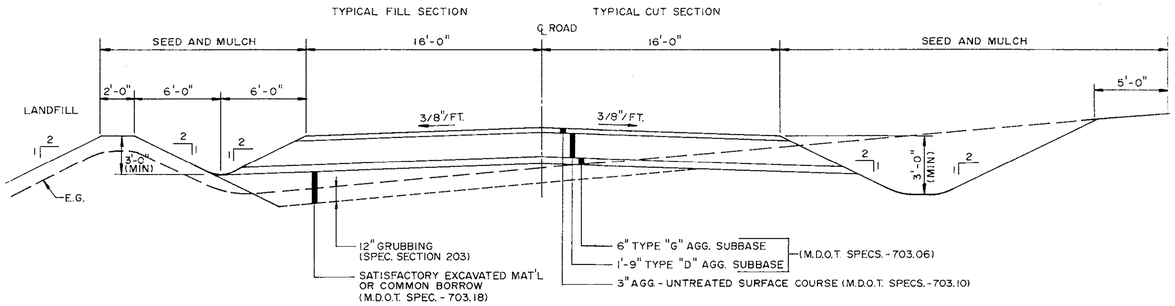
BOWATER
GREAT NORTHERN PAPER

EAST OPERATION
DOLBY III LANDFILL
CELL 10 CONSTRUCTION
SECTIONS & DETAILS

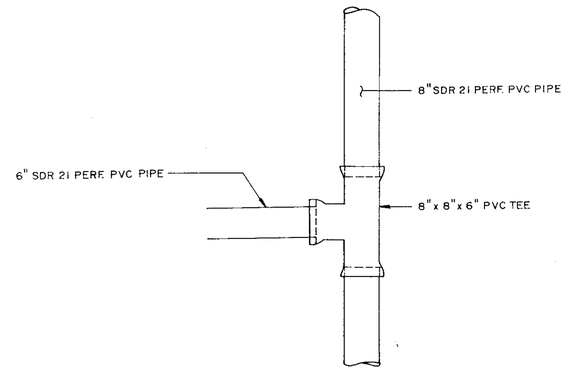
JOB NO. 94678
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-23384
SHEET 1 OF 2

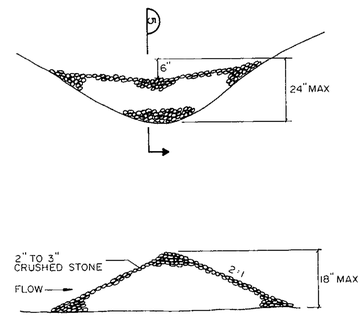
172203
SPILLER'S



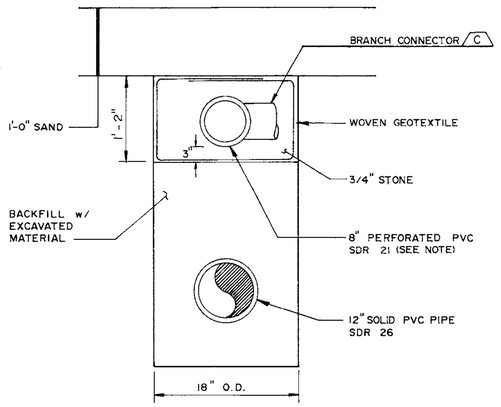

## TYPICAL SECTION
## LANDFILL ACCESS ROAD
NTS




## BRANCH CONNECTOR C
N.T.S. YB-23381

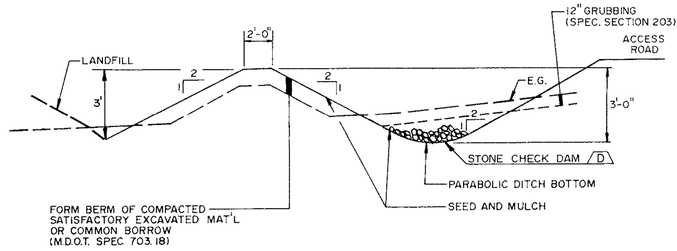



## SECTION 5
## STONE CHECK DAM D
NTS YB-23381

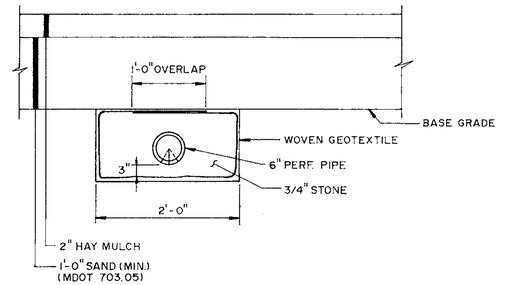



NOTE.
PIPE PERFORATIONS SHALL BE 3/8" ⌀ HOLES, 6" O.C., 2 ROWS. ROWS SHALL BE MINIMUM 45°, MAXIMUM 60° FROM INVERT OF PIPE. HOLES SHALL FACE DOWN.

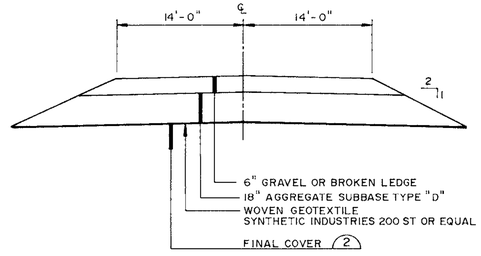
## 12-IN., 8-IN. LEACHATE COLLECTION PIPES 6
NTS YB-23381




## DIKE AND TYPE 2 DRAINAGE DITCH 7
N.T.S. YB-23381




## 6-IN. LEACHATE COLLECTION PIPE 8
N.T.S. YB-23381




## ACCESS ROAD 9
N.T.S. YB-23382

STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER

| DRAWING NO | REFERENCE DRAWING TITLE |
|---|---|

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| C | | 8/95 | ISSUED FOR CONSTRUCTION | HAM | | | |
| B | | 5/95 | SUBMITTED FOR BID | | | | |

**SEVEE & MAHER ENGINEERS, INC.**
CONSULTING ENGINEERS
CUMBERLAND, MAINE

JOB NO. 95019

| | |
|---|---|
| DRN | HAM |
| CKD | HAM |
| CKD | |
| CORR | |
| APPVD | |

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL T.O. | C - CONST

SCALE N.T.S.

**BOWATER**
GREAT NORTHERN PAPER

EAST OPERATION
DOLBY III LANDFILL
CELL 10 CONSTRUCTION
SECTIONS & DETAILS

JOB NO. 94678
ENG. REQ. NO.
FILE NO. 2-092-4703,7082

YB-23384
SHEET 2 OF 2

172202
SPILLER'S

# GREAT NORTHERN PAPER, INC.
# A SUBSIDIARY OF BOWATER INCORPORATED
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 11 CONSTRUCTION

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-25219 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-25220 |
| 3 | EXISTING CONDITIONS PLAN | YB-25221 |
| 4 | CELL 11 - SITE DEVELOPMENT PLAN | YB-25222 |
| 5 | FINAL GRADING PLAN | YB-25223 |
| 6 | SECTIONS & DETAILS | YB-25224 |


*SME*

*Sevee & Maher Engineers, Inc.*

*Waste Management and Hydrogeologic Consultants*

*Cumberland Center, Maine*


99070.00

| | |
|---|---|
| DRN | MSB |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - Prelim | B - Bids |
| M - MH T.O. | C - Const. |
| SCALE | NONE |

BOWATER
Great Northern Paper

EAST OPERATION

DOLBY III LANDFILL
CELL 11 CONSTRUCTION
COVER SHEET

JOB NO. 94744
ENG. REQ. NO.
FILE NO. 2-092-7082

YB-25219

G:\GNP\Do1\ACAD\Cell11\Gnpcov11.dwg Tue Jul 27 08:44:52 1999 DHD

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (MAGNETIC) | | | STONE WALL | ○ | ● | MANHOLE |
| Ⓝ | | NORTH ARROW (PLAN NORTH) | | | DRAINAGE COURSE (WITH DIRECTION) | ◎ | ⊙ | CATCH BASIN |
| 25 | 25 | CONTOUR LINES | SHORE SIDE | | EDGE OF WATER | ⋈ | ⋈ | WATER VALVE |
| 25 x 63 | 25.56 x | SPOT ELEVATION (GRADE) | | | WATER ELEVATION (GROUND OR SURFACE) | | | HYDRANT |
| | | EXISTING GROUND | | | FENCE LINE (WOOD) | | | UTILITY POLE |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | FENCE LINE (WIRE) | | ⊘ | CLEAN OUT STRUCTURE |
| | | PROPERTY LINE OR R.O.W. | | | RETAINING WALL | G | G | UNDERGROUND GAS MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE LINE |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | | BUILDING AND STRUCTURES | E | E | UNDERGROUND ELECTRICAL LINE |
| | | BOUNDARY LINE (State, County, Municipality) | | 1 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | OE | OE | OVERHEAD ELECTRICAL LINE |
| ⊡ | ■ | SURVEY MONUMENT | | TOP OF SLOPE 2 1 | SLOPES (WITH SLOPE RATIO) | | 12" ACP | SANITARY SEWER (SIZE & TYPE) |
| ○IF | ●IF | SURVEY IRON | | | EDGE OF TRAVELED WAY | FM | 8" PVC | FORCE MAIN (SIZE & TYPE) |
| ○ | ● | DRILL HOLE, PK, OR STAKE | | F | CUT OR FILL LINE | W | 8" D.I. | WATER MAIN (SIZE & TYPE) |
| | | WOODS OR BRUSH LINE | | CLL | CLEARING LIMIT LINE | | 12" RCP | STORM DRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Deciduous) | | | BITUMINOUS PAVEMENT | UD | 8" UD | UNDERDRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Coniferous) | | | CONCRETE | | | CULVERT |
| | | TREE, TO BE REMOVED | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | RAILROAD |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | S | SILTATION FENCE |
| | | | | | | PD | 6" PD | PERIMETER DRAIN (SIZE & TYPE) |
| | | | | | | LT | 6" LT | LEACHATE TRANSPORT (SIZE & TYPE) |
| | | | | | | LC | 6" LC | LEACHATE COLLECTION (SIZE & TYPE) |
| | | | | | | LD | 6" LD | LEAK DETECTION, SIZE & TYPE |
| | | | | | | | | TERRACE DRAINAGE SWALE |
| | | | | | | | 4" GS | GRAVITY SEWER |
| | | | | | | | 6" SWP | SOLID WALL PIPE |

GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18

STONE BEDDING – THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE – THE PIPE BEDDING MATERIAL SHALL BE 3/4-INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

BASAL BLANKET – MDOT SPECIFICATION 703.05

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" AND 8" PVC PIPE – SDR 21

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 11 ROADWAY AND CELL AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING SPOIL PILE.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

| SEED: | | |
|---|---|---|
| | TALL FESCUE | 59% |
| | RED FESCUE | 25% |
| | RED TOP | 5% |
| | LADINO CLOVER | 3% |
| | ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

| | | | | | |
|---|---|---|---|---|---|
| A.C.C.M.P | ASPHALT COATED C.M.P. | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE |
| A.C.P. | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HP | HORSEPOWER |
| AC | ACRE | DEG OR ° | DIAMETER | HYD | HYDRANT |
| AGG | AGGREGATE | DEPT | DEPARTMENT | | |
| ALUM | ALUMINUM | DI | DUCTILE IRON | I.D. | INSIDE DIAMETER |
| APPD | APPROVED | DIA OR ø | DIAMETER | IN OR " | INCHES |
| APPROX | APPROXIMATE | DIM | DIMENSION | INV | INVERT |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV. EL. | INVERT ELEVATION |
| ASB | ASBESTOS | DN | DOWN | | |
| ASPH | ASPHALT | DR | DRAIN | LB | POUND |
| AUTO | AUTOMATIC | DWG | DRAWING | LC | LEACHATE COLLECTION |
| AUX | AUXILIARY | | | LD | LEAK DETECTION |
| AVE | AVENUE | EA | EACH | LIN. FT. | LINEAR FEET |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LOC | LOCATION |
| | | ELEC | ELECTRIC | LT | LEACHATE TRANSPORT |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | EL | ELEVATION | | |
| B.M. | BENCH MARK | ELB | ELBOW | M.H. | MANHOLE |
| BIT | BITUMINOUS | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT |
| BLDG | BUILDING | EST | ESTIMATED | MATL | MATERIAL |
| BOT | BOTTOM | EXC | EXCAVATE | MAX | MAXIMUM |
| BRG | BEARING | EXIST | EXISTING | MFR | MANUFACTURE |
| | | | | MIN | MINIMUM |
| C.B. | CATCH BASIN | F.G. | FINISH GRADE | MISC | MISCELLANEOUS |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT |
| CEM. LIN. | CEMENT LINED | FDN | FOUNDATION | | |
| C.M.P. | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | N.I.T.C. | NOT IN THIS CONTRACT |
| C.O. | CLEAN OUT | FLG | FLANGE | N.T.S. | NOT TO SCALE |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO. OR # | NUMBER |
| CI | CAST IRON | FT OR ' | FEET | | |
| CL | CLASS | FTG | FOOTING | O.C. | ON CENTER |
| CONC | CONCRETE | | | O.D. | OUTSIDE DIAMETER |
| CONST | CONSTRUCTION | GA | GAUGE | | |
| CONTR | CONTRACTOR | GAL | GALLON | P.C. | POINT ON CURVE |
| CTR | CENTER | GALV | GALVANIZED | PD | PERIMETER DRAIN |
| CY | CUBIC YARD | GPD | GALLONS PER DAY | P.I. | POINT OF INTERSECTION |
| | | GPM | GALLONS PER MINUTE | P.T. | POINT OF TANGENT |
| | | | | PERF | PERFORATED |
| | | | | PSI | POUNDS PER SQUARE INCH |
| | | | | PVC | POLYVINYL CHLORIDE |
| | | | | PVMT | PAVEMENT |
| | | | | QTY | QUANTITY |
| | | | | R.O.W. | RIGHT OF WAY |
| | | | | RAD | RADIUS |
| | | | | REQD | REQUIRED |
| | | | | RT | RIGHT |
| | | | | RTE | ROUTE |
| | | | | S | SLOPE |
| | | | | SCH | SCHEDULE |
| | | | | SF | SQUARE FEET |
| | | | | SHT | SHEET |
| | | | | STA | STATION |
| | | | | SY | SQUARE YARD |
| | | | | TAN | TANGENT |
| | | | | TDH | TOTAL DYNAMIC HEAD |
| | | | | TEMP | TEMPORARY |
| | | | | TYP | TYPICAL |
| | | | | V | VOLTS |
| | | | | W/ | WITH |
| | | | | W/O | WITHOUT |
| | | | | YD | YARD |

## VIEW MARKERS & IDENTIFICATION

SECTION TITLE & NO. — ACCESS ROAD 3 — C-100 — DRAWING WHERE SECTION APPEARS

DETAIL TITLE & LETTER — MANHOLE A — C-100 — DRAWING WHERE DETAIL APPEARS

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 7/30/99 | SUBMITTED TO CLIENT | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*

| | |
|---|---|
| DRN | MSB |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P – Prelim | B – Bids |
| M – Mtl T.O. | C – Const. |
| SCALE AS SHOWN | |

BOWATER
Great Northern Paper

CENTRAL ENGINEERING

DOLBY III LANDFILL
CELL 11 CONSTRUCTION
SYMBOLS & ABBREVIATIONS

JOB NO. 94744
ENG. REQ. NO.
FILE NO. 2-092-7082

YB-25220

G:\GNP\Go1\ACAD\Ge1111\sysmsht.dwg Fri Jul 30 14:20:40 1999

CELL 11

Existing Leachate Collection Pipes (TYP)

CELL 10
(EXISTING)

CELL 9
(EXISTING)

CELL 1
THROUGH
CELL 8
(EXISTING)

EXISTING SPOIL STOCKPILE

GROUND OBSCURED

N 662500
E 475000
E 474500
E 474000

GENERAL NOTES:

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. NORRIDGEWOCK, MAINE, PHOTOGRAPH DATED 5/1/99.
2. GROUND CONTROL PROVIDED BY PLISGA & DAY, BANGOR, MAINE.
3. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MDEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE, AND LOCAL PERMITS.

50 0 100 200

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 7/30/99 | SUBMITTED TO CLIENT | | | | |


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


JOB NO. 99070

| | |
|---|---|
| DRN | MSB |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE

| | |
|---|---|
| P – Prelim | B – Bids |
| M – Mtl T.O. | C – Const. |

SCALE AS SHOWN

BOWATER
Great Northern Paper

EAST OPERATION

# DOLBY III LANDFILL CELL 11 CONSTRUCTION EXISTING CONDITIONS PLAN

JOB NO. 94744
ENG. REQ. NO.
FILE NO. 2-092-7082

YB-25221

G:\GNP\Dolby11\ACAD\Cell11\CELL11.dwg Fri Jul 30 14:16:04 1999

MW-303A
MW-303B
N 665000
E 475000
MW-106A
MW-106B
MW-203
N 664000
E 475000
CB #33
(EXIST.) 12" INV IN =
8" INV IN = 379.00
(EXIST.) 12" INV OUT
8" INV OUT = 379.00
B
YB-25224
LIMIT OF WORK
TYPE 2 DITCH 1
YB-25224
6" PERF. PVC COLLECTION LATERAL 2
(TYP) MIN. S=.005
YB-25224
CB#16
STONE CHECK DAM C
YB-25224
N 665062.22
E 474898.04
CONTAINMENT DIKE TO BE BUILT PRIOR TO LANDFILLING IN CELL 11
8" PERF. PVC COLLECTION LATERAL 4
YB-25224
EXISTING 12" PVC TRANSPORT PIPE
6"
LIMIT OF SAND DRAINAGE BLANKET (EL. 400)
CB#14
TEMPORARY DRAINAGE DITCH
EXIST. CB #32
12" INV IN 358.75
8" INV IN 363.15
12" INV OUT 360.00
8" INV OUT 363.15
LANDFILL ACCESS ROAD 5
YB-25224
CELL 11
6"
6"
BRANCH CONNECTOR A
YB-25224
6"
N 664042.32
E 474678.37
CB#12
END CAP (TYP)
EXISTING SPOIL STOCKPILE
CELL 10
(EXISTING)
N 665000
E 474500
358.9
CB#11
N 664000
E 474500
GROUND OBSCURED
CELL 9
(EXISTING)

CELL 11 OPERATION NOTES

REMOVE 8 INCH CAP FROM CB #32.

REMOVE TEMPORARY 8 INCH OUTLET PIPE AND CAP PIPE TEE.

BACKFILL TEMPORARY DRAINAGE DITCH ON NORTH SIDE WITH SUITABLE MATERIAL.

STRIP EXISTING LANDFILL COVER ON CELL 3B.

REMOVE EXISTING CATCH BASIN COVER ON CELL 3B (CB #14) AND REPLACE WITH SOLID H-20 LOADING MANHOLE COVER.

25 0 50 100

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 12/27/99 | RECORD DRAWING | | | | |
| | | 7/30/99 | SUBMITTED TO CLIENT | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 99070

| | |
|---|---|
| DRN | MSB |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |
| ISSUE CODE | |
| P - Prelim | B - Bids |
| M - Mtl T.O. | C - Const. |
| SCALE | AS SHOWN |

BOWATER
Great Northern Paper

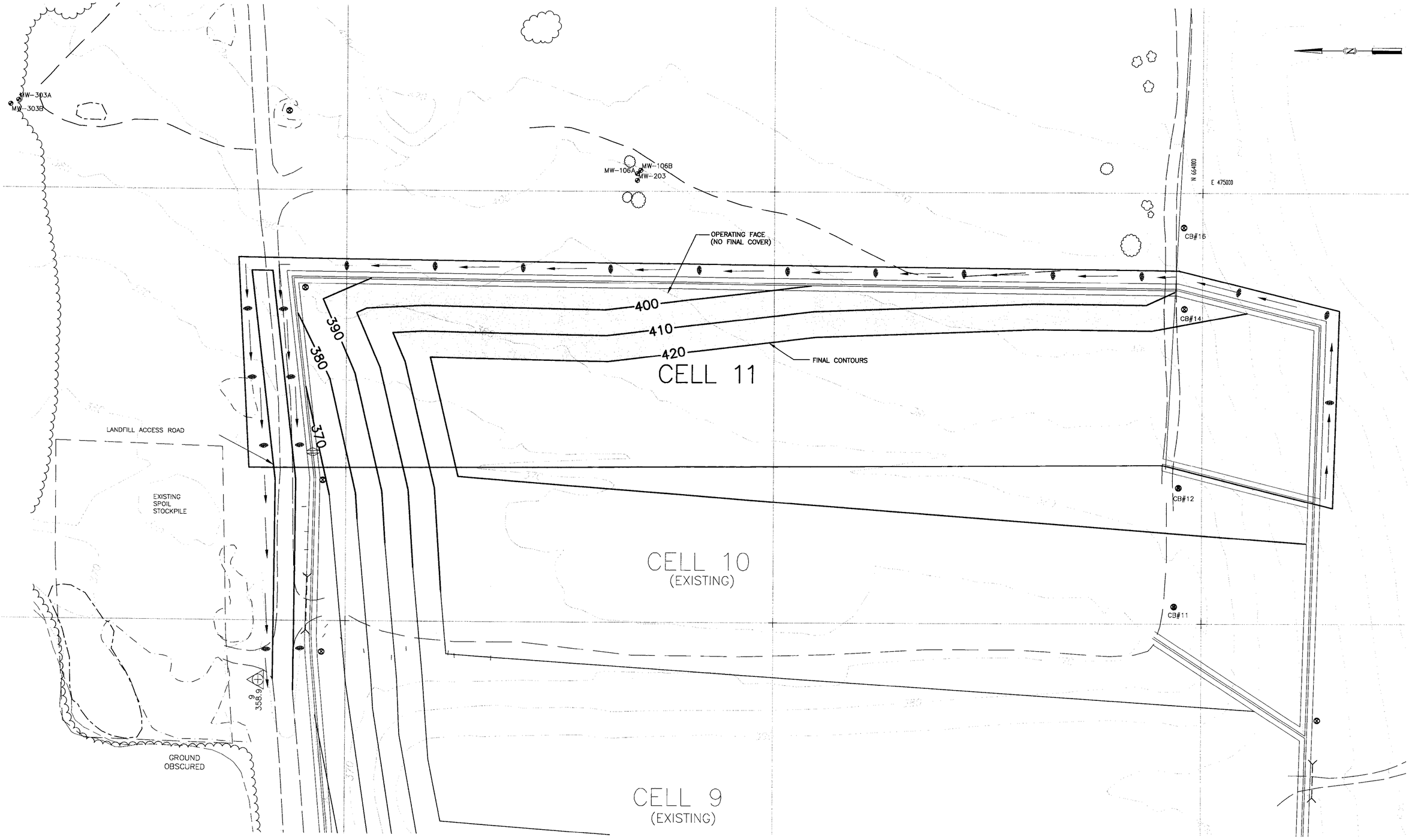
EAST OPERATION

DOLBY III LANDFILL
CELL 11 CONSTRUCTION
SITE DEVELOPMENT PLAN

JOB NO. 94744
ENG. REQ. NO.
FILE NO. 2-092-7082

YB-25222

G:\GNP\Do1\ACAD\Ce111\CELL11.dwg Mon Dec 27 08:44:11 1999




25 0 50 100

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 7/30/99 | SUBMITTED TO CLIENT | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

| | |
|---|---|
| DRN | MSB |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE
P - Prelim. | B - Bids
M - Mill T.O. | C - Const.
SCALE AS SHOWN

BOWATER
Great Northern Paper

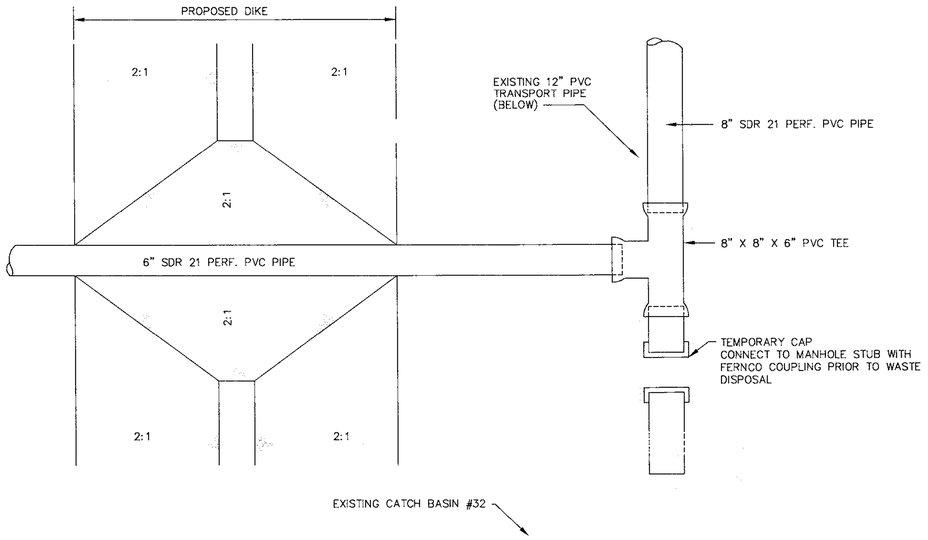
EAST OPERATION

# DOLBY III LANDFILL
# CELL 11 CONSTRUCTION
# FINAL GRADING PLAN

JOB NO. 94744
ENG. REQ. NO.
FILE NO. 2-092-7082

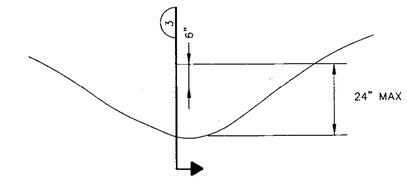
YB-25223

G:\GNP\Dol\ACAD\Cell11\CELL11.dwg Fri Jul 30 14:08:53 1999




## BRANCH CONNECTOR (A)

N.T.S. YB-25222

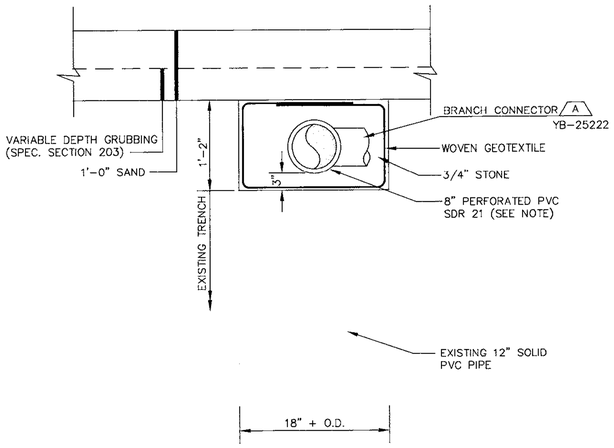




SECTION (3)

## STONE CHECK DAM (C)

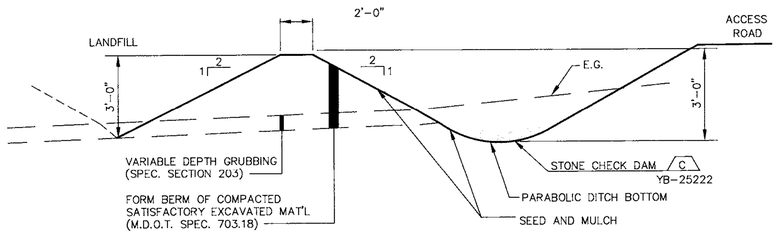
N.T.S. YB-25222




NOTE:
PIPE PERFORATIONS SHALL BE 3/8" DIA. HOLES, 6" O.C., 2 ROWS. ROWS SHLL BE MINIMUM 45°, MAXIMUM 60° FROM INVERT OF PIPE. HOLES SHALL FACE DOWN.

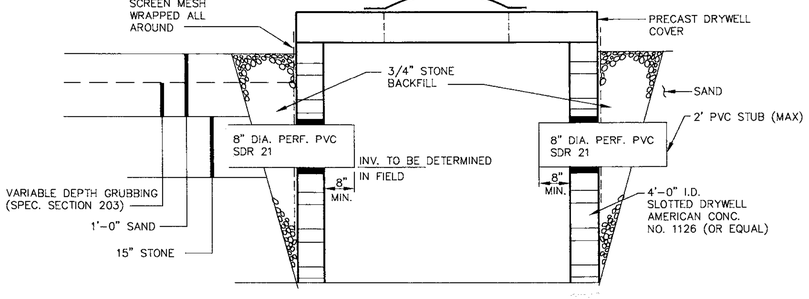
## 8" LEACHATE COLLECTION PIPES (4)

N.T.S. YB-25222



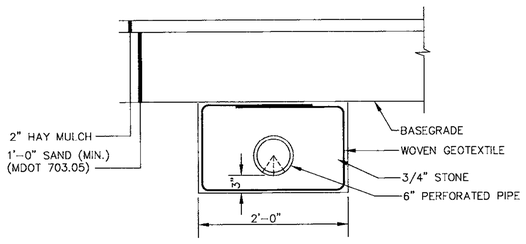

## DIKE AND TYPE 2 DRAINAGE DITCH (1)

N.T.S. YB-25222



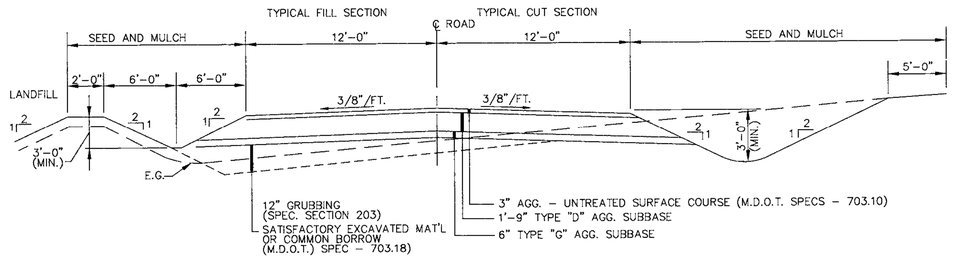

## CATCH BASIN # 33 (B)

N.T.S. YB-25222




## 6" LEACHATE COLLECTION PIPE (2)

N.T.S. YB-25222




## LANDFILL ACCESS ROAD (4)

N.T.S. YB-25222

| CODE | NO. | DATE | REVISION | BY | CKD | APPVD | JOB No. |
|---|---|---|---|---|---|---|---|
| | | 12/27/99 | RECORD DRAWING | | | | |
| | | 7/30/99 | SUBMITTED TO CLIENT | | | | |

JOB NO. 99070


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


| | |
|---|---|
| DRN | MSB |
| CHK | GHC |
| CHK | |
| CORR | |
| APPVD | |

ISSUE CODE: P - Prelim. | B - Bids | M - ME T.O. | C - Const.

SCALE AS SHOWN

BOWATER
Great Northern Paper

EAST OPERATION

# DOLBY III LANDFILL CELL 11 CONSTRUCTION SECTIONS & DETAILS

JOB NO. 94744
ENG. REQ. NO.
FILE NO. 2-092-7082

YB-25224

G:\GNP\Dol\ACAD\Cell11\DETAILS.dwg Mon Dec 27 08:31:20 1999

# GREAT NORTHERN PAPER, INC.
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 12 CONSTRUCTION
# CELL 10 CLOSURE

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-25539 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-25540 |
| 3 | EXISTING CONDITIONS PLAN | YB-25541 |
| 4 | CELL 12 – SITE DEVELOPMENT PLAN | YB-25542 |
| 5 | OPERATIONAL GRADING PLAN | YB-25543 |
| 6 | SECTIONS & DETAILS (SHEET 1 OF 2) | YB-25544 |
| 7 | SECTIONS & DETAILS (SHEET 2 OF 2) | YB-25544 |


SME

*Sevee & Maher Engineers, Inc.*

*Waste Management and Hydrogeologic Consultants*

*Cumberland Center, Maine*


| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | 6/8/00 | C | ISSUED FOR CONSTRUCTION | | | | |
| | 5/31/00 | P | SUBMITTED TO CLIENT | | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |

| | | |
|---|---|---|
| DRN | DRD | 5/31/00 |
| CHKD | GHC | 5/31/00 |
| APPVD | | - - |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

Great Northern PAPER, INC.

CAD FILE: GNPCOV12.DWG

**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 12 CONSTRUCTION**
**CELL 10 CLOSURE**
**COVER SHEET**

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

**YB-25539**

G:\GNP\Dol1\ACAD\CELL12\Gnpcov12.dwg Thu Jun 08 09:06:36 2000

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (MAGNETIC) | | | STONE WALL | ○ | ● | MANHOLE |
| N | | NORTH ARROW (PLAN NORTH) | | | DRAINAGE COURSE (WITH DIRECTION) | ◎ | ◉ | CATCH BASIN |
| 25 | 25 | CONTOUR LINES | SHORE SIDE | | EDGE OF WATER | ⋈ | ⋈ | WATER VALVE |
| 25 x 63 | 25.56 x | SPOT ELEVATION (GRADE) | | | WATER ELEVATION (GROUND OR SURFACE) | | | HYDRANT |
| | | EXISTING GROUND | | | FENCE LINE (WOOD) | | | UTILITY POLE |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | FENCE LINE (WIRE) | | ⊘ | CLEAN OUT STRUCTURE |
| | | PROPERTY LINE OR R.O.W. | | | RETAINING WALL | G | G | UNDERGROUND GAS MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE LINE |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | | BUILDING AND STRUCTURES | E | E | UNDERGROUND ELECTRICAL LINE |
| | | BOUNDARY LINE (State, County, Municipality) | | 1' 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | OE | OE | OVERHEAD ELECTRICAL LINE |
| ⊡ | ■ | SURVEY MONUMENT | | TOP OF SLOPE 2:1 | SLOPES (WITH SLOPE RATIO) | | 12" ACP | SANITARY SEWER (SIZE & TYPE) |
| ○IF | ●IF | SURVEY IRON | | | EDGE OF TRAVELED WAY | FM | 8" PVC | FORCE MAIN (SIZE & TYPE) |
| ○ | ● | DRILL HOLE, PK, OR STAKE | | | CUT OR FILL LINE | W | 8" D.I. | WATER MAIN (SIZE & TYPE) |
| | | WOODS OR BRUSH LINE | | CLL | CLEARING LIMIT LINE | | 12" RCP | STORM DRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Deciduous) | | | BITUMINOUS PAVEMENT | UD | 8" UD | UNDERDRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Coniferous) | | | CONCRETE | | | CULVERT |
| | | TREE, TO BE REMOVED | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | RAILROAD |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | S | SILTATION FENCE |
| | | | | | | PD | 6" PD | PERIMETER DRAIN (SIZE & TYPE) |
| | | | | | | LT | 6" LT | LEACHATE TRANSPORT (SIZE & TYPE) |
| | | | | | | LC | 6" LC | LEACHATE COLLECTION (SIZE & TYPE) |
| | | | | | | LD | 6" LD | LEAK DETECTION, SIZE & TYPE |
| | | | | | | | | TERRACE DRAINAGE SWALE |
| | | | | | | | 4" GS | GRAVITY SEWER |
| | | | | | | | 6" SWP | SOLID WALL PIPE |

GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18

STONE BEDDING – THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE – THE PIPE BEDDING MATERIAL SHALL BE 3/4–INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

BASAL BLANKET – MDOT SPECIFICATION 703.05

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" AND 8" PVC PIPE – SDR 21

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 11 ROADWAY AND CELL AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING SPOIL PILE.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A.C.C.M.P | ASPHALT COATED C.M.P. | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | P.C. | POINT ON CURVE |
| A.C.P. | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HP | HORSEPOWER | PD | PERIMETER DRAIN |
| AC | ACRE | DEG OR ° | DIAMETER | HYD | HYDRANT | P.I. | POINT OF INTERSECTION |
| AGG | AGGREGATE | DEPT | DEPARTMENT | | | P.T. | POINT OF TANGENT |
| ALUM | ALUMINUM | DI | DUCTILE IRON | I.D. | INSIDE DIAMETER | PERF | PERFORATED |
| APPD | APPROVED | DIA OR ø | DIAMETER | IN OR " | INCHES | PSI | POUNDS PER SQUARE INCH |
| APPROX | APPROXIMATE | DIM | DIMENSION | INV | INVERT | PVC | POLYVINYL CHLORIDE |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV. EL | INVERT ELEVATION | PVMT | PAVEMENT |
| ASB | ASBESTOS | DN | DOWN | | | | |
| ASPH | ASPHALT | DR | DRAIN | LB | POUND | QTY | QUANTITY |
| AUTO | AUTOMATIC | DWG | DRAWING | LC | LEACHATE COLLECTION | | |
| AUX | AUXILIARY | | | LD | LEAK DETECTION | R.O.W. | RIGHT OF WAY |
| AVE | AVENUE | EA | EACH | LIN FT. | LINEAR FEET | RAD | RADIUS |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LOC | LOCATION | REQD | REQUIRED |
| | | ELEC | ELECTRIC | LT | LEACHATE TRANSPORT | RT | RIGHT |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | EL | ELEVATION | | | RTE | ROUTE |
| B.M. | BENCH MARK | ELB | ELBOW | M.H. | MANHOLE | | |
| BIT | BITUMINOUS | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT | S | SLOPE |
| BLDG | BUILDING | EST | ESTIMATED | MATL | MATERIAL | SCH | SCHEDULE |
| BOT | BOTTOM | EXC | EXCAVATE | MAX | MAXIMUM | SF | SQUARE FEET |
| BRG | BEARING | EXIST | EXISTING | MFR | MANUFACTURE | SHT | SHEET |
| | | | | MIN | MINIMUM | STA | STATION |
| C.B. | CATCH BASIN | F.G. | FINISH GRADE | MISC | MISCELLANEOUS | SY | SQUARE YARD |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT | | |
| CEM. LIN. | CEMENT LINED | FDN | FOUNDATION | | | TAN | TANGENT |
| C.M.P. | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | N.I.T.C. | NOT IN THIS CONTRACT | TDH | TOTAL DYNAMIC HEAD |
| C.O. | CLEAN OUT | FLG | FLANGE | N.T.S. | NOT TO SCALE | TEMP | TEMPORARY |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY | TYP | TYPICAL |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO. OR # | NUMBER | | |
| CI | CAST IRON | FT OR ' | FEET | | | V | VOLTS |
| CL | CLASS | FTG | FOOTING | O.C. | ON CENTER | | |
| CONC | CONCRETE | | | O.D. | OUTSIDE DIAMETER | W/ | WITH |
| CONST | CONSTRUCTION | GA | GAUGE | | | W/O | WITHOUT |
| CONTR | CONTRACTOR | GAL | GALLON | | | | |
| CTR | CENTER | GALV | GALVANIZED | | | YD | YARD |
| CY | CUBIC YARD | GPD | GALLONS PER DAY | | | | |
| | | GPM | GALLONS PER MINUTE | | | | |

## VIEW MARKERS & IDENTIFICATION

SECTION TITLE & NO. — ACCESS ROAD 3 — C-100 — DRAWING WHERE SECTION APPEARS

DETAIL TITLE & LETTER — MANHOLE A — C-100 — DRAWING WHERE DETAIL APPEARS

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CUDL | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | 6/8/00 | C | ISSUED FOR CONSTRUCTION | | | | |
| | 5/31/00 | P | SUBMITTED TO CLIENT | | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |

SME
Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine

| | | |
|---|---|---|
| DRN | DRD | 5/31/00 |
| CHKD | GHC | 5/31/00 |
| APPVD | | - - |
| ISSUE CODE | | |
| P - Preliminary | | |
| B - Bids | | |
| C - Construction | | |
| ASB - As Built | | |
| SCALE | NONE | |

Great Northern PAPER, INC.

CAD FILE: SYMSHT.DWG

EAST OPERATION

DOLBY III LANDFILL
CELL 12 CONSTRUCTION
CELL 10 CLOSURE
SYMBOLS & ABBREVIATIONS

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

YB-25540

G:\GNP\DOL\ACAD\CELL12\SYMSHT.dwg Thu Jun 08 14:30:27 2000

CELL 11
(EXISTING)

CELL 10
(EXISTING)

CELL 9
(EXISTING)

CELL 1
THROUGH
CELL 8
(EXISTING)

Existing Leachate
Collection Pipes (TYP)

EXISTING
SPOIL
STOCKPILE

Exist. Spoil
Area

Sedimentation
Pond

Sedimentation
Pond

Leachate
Pond

Access
Road

GROUND
OBSCURED

N 662500
E 475000
E 474500
N 662000
E 474000

GENERAL NOTES:

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. NORRIDGEWOCK, MAINE, PHOTOGRAPH DATED 5/1/99.

2. GROUND CONTROL PROVIDED BY PLISGA & DAY, BANGOR, MAINE.

3. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MDEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE, AND LOCAL PERMITS.

5. GREAT NORTHERN PAPER IS ACTIVELY FILLING CELL 10. EXISTING GRADES MAY NOT REPRESENT CURRENT CONDITIONS.

50 0 100 200

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REVISION | BY | CKD | APPVD | JOB CODE | DATE |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | - | | | - - | | | | | | - - |
| 5 | - | | | - - | | | | | | - - |
| 4 | - | | | - - | | | | | | - - |
| 3 | - | | | - - | | | | | | - - |
| 2 | - | | | 6/8/00 | C ISSUED FOR CONSTRUCTION | | | | | - - |
| 1 | - | | | 5/31/00 | P SUBMITTED TO CLIENT | | | | | - - |


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


JOB NO. 00044

| | | |
|---|---|---|
| DRN | DRD | 5/31/00 |
| CHKD | GHC | 5/31/00 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

Great Northern PAPER, INC.

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 12 CONSTRUCTION
## CELL 10 CLOSURE
## EXISTING CONDITIONS PLAN

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

YB-25541

G:\GNP\Dol\MCAD\CELL12\SITEDEV.dwg Thu Jun 08 14:32:25 2000

REGRADE

LIMIT OF WORK

TYPE 2 DITCH (1) YB-25544

STONE CHECK DAM (C) 100' O.C. (TYP) YB-25544

CONTAINMENT DIKE TO BE BUILT PRIOR TO LANDFILLING IN CELL 12

CATCH BASIN #34 (B) YB-25544
(EXIST) 12" INV IN = 391.2
8" INV IN = 397.0
(EXIST) 12" INV OUT = 391.1
8" INV OUT = 397.0

MW-303A
MW-303B

8" LEACHATE TRANSPORT PIPE (4) YB-25544

EXISTING 12" PVC TRANSPORT PIPE

ABANDON EXISTING MONITORING WELLS (BY OTHERS)

MW-106A
MW-106B
MW-203

LEACHATE COLLECTION PIPE (2) YB-25544

LIMIT OF SAND BLANKET (EL: 400)

LANDFILL ACCESS ROAD (5) YB-25544

TEMPORARY DRAINAGE DITCH

END CAP (TYP)

BRANCH CONNECTOR (A) YB-25544

EXISTING CATCH BASIN #33
(EXIST) 12" INV IN = 373.25
8" INV IN = 379.00
(EXIST) 12" INV OUT = 373.15
8" INV OUT = 379.00

N 664000
E 475000

CB#15
CB#14
CB#12
CB#11

CELL 11
(EXISTING)

CELL 10

EXISTING
SPOIL
STOCKPILE

358.9

GROUND

CELL 12 OPERATION NOTES (PRIOR TO FILLING)
REMOVE 8 INCH CAP FROM CB #33.
REMOVE TEMPORARY 8 INCH OUTLET PIPE AND CAP PIPE TEE.
BACKFILL TEMPORARY DRAINAGE DITCH ON NORTH SIDE WITH SUITABLE MATERIAL.
STRIP EXISTING LANDFILL COVER AND CONSTRUCT CONTAINMENT BERM ON CELL 4.
REMOVE EXISTING CATCH BASIN COVER ON CELL 4 (CB #16) AND REPLACE WITH SOLID H-20 LOADING MANHOLE COVER.

25 0 50 100

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|
| 6 | - | | | - - | | | | | - - |
| 5 | - | | | - - | | | | | - - |
| 4 | - | | | - - | | | | | - - |
| 3 | - | | | 10/16/01 | ASB RECORD DRAWING | GHC | | | - - |
| 2 | - | | | 6/8/00 | C ISSUED FOR CONSTRUCTION | | | | - - |
| 1 | - | | | 5/31/00 | P SUBMITTED TO CLIENT | | | | - - |

REVISION | BY | CKD | APPVD | JOB | CODE | DATE

REVISION | BY | CKD | APPVD | JOB

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021
JOB NO. 00044

| | | |
|---|---|---|
| DRN | DRD | 5/31/00 |
| CHKD | GHC | 5/31/00 |
| APPVD | | |
| ISSUE CODE | | |
| P - Preliminary | | |
| B - Bids | | |
| C - Construction | | |
| ASB - As Built | | |
| SCALE | NONE | |

Great Northern PAPER, INC.

CAD FILE: SITEDEV.DWG

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 12 CONSTRUCTION
## CELL 10 CLOSURE
## CELL 12 - SITE DEVELOPMENT PLAN

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

YB-25542

STATE OF MAINE
HELEN M. ALMY
No. 5082
REGISTERED PROFESSIONAL ENGINEER

G:\GNP\Jobs\ACAD\CELL12\SITEDEV.dwg Tue Oct 16 10:13:09 2001 DRD

CELL 12

CELL 11
(EXISTING)

CELL 10
(EXISTING)

CELL 9
(EXISTING)

FINAL WASTE CONTOURS

LIMIT OF CELL 11 FINAL COVER

OPERATIONAL/FINAL COVER INTERFACE 6 YB-25544

FINAL COVER 7 YB-25544

INTERMEDIATE COVER 8 YB-25544

6" DIA. TOE DRAIN E YB-25544

RAISE CATCH BASIN D YB-25544

EXISTING SPOIL STOCKPILE

GROUND OBSCURED

358.9

N 664000

E 475000

CB#16

CB#14

CB#12

CB#11

410 400 390 380 370

420 410 400 390

430 420

25 0 50 100

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|
| C | 6/8/00 | ISSUED FOR CONSTRUCTION | | | | |
| P | 5/31/00 | SUBMITTED TO CLIENT | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

| | | |
|---|---|---|
| DRN | DRD | 5/31/00 |
| CHKD | GHC | 5/31/00 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

Great Northern PAPER, INC.

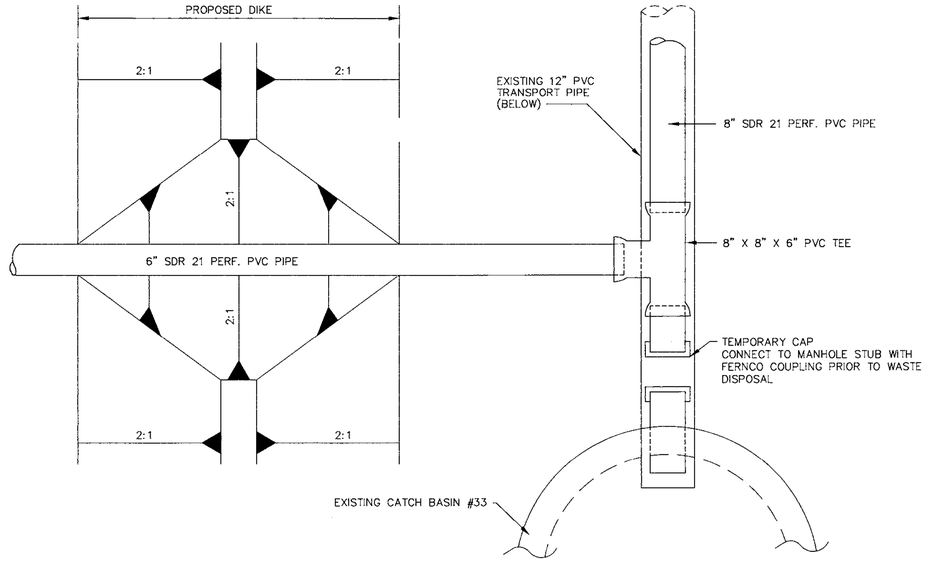
# EAST OPERATION

## DOLBY III LANDFILL
## CELL 12 CONSTRUCTION
## CELL 10 CLOSURE
## OPERATIONAL GRADING PLAN

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

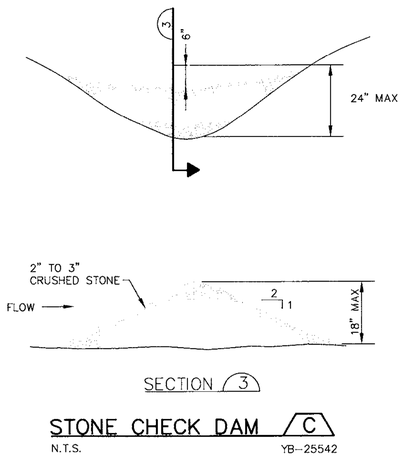
YB-25543

G:\GMP\Dol\ACAD\CELL12\SITEREV.dwg Thu Jun 08 10:10:04 2000




## BRANCH CONNECTOR A

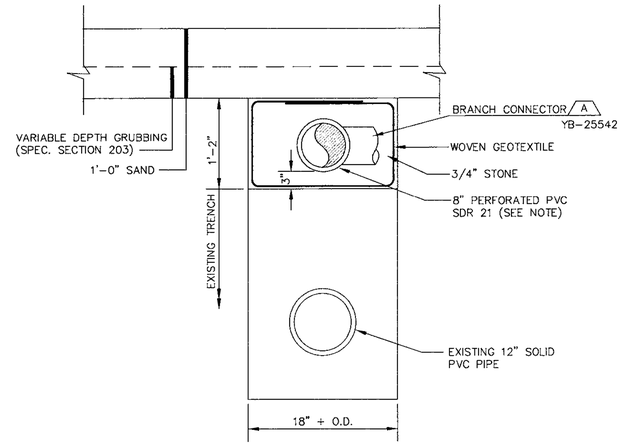
N.T.S. YB-25542




SECTION 3

## STONE CHECK DAM C

N.T.S. YB-25542

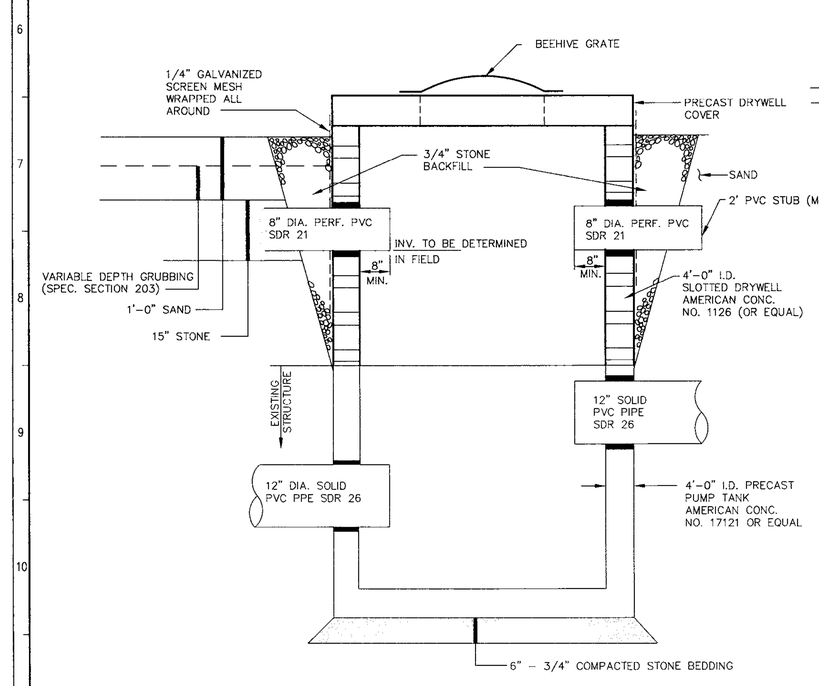



NOTE:

PIPE PERFORATIONS SHALL BE 3/8" DIA. HOLES, 6" O.C., 2 ROWS. ROWS SHALL BE MINIMUM 45°, MAXIMUM 60° FROM INVERT OF PIPE. HOLES SHALL FACE DOWN.

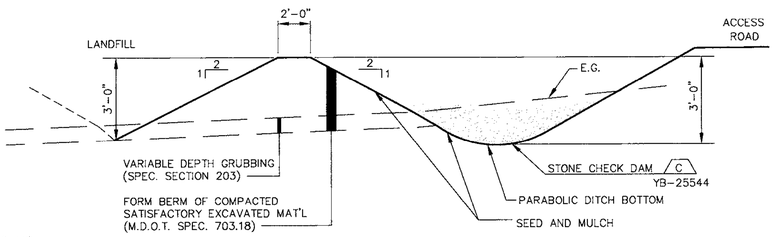
## 8" LEACHATE TRANSPORT PIPES 4

N.T.S. YB-25542



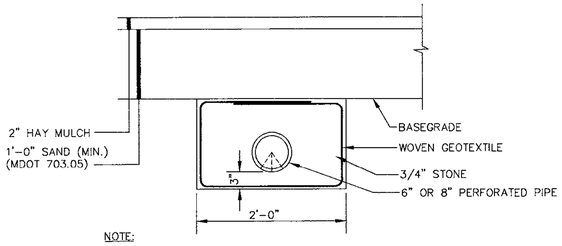

## CATCH BASIN # 34 B

N.T.S. YB-25542




## DIKE AND TYPE 2 DRAINAGE DITCH 1

N.T.S. YB-25542

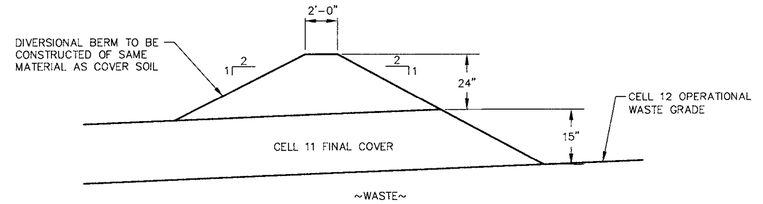



NOTE:

PIPE PERFORATIONS SHALL BE 3/8" DIA. HOLES, 6" O.C., 2 ROWS. ROWS SHALL BE MINIMUM 45°, MAXIMUM 60° FROM INVERT OF PIPE. HOLES SHALL FACE DOWN.

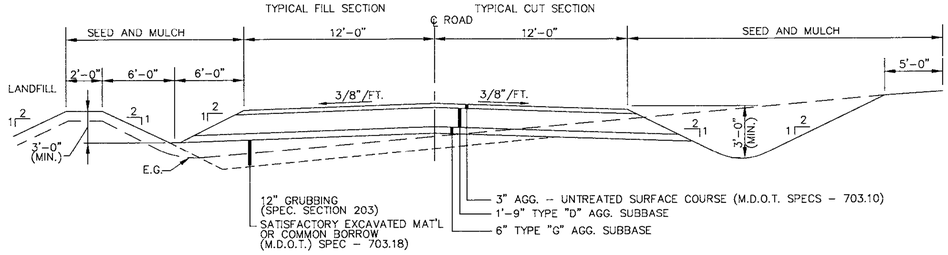
## LEACHATE COLLECTION PIPE 2

N.T.S. YB-25542




## OPERATIONAL/FINAL COVER INTERFACE 6

N.T.S. YB-25543




## LANDFILL ACCESS ROAD 5

N.T.S. YB-25542

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - - | - - | | | | | | |
| - - | - - | | | | | | |
| - - | - - | | | | | | |
| - - | - - | | | | | | |
| C | 6/8/00 | C | ISSUED FOR CONSTRUCTION | MBISK | | | |
| - - | - - | | | | | | |
| P | 5/31/00 | P | SUBMITTED TO CLIENT | MBISK | | | |
| - - | - - | | | | | | |


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


| | | | |
|---|---|---|---|
| DRN | MBISK | 5/31/00 | |
| CHKD | GHC | 5/31/00 | |
| APPVD | | - - | |
| ISSUE CODE | | | |
| P - Preliminary | | | |
| B - Bids | | | |
| C - Construction | | | |
| ASB - As Built | | | |
| SCALE | NONE | | |

Great Northern PAPER, INC.

CAD FILE: DETAILS.DWG

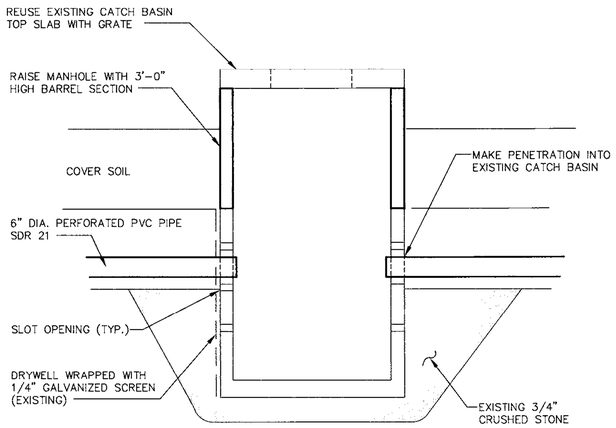
**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 12 CONSTRUCTION**
**CELL 10 CLOSURE**
**SECTIONS & DETAILS**

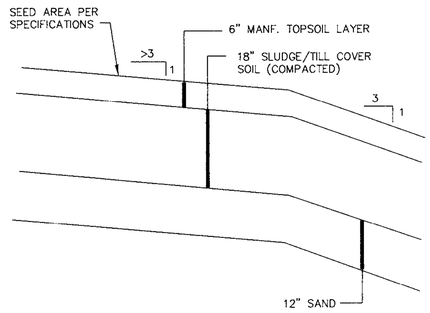
JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO.

YB-25544
SHEET 1 OF 2

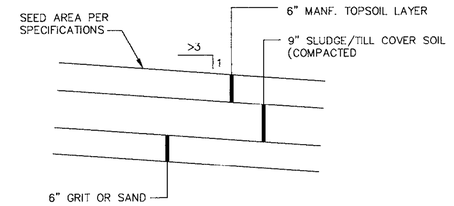
G:\GVP\Dolly\CAD\CELL12\DETAILS.dwg Thu Jun 08 10:14:12 2000



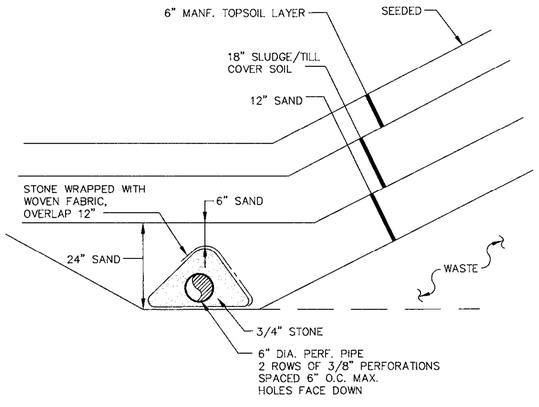

RAISE CATCH BASIN D
N.T.S. (EXISTING) YB-25543




FINAL COVER 7
N.T.S. YB-25543




INTERMEDIATE COVER 8
N.T.S. YB-25543




TOE DRAIN E
N.T.S. YB-25543

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | – | | | – – | | | | | | |
| 5 | – | | | – – | | | | | | |
| 4 | – | | | – – | | | | | | |
| 3 | – | | | – – | | | | | | |
| 2 | – | | | 6/8/00 | C | ISSUED FOR CONSTRUCTION | | | | |
| 1 | – | | | 5/31/00 | P | SUBMITTED TO CLIENT | | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

| | | |
|---|---|---|
| DRN | MBISK | 5/31/00 |
| CHKD | GHC | 5/31/00 |
| APPVD | | – – |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE NONE

Great Northern PAPER, INC.

CAD FILE: DETAILS.DWG

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 12 CONSTRUCTION
## CELL 10 CLOSURE
## SECTIONS & DETAILS

JOB NO. 94744
FILE NO. 2-092-7082
LOC. NO. _____

YB-25544
SHEET 2 OF 2

G:\GAP\DWI\ACAD\CELL12\DETAILS.dwg Thu Jun 08 10:14:33 2000

# KATAHDIN PAPER COMPANY, LLC.
# MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 13 CONSTRUCTION
# CELL 11 CLOSURE

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB-26077 |
| 2 | SYMBOLS & ABBREVIATIONS | YB-26078 |
| 3 | EXISTING CONDITIONS PLAN | YB-26079 |
| 4 | CELL 13 – SITE DEVELOPMENT PLAN | YB-26080 |
| 5 | OPERATIONAL GRADING PLAN | YB-26081 |
| 6 | SECTIONS & DETAILS (SHEET 1 OF 3) | YB-26082 |
| 7 | SECTIONS & DETAILS (SHEET 2 OF 3) | YB-26083 |
| 8 | SECTIONS & DETAILS (SHEET 3 OF 3) | YB-26084 |


SME

*Sevee & Maher Engineers, Inc.*

*Waste Management and Hydrogeologic Consultants*

*Cumberland Center, Maine*


STATE OF MAINE PETER A. M. MAHER NO. 4107 REGISTERED PROFESSIONAL ENGINEER

| REV. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | 5/03 | ASB | RECORD DRAWING | GHC | | | |
| | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| | | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |

JOB NO. 02021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | - - | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: GNPCOV13.DWG

**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 13 CONSTRUCTION**
**CELL 11 CLOSURE**
**COVER SHEET**

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

YB-26077

F:\GNP\Dol1\ACAD\CELL13\Record Drawings\GNPCOV13.dwg Tue May 27 09:19:22 2003 DRD

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (MAGNETIC) | | | STONE WALL | ○ | ● | MANHOLE |
| N | | NORTH ARROW (PLAN NORTH) | | | DRAINAGE COURSE (WITH DIRECTION) | ◎ | ◘ | CATCH BASIN |
| 25 | 25 | CONTOUR LINES | SHORE SIDE | | EDGE OF WATER | ⋈ | ⋈ | WATER VALVE |
| 25 x 63 | 25.56 | SPOT ELEVATION (GRADE) | | | WATER ELEVATION (GROUND OR SURFACE) | | | HYDRANT |
| | | EXISTING GROUND | | | FENCE LINE (WOOD) | | | UTILITY POLE |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | FENCE LINE (WIRE) | | ⊘ | CLEAN OUT STRUCTURE |
| | | PROPERTY LINE OR R.O.W. | | | RETAINING WALL | G | G | UNDERGROUND GAS MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | GUARD RAIL | T | T | UNDERGROUND TELEPHONE LINE |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | | BUILDING AND STRUCTURES | E | E | UNDERGROUND ELECTRICAL LINE |
| | | BOUNDARY LINE (State, County, Municipality) | | 1" = 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | OE | OE | OVERHEAD ELECTRICAL LINE |
| ⊡ | ■ | SURVEY MONUMENT | | TOP OF SLOPE | SLOPES (WITH SLOPE RATIO) | | 12" ACP | SANITARY SEWER (SIZE & TYPE) |
| ○IF | ●IF | SURVEY IRON | | | EDGE OF TRAVELED WAY | FM | 8" PVC | FORCE MAIN (SIZE & TYPE) |
| ○ | ● | DRILL HOLE, PK, OR STAKE | | | CUT OR FILL LINE | W | 8" D.I. | WATER MAIN (SIZE & TYPE) |
| | | WOODS OR BRUSH LINE | | CL | CLEARING LIMIT LINE | | 12" RCP | STORM DRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Deciduous) | | | BITUMINOUS PAVEMENT | UD | 8" UD | UNDERDRAIN (SIZE & TYPE) |
| | | INDIVIDUAL TREE (Coniferous) | | | CONCRETE | | | CULVERT |
| | | TREE, TO BE REMOVED | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | | | RAILROAD |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | S | SILTATION FENCE |
| | | | | | | PD | 6" PD | PERIMETER DRAIN (SIZE & TYPE) |
| | | | | | | LT | 6" LT | LEACHATE TRANSPORT (SIZE & TYPE) |
| | | | | | | LC | 6" LC | LEACHATE COLLECTION (SIZE & TYPE) |
| | | | | | | LD | 6" LD | LEAK DETECTION, SIZE & TYPE |
| | | | | | | | | TERRACE DRAINAGE SWALE |
| | | | | | | | 4" GS | GRAVITY SEWER |
| | | | | | | | 6" SWP | SOLID WALL PIPE |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A.C.C.M.P | ASPHALT COATED C.M.P. | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | P.C. | POINT ON CURVE |
| A.C.P. | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HP | HORSEPOWER | PD | PERIMETER DRAIN |
| AC | ACRE | DEG OR ° | DIAMETER | HYD | HYDRANT | P.I. | POINT OF INTERSECTION |
| AGG | AGGREGATE | DEPT | DEPARTMENT | | | P.T. | POINT OF TANGENT |
| ALUM | ALUMINUM | DI | DUCTILE IRON | I.D. | INSIDE DIAMETER | PERF | PERFORATED |
| APPD | APPROVED | DIA OR ø | DIAMETER | IN OR " | INCHES | PSI | POUNDS PER SQUARE INCH |
| APPROX | APPROXIMATE | DIM | DIMENSION | INV | INVERT | PVC | POLYVINYL CHLORIDE |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV. EL | INVERT ELEVATION | PVMT | PAVEMENT |
| ASB | ASBESTOS | DN | DOWN | | | | |
| ASPH | ASPHALT | DR | DRAIN | LB | POUND | QTY | QUANTITY |
| AUTO | AUTOMATIC | DWG | DRAWING | LC | LEACHATE COLLECTION | | |
| AUX | AUXILIARY | | | LD | LEAK DETECTION | R.O.W. | RIGHT OF WAY |
| AVE | AVENUE | EA | EACH | LIN FT. | LINEAR FEET | RAD | RADIUS |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LOC | LOCATION | REQD | REQUIRED |
| | | ELEC | ELECTRIC | LT | LEACHATE TRANSPORT | RT | RIGHT |
| B.C.C.M.P. | BITUMINOUS COATED C.M.P. | EL | ELEVATION | | | RTE | ROUTE |
| B.M. | BENCH MARK | ELB | ELBOW | M.H. | MANHOLE | | |
| BIT | BITUMINOUS | EQUIP | EQUIPMENT | M.J. | MECHANICAL JOINT | S | SLOPE |
| BLDG | BUILDING | EST | ESTIMATED | MATL | MATERIAL | SCH | SCHEDULE |
| BOT | BOTTOM | EXC | EXCAVATE | MAX | MAXIMUM | SF | SQUARE FEET |
| BRG | BEARING | EXIST | EXISTING | MFR | MANUFACTURE | SHT | SHEET |
| | | | | MIN | MINIMUM | STA | STATION |
| C.B. | CATCH BASIN | F.G. | FINISH GRADE | MISC | MISCELLANEOUS | SY | SQUARE YARD |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT | | |
| CEM. LIN. | CEMENT LINED | FDN | FOUNDATION | | | TAN | TANGENT |
| C.M.P. | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | N.I.T.C. | NOT IN THIS CONTRACT | TDH | TOTAL DYNAMIC HEAD |
| C.O. | CLEAN OUT | FLG | FLANGE | N.T.S. | NOT TO SCALE | TEMP | TEMPORARY |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY | TYP | TYPICAL |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO. OR # | NUMBER | | |
| CI | CAST IRON | FT OR ' | FEET | | | V | VOLTS |
| CL | CLASS | FTG | FOOTING | O.C. | ON CENTER | | |
| CONC | CONCRETE | | | O.D. | OUTSIDE DIAMETER | W/ | WITH |
| CONST | CONSTRUCTION | GA | GAUGE | | | W/O | WITHOUT |
| CONTR | CONTRACTOR | GAL | GALLON | | | | |
| CTR | CENTER | GALV | GALVANIZED | | | YD | YARD |
| CY | CUBIC YARD | GPD | GALLONS PER DAY | | | | |
| | | GPM | GALLONS PER MINUTE | | | | |

## VIEW MARKERS & IDENTIFICATION

SECTION TITLE & NO. — ACCESS ROAD 3 — C-100 — DRAWING WHERE SECTION APPEARS

DETAIL TITLE & LETTER — MANHOLE A — C-100 — DRAWING WHERE DETAIL APPEARS

GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18

STONE BEDDING – THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE – THE PIPE BEDDING MATERIAL SHALL BE 3/4-INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

SAND BLANKET – MDOT SPECIFICATION 703.05

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" PVC PIPE – SDR 35

6" PVC PIPE – SDR 21

GRUBBING:

ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM THE CELL 13 ROADWAY AND CELL AREA PRIOR TO PLACING ADDITIONAL MATERIAL. ANY TOPSOIL CLAIMED DURING THE GRUBBING OPERATION WILL BE STOCKPILED FOR THE OWNER'S USE. ALL OTHER GRUBBINGS WILL BE DISPOSED OF IN THE EXISTING SPOIL PILE.

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

STATE OF MAINE — PETER W. MAHER NO. 7107 — REGISTERED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | – – |
| | – – | | | | | | – – |
| | – – | | | | | | – – |
| | 5/03 | ASB | RECORD DRAWING | | | | – – |
| | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | – – |
| | – – | P | SUBMITTED TO CLIENT | GHC | | | – – |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | – – |
| | – – | | | | | | – – |
| | – – | | | | | | – – |
| | – – | | | | | | – – |
| | – – | | | | | | – – |
| | – – | | | | | | – – |

SME

*Sevee & Maher Engineers, Inc.*

*Waste Management and Hydrogeologic Consultants*

*Cumberland Center, Maine*

JOB NO. 02021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | – – | |

ISSUE CODE

P - Preliminary

B - Bids

C - Construction

ASB - As Built

SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: SYMSHT.DWG

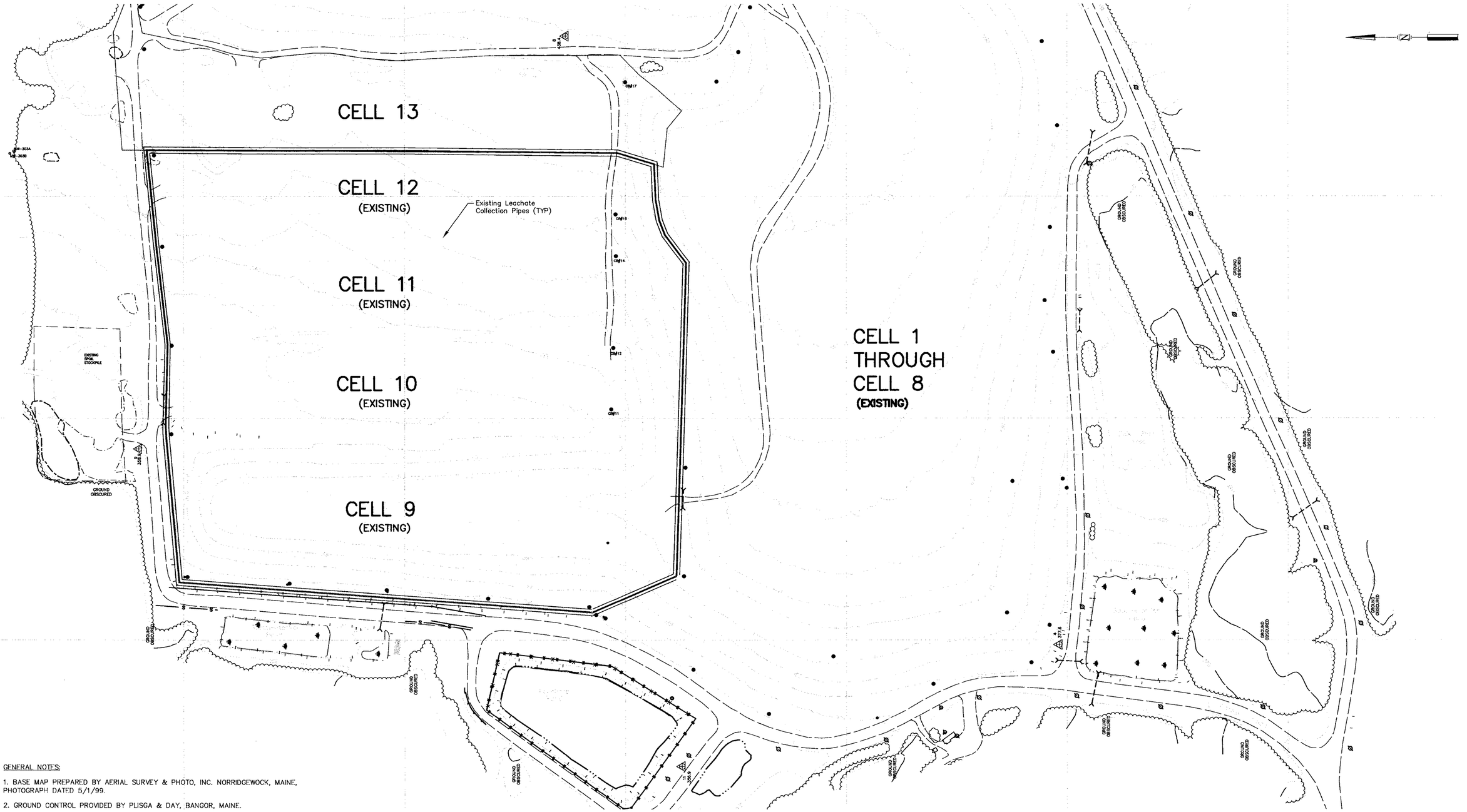
**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 13 CONSTRUCTION**
**CELL 11 CLOSURE**
**SYMBOLS & ABBREVIATIONS**

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

**YB-26078**

F:\GWP\Dol\ACAD\CELL13\Record Drawings\SYMSHT.dwg Tue May 27 09:24:18 2003 DRD




GENERAL NOTES:

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. NORRIDGEWOCK, MAINE, PHOTOGRAPH DATED 5/1/99.

2. GROUND CONTROL PROVIDED BY PLISGA & DAY, BANGOR, MAINE.

3. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MDEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE, AND LOCAL PERMITS.

5. GREAT NORTHERN PAPER IS ACTIVELY FILLING CELL 12. EXISTING GRADES MAY NOT REPRESENT CURRENT CONDITIONS.

50 0 100 200

STATE OF MAINE
PETER M. MAHER
NO. 7007
REGISTERED
PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | -- | |
| 5 | -- | |
| 4 | -- | |
| 3 | -- | |
| 2 | -- | |
| 1 | -- | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | 12/02 | ASB | RECORD DRAWING | KLC | | | |
| | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| | -- -- | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | | |

ISSUE CODE
P -- Preliminary
B -- Bids
C -- Construction
ASB -- As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: CELL13-SITEDEV.DWG

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 13 CONSTRUCTION
## CELL 11 CLOSURE
## EXISTING CONDITIONS PLAN

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

YB-26079

F:\GNP\Dol\ACAD\CELL13\Record Drawings\CELL-13-SITEDEV.dwg, 5/27/2003 9:43:56 AM, drd

LIMIT OF WORK

N 665100.36
E 475344.39

N 664946.55
E 475313.51

N 664899.47
E 475299.56

N 664846.64
E 475287.50

N 664804.46
E 475291.84

N 664774.98
E 475297.30

N 664669.45
E 475304.15

N 664646.11
E 475301.57

N 664601.99
E 475293.73

N 664530.02
E 475287.24

TYPE 2 DITCH (3) YB-26082

N 664324.67
E 475286.54

STONE CHECK DAM (C) YB-26082
100' O.C. (TYP)

N 663995.16
E 475267.74

CATCH BASIN #35 (B) YB-26082
(EXIST) 12" INV IN = 391.2
(EXIST) 12" INV OUT = 391.1

SLOPE TO DRAIN

CB#17

EXISTING 12" PVC TRANSPORT PIPE

N 663903.86
E 475191.89

# CELL 13

BRANCH CONNECTOR (A) YB-26082

6" LEACHATE COLLECTION PIPE (2) YB-26082

END CAP (TYP)

6" 6" 6"

N 663926.78
E 475161.09

03A

B

EXISTING CATCH BASIN #34
(EXIST) 12" INV IN = 391.2
(EXIST) 8" INV IN = 397.0
(EXIST) 12" INV OUT = 391.1

# CELL 12
## (EXISTING)

CB#16

CB#14

# CELL 11
## (EXISTING)

EXISTING
SPOIL
STOCKPILE

CB#12

# CELL 10
## (EXISTING)

CB#11

CELL 13 OPERATION NOTES (PRIOR TO FILLING)
STRIP EXISTING LANDFILL COVER AND CONSTRUCT CONTAINMENT BERM ON CELL 5.

25 0 50 100

STATE OF MAINE
PETER M. MAHER
No. 7107
REGISTERED PROFESSIONAL ENGINEER

| REV. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | - - |
| | - - | | | | | | - - |
| | - - | | | | | | - - |
| | 5/03 | ASB | RECORD DRAWING | | | | - - |
| | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | - - |
| | | P | SUBMITTED TO CLIENT | GHC | | | - - |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | - - |
| | - - | | | | | | - - |
| | - - | | | | | | - - |
| | - - | | | | | | - - |
| | - - | | | | | | - - |
| | - - | | | | | | - - |


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


JOB NO. 02021

| | | |
|---|---|---|
| DRN | K.L.C | 3/6/02 |
| CHKD | G.H.C | 3/8/02 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

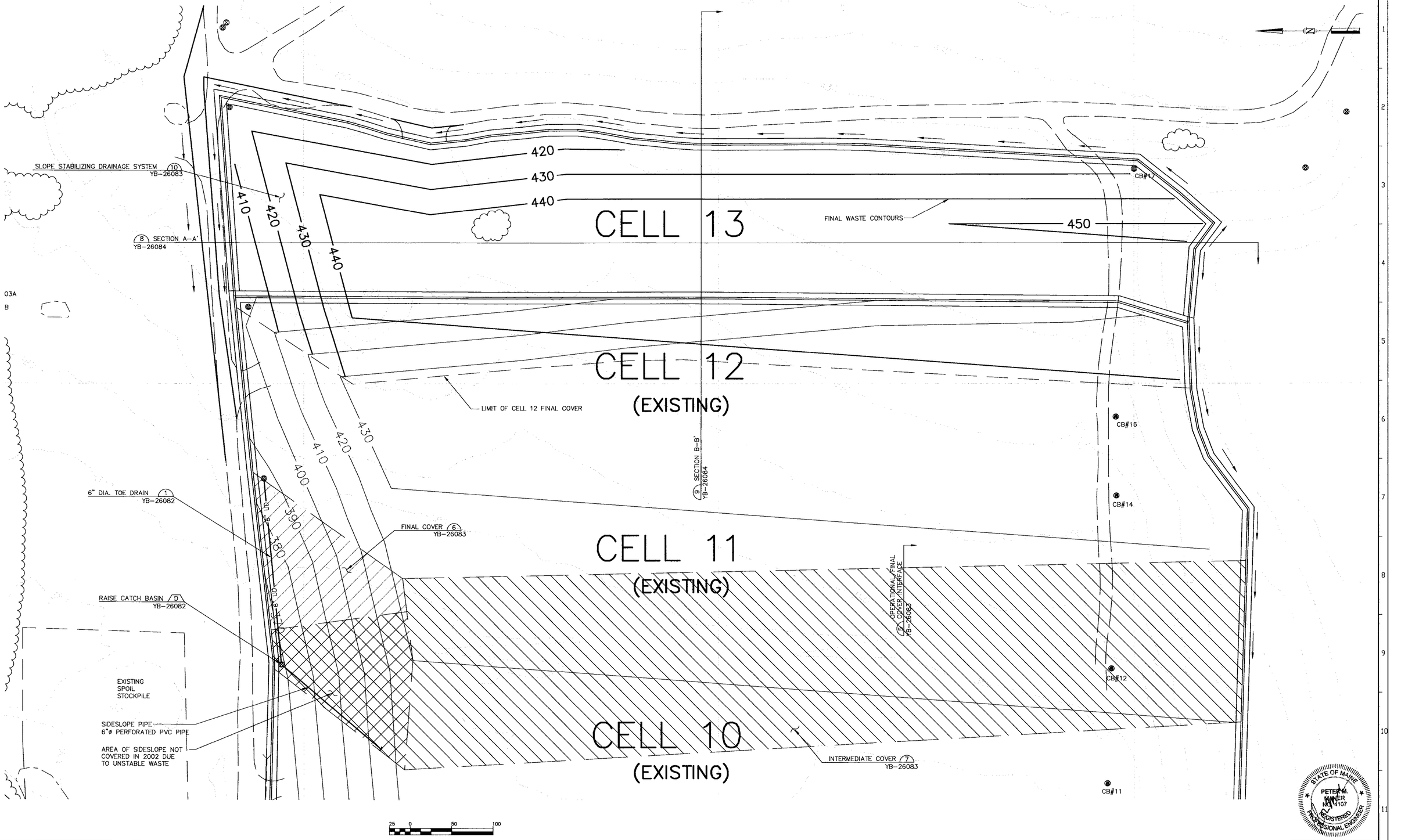
CAD FILE: CELL13-OPERGRADING.DWG

# EAST OPERATION
## DOLBY III LANDFILL
## CELL 13 CONSTRUCTION
## CELL 11 CLOSURE
## CELL 13 - SITE DEVELOPMENT PLAN

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

YB-26080

F:\GIN\PDs\MACAD\CELL13\Record Drawings\CELL13-OPERGRADING.dwg, 5/27/2003 9:40:03 AM, dtd




| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | -- | |
| 5 | -- | |
| 4 | -- | |
| 3 | -- | |
| 2 | -- | |
| 1 | -- | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| -- | -- | | | | | | -- |
| -- | -- | | | | | | -- |
| -- | -- | | | | | | -- |
| ASB | 5/03 | | RECORD DRAWING | | | | -- |
| C | 4/29/02 | | ISSUED FOR CONSTRUCTION | GHC | | | -- |
| P | | | SUBMITTED TO CLIENT | GHC | | | -- |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| -- | -- | | | | | | -- |

SME
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 02021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | | |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: CELL13-OPERGRADING.DWG

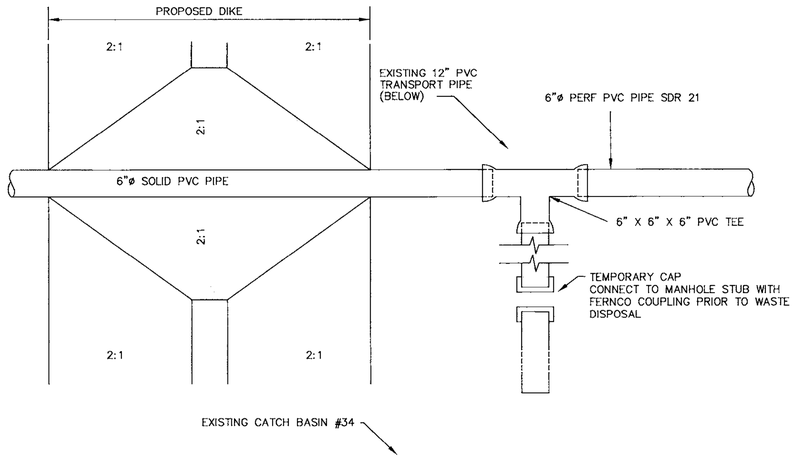
STATE OF MAINE
PETER M. MINER
NO. 14107
REGISTERED PROFESSIONAL ENGINEER

**EAST OPERATION**
**DOLBY III LANDFILL**
**CELL 13 CONSTRUCTION**
**CELL 11 CLOSURE**
**OPERATIONAL GRADING PLAN**

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO. ____

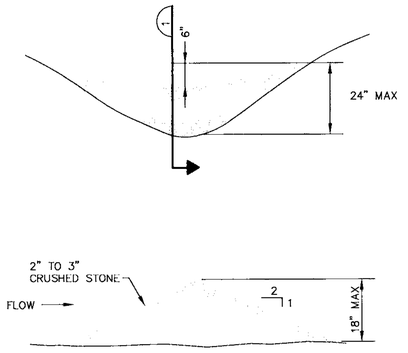
**YB-26081**

F:\GNP\Dolb\ACAD\CELL13\Record Drawings\CELL13-OPERGRADING.dwg, 5/27/2003 9:46:41 AM, dtd



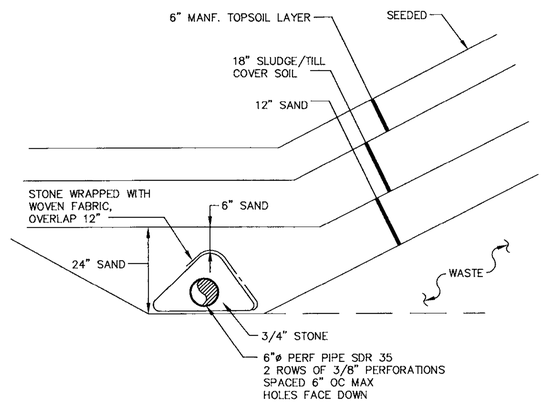

## BRANCH CONNECTOR A

N.T.S. YB-26080



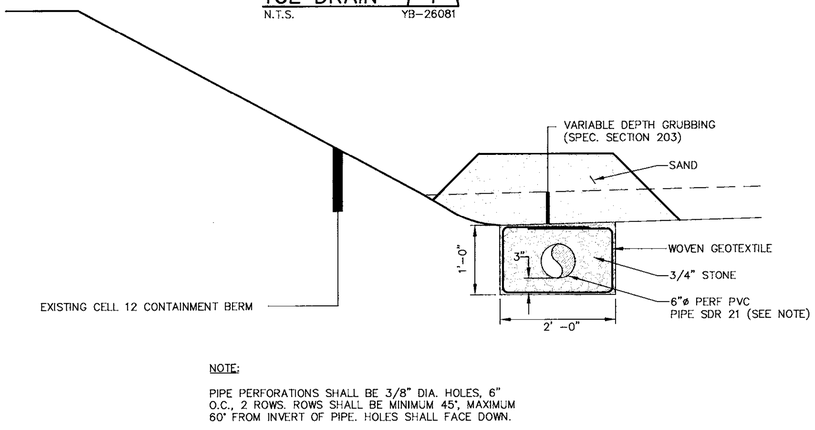

## STONE CHECK DAM C

N.T.S. YB-26080




## TOE DRAIN 1

N.T.S. YB-26081

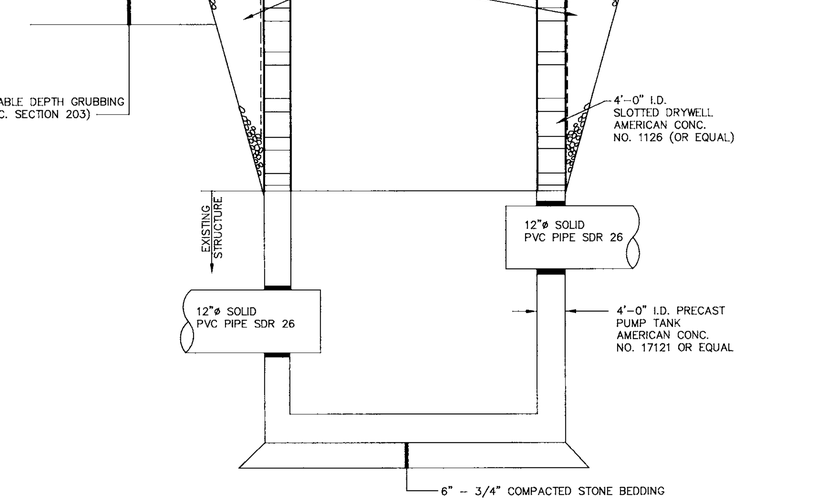



NOTE:

PIPE PERFORATIONS SHALL BE 3/8" DIA. HOLES, 6" O.C., 2 ROWS. ROWS SHALL BE MINIMUM 45°, MAXIMUM 60° FROM INVERT OF PIPE. HOLES SHALL FACE DOWN.

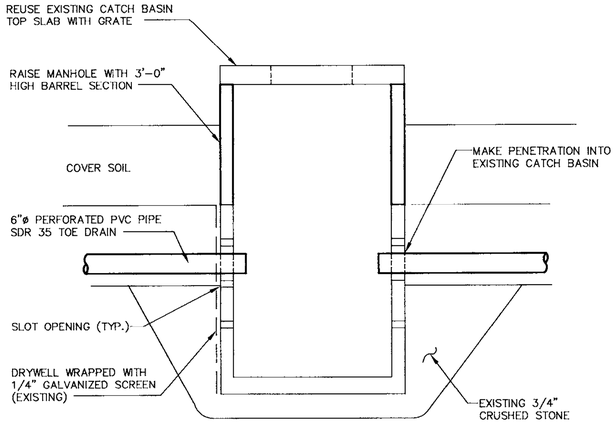
## 6" LEACHATE COLLECTION PIPE 2

N.T.S. YB-26080



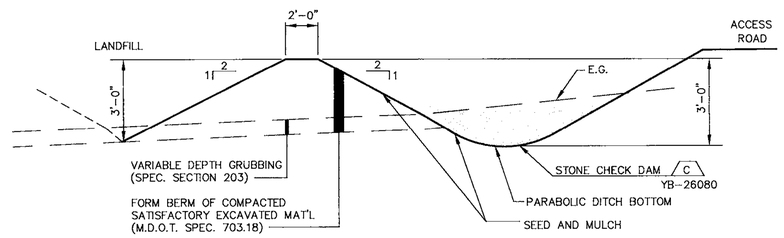

## CATCH BASIN # 35 B

N.T.S. YB-26080




## RAISE CATCH BASIN D

N.T.S. (EXISTING) YB-26081




## DIKE AND TYPE 2 DRAINAGE DITCH 3

N.T.S. YB-26080

STATE OF MAINE PETER W. MAHER NO. 4707 REGISTERED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | – | | | – – | | | | | | |
| 5 | – | | | – – | | | | | | |
| 4 | – | | | – – | | | | | | |
| 3 | – | | | 5/03 | ASB | RECORD DRAWING | KLC | | | |
| 2 | – | | | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| 1 | – | | | | P | SUBMITTED TO CLIENT | GHC | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021
JOB NO. 02021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | | – – |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

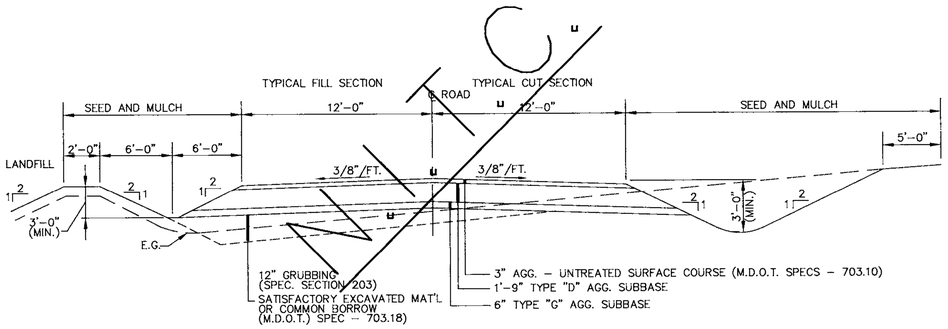
CAD FILE: DETAILS.DWG

**EAST OPERATION**
**DOLBY III LANDFILL**
**CELL 13 CONSTRUCTION**
**CELL 11 CLOSURE**
**SECTIONS & DETAILS**

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

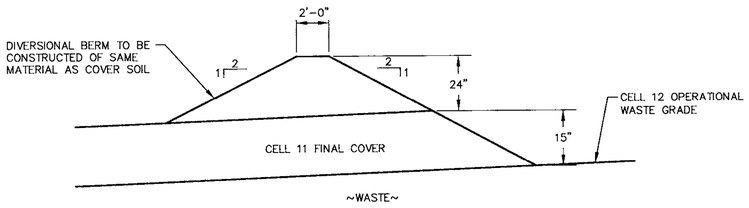
**YB-26082**
SHEET 1 OF 3

F:\GNP\Dol\ACAD\CELL 13\Record Drawings\DETAILS.dwg, 5/27/2003 9:51:41 AM, drd



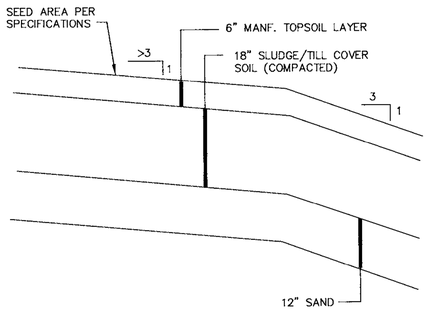

## LANDFILL ACCESS ROAD (4)

N.T.S. YB--26080



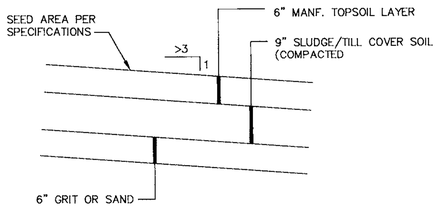

## OPERATIONAL/FINAL COVER INTERFACE (5)

N.T.S. YB-26081



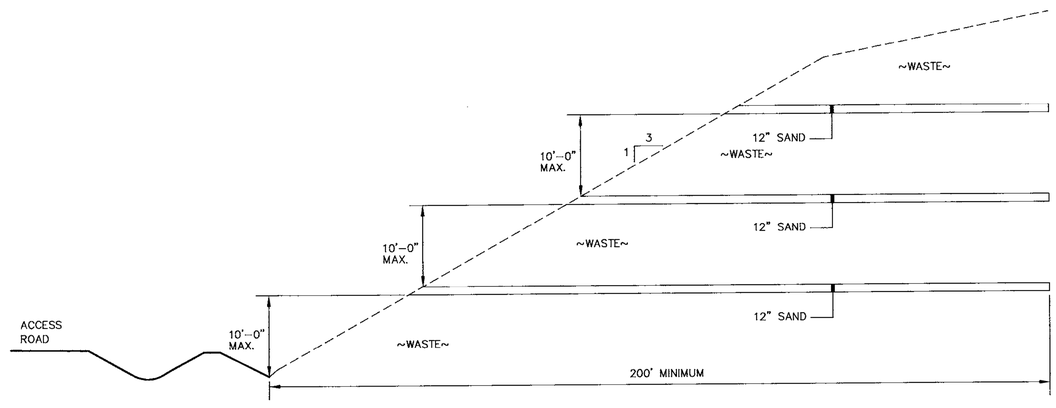

## FINAL COVER (6)

N.T.S. YB-26081




## INTERMEDIATE COVER (7)

N.T.S. YB-26081




NOTE: SAND DRAINAGE LAYERS TO BE INSTALLED ON NORTH SLOPE OF CELL 13

## SLOPE STABILIZING DRAINAGE SYSTEM (10)

N.T.S. YB-26081

STATE OF MAINE PETER A. MAHER NO. 7107 REGISTERED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | -- | |
| 5 | -- | |
| 4 | -- | |
| 3 | -- | |
| 2 | -- | |
| 1 | -- | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | 5/03 | ASB | RECORD DRAWING | | | | |
| | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| | | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 02021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | | -- -- |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: DETAILS.DWG

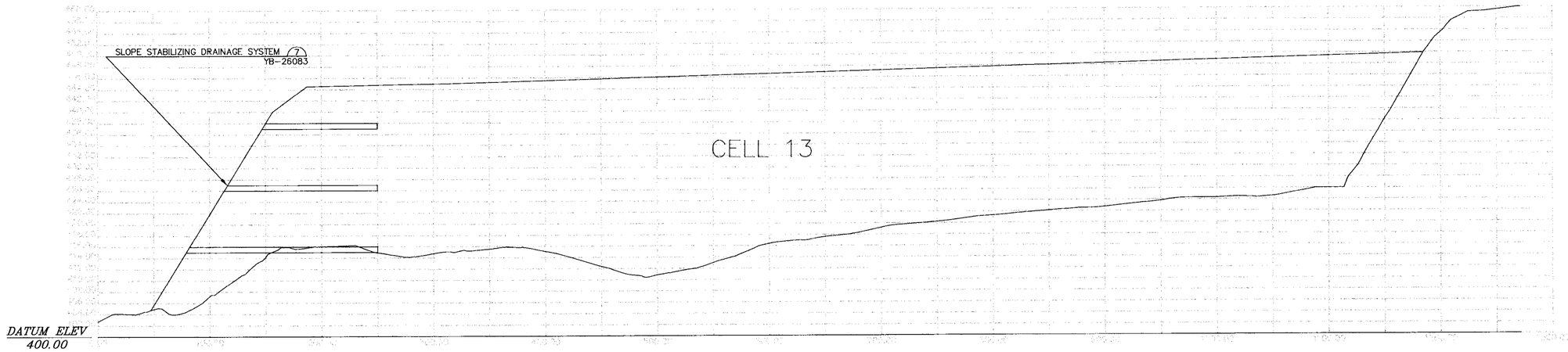
# EAST OPERATION

**DOLBY III LANDFILL**
**CELL 13 CONSTRUCTION**
**CELL 11 CLOSURE**
**SECTIONS & DETAILS**

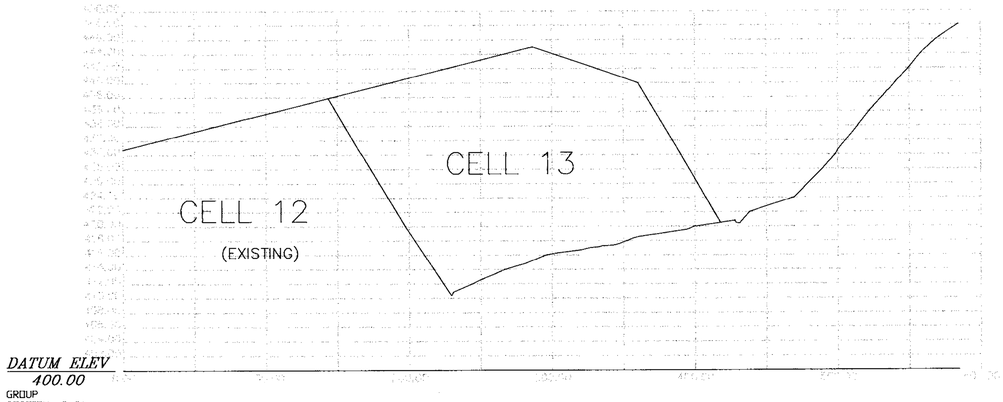
JOB NO. 94768
FILE NO. 2-952-7082
LOC. NO.

**YB-26083**
SHEET 2 OF 3

F:\GNP\Dol\ACAD\CELL13\Record Drawings\DETAILS.dwg, 5/27/2003 9:54:41 AM, drd




SECTION A – A' 8
YB-26081




SECTION B – B' 9
YB-26081

25 0 50 100

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | – | | | – – | | | | | | | | – – | | | | | | |
| 5 | – | | | – – | | | | | | | | – – | | | | | | |
| 4 | – | | | – – | | | | | | | | – – | | | | | | |
| 3 | – | | | 5/03 | ASB | RECORD DRAWING | | | | | | – – | | | | | | |
| 2 | – | | | 4/29/02 | C | ISSUED FOR CONSTRUCTION | GHC | | | | | – – | | | | | | |
| 1 | – | | | | P | SUBMITTED TO CLIENT | GHC | | | | | – – | | | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 02021

| | | |
|---|---|---|
| DRN | KLC | 3/6/02 |
| CHKD | GHC | 3/8/02 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY, LLC.
MILLINOCKET, MAINE

CAD FILE: CELL13-OPERGRADING.DWG

STATE OF MAINE
PETER M. MAHER
No. 7107
REGISTERED PROFESSIONAL ENGINEER

**EAST OPERATION**
**DOLBY III LANDFILL**
**CELL 13 CONSTRUCTION**
**CELL 11 CLOSURE**
**SECTIONS & DETAILS**

JOB NO. 94768
FILE NO. 2-092-7082
LOC. NO.

**YB-26084**
SHEET 3 OF 3

F:\GNP\Dol\ACAD\CELL13\Record Drawings\CELL13-OPERGRADING.dwg, 5/27/2003 10:01:46 AM, drd

# KATAHDIN PAPER COMPANY LLC.
# EAST MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 14 CONSTRUCTION
# CELL 12 CLOSURE

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | YB–26159 |
| 2 | SYMBOLS & ABBREVIATIONS | YB–26160 |
| 3 | EXISTING CONDITIONS PLAN | YB–26161 |
| 4 | SITE DEVELOPMENT PLAN | YB–26162 |
| 5 | CELL 14 – OPERATIONAL GRADING PLAN | YB–26163 |
| 6 | SECTIONS & DETAILS (SHEET 1 OF 3) | YB–26164 |
| 7 | SECTIONS & DETAILS (SHEET 2 OF 3) | YB–26165 |
| 8 | SECTIONS & DETAILS (SHEET 3 OF 3) | YB–26166 |


SME

*Sevee & Maher Engineers, Inc.*

*Waste Management and Hydrogeologic Consultants*

*Cumberland Center, Maine*


7/12/04

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | 7/12/04 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| | 6/15/04 | P | SUBMITTED TO CLIENT | | | | |

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | DRD | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | – – |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: GNPCOV14.DWG

**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**COVER SHEET**

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

YB–26159

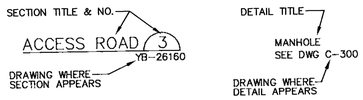
F:\Kpd\Dat\ACAD\CELL14\GNPCOV14.dwg, 7/12/2004 9:52:13 AM, drd

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | DRAINAGE COURSE (WITH DIRECTION) | | UG | UNDERGROUND GAS MAIN |
| DATE | | NORTH ARROW (MAGNETIC) | | | EDGE OF WATER | | UT | UNDERGROUND TELEPHONE LINE |
| (N) | | NORTH ARROW (PLAN NORTH) | | | WATER ELEVATION (GROUND OR SURFACE) | | UE | UNDERGROUND ELECTRICAL LINE |
| | 25 | CONTOUR LINES | | | FENCE LINE (WOOD) | | OE | OVERHEAD ELECTRICAL LINE |
| | INV 25.56 | SPOT ELEVATION (INVERT ELEVATION) | | | FENCE LINE (WIRE) | | OT | OVERHEAD TELEPHONE LINE |
| | | EXISTING GROUND | | | STONE WALL | | 12" SS | SANITARY SEWER |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | RETAINING WALL | | 8" FM | FORCE MAIN |
| | | PROPERTY LINE OR R.O.W. | | | GUARD RAIL | | 8" W | WATER MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | BUILDING AND STRUCTURES | | 12" SD | STORM DRAIN |
| | 0+00 1+00 | CONSTRUCTION BASELINE | | 2 1' OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | | 8" UD | UNDERDRAIN |
| | | BOUNDARY LINE (State, County, Municipality) | TOP OF SLOPE 2 | TOP OF SLOPE 2 | SLOPES (WITH SLOPE RATIO) | | 6" PD | PERIMETER DRAIN |
| ⊟ | ■ | SURVEY MONUMENT | | | EDGE OF ROAD | | 6" LT | LEACHATE TRANSPORT |
| △ | | SURVEY CONTROL | | F | CUT OR FILL LINE | | 6" LC | LEACHATE COLLECTION |
| ○ | • | PROPERTY PIN, DRILL HOLE, PK, OR STAKE | | | BITUMINOUS PAVEMENT | | 6" LD | LEAK DETECTION |
| | | WOODS OR BRUSH LINE | | | CONCRETE | | 6" G | GAS COLLECTION |
| | | INDIVIDUAL TREE | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | ▷ | ▶ | REDUCER |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | | MECHANICAL CAP OR PLUG |
| ⓥ | ◑ | GAS VENT | SW-12 | SW-12 | SURFACE WATER SAMPLE LOCATION | | | COUPLING |
| ⓥ | | GAS VENT (CAPPED) | ⊕ | ⊕ | GAS EXTRACTION WELL | | | BEND |
| ⊘ | ⊘ | CLEAN OUT STRUCTURE | ○ | ● | MANHOLE | | | TEE |
| | | CULVERT | ◎ | ○ | CATCH BASIN | | | PIPE TO BE ABANDONED |
| | | RAILROAD | | | WATER OR GAS VALVE | | | RISER PIPE & INLET GRATE |
| ⊙ | ◘ | SLOPE INCLINOMETER | | | HYDRANT | ▤ | ▤ | STORM GRATE |
| ⊠ | ⊠ | VIBRATING WIRE SETTLEMENT CELL | | | AIR RELEASE VALVE | ◯ | ◯ | DRAINAGE INLET STRUCTURE |
| ⊗ | ⊗ | VERTICAL/HORIZONTAL DISPLACEMENT MONUMENT | | | SURGE RELEASE VALVE | □ | ■ | UNDERDRAIN SUMP |
| ▷ | ▶ | VERTICAL DISPLACEMENT MONUMENT | | | UTILITY POLE | | SF | SILTATION FENCE |
| ⊛ | ⊛ | LIQUID SETTLEMENT GAGE | ☼ | ✷ | LIGHT POLE | | CLL | CLEARING OR CONSTRUCTION LIMIT LINE |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACCMP | ASPHALT COATED CMP | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | PERF | PERFORATED |
| ACP | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HORIZ | HORIZONTAL | PP | POWER POLE |
| AC | ACRE | DEG OR ° | DEGREE | HP | HORSEPOWER | PSI | POUNDS PER SQUARE INCH |
| AGG | AGGREGATE | DEPT | DEPARTMENT | HYD | HYDRANT | PVC | POLYVINYL CHLORIDE |
| ALUM | ALUMINUM | DI | DUCTILE IRON | | | PVMT | PAVEMENT |
| APPD | APPROVED | DIA OR ⌀ | DIAMETER | ID | INSIDE DIAMETER | | |
| APPROX | APPROXIMATE | DIM | DIMENSION | IN OR " | INCHES | QTY | QUANTITY |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV | INVERT | | |
| ASB | ASBESTOS | DN | DOWN | INV EL | INVERT ELEVATION | RCP | REINFORCED CONCRETE PIPE |
| ASP | ASPHALT | DR | DRAIN | | | ROW | RIGHT OF WAY |
| AUTO | AUTOMATIC | DWG | DRAWING | LB | POUND | RAD | RADIUS |
| AUX | AUXILIARY | | | LC | LEACHATE COLLECTION | REQD | REQUIRED |
| AVE | AVENUE | EA | EACH | LD | LEAK DETECTION | RT | RIGHT |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LF | LINEAR FEET | RTE | ROUTE |
| | | ELEC | ELECTRIC | LOC | LOCATION | | |
| BCCMP | BITUMINOUS COATED CMP | EL | ELEVATION | LT | LEACHATE TRANSPORT | S | SLOPE |
| BM | BENCH MARK | ELB | ELBOW | | | SCH | SCHEDULE |
| BIT | BITUMINOUS | EOP | EDGE OF PAVEMENT | MH | MANHOLE | SF | SQUARE FEET |
| BLDG | BUILDING | EQUIP | EQUIPMENT | MJ | MECHANICAL JOINT | SHT | SHEET |
| BOT | BOTTOM | EST | ESTIMATED | MATL | MATERIAL | SMH | SANITARY MANHOLE |
| BRG | BEARING | EXC | EXCAVATE | MAX | MAXIMUM | ST | STREET |
| BV | BALL VALVE | EXIST | EXISTING | MFR | MANUFACTURE | STA | STATION |
| | | | | MIN | MINIMUM | SY | SQUARE YARD |
| CB | CATCH BASIN | FG | FINISH GRADE | MISC | MISCELLANEOUS | | |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT | TAN | TANGENT |
| CEM LIN | CEMENT LINED | FDN | FOUNDATION | | | TDH | TOTAL DYNAMIC HEAD |
| CMP | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | NITC | NOT IN THIS CONTRACT | TEMP | TEMPORARY |
| CO | CLEAN OUT | FLG | FLANGE | NTS | NOT TO SCALE | TYP | TYPICAL |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY | UD | UNDERDRAIN |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO OR # | NUMBER | | |
| CI | CAST IRON | FT OR ' | FEET | | | V | VOLTS |
| CL | CLASS | FTG | FOOTING | OC | ON CENTER | VA TEE | VALVE ANCHORING TEE |
| CONC | CONCRETE | | | OD | OUTSIDE DIAMETER | VERT | VERTICAL |
| CONST | CONSTRUCTION | GA | GAUGE | | | | |
| CONTR | CONTRACTOR | GAL | GALLON | PC | POINT OF CURVE | WG | WATER GATE |
| CS | CURB STOP | GALV | GALVANIZED | PD | PERIMETER DRAIN | W/ | WITH |
| CTR | CENTER | GPD | GALLONS PER DAY | PI | POINT OF INTERSECTION | W/O | WITHOUT |
| CU | COPPER | GPM | GALLONS PER MINUTE | PIV | POST INDICATOR VALVE | | |
| CY | CUBIC YARD | | | PT | POINT OF TANGENT | YD | YARD |

## VIEW MARKERS & IDENTIFICATION




GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18

STONE BEDDING – THE STONE BEDDING MATERIAL SHALL BE 3/4 INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL

3/4" STONE – THE PIPE BEDDING MATERIAL SHALL BE 3/4-INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

SAND BLANKET – MDOT SPECIFICATION 703.05

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" PVC PIPE – SDR 35

12" LEACHATE TRANSPORT PIPE – SOLID HANCOR TITELINE

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

AGRICULTURAL GROUND LIMESTONE: 25 LBS PER UNIT (1,000 SF)

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

STATE OF MAINE — JOHN H. DOLBY — 12158 — REGISTERED PROFESSIONAL ENGINEER

| REV. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | 7/12/04 | C | ISSUED FOR CONSTRUCTION | GHC | | | | | | | | | | | |
| | 6/15/04 | P | SUBMITTED TO CLIENT | | | | | | | | | | | | |

SME
Sevee & Maher Engineers, Inc.
Waste Management and Hydrogeologic Consultants
Cumberland Center, Maine

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | DRD | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | – – |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: SYMSHT.DWG

**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**SYMBOLS & ABBREVIATIONS**

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

**YB-26160**

F:\kpc\Dolb\CAD\CELL14\SYMSHT.dwg, 7/12/2004 9:54:37 AM, drd

CELL 13
(EXISTING)

CELL 14

CELL 12
(EXISTING)

Existing Leachate Collection Pipes (TYP)

CELL 11
(EXISTING)

CELL 10
(EXISTING)

CELL 9
(EXISTING)

EXISTING SPOIL STOCKPILE

CELL 1
THROUGH
CELL 8
(EXISTING)

GENERAL NOTES:

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. NORRIDGEWOCK, MAINE, PHOTOGRAPH DATED 5/1/99.

2. GROUND CONTROL PROVIDED BY PLISGA & DAY, BANGOR, MAINE.

3. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MDEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE, AND LOCAL PERMITS.

5. GREAT NORTHERN PAPER IS ACTIVELY FILLING CELL 13. EXISTING GRADES MAY NOT REPRESENT CURRENT CONDITIONS.

50 0 100 200

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | - | | | - - | | | | | | | - - | | | | | | |
| 5 | - | | | - - | | | | | | | - - | | | | | | |
| 4 | - | | | - - | | | | | | | - - | | | | | | |
| 3 | - | | | - - | | | | | | | - - | | | | | | |
| 2 | - | | | 7/12/04 | C | ISSUED FOR CONSTRUCTION | | | | | - - | | | | | | |
| 1 | - | | | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | | - - | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | PAF | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: CELL14--EXCON.DWG

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 14 CONSTRUCTION
## CELL 12 CLOSURE
## EXISTING CONDITIONS PLAN

JOB NO. 46226
FILE NO. 2-092-7082
LIC. NO.

YB-26161

F:\Kpe\Dolv\ACAD\CELL14\CELL14-Excon.dwg, 7/12/2004 9:56:36 AM, dcd

EXISITNG CATCH BASIN #35
(EXIST) 12" INV IN = 391.2
(EXIST) 12" INV OUT = 391.1

EXISTING 12" PVC TRANSPORT PIPE

EXISTING CATCH BASIN #34
(EXIST) 12" INV IN = 391.2
(EXIST) 8" INV IN = 397.0
(EXIST) 12" INV OUT = 391.1

6" DIA. TOE DRAIN (1) YB-26164

FINAL COVER (6) YB-26165

EXISTING CATCH BASIN #33
(EXIST.) 12" INV IN = 373.25
8" INV IN = 379.00
(EXIST.) 12" INV OUT = 373.15
8" INV OUT = 379.00

RAISE CATCH BASIN SEE DWG YB-26164

SIDESLOPE PIPE TRENCH (2) YB-26164

EXISTING CATCH BASIN #32
12" INV IN 358.75
8" INV IN 363.15
12" INV OUT 360.00
8" INV OUT 363.15

EXISTING SPOIL STOCKPILE

DRAINAGE MANHOLE SEE DWG YB-26165

CELL 14 OPERATIONS DITCH (SLOPE TO DRAIN)

INTERMEDIATE COVER (7) YB-26165

OPERATIONAL/FINAL COVER INTERFACE (5) YB-26165

FINAL WASTE CONTOURS

OPERATIONAL ITEM TIE-IN DIKE WHEN STRIPPING COVER

N 663780.60
E 475082.65

N 663649.89
E 475035.46

(3) YB-26164 DIKE AND TYPE I DRAINAGE DITCH

N 663725.59
E 474927.75

N 663862.42
E 474843.32

CELL 13
(EXISTING)

CELL 12
(EXISTING)

CELL 11
(EXISTING)

CELL 10
(EXISTING)

410 420 430 440 450 420 430 410 400 390 380 370

12" UD

CELL 14 OPERATION NOTES (PRIOR TO FILLING)
STRIP EXISTING LANDFILL COVER AND CONSTRUCT CONTAINMENT BERM ON CELL 6.

25 0 50 100

STATE OF MAINE
JOHN F. SEVEE
REGISTERED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | 7/12/04 | C | ISSUED FOR CONSTRUCTION | fsm | | | |
| | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | PAF | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: CELL14-OPERGRADING.DWG

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 14 CONSTRUCTION
## CELL 12 CLOSURE
## SITE DEVELOPMENT PLAN

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

YB-26162

F:\Kpot\Dolf\ACAD\CELL14\CELL14-OPERGRADING.dwg, 7/12/2004 10:03:29 AM, dnd

EXISITNG CATCH BASIN #35
(EXIST) 12" INV IN = 391.2
(EXIST) 12" INV OUT = 391.1

EXISTING 12" PVC TRANSPORT PIPE

EXISTING CATCH BASIN #34
(EXIST) 12" INV IN = 391.2
(EXIST) 8" INV IN = 397.0
(EXIST) 12" INV OUT = 391.1

6" DIA. TOE DRAIN (1) YB-26164

EXISTING CATCH BASIN #33
(EXIST.) 12" INV IN = 373.25
8" INV IN = 379.00
(EXIST.) 12" INV OUT = 373.15
8" INV OUT = 379.00

RAISE CATCH BASIN SEE DWG YB-26164

SIDESLOPE PIPE TRENCH (2) YB-26164

EXISTING CATCH BASIN #32
12" INV IN 358.75
8" INV IN 363.15
12" INV OUT 360.00
8" INV OUT 363.15

EXISTING SPOIL STOCKPILE

FINAL COVER (6) YB-26165

DRAINAGE MANHOLE SEE DWG YB-26165

CELL 14 OPERATIONS DITCH (SLOPE TO DRAIN)

INTERMEDIATE COVER (7) YB-26165

OPERATIONAL COVER (5) YB-26165

FINAL WASTE CONTOURS

BERM REMOVED DURING 2004

CELL 14 BERM CONSTRUCTED DURING 2004

N 663780.60
E 475082.65

COVER STRIPPED DURING 2004

N 663649.89
E 475035.46

(3) YB-26164 DIKE AND TYPE I DRAINAGE DITCH

N 663725.59
E 474927.75

N 663862.42
E 474843.32

OPERATIONAL ITEM TIE-IN DIKE WHEN STRIPPING COVER

AREA OF CELL 12 INTERMEDIATE COVER INSTALLED DURING 2004

CELL 13
(EXISTING)

CELL 12
(EXISTING)

CELL 11
(EXISTING)

CELL 10
(EXISTING)

420 430 440 450 410 420 430 440 400 410 420 430 390 380 370

12" UD

CELL 14 OPERATION NOTES (PRIOR TO FILLING)
STRIP EXISTING LANDFILL COVER AND CONSTRUCT CONTAINMENT BERM ON CELL 6.

25 0 50 100

LEGEND
2004 CONSTRUCTION ACTIVITIES

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB | CODE | DATE | REV. |
|---|---|---|---|---|---|---|---|---|---|---|
| - | - | | | | | | | - | - | |
| - | - | | | | | | | - | - | |
| - | - | | | | | | | - | - | |
| C | 1/18/05 | C | ADDED 2004 CONSTRUCTION ACTIVITIES | GHC | | | | - | - | |
| C | 7/12/04 | C | ISSUED FOR CONSTRUCTION | GHC | | | | - | - | |
| P | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | | - | - | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | PAF | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

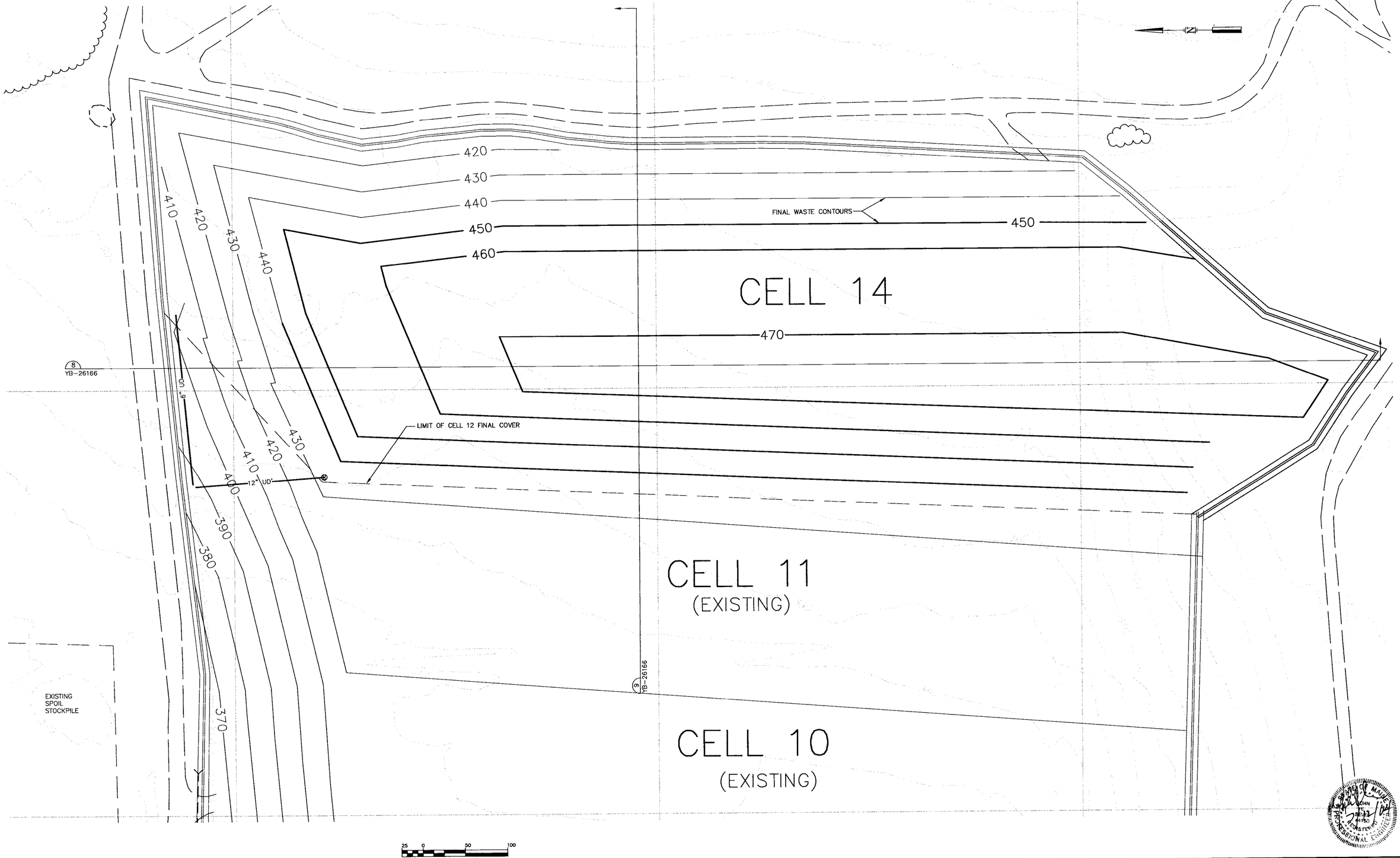
CAD FILE: CELL14-OPERGRADING.DWG

**EAST OPERATION**
**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**2004 CONSTRUCTION ACTIVITIES**

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

**YB-26162A**

P:\kpol\DACAD\CELL14\CELL14-OPERGRADING.dwg, 1/18/2005 7:16:10 AM, drd




| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | 7/12/04 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|

SME

Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | PAF | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: CELL14-OPERGRADING.DWG

**EAST OPERATION**

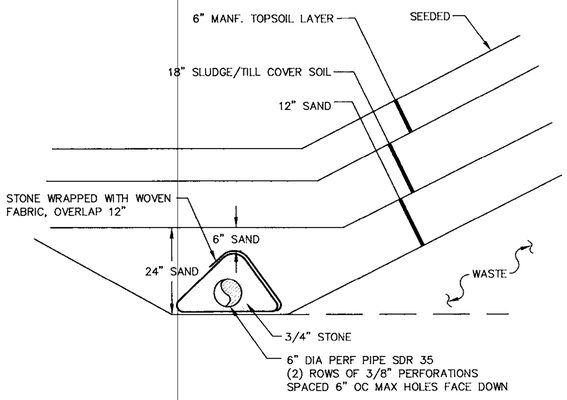
**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**CELL 14-OPERATIONAL GRADING PLAN**

JOB NO. 46226
FILE NO. 2-092-7082
LDC. NO.

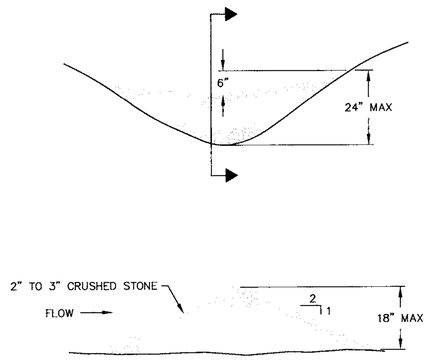
YB-26163

JOHN A. MASTEN 11150 PROFESSIONAL ENGINEER

F:\Kpd\Dat\ACAD\CELL14\CELL14-OPERGRADING.dwg, 7/12/2004 10:05:36 AM, drd

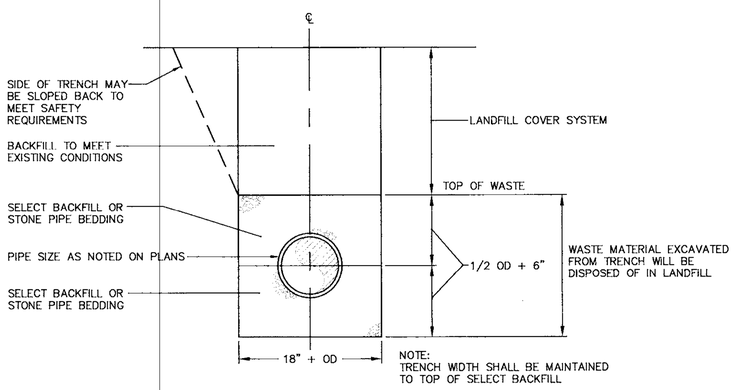



TOE DRAIN 1
NTS YB-26162

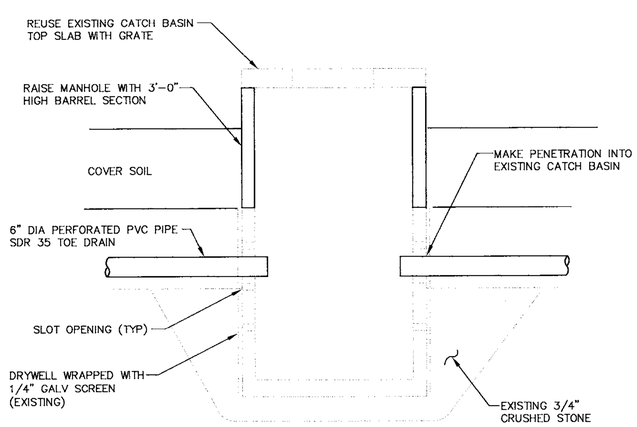



SECTION

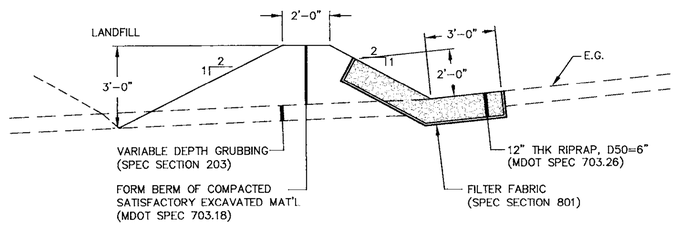
STONE CHECK DAM
NTS




SIDESLOPE PIPE TRENCH 2
NTS YB-26162




RAISE CATCH BASIN
NTS (EXISTING)




DIKE AND TYPE 1 DRAINAGE DITCH 3
NTS YB-26162

STATE OF MAINE
JOHN E. TYLER
No. 11162
REGISTERED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | 7/12/04 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |
| | -- -- | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | DRD | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | -- -- |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built
SCALE: NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: DETAILS.DWG

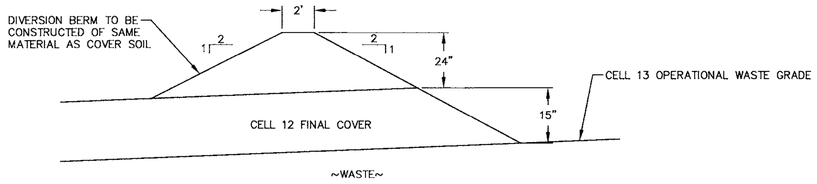
**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**SECTIONS & DETAILS**

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

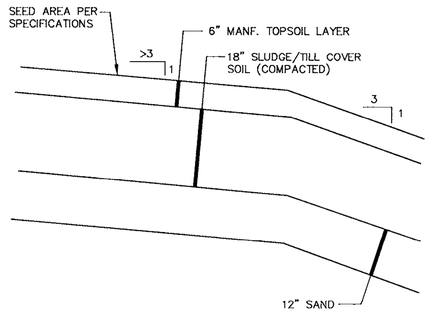
**YB-26164**
SHEET 1 OF 3

F:\Kpc\Dat\ACAD\CELL14\DETAILS.dwg, 7/12/2004 10:15:23 AM, drd



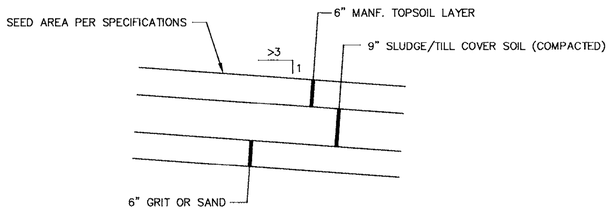

OPERATIONAL/FINAL COVER INTERFACE 5

NTS YB-26162



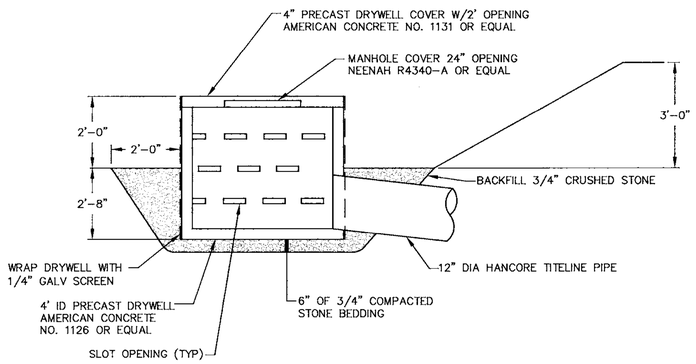

FINAL COVER 6

NTS YB-26162



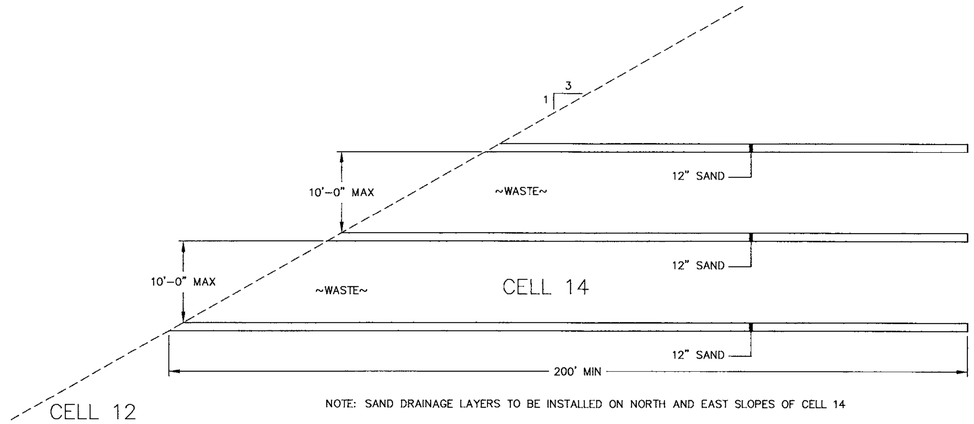

INTERMEDIATE COVER 7

NTS YB-26162




DRAINAGE MANHOLE

NTS




NOTE: SAND DRAINAGE LAYERS TO BE INSTALLED ON NORTH AND EAST SLOPES OF CELL 14

SLOPE STABILIZING DRAINAGE SYSTEM 10

NTS YB-26166

STATE OF MAINE JOHN K. WHITE 10150 REGISTERED PROFESSIONAL ENGINEER 6/17/04

| REV. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | -- | | | -- -- | | | | | | |
| 5 | -- | | | -- -- | | | | | | |
| 4 | -- | | | -- -- | | | | | | |
| 3 | -- | | | -- -- | | | | | | |
| 2 | -- | | | 7/12/04 | C | ISSUED FOR CONSTRUCTION | GHC | | | |
| 1 | -- | | | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| -- | -- -- | | | | | | |

SME

Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | DRD | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | -- -- |

ISSUE CODE
P -- Preliminary
B -- Bids
C -- Construction
ASB -- As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: DETAILS.DWG

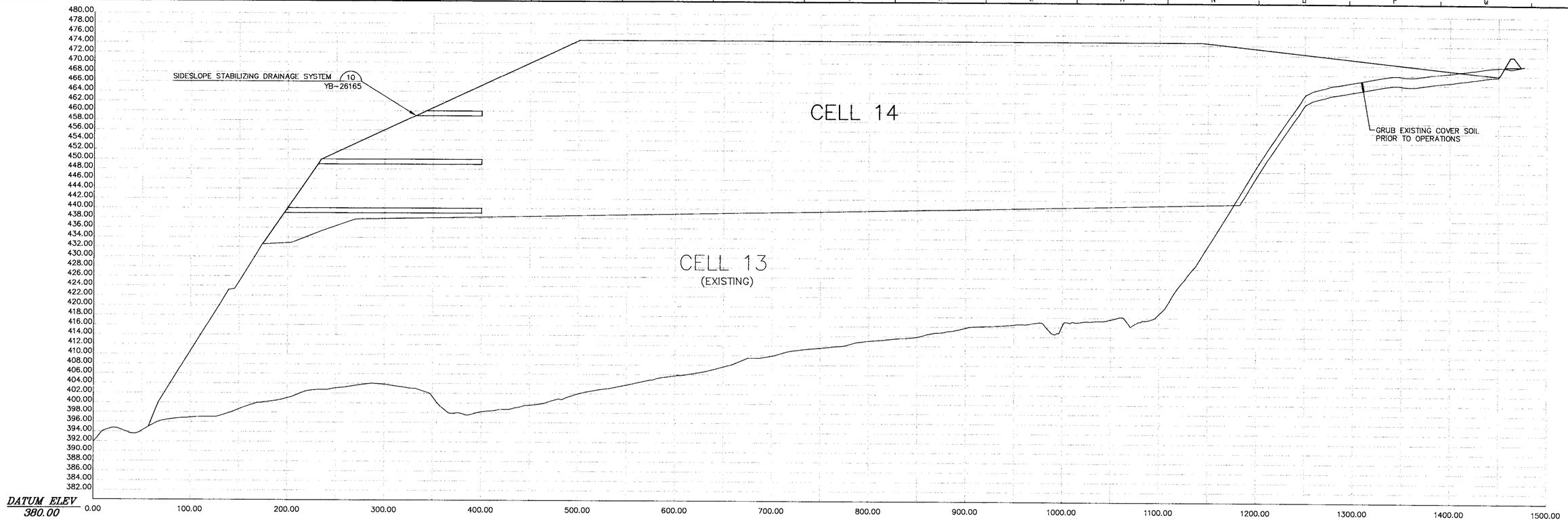
**EAST OPERATION**

**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**SECTIONS & DETAILS**

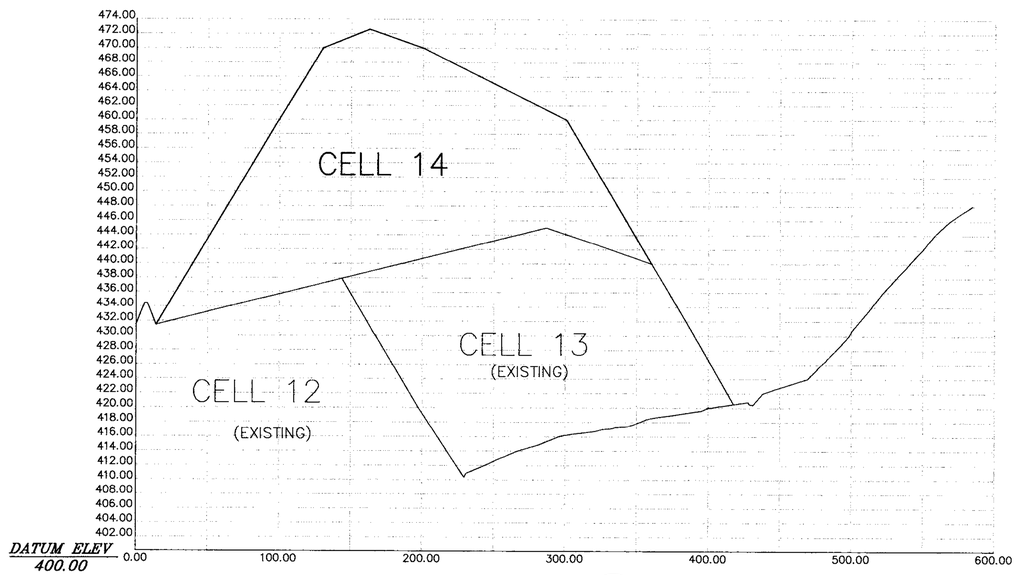
JOB NO. 46226
FILE NO. 2-092-7082
LIC. NO.

YB-26165
SHEET 2 OF 3

F:\Kpo\Dcs\ACAD\CELL14\DETAILS.dwg, 7/12/2004 10:17:28 AM, drd




SECTION 8
YB-26163




SECTION 9
YB-26163

25 0 50 100

STATE OF MAINE
GREGORY H. CROCKETT
7/12/04
REGISTERED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | 7/12/04 | C | ISSUED FOR CONSTRUCTION | | | | |
| | 6/15/04 | P | SUBMITTED TO CLIENT | GHC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

SME
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | DRD | 6/4/04 |
| CHKD | GHC | 6/14/04 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: CELL13-OPERGRADING.DWG

**EAST OPERATION**
**DOLBY III LANDFILL**
**CELL 14 CONSTRUCTION**
**CELL 12 CLOSURE**
**SECTIONS & DETAILS**

JOB NO. 46226
FILE NO. 2-092-7082
LOC. NO.

**YB-26166**
SHEET 3 OF 3

F:\pc\Dbl\CAD\CELL14\CELL14-SECTIONS.dwg, 7/12/2004 10:19:23 AM, drd

RAISE EXISTING CATCH BASIN #35
12" INV IN 407.2 (EXISTING)
12" INV OUT 407.1 (EXISTING)
6" INV IN 415.0
6" INV OUT 415.0
SEE DWG YB-26199
SHT 1 OF 2

6" DIA TOE DRAIN
SEE DWG YB-26199
SHT 1 OF 2

6"UD

410
420
430
440
450
460
470

EXISTING CATCH BASIN #18
6" INV OUT 428.0

LANDFILL COVER
SEE DWG YB-26199
SHT 2 OF 2

2 YB-26199 SHT 2 OF 2

FINAL WASTE CONTOURS

RAISE EXISTING CATCH BASIN #34
12" INV IN 391.2 (EXISTING)
8" INV IN 397.0 (EXISTING)
12" INV OUT 391.1 (EXISTING)
8" INV OUT 397.0 (EXISTING)
6" INV IN
SEE DWG YB-26199
SHT 1 OF 2

2 YB-26199 SHT 2 OF 2

1 YB-26199 SHT 2 OF 2

CELL 14

TIE INTO CELL 14 DIKE

DIKE AND TYPE 1 DRAINAGE DITCH
SEE DWG YB-26199
SHT 1 OF 2

CATCH BASIN #33

EXISTING DRAINAGE MANHOLE

N 663726.69
E 474777.65

N 663712.83
E 474774.23

CELL 15
(INTERIM OPERATIONS)

N 663757.38
E 474712.66

N 663745.63
E 474704.75

BREAK ON SLOPE
TO BE FIELD DETERMINED

CELL 15 OPERATIONAL DITCH
(SLOPE TO DRAIN)

1 YB-26199 SHT 2 OF 2

REMOVE EXISTING COVER

DRAINAGE MANHOLE
SEE DWG YB-26199
SHT 2 OF 2

PIPE TRENCH
SEE DWG YB-26199
SHT 1 OF 2

18"UD

EXISTING DRAINAGE MANHOLE

25 0 50 100

| REV. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | – | | | – – | | | | | | |
| 5 | – | | | – – | | | | | | |
| 4 | – | | | – – | | | | | | |
| 3 | – | | | 2/12/07 | | UPDATED PER MEDEP COMMENTS | | | | |
| 2 | – | | | 10/6/06 | | SUBMITTED TO MEDEP | GHC | | | |
| 1 | – | | | 8/24/06 | P | SUBMITTED TO CLIENT | RBC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |
| | – – | | | | | | |


SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021


JOB NO. 06116

| | | |
|---|---|---|
| DRN | PAF | 7/18/06 |
| CHKD | GHC | 8/8/06 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE AS SHOWN

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: YB-26197 BO

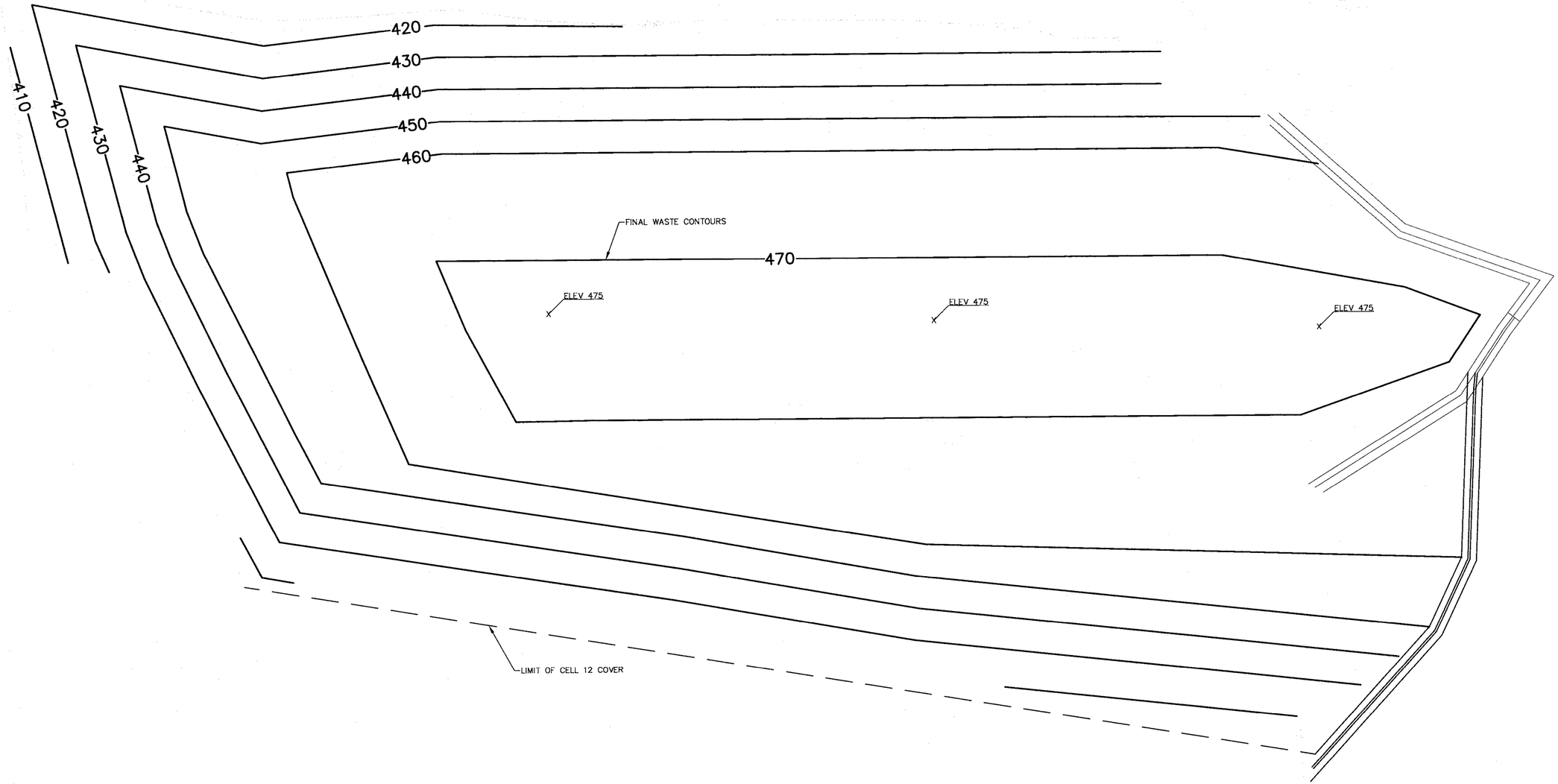
# EAST OPERATION

## DOLBY III LANDFILL
## CELL 15 CONSTRUCTION
## CELL 14 CLOSURE
## SITE DEVELOPMENT PLAN

JOB NO. _____
FILE NO. _____
LIC. NO. _____

YB-26197

F:\Kpc\Dol\ACAD\CELL14\Cell14Closure.dwg, 3/12/2007 12:00:33 PM, paf




25 0 50 100

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | 2/12/07 | | UPDATED PER MEDEP COMMENTS | | | | |
| | 10/6/06 | | SUBMITTED TO MEDEP | GHC | | | |
| | 8/24/06 | P | SUBMITTED TO CLIENT | RBC | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |


SME

*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*


JOB NO. 06116

| | | |
|---|---|---|
| DRN | PAF | 7/18/06 |
| CHKD | GHC | 8/6/06 |
| APPVD | | |

ISSUE CODE

P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

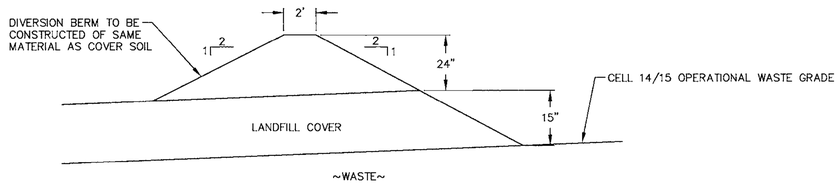
CAD FILE: YB-26198 B0

**EAST OPERATION**
**DOLBY III LANDFILL**
**CELL 15 CONSTRUCTION**
**CELL 14 CLOSURE**
**CELL 15 OPERATIONAL GRADING PLAN**

JOB NO.
FILE NO.
LOC. NO.

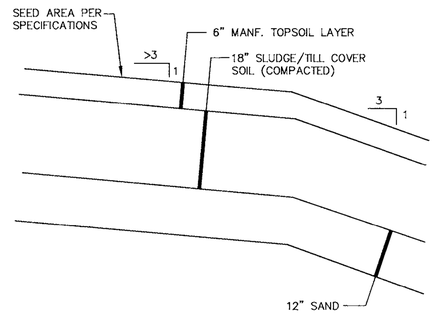
**YB-26198**

F:\Kpr\Dol\ACAD\CELL14\Cell14Closure.dwg, 3/12/2007 12:02:11 PM, paf



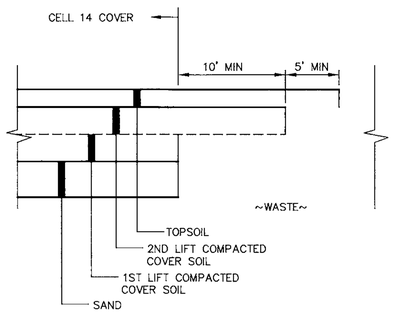

OPERATIONAL/LANDFILL COVER INTERFACE 1

NTS YB-26197



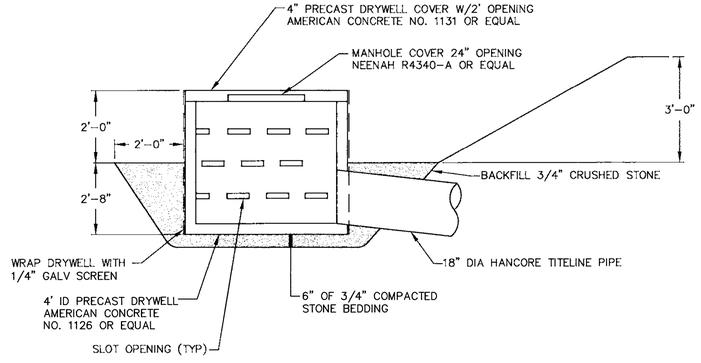

LANDFILL COVER

NTS




SECTION 2

NTS YB-26197




DRAINAGE MANHOLE

NTS

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | -- | | | -- -- | | | | | | | | -- -- | | | | | | |
| 5 | -- | | | -- -- | | | | | | | | -- -- | | | | | | |
| 4 | -- | | | -- -- | | | | | | | | -- -- | | | | | | |
| 3 | -- | | | 2/12/07 | | UPDATED PER MEDEP COMMENTS | | | | | | -- -- | | | | | | |
| 2 | -- | | | 10/6/06 | | SUBMITTED TO MEDEP | GHC | | | | | -- -- | | | | | | |
| 1 | -- | | | 8/24/06 | P | SUBMITTED TO CLIENT | RBC | | | | | -- -- | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 04011.04

| | | |
|---|---|---|
| DRN | DRD | 8/11/06 |
| CHKD | GHC | 8/11/06 |
| APPVD | | -- -- |

ISSUE CODE
P -- Preliminary
B -- Bids
C -- Construction
ASB -- As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: YB-26199 B1

EAST OPERATION

DOLBY III LANDFILL
CELL 15 CONSTRUCTION
CELL 14 CLOSURE
SECTIONS & DETAILS

JOB NO. YB-26199
FILE NO.
LOC. NO. SHEET 2 OF 2

F:\Xpc\Dol\ACAD\CELL14\DETAILS.dwg, 3/12/2007 12:08:03 PM, paf

# KATAHDIN PAPER COMPANY, LLC
# EAST MILLINOCKET, MAINE
# DOLBY III LANDFILL
# CELL 16 CONSTRUCTION

| SHT. NO. | TITLE | DWG. NO. |
|---|---|---|
| 1 | COVER SHEET | |
| 2 | SYMBOLS & ABBREVIATIONS | C-100 |
| 3 | EXISTING CONDITIONS PLAN | C-101 |
| 4 | SITE DEVELOPMENT PLAN | C-102 |
| 5 | OPERATIONAL GRADING PLAN | C-103 |
| 6 | SECTIONS & DETAILS (SHEET 1 OF 1) | C-300 |


*SME*

*Sevee & Maher Engineers, Inc.*
*Waste Management and Hydrogeologic Consultants*
*Cumberland Center, Maine*


STATE OF MAINE
PETER M. MAHER
NO. 7107
LICENSED
PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| P | 7/23/08 | | SUBMITTED TO MEDEP | ECC | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| - | - - | | | | | | |
| - | - - | | | | | | |
| - | - - | | | | | | |
| - | - - | | | | | | |
| - | - - | | | | | | |
| - | - - | | | | | | |


*SME*
*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*


JOB NO. 08035.05

| | | |
|---|---|---|
| DRN | MSB | 7/08 |
| CHKD | GHC | 7/08 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: COVERSHT.DWG

EAST OPERATION
DOLBY III LANDFILL
CELL 16 CONSTRUCTION
COVER SHEET

JOB NO.
FILE NO.
LOC. NO.

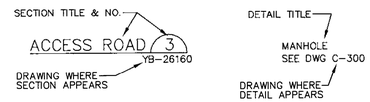
P:\Projects\08035\CAD\CELL 16-18\COVERSHT.dwg, 7/23/2008 2:18:05 PM, mbrooks

# SYMBOLS

| EXISTING | PROPOSED | | EXISTING | PROPOSED | | EXISTING | PROPOSED | |
|---|---|---|---|---|---|---|---|---|
| | | NORTH ARROW (TRUE) | | | DRAINAGE COURSE (WITH DIRECTION) | | UG | UNDERGROUND GAS MAIN |
| DATE | | NORTH ARROW (MAGNETIC) | | | EDGE OF WATER | | UT | UNDERGROUND TELEPHONE LINE |
| N | | NORTH ARROW (PLAN NORTH) | | | WATER ELEVATION (GROUND OR SURFACE) | | UE | UNDERGROUND ELECTRICAL LINE |
| | 25 | CONTOUR LINES | | | FENCE LINE (WOOD) | | OE | OVERHEAD ELECTRICAL LINE |
| | INV 25.56 | SPOT ELEVATION (INVERT ELEVATION) | | | FENCE LINE (WIRE) | | OT | OVERHEAD TELEPHONE LINE |
| | | EXISTING GROUND | | | STONE WALL | | 12" SS | SANITARY SEWER |
| | | SURVEY BASELINE WITH TRIANGULATION OR INTERSECTION PT. | | | RETAINING WALL | | 8" FM | FORCE MAIN |
| | | PROPERTY LINE OR R.O.W. | | | GUARD RAIL | | 8" W | WATER MAIN |
| N35°-10'-10"W 251.17' | N35°-10'-10"W 251.17' | PROPERTY LINE W/ BEARING AND DISTANCE | | | BUILDING AND STRUCTURES | | 12" SD | STORM DRAIN |
| 0+00 | 1+00 | CONSTRUCTION BASELINE | | 1 2 OR 2:1 | SLOPE RATIO (HORIZONTAL TO VERTICAL) | | 8" UD | UNDERDRAIN |
| | | BOUNDARY LINE (State, County, Municipality) | TOP OF SLOPE | TOP OF SLOPE | SLOPES (WITH SLOPE RATIO) | | 6" PD | PERIMETER DRAIN |
| ◻ | ■ | SURVEY MONUMENT | | | EDGE OF ROAD | | 6" LT | LEACHATE TRANSPORT |
| | | SURVEY CONTROL | | C F | CUT OR FILL LINE | | 6" LC | LEACHATE COLLECTION |
| ○ | • | PROPERTY PIN, DRILL HOLE, PK, OR STAKE | | | BITUMINOUS PAVEMENT | | 6" LD | LEAK DETECTION |
| | | WOODS OR BRUSH LINE | | | CONCRETE | | 6" G | GAS COLLECTION |
| | | INDIVIDUAL TREE | B-12 MW-12 P-12 | B-12 MW-12 P-12 | TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER | ▷ | ▶ | REDUCER |
| | | MAPPED WETLAND | TP-12 | TP-12 | TEST PIT AND NUMBER | | | MECHANICAL CAP OR PLUG |
| ⏀ | ◑ | GAS VENT | SW-12 | SW-12 | SURFACE WATER SAMPLE LOCATION | | | COUPLING |
| ⏀ | | GAS VENT (CAPPED) | | | GAS EXTRACTION WELL | | | BEND |
| ⊘ | ⊘ | CLEAN OUT STRUCTURE | ○ | ● | MANHOLE | | | TEE |
| | | CULVERT | ◎ | ○ | CATCH BASIN | | | PIPE TO BE ABANDONED |
| | | RAILROAD | | | WATER OR GAS VALVE | | | RISER PIPE & INLET GRATE |
| ◎ | ◘ | SLOPE INCLINOMETER | | | HYDRANT | ▤ | ▤ | STORM GRATE |
| ⊠ | ⊠ | VIBRATING WIRE SETTLEMENT CELL | | | AIR RELEASE VALVE | ◯ | ◯ | DRAINAGE INLET STRUCTURE |
| ⊗ | ⊗ | VERTICAL/HORIZONTAL DISPLACEMENT MONUMENT | | | SURGE RELEASE VALVE | □ | ■ | UNDERDRAIN SUMP |
| ▷ | ▶ | VERTICAL DISPLACEMENT MONUMENT | | | UTILITY POLE | | SF | SILTATION FENCE |
| ⊗ | ● | LIQUID SETTLEMENT GAGE | ☼ | ✷ | LIGHT POLE | | CLL | CLEARING OR CONSTRUCTION LIMIT LINE |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACCMP | ASPHALT COATED CMP | D | DEGREE OF CURVE | HDPE | HIGH DENSITY POLYETHYLENE | PERF | PERFORATED |
| ACP | ASBESTOS CEMENT PIPE | DBL | DOUBLE | HORIZ | HORIZONTAL | PP | POWER POLE |
| AC | ACRE | DEG OR ° | DEGREE | HP | HORSEPOWER | PSI | POUNDS PER SQUARE INCH |
| AGG | AGGREGATE | DEPT | DEPARTMENT | HYD | HYDRANT | PVC | POLYVINYL CHLORIDE |
| ALUM | ALUMINUM | DI | DUCTILE IRON | | | PVMT | PAVEMENT |
| APPD | APPROVED | DIA OR ø | DIAMETER | ID | INSIDE DIAMETER | | |
| APPROX | APPROXIMATE | DIM | DIMENSION | IN OR " | INCHES | QTY | QUANTITY |
| ARMH | AIR RELEASE MANHOLE | DIST | DISTANCE | INV | INVERT | | |
| ASB | ASBESTOS | DN | DOWN | INV EL | INVERT ELEVATION | RCP | REINFORCED CONCRETE PIPE |
| ASP | ASPHALT | DR | DRAIN | | | ROW | RIGHT OF WAY |
| AUTO | AUTOMATIC | DWG | DRAWING | LB | POUND | RAD | RADIUS |
| AUX | AUXILIARY | | | LC | LEACHATE COLLECTION | REQD | REQUIRED |
| AVE | AVENUE | EA | EACH | LD | LEAK DETECTION | RT | RIGHT |
| AZ | AZIMUTH | EG | EXISTING GROUND OR GRADE | LF | LINEAR FEET | RTE | ROUTE |
| | | ELEC | ELECTRIC | LOC | LOCATION | | |
| BCCMP | BITUMINOUS COATED CMP | EL | ELEVATION | LT | LEACHATE TRANSPORT | S | SLOPE |
| BM | BENCH MARK | ELB | ELBOW | | | SCH | SCHEDULE |
| BIT | BITUMINOUS | EOP | EDGE OF PAVEMENT | MH | MANHOLE | SF | SQUARE FEET |
| BLDG | BUILDING | EQUIP | EQUIPMENT | MJ | MECHANICAL JOINT | SHT | SHEET |
| BOT | BOTTOM | EST | ESTIMATED | MATL | MATERIAL | SMH | SANITARY MANHOLE |
| BRG | BEARING | EXC | EXCAVATE | MAX | MAXIMUM | ST | STREET |
| BV | BALL VALVE | EXIST | EXISTING | MFR | MANUFACTURE | STA | STATION |
| | | | | MIN | MINIMUM | SY | SQUARE YARD |
| CB | CATCH BASIN | FG | FINISH GRADE | MISC | MISCELLANEOUS | TAN | TANGENT |
| CEN | CENTER | FBRGL | FIBERGLASS | MON | MONUMENT | TDH | TOTAL DYNAMIC HEAD |
| CEM LIN | CEMENT LINED | FDN | FOUNDATION | | | TEMP | TEMPORARY |
| CMP | CORRUGATED METAL PIPE | FLEX | FLEXIBLE | NITC | NOT IN THIS CONTRACT | TYP | TYPICAL |
| CO | CLEAN OUT | FLG | FLANGE | NTS | NOT TO SCALE | | |
| CF | CUBIC FEET | FLR | FLOOR | N/F | NOW OR FORMERLY | UD | UNDERDRAIN |
| CFS | CUBIC FEET PER SECOND | FPS | FEET PER SECOND | NO OR # | NUMBER | | |
| CI | CAST IRON | FT OR ' | FEET | | | V | VOLTS |
| CL | CLASS | FTG | FOOTING | OC | ON CENTER | VA TEE | VALVE ANCHORING TEE |
| CONC | CONCRETE | | | OD | OUTSIDE DIAMETER | VERT | VERTICAL |
| CONST | CONSTRUCTION | GA | GAUGE | | | | |
| CONTR | CONTRACTOR | GAL | GALLON | PC | POINT OF CURVE | WG | WATER GATE |
| CS | CURB STOP | GALV | GALVANIZED | PD | PERIMETER DRAIN | W/ | WITH |
| CTR | CENTER | GPD | GALLONS PER DAY | PI | POINT OF INTERSECTION | W/O | WITHOUT |
| CU | COPPER | GPM | GALLONS PER MINUTE | PIV | POST INDICATOR VALVE | | |
| CY | CUBIC YARD | | | PT | POINT OF TANGENT | YD | YARD |

## VIEW MARKERS & IDENTIFICATION




GENERAL NOTES:

THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SAFETY PROCEDURES WITH RESPECT TO THE EMPLOYEES OF THE CONTRACTOR AND HIS SUBCONTRACTOR UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ISSUED THEREUNDER AND STATE LABOR (SAFETY) DEPARTMENT AND MILL RULES, PROCEDURES, AND REGULATIONS REGARDING SAFETY.

CONTOURS SHOWN ON PLANS MAY NOT REPRESENT EXISTING CONDITIONS OF THE SITE.

MATERIAL SPECIFICATIONS:

COMMON BORROW – MDOT SPECIFICATION 703.18

SCREENED TILL – SHALL BE EARTH, SUITABLE FOR EMBANKMENT CONSTRUCTION. SCREENED TILL SHALL BE GLACIAL TILL FREE OF FROZEN MATERIALS, PERISHABLE RUBBISH, PEAT, ORGANIC MATER, LARGE ROCK FRAGMENTS, OR OTHER UNSUITABLE MATERIAL AND SHALL BE SCREENED TO LESS THAN 4" IN DIAMETER WITH GREATER THAN 20 PERCENT FINES. THE FINAL SURFACE OF THE SCREENED TILL SHALL BE FREE FROM PROTRUDING ROCKS GREATER THAN 3" IN DIAMETER.

SAND – THE DRAINAGE SAND SHALL BE AGGREGATE FREE OF ORGANIC MATTER, DEBRIS, AND ROCK FRAGMENTS LARGER THAN 1 INCH IN DIAMETER. SAND SHALL MEET A GRADATION AND HYDRAULIC CONDUCTIVITY REQUIREMENT AS FOLLOWS:

a.

| SIEVE DESIGNATION | PERCENT BY WEIGHT PASSING SQUARE MESH SIEVE |
|---|---|
| 1/4" | 60 – 100 |
| #40 | 0 – 50 |
| #200 | 0 – 7 |

b. REMOLDED HYDRAULIC CONDUCTIVITY (ASTM D 5084–90) MAXIMUM $\geq 1X10^{-3}$cm/sec

3/4" STONE – THE PIPE BEDDING MATERIAL SHALL BE 3/4–INCH SCREENED OR CRUSHED STONE, FREE OF ORGANIC MATTER, SILT OR CLAY LUMPS, OR DELETERIOUS MATERIAL.

COMPACTION – DIKE EMBANKMENT SOIL SHALL BE COMPACTED TO A DENSITY OF 90 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 (STANDARD PROCTOR)

6" PERFORATED HDPE UNDERDRAIN PIPE – SDR 21 – HDPE PIPE JOINTS SHALL BE BUTT–FUSION WELDED OR ELECTROFUSION COUPLED.

12" UNDERDRAIN/LEACHATE TRANSPORT PIPE – SOLID HANCOR TITELINE

SEED AND FERTILIZER:

AREAS DISTURBED BY CONSTRUCTION AND THE OUTBOARD SLOPES OF THE DIKE SHALL BE FERTILIZED AND SEEDED.

MATERIAL:

FERTILIZER: GRANULAR FERTILIZER 18.5, 18.5, 18.5 (N,P,K) 10 LBS PER UNIT

SEED:

| | |
|---|---|
| TALL FESCUE | 59% |
| RED FESCUE | 25% |
| RED TOP | 5% |
| LADINO CLOVER | 3% |
| ANNUAL RYEGRASS | 8% |

THIS SEED MIXTURE SHALL BE APPLIED AT A RATE OF 3 LBS PER UNIT

MULCH – THE MULCH APPLICATION RATE SHALL BE 2 TONS PER ACRE

INSTALLATION – MDOT 618.05 AND MDOT 618.06

RECOMMENDED TIME OF SEEDING IS FROM APRIL 15 TO SEPTEMBER 15.

STATE OF MAINE — PETER MILLER — NO. 8807 — LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | – | |
| 5 | – | |
| 4 | – | |
| 3 | – | |
| 2 | – | |
| 1 | – | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| – | – | – | | – | – | – | – |
| – | – | – | | – | – | – | – |
| – | – | – | | – | – | – | – |
| – | – | – | | – | – | – | – |
| – | – | – | | – | – | – | – |
| P | 7/23/08 | – | SUBMITTED TO MEDEP | EDD | MM | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| – | – | – | | – | – | – | – |

SME

*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 08035.05

| | | |
|---|---|---|
| DRN | MSB | 7/08 |
| CHKD | GHC | 7/08 |
| APPVD | | |

ISSUE CODE
P – Preliminary
B – Bids
C – Construction
ASB – As Built

SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: SYMSHT

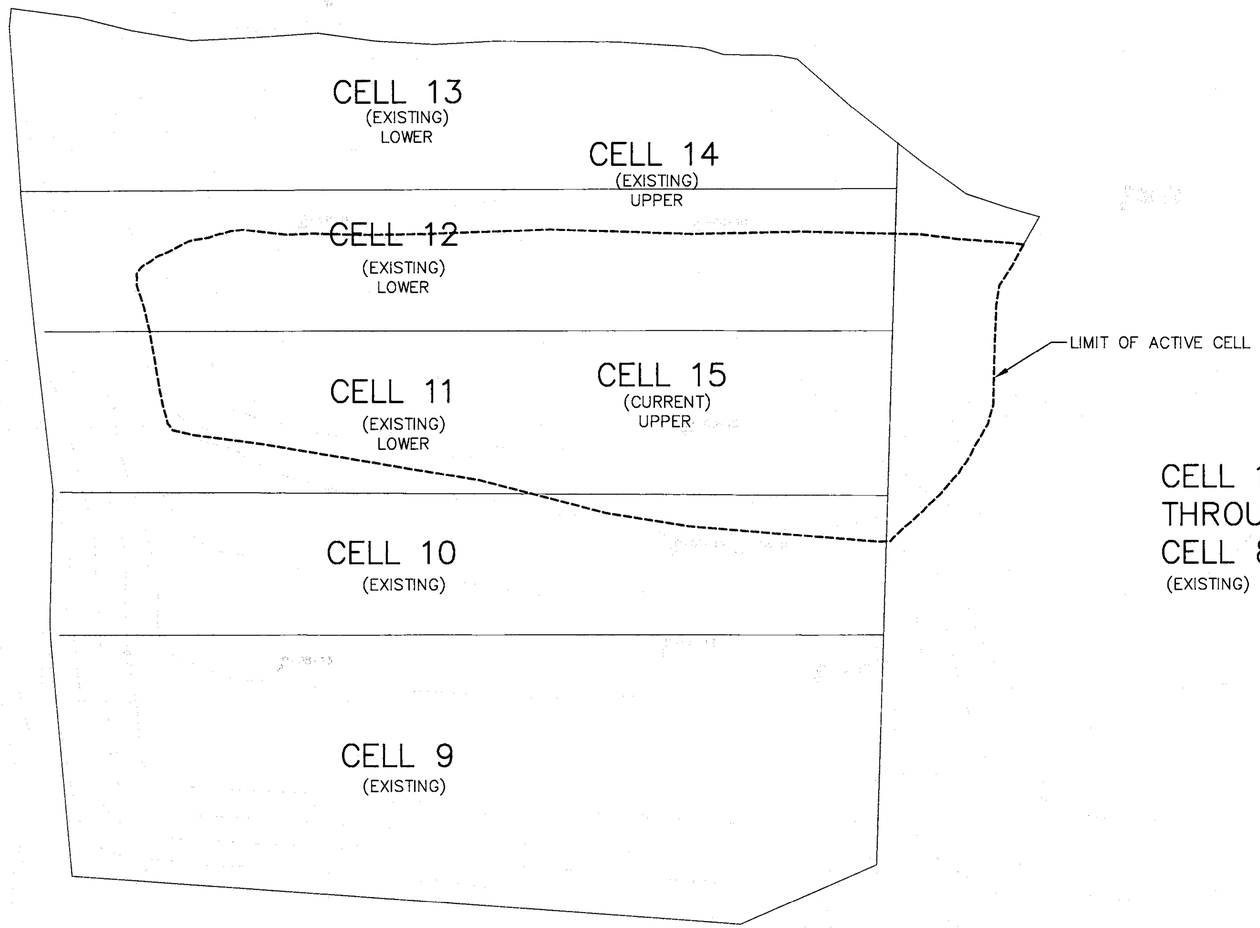
# EAST OPERATION

## DOLBY III LANDFILL CELL 16 CONSTRUCTION SYMBOLS AND ABBREVIATIONS

JOB NO.
FILE NO.
LOC. NO.

**C–100**

P:\KCC\DABCAD\CELL 15-18\DYNAMIC\dwg, 7/23/2008 2:11:25 PM, mbrkab




GENERAL NOTES:

1. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO, INC. NORRIDGEWOCK, MAINE, PHOTOGRAPH DATED 5/14/08.

2. GROUND CONTROL PROVIDED BY SEVEE & MAHER ENGINEERS, INC, CUMBERLAND, MAINE.

3. STANDARD PRACTICE DICTATES THAT PLANS COMPILED IN THIS MANNER BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

4. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL REMAIN IN COMPLIANCE WITH MDEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENTATION CONTROL AND EXISTING PERMITTING REQUIREMENTS FOR THE SITE INCLUDING FEDERAL, STATE, AND LOCAL PERMITS.

5. KATAHDIN PAPER COMPANY IS ACTIVELY FILLING CELL 15. EXISTING GRADES MAY NOT REPRESENT CURRENT CONDITIONS.

50 0 100 200 FEET

STATE OF MAINE — PETER G. MAHER — 12107 — LICENSED PROFESSIONAL ENGINEER

| REF. NO. | DRAWING NO. | REFERENCE DRAWING TITLE |
|---|---|---|
| 6 | - | |
| 5 | - | |
| 4 | - | |
| 3 | - | |
| 2 | - | |
| 1 | - | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| P | 7/23/08 | | SUBMITTED TO MEDEP | KRG | MJK | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |
| | - - | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021

JOB NO. 08035.05

| | | |
|---|---|---|
| DRN | MSB | 7/08 |
| CHKD | GHC | 7/08 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE AS SHOWN

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: CELL15-16Site

# EAST OPERATION

## DOLBY III LANDFILL
## CELL 16 CONSTRUCTION
## EXISTING CONDITIONS PLAN

JOB NO.
FILE NO.
LOC. NO.

C-101

P:\jobs\08035\CAD\CELL 15-16\Cell15-16Site.dwg, 7/23/2008 2:09:37 PM, mbishop

CELL 15

CELL 16
(INTERIM OPERATIONS)

FINAL WASTE CONTOURS

OPERATIONAL DRAINAGE
SEE SECTIONS AND DETAILS
DWG C-300
(12" SAND LAYER TO BE EXTENDED FROM UNDERDRAIN PIPE UPSLOPE MINIMUM OF 10 FT. IN ELEVATION ON WESTERN SIDESLOPE OF CELL 15 AND NORTHERN SIDESLOPE OF CELL 7).

CORE EXIST DRAINAGE MANHOLE FOR 6" PIPE
N 664876.36
E 474758.74

6" PERFORATED DRAIN

TIE-IN TO CELL 15 DIKE

CELL 16 OPERATIONAL DITCH (SLOPE TO DRAIN)

EXTEND EXISTING 6" UNDERDRAIN

6"UD

6" PERFORATED DRAIN

SECTIONS AND DETAILS DWG C-300

6" TEE (TYP)

N 664858.12
E 474597.92

N 664857.15
E 474503.59

12" SOLID DRAIN

6" PERFORATED DRAIN.

EXISTING CATCH BASIN #31
12" INV IN 365.25
8" INV IN 359.15
18" INV OUT 356.5

CORE EXISTING DRAINAGE MANHOLE FOR 12" PIPE

DRAINAGE MANHOLE SEE SECTIONS AND DETAILS SEE DWG C-300

BREAK ON SLOPE

6" PERFORATED DRAIN (SLOPE TO DRAIN NORTH)

BREAK ON SLOPE TO BE FIELD DETERMINED

STRIP COVER SOIL AND ADD 6" OF SAND

CELL 16 OPERATIONAL DITCH (SLOPE TO DRAIN)

P-08-14 P-08-16

PROTECT PIEZOMETERS FROM DAMAGE DURING CONSTRUCTION.

6" PERFORATED DRAIN (SLOPE TO DRAIN SOUTH)

6" TEE (TYP)

STRIP COVER SOILS FROM BULGING AREA SHOWN AND GRADE WASTE TO MATCH SURROUNDING GRADES. PLACE 12" SAND DRAINAGE LAYER ABOVE GRADED WASTE AND TIE-IN WITH SAND DRAINAGE LAYER.

N 663726.69
E 474777.65

TIE INTO CELL 15 DIKE

N 663712.83
E 474774.23

STRIP AND REMOVE CELL 7 SIDESLOPE COVER

REPLACE PERFORATED MANHOLE TOP WITH SOLID MANHOLE TOP.

N 663719.79
E 474562.70

N 663705.58
E 474556.42

N 663682.32
E 474511.36

DIKE AND TYPE 1 DRAINAGE DITCH SEE SECTIONS AND DETAILS DWG C-300

N 663874.27
E 474431.17

DRAINAGE MANHOLE SEE SECTIONS AND DETAILS SEE DWG C-300

12" SOLID DRAIN

EXISTING DRAINAGE MANHOLE

TIE-IN 12" SOLID DRAIN TO EXISTING 12" DRAIN (TO CB-1) WITH PIPE FITTINGS AS NEEDED FOR SECURE CONNECTION

EXISTING 12" PIPE TO CB#1

P-08-11A
P-08-11B

30 0 60 120 FEET

STATE OF MAINE
GUY H. COTE, JR.
No. 5144
LICENSED
PROFESSIONAL ENGINEER

| REF NO | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | - | | | | | | | | | |
| 5 | - | | | | | | | | | |
| 4 | - | | | | | | | | | |
| 3 | - | | P | 8/22/08 | | REVISED PER MEDEP COMMENTS | | | | |
| 2 | - | | P | 7/25/08 | | RESUBMITTED TO MEDEP | KCC | GHC | | |
| 1 | - | | P | 7/23/08 | | SUBMITTED TO MEDEP | KCC | GHC | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

*SME*

*Sevee & Maher Engineers, Inc.*
*4 Blanchard Road P.O. Box 85A*
*Cumberland Center, ME 04021*

JOB NO. 08035.05

| | | |
|---|---|---|
| DRN | MSB | 7/08 |
| CHKD | GHC | 7/08 |
| APPVD | | |

ISSUE CODE
P - Preliminary
B - Bids
C - Construction
ASB - As Built
SCALE NONE

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE: CELL15-16Site

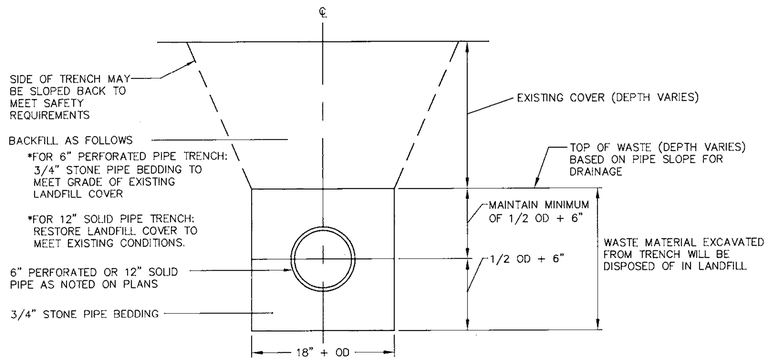
# EAST OPERATION

## DOLBY III LANDFILL
## CELL 16 CONSTRUCTION
## SITE DEVELOPMENT PLAN

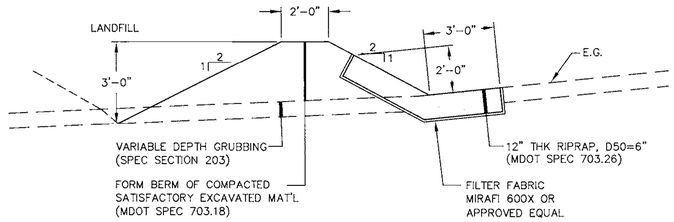
JOB NO.
FILE NO.
LOC. NO.

C-102

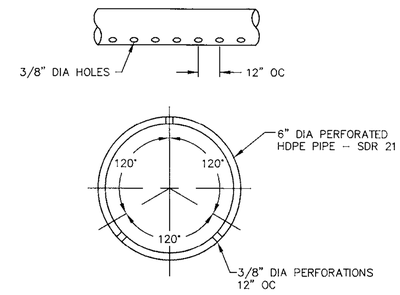
W:\servers\Eng\Dolby\CAD\CELL 15-16\Cell15-16Site.dwg, 8/22/2008 8:17:04 AM, jaf



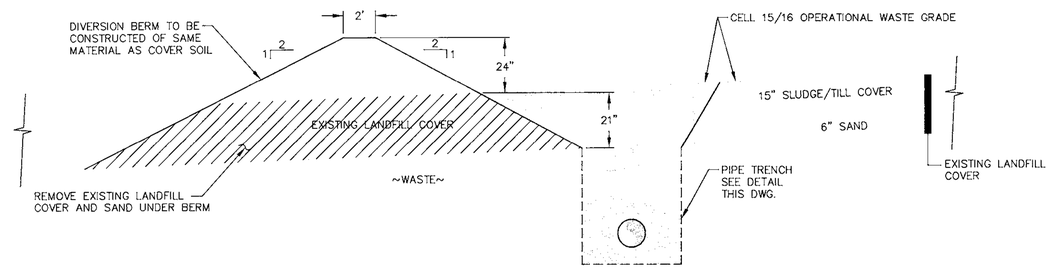

PIPE TRENCH
NTS



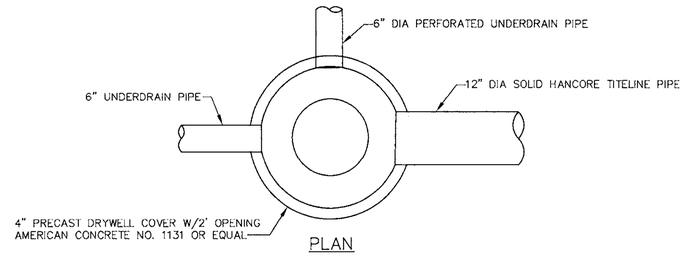

DIKE AND TYPE 1 DRAINAGE DITCH
NTS



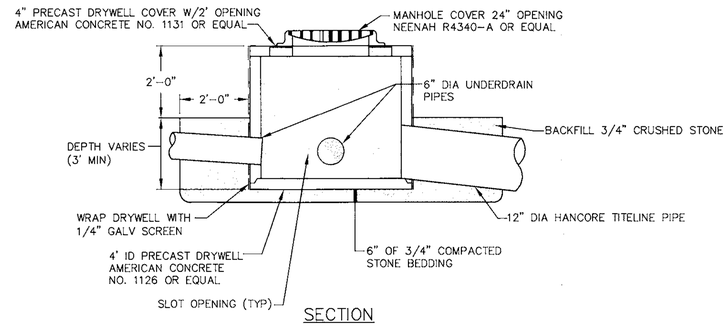

PERFORATED PIPE
NTS




OPERATIONAL/EXISTING LANDFILL COVER INTERFACE 1
NTS

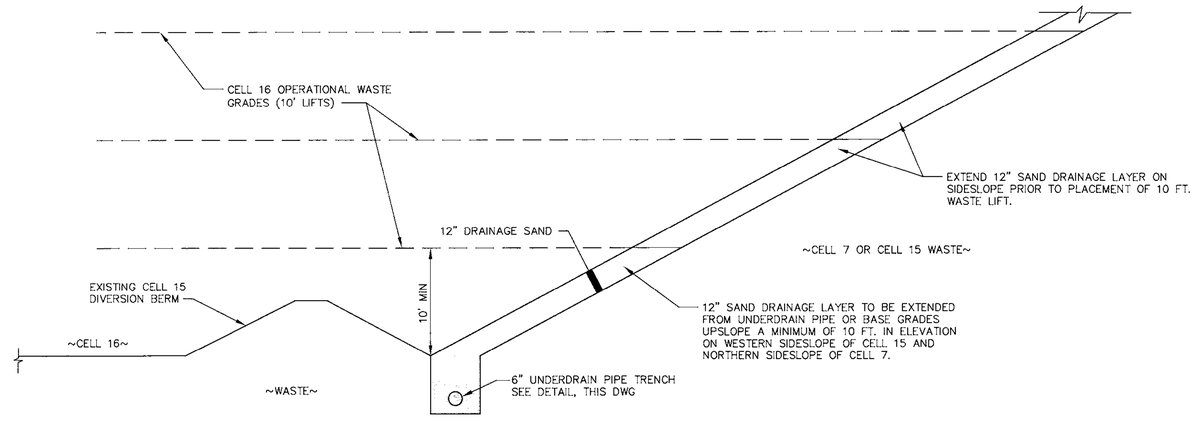



PLAN




SECTION

DRAINAGE MANHOLE
NTS




OPERATIONAL DRAINAGE
NTS

STATE OF MAINE
PATRICK J. LUNER
NO. 4107
LICENSED PROFESSIONAL ENGINEER

| REF NO. | DRAWING NO. | REFERENCE DRAWING TITLE | CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | -- | | | -- | | | | | | |
| 5 | -- | | | -- | | | | | | |
| 4 | -- | | | -- | | | | | | |
| 3 | -- | | | -- | | | | | | |
| 2 | -- | | | -- | | | | | | |
| 1 | -- | | P | 7/23/08 | | SUBMITTED TO MEDEP | | | | |

| CODE | DATE | REV. | REVISION | BY | CKD | APPVD | JOB |
|---|---|---|---|---|---|---|---|
| | -- | | | | | | |

SME
Sevee & Maher Engineers, Inc.
4 Blanchard Road P.O. Box 85A
Cumberland Center, ME 04021
JOB NO. 08035.05

| | | |
|---|---|---|
| DRN | MSB | 7/08 |
| CHKD | GHC | 7/08 |
| APPVD | | -- |
| ISSUE CODE | | |
| P – Preliminary | | |
| B – Bids | | |
| C – Construction | | |
| ASB – As Built | | |
| SCALE | NONE | |

KATAHDIN PAPER COMPANY LLC.
EAST MILLINOCKET, MAINE

CAD FILE:

EAST OPERATION

DOLBY III LANDFILL
CELL 16 CONSTRUCTION
SECTIONS & DETAILS

JOB NO.
FILE NO.
LIC. NO.

C-300
SHEET 1 OF 1

P:\jobs\DWG\CAD\CELL 15-16\DETAILS.dwg, 7/23/2008 2:19:52 PM, mbolduc

**APPENDIX C**

**INSPECTION LOGS**

SME
SEVEE & MAHER
ENGINEERS

**WEEKLY INSPECTION REPORT**
**DOLBY LANDFILL**

Date: _____ Time: _____

Weather: _____ Inspected By: _____

| Item | Condition | |
|---|---|---|
| **DOLBY II LANDFILL** | **Ok** | **Not Ok** |
| **LEACHATE HOLDING POND** | | |
| Level of Pond (low, medium, or high) | | |
| Outlet Structure Accessible | | |
| **DOLBY III LANDFILL** | | |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | | |
| Poor Drainage, Ponding | | |
| **PERIMETER DRAIN AND CATCH BASINS** | | |
| Flow Conditions (slow, medium or fast) | | |
| Catch Basins Intact and Serviceable | | |
| **ACTIVE CELL** | | |
| Containment Dikes Intact and Functioning | | |
| Cell Access Road Condition | | |
| Leachate Collection Structures Intact and Functioning | | |
| **LEACHATE COLLECTION POND** | | |
| Liner | | |
| Pond Level | | |
| **LEACHATE PUMP STATION** | | |
| Flow Measurement (gallons) | | |
| **LEAK DETECTION SYSTEM** | | |
| Leachate level | | |
| Flow Measurement (gallons) | | |
| **LEACHATE PIPELINE** | | |
| Manholes Intact and Serviceable | | |
| **SITE ROADWAYS** | | |
| Check Roadway Ditches for Signs of Erosion | | |
| Silt Fence Properly Installed (if applicable) | | |

COMMENTS:

_____

_____

_____

_____

ACTION TAKEN:

_____

_____

_____

**QUARTERLY INSPECTION REPORT**
**DOLBY LANDFILL**

Date: _____ Time: _____

Weather: _____ Inspected By: _____

| Item | Condition | |
|---|---|---|
| **DOLBY I LANDFILL** | **Ok** | **Not Ok** |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | | |
| Poor Drainage, Ponding | | |
| Excessive Settling, Crack Development | | |
| Grass Die-off-Failure to Thrive | | |
| Mowing Required | | |
| Germination of Trees, Deep Root Vegetation | | |
| Animal Burrowing | | |
| **COLLECTION PONDS** | | |
| West End Pond Level (low, medium, or high) | | |
| East End Pond Level (low, medium, or high) | | |
| Vegetative Build-up in Ponds (Cat Tails) | | |
| **ACCESS GATES** | | |
| Gates Secured and Working Properly (Facility Front and Rear Main Gates) | | |
| Roads Accessible by Vehicle | | |
| **DOLBY II LANDFILL** | | |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | | |
| Poor Drainage, Ponding | | |
| Excessive Settling, Crack Development | | |
| Grass Die-off-Failure to Thrive | | |
| Mowing Required | | |
| Germination of Trees, Deep Root Vegetation | | |
| Animal Burrowing | | |
| **PERIMETER DRAIN CATCH BASINS** | | |
| Build-up Sediment in Catch Basins | | |
| Flow Conditions (low, medium, or high) | | |
| Catch Basins Intact and Serviceable | | |
| **LEACHATE HOLDING POND** | | |
| Iron Staining (wooded area east of pond) | | |
| **DOLBY III LANDFILL** | | |
| **COVER SYSTEM** | | |
| Erosion, Channeling, Eruptions | | |
| Excessive Settling, Crack Development | | |
| Grass Die-off-Failure to Thrive | | |
| Mowing Required | | |
| Germination of Trees, Deep Root Vegetation | | |
| Poor Drainage, Ponding | | |
| Animal Burrowing | | |
| Access Road Condition | | |
| **PERIMETER DRAIN AND CATCH BASINS** | | |
| Build-up of Sediment in Catch Basins | | |
| Valves Functioning Properly (free turning) | | |

| Item | Condition | |
|---|---|---|
| **LEACHATE COLLECTION POND** | **Ok** | **Not OK** |
| **GEOMEMBRANE LINER** | | |
| Condition of Liner (rips, holes, torn seams) | | |
| **LEACHATE PUMP STATION** | | |
| Build-up Sediment in Wetwells | | |
| Pumps Functioning Properly (amps, noises) | | |
| Valves Functioning Properly (free turning) | | |
| Flow Conditions (low, medium, or high) | | |
| Properly Vented | | |
| Electrical Panel Inspection (corrosion, etc.) | | |
| Flow Meter Inspection – Flow meter not working | | |
| **LEAK DETECTION SYSTEM** | | |
| Pump functioning properly (amps, noises) | | |
| Flow Conditions (low, medium, high) | | |
| Flow Meter Inspection | | |
| Control Panel Inspection | | |
| **UNDERDRAIN PUMPING SYSTEM** | | |
| Pump functioning properly | | |
| Flow Conditions | | |
| **SITE SEDIMENTATION STRUCTURES** | | |
| **NORTHWEST SEDIMENTATION BASIN** | | |
| Check Outlet Structure for Condition | | |
| Water Level (low, medium, or high) | | |
| **WEST SEDIMENTATION BASIN** | | |
| Check Outlet Structure for Condition | | |
| Water Level (low, medium, or high) | | |
| **SOUTHWEST SEDIMENTATION BASIN** | | |
| Check Outlet Structure for Condition | | |
| Water Level (low, medium, or high) | | |
| **SITE ROADWAYS AND DRAINAGE** | | |
| Check Catch Basins for Build-up of Sediment | | |
| Check Culverts for Blocked Drainage and/or damage | | |
| Check Monitoring Wells for Visual Damage | | |
| General condition of Perimeter Roadways | | |
| **LEACHATE PIPELINE** | | |
| Check Manhole Exterior Condition | | |
| Check Transition Station Exterior Condition | | |
| Check Aboveground Utility Line to the Transition Station | | |
| General condition of Leachate Pipeline Access Road | | |

**COMMENTS:**

**RECOMMENDED ACTIONS:**

**ACTION TAKEN SINCE LAST REPORT:**

**APPENDIX D**

# ACTION LEAKAGE RATE/RESPONSE ACTION PLAN FOR LEACHATE POND LINER

SME
SEVEE & MAHER
ENGINEERS

**ACTION LEAKAGE RATE/RESPONSE ACTION PLAN**
**FOR LEACHATE POND LINER**

Note to Reader: This plan is an update of the Action Leakage Rate/ Response Action Plan prepared for the Dolby leachate pond in 2006. The update did not change the calculations used for determining the action leakage rate. At the time of this plan in 2006, the leachate pond, as intended herein, had not been constructed. The narrative for this plan was updated to recognize that the leachate pond was subsequently constructed.

A leak detection system was included in the leachate pond construction to monitor the performance of the primary liner. The leak detection system consists of a drainage geocomposite layer below the primary 60-mil HDPE geomembrane. Beneath the leak detection system is a secondary 60-mil HDPE geomembrane overlying a geosynthetic clay liner (GCL), followed by a 12-inch-thick compacted clay layer. At the south end of the leak detection system is a 6-inch diameter SDR-17 HDPE perforated pipe buried in a 12-inch-thick layer of 3/4-inch drainage stone (i.e., a sump). Sample tubing is provided in the leak detection piping system so that the landfill operator can sample the contents of the sump. All water collected in the leak detection system drains to the leak detection sump. The leak detection sump is equipped with a 1/2-HP submersible pump, which is activated by a transducer system. The discharge line from the pump contains a flow meter for recording discharge from the leak detection layer. The pump discharges to the leachate pump station sump where it is pumped off site. The engineering drawings for the leachate pond are appended to the Post-Closure Monitoring and Maintenance Plan for Dolby Landfill.

Estimated Liner Leakage Rates. The amount of leakage through the primary liner depends on several factors, including the following:

- The number and size of holes or imperfections in the geomembrane liner;
- The head above the primary liner;
- The uniformity of contact between the geomembrane liner and underlying geocomposite; and
- The hydraulic conductivity of the material in contact with the primary liner.

Typically, two-hole or imperfections sizes are used in defining leakage rates through a geomembrane liner system. Small holes (i.e., $3x10^{-6}$ $m^2$) roughly equal to the thickness of the geomembrane should be considered representative of actual field conditions and more typical of operating conditions. A larger hole (i.e., $1x10^{-4}$ $m^2$) should be used to size the hydraulic capacity of the leak detection layer (ref. Cell and Liner System Detailed Design (Design Examples), J.P. Giroud/Geosyntec Consultants, 1992).

For the leachate pond, Sevee & Maher Engineers, Inc. (SME) calculated leakage rates through the primary liner using the larger hole size. The frequency of imperfections in a geomembrane is associated with the degree of QA/QC associated with the manufacture and installation of the membrane. Because a detailed

geomembrane QA/QC program was developed for the project (ref. "Contract Documents and Construction Specifications for Leachate Pond Redevelopment, Dolby Ill Landfill", SME, Revised May 2006), a minimal number of defects are anticipated. Giroud et al. suggests that for liner installation with good QA/QC, between one and three manufacture holes per acre and one installation defect per acre can be expected. SME calculated total leakage rates through the primary liner for one hole per acre (with a size of $1x10^{-4}$ $m^2$) to predict the hydraulic capacity of the leak detection system.

The second variable affecting flow through the primary geomembrane liner is hydraulic head on the liner. SME used a hydraulic head for a pond level at a normal operating depth of two feet to determine the leak detection time.

The last two variables that affect leakage rate through the primary liner are the hydraulic conductivity of the materials in contact with the liner and the contact conditions. Calculated flow estimates were based on the proposed liner design. For primary liner, which will be underlain by a drainage geocomposite and secondary liner, flow rates were estimated based on analytical models developed by Giroud and Bonaparte (1989b) for flow through composite liners. Giroud and Bonaparte defined two conditions corresponding to the contact made between the geomembrane and underlying material that affect the flow through the geomembrane liner. A good contact is defined by Bonaparte et al. as a membrane installed with few wrinkles on top of a low hydraulic conductivity soil layer. Poor contact is defined as a geomembrane installed with a certain number of wrinkles and/or placed on a low-hydraulic conductivity soil layer that has not been well compacted and does not appear smooth. SME developed estimates of leakage through the primary geomembrane liner system for a single geomembrane underlain by a high permeability material (drainage geocomposite). Based on these variables, leakage rates through the primary geomembrane liner systems were calculated for the worst case. SME also evaluated hydraulic capacities of the leak detection system to handle the calculated flows and the time of travel for these flows in the leak detection systems. For the conditions described above, the calculations demonstrate that the leak detection system has the capacity to both handle worst case design flows and detect leaks in an approximate 20-hour period. This exceeds the regulatory requirement of detecting leaks from a leachate pond liner system within 24-hours.

An action leakage rate (ALR) of 20 gallons per acre per day (gpad) was established for the leachate pond. This is the standard action leakage rate value used by the U.S.EPA and the MEDEP. The ALR represents the minimum rate of leakage that will trigger interaction between the landfill owner and the MEDEP to determine the appropriate response action for the leakage.

Monitoring Frequency

The total flows will be obtained daily from a flow meter installed on the discharge lines for the leak detection system. Leak detection water quality samples will be collected during the regular water quality sampling rounds three times per year. The water quality samples of the leak detection sump will be collected using a peristaltic pump. The data will be incorporated into the submittals to the MEDEP.

Reporting Procedures

The landfill operator will submit a yearly report presenting all of the data collected during the preceding year and any recommended changes to the monitoring program, such as adjustments of the UAL values.

Response Actions

The landfill operator will record daily flow measurements from the leak detection discharge pipe and notify the MEDEP within 5 working days of obtaining four consecutive readings suggesting primary liner seepage is in exceedance of ALR. As weather conditions allow, the landfill operator will drain the leachate pond and visually inspect the liner and repair damaged areas within 15 days and no more than 30 days after notifying the MEDEP. If the visual inspection and subsequent repairs fail to reduce the seepage rate below the ALR, the landfill operator will consult with the MEDEP regarding other remedial measures.

The landfill operator will prepare a report summarizing the results of the inspection and repairs and submit it to the MEDEP for its review. The report will contain recommendations for continuation of the sampling program[1].

[1] The leak detection calculations were transmitted in a letter to MEDEP (Lou Pizzuti) dated May 17, 2006.

**APPENDIX H**

**WASTE LOGS**

SME
SEVEE & MAHER
ENGINEERS

**Millinocket**

**Truck hauling tally sheet for Dolby landfill** YEAR 2021

| Load Number | Truck Number | Empty weight | Load Weight | Material Weight | Tons of material | Yards | Date | Material | Driver Initials |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 15 | 28300 | 48660 | 20360 | 10.18 | 19.81 | 9/1/2021 | Ash | |
| 2 | 11 | 20780 | 33500 | 12720 | 6.36 | 12.37 | 9/1/2021 | Ash | |
| 3 | 10 | 21800 | 35080 | 13280 | 6.64 | 12.92 | 9/1/2021 | Ash | |
| 4 | 11 | 20780 | 33500 | 12720 | 6.36 | 12.37 | 9/1/2021 | Ash | |
| 5 | 10 | 21800 | 35080 | 13280 | 6.64 | 12.92 | 9/1/2021 | Ash | |
| 6 | 11 | 20780 | 33500 | 12720 | 6.36 | 12.37 | 9/1/2021 | Ash | |
| 7 | 15 | 28300 | 48660 | 20360 | 10.18 | 19.81 | 9/1/2021 | Ash | |
| 8 | 10 | 21800 | 35080 | 13280 | 6.64 | 12.92 | 9/1/2021 | Ash | |
| 9 | 11 | 20780 | 33500 | 12720 | 6.36 | 12.37 | 9/1/2021 | Ash | |
| 10 | | | | 0 | 0 | 0.00 | | Ash | |
| 11 | | | | 0 | 0 | 0.00 | | Ash | |
| 12 | | | | 0 | 0 | 0.00 | | Ash | |
| 13 | | | | 0 | 0 | 0.00 | | Ash | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Total | | | | 131440 | 65.72 | 127.86 | | | |

East Millinocket

Truck hauling tally sheet for Dolby landfill YEAR 2021

| Load Number | Truck Number | Empty weight | Load Weight | Material Weight | Tons of material | Yards | Date | Material | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 8 | 23520 | 38360 | 14840 | 7.42 | 14.44 | 9/1/2021 | Ash | |
| 2 | 6 | 22500 | 36800 | 14300 | 7.15 | 13.91 | 9/1/2021 | Ash | |
| 3 | 8 | 23520 | 38360 | 14840 | 7.42 | 14.44 | 9/1/2021 | Ash | |
| 4 | 6 | 22500 | 36800 | 14300 | 7.15 | 13.91 | 9/1/2021 | Ash | |
| 5 | 8 | 23520 | 38360 | 14840 | 7.42 | 14.44 | 9/1/2021 | Ash | |
| 6 | 8 | 23520 | 38360 | 14840 | 7.42 | 14.44 | 9/1/2021 | Ash | |
| 7 | 6 | 22500 | 36800 | 14300 | 7.15 | 13.91 | 9/1/2021 | Ash | |
| 8 | 8 | 23520 | 38360 | 14840 | 7.42 | 14.44 | 9/1/2021 | Ash | |
| 9 | 6 | 22500 | 36800 | 14300 | 7.15 | 13.91 | 9/1/2021 | Ash | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Total | | | | 131400 | 65.7 | 127.82 | | | |

Medway

Truck hauling tally sheet for Dolby landfill YEAR 2021

| Load Number | Truck Number | Empty weight | Load Weight | Material Weight | Tons of material | Yards | Date | Material | Driver Initials |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 7 | 28520 | 44720 | 16200 | 8.1 | 15.76 | 9/1/2021 | Ash | |
| 2 | 6 | 18900 | 31520 | 12620 | 6.31 | 12.28 | 9/1/2021 | Ash | |
| 3 | 6 | 18900 | 31520 | 12620 | 6.31 | 12.28 | 9/1/2021 | Ash | |
| 4 | 7 | 28520 | 44720 | 16200 | 8.1 | 15.76 | 9/1/2021 | Ash | |
| 5 | 7 | 28520 | 44720 | 16200 | 8.1 | 15.76 | 9/1/2021 | Ash | |
| 6 | 6 | 18900 | 31520 | 12620 | 6.31 | 12.28 | 9/1/2021 | Ash | |
| 7 | 6 | 18900 | 31520 | 12620 | 6.31 | 12.28 | 9/1/2021 | Ash | |
| 8 | 7 | 28520 | 44720 | 16200 | 8.1 | 15.76 | 9/1/2021 | Ash | |
| 9 | 7 | 28520 | 44720 | 16200 | 8.1 | 15.76 | 9/1/2021 | Ash | |
| 10 | 6 | 18900 | 31520 | 12620 | 6.31 | 12.28 | 9/1/2021 | Ash | |
| 11 | 7 | 28520 | 44720 | 16200 | 8.1 | 15.76 | 9/1/2021 | Ash | |
| 12 | | | | 0 | 0 | 0.00 | | Ash | |
| 13 | | | | 0 | 0 | 0.00 | | Ash | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Total | | | | 160300 | 80.15 | 155.93 | | | |

**APPENDIX I**

**SELF-AUDIT CHECKLIST**

SME
SEVEE & MAHER
ENGINEERS

**State of Maine, Bureau of General Services**
**Dolby III Landfill Compliance Self-Audit Checklist**

**Report Year:** 2021

**General License Information**

* Any new licenses or revisions issued to the facility during the year? ☐ Yes ☒ No

If yes, was the new license listed in the submitted facilities annual report? ☐ Yes ☐ No
List the new licenses: Minor Revision #S-000796-2D-AD-N for landfill cover upgrade.

**Chapter 400 Requirements**

* Was the annual report fee submitted with the annual report? ☐ Yes ☒ No

If no, reason the fee was not submitted: Direct inter-governmental billing with Service Center

**Chapter 401, Section 4 Requirements**

**401.4.A Requirements**

* Is the facilities operations manual being properly maintained? ☒ Yes ☐ No (This includes up-to-date certified copies to the Department and to key operating and management personnel of the landfill.)

If no, describe what is being done to bring the facility up to compliance: _____

* Is there a certified copy of the operations manual available for use at the facility at all times? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: Landfill not operating daily. Operations Manual with Landfill Operator and Subcontractors.

* Was the operations manual reviewed annually by the operator and updated as necessary? ☒ Yes (Date Reviewed:) ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

**401.4.B Requirements**

* Were operational personnel appropriately trained in relevant sections of the operations manual? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

* Are at least two key personnel trained in the operation of, and regulatory requirements for, the landfill facilities? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

**401.4.C Requirements**

* Were all waste excepted at the facility allowed under the current license and handled as described in the landfill's approved operations manual? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

* Was the facility operations manual, solid waste characterization plan, followed?
☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

* Access to the facility is controlled so that the public is not exposed to potential health and safety hazards and access is only permitted when an attendant is on duty. ☒ Yes ☐ No

The hours of operation and other limitations to access are prominently posted at the entrance to the landfill. ☐ Yes ☒ No Landfill is closed. Gates are locked.

If no in either, describe what is being done to bring the facility up to compliance: _____

* Are access roads within the facility maintained and is the road maintenance program implemented to prevent the migration of dust, mud or waste from the facility on access, public or private roads? ☒ Yes ☐ No

Are access roads onto a cell of a landfill constructed and maintained to prevent the migration of leachate outside the cell? ☒ Yes ☐ No

If no in either, describe what is being done to bring the facility up to compliance: _____

* Is the facilities cell development plans up-to-date and submitted with the annual report?
☒ Yes ☐ No Only operating in temporary cell.

If no, describe what is being done to bring the facility up to compliance: _____

* Was the waste in the active landfill cell compacted at least once during the operating day?
☐ Yes ☒ No

If no, describe what is being done to bring the facility up to compliance: N/A

* Was daily, intermediate and phased final cover placed according to the facilities operating manual? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: Phase II of final capping taking place summer of 2022.

**401.4.C Requirements continued**

* Was the facilities stormwater management and erosion control plan followed?
☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

* Was the facilities leachate management plan followed? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

* Was the facilities methane and $H_2S$ gas monitoring program done quarterly and any exceedances of triggers reported to the Department within 24hrs? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

* Were required quarterly landfill inspections completed? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance:

* Was the facilities dust control plan followed? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

* Is the landfill operation equipment sufficient to meet operating requirements of this section? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

* Does the facility have proper fire and emergency plan? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

* Was the facilities hazardous and special waste handling and exclusion plan properly followed? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

* Was the facilities litter control plan properly followed? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

**401.4.C Requirements continued**

* Was the facilities quarterly groundwater and leachate reports submitted to the Department? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

* Are all the facilities operation records maintained on file as required? ☒ Yes ☐ No

If no, describe what is being done to bring the facility up to compliance: _____

* Was the facilities asbestos disposal plan followed? ☐ Yes ☒ No

If no, describe what is being done to bring the facility up to compliance: N/A

Evaluator

WILLIAM Longfellow

9/14/22

Date

Director Bureau of General Services

Title

**APPENDIX J**

**WATER QUALITY MONITORING DATA**

SME
SEVEE & MAHER
ENGINEERS

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(103)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **103** | | | | | | | | | | | |
| 4/27/2000 | XX | 103XX36643 | 24 | 6.24 | 3.3 | | 434.32 | | | | |
| 8/1/2000 | XX | 103XX36739 | 30 | 6.03 | 7 | | 425.86 | | 15.81 | 9.1 | 4.2 |
| 10/24/2000 | XX | 103XX36823 | D | D | D | | | | | | |
| 5/8/2001 | XX | 103XX37019 | 25.7 | 6.04 | 5.4 | | 432.35 | | | 11.2 | 2.3 |
| 7/24/2001 | XX | 103XX37096 | D | D | D | | | | 18.86 | D | D |
| 10/16/2001 | XX | 103XX37180 | D | D | D | | | | | D | |
| 5/15/2002 | XX | 103XX37391 | 23 | 6.21 | 5 | | 431.95 | | | 11.2 | 3.15 |
| 7/29/2002 | XX | 103XX37466 | 28 | 4.93 | 10.2 | | 426.33 | | 15.69 | 9.6 | 1.03 |
| 10/18/2002 | XX | 103XX37547 | D | D | D | | | | | D | D |
| 6/18/2003 | XX | 103XX37790 | 26.9 | 6.43 | 7.2 | | 430.62 | | | 10.2 | 0.98 |
| 8/6/2003 | XX | 103XX37839 | 27.2 | 6.07 | 10.3 | | 428.02 | | 15.92 | 9 | 0.78 |
| 10/6/2003 | XX | 103XX37900 | 30.2 | 5.9 | 9.5 | | 429.02 | | | 10.1 | 1.12 |
| 5/12/2004 | XX | 103XX38119 | 28.9 | 5.8 | 5.8 | | 431.2 | | | 14.3 | 1.9 |
| 8/19/2004 | XX | 103XX38218 | 31 | 6.3 | 10.3 | | 426.06 | | 15.88 | 9.1 | 0.44 |
| 10/18/2004 | XX | 103XX38278 | D | D | D | | | | | D | D |
| 5/24/2005 | XX | GW103X004 | 25.2 | 7.35 | 6.1 | 7.56 | 432.01 | 439.57 | | 10.5 | 1 |
| 8/17/2005 | XX | GW103X01G | 31 | 6.13 | 6.7 | 14 | 425.57 | 439.57 | 15.92 | 10.5 | 0.8 |
| 10/13/2005 | XX | GW103X038 | D | D | D | D | | | | D | D |
| 5/15/2006 | XX | GW103X084 | 26.1 | 6.49 | 5.3 | | 432.85 | | | 9.7 | 1.4 |
| 8/7/2006 | XX | GW103X06C | 31 | 6.28 | 11.4 | | 430.95 | | 15.81 | 10.1 | 1.24 |
| 10/11/2006 | XX | GW103X050 | 32 | 6.69 | 9.8 | | 427.29 | | | 8.2 | 0.7 |
| 5/22/2007 | XX | GW103X09G | 28 | 6.67 | 5.9 | | 432.42 | | | 10.4 | 0.6 |
| 8/21/2007 | XX | GW103X0B9 | D | D | D | | D | | 16.05 | D | D |
| 11/1/2007 | XX | GW103X0D1 | 34 | 5.67 | 9.6 | | 428.26 | | | 9.8 | 1.6 |
| 5/28/2008 | XX | GW103X0F9 | 29 | 5.63 | 8.1 | | 429.35 | | | 9.6 | 1.9 |
| 8/26/2008 | XX | GW103X0H9 | 32 | 5.3 | 10.5 | | 429.21 | | | 8.9 | 1.4 |
| 10/28/2008 | XX | GW103X0IH | 34 | 5.47 | 9.7 | | 429.21 | | | 8.7 | 0.8 |
| 5/18/2009 | XX | GW103X10H | 29 | 5.05 | 6.3 | 8.27 | 431.3 | 439.57 | | 10.7 | 0.9 |
| 8/17/2009 | XX | GW103X12H | 30 | 4.58 | 11.7 | 9.41 | 430.16 | 439.57 | | 8.4 | 2.7 |
| 10/29/2009 | XX | GW103X145 | 31 | 5.48 | 8.8 | 9.29 | 346.49 | 439.57 | | 9.44 | 1.2 |
| 6/10/2010 | XX | GW103X166 | 30 | 7.15 | 8.1 | | 428.48 | | | 8.8 | 1.01 |
| 8/19/2010 | XX | GW103X187 | D | D | D | | 424.22 | | | D | D |
| 10/26/2010 | XX | GW103X19F | 34 | 6.21 | 10 | | 426.93 | | | 9.51 | 23.4 |
| 11/3/2011 | XX | GW103X1I2 | 32 | 5.9 | 9.9 | 9.66 | 429.91 | 439.57 | 16.05 | 4 | 1.3 |
| 5/15/2012 | XX | GW103X1JF | 34 | 6 | 11.1 | 6.86 | 432.71 | 439.57 | 14.4 | 4 | 2.1 |
| 8/14/2012 | XX | GW103X218 | 28 | 5.4 | 12.3 | 13.93 | 425.64 | 439.57 | | 8 | 1.2 |
| 10/31/2012 | XX | GW103X232 | 26 | 5.9 | 11.2 | 8.2 | 431.37 | 439.57 | 16.05 | 8 | 0 |
| 5/22/2013 | XX | GW103X24G | 28 | 6.7 | 7.3 | 10.01 | 429.56 | 439.57 | | 6 | 0.6 |
| 7/25/2013 | XX | GW103X26A | 27 | 7.2 | 12.5 | 11.52 | 428.05 | 439.57 | | 5 | 0 |
| 10/3/2013 | XX | GW103X284 | 33 | 6.2 | 11.7 | 11.99 | 427.58 | 439.57 | 16.03 | 4 | 0.5 |
| 6/6/2014 | XX | GW103X29I | 27 | 5.8 | 7.6 | 9.9 | 429.67 | 439.57 | | 2 | 0.4 |
| 8/22/2014 | XX | GW103X2BC | 32 | 6.7 | 11.3 | 14.48 | 425.09 | 439.57 | | 1 | 0.2 |
| 11/14/2014 | XX | GW103X2D6 | 27 | 7 | 7 | 9.43 | 430.14 | 439.57 | 16.1 | 2 | 1.4 |
| 6/5/2015 | XX | GW103X2F2 | 30 | 7.6 | 7.5 | 8.12 | 431.45 | 439.57 | | 10.4 | 0.4 |
| 9/2/2015 | XX | GW103X2GH | 30 | 9.1 | 10.2 | 13.58 | 425.99 | 439.57 | | 8.9 | 0.05 U |
| 11/5/2015 | XX | GW103X2IB | 28 | 6.6 | 9.5 | 8.83 | 430.74 | 439.57 | 16.08 | 9.8 | 0.1 |
| 6/13/2016 | XX | GW103X321 | 29 | 5.9 | 7.6 | 11.57 | 428 | 439.57 | | 9.2 | 2 |
| 9/19/2016 | XX | GW103X33F | D | D | D | D | D | D | | D | D |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (103) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/7/2016 | XX | GW103X359 | D | D | D | D | D | D | 16.09 | D | D |
| 6/12/2017 | XX | GW103X374 | 28 | 6.3 | 9.9 | 9.5 | 430.07 | 439.57 | | 10.5 | 5 |
| 8/28/2017 | XX | GW103X38I | I | I | I | I | I | 439.57 | | I | I |
| 11/13/2017 | XX | GW103X3AC | 25 | 7 | 9.3 | 13.95 | 425.62 | 439.57 | 16.09 | 9.9 | 0.2 |
| 6/18/2018 | XX | GW103X3C7 | 29 | 6.5 | 8.1 | 11.69 | 427.88 | 439.57 | | 9.4 | 0.5 |
| 8/13/2018 | XX | GW103X3D2 | I | I | I | I | I | 439.57 | | I | I |
| 11/26/2018 | XX | GW103X3FF | A | A | A | A | A | 439.57 | | A | A |
| 6/3/2019 | XX | GW103X3HA | 59 | 7.6 | 11.7 | 8.02 | 431.55 | 439.57 | | 12.7 | 1.1 |
| 8/12/2019 | XX | GW103X3I5 | 45 | 7 | 12.2 | 13.35 | 426.22 | 439.57 | | 12.3 | 1.1 |
| 10/23/2019 | XX | GW103X40I | D | D | D | D | | 439.57 | | D | D |
| 6/15/2020 | XX | GW103X42D | 90 | 6.6 | 11.2 | 11.5 | 428.07 | 439.57 | | 8.6 | 1.1 |
| 8/3/2020 | XX | GW103X438 | I | I | I | I | | 439.57 | | I | I |
| 10/19/2020 | XX | GW103X461 | D | D | D | D | | 439.57 | 16.04 | D | D |
| 6/21/2021 | XX | GW103X47G | 135 | 6.9 | 12.1 | 13.16 | 426.41 | 439.57 | | 6.7 | 0.3 |
| 9/20/2021 | XX | GW103X49B | D | D | D | D | D | 439.57 | 16.1 | D | D |
| **104B** | | | | | | | | | | | |
| 4/27/2000 | XX | 104BXX36643 | 150 | 8.17 | 3.5 | | 426.44 | | | | |
| 8/1/2000 | XX | 104BXX36739 | 137 | 8.07 | 5 | | 422.38 | | 32.58 | 1.2 | 0.8 |
| 10/24/2000 | XX | 104BXX36823 | 132 | 8.22 | 7 | | 421.04 | | | 0.6 | 0.3 |
| 5/8/2001 | XX | 104BXX37019 | 150 | 8.13 | 7.2 | | 424.71 | | | 1 | 5.5 |
| 7/24/2001 | XX | 104BXX37096 | 139 | 8.3 | 9.8 | | 420.75 | | 32.54 | 0.8 | 0.35 |
| 10/16/2001 | XX | 104BXX37180 | 144 | 8.14 | 7.8 | | 418.82 | | | 1.1 | 0.64 |
| 5/15/2002 | XX | 104BXX37391 | 152 | 7.89 | 5.8 | | 424.72 | | | 2.1 | 0.22 |
| 7/29/2002 | XX | 104BXX37466 | 149 | 7.77 | 8.8 | | 421.79 | | 32.52 | 1 | 0.73 |
| 10/15/2002 | XX | 104BXX37544 | 150 | 7.62 | 7.2 | | 419.28 | | | 1.8 | 0.3 |
| 6/19/2003 | XX | 104BXX37791 | 161 | 8.17 | 7.3 | | 424.43 | | | 0.7 | 0.2 |
| 8/5/2003 | XX | 104BXX37838 | 149 | 7.94 | 8.7 | | 423.57 | | 32.58 | 0.8 | 0.41 |
| 10/7/2003 | XX | 104BXX37901 | 153.6 | 8.12 | 7.5 | | 424.28 | | | 1.6 | 0.3 |
| 4/26/2004 | XX | 104BXX38103 | 156.2 | 7.18 | 5.3 | | 425.12 | | | 1.1 | 0.33 |
| 8/9/2004 | XX | 104BXX38208 | 144 | 7.56 | 8.7 | | 422.148 | | 32.61 | 1.3 | 0.4 |
| 10/11/2004 | XX | 104BXX38271 | 144 | 8.09 | 8.2 | | 421.49 | | | 0.8 | 0.44 |
| 5/24/2005 | XX | GW104B005 | 143 | 8.31 | 6.2 | 10.81 | 424.92 | 435.73 | | 4 | 0.1 |
| 8/1/2005 | XX | GW104B01H | 142 | 7.52 | 8 | 13.41 | 422.32 | 435.73 | 32.58 | 0.9 | 0.6 |
| 10/25/2005 | XX | GW104B039 | 142 | 7.22 | 7.9 | 10.16 | 425.57 | 435.73 | | 1.3 | 0.5 |
| 5/10/2006 | XX | GW104B085 | 138.9 | 6.96 | 6.2 | | 425.2 | | | 1.2 | 0.58 |
| 7/24/2006 | XX | GW104B06D | 141 | 6.82 | 8.4 | | 424.44 | | 32.52 | 1 | 0.4 |
| 10/10/2006 | XX | GW104B051 | 139 | 7.68 | 8.1 | | 422.63 | | | 0.7 | 0.6 |
| 5/10/2007 | XX | GW104B09H | 138 | 6.92 | 6.8 | | 425.13 | | | 1.5 | 0.7 |
| 8/6/2007 | XX | GW104B0BA | 139 | 7.52 | 7.2 | | 421.88 | | 32.58 | 1 | 0.3 |
| 10/24/2007 | XX | GW104B0D2 | 140 | 7.14 | 7.7 | | 422.37 | | | 0.7 | 0.7 |
| 5/28/2008 | XX | GW104B0FA | 142 | 7.69 | 6.6 | | 423.98 | | | 0.6 | 0.3 |
| 8/11/2008 | XX | GW104B0HA | 140 | 7.09 | 8.4 | | 424.97 | | | 0.5 | 0.4 |
| 10/15/2008 | XX | GW104B0II | 138 | 7.52 | 7.9 | | 424.97 | | | 0.9 | 0.7 |
| 5/6/2009 | XX | GW104B10I | 142 | 6.34 | 6.2 | 10.96 | 424.77 | 435.73 | | 1 | 0.6 |
| 8/4/2009 | XX | GW104B12I | 142 | 6.8 | 8.3 | 9.41 | 426.32 | 435.73 | | 0.7 | 0.7 |
| 10/19/2009 | XX | GW104B146 | 140 | 6.65 | 7.4 | 12.34 | 423.39 | 435.73 | | 1.1 | 0.4 |
| 5/25/2010 | XX | GW104B167 | 143 | 6.64 | 7.5 | | 423.37 | | | 0.86 | 0.19 |
| 8/2/2010 | XX | GW104B188 | 144 | 7.36 | 8.1 | | 421.11 | | | 0.98 | 0.55 |
| 10/12/2010 | XX | GW104B19G | 146 | 7.68 | 7.9 | | 421.84 | | | 0.68 | 0.4 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (104B) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/16/2011 | XX | GW104B1DI | 132 | 7.8 | 5.9 | 10.22 | 425.51 | 435.73 | 32.48 | 1 | 0.2 | | | | | | |
| 8/9/2011 | XX | GW104B1F9 | 149 | 7.65 | 12.1 | 14.72 | 421.01 | 435.73 | 32.4 | 1 | 0.2 | | | | | | |
| 11/3/2011 | XX | GW104B1H0 | 145 | 7.4 | 7.4 | 11.52 | 424.21 | 435.73 | 32.6 | 1 | 0.2 | | | | | | |
| 5/14/2012 | XX | GW104B1IE | 146 | 7.9 | 8.2 | 10.24 | 425.49 | 435.73 | 32.42 | 1 | 0.6 | | | | | | |
| 8/14/2012 | XX | GW104B207 | 113 | 7.8 | 11.7 | 14.76 | 420.97 | 435.73 | | 2 | 0.2 | | | | | | |
| 10/31/2012 | XX | GW104B221 | 143 | 7.4 | 10.8 | 10.55 | 425.18 | 435.73 | 32.6 | 0.8 | 0 | | | | | | |
| 5/22/2013 | XX | GW104B23F | 144 | 7.3 | 7.7 | 11.35 | 424.38 | 435.73 | | 1 | 0.8 | | | | | | |
| 7/23/2013 | XX | GW104B259 | 145 | 7.9 | 16 | 11.83 | 423.9 | 435.73 | | 0.2 | 0.2 | | | | | | |
| 10/1/2013 | XX | GW104B273 | 140 | 7.8 | 11.7 | 11.3 | 424.43 | 435.73 | 32.42 | 1 | 0.5 | | | | | | |
| 6/4/2014 | XX | GW104B28H | 143 | 7.7 | 9.3 | 11.55 | 424.18 | 435.73 | | 1 | 0.2 | | | | | | |
| 8/19/2014 | XX | GW104B2AB | 139 | 7.8 | 12.8 | 12.84 | 422.89 | 435.73 | | 0.8 | 0.2 | | | | | | |
| 11/12/2014 | XX | GW104B2C5 | 145 | 8 | 7.9 | 10.56 | 425.17 | 435.73 | 32.55 | 1 | 0.2 | | | | | | |
| 6/3/2015 | XX | GW104B2E1 | 151 | 8 | 7.2 | 10.61 | 425.12 | 435.73 | | 0.7 | 0.2 | | | | | | |
| 9/2/2015 | XX | GW104B2FG | 131 | 8 | 11.6 | 12.24 | 423.49 | 435.73 | | 0.9 | 0.3 | | | | | | |
| 11/4/2015 | XX | GW104B2HA | 150 | 8.2 | 9.3 | 10.61 | 425.12 | 435.73 | 32.6 | 0.5 | 0.2 | | | | | | |
| 6/14/2016 | XX | GW104B310 | 140 | 7.8 | 8.9 | 11.86 | 423.87 | 435.73 | | 0.9 | 0.4 | | | | | | |
| 9/20/2016 | XX | GW104B32E | 147 | 8 | 10.6 | 16.25 | 419.48 | 435.73 | | 0.7 | 0.3 | | | | | | |
| 11/8/2016 | XX | GW104B348 | 141 | 7.9 | 9 | 16.26 | 419.47 | 435.73 | 32.6 | 0.8 | 0.1 | | | | | | |
| 6/14/2017 | XX | GW104B363 | 137 | 8.1 | 9.2 | 11.99 | 423.74 | 435.73 | | 0.8 | 0.5 | | | | | | |
| 8/30/2017 | XX | GW104B37H | 153 | 8.2 | 8.9 | 15.98 | 419.75 | 435.73 | | 0.8 | 0.2 | | | | | | |
| 11/15/2017 | XX | GW104B39B | 150 | 8 | 8 | 11.4 | 424.33 | 435.73 | 32.6 | 0.4 | 0.2 | | | | | | |
| 6/19/2018 | XX | GW104B3B6 | 167 | 8.5 | 8 | 12.95 | 422.78 | 435.73 | | 0.8 | 0.4 | | | | | | |
| 8/14/2018 | XX | GW104B3DF | 171 | 8.1 | 9.9 | 13.38 | 422.35 | 435.73 | | 0.6 | 0.3 | | | | | | |
| 11/27/2018 | XX | GW104B3EE | 174 | 8.3 | 7.4 | 11.1 | 424.63 | 435.73 | 32.58 | 0.3 | 0.5 | | | | | | |
| 6/4/2019 | XX | GW104B3G9 | 140 | 7.8 | 8.9 | 10.97 | 424.76 | 435.73 | | 4.6 | 0.4 | | | | | | |
| 8/14/2019 | XX | GW104B3II | 140 | 8.3 | 9.3 | 14.02 | 421.71 | 435.73 | | 5.5 | 0.2 | | | | | | |
| 10/22/2019 | XX | GW104B3JH | 162 | 7.1 | 8.9 | 13.5 | 422.23 | 435.73 | | 5 | 0.3 | | | | | | |
| 6/16/2020 | XX | GW104B41C | 151 | 7.8 | 10.9 | 12.88 | 422.85 | 435.73 | | 3.4 | 0.4 | | | | | | |
| 8/4/2020 | XX | GW104B441 | 124 | 7.1 | 10 | 15.7 | 420.03 | 435.73 | | 2.2 | 0.3 | | | | | | |
| 10/20/2020 | XX | GW104B450 | 128 | 7.8 | 8.5 | 15.27 | 420.46 | 435.73 | 32.65 | 1.5 | 0.3 | | | | | | |
| 6/22/2021 | XX | GW104B46F | 125 | 7.1 | 10.4 | 14.13 | 421.6 | 435.73 | | 1.4 | 0.1 | | | | | | |
| 9/21/2021 | XX | GW104B48A | 126 | 7.5 | 8.7 | 15.3 | 420.43 | 435.73 | 32.6 | 0.5 | 0.1 | | | | | | |
| **107A** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 107AXX36649 | 1263 | 6.69 | 4.4 | | 352.78 | | | | | | | | | | |
| 8/10/2000 | XX | 107AXX36748 | 987 | 6.5 | 7 | | 350.44 | | 22.19 | 0.51 | 0.2 | | | | | | |
| 11/9/2000 | XX | 107AXX36839 | 807 | 6.76 | 9 | | 350.66 | | | 0.53 | 0.3 | | | | | | |
| 5/16/2001 | XX | 107AXX37027 | 1083 | 6.58 | 7.1 | | 351.59 | | | 0.4 | 0.1 | | | | | | |
| 8/1/2001 | XX | 107AXX37104 | 1948 | 6.41 | 12.4 | | 349.87 | | 22.31 | 0.8 | 0.1 | | | | | | |
| 10/24/2001 | XX | 107AXX37188 | 2620 | 6.63 | 11 | | 350.19 | | | 0.8 | 0.3 | | | | | | |
| 5/22/2002 | XX | 107AXX37398 | 2520 | 6.77 | 10.5 | | 352.06 | | | 0.7 | 0.6 | | | | | | |
| 8/2/2002 | XX | 107AXX37470 | 2710 | 6.52 | 12.4 | | 350.61 | | 22.31 | 0.4 | 0.3 | | | | | | |
| 10/23/2002 | XX | 107AXX37552 | 2230 | 6.79 | 9.9 | | 350.68 | | | 0.5 | 0.3 | | | | | | |
| 6/24/2003 | XX | 107AXX37796 | 2220 | 6.56 | 10.6 | | 351.52 | | | 0.3 | 0.2 | | | | | | |
| 8/13/2003 | XX | 107AXX37846 | 2150 | 6.59 | 11.6 | | 351.32 | | 22.19 | 0.5 | 0.22 | | | | | | |
| 10/16/2003 | XX | 107AXX37910 | 1967 | 6.66 | 10 | | 351.89 | | | 0.7 | 0.34 | | | | | | |
| 5/13/2004 | XX | 107AXX38120 | 1042 | 6.82 | 4.5 | | 351.91 | | | 1.2 | 0.44 | | | | | | |
| 8/2/2004 | XX | 107AXX38201 | 835 | 6.89 | 13 | | 350.94 | | 22.24 | 0.7 | 0.22 | | | | | | |
| 10/19/2004 | XX | 107AXX38279 | 897 | 6.92 | 11.6 | | 350.74 | | | 0.5 | 0.49 | | | | | | |
| 5/10/2005 | XX | GW107A006 | 1305 | 6.59 | 8.6 | 2.87 | 353.22 | 356.09 | | 0.9 | 0.3 | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(107A)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/27/2005 | XX | GW107A01I | 1375 | 6.4 | 11.6 | 5.23 | 350.86 | 356.09 | 22.23 | 1.5 | 0.3 |
| 10/27/2005 | XX | GW107A03A | 1178 | 6.5 | 9.5 | 2.78 | 353.31 | 356.09 | | 0.5 | 0.4 |
| 5/3/2006 | XX | GW107A086 | 697 | 6.75 | 6.5 | | 352.57 | | | 0.8 | 0.42 |
| 8/1/2006 | XX | GW107A06E | 597 | 6.79 | 12.7 | | 351.44 | | 22.03 | 0.6 | 0.5 |
| 10/25/2006 | XX | GW107A052 | 562 | 6.8 | 10.2 | | 351.91 | | | 0.1 | 0.6 |
| 5/8/2007 | XX | GW107A09I | 526 | 6.78 | 6.8 | | 352.89 | | | 0.6 | 0.3 |
| 8/7/2007 | XX | GW107A0BB | 609 | 6.74 | 11.2 | | 350.59 | | 22.21 | 0.85 | 0.3 |
| 10/31/2007 | XX | GW107A0D3 | 843 | 6.6 | 10.3 | | 350.71 | | | 2 | 0.5 |
| 5/28/2008 | XX | GW107A0FB | 819 | 6.56 | 8.5 | | 351.61 | | | 0.4 | 0.4 |
| 8/18/2008 | XX | GW107A0HB | 699 | 6.42 | 12.2 | | 351.82 | | | 0.1 | 0.4 |
| 10/23/2008 | XX | GW107A0IJ | 615 | 6.52 | 9 | | 351.82 | | | 0.6 | 0.3 |
| 5/12/2009 | XX | GW107A10J | 503 | 6.43 | 8.6 | 3.58 | 352.51 | 356.09 | | 0.58 | 0.1 |
| 8/11/2009 | XX | GW107A12J | 555 | 5.98 | 12.3 | 3.93 | 352.16 | 356.09 | | 0.39 | 1.5 |
| 10/26/2009 | XX | GW107A147 | 616 | 6.62 | 8.9 | 4.44 | 351.65 | 356.09 | | 0.1 | 0.6 |
| 6/2/2010 | XX | GW107A168 | 520 | 6.79 | 9.5 | | 351.06 | | | 0.59 | 0.27 |
| 8/5/2010 | XX | GW107A189 | 600 | 6.28 | 12.2 | | 349.97 | | | 0.31 | 0.4 |
| 10/18/2010 | XX | GW107A19H | 961 | 6.4 | 10.6 | | 350.97 | | | 0.11 | 0.28 |
| 5/18/2011 | XX | GW107A1D8 | 970 | 6.2 | 12.2 | 2.9 | 353.19 | 356.09 | 22.1 | 1 | 0 |
| 8/9/2011 | XX | GW107A1EJ | 800 | 6.33 | 15.1 | 5.74 | 350.35 | 356.09 | 22.04 | 1 | 0.4 |
| 11/2/2011 | XX | GW107A1GA | 713 | 6.5 | 6.1 | 4.52 | 351.57 | 356.09 | 22.23 | 1 | 0.6 |
| 5/17/2012 | XX | GW107A1I4 | 813 | 6.5 | 10.1 | 3.28 | 352.81 | 356.09 | 22.04 | 1 | 0 |
| 8/14/2012 | XX | GW107A1JH | 890 | 6.2 | 17.5 | 6.04 | 350.05 | 356.09 | | 1 | 0.4 |
| 10/31/2012 | XX | GW107A21B | 1117 | 6.7 | 13.1 | 3.66 | 352.43 | 356.09 | 22.2 | 1 | 0 |
| 5/21/2013 | XX | GW107A235 | 1301 | 6.5 | 10.8 | 4.44 | 351.65 | 356.09 | | 0.8 | 0.1 |
| 7/22/2013 | XX | GW107A24J | 1080 | 6.5 | 15.3 | 5.2 | 350.89 | 356.09 | | 0.8 | 0.2 |
| 10/1/2013 | XX | GW107A26D | 925 | 6.6 | 17.4 | 5.79 | 350.3 | 356.09 | 22.23 | 1 | 0.5 |
| 6/4/2014 | XX | GW107A287 | 477 | 7 | 10.3 | 4.4 | 351.69 | 356.09 | | 0.8 | 0.8 |
| 8/19/2014 | XX | GW107A2A1 | 787 | 6.8 | 15.9 | 5.53 | 350.56 | 356.09 | | 0.6 | 0.6 |
| 11/12/2014 | XX | GW107A2BF | 999 | 6.7 | 8.2 | 4.5 | 351.59 | 356.09 | 22.02 | 0.8 | 0.6 |
| 6/3/2015 | XX | GW107A2DB | 773 | 6.7 | 8.1 | 3.7 | 352.39 | 356.09 | | 0.6 | 0.3 |
| 9/2/2015 | XX | GW107A2F6 | 1118 | 6.6 | 15.8 | 4.95 | 351.14 | 356.09 | | 0.7 | 0.3 |
| 11/4/2015 | XX | GW107A2H0 | 1246 | 6.7 | 9.4 | 3.92 | 352.17 | 356.09 | 22.04 | 0.9 | 0.7 |
| 6/15/2016 | XX | GW107A30A | 655 | 6.6 | 10.4 | 4.66 | 351.43 | 356.09 | | 0.5 | 0.6 |
| 9/20/2016 | XX | GW107A324 | 627 | 6.8 | 14.6 | 6.55 | 349.54 | 356.09 | | 0.4 | 0.4 |
| 11/8/2016 | XX | GW107A33I | 816 | 6.7 | 11.3 | 6.04 | 350.05 | 356.09 | 22.22 | 0.2 | 0.5 |
| 6/14/2017 | XX | GW107A35D | 1271 | 6.5 | 9.5 | 4.51 | 351.58 | 356.09 | | 0.4 | 3.1 |
| 8/29/2017 | XX | GW107A377 | 1543 | 6.7 | 12.9 | 6.35 | 349.74 | 356.09 | | 0.5 | 0.3 |
| 11/15/2017 | XX | GW107A391 | 1415 | 6.7 | 9.6 | 4.65 | 351.44 | 356.09 | 22.22 | 0.6 | 0.5 |
| 6/19/2018 | XX | GW107A3AG | 896 | 7 | 10.1 | 5.2 | 350.89 | 356.09 | | 0.3 | 1.3 |
| 8/16/2018 | XX | GW107A3D5 | 1258 | 7.2 | 11.8 | 5.28 | 350.81 | 356.09 | | 0.6 | 0.5 |
| 11/28/2018 | XX | GW107A3E4 | 1038 | 7.3 | 6.9 | 5.28 | 350.81 | 356.09 | 22.22 | 0.4 | 0.5 |
| 6/5/2019 | XX | GW107A3FJ | 653 | 7.2 | 11.1 | 3.74 | 352.35 | 356.09 | | 0.1 U | 0.4 |
| 8/14/2019 | XX | GW107A3I8 | 1000 | 6.9 | 13.5 | 5.43 | 350.66 | 356.09 | | 3.5 | 0.4 |
| 10/23/2019 | XX | GW107A3J7 | 914 | 7.1 | 9.6 | 6.86 | 349.23 | 356.09 | | 0.5 | 0.8 |
| 6/17/2020 | XX | GW107A412 | 565 | 7 | 12.7 | 6.95 | 349.14 | 356.09 | | 0.5 | 0.6 |
| 8/4/2020 | XX | GW107A43B | 760 | 6.7 | 14.7 | 6.16 | 349.93 | 356.09 | | 0.7 | 0.5 |
| 10/22/2020 | XX | GW107A44A | 1190 | 7 | 11 | 5.19 | 350.9 | 356.09 | 22.22 | 0.9 | 0.6 |
| 6/22/2021 | XX | GW107A465 | 972 | 6.9 | 14.7 | 5.46 | 350.63 | 356.09 | | 0.4 | 0.2 |
| 9/21/2021 | XX | GW107A480 | 1352 | 6.8 | 13.2 | 5.12 | 350.97 | 356.09 | 22.23 | 0.4 | 0.8 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(113)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **113** | | | | | | | | | | | |
| 4/27/2000 | XX | 113XX36643 | 1216 | 6.73 | 3.2 | | 393 | | | | |
| 8/1/2000 | XX | 113XX36739 | 1439 | 6.43 | 9 | | 391.58 | | 21.44 | 0.6 | 0.7 |
| 11/8/2000 | XX | 113XX36838 | 1241 | 6.48 | 8 | | 391.46 | | | 0.54 | 0.5 |
| 5/8/2001 | XX | 113XX37019 | 1278 | 6.4 | 7.5 | | 392.46 | | | 0.6 | 0.9 |
| 7/24/2001 | XX | 113XX37096 | 1338 | 6.4 | 11.3 | | 391.11 | | 21.47 | 0.7 | 1.68 |
| 10/16/2001 | XX | 113XX37180 | 1348 | 6.36 | 9.4 | | 390.77 | | | 0.9 | 0.54 |
| 5/15/2002 | XX | 113XX37391 | 1279 | 6.36 | 5.4 | | 392.67 | | | 0.9 | 0.27 |
| 7/31/2002 | XX | 113XX37468 | 1504 | 6.37 | 11.1 | | 391.73 | | 21.28 | 0.4 | 2.67 |
| 10/18/2002 | XX | 113XX37547 | 1465 | 6.4 | 8.9 | | 391.04 | | | 0.5 | 0.5 |
| 6/18/2003 | XX | 113XX37790 | 1442 | 6.4 | 7.5 | | 392.44 | | | 0.3 | 0.75 |
| 8/6/2003 | XX | 113XX37839 | 1448 | 6.42 | 10 | | 392.28 | | 21.44 | 0.5 | 1.32 |
| 10/6/2003 | XX | 113XX37900 | 1453 | 6.38 | 9.5 | | 392.49 | | | 1.3 | 0.5 |
| 5/12/2004 | XX | 113XX38119 | 1411 | 6.48 | 6.4 | | 392.44 | | | 0.6 | 0.46 |
| 8/19/2004 | XX | 113XX38218 | 1396 | 6.32 | 9.6 | | 391.94 | | 21.46 | 2.1 | 1.62 |
| 10/18/2004 | XX | 113XX38278 | 1326 | 6.4 | 8.9 | | 391.6 | | | 0.7 | 0.87 |
| 5/24/2005 | XX | GW113X008 | 1106 | 6.43 | 5.7 | 4.03 | 392.59 | 396.62 | | 0.7 | 0.6 |
| 8/17/2005 | XX | GW113X020 | 1279 | 6.3 | 6.8 | 5.26 | 391.36 | 396.62 | 21.46 | 0.8 | 1.1 |
| 10/13/2005 | XX | GW113X03C | 1275 | 6.15 | 6.1 | 4.21 | 392.41 | 396.62 | | 0.7 | 0.6 |
| 5/15/2006 | XX | GW113X088 | 1201 | 6.4 | 6.1 | | 392.64 | | | 1.3 | 0.66 |
| 8/7/2006 | XX | GW113X06G | 1244 | 6.34 | 10.7 | | 392.22 | | 21.42 | 1.2 | 2.5 |
| 10/11/2006 | XX | GW113X054 | 1240 | 6.38 | 9.4 | | 391.33 | | | 0.2 | 0.6 |
| 5/22/2007 | XX | GW113X0A0 | 1131 | 6.4 | 6.2 | | 392.66 | | | 0.1 | 0.4 |
| 8/21/2007 | XX | GW113X0BD | 1224 | 6.32 | 8.9 | | 390.9 | | 21.45 | 0.1 | 0.9 |
| 11/1/2007 | XX | GW113X0D5 | 1182 | 6.43 | 9.2 | | 391.97 | | | 0.6 | 0.6 |
| 5/28/2008 | XX | GW113X0FD | 1212 | 6.33 | 8.3 | | 392.21 | | | 0.1 | 0.9 |
| 8/26/2008 | XX | GW113X0HD | 1236 | 6.41 | 9.9 | | 392.23 | | | 0.1 | 0.6 |
| 10/28/2008 | XX | GW113X0J1 | 1209 | 6.26 | 9.2 | | 392.23 | | | 0.2 | 0.8 |
| 5/18/2009 | XX | GW113X111 | 1112 | 6.32 | 6.1 | 4.12 | 392.5 | 396.62 | | 0.1 | 0.8 |
| 8/17/2009 | XX | GW113X131 | 1154 | 6.08 | 10.7 | 4.35 | 392.27 | 396.62 | | 0.1 | 1.3 |
| 10/29/2009 | XX | GW113X149 | 1178 | 6.26 | 8.3 | 4.12 | 392.5 | 396.62 | | 0.1 | 1 |
| 6/10/2010 | XX | GW113X16A | 1121 | 6.24 | 7.6 | | 391.23 | | | 0.1 | 0.68 |
| 8/19/2010 | XX | GW113X18B | 1139 | 6.1 | 10.2 | | 390.15 | | | 0.33 | 0.53 |
| 10/26/2010 | XX | GW113X19J | 1118 | 6.14 | 9.5 | | 392.07 | | | 0.1 | 0.47 |
| 11/4/2011 | XX | GW113X1I3 | 1105 | 6.3 | 7.8 | 4.19 | 392.43 | 396.62 | 21.5 | 1 | 0.7 |
| 5/17/2012 | XX | GW113X1JG | 972 | 6.4 | 8.5 | 4.02 | 392.6 | 396.62 | 21.3 | 1 | 0 |
| 8/14/2012 | XX | GW113X219 | 1000 | 6 | 14.4 | 4.92 | 391.7 | 396.62 | | 3 | 1.8 |
| 10/31/2012 | XX | GW113X233 | 1015 | 6.5 | 12.1 | 3.8 | 392.82 | 396.62 | 21.45 | 1 | 0 |
| 5/22/2013 | XX | GW113X24H | 988 | 6 | 8.6 | 4.22 | 392.4 | 396.62 | | 1 | 0.4 |
| 7/25/2013 | XX | GW113X26B | 1001 | 6.2 | 11.7 | 4.43 | 392.19 | 396.62 | | 1 | 0 |
| 10/3/2013 | XX | GW113X285 | 985 | 6.4 | 11 | 4.4 | 392.22 | 396.62 | 21.43 | 1 | 0.2 |
| 6/6/2014 | XX | GW113X29J | 925 | 6.4 | 9.4 | 4.2 | 392.42 | 396.62 | | 1 | 0.5 |
| 8/22/2014 | XX | GW113X2BD | 936 | 6.7 | 12.1 | 5.01 | 391.61 | 396.62 | | 1 | 0.3 |
| 11/14/2014 | XX | GW113X2D7 | 924 | 6.6 | 7.7 | 4.05 | 392.57 | 396.62 | 21.49 | 1 | 0.5 |
| 6/5/2015 | XX | GW113X2F3 | 1049 | 6.4 | 8.7 | 4.03 | 392.59 | 396.62 | | 1.2 | 0.4 |
| 9/2/2015 | XX | GW113X2GI | 972 | 6.9 | 11.2 | 4.64 | 391.98 | 396.62 | | 1 | 0.2 |
| 11/5/2015 | XX | GW113X2IC | 929 | 6.1 | 8.9 | 4.05 | 392.57 | 396.62 | 21.49 | 0.7 | 0.2 |
| 6/13/2016 | XX | GW113X322 | 989 | 6.2 | 8.5 | 4.37 | 392.25 | 396.62 | | 0.6 | 0.5 |
| 9/19/2016 | XX | GW113X33G | 950 | 6.7 | 12.5 | 6.44 | 390.18 | 396.62 | | 0.6 | 0.3 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (113) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/7/2016 | XX | GW113X35A | 948 | 6.5 | 8.7 | 6.42 | 390.2 | 396.62 | 21.48 | 0.6 | 0.2 |
| 6/12/2017 | XX | GW113X375 | 924 | 6.4 | 9.8 | 4.19 | 392.43 | 396.62 | | 0.1 | 4.2 |
| 8/28/2017 | XX | GW113X38J | 1094 | 6.6 | 11.2 | 5.41 | 391.21 | 396.62 | | 0.8 | 0.3 |
| 11/13/2017 | XX | GW113X3AD | 1023 | 6.3 | 8.6 | 4.18 | 392.44 | 396.62 | 21.48 | 1.5 | 0.2 |
| 6/18/2018 | XX | GW113X3C8 | 1080 | 6.6 | 9.2 | 4.5 | 392.12 | 396.62 | | 1.4 | 0.3 |
| 8/13/2018 | XX | GW113X3D3 | 1262 | 6.4 | 13.9 | 4.88 | 391.74 | 396.62 | | 0.5 | 0.5 |
| 11/26/2018 | XX | GW113X3FG | A | A | A | A | A | 396.62 | | A | A |
| 6/3/2019 | XX | GW113X3HB | 910 | 7.1 | 12.2 | 4.15 | 392.47 | 396.62 | | 9.9 | 0.5 |
| 8/12/2019 | XX | GW113X3I6 | 767 | 6.9 | 15.3 | 4.39 | 392.23 | 396.62 | | 3.2 | 1.2 |
| 10/23/2019 | XX | GW113X40J | 777 | 7.3 | 10.4 | 5.34 | 391.28 | 396.62 | | 8.3 | 0.5 |
| 6/15/2020 | XX | GW113X42E | 683 | 6.9 | 11.4 | 5.4 | 391.22 | 396.62 | | 3.2 | 0.8 |
| 8/3/2020 | XX | GW113X439 | 806 | 6.8 | 19.9 | 6.05 | 390.57 | 396.62 | | 5 | 0.5 |
| 10/19/2020 | XX | GW113X462 | 998 | 6.8 | 11.5 | 5.36 | 391.26 | 396.62 | 21.5 | 7.6 | 1.7 |
| 6/21/2021 | XX | GW113X47H | 932 | 6.7 | 16 | 5.15 | 391.47 | 396.62 | | 4.3 | 1.2 |
| 9/20/2021 | XX | GW113X49C | 961 | 6.8 | 15.1 | 5.57 | 391.05 | 396.62 | 21.3 | 4.7 | 1.2 |
| **202AR** | | | | | | | | | | | |
| 4/27/2000 | XX | 202ARXX36643 | 1804 | 6.65 | 3.7 | | 413.27 | | | | |
| 8/2/2000 | XX | 202ARXX36740 | 1767 | 6.72 | 7 | | 410.84 | | 84.33 | 0.47 | 0.2 |
| 10/24/2000 | XX | 202ARXX36823 | 1739 | 6.71 | 6 | | 409.82 | | | 0.4 | 0.2 |
| 5/9/2001 | XX | 202ARXX37020 | 1912 | 6.62 | 7.2 | | 412.01 | | | 0.6 | 0.3 |
| 7/24/2001 | XX | 202ARXX37096 | 1785 | 6.58 | 10.8 | | 408.7 | | 84.25 | 0.5 | 0.2 |
| 10/16/2001 | XX | 202ARXX37180 | 1929 | 6.53 | 9.3 | | 407.89 | | | 3.1 | 0.2 |
| 5/16/2002 | XX | 202ARXX37392 | 1947 | 6.61 | 7.1 | | 413.12 | | | 1 | 0.27 |
| 7/31/2002 | XX | 202ARXX37468 | 1853 | 6.57 | 11.1 | | 410.15 | | 84.22 | 1.2 | 0.53 |
| 10/16/2002 | XX | 202ARXX37545 | 1915 | 6.63 | 7.6 | | 408.32 | | | 4 | 0.2 |
| 6/17/2003 | XX | 202ARXX37789 | 1995 | 6.59 | 8 | | 412.37 | | | 0.2 | 1.7 |
| 8/6/2003 | XX | 202ARXX37839 | 1851 | 6.61 | 10.1 | | 411.54 | | 84.07 | 0.4 | 0.43 |
| 10/8/2003 | XX | 202ARXX37902 | 1906 | 6.62 | 8.1 | | 412.43 | | | 1.7 | 0.31 |
| 4/28/2004 | XX | 202ARXX38105 | 1930 | 6.62 | 5.4 | | 412.42 | | | 2.4 | 0.22 |
| 8/11/2004 | XX | 202ARXX38210 | 1806 | 6.49 | 9.3 | | 409.4 | | 84.32 | 2.4 | 0.26 |
| 10/12/2004 | XX | 202ARXX38272 | 1786 | 6.52 | 8.2 | | 409.05 | | | 2 | 0.41 |
| 5/19/2005 | XX | GW202A009 | 1717 | 6.58 | 6.6 | 1.91 | 412.03 | 413.94 | | 3.8 | 0.2 |
| 8/4/2005 | XX | GW202A021 | 1680 | 6.56 | 5.8 | 4.22 | 409.72 | 413.94 | 84.25 | 0.6 | 0.4 |
| 10/25/2005 | XX | GW202A03D | 1781 | 6.57 | 7.8 | 1.47 | 412.47 | 413.94 | | 0.3 | 0.3 |
| 5/9/2006 | XX | GW202A089 | 1687 | 6.56 | 6.4 | | 411.62 | | | 1.4 | 0.49 |
| 7/25/2006 | XX | GW202A06H | 1680 | 6.52 | 10.5 | | 411.02 | | 84.05 | 0.6 | 0.4 |
| 10/19/2006 | XX | GW202A055 | 1686 | 6.64 | 8.7 | | 411.36 | | | 0.1 | 0.4 |
| 5/10/2007 | XX | GW202A0A1 | 1673 | 6.53 | 8.3 | | 411.23 | | | 0.2 | 0.6 |
| 8/6/2007 | XX | GW202A0BE | 1669 | 6.49 | 9.6 | | 408.42 | | 84.25 | 0.1 | 0.4 |
| 10/25/2007 | XX | GW202A0D6 | 1746 | 6.57 | 8 | | 410.46 | | | 0.4 | 0.5 |
| 5/29/2008 | XX | GW202A0FE | 1656 | 6.64 | 6.7 | | 410.63 | | | 0.1 | 0.4 |
| 8/12/2008 | XX | GW202A0HE | 1713 | 6.54 | 10.4 | | 411.72 | | | 0.1 | 0.7 |
| 10/16/2008 | XX | GW202A0J2 | 1595 | 6.54 | 8.6 | | 411.72 | | | 1.4 | 0.5 |
| 5/4/2009 | XX | GW202A112 | 1693 | 6.46 | 7 | 2.64 | 411.3 | 413.94 | | 0.3 | 0.2 |
| 8/5/2009 | XX | GW202A132 | 1689 | 6.06 | 10.7 | 2.14 | 411.8 | 413.94 | | 0.2 | 0.5 |
| 10/20/2009 | XX | GW202A14A | 1643 | 6.34 | 7.5 | 3.6 | 410.34 | 413.94 | | 0.1 | 0.4 |
| 5/26/2010 | XX | GW202A16B | 1577 | 6.33 | 9.4 | | 409.66 | | | 5.56 | 0.25 |
| 8/2/2010 | XX | GW202A18C | 1628 | 6.33 | 10.1 | | 407.83 | | | 0.42 | 0.54 |
| 10/12/2010 | XX | GW202A1A0 | 1693 | 6.44 | 8.4 | | 410.31 | | | 0.42 | 0.42 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (202AR) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/17/2011 | XX | GW202A1DJ | 1515 | 6.5 | 6.2 | 2.04 | 411.9 | 413.94 | 84.08 | 1 | 0.7 |
| 8/10/2011 | XX | GW202A1FA | 1602 | 6.43 | 11.3 | 5.97 | 407.97 | 413.94 | 84.1 | 1 | 0.2 |
| 11/3/2011 | XX | GW202A1H1 | 1648 | 6.5 | 7.8 | 2.98 | 410.96 | 413.94 | 84.25 | 1 | 0.2 |
| 5/16/2012 | XX | GW202A1IF | 1527 | 6.5 | 9.8 | 2.53 | 411.41 | 413.94 | 84.06 | 0.6 | 0 |
| 8/15/2012 | XX | GW202A208 | 1524 | 6.5 | 12.1 | 6.35 | 407.59 | 413.94 | | 0.4 | 0.2 |
| 10/31/2012 | XX | GW202A222 | 1546 | 6.7 | 12.1 | 2.1 | 411.84 | 413.94 | 84.3 | 0.4 | 0 |
| 5/20/2013 | XX | GW202A23G | 1579 | 6.6 | 8.8 | 3.65 | 410.29 | 413.94 | | 1 | 0.3 |
| 7/23/2013 | XX | GW202A25A | 1540 | 6.5 | 12.3 | 5.29 | 408.65 | 413.94 | | 1 | 0.2 |
| 10/2/2013 | XX | GW202A274 | 1514 | 6.7 | 11.2 | 4.24 | 409.7 | 413.94 | 84.29 | 0.3 | 0.2 |
| 6/3/2014 | XX | GW202A28I | 1496 | 6.5 | 11.3 | 4.3 | 409.64 | 413.94 | | 1 | 1.3 |
| 8/19/2014 | XX | GW202A2AC | 1459 | 6.8 | 11.3 | 5.96 | 407.98 | 413.94 | | 0.8 | 0.1 |
| 11/12/2014 | XX | GW202A2C6 | 1437 | 6.7 | 7.5 | 3.11 | 410.83 | 413.94 | 84.18 | 1 | 0.2 |
| 6/2/2015 | XX | GW202A2E2 | 1654 | 6.5 | 7 | 3.48 | 410.46 | 413.94 | | 0.4 | 0.3 |
| 9/2/2015 | XX | GW202A2FH | 1429 | 6.5 | 12.1 | 5.44 | 408.5 | 413.94 | | 0.5 | 0.05 U |
| 11/3/2015 | XX | GW202A2HB | 1475 | 6.5 | 7.9 | 3.35 | 410.59 | 413.94 | 84.3 | 0.1 | 0.2 |
| 6/14/2016 | XX | GW202A311 | 1433 | 6.4 | 10.9 | 4.52 | 409.42 | 413.94 | | 0.7 | 1.5 |
| 9/22/2016 | XX | GW202A32F | 1458 | 6.5 | 10.1 | 8.87 | 405.07 | 413.94 | | 0.8 | 0.5 |
| 11/9/2016 | XX | GW202A349 | 1460 | 6.5 | 8.6 | 9.12 | 404.82 | 413.94 | 84.2 | 0.1 | 0.1 |
| 6/13/2017 | XX | GW202A364 | 1400 | 6.6 | 10.3 | 4.33 | 409.61 | 413.94 | | 3 | 0.8 |
| 8/30/2017 | XX | GW202A37I | 1435 | 6.4 | 9.4 | 7.45 | 406.49 | 413.94 | | 0.3 | 0.8 |
| 11/16/2017 | XX | GW202A39C | 1394 | 6.8 | 7.4 | 7.56 | 406.38 | 413.94 | 84.2 | 0.6 | 0.5 |
| 6/20/2018 | XX | GW202A3B7 | 1586 | 6.7 | 9.6 | 4.96 | 408.98 | 413.94 | | 0.5 | 0.3 |
| 8/14/2018 | XX | GW202A3DG | 1570 | 6.6 | 10.5 | 5.54 | 408.4 | 413.94 | | 0.3 | 0.1 |
| 11/27/2018 | XX | GW202A3EF | F | F | F | F | F | 413.94 | | F | F |
| 6/4/2019 | XX | GW202A3GA | 1418 | 6.6 | 9 | 3.93 | 410.01 | 413.94 | | 2.8 | 1.2 |
| 8/13/2019 | XX | GW202A3IJ | 1403 | 6.6 | 11.6 | 5.72 | 408.22 | 413.94 | | 1.6 | 0.3 |
| 10/24/2019 | XX | GW202A3JI | 1410 | 6.9 | 8 | 4.13 | 409.81 | 413.94 | | 0.4 | 0.2 |
| 6/16/2020 | XX | GW202A41D | 1273 | 6.6 | 9 | 5.25 | 408.69 | 413.94 | | 0.5 | 0.6 |
| 8/5/2020 | XX | GW202A442 | 1272 | 6.5 | 11 | 7.5 | 406.44 | 413.94 | | 0.4 | 0.4 |
| 10/22/2020 | XX | GW202A451 | 1276 | 6.8 | 9.3 | 4.65 | 409.29 | 413.94 | 84.32 | 1.5 | 0.5 |
| 6/23/2021 | XX | GW202A46G | 1276 | 6.6 | 8.9 | 6 | 407.94 | 413.94 | | 1.1 | 0.2 |
| 9/23/2021 | XX | GW202A48B | 1298 | 6.5 | 11.4 | 3.51 | 410.43 | 413.94 | 84.2 | 0.3 | 0.3 |
| **202B & 202BR** | | | | | | | | | | | |
| 4/27/2000 | XX | 202BXX36643 | 929 | 6.68 | 3.6 | | 409.98 | | | | |
| 8/2/2000 | XX | 202BXX36740 | 1566 | 6.55 | 9 | | 407.94 | | 12.15 | 0.4 | 2.4 |
| 10/24/2000 | XX | 202BXX36823 | 1910 | 6.59 | 8 | | 407.42 | | | 0.4 | 3.9 |
| 5/9/2001 | XX | 202BXX37020 | 1298 | 6.45 | 6.8 | | 409.11 | | | 0.4 | 9 |
| 7/25/2001 | XX | 202BXX37097 | 1875 | 6.49 | 12.3 | | 405.94 | | 12.13 | 0.6 | 4.42 |
| 10/16/2001 | XX | 202BXX37180 | 1548 | 6.61 | 11.1 | | 405.25 | | | 0.6 | 1.75 |
| 5/16/2002 | XX | 202BXX37392 | 1207 | 6.39 | 6.2 | | 410.08 | | | 1.4 | 0.76 |
| 7/31/2002 | XX | 202BXX37468 | 1661 | 6.42 | 12.8 | | 407.4 | | 12.13 | 0.4 | 3.31 |
| 10/16/2002 | XX | 202BXX37545 | 1576 | 6.68 | 9.4 | | 405.64 | | | 0.7 | 8.1 |
| 6/17/2003 | XX | 202BXX37789 | 1285 | 6.53 | 8.1 | | 409.24 | | | 0.3 | 4.7 |
| 8/6/2003 | XX | 202BXX37839 | 1394 | 6.52 | 12.8 | | 408.58 | | 12.15 | 0.4 | 1.21 |
| 10/8/2003 | XX | 202BXX37902 | 1648 | 6.48 | 10.6 | | 409.36 | | | 0.7 | 3.42 |
| 4/28/2004 | XX | 202BXX38105 | 1200 | 6.54 | 5.5 | | 409.25 | | | 1.7 | 1.91 |
| 8/11/2004 | XX | 202BXX38210 | 1732 | 6.42 | 12.1 | | 406.54 | | 12.14 | 1.1 | 1.6 |
| 10/12/2004 | XX | 202BXX38272 | 1828 | 6.45 | 10 | | 406.24 | | | 0.7 | 2.61 |
| 5/19/2005 | XX | GW202B00A | 883 | 6.53 | 6.2 | 5.49 | 408.87 | 414.36 | | 0.8 | 6.4 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(202B & 202BR)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/4/2005 | XX | GW202B022 | 1300 | 6.45 | 8.1 | 7.42 | 406.94 | 414.36 | 11.37 Z3 | 1.2 | 19.1 |
| 10/25/2005 | XX | GW202B03E | 1345 | 6.5 | 9.2 | 5.01 | 409.35 | 414.36 | | 0.7 | 48.9 |
| 5/9/2006 | XX | GW202B08A | 917 | 6.57 | 5.4 | | 408.59 | | | 0.9 | 49.2 |
| 7/25/2006 | XX | GW202B06I | 1066 | 6.42 | 12.3 | | 408.08 | | 11.24 | 1.1 | 35.3 |
| 10/19/2006 | XX | GW202B056 | 1399 | 6.52 | 10.1 | | 408.49 | | | 0.3 | 35.4 |
| 5/10/2007 | XX | GW202B0A2 | 865 | 6.52 | 6.6 | | 408.17 | | | 0.1 | 29.1 |
| 8/6/2007 | XX | GW202B0BF | 1377 | 6.7 | 12.5 | | 405.83 | | 11.41 | 6.29 | 48.7 |
| 10/25/2007 | XX | GW202B0D7 | 1214 | 6.6 | 9.7 | | 407.76 | | | 0.6 | 7.5 |
| 5/29/2008 | XX | GW202B0FF | 822 | 6.64 | 6.9 | | 407.48 | | | 0.6 | 9.4 |
| 8/26/2008 | XX | GW202B0HF | 880 | 6.48 | 13 | | 408.6 | | | 0.3 | 12.6 |
| 10/16/2008 | XX | GW202B0J3 | 1153 | 6.4 | 10.4 | | 408.6 | | | 0.8 | 23.7 |
| 5/4/2009 | XX | GW202B113 | 822 | 6.41 | 6 | 6.46 | 407.9 | 414.36 | | 0.48 | 27.4 |
| 8/5/2009 | XX | GW202B133 | 864 | 5.96 | 13.4 | 5.92 | 408.44 | 414.36 | | 0.41 | 28.2 |
| 10/20/2009 | XX | GW202B14B | 1255 | 6.18 | 8.9 | 7.1 | 407.26 | 414.36 | | 0.1 | 64.7 |
| 5/26/2010 | XX | GW202B16C | 912 | 6.56 | 9.4 | | 406.55 | | | 0.19 | 11.6 |
| 8/2/2010 | XX | GW202B18D | 1260 | 6.33 | 12.8 | | 404.85 | | | 0.66 | 3.88 |
| 10/12/2010 | XX | GW202B1A1 | 867 | 6.5 | 10.7 | | 407.29 | | | 0.98 | 3.31 |
| 5/17/2011 | XX | GW202B1E0 | 650 | 6.5 | 5.5 | 5.62 | 408.74 | 414.36 | 11.25 | 1 | 4.1 |
| 8/10/2011 | XX | GW202B1FB | 1290 | 6.37 | 13.6 | 9.16 | 405.2 | 414.36 | 11.25 | 1 | 3 |
| 11/3/2011 | XX | GW202B1H2 | 886 | 6.5 | 9.3 | 6.65 | 407.71 | 414.36 | 11.5 | 1 | 1.2 |
| 5/16/2012 | XX | GW202B1IG | 710 | 6.5 | 8.8 | 6.1 | 408.26 | 414.36 | 11.27 | 0.4 | 6 |
| 8/15/2012 | XX | GW202B209 | 1125 | 6.4 | 15.4 | 9.5 | 404.86 | 414.36 | | 0.6 | 0.6 |
| 10/31/2012 | XX | GW202B223 | 807 | 6.7 | 12.8 | 5.56 | 408.8 | 414.36 | 11.53 | 0.6 | 0 |
| 5/20/2013 | XX | GW202B23H | 751 | 6.6 | 8.5 | 7.02 | 407.34 | 414.36 | | 4 | 11.1 |
| 7/23/2013 | XX | GW202B25B | 853 | 6.4 | 13.4 | 8.76 | 405.6 | 414.36 | | 2 | 2.9 |
| 10/2/2013 | XX | GW202B275 | 973 | 6.7 | 13.8 | 7.31 | 407.05 | 414.36 | 11.48 | 0.8 | 0.2 |
| 6/3/2014 | XX | GW202B28J | 842 | 6.6 | 10.6 | 7.92 | 406.44 | 414.36 | | 2 | 5.3 |
| 8/19/2014 | XX | GW202B2AD | 1162 | 6.7 | 12.9 | 9.15 | 405.21 | 414.36 | | 0.8 | 0.3 |
| 11/12/2014 | XX | GW202B2C7 | 1162 | 6.6 | 8 | 6.6 | 407.76 | 414.36 | 11.42 | 2 | 0.2 |
| 6/2/2015 | XX | GW202B2E3 | 793 | 6.6 | 7.8 | 6.65 | 407.71 | 414.36 | | 0.3 | 0.1 |
| 9/2/2015 | XX | GW202B2FI | 1209 | 6.5 | 16.1 | 8.64 | 405.72 | 414.36 | | 0.9 | 0.2 |
| 11/3/2015 | XX | GW202B2HC | 1028 | 6.5 | 8.8 | 6.6 | 407.76 | 414.36 | 11.5 | 0.4 | 0.1 |
| 6/14/2016 | XX | GW202B312 | 778 | 6.3 | 9 | 8.13 | 406.23 | 414.36 | | 0.2 | 11.3 |
| 9/22/2016 | XX | GW202B32G | I | I | I | I | I | 414.36 | | I | I |
| 11/9/2016 | XX | GW202B34A | I | I | I | 11.03 | 403.33 | 414.36 | 11.52 | I | I |
| 6/13/2017 | XX | GW202B365 | 847 | 6.6 | 13.1 | 7.92 | 406.44 | 414.36 | | 1 | 7.4 |
| 8/30/2017 | XX | GW202B37J | I | I | I | I | I | 414.36 | | I | I |
| 11/16/2017 | XX | GW202B39D | 1108 | 6.6 | 8 | 7.4 | 406.96 | 414.36 | 11.52 | 0.6 | 0.3 |
| 6/20/2018 | XX | GW202B3B8 | 840 | 6.7 | 14.3 | 8.6 | 405.76 | 414.36 | | 1.2 | 2.5 |
| 8/14/2018 | XX | GW202B3DH | 713 | 6.6 | 17.2 | 9.1 | 405.26 | 414.36 | | 1.6 | 2.4 |
| 11/27/2018 | XX | GW202B3EG | 1369 | 7 | 5.4 | 7.26 | 407.1 | 414.36 | 11.52 | 0.2 | 0.5 |
| 6/4/2019 | XX | GW202B3GB | 604 | 6.7 | 9.7 | 7.59 | 406.77 | 414.36 | | 2.4 | 2.3 |
| 8/13/2019 | XX | GW202B3J0 | 949 | 6.6 | 15.5 | 9.31 | 405.05 | 414.36 | | 3.5 | 0.8 |
| 10/24/2019 | XX | GW202B3JJ | 917 | 6.9 | 9 | 7.56 | 406.8 | 414.36 | | 0.6 | 0.3 |
| 6/16/2020 | XX | GW202B41E | ! | ! | ! | ! | ! | 414.36 | | ! | ! |
| 8/5/2020 | XX | GW202B443 | ! | ! | ! | ! | ! | 414.36 | | ! | ! |
| 10/22/2020 | XX | GW202B452 | ! | ! | ! | ! | ! | 414.36 | | ! | ! |
| 6/23/2021 | XX | GW202B46H | ! | ! | ! | ! | ! | 414.36 | | ! | ! |
| 9/23/2021 | XX | GW202B48C | 1431 | 6.4 | 13.1 | 6.16 | | | 14.6 | 0.7 | 1.2 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(205A)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **205A** | | | | | | | | | | | |
| 4/27/2000 | XX | 205AXX36643 | 553 | 7.16 | 4 | | 414.67 | | | | |
| 8/2/2000 | XX | 205AXX36740 | 692 | 7.06 | 9 | | 411.86 | | 34.92 | 0.57 | 0.3 |
| 10/25/2000 | XX | 205AXX36824 | 541 | 7.1 | 6 | | 411.33 | | | 0.7 | 0.2 |
| 5/9/2001 | XX | 205AXX37020 | 660 | 7.02 | 7.8 | | 413.35 | | | 0.8 | 0.2 |
| 7/25/2001 | XX | 205AXX37097 | 601 | 7.04 | 11 | | 409.62 | | 34.89 | 1 | 0.1 |
| 10/17/2001 | XX | 205AXX37181 | 570 | 7.08 | 9.6 | | 410.25 | | | 2.9 | 0.18 |
| 5/15/2002 | XX | 205AXX37391 | 906 | 6.92 | 6.4 | | 414.43 | | | 0.9 | 0.17 |
| 8/1/2002 | XX | 205AXX37469 | 764 | 6.88 | 10.6 | | 411.26 | | 35.71 | 0.8 | 0.29 |
| 10/16/2002 | XX | 205AXX37545 | 758 | 6.88 | 8.2 | | 410.36 | | | 0.6 | 0.2 |
| 6/19/2003 | XX | 205AXX37791 | 994 | 6.94 | 8.5 | | 413.62 | | | 0.4 | 0.5 |
| 8/20/2003 | XX | 205AXX37853 | 758 | 6.97 | 10.7 | | 412.11 | | 34.96 | 0.5 | 0.36 |
| 10/9/2003 | XX | 205AXX37903 | 746 | 7 | 10 | | 413.66 | | | 0.8 | 0.29 |
| 4/27/2004 | XX | 205AXX38104 | 852 | 7.06 | 5.2 | | 413.89 | | | 2.3 | 0.25 |
| 8/12/2004 | XX | 205AXX38211 | 713 | 6.8 | 11.6 | | 411.35 | | 34.94 | 1 | 0.35 |
| 10/14/2004 | XX | 205AXX38274 | 686 | 6.88 | 8.2 | | 411.07 | | | 1.1 | 0.19 |
| 5/17/2005 | XX | GW205A00B | 901 | 7 | 6.5 | 5.62 | 414.45 | 420.07 | | 0.7 | 0.2 |
| 8/4/2005 | XX | GW205A023 | 966 | 6.97 | 6.8 | 8.21 | 411.86 | 420.07 | 34.88 | 1 | 0.4 |
| 10/27/2005 | XX | GW205A03F | 737 | 6.92 | 8.2 | 5.22 | 414.85 | 420.07 | | 1.1 | 0.5 |
| 5/9/2006 | XX | GW205A08B | 818 | 7 | 6.9 | | 413.72 | | | 0.8 | 0.51 |
| 7/25/2006 | XX | GW205A06J | 1013 | 6.92 | 11.1 | | 413.02 | | 34.7 | 0.6 | 0.5 |
| 10/23/2006 | XX | GW205A057 | 683 | 7.15 | 8.7 | | 414.27 | | | 0.1 | 0.3 |
| 5/14/2007 | XX | GW205A0A3 | 928 | 6.84 | 6.1 | | 412.16 | | | 0.1 | 0.5 |
| 8/16/2007 | XX | GW205A0BG | 857 | 7.01 | 9 | | 411.02 | | 34.87 | 0.7 | 0.7 |
| 10/25/2007 | XX | GW205A0D8 | 758 | 7.13 | 9.1 | | 413.17 | | | 0.2 | 0.5 |
| 5/29/2008 | XX | GW205A0FG | 971 | 7.23 | 6.8 | | 412.81 | | | 0.1 | 0.4 |
| 8/12/2008 | XX | GW205A0HG | 989 | 6.97 | 11 | | 414.05 | | | 0.1 | 0.9 |
| 10/16/2008 | XX | GW205A0J4 | 861 | 6.94 | 9.5 | | 414.05 | | | 0.2 | 0.7 |
| 5/4/2009 | XX | GW205A114 | 909 | 6.9 | 7.3 | 6.3 | 413.77 | 420.07 | | 0.4 | 0.4 |
| 8/5/2009 | XX | GW205A134 | 938 | 6.56 | 12.3 | 5.47 | 414.6 | 420.07 | | 0.5 | 0.9 |
| 10/20/2009 | XX | GW205A14C | 801 | 6.85 | 8.3 | 7.15 | 412.92 | 420.07 | | 0.1 | 1 |
| 5/26/2010 | XX | GW205A16D | 842 | 6.98 | 9.7 | | 411.94 | | | 0.63 | 0.28 |
| 8/3/2010 | XX | GW205A18E | 749 | 6.74 | 10.3 | | 410.29 | | | 0.4 | 1.49 |
| 10/13/2010 | XX | GW205A1A2 | 616 | 6.95 | 9.5 | | 412.82 | | | 0.42 | 0.87 |
| 5/17/2011 | XX | GW205A1E1 | 680 | 7 | 6.3 | 5.38 | 414.69 | 420.07 | 34.71 | 0.8 | 2.9 |
| 8/9/2011 | XX | GW205A1FC | 827 | 6.9 | 13.8 | 9.1 | 410.97 | 420.07 | 34.72 | 2 | 1.5 |
| 11/3/2011 | XX | GW205A1H3 | 724 | 6.9 | 10.1 | 6.7 | 413.37 | 420.07 | 35.91 | 2 | 0.3 |
| 5/16/2012 | XX | GW205A1IH | 588 | 7.1 | 11.1 | 5.71 | 414.36 | 420.07 | 34.7 | 1 | 0 |
| 8/16/2012 | XX | GW205A20A | 643 | 7 | 13.7 | 10.86 | 409.21 | 420.07 | | 2 | 0.8 |
| 10/30/2012 | XX | GW205A224 | 575 | 7.1 | 12.7 | 6.61 | 413.46 | 420.07 | 34.89 | 1 | 0 |
| 5/20/2013 | XX | GW205A23I | 561 | 6.9 | 8.8 | 7.5 | 412.57 | 420.07 | | 1 | 0.5 |
| 7/23/2013 | XX | GW205A25C | 572 | 7.3 | 10.3 | 8.5 | 411.57 | 420.07 | | 1 | 0.7 |
| 10/2/2013 | XX | GW205A276 | 516 | 7.5 | 12.9 | 7.75 | 412.32 | 420.07 | 34.97 | 1 | 0.3 |
| 6/3/2014 | XX | GW205A290 | 510 | 7.1 | 10.1 | 7.23 | 412.84 | 420.07 | | 2 | 0.3 |
| 8/19/2014 | XX | GW205A2AE | 512 | 7.2 | 11.6 | 9.05 | 411.02 | 420.07 | | 0.8 | 0.2 |
| 11/12/2014 | XX | GW205A2C8 | 494 | 7.3 | 8.2 | 6.05 | 414.02 | 420.07 | 34.82 | 2 | 0.5 |
| 6/2/2015 | XX | GW205A2E4 | 544 | 7.3 | 6.6 | 6.2 | 413.87 | 420.07 | | 0.4 | 0.3 |
| 9/2/2015 | XX | GW205A2FJ | 474 | 7.7 | 11.6 | 7.92 | 412.15 | 420.07 | | 0.5 | 0.8 |
| 11/3/2015 | XX | GW205A2HD | 472 | 7.1 | 8.6 | 5.98 | 414.09 | 420.07 | 34.85 | 8.6 | 0.8 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (205A) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/14/2016 | XX | GW205A313 | 534 | 7.3 | 8.5 | 7.45 | 412.62 | 420.07 | | 0.5 | 1.5 |
| 9/21/2016 | XX | GW205A32H | 548 | 7.6 | 9.8 | 11.25 | 408.82 | 420.07 | | 0.5 | 0.4 |
| 11/9/2016 | XX | GW205A34B | 489 | 7.2 | 9.5 | 10.1 | 409.97 | 420.07 | 34.83 | 0.6 | 0.2 |
| 6/13/2017 | XX | GW205A366 | 508 | 7.4 | 10.8 | 7.01 | 413.06 | 420.07 | | 0.9 | 1.6 |
| 8/30/2017 | XX | GW205A380 | 508 | 6.9 | 9.5 | 10 | 410.07 | 420.07 | | 1 | 0.5 |
| 11/16/2017 | XX | GW205A39E | 488 | 7.8 | 7.8 | 6.43 | 413.64 | 420.07 | 34.83 | 0.3 | 0.5 |
| 6/19/2018 | XX | GW205A3B9 | 551 | 7.5 | 8.9 | 8.11 | 411.96 | 420.07 | | 0.8 | 1.6 |
| 8/14/2018 | XX | GW205A3DI | 542 | 7.2 | 10.5 | 7.74 | 412.33 | 420.07 | | 0.5 | 0.3 |
| 11/27/2018 | XX | GW205A3EH | 497 | 7.7 | 7.6 | 6.15 | 413.92 | 420.07 | 34.81 | 0.5 | 0.8 |
| 6/4/2019 | XX | GW205A3GC | 484 | 7.5 | 7.7 | 6.2 | 413.87 | 420.07 | | 2.1 | 1.1 |
| 8/13/2019 | XX | GW205A3J1 | 482 | 7.3 | 10.7 | 9.3 | 410.77 | 420.07 | | 4.5 | 0.8 |
| 10/23/2019 | XX | GW205A400 | 454 | 7.6 | 8.9 | 8.1 | 411.97 | 420.07 | | 0.6 | 0.6 |
| 6/16/2020 | XX | GW205A41F | 411 | 7.3 | 10 | 8.21 | 411.86 | 420.07 | | 1 | 0.8 |
| 8/5/2020 | XX | GW205A444 | 430 | 7.3 | 13.7 | 10.6 | 409.47 | 420.07 | | 1.2 | 0.6 |
| 10/20/2020 | XX | GW205A453 | 417 | 7.1 | 9.3 | 6.63 | 413.44 | 420.07 | 34.77 | 3.1 | 0.6 |
| 6/23/2021 | XX | GW205A46I | 409 | 7 | 8.7 | 9.13 | 410.94 | 420.07 | | 1.2 | 0.6 |
| 9/22/2021 | XX | GW205A48D | 403 | 7.1 | 11.5 | 7.4 | 412.67 | 420.07 | 34.51 | 0.6 | 0.3 |
| **205B** | | | | | | | | | | | |
| 4/27/2000 | XX | 205BXX36643 | 378 | 7.16 | 3.3 | | 415.25 | | | | |
| 8/2/2000 | XX | 205BXX36740 | 328 | 7.08 | 8 | | 412.14 | | 17.75 | 0.45 | 0.5 |
| 10/25/2000 | XX | 205BXX36824 | 386 | 7.03 | 8 | | 411.77 | | | 0.6 | 0.2 |
| 5/9/2001 | XX | 205BXX37020 | 796 | 6.89 | 8 | | 413.75 | | | 0.5 | 0.4 |
| 7/25/2001 | XX | 205BXX37097 | 461 | 6.88 | 11.4 | | 409.64 | | 17.79 | 0.8 | 0.66 |
| 10/17/2001 | XX | 205BXX37181 | 697 | 6.74 | 10.9 | | 410.62 | | | 1.8 | 0.48 |
| 5/15/2002 | XX | 205BXX37391 | 968 | 7.01 | 5.7 | | 415 | | | 0.9 | 0.22 |
| 8/1/2002 | XX | 205BXX37469 | 865 | 6.49 | 10.1 | | 411.42 | | 18.58 | 0.4 | 0.4 |
| 10/16/2002 | XX | 205BXX37545 | 1144 | 6.44 | 9.4 | | 410.68 | | | 1 | 0.5 |
| 6/19/2003 | XX | 205BXX37791 | 1066 | 6.85 | 8.1 | | 413.91 | | | 0.5 | 0.4 |
| 8/19/2003 | XX | 205BXX37852 | 597 | 6.62 | 11.1 | | 412.51 | | 17.76 | 0.4 | 4.24 |
| 10/9/2003 | XX | 205BXX37903 | 1274 | 6.75 | 10.4 | | 414.01 | | | 1.1 | 0.43 |
| 4/27/2004 | XX | 205BXX38104 | 876 | 7.03 | 5.9 | | 414.32 | | | 2.1 | 0.2 |
| 8/12/2004 | XX | 205BXX38211 | 395 | 6.73 | 10.5 | | 411.5 | | 17.79 | 1.7 | 0.52 |
| 10/14/2004 | XX | 205BXX38274 | 460 | 6.54 | 9.7 | | 411.15 | | | 0.4 | 0.72 |
| 5/17/2005 | XX | GW205B00C | 894 | 6.94 | 5.6 | 4.64 | 414.69 | 419.33 | | 1.1 | 0.2 |
| 8/4/2005 | XX | GW205B024 | 335 | 7.05 | 6.8 | 7.48 | 411.85 | 419.33 | 17.75 | 0.7 | 1.1 |
| 10/27/2005 | XX | GW205B03G | 922 | 6.82 | 9.4 | 4.21 | 415.12 | 419.33 | | 0.6 | 0.5 |
| 5/9/2006 | XX | GW205B08C | 670 | 7.08 | 5.8 | | 414.05 | | | 1.4 | 0.67 |
| 7/25/2006 | XX | GW205B070 | 302 | 7.16 | 11 | | 412.96 | | 17.58 | 1.7 | 0.7 |
| 10/19/2006 | XX | GW205B058 | 212 | 7.25 | 10.4 | | 413.83 | | | 0.1 | 0.8 |
| 5/14/2007 | XX | GW205B0A4 | 600 | 7.06 | 5.4 | | 413.12 | | | 0.4 | 0.5 |
| 8/16/2007 | XX | GW205B0BH | 633 | 7.1 | 9.9 | | 410.86 | | 17.75 | 0.5 | 1.3 |
| 10/25/2007 | XX | GW205B0D9 | 389 | 7.26 | 9.9 | | 413.39 | | | 0.5 | 0.6 |
| 5/27/2008 | XX | GW205B0FH | 599 | 7.42 | 6.2 | | 412.66 | | | 0.1 | 0.6 |
| 8/12/2008 | XX | GW205B0HH | 614 | 7.13 | 11.1 | | 414.33 | | | 0.3 | 0.8 |
| 10/16/2008 | XX | GW205B0J5 | 339 | 7.35 | 10.2 | | 414.33 | | | 0.6 | 0.5 |
| 5/4/2009 | XX | GW205B115 | 525 | 7.15 | 6.4 | 5.63 | 413.7 | 419.33 | | 0.4 | 0.5 |
| 8/5/2009 | XX | GW205B135 | 563 | 6.82 | 12 | 4.75 | 414.58 | 419.33 | | 0.2 | 0.5 |
| 10/20/2009 | XX | GW205B14D | 340 | 7.35 | 8.9 | 6.43 | 412.9 | 419.33 | | 0.1 | 0.7 |
| 5/26/2010 | XX | GW205B16E | 411 | 7.23 | 10.1 | | 411.83 | | | 0.56 | 0.4 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (205B) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/3/2010 | XX | GW205B18F | 472 | 7.05 | 11.2 | | 409.93 | | | 0.5 | 0.74 | | | | | | |
| 10/13/2010 | XX | GW205B1A3 | 352 | 7.03 | 10.2 | | 413.03 | | | 0.42 | 0.25 | | | | | | |
| 5/17/2011 | XX | GW205B1E2 | 473 | 7.2 | 6 | 4.65 | 414.68 | 419.33 | 17.56 | 0.6 | 0.6 | | | | | | |
| 8/9/2011 | XX | GW205B1FD | 225 | 7 | 15.7 | 8.64 | 410.69 | 419.33 | 17.57 | 2 | 1.1 | | | | | | |
| 11/3/2011 | XX | GW205B1H4 | 277 | 6.9 | 11.2 | 5.93 | 413.4 | 419.33 | 17.76 | 1 | 0.3 | | | | | | |
| 5/16/2012 | XX | GW205B1II | 345 | 7.4 | 10.9 | 4.81 | 414.52 | 419.33 | 17.55 | 1 | 0.3 | | | | | | |
| 8/16/2012 | XX | GW205B20B | 247 | 7 | 14.5 | 9.67 | 409.66 | 419.33 | | 2 | 1.5 | | | | | | |
| 10/30/2012 | XX | GW205B225 | 417 | 7.1 | 12.8 | 5.56 | 413.77 | 419.33 | 17.78 | 0.6 | 0 | | | | | | |
| 5/20/2013 | XX | GW205B23J | 257 | 7.4 | 9.5 | 6.78 | 412.55 | 419.33 | | 1 | 0.5 | | | | | | |
| 7/23/2013 | XX | GW205B25D | 281 | 7.4 | 12.6 | 8.28 | 411.05 | 419.33 | | 1 | 0.8 | | | | | | |
| 10/2/2013 | XX | GW205B277 | 260 | 7.5 | 13.7 | 6.95 | 412.38 | 419.33 | 17.76 | 1 | 0.3 | | | | | | |
| 6/3/2014 | XX | GW205B291 | 408 | 7.1 | 11 | 6.95 | 412.38 | 419.33 | | 1 | 0.4 | | | | | | |
| 8/19/2014 | XX | GW205B2AF | 324 | 7.1 | 11.8 | 8.81 | 410.52 | 419.33 | | 1 | 0.2 | | | | | | |
| 11/12/2014 | XX | GW205B2C9 | 330 | 7.2 | 8.9 | 5.36 | 413.97 | 419.33 | 17.72 | 1 | 0.2 | | | | | | |
| 6/2/2015 | XX | GW205B2E5 | 259 | 7.3 | 6.1 | 5.53 | 413.8 | 419.33 | | 1 | 0.2 | | | | | | |
| 9/2/2015 | XX | GW205B2G0 | 192 | 7.1 | 13.6 | 7.47 | 411.86 | 419.33 | | 0.2 | 0.1 | | | | | | |
| 11/3/2015 | XX | GW205B2HE | 298 | 7.3 | 9.3 | 5.31 | 414.02 | 419.33 | 17.75 | 2 | 0.1 | | | | | | |
| 6/14/2016 | XX | GW205B314 | 228 | 7.4 | 8.3 | 7 | 412.33 | 419.33 | | 0.5 | 1.5 | | | | | | |
| 9/21/2016 | XX | GW205B32I | 201 | 7.2 | 12.3 | 10.96 | 408.37 | 419.33 | | 0.3 | 0.3 | | | | | | |
| 11/9/2016 | XX | GW205B34C | 178 | 7 | 10.1 | 9.75 | 409.58 | 419.33 | 17.76 | 0.4 | 0.1 | | | | | | |
| 6/13/2017 | XX | GW205B367 | 305 | 7.4 | 10.4 | 6.85 | 412.48 | 419.33 | | 0.5 | 1.1 | | | | | | |
| 8/30/2017 | XX | GW205B381 | 203 | 7.2 | 10.9 | 10.01 | 409.32 | 419.33 | | 1 | 0.2 | | | | | | |
| 11/16/2017 | XX | GW205B39F | 389 | 7.6 | 9.1 | 5.95 | 413.38 | 419.33 | 17.76 | 0.4 | 0.4 | | | | | | |
| 6/19/2018 | XX | GW205B3BA | 288 | 7.4 | 8.8 | 8.01 | 411.32 | 419.33 | | 1.5 | 2.1 | | | | | | |
| 8/14/2018 | XX | GW205B3DJ | 256 | 7.1 | 12.6 | 7.66 | 411.67 | 419.33 | | 0.9 | 0.3 | | | | | | |
| 11/27/2018 | XX | GW205B3EI | 439 | 8 | 7.2 | 5.58 | 413.75 | 419.33 | 17.76 | 3.6 | 0.5 | | | | | | |
| 6/4/2019 | XX | GW205B3GD | 467 | 7.4 | 7.8 | 5.96 | 413.37 | 419.33 | | 2.1 | 0.3 | | | | | | |
| 8/13/2019 | XX | GW205B3J2 | 190 | 7.2 | 13.1 | 8.78 | 410.55 | 419.33 | | 4.4 | 0.5 | | | | | | |
| 10/23/2019 | XX | GW205B401 | 369 | 7.9 | 9.7 | 7.83 | 411.5 | 419.33 | | 0.5 | 0.3 | | | | | | |
| 6/16/2020 | XX | GW205B41G | 232 | 7.4 | 8.9 | 8.02 | 411.31 | 419.33 | | 0.5 | 0.2 | | | | | | |
| 8/5/2020 | XX | GW205B445 | 204 | 7 | 14.1 | 10.28 | 409.05 | 419.33 | | 0.9 | 0.2 | | | | | | |
| 10/20/2020 | XX | GW205B454 | 185 | 7.5 | 10.5 | 6.02 | 413.31 | 419.33 | 17.8 | 1 | 0.4 | | | | | | |
| 6/23/2021 | XX | GW205B46J | 228 | 7.2 | 8.7 | 8.92 | 410.41 | 419.33 | | 0.8 | 0.2 | | | | | | |
| 9/22/2021 | XX | GW205B48E | 247 | 6.9 | 12.8 | 7.92 | 411.41 | 419.33 | 18.93 | 0.3 | 0.1 | | | | | | |
| **206A** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 206AXX36643 | 1291 | 6.17 | 3 | | 404.16 | | | | | | | | | | |
| 8/2/2000 | XX | 206AXX36740 | 2590 | 6.83 | 6 | | 397.58 | | 31.23 | 0.45 | 0.4 | | | | | | |
| 10/25/2000 | XX | 206AXX36824 | 3130 | 6.84 | 7 | | 395.14 | | | 0.4 | 0.8 | | | | | | |
| 5/8/2001 | XX | 206AXX37019 | 2350 | 6.69 | 8 | | 401.83 | | | 0.5 | 0.6 | | | | | | |
| 7/25/2001 | XX | 206AXX37097 | 2910 | 6.71 | 9.2 | | 395.73 | | 31.21 | 0.5 | 0.39 | | | | | | |
| 10/17/2001 | XX | 206AXX37181 | 3480 | 6.7 | 9.8 | | 393.13 | | | 0.8 | 1.37 | | | | | | |
| 5/16/2002 | XX | 206AXX37392 | 1802 | 6.71 | 6.4 | | 401.65 | | | 1.3 | 0.62 | | | | | | |
| 8/1/2002 | XX | 206AXX37469 | 2230 | 6.66 | 9.6 | | 397.81 | | 31.04 | 0.5 | 1 | | | | | | |
| 10/17/2002 | XX | 206AXX37546 | 3440 | 6.81 | 8.2 | | 394.71 | | | 5 | 1.7 | | | | | | |
| 6/19/2003 | XX | 206AXX37791 | 2380 | 6.7 | 7.5 | | 400.49 | | | 0.3 | 1.3 | | | | | | |
| 8/18/2003 | XX | 206AXX37851 | 2350 | 6.76 | 8.4 | | 398.37 | | 31.24 | 0.6 | 0.64 | | | | | | |
| 10/13/2003 | XX | 206AXX37907 | 2510 | 6.8 | 9 | | 399.09 | | | 0.9 | 0.34 | | | | | | |
| 4/29/2004 | XX | 206AXX38106 | 2390 | 6.75 | 5.6 | | 400.6 | | | 2.7 | 0.96 | | | | | | |
| 8/16/2004 | XX | 206AXX38215 | 2940 | 6.65 | 8.5 | | 397.39 | | 31.21 | 1 | 1.34 | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(206A)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/12/2004 | XX | 206AXX38272 | 2650 | 6.81 | 8 | | 397.08 | | | 2.2 | 1.66 |
| 5/17/2005 | XX | GW206A00D | 1950 | 6.66 | 6.4 | 13.48 | 401.83 | 415.31 | | 1.6 | 0.4 |
| 8/15/2005 | XX | GW206A025 | 2580 | 6.66 | 5.2 | 18.1 | 397.21 | 415.31 | 31.22 | 0.7 | 1.1 |
| 10/24/2005 | XX | GW206A03H | 2270 | 6.69 | 5 | 13.35 | 401.96 | 415.31 | | 1.3 | 0.4 |
| 5/11/2006 | XX | GW206A08D | 2160 | 6.68 | 7 | | 400.46 | | | 2 | 0.84 |
| 7/26/2006 | XX | GW206A071 | 2200 | 6.68 | 9.5 | | 398.96 | | 31.06 | 1.5 | 1.2 |
| 10/23/2006 | XX | GW206A059 | 2250 | 6.69 | 8.8 | | 400.1 | | | 0.5 | 1 |
| 5/14/2007 | XX | GW206A0A5 | 2000 | 6.6 | 7 | | 400.55 | | | 0.3 | 0.7 |
| 8/16/2007 | XX | GW206A0BI | 2600 | 6.7 | 8.6 | | 396.58 | | 31.22 | 0.2 | 1.3 |
| 10/29/2007 | XX | GW206A0DA | 2670 | 6.71 | 7.2 | | 398.48 | | | 2.8 | 0.6 |
| 5/27/2008 | XX | GW206A0FI | 1938 | 6.73 | 6.6 | | 399.1 | | | 0.1 | 1 |
| 8/13/2008 | XX | GW206A0HI | 1621 | 6.62 | 9.1 | | 400.77 | | | 0.1 | 0.6 |
| 10/20/2008 | XX | GW206A0J6 | 2090 | 6.49 | 7.3 | | 400.77 | | | 0.4 | 0.7 |
| 5/5/2009 | XX | GW206A116 | 1884 | 6.62 | 6 | 14.65 | 400.66 | 415.31 | | 0.2 | 0.7 |
| 8/6/2009 | XX | GW206A136 | 1531 | 6.04 | 10.2 | 12.71 | 402.6 | 415.31 | | 1 | 1.5 |
| 10/21/2009 | XX | GW206A14E | 2230 | 6.43 | 8.2 | 17.36 | 397.95 | 415.31 | | 0.1 | 0.9 |
| 5/27/2010 | XX | GW206A16F | 1284 | 6.43 | 7.5 | | 397.82 | | | 1.03 | 0.35 |
| 8/3/2010 | XX | GW206A18G | 2180 | 6.55 | 10.1 | | 396.77 | | | 0.53 | 0.94 |
| 10/13/2010 | XX | GW206A1A4 | 1941 | 6.63 | 8.7 | | 397.62 | | | 0.28 | 0.94 |
| 5/17/2011 | XX | GW206A1E3 | 1422 | 6.6 | 6.3 | 11.39 | 403.92 | 415.31 | 31.07 | 0.6 | 0.5 |
| 8/9/2011 | XX | GW206A1FE | 2569 | 6.49 | 13.3 | 18.47 | 396.84 | 415.31 | 31.08 | 1 | 0.6 |
| 11/3/2011 | XX | GW206A1H5 | 2004 | 6.6 | 9.4 | 15.34 | 399.97 | 415.31 | 31.24 | 1 | 0.3 |
| 5/16/2012 | XX | GW206A1IJ | 1570 | 6.7 | 10.5 | 12.96 | 402.35 | 415.31 | 31.06 | 0.4 | 1.2 |
| 8/15/2012 | XX | GW206A20C | 2144 | 6.3 | 16.1 | 18.32 | 396.99 | 415.31 | | 1 | 0.3 |
| 10/30/2012 | XX | GW206A226 | 630 | 6.5 | 12.2 | 15.26 | 400.05 | 415.31 | 31.26 | 1 | 0 |
| 5/20/2013 | XX | GW206A240 | 1734 | 6.7 | 9.3 | 16.5 | 398.81 | 415.31 | | 0.6 | 0.4 |
| 7/23/2013 | XX | GW206A25E | 1073 | 6.5 | 14 | 16.94 | 398.37 | 415.31 | | 1 | 0.7 |
| 10/2/2013 | XX | GW206A278 | 2060 | 6.9 | 13.6 | 16.85 | 398.46 | 415.31 | 31.27 | 0.4 | 0.6 |
| 6/3/2014 | XX | GW206A292 | 811 | 6.1 | 10.4 | 15.43 | 399.88 | 415.31 | | 0.6 | 0.8 |
| 8/20/2014 | XX | GW206A2AG | 1880 | 6.9 | 10.6 | 18.53 | 396.78 | 415.31 | | 1 | 0.4 |
| 11/11/2014 | XX | GW206A2CA | 210 | 6.5 | 8.7 | 14.8 | 400.51 | 415.31 | 31.2 | 0.8 | 0.5 |
| 6/2/2015 | XX | GW206A2E6 | 1845 | 6.6 | 5.8 | 14.35 | 400.96 | 415.31 | | 0.7 | 0.2 |
| 9/2/2015 | XX | GW206A2G1 | 2167 | 6.6 | 13 | 18.41 | 396.9 | 415.31 | | 1.6 | 0.3 |
| 11/3/2015 | XX | GW206A2HF | 358 | 6.4 | 7.9 | 14.48 | 400.83 | 415.31 | 31.25 | 0.5 | 0.2 |
| 6/15/2016 | XX | GW206A315 | 1858 | 6.5 | 10.1 | 17.31 | 398 | 415.31 | | 0.4 | 1.1 |
| 9/21/2016 | XX | GW206A32J | 2428 | 6.6 | 10.5 | 21.75 | 393.56 | 415.31 | | 2.2 | 0.3 |
| 11/9/2016 | XX | GW206A34D | 2645 | 6.6 | 8.4 | 22.3 | 393.01 | 415.31 | 31.24 | 0.3 | 0.2 |
| 6/13/2017 | XX | GW206A368 | 1659 | 6.6 | 10.6 | 14.99 | 400.32 | 415.31 | | 2.1 | 2.1 |
| 8/30/2017 | XX | GW206A382 | 2540 | 6.7 | 8.3 | 18.6 | 396.71 | 415.31 | | 1.8 | 0.2 |
| 11/15/2017 | XX | GW206A39G | 2570 | 6.6 | 7.7 | 16.16 | 399.15 | 415.31 | 31.24 | 0.7 | 0.4 |
| 6/19/2018 | XX | GW206A3BB | 2159 | 6.7 | 8.2 | 16.75 | 398.56 | 415.31 | | 0.3 | 1.1 |
| 8/14/2018 | XX | GW206A3E0 | 2688 | 6.7 | 10 | 18.28 | 397.03 | 415.31 | | 0.4 | 0.5 |
| 11/27/2018 | XX | GW206A3EJ | 1731 | 6.7 | 7.6 | 14.75 | 400.56 | 415.31 | 31.24 | 0.2 | 0.5 |
| 6/4/2019 | XX | GW206A3GE | 470 | 6.7 | 8.4 | 13.2 | 402.11 | 415.31 | | 2.1 | 0.5 |
| 8/13/2019 | XX | GW206A3J3 | 2125 | 6.7 | 12.1 | 17.72 | 397.59 | 415.31 | | 5.1 | 0.5 |
| 10/23/2019 | XX | GW206A402 | 2490 | 6.9 | 8.2 | 13.75 | 401.56 | 415.31 | | 0.5 | 0.4 |
| 6/16/2020 | XX | GW206A41H | 1335 | 6.6 | 8.2 | 16.73 | 398.58 | 415.31 | | 1.1 | 0.3 |
| 8/5/2020 | XX | GW206A446 | 1593 | 6.5 | 13.9 | 19.18 | 396.13 | 415.31 | | 0.7 | 0.2 |
| 10/20/2020 | XX | GW206A455 | 2270 | 6.7 | 9.1 | 21.25 | 394.06 | 415.31 | 31.3 | 1.3 | 0.3 |
| 6/23/2021 | XX | GW206A470 | 1881 | 6.8 | 7.9 | 17.29 | 398.02 | 415.31 | | 3.2 | 0.2 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (206A) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/22/2021 | XX | GW206A48F | 2272 | 6.6 | 10.3 | 20.23 | 395.08 | 415.31 | 31.68 | 0.6 | 0.1 |
| **206B** | | | | | | | | | | | |
| 4/27/2000 | XX | 206BXX36643 | 75 | 6.83 | 3.6 | | 405.17 | | | | |
| 8/2/2000 | XX | 206BXX36740 | D | D | D | | | | 18.69 | | |
| 10/25/2000 | XX | 206BXX36824 | D | D | D | | | | | | |
| 5/8/2001 | XX | 206BXX37019 | 96.1 | 5.26 | 9.2 | | 402.21 | | | 9.7 | 4 |
| 7/25/2001 | XX | 206BXX37097 | D | D | D | | | | 18.66 | D | D |
| 10/17/2001 | XX | 206BXX37181 | D | D | D | | | | | D | D |
| 5/16/2002 | XX | 206BXX37392 | 157 | 6.35 | 6 | | 401.91 | | | 4.5 | 2.33 |
| 7/29/2002 | XX | 206BXX37466 | D | D | D | | | | 18.69 | D | D |
| 10/15/2002 | XX | 206BXX37544 | D | D | D | | | | | D | D |
| 6/17/2003 | XX | 206BXX37789 | 207 | 6.27 | 7.2 | | 400.7 | | | 4 | 2.7 |
| 8/18/2003 | XX | 206BXX37851 | 171.6 | 6.12 | 9.7 | | 399.01 | | 18.67 | 4.3 | 2.58 |
| 10/13/2003 | XX | 206BXX37907 | 116.7 | 6.19 | 10.2 | | 399.6 | | | 8.6 | 1.88 |
| 4/29/2004 | XX | 206BXX38106 | 194.4 | 6.18 | 5 | | 400.96 | | | 3.9 | 1.94 |
| 8/16/2004 | XX | 206BXX38215 | D | D | D | | | | 18.68 | D | D |
| 10/12/2004 | XX | 206BXX38272 | D | D | D | | | | | D | D |
| 5/17/2005 | XX | GW206B00E | 167 | 6.11 | 6.2 | 13.04 | 402.23 | 415.27 | | 5.2 | 1.47 |
| 8/15/2005 | XX | GW206B026 | D | D | D | D | | | 18.68 | D | D |
| 10/24/2005 | XX | GW206B03I | 84.8 | 6.25 | 6.8 | 12.38 | 402.89 | 415.27 | | 9.8 | 1.2 |
| 5/11/2006 | XX | GW206B08E | 134.9 | 6.65 | 6.1 | | 400.82 | | | 6.6 | 2.17 |
| 7/26/2006 | XX | GW206B072 | 174 | 6.13 | 10.5 | | 399.22 | | 18.51 | 4.6 | 7.3 |
| 10/23/2006 | XX | GW206B05A | 102 | 6.32 | 10.1 | | 401.36 | | | 8.3 | 7.4 |
| 5/14/2007 | XX | GW206B0A6 | 173 | 6.41 | 7.3 | | 400.85 | | | 5 | 3.4 |
| 8/16/2007 | XX | GW206B0BJ | D | D | D | | D | | 18.64 | D | D |
| 10/29/2007 | XX | GW206B0DB | D | D | D | | D | | | D | D |
| 5/27/2008 | XX | GW206B0FJ | D | D | D | | D | | | D | D |
| 8/13/2008 | XX | GW206B0HJ | 182 | 6.01 | 10.6 | | 401.13 | | | 4 | 2.5 |
| 10/20/2008 | XX | GW206B0J7 | D | D | D | | D | | | D | D |
| 5/5/2009 | XX | GW206B117 | 185 | 6.06 | 5.7 | 14.36 | 400.91 | 415.27 | | 3 | 1.4 |
| 8/6/2009 | XX | GW206B137 | 127 | 5.46 | 11.4 | 11.84 | 403.43 | 415.27 | | 5.9 | 1.5 |
| 10/21/2009 | XX | GW206B14F | 199 | 6.33 | 9.3 | 16.65 | 398.62 | 415.27 | | 4 | 2 |
| 5/27/2010 | XX | GW206B16G | D | D | D | | 398.45 | | | D | D |
| 8/3/2010 | XX | GW206B18H | D | D | D | | | | | D | D |
| 10/13/2010 | XX | GW206B1A5 | 104 | 6.4 | 10.2 | | 398.98 | | | 7.97 | 3.81 |
| 5/17/2011 | XX | GW206B1E4 | 61 | 6.2 | 5.8 | 9.75 | 405.52 | 415.27 | 18.54 | 6 | 1.3 |
| 8/9/2011 | XX | GW206B1FF | D | D | D | 17.95 | 397.32 | 415.27 | 18.52 | D | D |
| 11/4/2011 | XX | GW206B1H6 | 182 | 6.2 | 8.7 | 15.21 | 400.06 | 415.27 | 18.71 | 2 | 0.5 |
| 5/16/2012 | XX | GW206B1J0 | 98 | 6.2 | 9.7 | 12.29 | 402.98 | 415.27 | 18.48 | 5 | 0.3 |
| 8/15/2012 | XX | GW206B20D | I | I | I | 17.72 | 397.55 | 415.27 | | I | I |
| 10/30/2012 | XX | GW206B227 | 143 | 6.2 | 12.5 | 14.85 | 400.42 | 415.27 | 18.72 | 5 | 0 |
| 5/20/2013 | XX | GW206B241 | 178 | 6.9 | 7.4 | 16.2 | 399.07 | 415.27 | | 5 | 1.1 |
| 7/24/2013 | XX | GW206B25F | 196 | 6.2 | 14.1 | 16.31 | 398.96 | 415.27 | | 5 | 0.5 |
| 10/2/2013 | XX | GW206B279 | 165 | 6.6 | 14.4 | 16.24 | 399.03 | 415.27 | 18.74 | 5 | 0.3 |
| 6/3/2014 | XX | GW206B293 | 189 | 7.2 | 10.9 | 15.15 | 400.12 | 415.27 | | 4 | 0.8 |
| 8/20/2014 | XX | GW206B2AH | D | D | D | D | D | 415.27 | | D | D |
| 11/11/2014 | XX | GW206B2CB | 91 | 6.4 | 9.2 | 13.36 | 401.91 | 415.27 | 18.66 | 2 | 0.3 |
| 6/2/2015 | XX | GW206B2E7 | 120 | 7.1 | 5.4 | 13.7 | 401.57 | 415.27 | | 7.9 | 0.05 U |
| 9/2/2015 | XX | GW206B2G2 | I | I | I | I | | 415.27 | | I | I |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (206B) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/3/2015 | XX | GW206B2HG | 90 | 6.4 | 9.1 | 13.6 | 401.67 | 415.27 | 18.71 | 8 | 0.3 |
| 6/15/2016 | XX | GW206B316 | 166 | 7 | 8.4 | 16.8 | 398.47 | 415.27 | | 5 | 12.2 |
| 9/21/2016 | XX | GW206B330 | D | D | D | D | D | D | | D | D |
| 11/9/2016 | XX | GW206B34E | D | D | D | D | D | D | 18.7 | D | D |
| 6/13/2017 | XX | GW206B369 | 176 | 7.1 | 9.9 | 15.15 | 400.12 | 415.27 | | 7.1 | 1.9 |
| 8/30/2017 | XX | GW206B383 | I | I | I | I | I | 415.27 | | I | I |
| 11/15/2017 | XX | GW206B39H | 260 | 7.3 | 8.6 | 15.95 | 399.32 | 415.27 | 18.7 | 6.8 | 0.8 |
| 6/19/2018 | XX | GW206B3BC | 260 | 7.2 | 7.8 | 16.6 | 398.67 | 415.27 | | 3.5 | 6.5 |
| 8/14/2018 | XX | GW206B3E1 | I | I | I | I | I | 415.27 | | I | I |
| 11/27/2018 | XX | GW206B3F0 | 106 | 7.7 | 7.5 | 14.45 | 400.82 | 415.27 | 18.7 | 8.1 | 0.8 |
| 6/4/2019 | XX | GW206B3GF | 146 | 7.2 | 7.3 | 12.74 | 402.53 | 415.27 | | 10.6 | 0.8 |
| 8/13/2019 | XX | GW206B3J4 | 191 | 6.8 | 11.8 | 17.1 | 398.17 | 415.27 | | 10.7 | 2.5 |
| 10/23/2019 | XX | GW206B403 | D | D | D | D | | 415.27 | | D | D |
| 6/16/2020 | XX | GW206B41I | 179 | 6.6 | 8.8 | 16.42 | 398.85 | 415.27 | | 5.1 | 1.6 |
| 8/5/2020 | XX | GW206B447 | I | I | I | I | I | 415.27 | | I | I |
| 10/22/2020 | XX | GW206B456 | D | D | D | D | D | 415.27 | 18.76 | D | D |
| 6/23/2021 | XX | GW206B471 | 215 | 7 | 7.5 | 16.82 | 398.45 | 415.27 | | 6.8 | 0.6 |
| 9/22/2021 | XX | GW206B48G | D | D | D | D | | 415.27 | 18.7 | D | D |
| **301** | | | | | | | | | | | |
| 5/3/2000 | XX | 301XX36649 | 348 | 7.07 | 3.9 | | 347.49 | | | | |
| 8/9/2000 | XX | 301XX36747 | 338 | 6.55 | 8 | | 346.65 | | 17.46 | 0.38 | 1.5 |
| 11/8/2000 | XX | 301XX36838 | 362 | 6.9 | 8 | | 347.04 | | | 3.02 | 0.4 |
| 5/16/2001 | XX | 301XX37027 | 434 | 6.59 | 5.6 | | 347.31 | | | 0.6 | 0.2 |
| 7/31/2001 | XX | 301XX37103 | 416 | 6.53 | 11.6 | | 345.5 | | 17.42 | 0.7 | 0.4 |
| 10/23/2001 | XX | 301XX37187 | 494 | 6.72 | 9.7 | | 346.53 | | | 0.8 | 0.2 |
| 5/21/2002 | XX | 301XX37397 | 505 | 6.68 | 6.6 | | 347.51 | | | 0.9 | 0.1 |
| 8/2/2002 | XX | 301XX37470 | 526 | 6.34 | 11.5 | | 346.48 | | 17.42 | 0.2 | 0.3 |
| 10/23/2002 | XX | 301XX37552 | 554 | 6.6 | 9.7 | | 346.96 | | | 0.5 | 0.3 |
| 6/24/2003 | XX | 301XX37796 | 603 | 6.52 | 7.5 | | 347.03 | | | 0.3 | 0.2 |
| 8/12/2003 | XX | 301XX37845 | 596 | 6.34 | 11.6 | | 347.12 | | 17.48 | 0.3 | 0.87 |
| 10/16/2003 | XX | 301XX37910 | 641 | 6.47 | 10 | | 347.68 | | | 0.5 | 0.1 |
| 5/5/2004 | XX | 301XX38112 | 663 | 6.56 | 4.5 | | 347.79 | | | 0.8 | 0.33 |
| 8/9/2004 | XX | 301XX38208 | 634 | 6.28 | 10.3 | | 346.67 | | 17.44 | 1.1 | 0.52 |
| 10/20/2004 | XX | 301XX38280 | 666 | 6.53 | 9.3 | | 346.93 | | | 0.7 | 0.39 |
| 5/11/2005 | XX | GW301X00F | 672 | 6.47 | 5.7 | 3.54 | 347.8 | 351.34 | | 0.5 | 0.3 |
| 7/27/2005 | XX | GW301X027 | 701 | 6.48 | 10.5 | 4.9 | 346.44 | 351.34 | 17.44 | 2 | 0.5 |
| 11/7/2005 | XX | GW301X03J | 755 | 6.47 | 9.4 | 3.46 | 347.88 | 351.34 | | 0.5 | 0.4 |
| 5/1/2006 | XX | GW301X08F | 792 | 6.65 | 4.5 | | 346.99 | | | 0.6 | 0.41 |
| 7/31/2006 | XX | GW301X073 | 841 | 6.43 | 12 | | 347.03 | | 17.26 | 0.3 | 0.7 |
| 10/26/2006 | XX | GW301X05B | 881 | 6.57 | 9.1 | | 347.74 | | | 0.1 | 0.4 |
| 5/9/2007 | XX | GW301X0A7 | 868 | 6.59 | 5.3 | | 347.5 | | | 0.2 | 0.5 |
| 8/9/2007 | XX | GW301X0C0 | 990 | 6.53 | 10.4 | | 346.31 | | 17.46 | 0.2 | 0.6 |
| 10/30/2007 | XX | GW301X0DC | 1185 | 6.56 | 9.1 | | 347.29 | | | 0.6 | 0.6 |
| 6/3/2008 | XX | GW301X0G0 | 1226 | 6.49 | 6.2 | | 347.4 | | | 0.1 | 0.1 |
| 8/14/2008 | XX | GW301X0I0 | 1245 | 6.32 | 10.6 | | 347.79 | | | 0.1 | 0.7 |
| 10/21/2008 | XX | GW301X0J8 | 1249 | 6.37 | 9.1 | | 347.79 | | | 0.1 | 0.5 |
| 5/11/2009 | XX | GW301X118 | 1256 | 6.32 | 5.7 | 3.7 | 347.64 | 351.34 | | 0.4 | 0.5 |
| 8/10/2009 | XX | GW301X138 | 1272 | 5.98 | 10.8 | 4.05 | 347.29 | 351.34 | | 0.1 | 0.7 |
| 10/22/2009 | XX | GW301X14G | 1354 | 6.38 | 8.5 | 4.36 | 346.98 | 351.34 | | 0.1 | 0.4 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (301) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/1/2010 | XX | GW301X16H | 1319 | 6.47 | 7.4 | | 346.53 | | | 0.1 | 0.6 |
| 8/5/2010 | XX | GW301X18I | 1369 | 6.29 | 12.2 | | 345.33 | | | 0.18 | 0.43 |
| 10/18/2010 | XX | GW301X1A6 | 1433 | 6.22 | 9.6 | | 347.28 | | | 0.1 | 0.14 |
| 5/18/2011 | XX | GW301X1D9 | 1265 | 6.3 | 6.3 | 3.55 | 347.79 | 351.34 | 17.35 | 0.8 | 0 |
| 8/9/2011 | XX | GW301X1F0 | 1534 | 6.21 | 13.5 | 5.11 | 346.23 | 351.34 | 17.3 | 2 | 0.3 |
| 11/2/2011 | XX | GW301X1GB | 1353 | 6.4 | 9.1 | 3.88 | 347.46 | 351.34 | 17.48 | 2 | 0.2 |
| 5/15/2012 | XX | GW301X1I5 | 1321 | 6.4 | 8.5 | 3.61 | 347.73 | 351.34 | 17.27 | 1 | 0 |
| 8/14/2012 | XX | GW301X1JI | 980 | 5.9 | 14.5 | 5.52 | 345.82 | 351.34 | | 1 | 0.9 |
| 10/30/2012 | XX | GW301X21C | 1470 | 6.6 | 11.5 | 3.83 | 347.51 | 351.34 | 17.5 | 1 | 0 |
| 5/22/2013 | XX | GW301X236 | 1594 | 6.4 | 6.3 | 3.95 | 347.39 | 351.34 | | 1 | 0.6 |
| 7/25/2013 | XX | GW301X250 | 1600 | 6 | 11.8 | 4.66 | 346.68 | 351.34 | | 2 | 0.6 |
| 10/1/2013 | XX | GW301X26E | 1464 | 6.6 | 11.6 | 4.51 | 346.83 | 351.34 | 17.48 | 1 | 0.4 |
| 6/4/2014 | XX | GW301X288 | 1590 | 6.6 | 7.8 | 4.4 | 346.94 | 351.34 | | 1 | 0.3 |
| 8/20/2014 | XX | GW301X2A2 | 1693 | 6.8 | 12.4 | 4.95 | 346.39 | 351.34 | | 1 | 0.2 |
| 11/11/2014 | XX | GW301X2BG | 1715 | 6.8 | 6.2 | 3.75 | 347.59 | 351.34 | 17.45 | 1 | 0.2 |
| 6/3/2015 | XX | GW301X2DC | 1883 | 6.3 | 6.4 | 3.75 | 347.59 | 351.34 | | 1 | 0.05 U |
| 9/1/2015 | XX | GW301X2F7 | 1750 | 6.4 | 12.1 | 4.52 | 346.82 | 351.34 | | 1 | 0.05 U |
| 11/4/2015 | XX | GW301X2H1 | 1739 | 6.4 | 8 | 3.76 | 347.58 | 351.34 | 17.46 | 0.7 | 0.2 |
| 6/15/2016 | XX | GW301X30B | 1785 | 6.3 | 9.5 | 4.26 | 347.08 | 351.34 | | 0.4 | 0.6 |
| 9/20/2016 | XX | GW301X325 | 1990 | 6.3 | 12.6 | 5.41 | 345.93 | 351.34 | | 1.6 | 0.2 |
| 11/10/2016 | XX | GW301X33J | 1992 | 6.6 | 8 | 4.57 | 346.77 | 351.34 | 17.48 | 0.3 | 0.1 |
| 6/14/2017 | XX | GW301X35E | 1820 | 6.4 | 7.7 | 4.5 | 346.84 | 351.34 | | 3 | 0.7 |
| 8/29/2017 | XX | GW301X378 | 1891 | 6.5 | 9.8 | 5.89 | 345.45 | 351.34 | | 0.2 | 0.3 |
| 11/14/2017 | XX | GW301X392 | 1882 | 6.4 | 8.8 | 4.1 | 347.24 | 351.34 | 17.48 | 1.7 | 0.3 |
| 6/19/2018 | XX | GW301X3AH | 2041 | 6.5 | 8.5 | 4.8 | 346.54 | 351.34 | | 0.2 | 0.7 |
| 8/14/2018 | XX | GW301X3D6 | 2114 | 6.4 | 12.5 | 4.79 | 346.55 | 351.34 | | 2.9 | 0.2 |
| 11/28/2018 | XX | GW301X3E5 | 2156 | 6.7 | 7.5 | 3.76 | 347.58 | 351.34 | 17.48 | 0.6 | 0.3 |
| 6/5/2019 | XX | GW301X3G0 | 1896 | 6.6 | 6.8 | 4.19 | 347.15 | 351.34 | | 1.1 | 0.2 |
| 8/13/2019 | XX | GW301X3I9 | 1867 | 6.6 | 11 | 4.85 | 346.49 | 351.34 | | 2.5 | 0.5 |
| 10/23/2019 | XX | GW301X3J8 | 1803 | 6.8 | 9.3 | 4.28 | 347.06 | 351.34 | | 0.3 | 0.2 |
| 6/16/2020 | XX | GW301X413 | 1587 | 6.5 | 7.8 | 4.98 | 346.36 | 351.34 | | 0.5 | 0.1 |
| 8/4/2020 | XX | GW301X43C | 1561 | 6.5 | 12.3 | 6.35 | 344.99 | 351.34 | | 0.9 | 0.2 |
| 10/21/2020 | XX | GW301X44B | 1612 | 6.7 | 9.1 | 4.14 | 347.2 | 351.34 | 17.52 | 0.9 | 0.3 |
| 6/22/2021 | XX | GW301X466 | 1501 | 6.5 | 11.6 | 5.26 | 346.08 | 351.34 | | 0.6 | 0.2 |
| 9/22/2021 | XX | GW301X481 | 1581 | 6.6 | 11.8 | 4.52 | 346.82 | 351.34 | 17.9 | 0.3 | 0.2 |
| **302B** | | | | | | | | | | | |
| 5/3/2000 | XX | 302BXX36649 | 345 | 6.15 | 5 | | 348.95 | | | | |
| 8/9/2000 | XX | 302BXX36747 | 121 | 6.14 | 6 | | 346.58 | | 28.04 | 0.37 | 0.4 |
| 11/8/2000 | XX | 302BXX36838 | 405 | 6.04 | 8 | | 347.59 | | | 0.6 | 0.1 |
| 5/16/2001 | XX | 302BXX37027 | 625 | 6.08 | 6.1 | | 347.76 | | | 0.5 | 0.1 |
| 7/31/2001 | XX | 302BXX37103 | 436 | 5.97 | 10.6 | | 345.39 | | 28.12 | 0.9 | 0.2 |
| 10/23/2001 | XX | 302BXX37187 | 470 | 5.8 | 9.6 | | 347.08 | | | 1.4 | 0.3 |
| 5/21/2002 | XX | 302BXX37397 | 623 | 6.13 | 6.9 | | 348.71 | | | 1.5 | 0.1 |
| 8/7/2002 | XX | 302BXX37475 | 602 | 6.08 | 10.2 | | 346.34 | | 28.12 | 0.5 | 0.2 |
| 10/23/2002 | XX | 302BXX37552 | 655 | 6.18 | 8.7 | | 347.82 | | | 0.5 | 0.8 |
| 6/23/2003 | XX | 302BXX37795 | 912 | 6.04 | 8.5 | | 347.68 | | | 0.4 | 0.3 |
| 8/12/2003 | XX | 302BXX37845 | 862 | 6.25 | 10.8 | | 348.1 | | 28.16 | 0.5 | 0.44 |
| 10/20/2003 | XX | 302BXX37914 | 970 | 6.26 | 8.8 | | 348.74 | | | 0.6 | 0.29 |
| 5/4/2004 | XX | 302BXX38111 | 1055 | 6.21 | 5.7 | | 348.91 | | | 1.3 | 0.25 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(302B)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/5/2004 | XX | 302BXX38204 | 838 | 6.13 | 11.2 | | 347.35 | | 28.1 | 1.2 | 0.15 |
| 10/20/2004 | XX | 302BXX38280 | 898 | 6.13 | 8.9 | | 347.33 | | | 1 | 0.19 |
| 5/11/2005 | XX | GW302B00G | 943 | 6.07 | 8.1 | 4.98 | 349.18 | 354.16 | | 0.7 | 0.2 |
| 7/27/2005 | XX | GW302B028 | 906 | 6.24 | 10 | 7.69 | 346.47 | 354.16 | 28.09 | 1.1 | 0.3 |
| 11/7/2005 | XX | GW302B040 | 1010 | 6.14 | 10.1 | 5.2 | 348.96 | 354.16 | | 1.2 | 0.4 |
| 5/1/2006 | XX | GW302B08G | 1067 | 6.23 | 5.6 | | 348.42 | | | 0.6 | 0.38 |
| 7/31/2006 | XX | GW302B074 | 1119 | 6.13 | 10.2 | | 347.79 | | 27.91 | 1.2 | 0.5 |
| 10/25/2006 | XX | GW302B05C | 1000 | 6.31 | 9.1 | | 349.01 | | | 0.1 | 0.3 |
| 5/9/2007 | XX | GW302B0A8 | 994 | 6.23 | 6.1 | | 348.73 | | | 0.3 | 0.3 |
| 8/9/2007 | XX | GW302B0C1 | 936 | 6.28 | 8.9 | | 346.47 | | 28.12 | 0.5 | 0.4 |
| 10/30/2007 | XX | GW302B0DD | 1029 | 6.37 | 8.2 | | 348.18 | | | 1 | 0.5 |
| 6/2/2008 | XX | GW302B0G1 | 1087 | 6.13 | 6.7 | | 347.77 | | | 0.1 | 0.3 |
| 8/14/2008 | XX | GW302B0I1 | 1150 | 6.03 | 10.5 | | 349.51 | | | 0.1 | 0.4 |
| 10/21/2008 | XX | GW302B0J9 | 1084 | 6.16 | 8.5 | | 349.51 | | | 0.3 | 0.4 |
| 5/11/2009 | XX | GW302B119 | 1149 | 6.02 | 6.7 | 5.04 | 349.12 | 354.16 | | 0.8 | 0.3 |
| 8/10/2009 | XX | GW302B139 | 1111 | 5.77 | 10.8 | 5.82 | 348.34 | 354.16 | | 0.3 | 0.4 |
| 10/22/2009 | XX | GW302B14H | 1097 | 6.01 | 8.4 | 6.5 | 347.66 | 354.16 | | 0.1 | 0.5 |
| 6/1/2010 | XX | GW302B16I | 1134 | 6.45 | 7.4 | | 346.41 | | | 0.61 | 0.19 |
| 8/4/2010 | XX | GW302B18J | 1113 | 6.4 | 11.1 | | 345.45 | | | 0.45 | 0.37 |
| 10/14/2010 | XX | GW302B1A7 | 1164 | 6.28 | 9.3 | | 348.08 | | | 0.16 | 0.34 |
| 5/18/2011 | XX | GW302B1DA | 1019 | 6.3 | 9.8 | 4.62 | 349.54 | 354.16 | 28.01 | 1 | 0 |
| 8/8/2011 | XX | GW302B1F1 | 1096 | 6.2 | 14.8 | 7.77 | 346.39 | 354.16 | 27.95 | 1 | 0 |
| 11/1/2011 | XX | GW302B1GC | 1262 | 8.9 | 8.9 | 5.66 | 348.5 | 354.16 | 28.12 | 1 | 0.2 |
| 5/15/2012 | XX | GW302B1I6 | 1341 | 6.3 | 11.1 | 4.86 | 349.3 | 354.16 | 27.9 | 0.6 | 0.2 |
| 8/16/2012 | XX | GW302B1JJ | 1219 | 6.3 | 14.2 | 8.54 | 345.62 | 354.16 | | 2 | 0.3 |
| 10/30/2012 | XX | GW302B21D | 1282 | 6.4 | 13.2 | 5.55 | 348.61 | 354.16 | 28.14 | 0.8 | 0 |
| 5/21/2013 | XX | GW302B237 | 1445 | 6.4 | 8.8 | 6.2 | 347.96 | 354.16 | | 2 | 0.5 |
| 7/25/2013 | XX | GW302B251 | 1483 | 6.2 | 11 | 7.09 | 347.07 | 354.16 | | 2 | 0.3 |
| 10/1/2013 | XX | GW302B26F | 1464 | 6.7 | 13.4 | 6.9 | 347.26 | 354.16 | 28.15 | 0.8 | 0.3 |
| 6/3/2014 | XX | GW302B289 | 1384 | 6.4 | 10.2 | 6.72 | 347.44 | 354.16 | | 2 | 0.4 |
| 8/20/2014 | XX | GW302B2A3 | 1347 | 6.9 | 13 | 7.51 | 346.65 | 354.16 | | 1 | 0.6 |
| 11/11/2014 | XX | GW302B2BH | 1314 | 6.6 | 6.1 | 5.4 | 348.76 | 354.16 | 28.05 | 1 | 0.2 |
| 6/3/2015 | XX | GW302B2DD | 1582 | 6.5 | 6.4 | 5.32 | 348.84 | 354.16 | | 0.6 | 0.3 |
| 9/1/2015 | XX | GW302B2F8 | 1416 | 6.5 | 11.2 | 6.89 | 347.27 | 354.16 | | 1.2 | 0.3 |
| 11/4/2015 | XX | GW302B2H2 | 1381 | 6.5 | 8.4 | 5.42 | 348.74 | 354.16 | 28.12 | 1 | 0.5 |
| 6/15/2016 | XX | GW302B30C | 1563 | 6.3 | 9 | 6.59 | 347.57 | 354.16 | | 0.6 | 0.8 |
| 9/21/2016 | XX | GW302B326 | 1479 | 6.5 | 12.1 | 8.2 | 345.96 | 354.16 | | 0.7 | 0.6 |
| 11/8/2016 | XX | GW302B340 | 1349 | 6.6 | 5.8 | 6.91 | 347.25 | 354.16 | 28.1 | 1.2 | 0.2 |
| 6/13/2017 | XX | GW302B35F | 1419 | 6.5 | 13.2 | 6.69 | 347.47 | 354.16 | | 4 | 1.8 |
| 8/29/2017 | XX | GW302B379 | 1503 | 6.5 | 9.8 | 8.8 | 345.36 | 354.16 | | 0.6 | 0.4 |
| 11/14/2017 | XX | GW302B393 | 1419 | 6.7 | 7.6 | 6.13 | 348.03 | 354.16 | 28.14 | 1.4 | 0.5 |
| 6/19/2018 | XX | GW302B3AI | 1680 | 6.7 | 10.4 | 7.73 | 346.43 | 354.16 | | 1.4 | 0.8 |
| 8/14/2018 | XX | GW302B3D7 | 1657 | 6.5 | 9.6 | 7.03 | 347.13 | 354.16 | | 1.2 | 0.6 |
| 11/28/2018 | XX | GW302B3E6 | 1709 | 6.9 | 7.5 | 5.7 | 348.46 | 354.16 | 28.14 | 1.4 | 0.5 |
| 6/5/2019 | XX | GW302B3G1 | 1591 | 6.6 | 8.5 | 6.04 | 348.12 | 354.16 | | 12.5 | 0.4 |
| 8/13/2019 | XX | GW302B3IA | 1653 | 6.6 | 14.3 | 7.46 | 346.7 | 354.16 | | 6 | 0.8 |
| 10/23/2019 | XX | GW302B3J9 | 1560 | 6.7 | 8.6 | 6.72 | 347.44 | 354.16 | | 0.5 | 0.5 |
| 6/17/2020 | XX | GW302B414 | 1518 | 6 | 9.9 | 7.61 | 346.55 | 354.16 | | 0.8 | 0.8 |
| 8/5/2020 | XX | GW302B43D | 1476 | 6.5 | 13.5 | 8.66 | 345.5 | 354.16 | | 0.8 | 0.6 |
| 10/21/2020 | XX | GW302B44C | 1401 | 6.7 | 7.9 | 5.52 | 348.64 | 354.16 | 28.18 | 2.3 | 0.8 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (302B) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/22/2021 | XX | GW302B467 | 1574 | 6.5 | 11.6 | 8.03 | 346.13 | 354.16 | | 0.7 | 0.4 |
| 9/22/2021 | XX | GW302B482 | 1582 | 6.5 | 12.2 | 6.69 | 347.47 | 354.16 | 27.45 | 0.9 | 0.8 |
| **302C** | | | | | | | | | | | |
| 5/3/2000 | XX | 302CXX36649 | 292 | 5.91 | 4.5 | | 347.84 | | | | |
| 8/9/2000 | XX | 302CXX36747 | 362 | 5.9 | 8 | | 345.52 | | 14.21 | 0.39 | 0.7 |
| 11/8/2000 | XX | 302CXX36838 | 402 | 6.07 | 8 | | 346.58 | | | 0.46 | 0.2 |
| 5/16/2001 | XX | 302CXX37027 | 507 | 5.85 | 5.8 | | 346.81 | | | 0.5 | 0.2 |
| 7/31/2001 | XX | 302CXX37103 | 453 | 5.93 | 10.6 | | 344.12 | | 14.23 | 0.8 | 0.3 |
| 10/23/2001 | XX | 302CXX37187 | 504 | 5.93 | 10.1 | | 345.88 | | | 0.9 | 0.2 |
| 5/21/2002 | XX | 302CXX37397 | 453 | 5.92 | 6.7 | | 347.54 | | | 2.3 | 0.1 |
| 8/7/2002 | XX | 302CXX37475 | 754 | 5.92 | 10.6 | | 345.13 | | 14.23 | 0.4 | 1.2 |
| 10/23/2002 | XX | 302CXX37552 | 796 | 6.16 | 9.4 | | 346.75 | | | 1.3 | 0.3 |
| 6/23/2003 | XX | 302CXX37795 | 796 | 5.9 | 8.4 | | 346.66 | | | 0.4 | 0.9 |
| 8/12/2003 | XX | 302CXX37845 | 1000 | 5.99 | 12.2 | | 346.92 | | 14.19 | 0.6 | 0.23 |
| 10/20/2003 | XX | 302CXX37914 | 801 | 5.88 | 10.9 | | 347.51 | | | 0.8 | 0.29 |
| 5/4/2004 | XX | 302CXX38111 | 898 | 6.03 | 5.2 | | 348.13 | | | 1.1 | 0.28 |
| 8/5/2004 | XX | 302CXX38204 | 868 | 6.05 | 11.2 | | 346.16 | | 14.23 | 1 | 0.24 |
| 10/20/2004 | XX | 302CXX38280 | 823 | 6.02 | 10.3 | | 346.11 | | | 0.9 | 0.19 |
| 5/11/2005 | XX | GW302C00H | 812 | 5.95 | 6.8 | 5.16 | 348.05 | 353.21 | | 0.6 | 0.3 |
| 7/27/2005 | XX | GW302C029 | 967 | 6.08 | 10.9 | 7.94 | 345.27 | 353.21 | 14.25 | 2.7 | 0.5 |
| 11/7/2005 | XX | GW302C041 | 954 | 5.96 | 10.3 | 5.39 | 347.82 | 353.21 | | 0.7 | 0.3 |
| 5/1/2006 | XX | GW302C08H | 1023 | 6.07 | 5.3 | | 347.27 | | | 0.9 | 0.3 |
| 7/31/2006 | XX | GW302C075 | 1108 | 6.15 | 11.6 | | 346.61 | | 14.04 | 1.6 | 0.2 |
| 10/25/2006 | XX | GW302C05D | 918 | 6.15 | 10.2 | | 347.83 | | | 0.1 | 0.4 |
| 5/9/2007 | XX | GW302C0A9 | 935 | 6.17 | 5.8 | | 347.59 | | | 0.1 | 0.4 |
| 8/9/2007 | XX | GW302C0C2 | 974 | 6.25 | 10.2 | | 345.26 | | 14.22 | 0.4 | 0.5 |
| 10/30/2007 | XX | GW302C0DE | 938 | 6.33 | 10 | | 347.02 | | | 0.9 | 0.5 |
| 6/2/2008 | XX | GW302C0G2 | 1150 | 6.34 | 6.5 | | 346.57 | | | 0.1 | 0.2 |
| 8/14/2008 | XX | GW302C0I2 | 1088 | 6.05 | 11.2 | | 348.39 | | | 0.1 | 0.5 |
| 10/21/2008 | XX | GW302C0JA | 1022 | 6.2 | 9.8 | | 348.39 | | | 0.5 | 0.4 |
| 5/11/2009 | XX | GW302C11A | 1093 | 6.13 | 6 | 5.21 | 348 | 353.21 | | 0.9 | 0.3 |
| 8/10/2009 | XX | GW302C13A | 1124 | 5.71 | 11.8 | 6.04 | 347.17 | 353.21 | | 0.4 | 0.3 |
| 10/22/2009 | XX | GW302C14I | 967 | 6.41 | 9.3 | 6.72 | 346.49 | 353.21 | | 0.1 | 0.4 |
| 6/1/2010 | XX | GWXXXX17F | 1137 | 6.66 | 7.7 | | 345.23 | | | 0.1 | 0.36 |
| 8/4/2010 | XX | GW302C190 | 1011 | 6.36 | 11.8 | | 344.27 | | | 0.47 | 0.61 |
| 10/14/2010 | XX | GW302C1A8 | 1137 | 6.3 | 10.5 | | 346.93 | | | 0.1 | 0.35 |
| 5/18/2011 | XX | GW302C1DB | 609 | 6.2 | 8.8 | 4.78 | 348.43 | 353.21 | 14.1 | 1 | 0 |
| 8/8/2011 | XX | GW302C1F2 | 1200 | 6.16 | 12.2 | 8.03 | 345.18 | 353.21 | 14.03 | 1 | 0 |
| 11/1/2011 | XX | GW302C1GD | 1233 | 6.3 | 10.1 | 5.7 | 347.51 | 353.21 | 14.25 | 1 | 0.2 |
| 5/15/2012 | XX | GW302C1I7 | 1040 | 6.3 | 9.6 | 5.05 | 348.16 | 353.21 | 14 | 1 | 0 |
| 8/16/2012 | XX | GW302C200 | 1304 | 6 | 13 | 8.68 | 344.53 | 353.21 | | 1 | 0.4 |
| 10/30/2012 | XX | GW302C21E | 1271 | 6.6 | 12.1 | 5.82 | 347.39 | 353.21 | 14.22 | 1 | 0 |
| 5/21/2013 | XX | GW302C238 | 1486 | 6.4 | 7.3 | 6.37 | 346.84 | 353.21 | | 1 | 0.3 |
| 7/25/2013 | XX | GW302C252 | 1504 | 6.3 | 11.9 | 7.19 | 346.02 | 353.21 | | 1 | 0.3 |
| 10/1/2013 | XX | GW302C26G | 1294 | 6.6 | 11.3 | 6.6 | 346.61 | 353.21 | 14.24 | 0.8 | 0.2 |
| 6/3/2014 | XX | GW302C28A | 1401 | 6.1 | 8.7 | 6.74 | 346.47 | 353.21 | | 0.3 | 0.3 |
| 8/20/2014 | XX | GW302C2A4 | 1134 | 6.8 | 12.4 | 7.6 | 345.61 | 353.21 | | 1 | 0.4 |
| 11/11/2014 | XX | GW302C2BI | 1327 | 6.5 | 7.9 | 5.4 | 347.81 | 353.21 | 14.18 | 0.8 | 0.2 |
| 6/3/2015 | XX | GW302C2DE | 1563 | 6.4 | 6.3 | 5.33 | 347.88 | 353.21 | | 0.4 | 0.2 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (302C) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/1/2015 | XX | GW302C2F9 | 1200 | 6.4 | 12.9 | 6.91 | 346.3 | 353.21 | | 0.5 | 0.3 |
| 11/4/2015 | XX | GW302C2H3 | 1349 | 6.5 | 8.8 | 5.45 | 347.76 | 353.21 | 14.22 | 1 | 0.5 |
| 6/15/2016 | XX | GW302C30D | 1565 | 6.3 | 8.8 | 6.7 | 346.51 | 353.21 | | 0.2 | 0.3 |
| 9/21/2016 | XX | GW302C327 | 1253 | 6.4 | 13.2 | 8.2 | 345.01 | 353.21 | | 0.6 | 0.4 |
| 11/8/2016 | XX | GW302C341 | 1323 | 6.4 | 8.3 | 6.93 | 346.28 | 353.21 | 14.18 | 0.2 | 0.1 |
| 6/13/2017 | XX | GW302C35G | 1520 | 6.4 | 10.4 | 6.94 | 346.27 | 353.21 | | 0.6 | 1.2 |
| 8/29/2017 | XX | GW302C37A | 1311 | 6.4 | 11.3 | 8.91 | 344.3 | 353.21 | | 0.4 | 0.1 |
| 11/14/2017 | XX | GW302C394 | 1440 | 6.4 | 9 | 6.15 | 347.06 | 353.21 | 14.22 | 1.2 | 0.3 |
| 6/19/2018 | XX | GW302C3AJ | 1689 | 6.5 | 8.6 | 7.75 | 345.46 | 353.21 | | 0.1 | 0.3 |
| 8/14/2018 | XX | GW302C3D8 | 1491 | 6.5 | 13.8 | 7.1 | 346.11 | 353.21 | | 2.5 | 0.2 |
| 11/28/2018 | XX | GW302C3E7 | 1793 | 7.4 | 7.1 | 5.7 | 347.51 | 353.21 | 14.22 | 0.4 | 0.3 |
| 6/5/2019 | XX | GW302C3G2 | 1483 | 6.5 | 7.4 | 6.31 | 346.9 | 353.21 | | 6.6 | 0.5 |
| 8/13/2019 | XX | GW302C3IB | 1518 | 6.5 | 13.8 | 7.43 | 345.78 | 353.21 | | 4.5 | 0.3 |
| 10/23/2019 | XX | GW302C3JA | 1305 | 6.7 | 9.7 | 6.86 | 346.35 | 353.21 | | 0.4 | 0.2 |
| 6/17/2020 | XX | GW302C415 | 1507 | 6.5 | 9.5 | 7.7 | 345.51 | 353.21 | | 0.6 | 0.2 |
| 8/5/2020 | XX | GW302C43E | 1309 | 6.4 | 12.5 | 8.69 | 344.52 | 353.21 | | 0.5 | 0.2 |
| 10/21/2020 | XX | GW302C44D | 1465 | 6.7 | 9.3 | 5.58 | 347.63 | 353.21 | 14.26 | 1.5 | 0.4 |
| 6/22/2021 | XX | GW302C468 | 1675 | 6.4 | 10.8 | 8.03 | 345.18 | 353.21 | | 0.2 | 0.4 |
| 9/22/2021 | XX | GW302C483 | 1491 | 6.8 | 12.5 | 6.62 | 346.59 | 353.21 | 14.85 | 0.4 | 0.3 |
| **303A** | | | | | | | | | | | |
| 4/27/2000 | XX | 303AXX36643 | 1482 | 6.81 | 5.5 | | 379.15 | | | | |
| 8/2/2000 | XX | 303AXX36740 | 1354 | 6.65 | 8 | | 375.57 | | 43.58 | 0.51 | 2 |
| 10/25/2000 | XX | 303AXX36824 | 2070 | 6.62 | 9 | | 374 | | | 0.5 | 0.8 |
| 5/9/2001 | XX | 303AXX37020 | 2650 | 6.57 | 9.4 | | 377.37 | | | 0.5 | 0.3 |
| 7/25/2001 | XX | 303AXX37097 | 1808 | 6.56 | 12 | | 373.91 | | 43.63 | 0.6 | 0.82 |
| 10/17/2001 | XX | 303AXX37181 | 2460 | 6.55 | 12.1 | | 372.54 | | | 0.8 | 0.46 |
| 5/16/2002 | XX | 303AXX37392 | 1837 | 6.79 | 7.6 | | 377.36 | | | 1.4 | 1.58 |
| 8/1/2002 | XX | 303AXX37469 | 1560 | 6.48 | 11.2 | | 374.75 | | 43.57 | 0.5 | 0.65 |
| 10/17/2002 | XX | 303AXX37546 | 1998 | 6.56 | 10.1 | | 373.48 | | | 1.9 | 0.2 |
| 6/23/2003 | XX | 303AXX37795 | 1473 | 6.69 | 8.2 | | 376.6 | | | 0.3 | 0.5 |
| 8/19/2003 | XX | 303AXX37852 | 1611 | 6.57 | 9.2 | | 375.49 | | 43.61 | 0.4 | 0.63 |
| 10/14/2003 | XX | 303AXX37908 | 2040 | 6.58 | 8.8 | | 376.34 | | | 0.5 | 0.67 |
| 5/3/2004 | XX | 303AXX38110 | 1737 | 6.59 | 7.7 | | 377.08 | | | 1.2 | 0.42 |
| 8/17/2004 | XX | 303AXX38216 | 1929 | 6.39 | 9.7 | | 375.24 | | 43.56 | 0.6 | 1.21 |
| 10/19/2004 | XX | 303AXX38279 | 2260 | 6.56 | 8.4 | | 374.61 | | | 0.9 | 0.31 |
| 5/18/2005 | XX | GW303A00I | 1610 | 6.65 | 7.3 | 11.68 | 377.97 | 389.65 | | 0.9 | 0.5 |
| 8/15/2005 | XX | GW303A02A | 1093 | 6.64 | 6.6 | 14.77 | 374.88 | 389.65 | 43.57 | 0.5 | 0.3 |
| 11/3/2005 | XX | GW303A042 | 1842 | 6.47 | 9 | 11.86 | 377.79 | 389.65 | | 1.2 | 0.5 |
| 5/11/2006 | XX | GW303A08I | 1086 | 6.42 | 7.8 | | 377.17 | | | 0.8 | 0.51 |
| 7/26/2006 | XX | GW303A076 | 1065 | 6.48 | 10.5 | | 376.84 | | 43.45 | 1.2 | 0.6 |
| 10/24/2006 | XX | GW303A05E | 1410 | 6.42 | 9 | | 376.96 | | | 0.1 | 0.6 |
| 5/15/2007 | XX | GW303A0AA | 1382 | 6.51 | 7.3 | | 377.08 | | | 0.6 | 0.6 |
| 8/15/2007 | XX | GW303A0C3 | 1111 | 6.54 | 9.2 | | 374.67 | | 43.62 | 0.22 | 0.5 |
| 10/29/2007 | XX | GW303A0DF | 1704 | 6.57 | 8.5 | | 375.54 | | | 4.9 | 0.7 |
| 6/2/2008 | XX | GW303A0G3 | 1195 | 6.68 | 7.4 | | 376.6 | | | 0.1 | 0.3 |
| 8/13/2008 | XX | GW303A0I3 | 993 | 6.57 | 10.4 | | 377.44 | | | 0.1 | 0.6 |
| 10/20/2008 | XX | GW303A0JB | 1034 | 6.42 | 7.5 | | 377.44 | | | 0.5 | 0.8 |
| 5/5/2009 | XX | GW303A11B | 1296 | 6.5 | 7.4 | 12.24 | 377.41 | 389.65 | | 0.47 | 0.2 |
| 8/6/2009 | XX | GW303A13B | 994 | 6.14 | 10.6 | 11.4 | 378.25 | 389.65 | | 0.13 | 0.7 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (303A) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/21/2009 | XX | GW303A14J | 926 | 6.64 | 9.1 | 14.41 | 375.24 | 389.65 | | 0.1 | 0.9 |
| 5/27/2010 | XX | GW303A170 | 919 | 6.67 | 8.5 | | 375.48 | | | 0.59 | 0.27 |
| 8/4/2010 | XX | GW303A191 | 1037 | 6.29 | 10.6 | | 374.33 | | | 0.55 | 0.64 |
| 10/14/2010 | XX | GW303A1A9 | 1536 | 6.46 | 8 | | 374.62 | | | 0.28 | 0.54 |
| 5/17/2011 | XX | GW303A1E5 | 850 | 6.4 | 7.4 | 10.85 | 378.8 | 389.65 | 43.55 | 0.6 | 1.1 |
| 8/9/2011 | XX | GW303A1FG | 724 | 6.38 | 13.1 | 15.22 | 374.43 | 389.65 | 36.11 | 1 | 0.2 |
| 11/3/2011 | XX | GW303A1H7 | 1024 | 6.3 | 9.8 | 12.88 | 376.77 | 389.65 | 43.6 | 1 | 1.4 |
| 5/17/2012 | XX | GW303A1J1 | 911 | 6.4 | 8.7 | 11.58 | 378.07 | 389.65 | 43.45 | 0.4 | 0 |
| 8/15/2012 | XX | GW303A20E | 856 | 6.1 | 15.8 | 15.08 | 374.57 | 389.65 | | 1 | 0.3 |
| 11/1/2012 | XX | GW303A228 | 1120 | 6.6 | 9.4 | 11.05 | 378.6 | 389.65 | 43.62 | 0.6 | 0.4 |
| 5/21/2013 | XX | GW303A242 | 875 | 6.6 | 8.4 | 13.48 | 376.17 | 389.65 | | 1 | 0.4 |
| 7/24/2013 | XX | GW303A25G | 800 | 6.3 | 16 | 13.89 | 375.76 | 389.65 | | 1 | 0.4 |
| 10/2/2013 | XX | GW303A27A | 818 | 6.9 | 10.8 | 14.28 | 375.37 | 389.65 | 43.85 | 0.6 | 1 |
| 6/3/2014 | XX | GW303A294 | 846 | 6 | 9.6 | 13.01 | 376.64 | 389.65 | | 1 | 0.3 |
| 8/20/2014 | XX | GW303A2AI | 811 | 7 | 12.8 | 15.24 | 374.41 | 389.65 | | 1 | 0.3 |
| 11/12/2014 | XX | GW303A2CC | 1007 | 6.5 | 7.8 | 12.49 | 377.16 | 389.65 | 43.55 | 1 | 0.2 |
| 6/3/2015 | XX | GW303A2E8 | 834 | 6.5 | 6.7 | 12.02 | 377.63 | 389.65 | | 0.7 | 0.2 |
| 9/1/2015 | XX | GW303A2G3 | 651 | 6.3 | 10.1 | 14.89 | 374.76 | 389.65 | | 0.3 | 0.05 U |
| 11/3/2015 | XX | GW303A2HH | 877 | 6.6 | 8.1 | 12.26 | 377.39 | 389.65 | 43.64 | 0.2 | 0.3 |
| 6/15/2016 | XX | GW303A317 | 559 | 6.4 | 9 | 14.08 | 375.57 | 389.65 | | 0.2 | 1.1 |
| 9/20/2016 | XX | GW303A331 | 726 | 6.3 | 10.7 | 16.81 | 372.84 | 389.65 | | 0.4 | 0.3 |
| 11/8/2016 | XX | GW303A34F | 936 | 6.5 | 8.5 | 17.58 | 372.07 | 389.65 | 43.55 | 0.3 | 0.2 |
| 6/13/2017 | XX | GW303A36A | 656 | 6.5 | 9.8 | 12.68 | 376.97 | 389.65 | | 0.1 | 0.7 |
| 8/30/2017 | XX | GW303A384 | 1143 | 6.9 | 8.5 | 15.55 | 374.1 | 389.65 | | 0.2 | 0.2 |
| 11/15/2017 | XX | GW303A39I | 1028 | 6.7 | 7.4 | 13.25 | 376.4 | 389.65 | 43.55 | 0.9 | 0.3 |
| 6/20/2018 | XX | GW303A3BD | 1276 | 6.8 | 8.4 | 13.93 | 375.72 | 389.65 | | 0.1 | 0.3 |
| 8/15/2018 | XX | GW303A3E2 | 1285 | 6.7 | 10.1 | 14.9 | 374.75 | 389.65 | | 0.2 | 0.2 |
| 11/27/2018 | XX | GW303A3F1 | 1291 | 6.7 | 7.8 | 12.46 | 377.19 | 389.65 | 43.54 | 0.1 | 0.2 |
| 6/4/2019 | XX | GW303A3GG | 830 | 6.7 | 7.7 | 11.76 | 377.89 | 389.65 | | 0.1 | 0.3 |
| 8/14/2019 | XX | GW303A3J5 | 556 | 6.6 | 9.7 | 14.73 | 374.92 | 389.65 | | 3.9 | 0.2 |
| 10/22/2019 | XX | GW303A404 | 771 | 6.7 | 7.7 | 15.9 | 373.75 | 389.65 | | 3.5 | 0.2 |
| 6/16/2020 | XX | GW303A41J | 622 | 6.9 | 7.3 | 13.96 | 375.69 | 389.65 | | 1.2 | 0.2 |
| 8/4/2020 | XX | GW303A448 | 584 | 6.5 | 10 | 15.78 | 373.87 | 389.65 | | 0.5 | 0.2 |
| 10/20/2020 | XX | GW303A457 | 827 | 6.8 | 9 | 16.07 | 373.58 | 389.65 | 43.62 | 1.3 | 0.3 |
| 6/22/2021 | XX | GW303A472 | 596 | 6.3 | 10 | 14.51 | 375.14 | 389.65 | | 0.5 | 0.2 |
| 9/21/2021 | XX | GW303A48H | 90 | 7 | 9.4 | 15.76 | 373.89 | 389.65 | 43.62 | 0.4 | 0.1 |
| **303B** | | | | | | | | | | | |
| 4/27/2000 | XX | 303BXX36643 | 808 | 6.59 | 5 | | 381 | | | | |
| 8/2/2000 | XX | 303BXX36740 | 1355 | 6.47 | 9 | | 376.68 | | 26.5 | 0.31 | 0.2 |
| 10/25/2000 | XX | 303BXX36824 | 2470 | 6.61 | 9 | | 374.7 | | | 0.5 | 0.5 |
| 5/9/2001 | XX | 303BXX37020 | 1878 | 6.59 | 6.8 | | 379.1 | | | 0.5 | 0.9 |
| 7/25/2001 | XX | 303BXX37097 | 1905 | 6.46 | 11 | | 374.77 | | 26.47 | 0.6 | 0.23 |
| 10/17/2001 | XX | 303BXX37181 | 2630 | 6.62 | 12.5 | | 373.2 | | | 1.2 | 0.18 |
| 5/16/2002 | XX | 303BXX37392 | 1226 | 6.72 | 6.5 | | 378.69 | | | 0.8 | 0.29 |
| 8/2/2002 | XX | 303BXX37470 | 1131 | 6.42 | 11.2 | | 376.07 | | 26.5 | 0.9 | 0.38 |
| 10/17/2002 | XX | 303BXX37546 | 2200 | 6.64 | 10.4 | | 374.21 | | | 1.1 | 0.3 |
| 6/23/2003 | XX | 303BXX37795 | 1084 | 6.61 | 8.1 | | 377.83 | | | 0.3 | 0.6 |
| 8/19/2003 | XX | 303BXX37852 | 1601 | 6.46 | 10.9 | | 376.86 | | 26.5 | 0.4 | 0.53 |
| 10/14/2003 | XX | 303BXX37908 | 2190 | 6.59 | 11.5 | | 377.66 | | | 1.7 | 0.41 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(303B)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/3/2004 | XX | 303BXX38110 | 1378 | 6.61 | 7 | | 378.66 | | | 2 | 0.52 |
| 8/17/2004 | XX | 303BXX38216 | 1941 | 6.53 | 11.6 | | 376.55 | | 26.51 | 0.8 | 0.27 |
| 10/19/2004 | XX | 303BXX38279 | 2100 | 6.63 | 10.6 | | 375.8 | | | 0.8 | 0.24 |
| 5/18/2005 | XX | GW303B00J | 990 | 6.7 | 6.6 | 9.94 | 379.68 | 389.62 | | 0.7 | 0.6 |
| 8/15/2005 | XX | GW303B02B | 902 | 6.4 | 7.8 | 13.46 | 376.16 | 389.62 | 26.45 | 0.6 | 0.2 |
| 11/3/2005 | XX | GW303B043 | 1604 | 6.5 | 10.2 | 10.11 | 379.51 | 389.62 | | 0.6 | 0.5 |
| 5/11/2006 | XX | GW303B08J | 986 | 6.4 | 6.4 | | 378.74 | | | 0.7 | 0.25 |
| 7/26/2006 | XX | GW303B077 | 869 | 6.46 | 12.4 | | 378.1 | | 26.31 | 1.5 | 0.6 |
| 10/24/2006 | XX | GW303B05F | 1489 | 6.4 | 10.7 | | 378.31 | | | 0.1 | 0.4 |
| 5/15/2007 | XX | GW303B0AB | 855 | 6.6 | 6.1 | | 378.57 | | | 0.3 | 0.4 |
| 8/15/2007 | XX | GW303B0C4 | 1116 | 6.41 | 9.7 | | 375.75 | | 26.5 | 0.5 | 0.3 |
| 10/29/2007 | XX | GW303B0DG | 1832 | 6.61 | 9.8 | | 376.76 | | | 1.7 | 0.6 |
| 6/3/2008 | XX | GW303B0G4 | 772 | 6.79 | 7.1 | | 377.91 | | | 0.1 | 0.4 |
| 8/13/2008 | XX | GW303B0I4 | 729 | 6.44 | 11.3 | | 378.87 | | | 0.3 | 0.4 |
| 10/20/2008 | XX | GW303B0JC | 990 | 6.41 | 9.9 | | 378.87 | | | 0.5 | 0.6 |
| 5/5/2009 | XX | GW303B11C | 844 | 6.47 | 6.2 | 10.73 | 378.89 | 389.62 | | 0.5 | 0.4 |
| 8/6/2009 | XX | GW303B13C | 655 | 6.11 | 11.2 | 9.8 | 379.82 | 389.62 | | 0.5 | 0.3 |
| 10/21/2009 | XX | GW303B150 | 859 | 6.29 | 10.8 | 13.23 | 376.39 | 389.62 | | 0.2 | 0.5 |
| 5/27/2010 | XX | GW303B171 | 611 | 6.6 | 7.4 | | 376.67 | | | 0.67 | 0.19 |
| 8/4/2010 | XX | GW303B192 | 1061 | 6.43 | 10.8 | | 375.3 | | | 0.59 | 0.27 |
| 10/14/2010 | XX | GW303B1AA | 1350 | 6.28 | 9.7 | | 375.73 | | | 0.55 | 0.42 |
| 5/17/2011 | XX | GW303B1E6 | 500 | 6.4 | 7.3 | 8.79 | 380.83 | 389.62 | 26.4 | 0.8 | 0.7 |
| 8/9/2011 | XX | GW303B1FH | 631 | 6.06 | 17 | 13.95 | 375.67 | 389.62 | 26.3 | 1 | 0.2 |
| 11/3/2011 | XX | GW303B1H8 | 937 | 6.4 | 10.7 | 11.3 | 378.32 | 389.62 | 26.5 | 1 | 0.1 |
| 5/17/2012 | XX | GW303B1J2 | 685 | 6.4 | 8.9 | 9.95 | 379.67 | 389.62 | 26.3 | 1 | 0 |
| 8/15/2012 | XX | GW303B20F | 711 | 5.9 | 17.9 | 13.98 | 375.64 | 389.62 | | 1 | 0.7 |
| 11/1/2012 | XX | GW303B229 | 1205 | 6.7 | 10.7 | 9.35 | 380.27 | 389.62 | 26.5 | 0.8 | 0.4 |
| 5/21/2013 | XX | GW303B243 | 570 | 6.5 | 7.5 | 12.08 | 377.54 | 389.62 | | 0.8 | 0.3 |
| 7/24/2013 | XX | GW303B25H | 536 | 6.3 | 15.8 | 12.59 | 377.03 | 389.62 | | 1 | 0.2 |
| 10/2/2013 | XX | GW303B27B | 707 | 6.7 | 12.7 | 12.64 | 376.98 | 389.62 | 26.5 | 0.6 | 0.4 |
| 6/3/2014 | XX | GW303B295 | 589 | 6.2 | 8.4 | 11.6 | 378.02 | 389.62 | | 1 | 0.3 |
| 8/20/2014 | XX | GW303B2AJ | 723 | 6.7 | 12.6 | 14.29 | 375.33 | 389.62 | | 1 | 0.3 |
| 11/12/2014 | XX | GW303B2CD | 1143 | 6.5 | 9.1 | 10.85 | 378.77 | 389.62 | 21.05 | 1 | 0.3 |
| 6/3/2015 | XX | GW303B2E9 | 632 | 6.5 | 6.2 | 10.25 | 379.37 | 389.62 | | 1 | 0.1 |
| 9/1/2015 | XX | GW303B2G4 | 559 | 6.3 | 11 | 13.55 | 376.07 | 389.62 | | 0.8 | 0.05 U |
| 11/3/2015 | XX | GW303B2HI | 718 | 6.5 | 9.3 | 10.64 | 378.98 | 389.62 | 26.5 | 0.6 | 0.2 |
| 6/15/2016 | XX | GW303B318 | 383 | 6.2 | 8.7 | 12.68 | 376.94 | 389.62 | | 0.5 | 0.3 |
| 9/20/2016 | XX | GW303B332 | 851 | 6.3 | 12 | 15.83 | 373.79 | 389.62 | | 1.1 | 0.3 |
| 11/8/2016 | XX | GW303B34G | 1069 | 6.3 | 9.8 | 16.9 | 372.72 | 389.62 | 26.49 | 0.3 | 0.2 |
| 6/13/2017 | XX | GW303B36B | 413 | 6.4 | 8.4 | 11.11 | 378.51 | 389.62 | | 0.2 | 1.1 |
| 8/30/2017 | XX | GW303B385 | 491 | 6.4 | 10.3 | 14.2 | 375.42 | 389.62 | | 0.5 | 0.1 |
| 11/15/2017 | XX | GW303B39J | 1023 | 6.4 | 8.8 | 11.69 | 377.93 | 389.62 | 26.49 | 0.9 | 0.3 |
| 6/20/2018 | XX | GW303B3BE | 477 | 6.6 | 7.8 | 12.5 | 377.12 | 389.62 | | 0.3 | 0.3 |
| 8/15/2018 | XX | GW303B3E3 | 586 | 6.1 | 10.6 | 13.4 | 376.22 | 389.62 | | 1.7 | 0.2 |
| 11/27/2018 | XX | GW303B3F2 | 1279 | 6.8 | 8.5 | 10.64 | 378.98 | 389.62 | 26.47 | 1.3 | 0.3 |
| 6/4/2019 | XX | GW303B3GH | 456 | 6.7 | 6.7 | 9.45 | 380.17 | 389.62 | | 2.4 | 0.2 |
| 8/14/2019 | XX | GW303B3J6 | 423 | 6.4 | 10.2 | 13.34 | 376.28 | 389.62 | | 4.2 | 0.3 |
| 10/22/2019 | XX | GW303B405 | 800 | 6.4 | 9.1 | 14.9 | 374.72 | 389.62 | | 4.2 | 0.3 |
| 6/16/2020 | XX | GW303B420 | 455 | 6.6 | 6.8 | 12.42 | 377.2 | 389.62 | | 0.9 | 0.2 |
| 8/4/2020 | XX | GW303B449 | 562 | 6.3 | 10.2 | 14.74 | 374.88 | 389.62 | | 0.7 | 0.2 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (303B) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/20/2020 | XX | GW303B458 | 933 | 6.5 | 9.6 | 15.45 | 374.17 | 389.62 | 26.58 | 1.6 | 0.2 |
| 6/22/2021 | XX | GW303B473 | 445 | 6.2 | 9.6 | 13 | 376.62 | 389.62 | | 0.6 | 0.2 |
| 9/21/2021 | XX | GW303B48I | 848 | 6.3 | 10.8 | 14.96 | 374.66 | 389.62 | 26.48 | 0.4 | 0.2 |
| **304A** | | | | | | | | | | | |
| 5/3/2000 | XX | 304AXX36649 | 380 | 7.62 | 5.4 | | 345.36 | | | | |
| 8/9/2000 | XX | 304AXX36747 | 314 | 7.86 | 11 | | 343.2 | | 23.92 | 0.86 | 0.6 |
| 11/9/2000 | XX | 304AXX36839 | 358 | 7.91 | 13 | | 344.4 | | | 0.68 | 0.2 |
| 5/16/2001 | XX | 304AXX37027 | 383 | 7.94 | 7.4 | | 345.02 | | | 0.5 | 0.1 |
| 7/31/2001 | XX | 304AXX37103 | 310 | 7.71 | 14.5 | | 341.82 | | 23.92 | 0.7 | 0.2 |
| 10/23/2001 | XX | 304AXX37187 | 394 | 7.83 | 11.9 | | 343.28 | | | 0.6 | 0.1 |
| 5/21/2002 | XX | 304AXX37397 | 387 | 7.48 | 9.7 | | 345.31 | | | 0.8 | 0.2 |
| 7/30/2002 | XX | 304AXX37467 | 378 | 7.71 | 13.1 | | 343.36 | | 23.92 | 1.4 | 0.4 |
| 10/22/2002 | XX | 304AXX37551 | 473 | 7.5 | 10.5 | | 345.05 | | | 0.8 | 0.2 |
| 6/24/2003 | XX | 304AXX37796 | 409 | 7.5 | 11.8 | | 344.65 | | | 0.5 | 0.6 |
| 8/7/2003 | XX | 304AXX37840 | 383 | 7.45 | 13.8 | | 344.67 | | 23.91 | 0.5 | 0.34 |
| 10/21/2003 | XX | 304AXX37915 | 454 | 7.75 | 9.8 | | 345.39 | | | 1 | 0.59 |
| 5/10/2004 | XX | 304AXX38117 | 447 | 7.6 | 7.1 | | 345.13 | | | 0.8 | 0.31 |
| 7/28/2004 | XX | 304AXX38196 | 420 | 7.71 | 10 | | 344.71 | | 23.94 | 0.9 | 0.55 |
| 10/21/2004 | XX | 304AXX38281 | 456 | 7.82 | 10.3 | | 344.27 | | | 0.7 | 0.2 |
| 5/10/2005 | XX | GW304A010 | 450 | 7.35 | 6.9 | 4.46 | 345.86 | 350.32 | | 0.6 | 0.3 |
| 7/28/2005 | XX | GW304A02C | 374 | 7.62 | 10.5 | 6.82 | 343.5 | 350.32 | 23.66 | 2.1 | 0.8 |
| 11/8/2005 | XX | GW304A044 | 440 | 7.62 | 10.2 | 4.67 | 345.65 | 350.32 | | 6.1 | 0.3 |
| 5/3/2006 | XX | GW304A090 | 333 | 7.4 | 6 | | 345.95 | | | 4.3 | 1.59 |
| 8/1/2006 | XX | GW304A078 | 428 | 7.38 | 13.3 | | 344.75 | | 23.61 | 3.2 | 38 |
| 10/26/2006 | XX | GW304A05G | 374 | 7.43 | 10.3 | | 345.47 | | | 2.5 | 4.7 |
| 5/8/2007 | XX | GW304A0AC | 343 | 7.04 | 6.2 | | 345.37 | | | 0.7 | 0.7 |
| 8/7/2007 | XX | GW304A0C5 | 338 | 7.47 | 11 | | 343.07 | | 23.35 | 1.3 | 0.7 |
| 10/31/2007 | XX | GW304A0DH | 402 | 7.2 | 9.5 | | 344.9 | | | 1.5 | 0.8 |
| 6/3/2008 | XX | GW304A0G5 | 367 | 7.64 | 7.4 | | 345.12 | | | 0.2 | 0.3 |
| 8/18/2008 | XX | GW304A0I5 | 367 | 7.29 | 12 | | 345.05 | | | 0.7 | 0.5 |
| 10/23/2008 | XX | GW304A0JD | 343 | 7.38 | 9.2 | | 345.05 | | | 1.1 | 0.4 |
| 5/12/2009 | XX | GW304A11D | 341 | 7.29 | 6.6 | 4.81 | 345.51 | 350.32 | | 1.2 | 0.3 |
| 8/11/2009 | XX | GW304A13D | 340 | 7.16 | 12.9 | 4.74 | 345.58 | 350.32 | | 0.6 | 0.8 |
| 10/26/2009 | XX | GW304A151 | 350 | 6.77 | 9.4 | 4.57 | 345.75 | 350.32 | | 0.2 | 0.6 |
| 6/2/2010 | XX | GW304A172 | 316 | 7.05 | 8.8 | | 343.96 | | | 1.1 | 0.38 |
| 8/5/2010 | XX | GW304A193 | 315 | 7.37 | 13.5 | | 341.61 | | | 0.89 | 0.65 |
| 10/18/2010 | XX | GW304A1AB | 341 | 7.36 | 10.5 | | 345.29 | | | 0.81 | 0.42 |
| 5/19/2011 | XX | GW304A1DC | 296 | 7.8 | 10.1 | 4.46 | 345.86 | 350.32 | 21.2 | 2 | 0.2 |
| 8/8/2011 | XX | GW304A1F3 | 266 | 7.66 | 14.1 | 7.67 | 342.65 | 350.32 | 21.13 | 1 | 0 |
| 11/2/2011 | XX | GW304A1GE | 314 | 7.5 | 10.3 | 5.04 | 345.28 | 350.32 | 21.35 | 2 | 0.5 |
| 5/15/2012 | XX | GW304A1I8 | 339 | 8.5 | 9.4 | 4.61 | 345.71 | 350.32 | 20.28 | 3 | 0.2 |
| 8/15/2012 | XX | GW304A201 | 259 | 6.9 | 17.3 | 8.49 | 341.83 | 350.32 | | 1 | 0.7 |
| 10/31/2012 | XX | GW304A21F | 300 | 7.5 | 13.6 | 3.85 | 346.47 | 350.32 | 21.32 | 1 | 0 |
| 5/21/2013 | XX | GW304A239 | 301 | 7.8 | 9.3 | 5.12 | 345.2 | 350.32 | | 2 | 0.1 |
| 7/25/2013 | XX | GW304A253 | 273 | 6.6 | 13.6 | 6.57 | 343.75 | 350.32 | | 2 | 0.3 |
| 10/2/2013 | XX | GW304A26H | 279 | 8.2 | 14.2 | 5.76 | 344.56 | 350.32 | 21.34 | 1 | 0.9 |
| 6/4/2014 | XX | GW304A28B | 270 | 7.8 | 10.1 | 4.91 | 345.41 | 350.32 | | 1 | 0.4 |
| 8/20/2014 | XX | GW304A2A5 | 260 | 7.9 | 14.2 | 6.98 | 343.34 | 350.32 | | 2 | 1.2 |
| 11/12/2014 | XX | GW304A2BJ | 231 | 6.7 | 8.6 | 4.98 | 345.34 | 350.32 | 21.28 | 1 | 0.8 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (304A) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/3/2015 | XX | GW304A2DF | 282 | 7.9 | 7.2 | 4.58 | 345.74 | 350.32 | | 1.9 | 1 |
| 9/2/2015 | XX | GW304A2FA | 240 | 8 | 12.9 | 6.3 | 344.02 | 350.32 | | 0.6 | 0.5 |
| 11/4/2015 | XX | GW304A2H4 | 272 | 7.6 | 10.7 | 4.89 | 345.43 | 350.32 | 21.32 | 1.7 | 1 |
| 6/16/2016 | XX | GW304A30E | 252 | 7.8 | 10.2 | 5.84 | 344.48 | 350.32 | | 1.6 | 1.7 |
| 9/21/2016 | XX | GW304A328 | 265 | 7.9 | 13.1 | 9.35 | 340.97 | 350.32 | | 1.8 | 0.5 |
| 11/8/2016 | XX | GW304A342 | 246 | 7.4 | 9.9 | 7.43 | 342.89 | 350.32 | 21.34 | 1.8 | 0.8 |
| 6/14/2017 | XX | GW304A35H | 247 | 7.9 | 10.1 | 5.82 | 344.5 | 350.32 | | 1.6 | 3 |
| 8/29/2017 | XX | GW304A37B | 248 | 7.8 | 10.8 | 8.98 | 341.34 | 350.32 | | 2.6 | 0.5 |
| 11/14/2017 | XX | GW304A395 | 243 | 7.2 | 9.3 | 10.8 | 339.52 | 350.32 | 21.34 | 2 | 0.4 |
| 6/21/2018 | XX | GW304A3B0 | 263 | 8.1 | 8.5 | 7.03 | 343.29 | 350.32 | | 1.6 | 5.1 |
| 8/15/2018 | XX | GW304A3D9 | 285 | 8.1 | 15.5 | 7 | 343.32 | 350.32 | | 1.9 | 0.6 |
| 11/30/2018 | XX | GW304A3E8 | 277 | 8.8 | 7.8 | 4.81 | 345.51 | 350.32 | 21.34 | 8.5 | 0.8 |
| 6/5/2019 | XX | GW304A3G3 | 241 | 8.2 | 9.8 | 5.28 | 345.04 | 350.32 | | 4 | 0.5 |
| 8/14/2019 | XX | GW304A3IC | 233 | 8.1 | 11.7 | 7.71 | 342.61 | 350.32 | | 3.6 | 0.6 |
| 10/24/2019 | XX | GW304A3JB | 275 | 7.9 | 10.3 | 4.6 | 345.72 | 350.32 | | 0.3 | 0.8 |
| 6/17/2020 | XX | GW304A416 | 211 | 6.9 | 10.8 | 6.85 | 343.47 | 350.32 | | 0.7 | 0.5 |
| 8/5/2020 | XX | GW304A43F | 212 | 7.5 | 14.4 | 9.03 | 341.29 | 350.32 | | 1 | 0.6 |
| 10/22/2020 | XX | GW304A44E | 282 | 7.5 | 11 | 5.19 | 345.13 | 350.32 | 21.38 | 1.7 | 0.9 |
| 6/22/2021 | XX | GW304A469 | 255 | 7.2 | 13.6 | 7.6 | 342.72 | 350.32 | | 1.4 | 0.6 |
| 9/22/2021 | XX | GW304A484 | 267 | 7 | 13.9 | 6.15 | 344.17 | 350.32 | 24.95 | 1.3 | 0.3 |
| **304B** | | | | | | | | | | | |
| 5/3/2000 | XX | 304BXX36649 | 58 | 6.35 | 4.9 | | 344.82 | | | | |
| 8/9/2000 | XX | 304BXX36747 | 191 | 6.78 | 18 | | 342.59 | | 10.79 | 4.41 | 1.1 |
| 11/9/2000 | XX | 304BXX36839 | 222 | 6.64 | 9 | | 343.84 | | | 4.72 | 0.9 |
| 5/16/2001 | XX | 304BXX37027 | 303 | 6.57 | 7.8 | | 344.38 | | | 4.2 | 0.3 |
| 7/31/2001 | XX | 304BXX37103 | D | D | D | | | | 10.77 | D | D |
| 10/23/2001 | XX | 304BXX37187 | 341 | 6.45 | 12.8 | | 342.67 | | | 1.7 | 1.2 |
| 5/21/2002 | XX | 304BXX37397 | 208 | 6.54 | 9.8 | | 344.74 | | | 9.1 | 0.9 |
| 7/30/2002 | XX | 304BXX37467 | 331 | 6.48 | 14.2 | | 342.7 | | 10.77 | 4.6 | 0.8 |
| 10/22/2002 | XX | 304BXX37551 | 327 | 6.48 | 11.7 | | 344.53 | | | 3.6 | 1.2 |
| 6/24/2003 | XX | 304BXX37796 | 314 | 6.55 | 12.3 | | 343.94 | | | 5.5 | 0.7 |
| 8/7/2003 | XX | 304BXX37840 | 259 | 6.37 | 15.2 | | 344.03 | | 10.81 | 4.5 | 1.01 |
| 10/21/2003 | XX | 304BXX37915 | 268 | 6.54 | 10.7 | | 344.8 | | | 4.8 | 2.09 |
| 5/10/2004 | XX | 304BXX38117 | 226 | 6.9 | 7.6 | | 344.38 | | | 7.3 | 0.79 |
| 7/28/2004 | XX | 304BXX38196 | 224 | 6.6 | 11.1 | | 344.04 | | 10.75 | 5 | 0.57 |
| 10/21/2004 | XX | 304BXX38281 | 219 | 6.69 | 11.4 | | 343.57 | | | 3.4 | 0.37 |
| 5/10/2005 | XX | GW304B011 | 152 | 6.89 | 7.5 | 4.35 | 345.2 | 349.55 | | 8 | 1.1 |
| 7/28/2005 | XX | GW304B02D | 297 | 6.54 | 12.9 | 6.84 | 342.71 | 349.55 | 10.76 | 6 | 0.6 |
| 11/8/2005 | XX | GW304B045 | 236 | 6.65 | 10.2 | 4.55 | 345 | 349.55 | | 6.3 | 0.4 |
| 5/3/2006 | XX | GW304B091 | 152.6 | 7.08 | 5.3 | | 345.37 | | | 8.2 | 0.78 |
| 8/1/2006 | XX | GW304B079 | 218 | 6.49 | 14.4 | | 343.94 | | 10.65 | 5.7 | 0.4 |
| 10/26/2006 | XX | GW304B05H | 212 | 6.7 | 11.1 | | 344.76 | | | 5.2 | 0.4 |
| 5/8/2007 | XX | GW304B0AD | 186 | 6.93 | 5.8 | | 344.51 | | | 7.2 | 0.5 |
| 8/7/2007 | XX | GW304B0C6 | 245 | 6.65 | 13.2 | | 342.18 | | 10.76 | 4.8 | 0.7 |
| 10/31/2007 | XX | GW304B0DI | 238 | 6.49 | 10.9 | | 344.11 | | | 5.5 | 1.2 |
| 6/5/2008 | XX | GW304B0G6 | 144 | 6.42 | 8.2 | | 344.29 | | | 7.2 | 0.4 |
| 8/18/2008 | XX | GW304B0I6 | 111 | 5.86 | 13.7 | | 344.14 | | | 3.3 | 0.8 |
| 10/23/2008 | XX | GW304B0JE | 131 | 6.36 | 10.4 | | 344.14 | | | 2.6 | 2.2 |
| 5/12/2009 | XX | GW304B11E | 72.3 | 6.12 | 6.8 | 4.91 | 344.64 | 349.55 | | 3.5 | 2 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (304B) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/11/2009 | XX | GW304B13E | 184 | 5.46 | 14.4 | 4.81 | 344.74 | 349.55 | | 4.3 | 1 |
| 10/26/2009 | XX | GW304B152 | 119 | 6.85 | 9.2 | 4.57 | 344.98 | 349.55 | | 3 | 17.5 |
| 6/2/2010 | XX | GW304B173 | 117 | 7.19 | 9.9 | | 343 | | | 5.27 | 0.84 |
| 8/5/2010 | XX | GW304B194 | 152.7 | 6.47 | 15.3 | | 340.73 | | | 4.17 | 8.21 |
| 10/18/2010 | XX | GW304B1AC | 129 | 5.79 | 11.2 | | 344.51 | | | 2.91 | 4.29 |
| 5/19/2011 | XX | GW304B1DD | 63 | 6.4 | 8.7 | 4.5 | 345.05 | 349.55 | 10.63 | 5 | 2.1 |
| 8/8/2011 | XX | GW304B1F4 | 127 | 6.34 | 14.6 | 7.81 | 341.74 | 349.55 | 10.63 | 5 | 0 |
| 11/2/2011 | XX | GW304B1GF | 130 | 6.2 | 10.3 | 5.15 | 344.4 | 349.55 | 10.84 | 2 | 0.5 |
| 5/15/2012 | XX | GW304B1I9 | 71 | 6 | 9.4 | 4.5 | 345.05 | 349.55 | 10.93 | 4 | 0.6 |
| 8/15/2012 | XX | GW304B202 | 223 | 5.8 | 17.2 | 8.65 | 340.9 | 349.55 | | 4 | 1.9 |
| 10/31/2012 | XX | GW304B21G | 144 | 6.2 | 12.5 | 3.9 | 345.65 | 349.55 | 10.85 | 5 | 0 |
| 5/21/2013 | XX | GW304B23A | 127 | 7.2 | 8.1 | 5.27 | 344.28 | 349.55 | | 5 | 0.3 |
| 7/25/2013 | XX | GW304B254 | 138 | 5.8 | 16.8 | 6.75 | 342.8 | 349.55 | | 5 | 1 |
| 10/2/2013 | XX | GW304B26I | 127 | 6.9 | 14.7 | 5.92 | 343.63 | 349.55 | 10.85 | 4 | 1.2 |
| 6/4/2014 | XX | GW304B28C | 112 | 7.5 | 10.8 | 6.12 | 343.43 | 349.55 | | 5 | 0.6 |
| 8/20/2014 | XX | GW304B2A6 | 114 | 7 | 14.9 | 6.96 | 342.59 | 349.55 | | 5 | 0.3 |
| 11/12/2014 | XX | GW304B2C0 | 61 | 6.3 | 8.3 | 5.1 | 344.45 | 349.55 | 10.75 | 4 | 0.4 |
| 6/3/2015 | XX | GW304B2DG | 44 | 6.6 | 9 | 4.65 | 344.9 | 349.55 | | 2.3 | 0.2 |
| 9/2/2015 | XX | GW304B2FB | 103 | 6.6 | 15.6 | 6.45 | 343.1 | 349.55 | | 5 | 0.05 U |
| 11/4/2015 | XX | GW304B2H5 | 80 | 6.5 | 10 | 4.92 | 344.63 | 349.55 | 10.85 | 4.6 | 2.4 |
| 6/16/2016 | XX | GW304B30F | 92 | 6.6 | 10.9 | 6.3 | 343.25 | 349.55 | | 5.7 | 3.7 |
| 9/21/2016 | XX | GW304B329 | 106 | 6.6 | 17.6 | 9.46 | 340.09 | 349.55 | | 4.8 | 0.5 |
| 11/8/2016 | XX | GW304B343 | 151 | 7.1 | 9.8 | 7.45 | 342.1 | 349.55 | 10.82 | 2.6 | 0.2 |
| 6/14/2017 | XX | GW304B35I | 108 | 6.7 | 10 | 6.1 | 343.45 | 349.55 | | 8.3 | 1.2 |
| 8/29/2017 | XX | GW304B37C | 82 | 6.9 | 13.5 | 9.09 | 340.46 | 349.55 | | 7 | 0.2 |
| 11/14/2017 | XX | GW304B396 | 110 | 6.7 | 9.4 | 5.59 | 343.96 | 349.55 | 10.82 | 4 | 0.3 |
| 6/21/2018 | XX | GW304B3B1 | 119 | 7.1 | 10.3 | 7.26 | 342.29 | 349.55 | | 6 | 6.2 |
| 8/15/2018 | XX | GW304B3DA | 134 | 5.7 | 15.1 | 7.15 | 342.4 | 349.55 | | 5.3 | 0.5 |
| 11/30/2018 | XX | GW304B3E9 | 55 | 8 | 5.5 | 4.9 | 344.65 | 349.55 | 10.83 | 1.3 | 0.3 |
| 6/5/2019 | XX | GW304B3G4 | 104 | 7 | 10.3 | 5.53 | 344.02 | 349.55 | | 13.5 | 0.2 |
| 8/14/2019 | XX | GW304B3ID | 124 | 7.2 | 14.5 | 7.88 | 341.67 | 349.55 | | 9.5 | 0.4 |
| 10/24/2019 | XX | GW304B3JC | 98 | 7.5 | 10.8 | 4.45 | 345.1 | 349.55 | | 4.4 | 0.2 |
| 6/17/2020 | XX | GW304B417 | 103 | 6.7 | 12.4 | 7.02 | 342.53 | 349.55 | | 6.5 | 0.4 |
| 8/5/2020 | XX | GW304B43G | 116 | 6.6 | 15.8 | 9.18 | 340.37 | 349.55 | | 4.6 | 0.2 |
| 10/22/2020 | XX | GW304B44F | 41 | 6.9 | 11.1 | 5.14 | 344.41 | 349.55 | 10.88 | 2.7 | 0.5 |
| 6/22/2021 | XX | GW304B46A | 146 | 6.4 | 14.1 | 7.65 | 341.9 | 349.55 | | 5.2 | 0.3 |
| 9/22/2021 | XX | GW304B485 | 211 | 6.6 | 15.1 | 5.72 | 343.83 | 349.55 | 11.87 | 0.9 | 0.2 |
| **401A** | | | | | | | | | | | |
| 5/3/2000 | XX | 401AXX36649 | 204 | 7.72 | 7 | | 369.36 | | | | |
| 8/10/2000 | XX | 401AXX36748 | 190 | 7.7 | 8 | | 366.27 | | 43.58 | 1.13 | 0.5 |
| 11/9/2000 | XX | 401AXX36839 | 196 | 7.89 | 8 | | 366.4 | | | 0.67 | 1.6 |
| 5/17/2001 | XX | 401AXX37028 | 225 | 7.91 | 6.6 | | 367.93 | | | 4.2 | 0.9 |
| 8/1/2001 | XX | 401AXX37104 | 216 | 7.73 | 10.1 | | 365.2 | | 43.58 | 2.1 | 0.3 |
| 10/24/2001 | XX | 401AXX37188 | 226 | 7.88 | 10.7 | | 365.33 | | | 0.7 | 0.9 |
| 5/22/2002 | XX | 401AXX37398 | 216 | 7.84 | 8.7 | | 368.22 | | | 5.4 | 1.4 |
| 7/30/2002 | XX | 401AXX37467 | 235 | 7.68 | 11 | | 366.13 | | 43.58 | 2.7 | 0.6 |
| 10/22/2002 | XX | 401AXX37551 | 240 | 7.84 | 9.4 | | 366.19 | | | 2.2 | 0.4 |
| 6/25/2003 | XX | 401AXX37797 | 243 | 7.82 | 9.6 | | 367.57 | | | 1.7 | 1.6 |
| 8/11/2003 | XX | 401AXX37844 | 236 | 7.83 | 11.1 | | 367.14 | | 43.57 | 2.6 | 0.25 |

# SUMMARY REPORT

## Field Parameters



SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(401A)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/21/2003 | XX | 401AXX37915 | 246 | 7.59 | 8.5 | | 368.16 | | | 1.1 | 2.33 |
| 5/10/2004 | XX | 401AXX38117 | 249 | 7.84 | 8.3 | | 368.16 | | | 5.8 | 0.29 |
| 7/29/2004 | XX | 401AXX38197 | 226 | 7.17 | 10.1 | | 366.55 | | 43.61 | 5.2 | 0.47 |
| 10/21/2004 | XX | 401AXX38281 | 230 | 7.87 | 10 | | 366.15 | | | 2.9 | 0.4 |
| 5/9/2005 | XX | GW401A012 | 226 | 7.98 | 7.3 | 5.69 | 369.79 | 375.48 | | 7.4 | 0.3 |
| 7/28/2005 | XX | GW401A02E | 226 | 7.79 | 10.7 | 8.88 | 366.6 | 375.48 | 43.65 | 5.3 | 1.6 |
| 11/8/2005 | XX | GW401A046 | 229 | 7.58 | 9.9 | 7.05 | 368.43 | 375.48 | | 1.9 | 0.3 |
| 5/4/2006 | XX | GW401A092 | 227 | 7.53 | 7.8 | | 367.93 | | | 7.4 | 0.63 |
| 8/2/2006 | XX | GW401A07A | 234 | 7.66 | 11.4 | | 367.33 | | 43.34 | 5.6 | 1 |
| 10/30/2006 | XX | GW401A05I | 236 | 8.1 | 8.9 | | 368.24 | | | 2.3 | 0.6 |
| 5/7/2007 | XX | GW401A0AE | 235 | 7.48 | 7.4 | | 369.12 | | | 7.1 | 0.5 |
| 8/14/2007 | XX | GW401A0C7 | 239 | 8.04 | 10.2 | | 365.8 | | 43.62 | 5.3 | 0.5 |
| 11/5/2007 | XX | GW401A0DJ | 245 | 7.84 | 8.7 | | 367.38 | | | 3.7 | 1.1 |
| 6/5/2008 | XX | GW401A0G7 | 240 | 7.6 | 7.7 | | 367.52 | | | 6.2 | 0.2 |
| 8/20/2008 | XX | GW401A0I7 | 246 | 7.48 | 10.9 | | 368.11 | | | 4.1 | 0.7 |
| 10/27/2008 | XX | GW401A0JF | 241 | 7.58 | 9.3 | | 368.11 | | | 2.7 | 1.1 |
| 5/13/2009 | XX | GW401A11F | 247 | 7.27 | 7.6 | 6.81 | 368.67 | 375.48 | | 3 | 0.3 |
| 8/13/2009 | XX | GW401A13F | 252 | 7.17 | 10.6 | 7.31 | 368.17 | 375.48 | | 4 | 0.9 |
| 10/28/2009 | XX | GW401A153 | 259 | 7.32 | 8.3 | 7.9 | 367.58 | 375.48 | | 3.3 | 0.6 |
| 6/3/2010 | XX | GW401A174 | 251 | 7.8 | 8.3 | | 366.53 | | | 5.59 | 0.34 |
| 8/17/2010 | XX | GW401A195 | 259 | 7.94 | 11 | | 364.57 | | | 4.55 | 0.54 |
| 10/19/2010 | XX | GW401A1AD | 265 | 7.48 | 8.6 | | 366.51 | | | 2.52 | 0.26 |
| 5/16/2011 | XX | GW401A1DE | 337 | 7 | 6.6 | 6.36 | 369.12 | 375.48 | 43.6 | 6 | 0.2 |
| 8/8/2011 | XX | GW401A1F5 | 241 | 7.62 | 12.3 | 9.52 | 365.96 | 375.48 | 43.5 | 4 | 0.2 |
| 11/1/2011 | XX | GW401A1GG | 253 | 7.4 | 9.94 | 7.67 | 367.81 | 375.48 | 43.66 | 2 | 0.4 |
| 5/14/2012 | XX | GW401A1IA | 265 | 8 | 8.7 | 6.56 | 368.92 | 375.48 | 43.5 | 5 | 0.3 |
| 8/14/2012 | XX | GW401A203 | 182 | 6.4 | 12 | 9.66 | 365.82 | 375.48 | | 3 | 1.3 |
| 11/1/2012 | XX | GW401A21H | 295 | 7.8 | 10.4 | 6.85 | 368.63 | 375.48 | 43.65 | 2 | 0.5 |
| 5/21/2013 | XX | GW401A23B | 312 | 8 | 8.3 | 8.1 | 367.38 | 375.48 | | 5 | 0.8 |
| 7/22/2013 | XX | GW401A255 | 270 | 7.9 | 10.9 | 8.51 | 366.97 | 375.48 | | 5 | 0.9 |
| 9/30/2013 | XX | GW401A26J | 255 | 8.2 | 15 | 8.23 | 367.25 | 375.48 | 43.65 | 3 | 1.1 |
| 6/4/2014 | XX | GW401A28D | 266 | 7.7 | 11.2 | 7.65 | 367.83 | 375.48 | | 5 | 0.2 |
| 8/19/2014 | XX | GW401A2A7 | 266 | 7.8 | 12.6 | 9.68 | 365.8 | 375.48 | | 5 | 0.5 |
| 11/11/2014 | XX | GW401A2C1 | 259 | 7.3 | 8.3 | 7.28 | 368.2 | 375.48 | 43.61 | 3 | 0.8 |
| 6/2/2015 | XX | GW401A2DH | 291 | 8 | 6.9 | 6.95 | 368.53 | 375.48 | | 5.2 | 0.2 |
| 9/1/2015 | XX | GW401A2FC | 255 | 7.9 | 10.6 | 8.2 | 367.28 | 375.48 | | 4.2 | 0.8 |
| 11/3/2015 | XX | GW401A2H6 | 278 | 8 | 8.8 | 7.35 | 368.13 | 375.48 | | 5.4 | 5 |
| 6/14/2016 | XX | GW401A30G | 269 | 7.8 | 8.3 | 8.54 | 366.94 | 375.48 | | 6.1 | 1.1 |
| 9/20/2016 | XX | GW401A32A | 359 | 7.7 | 10.4 | 10.81 | 364.67 | 375.48 | | 3.6 | 0.8 |
| 11/9/2016 | XX | GW401A344 | 274 | 8 | 8.9 | 10.4 | 365.08 | 375.48 | 43.65 | 2.3 | 0.4 |
| 6/14/2017 | XX | GW401A35J | 258 | 8 | 8.9 | 7.68 | 367.8 | 375.48 | | 5.5 | 3 |
| 8/29/2017 | XX | GW401A37D | 276 | 7.9 | 9.2 | 10.25 | 365.23 | 375.48 | | 4.2 | 0.6 |
| 11/14/2017 | XX | GW401A397 | 263 | 7.7 | 8.6 | 7.52 | 367.96 | 375.48 | 43.65 | 3.7 | 0.4 |
| 6/20/2018 | XX | GW401A3B2 | 292 | 8.1 | 9.2 | 8.65 | 366.83 | 375.48 | | 5.1 | 0.8 |
| 8/15/2018 | XX | GW401A3DB | 298 | 8.1 | 10.2 | 8.85 | 366.63 | 375.48 | | 3.8 | 0.8 |
| 11/30/2018 | XX | GW401A3EA | 292 | 8 | 4.5 | 7.16 | 368.32 | 375.48 | 43.65 | 3.5 | 0.5 |
| 6/5/2019 | XX | GW401A3G5 | 370 | 7.8 | 8.2 | 6.76 | 368.72 | 375.48 | | 10.9 | 0.5 |
| 8/14/2019 | XX | GW401A3IE | 270 | 8.1 | 10 | 9.1 | 366.38 | 375.48 | | 10.5 | 0.6 |
| 10/22/2019 | XX | GW401A3JD | 272 | 7.9 | 10.9 | 8.99 | 366.49 | 375.48 | | 4.6 | 0.6 |
| 6/17/2020 | XX | GW401A418 | 247 | 8 | 9.6 | 8.59 | 366.89 | 375.48 | | 4.1 | 0.6 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (401A) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/4/2020 | XX | GW401A43H | 246 | 7.4 | 9.8 | 10.22 | 365.26 | 375.48 | | 5.5 | 0.5 |
| 10/21/2020 | XX | GW401A44G | 253 | 7.9 | 8.4 | 8.74 | 366.74 | 375.48 | 43.68 | 2.6 | 0.8 |
| 6/23/2021 | XX | GW401A46B | 250 | 7.5 | 12.3 | 8.85 | 366.63 | 375.48 | | 5.2 | 0.3 |
| 9/21/2021 | XX | GW401A486 | 256 | 7.6 | 12.7 | 8.82 | 366.66 | 375.48 | 43.65 | 3.6 | 0.4 |
| **401B** | | | | | | | | | | | |
| 5/3/2000 | XX | 401BXX36649 | 343 | 7.86 | 4.9 | | 366.33 | | | | |
| 8/10/2000 | XX | 401BXX36748 | 323 | 8.03 | 5 | | 363.28 | | 25.92 | 0.51 | 0.2 |
| 11/9/2000 | XX | 401BXX36839 | 310 | 8.16 | 8 | | 363.38 | | | 0.98 | 1.2 |
| 5/17/2001 | XX | 401BXX37028 | 350 | 8.2 | 6.6 | | 364.97 | | | 1.2 | 20.3 |
| 8/1/2001 | XX | 401BXX37104 | 333 | 7.94 | 12 | | 362.17 | | 25.89 | 0.8 | 0.2 |
| 10/24/2001 | XX | 401BXX37188 | 347 | 8.07 | 10.8 | | 362.32 | | | 0.9 | 11.9 |
| 5/22/2002 | XX | 401BXX37398 | 330 | 7.92 | 9.1 | | 365.18 | | | 0.9 | 4.4 |
| 7/30/2002 | XX | 401BXX37467 | 360 | 8.06 | 10.4 | | 363.28 | | 25.89 | 1.5 | 1.5 |
| 10/22/2002 | XX | 401BXX37551 | 365 | 8.11 | 9.8 | | 363.35 | | | 0.5 | 0.6 |
| 6/25/2003 | XX | 401BXX37797 | 368 | 8.06 | 8.7 | | 364.54 | | | 0.4 | 1 |
| 8/11/2003 | XX | 401BXX37844 | 361 | 8.01 | 12.1 | | 364.48 | | 25.93 | 0.2 | 1 |
| 10/21/2003 | XX | 401BXX37915 | 383 | 8.26 | 8.4 | | 365.25 | | | 0.4 | 0.85 |
| 5/10/2004 | XX | 401BXX38117 | 385 | 8.03 | 8.2 | | 365.17 | | | 0.9 | 0.34 |
| 7/29/2004 | XX | 401BXX38197 | 345 | 7.98 | 10.8 | | 363.93 | | 23.95 | 1.6 | 0.42 |
| 10/21/2004 | XX | 401BXX38281 | 360 | 8.07 | 10.7 | | 363.22 | | | 1.1 | 0.36 |
| 5/9/2005 | XX | GW401B013 | 346 | 8.04 | 6.8 | 6.05 | 366.88 | 372.93 | | 0.5 | 0.4 |
| 7/28/2005 | XX | GW401B02F | 346 | 7.95 | 10.3 | 9.27 | 363.66 | 372.93 | 25.92 | 1.1 | 1 |
| 11/8/2005 | XX | GW401B047 | 356 | 7.9 | 10.7 | 7.45 | 365.48 | 372.93 | | 1.6 | 1 |
| 5/4/2006 | XX | GW401B093 | 345 | 7.76 | 7.9 | | 365.28 | | | 1.9 | 0.58 |
| 8/2/2006 | XX | GW401B07B | 354 | 7.81 | 13.7 | | 364.44 | | 25.74 | 0.5 | 1.4 |
| 10/30/2006 | XX | GW401B05J | 362 | 7.98 | 9.7 | | 365.68 | | | 0.1 | 0.6 |
| 5/7/2007 | XX | GW401B0AF | 358 | 7.75 | 7.4 | | 366.02 | | | 0.1 | 0.6 |
| 8/14/2007 | XX | GW401B0C8 | 361 | 8.05 | 11.1 | | 362.73 | | 25.89 | 0.1 | 0.6 |
| 11/5/2007 | XX | GW401B0E0 | 377 | 8.16 | 9.2 | | 365.04 | | | 0.7 | 1.3 |
| 6/5/2008 | XX | GW401B0G8 | 359 | 7.95 | 8.7 | | 364.56 | | | 0.2 | 0.2 |
| 8/20/2008 | XX | GW401B0I8 | 364 | 7.82 | 11.5 | | 365.09 | | | 0.1 | 0.4 |
| 10/27/2008 | XX | GW401B0JG | 360 | 7.81 | 9.8 | | 365.09 | | | 0.1 | 0.7 |
| 5/13/2009 | XX | GW401B11G | 360 | 7.62 | 7.5 | 7.21 | 365.72 | 372.93 | | 0.2 | 0.4 |
| 8/13/2009 | XX | GW401B13G | 370 | 7.52 | 10.7 | 7.82 | 365.11 | 372.93 | | 0.1 | 0.8 |
| 10/28/2009 | XX | GW401B154 | 380 | 7.83 | 8.9 | 8.11 | 364.82 | 372.93 | | 0.1 | 0.6 |
| 6/3/2010 | XX | GW401B175 | 364 | 7.8 | 8.2 | | 363.52 | | | 0.12 | 0.37 |
| 8/17/2010 | XX | GW401B196 | 377 | 8.07 | 12.1 | | 361.37 | | | 0.35 | 0.37 |
| 10/19/2010 | XX | GW401B1AE | 386 | 7.62 | 10.5 | | 363.64 | | | 0.25 | 0.48 |
| 5/16/2011 | XX | GW401B1DF | 335 | 7.8 | 6.3 | 6.25 | 366.68 | 372.93 | 25.81 | 0.8 | 0 |
| 8/8/2011 | XX | GW401B1F6 | 350 | 7.87 | 14.7 | 10.02 | 362.91 | 372.93 | 25.75 | 1 | 0.4 |
| 11/1/2011 | XX | GW401B1GH | 359 | 7.5 | 10.46 | 7.98 | 364.95 | 372.93 | 25.94 | 1 | 0.4 |
| 5/14/2012 | XX | GW401B1IB | 375 | 7.9 | 8.9 | 6.9 | 366.03 | 372.93 | 25.76 | 0.3 | 0.1 |
| 8/14/2012 | XX | GW401B204 | 291 | 7.3 | 16.5 | 10.17 | 362.76 | 372.93 | | 1 | 0.5 |
| 11/1/2012 | XX | GW401B21I | 403 | 7.6 | 10.6 | 8.1 | 364.83 | 372.93 | 25.93 | 0.4 | 7.3 |
| 5/21/2013 | XX | GW401B23C | 377 | 7.9 | 8.1 | 8.48 | 364.45 | 372.93 | | 0.8 | 1.5 |
| 7/22/2013 | XX | GW401B256 | 381 | 7.9 | 11.5 | 8.95 | 363.98 | 372.93 | | 0.8 | 0.6 |
| 9/30/2013 | XX | GW401B270 | 377 | 7 | 12.3 | 8.65 | 364.28 | 372.93 | 26.05 | 1 | 0.4 |
| 6/4/2014 | XX | GW401B28E | 375 | 7.7 | 11.6 | 8.15 | 364.78 | 372.93 | | 1 | 0.3 |
| 8/19/2014 | XX | GW401B2A8 | 377 | 7.9 | 11.9 | 10 | 362.93 | 372.93 | | 0.6 | 0.5 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (401B) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/11/2014 | XX | GW401B2C2 | 366 | 7.2 | 9.2 | 7.57 | 365.36 | 372.93 | 25.9 | 1 | 0.4 |
| 6/2/2015 | XX | GW401B2DI | 397 | 7.9 | 6.6 | 7.34 | 365.59 | 372.93 | | 0.5 | 0.2 |
| 9/1/2015 | XX | GW401B2FD | 366 | 7.9 | 11.8 | 8.6 | 364.33 | 372.93 | | 0.3 | 0.8 |
| 11/3/2015 | XX | GW401B2H7 | 438 | 8 | 9.3 | 7.65 | 365.28 | 372.93 | 25.93 | 2 | 6.6 |
| 6/14/2016 | XX | GW401B30H | 386 | 7.8 | 8.7 | 8.95 | 363.98 | 372.93 | | 0.3 | 8.3 |
| 9/20/2016 | XX | GW401B32B | 390 | 7.8 | 11.3 | 11.43 | 361.5 | 372.93 | | 0.4 | 0.6 |
| 11/9/2016 | XX | GW401B345 | 395 | 7.9 | 9.7 | 10.85 | 362.08 | 372.93 | 25.92 | 0.3 | 0.2 |
| 6/14/2017 | XX | GW401B360 | 373 | 8 | 8.5 | 8.18 | 364.75 | 372.93 | | 0.8 | 2.3 |
| 8/29/2017 | XX | GW401B37E | 392 | 7.9 | 10.3 | 10.9 | 362.03 | 372.93 | | 0.3 | 0.2 |
| 11/14/2017 | XX | GW401B398 | 380 | 7.8 | 8.9 | 7.9 | 365.03 | 372.93 | 25.92 | 5.6 | 0.4 |
| 6/20/2018 | XX | GW401B3B3 | 428 | 8.1 | 8.6 | 9.16 | 363.77 | 372.93 | | 0.2 | 0.5 |
| 8/15/2018 | XX | GW401B3DC | 420 | 7.7 | 11.2 | 9.26 | 363.67 | 372.93 | | 0.2 | 0.3 |
| 11/30/2018 | XX | GW401B3EB | 416 | 7.9 | 8.3 | 7.55 | 365.38 | 372.93 | 25.92 | 1.2 | 0.3 |
| 6/5/2019 | XX | GW401B3G6 | 394 | 8 | 10 | 7.28 | 365.65 | 372.93 | | 2.4 | 0.6 |
| 8/14/2019 | XX | GW401B3IF | 394 | 8 | 10.5 | 9.4 | 363.53 | 372.93 | | 4.4 | 0.6 |
| 10/22/2019 | XX | GW401B3JE | 393 | 8 | 10 | 9.38 | 363.55 | 372.93 | | 0.7 | 0.5 |
| 6/17/2020 | XX | GW401B419 | 355 | 7.9 | 11.6 | 9.08 | 363.85 | 372.93 | | 2.4 | 0.8 |
| 8/4/2020 | XX | GW401B43I | 358 | 7.6 | 12.2 | 10.79 | 362.14 | 372.93 | | 0.7 | 0.3 |
| 10/21/2020 | XX | GW401B44H | 357 | 7.9 | 8.8 | 8.85 | 364.08 | 372.93 | 25.98 | 0.8 | 0.7 |
| 6/23/2021 | XX | GW401B46C | 358 | 7.5 | 12.6 | 9.36 | 363.57 | 372.93 | | 0.7 | 0.3 |
| 9/21/2021 | XX | GW401B487 | 362 | 7.6 | 13.2 | 9.15 | 363.78 | 372.93 | 25.9 | 0.2 | 0.6 |
| **402A** | | | | | | | | | | | |
| 5/3/2000 | XX | 402AXX36649 | 210 | 8.03 | 4.7 | | 401.66 | | | | |
| 8/10/2000 | XX | 402AXX36748 | 198 | 8.03 | 9 | | 401.12 | | 62.81 | 0.55 | 0.3 |
| 11/9/2000 | XX | 402AXX36839 | 194 | 8.14 | 8 | | 401.22 | | | 0.66 | 0.3 |
| 5/17/2001 | XX | 402AXX37028 | 224 | 8.24 | 7.2 | | 401.25 | | | 0.4 | 0.1 |
| 8/1/2001 | XX | 402AXX37104 | 215 | 7.97 | 16.2 | | 399.76 | | 62.8 | 1.4 | 0.5 |
| 10/24/2001 | XX | 402AXX37188 | 221 | 8.08 | 10.9 | | 400.66 | | | 0.8 | 0.5 |
| 5/22/2002 | XX | 402AXX37398 | 213 | 7.97 | 9 | | 401.35 | | | 0.7 | 0.3 |
| 7/30/2002 | XX | 402AXX37467 | 228 | 7.95 | 12.2 | | 400.79 | | 62.8 | 0.9 | 0.9 |
| 10/22/2002 | XX | 402AXX37551 | 233 | 8.18 | 9.4 | | 401.02 | | | 0.7 | 0.2 |
| 6/25/2003 | XX | 402AXX37797 | 242 | 7.6 | 10.1 | | 401.1 | | | 0.4 | 0.7 |
| 8/11/2003 | XX | 402AXX37844 | 232 | 7.86 | 13.6 | | 401.52 | | 62.78 | 0.3 | 0.35 |
| 10/22/2003 | XX | 402AXX37916 | 239 | 8.2 | 6.8 | | 401.92 | | | 0.7 | 0.57 |
| 5/11/2004 | XX | 402AXX38118 | 249 | 7.41 | 6.6 | | 401.52 | | | 1.7 | 0.51 |
| 7/29/2004 | XX | 402AXX38197 | 227 | 7.57 | 11.8 | | 401.18 | | 62.82 | 2.2 | 0.11 |
| 10/26/2004 | XX | 402AXX38286 | 234 | 7.74 | 9.2 | | 401.04 | | | 1 | 0.23 |
| 5/9/2005 | XX | GW402A014 | 230 | 7.6 | 6 | 4.05 | 402.05 | 406.1 | | 2.1 | 0.2 |
| 8/1/2005 | XX | GW402A02G | 229 | 7.64 | 10.1 | 5.3 | 400.8 | 406.1 | 62.84 | 3.4 | 0.7 |
| 11/9/2005 | XX | GW402A048 | 235 | 7.91 | 8.3 | 4.58 | 401.52 | 406.1 | | 1.8 | 0.4 |
| 5/4/2006 | XX | GW402A094 | 229 | 7.77 | 7.6 | | 401.91 | | | 2.8 | 0.4 |
| 8/2/2006 | XX | GW402A07C | 232 | 7.61 | 14.8 | | 401.49 | | 62.63 | 4.8 | 0.6 |
| 10/30/2006 | XX | GW402A060 | 243 | 8.06 | 9 | | 402 | | | 0.4 | 0.8 |
| 5/7/2007 | XX | GW402A0AG | 242 | 7.79 | 7.1 | | 401.76 | | | 0.6 | 0.3 |
| 8/14/2007 | XX | GW402A0C9 | 237 | 7.91 | 10.4 | | 400.76 | | 62.74 | 4.1 | 0.6 |
| 11/5/2007 | XX | GW402A0E1 | 257 | 8.02 | 8.4 | | 401.62 | | | 2 | 0.6 |
| 6/5/2008 | XX | GW402A0G9 | 247 | 8.01 | 8.2 | | 401.45 | | | 1.8 | 0.3 |
| 8/20/2008 | XX | GW402A0I9 | 258 | 7.7 | 11.2 | | 401.49 | | | 1 | 0.5 |
| 10/27/2008 | XX | GW402A0JH | 259 | 7.84 | 9.4 | | 401.49 | | | 0.6 | 0.5 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (402A) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/13/2009 | XX | GW402A11H | 264 | 7.67 | 7.1 | 4.35 | 401.75 | 406.1 | | 0.5 | 0.3 |
| 8/13/2009 | XX | GW402A13H | 262 | 7.38 | 12.1 | 4.66 | 401.44 | 406.1 | | 1.2 | 0.7 |
| 10/28/2009 | XX | GW402A155 | 278 | 8 | 8.3 | 4.5 | 401.6 | 406.1 | | 0.5 | 0.5 |
| 6/3/2010 | XX | GW402A176 | 273 | 8.07 | 8.8 | | 401.19 | | | 2.04 | 0.21 |
| 8/17/2010 | XX | GW402A197 | 274 | 7.76 | 11.7 | | 399.69 | | | 1.49 | 0.57 |
| 10/19/2010 | XX | GW402A1AF | 297 | 7.74 | 9.4 | | 401.32 | | | 1.26 | 0.18 |
| 5/16/2011 | XX | GW402A1DG | 281 | 8 | 6.7 | 4.13 | 401.97 | 406.1 | 62.78 | 1 | 3.6 |
| 8/8/2011 | XX | GW402A1F7 | 273 | 7.84 | 13.4 | 5.19 | 400.91 | 406.1 | 62.63 | 1 | 0 |
| 11/1/2011 | XX | GW402A1GI | 276 | 7.7 | 9.8 | 4.5 | 401.6 | 406.1 | 62.83 | 1 | 0.5 |
| 5/16/2012 | XX | GW402A1IC | 328 | 7.8 | 10.9 | 4.05 | 402.05 | 406.1 | 62.6 | 0.6 | 0 |
| 8/15/2012 | XX | GW402A205 | 367 | 8 | 16.4 | 5.84 | 400.26 | 406.1 | | 1 | 0 |
| 10/31/2012 | XX | GW402A21J | 315 | 7.4 | 12.4 | 4.15 | 401.95 | 406.1 | 62.83 | 1 | 0 |
| 5/20/2013 | XX | GW402A23D | 303 | 7.9 | 8.9 | 4.6 | 401.5 | 406.1 | | 5 | 0.2 |
| 7/22/2013 | XX | GW402A257 | 318 | 7.8 | 15.8 | 5.41 | 400.69 | 406.1 | | 2 | 0.3 |
| 9/30/2013 | XX | GW402A271 | 309 | 8.3 | 12.7 | 4.65 | 401.45 | 406.1 | 62.8 | 1 | 1.1 |
| 6/4/2014 | XX | GW402A28F | 347 | 7.9 | 11.8 | 4.8 | 401.3 | 406.1 | | 1 | 0.4 |
| 8/19/2014 | XX | GW402A2A9 | 331 | 7.9 | 11.8 | 5.2 | 400.9 | 406.1 | | 1 | 0.5 |
| 11/11/2014 | XX | GW402A2C3 | 313 | 7.1 | 7.2 | 4.37 | 401.73 | 406.1 | 62.75 | 1 | 0.3 |
| 6/4/2015 | XX | GW402A2DJ | 381 | 7.8 | 8.1 | 4.3 | 401.8 | 406.1 | | 2.6 | 0.6 |
| 9/1/2015 | XX | GW402A2FE | 323 | 7.8 | 12 | 4.79 | 401.31 | 406.1 | | 0.3 | 0.8 |
| 11/3/2015 | XX | GW402A2H8 | 347 | 7.9 | 8.9 | 4.38 | 401.72 | 406.1 | 62.82 | 3.6 | 1 |
| 6/14/2016 | XX | GW402A30I | 353 | 7.6 | 8.7 | 4.75 | 401.35 | 406.1 | | 1.5 | 2.2 |
| 9/20/2016 | XX | GW402A32C | 368 | 7.8 | 12.2 | 6.08 | 400.02 | 406.1 | | 1.2 | 0.5 |
| 11/9/2016 | XX | GW402A346 | 386 | 7.8 | 8.9 | 5.32 | 400.78 | 406.1 | 62.78 | 1.1 | 0.4 |
| 6/14/2017 | XX | GW402A361 | 343 | 8 | 8.9 | 4.8 | 401.3 | 406.1 | | 0.3 | 1.7 |
| 8/29/2017 | XX | GW402A37F | 379 | 7.9 | 10.2 | 6.3 | 399.8 | 406.1 | | 2.5 | 0.6 |
| 11/15/2017 | XX | GW402A399 | 343 | 7.7 | 8 | 4.72 | 401.38 | 406.1 | 62.76 | 1.5 | 0.4 |
| 6/20/2018 | XX | GW402A3B4 | 418 | 8.1 | 9.3 | 4.95 | 401.15 | 406.1 | | 0.1 | 0.6 |
| 8/15/2018 | XX | GW402A3DD | 407 | 7.6 | 12.8 | 4.92 | 401.18 | 406.1 | | 1.6 | 0.3 |
| 11/28/2018 | XX | GW402A3EC | 439 | 8.1 | 7.6 | 4.28 | 401.82 | 406.1 | 62.75 | 0.4 | 0.6 |
| 6/5/2019 | XX | GW402A3G7 | 410 | 7.7 | 9.4 | 4.33 | 401.77 | 406.1 | | 0.4 | 0.8 |
| 8/13/2019 | XX | GW402A3IG | 385 | 7.9 | 10.9 | 5.18 | 400.92 | 406.1 | | 6.8 | 0.8 |
| 10/22/2019 | XX | GW402A3JF | 376 | 7.8 | 10.1 | 4.51 | 401.59 | 406.1 | | 3 | 0.3 |
| 6/17/2020 | XX | GW402A41A | 333 | 8 | 11.7 | 5.32 | 400.78 | 406.1 | | 4.3 | 0.6 |
| 8/4/2020 | XX | GW402A43J | 346 | 7.3 | 12.6 | 5.97 | 400.13 | 406.1 | | 3.2 | 0.6 |
| 10/21/2020 | XX | GW402A44I | 375 | 7.9 | 8.5 | 4.75 | 401.35 | 406.1 | 62.8 | 3.8 | 0.6 |
| 6/23/2021 | XX | GW402A46D | 388 | 7.5 | 9.5 | 5.83 | 400.27 | 406.1 | | 1.3 | 0.3 |
| 9/21/2021 | XX | GW402A488 | 378 | 7.3 | 11.1 | 4.92 | 401.18 | 406.1 | 62.88 | 1.5 | 0.4 |
| **402B** | | | | | | | | | | | |
| 5/3/2000 | XX | 402BXX36649 | 1422 | 6.88 | 4 | | 399.32 | | | | |
| 8/10/2000 | XX | 402BXX36748 | 2130 | 6.72 | 7 | | 398.69 | | 22.81 | 0.39 | 0.1 |
| 11/9/2000 | XX | 402BXX36839 | 1913 | 6.86 | 8 | | 398.82 | | | 0.6 | 0.3 |
| 5/17/2001 | XX | 402BXX37028 | 2180 | 6.9 | 6.8 | | 398.86 | | | 0.5 | 0.1 |
| 8/1/2001 | XX | 402BXX37104 | 2040 | 6.69 | 13.2 | | 397.37 | | 22.87 | 1.2 | 0.1 |
| 10/24/2001 | XX | 402BXX37188 | 2030 | 6.79 | 10.8 | | 398.79 | | | 6.1 | 0.1 |
| 5/22/2002 | XX | 402BXX37398 | 1858 | 6.82 | 9.4 | | 399.08 | | | 0.7 | 0.1 |
| 8/7/2002 | XX | 402BXX37475 | 2030 | 6.72 | 11.1 | | 398.05 | | 22.87 | 0.4 | 0.2 |
| 10/24/2002 | XX | 402BXX37553 | 1996 | 6.92 | 9.6 | | 398.87 | | | 1.1 | 0.2 |
| 6/25/2003 | XX | 402BXX37797 | 1968 | 6.83 | 8.9 | | 398.53 | | | 0.3 | 0.2 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(402B)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/11/2003 | XX | 402BXX37844 | 1905 | 6.83 | 11.6 | | 399.21 | | 22.77 | 0.4 | 0.14 |
| 10/22/2003 | XX | 402BXX37916 | 1858 | 6.89 | 7.6 | | 399.74 | | | 0.6 | 0.3 |
| 5/11/2004 | XX | 402BXX38118 | 1828 | 6.91 | 5.9 | | 399.06 | | | 1.7 | 0.19 |
| 8/2/2004 | XX | 402BXX38201 | 1631 | 6.73 | 10.4 | | 398.63 | | 22.78 | 1.5 | 0.2 |
| 10/26/2004 | XX | 402BXX38286 | 1670 | 6.83 | 10 | | 398.62 | | | 1 | 0.19 |
| 5/9/2005 | XX | GW402B015 | 1175 | 6.96 | 5.6 | 6.63 | 399.81 | 406.44 | | 0.3 | 0.1 |
| 8/1/2005 | XX | GW402B02H | 1520 | 6.72 | 9.4 | 8.18 | 398.26 | 406.44 | 22.81 | 0.4 | 0.3 |
| 11/9/2005 | XX | GW402B049 | 1514 | 6.89 | 9.4 | 7.32 | 399.12 | 406.44 | | 0.5 | 0.3 |
| 5/5/2006 | XX | GW402B095 | 1349 | 6.98 | 6.3 | | 399.67 | | | 0.3 | 0.44 |
| 8/2/2006 | XX | GW402B07D | 1465 | 6.94 | 12.2 | | 398.97 | | 22.58 | 1.1 | 0.7 |
| 10/30/2006 | XX | GW402B061 | 1368 | 6.96 | 10.1 | | 399.75 | | | 0.1 | 0.5 |
| 5/7/2007 | XX | GW402B0AH | 1344 | 6.98 | 6.1 | | 399.33 | | | 0.1 | 1 |
| 8/14/2007 | XX | GW402B0CA | 1384 | 7.02 | 10.2 | | 398.27 | | 22.78 | 0.2 | 0.4 |
| 11/5/2007 | XX | GW402B0E2 | 1183 | 7.03 | 9.6 | | 399.72 | | | 1.2 | 0.5 |
| 6/11/2008 | XX | GW402B0GA | 1330 | 6.93 | 7 | | 399.09 | | | 0.2 | 0.2 |
| 8/20/2008 | XX | GW402B0IA | 1341 | 6.91 | 10.8 | | 398.76 | | | 0.3 | 0.7 |
| 10/27/2008 | XX | GW402B0JI | 1293 | 6.91 | 10.4 | | 398.76 | | | 0.4 | 0.6 |
| 5/13/2009 | XX | GW402B11I | 1280 | 6.98 | 6.2 | 7.05 | 399.39 | 406.44 | | 0.4 | 0.4 |
| 8/13/2009 | XX | GW402B13I | 1282 | 6.77 | 10.6 | 4.47 | 401.97 | 406.44 | | 0.2 | 0.6 |
| 10/28/2009 | XX | GW402B156 | 1290 | 7.02 | 9.4 | 7.05 | 399.39 | 406.44 | | 0.1 | 0.2 |
| 6/3/2010 | XX | GW402B177 | 1233 | 7.13 | 7.4 | | 398.78 | | | 0.1 | 0.81 |
| 8/17/2010 | XX | GW402B198 | 1259 | 6.89 | 11.2 | | 397.37 | | | 0.1 | 0.42 |
| 10/19/2010 | XX | GW402B1AG | 1293 | 6.82 | 10.2 | | 399.13 | | | 0.19 | 0.22 |
| 5/16/2011 | XX | GW402B1DH | 1000 | 6.9 | 6 | 6.4 | 400.04 | 406.44 | 22.58 | 1 | 1 |
| 8/8/2011 | XX | GW402B1F8 | 1138 | 6.6 | 13.7 | 7.93 | 398.51 | 406.44 | 22.6 | 1 | 0 |
| 11/1/2011 | XX | GW402B1GJ | 1166 | 6.8 | 10.4 | 7.22 | 399.22 | 406.44 | 22.78 | 1 | 0.2 |
| 5/16/2012 | XX | GW402B1ID | 1001 | 6.9 | 9.4 | 6.72 | 399.72 | 406.44 | 22.59 | 0.6 | 0.4 |
| 8/15/2012 | XX | GW402B206 | 1168 | 6.9 | 13.3 | 8.33 | 398.11 | 406.44 | | 1 | 0 |
| 10/31/2012 | XX | GW402B220 | 1118 | 7 | 12.2 | 6.39 | 400.05 | 406.44 | 22.8 | 0.4 | 0 |
| 5/20/2013 | XX | GW402B23E | 1151 | 6.9 | 7.3 | 7.35 | 399.09 | 406.44 | | 0.8 | 0.5 |
| 7/22/2013 | XX | GW402B258 | 1183 | 6.5 | 14.2 | 8.44 | 398 | 406.44 | | 1 | 0.2 |
| 9/30/2013 | XX | GW402B272 | 1140 | 7 | 12.4 | 7.6 | 398.84 | 406.44 | 22.8 | 0.6 | 0.3 |
| 6/4/2014 | XX | GW402B28G | 1146 | 6.9 | 11.2 | 7.78 | 398.66 | 406.44 | | 1 | 0.1 |
| 8/19/2014 | XX | GW402B2AA | 1117 | 7.3 | 13.4 | 7.85 | 398.59 | 406.44 | | 0.6 | 0.4 |
| 11/11/2014 | XX | GW402B2C4 | 1084 | 6.7 | 8.6 | 7.02 | 399.42 | 406.44 | 22.73 | 1 | 0.4 |
| 6/4/2015 | XX | GW402B2E0 | 1183 | 6.9 | 7.1 | 7.01 | 399.43 | 406.44 | | 0.3 | 0.2 |
| 9/1/2015 | XX | GW402B2FF | 1092 | 6.9 | 11.7 | 7.6 | 398.84 | 406.44 | | 0.3 | 0.05 U |
| 11/3/2015 | XX | GW402B2H9 | 1110 | 7 | 9.6 | 7.83 | 398.61 | 406.44 | 22.8 | 0.8 | 1 |
| 6/14/2016 | XX | GW402B30J | 1117 | 6.7 | 7.8 | 7.49 | 398.95 | 406.44 | | 0.2 | 0.5 |
| 9/20/2016 | XX | GW402B32D | 1120 | 6.8 | 11.5 | 8.78 | 397.66 | 406.44 | | 0.2 | 0.3 |
| 11/9/2016 | XX | GW402B347 | 1118 | 7 | 9.5 | 7.74 | 398.7 | 406.44 | 22.8 | 0.2 | 0.3 |
| 6/14/2017 | XX | GW402B362 | 1033 | 6.9 | 7.5 | 7.78 | 398.66 | 406.44 | | 0.2 | 2.8 |
| 8/29/2017 | XX | GW402B37G | 1070 | 6.9 | 9.8 | 9.25 | 397.19 | 406.44 | | 0.1 | 0.2 |
| 11/15/2017 | XX | GW402B39A | 1066 | 6.9 | 9.1 | 7.41 | 399.03 | 406.44 | 22.8 | 0.3 | 0.3 |
| 6/20/2018 | XX | GW402B3B5 | 1160 | 7.1 | 7.9 | 7.92 | 398.52 | 406.44 | | 0.2 | 0.6 |
| 8/15/2018 | XX | GW402B3DE | 1165 | 6.8 | 10.4 | 7.9 | 398.54 | 406.44 | | 0.1 | 0.6 |
| 11/28/2018 | XX | GW402B3ED | 997 | 7.3 | 8.4 | 7.22 | 399.22 | 406.44 | 22.8 | 0.4 | 0.6 |
| 6/5/2019 | XX | GW402B3G8 | 1007 | 7 | 7.5 | 7.33 | 399.11 | 406.44 | | 0.4 | 0.5 |
| 8/13/2019 | XX | GW402B3IH | 1016 | 7.1 | 10.8 | 7.68 | 398.76 | 406.44 | | 1.6 | 0.8 |
| 10/22/2019 | XX | GW402B3JG | 1000 | 7 | 10 | 7.53 | 398.91 | 406.44 | | 1.9 | 0.6 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (402B) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/17/2020 | XX | GW402B41B | 894 | 6.9 | 11.9 | 8.2 | 398.24 | 406.44 | | 0.8 | 0.5 |
| 8/4/2020 | XX | GW402B440 | 880 | 7.2 | 11.6 | 8.65 | 397.79 | 406.44 | | 2.2 | 0.4 |
| 10/21/2020 | XX | GW402B44J | 895 | 7.1 | 9.3 | 7.12 | 399.32 | 406.44 | 22.81 | 0.9 | 0.6 |
| 6/23/2021 | XX | GW402B46E | 878 | 6.9 | 8.8 | 8.54 | 397.9 | 406.44 | | 0.9 | 0.5 |
| 9/21/2021 | XX | GW402B489 | 894 | 6.8 | 11.2 | 7.5 | 398.94 | 406.44 | 22.75 | 0.5 | 0.8 |
| **LDS** | | | | | | | | | | | |
| 6/10/2008 | XX | LDSXX39597 | 911 | 7.44 | 14.2 | | | | | | |
| 8/19/2008 | XX | LDSXX39687 | 981 | 6.87 | 16.2 | | | | | | |
| 10/22/2008 | XX | LDSXX39736 | 1058 | 6.83 | 9.8 | | | | | | |
| 5/7/2009 | XX | LDSXX39940 | 1558 | 7.38 | 9.1 | | | | | | 5.9 |
| 8/12/2009 | XX | LDSXX40037 | 1454 | 6.83 | 16.3 | | | | | | |
| 10/27/2009 | XX | LDSXX40113 | 1498 | 6.57 | 7.9 | | | | | | |
| 6/7/2010 | XX | GWXXXX1B8 | 1684 | 7.39 | 17.5 | | | | | | |
| 8/18/2010 | XX | GWXXXX1B9 | 1773 | 7.62 | 18.4 | | | | | | |
| 10/21/2010 | XX | GWXXXX1BA | 1580 | 6.81 | 10.8 | | | | | | |
| 5/18/2011 | XX | LTXXXX1EF | 887 | 7 | 13.9 | | | | | 0.8 | 1.8 |
| 8/10/2011 | XX | LTXXXX1G6 | 1046 | 6.96 | 17.2 | | | | | 1 | 1.4 |
| 11/2/2011 | XX | LTXXXX1HH | 1018 | 6.8 | 10.4 | | | | | 1 | 0.9 |
| 5/14/2012 | XX | LTXXXX1JB | 1528 | 7 | 13.4 | | | | | 0.6 | 0.7 |
| 8/14/2012 | XX | LTXXXX214 | 1125 | 6.9 | 19.2 | | | | | 2 | 0 |
| 10/30/2012 | XX | LTXXXX22I | 1356 | 6.9 | 13.4 | | | | | 2 | 1.8 |
| 5/21/2013 | XX | LTXXXX24C | 1371 | 7.1 | 16.9 | | | | | 6 | 3.5 |
| 7/25/2013 | XX | LTXXXX266 | 1383 | 6.9 | 21.4 | | | | | 3 | 5 |
| 10/1/2013 | XX | LTXXXX280 | 1346 | 7.1 | 20.8 | | | | | 1 | 0.8 |
| 6/5/2014 | XX | LTXXXX29E | 1664 | 7.2 | 13.7 | | | | | 1 | 3.1 |
| 8/21/2014 | XX | LTXXXX2B8 | 915 | 7.8 | 18.6 | | | | | 2 | 1.8 |
| 11/13/2014 | XX | LTXXXX2D2 | 975 | 6.9 | 7 | | | | | 1 | 1.8 |
| 6/4/2015 | XX | LTXXXX2EI | 1018 | 7 | 13.6 | | | | | 1.8 | 2.2 |
| 9/3/2015 | XX | LTXXXX2GD | 918 | 7.1 | 23 | | | | | 1.1 | 2.2 |
| 11/5/2015 | XX | LTXXXX2I7 | 914 | 7 | 9.4 | | | | | 2.1 | 2.8 |
| 6/16/2016 | XX | LTXXXX31H | 1014 | 6.8 | 19.8 | | | | | 1.3 | 1 |
| 9/22/2016 | XX | LTXXXX33B | 1053 | 7.5 | 18 | | | | | 0.5 | 2.6 |
| 11/10/2016 | XX | LTXXXX355 | 995 | 7.1 | 8.8 | | | | | 1.4 | 0.8 |
| 6/15/2017 | XX | LTXXXX370 | 1304 | 7 | 17.7 | | | | | 0.7 | 1.1 |
| 8/31/2017 | XX | LTXXXX38E | 1140 | 7.1 | 18.5 | | | | | 1.5 | 1.3 |
| 11/16/2017 | XX | LTXXXX3A8 | 1078 | 6.9 | 7.1 | | | | | 2 | 2.7 |
| 6/21/2018 | XX | LTXXXX3C3 | 1352 | 7 | 19.3 | | | | | 0.3 | 2.1 |
| 8/16/2018 | XX | LTXXXX3CI | 1282 | 6.7 | 21.4 | | | | | 0.5 | 1.8 |
| 11/29/2018 | XX | LTXXXX3FB | 1689 | 6.9 | 7.1 | | | | | 2.9 | 0.6 |
| 6/6/2019 | XX | LTXXXX3H6 | 1497 | 7.1 | 20.3 | | | | | 3.4 | 0.6 |
| 8/15/2019 | XX | LTXXXX3I1 | 1408 | 7.1 | 23.9 | | | | | 2.5 | 1.6 |
| 10/24/2019 | XX | LTXXXX40E | 1162 | 7.2 | 11.8 | | | | | 0.5 | 0.8 |
| 6/18/2020 | XX | LTXXXX429 | 1415 | 7.3 | 22.3 | | | | | 2.5 | 0.8 |
| 8/6/2020 | XX | LTXXXX434 | 1099 | 7 | 22 | | | | | 1.7 | 0.9 |
| 10/22/2020 | XX | LTXXXX45H | 1193 | 7.1 | 11.5 | | | | | 2.2 | 0.8 |
| 6/24/2021 | XX | LTXXXX47C | 922 | 6.8 | 23 | | | | | 0.7 | 8.5 |
| 9/23/2021 | XX | LTXXXX497 | 916 | 6.6 | 19.4 | | | | | 1.4 | 0.3 |
| **LP** | | | | | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(LP)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/3/2000 | XX | LPXX36649 | 2068 | 6.88 | 7.7 | | | | | | |
| 8/9/2000 | XX | LPXX36747 | 2940 | 7.47 | 18 | | | | | | |
| 11/8/2000 | XX | LPXX36838 | 3330 | 7.75 | 10.1 | | | | | | |
| 5/16/2001 | XX | LPXX37027 | 3610 | 7.63 | 12 | | | | | | |
| 7/31/2001 | XX | LPXX37103 | 4760 | 7.11 | 20.2 | | | | | | |
| 10/23/2001 | XX | LPXX37187 | 4560 | 7.35 | 11.3 | | | | | | |
| 5/21/2002 | XX | LPXX37397 | 2590 | 7.1 | 12.2 | | | | | | |
| 8/6/2002 | XX | LPXX37474 | 3760 | 7.44 | 20.6 | | | | | | |
| 10/24/2002 | XX | LPXX37553 | 3250 | 7.57 | 8.3 | | | | | | |
| 6/26/2003 | XX | LPXX37798 | 2320 | 7.43 | 24.9 | | | | | | |
| 8/13/2003 | XX | LPXX37846 | 2190 | 7.36 | 23.4 | | | | | | |
| 10/22/2003 | XX | LPXX37916 | 1751 | 7.52 | 7.4 | | | | | | |
| 5/6/2004 | XX | LPXX38113 | 1805 | 6.76 | 10.8 | | | | | | |
| 7/27/2004 | XX | LPXX38195 | 2250 | 7.49 | 16.9 | | | | | | |
| 10/25/2004 | XX | LPXX38285 | 2680 | 7.67 | 10.1 | | | | | | |
| 5/12/2005 | XX | LTLPXX002 | 1791 | 7.34 | 11.5 | | | | | | |
| 7/25/2005 | XX | LTLPXX01E | 2500 | 7.59 | 20.6 | | | | | | |
| 11/9/2005 | XX | LTLPXX036 | 2500 | 7.59 | 20.6 | | | | | | |
| 5/2/2006 | XX | LTLPXX082 | 1941 | 6.83 | 9.6 | | | | | | |
| 8/3/2006 | XX | LTLPXX06A | 1638 | 7.25 | 22.4 | | | | | | |
| 10/18/2006 | XX | LTLPXX04I | 2050 | 7.53 | 10.6 | | | | | | |
| 5/21/2007 | XX | LTLPXX09E | 1718 | 6.8 | 9 | | | | | | |
| 8/8/2007 | XX | LTLPXX0B7 | A | A | A | | | | | A | A |
| 11/6/2007 | XX | LTLPXX0CJ | 1772 | 7.06 | 7.1 | | | | | | |
| 5/27/2008 | XX | LTLPXX0F7 | 1806 | 7.58 | 20.4 | | | | | | |
| 8/19/2008 | XX | LTLPXX0H7 | 1755 | 7.38 | 20 | | | | | | |
| 10/22/2008 | XX | LTLPXX0IF | 2070 | 7.59 | 6.3 | | | | | | |
| 5/7/2009 | XX | LTLPXX10F | 2070 | 7.09 | 10.4 | | | | | | |
| 8/12/2009 | XX | LTLPXX12F | 2320 | 6.88 | 18 | | | | | | |
| 10/27/2009 | XX | LTLPXX143 | 1570 | 6.46 | 7.9 | | | | | | |
| 6/7/2010 | XX | LTLPXX164 | 2090 | 7.12 | 16.4 | | | | | | D3 |
| 8/18/2010 | XX | LTLPXX185 | 3120 | 7.84 | 20.8 | | | | | | D3 |
| 10/21/2010 | XX | LTLPXX19D | 2290 | 6.98 | 9.9 | | | | | | D3 |
| 5/18/2011 | XX | LTXXXX1ED | 1055 | 6.8 | 10.7 | | | | | 8 | 74.3 |
| 8/10/2011 | XX | LTXXXX1G4 | 2200 | 8.46 | 18.8 | | | | | 10 | 55.6 |
| 11/2/2011 | XX | LTXXXX1HF | 1904 | 7 | 9.6 | | | | | 5 | 45.4 |
| 5/14/2012 | XX | LTXXXX1J9 | 1182 | 6.9 | 18.2 | | | | | 5 | 62.4 |
| 8/15/2012 | XX | LTXXXX212 | 1828 | 8.3 | 24.4 | | | | | 8 | 63.6 |
| 10/30/2012 | XX | LTXXXX22G | 1405 | 7.4 | 13.4 | | | | | 6 | 4.2 |
| 5/21/2013 | XX | LTXXXX24A | 1560 | 7.7 | 16 | | | | | 6 | 20 |
| 7/25/2013 | XX | LTXXXX264 | 1379 | 7.8 | 23 | | | | | 6 | 26.5 |
| 10/1/2013 | XX | LTXXXX27I | 1600 | 7.4 | 24.9 | | | | | 6 | 6.5 |
| 6/5/2014 | XX | LTXXXX29C | 1648 | 7.7 | 15.7 | | | | | 4 | 5.8 |
| 8/21/2014 | XX | LTXXXX2B6 | 2730 | 7.7 | 18.2 | | | | | 6 | 8.2 |
| 11/13/2014 | XX | LTXXXX2D0 | 1210 | 7 | 6.6 | | | | | 4 | 8.4 |
| 6/4/2015 | XX | LTXXXX2EG | 1202 | 7.1 | 15.1 | | | | | 6.8 | 13.8 |
| 9/3/2015 | XX | LTXXXX2GB | 1600 | 8 | 26.8 | | | | | 8.4 | 18.6 |
| 11/5/2015 | XX | LTXXXX2I5 | 1172 | 7.2 | 9.2 | | | | | 5.8 | 12.8 |
| 6/16/2016 | XX | LTXXXX31F | 1806 | 7.7 | 20.5 | | | | | 6.6 | 23.1 |
| 9/22/2016 | XX | LTXXXX339 | 2171 | 8.2 | 20.6 | | | | | 10.7 | 5.8 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LP) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/10/2016 | XX | LTXXXX353 | 2346 | 7.6 | 6.3 | | | | | 7.4 | 6.8 | | | | | | |
| 6/15/2017 | XX | LTXXXX36I | 1650 | 7.8 | 20.6 | | | | | 6.9 | 12.2 | | | | | | |
| 8/31/2017 | XX | LTXXXX38C | 2829 | 7.7 | 18.1 | | | | | 6.9 | 8.4 | | | | | | |
| 11/16/2017 | XX | LTXXXX3A6 | 1170 | 7.7 | 4.1 | | | | | 8.5 | 6.7 | | | | | | |
| 6/21/2018 | XX | LTXXXX3C1 | 2070 | 7.9 | 23.2 | | | | | 9.6 | 14.5 | | | | | | |
| 8/16/2018 | XX | LTXXXX3CG | 1677 | 7.9 | 25.5 | | | | | 13.9 | 4.6 | | | | | | |
| 11/29/2018 | XX | LTXXXX3F9 | 630 | 7.7 | 1.7 | | | | | 2.4 | 0.8 | | | | | | |
| 6/6/2019 | XX | LTXXXX3H4 | 1182 | 7.4 | 23.4 | | | | | 12.4 | 12.6 | | | | | | |
| 8/15/2019 | XX | LTXXXX3HJ | 1875 | 7.9 | 25.2 | | | | | 6.6 | 6.7 | | | | | | |
| 10/24/2019 | XX | LTXXXX40C | 1549 | 7.7 | 11 | | | | | 5.4 | 2.6 | | | | | | |
| 6/18/2020 | XX | LTXXXX427 | 1511 | 7.7 | 28.7 | | | | | 5.2 | 3.1 | | | | | | |
| 8/6/2020 | XX | LTXXXX432 | 1733 | 8.1 | 24 | | | | | 3.7 | 5.6 | | | | | | |
| 10/22/2020 | XX | LTXXXX45F | 1073 | 7.3 | 10.7 | | | | | 5.6 | 2.1 | | | | | | |
| 6/24/2021 | XX | LTXXXX47A | 1625 | 7.7 | 21.3 | | | | | 1.8 | 5.6 | | | | | | |
| 10/5/2021 | XX | LTXXXX49J | 1110 | 7.6 | 22.4 | | | | | 9.1 | 17 | | | | | | |
| **LPD2** | | | | | | | | | | | | | | | | | |
| 5/19/2005 | XX | LTLPD2003 | 246 | 7.31 | 10.8 | | | | | 9.6 | 5.4 | | | | | | |
| 8/2/2005 | XX | LTLPD201F | 642 | 6.67 | 16.6 | | | | | 10.3 | 18.5 | | | | | | |
| 10/26/2005 | XX | LTLPD2037 | 292 | 7.64 | 8.4 | | | | | 4.3 | 11.8 | | | | | | |
| 5/10/2006 | XX | LTLPD2083 | 204 | 6.87 | 12.8 | | | | | 7 | 3.68 | | | | | | |
| 7/24/2006 | XX | LTLPD206B | 199 | 6.99 | 21.6 | | | | | 7.5 | 9 | | | | | | |
| 10/10/2006 | XX | LTLPD204J | 582 | 8.29 | 10 | | | | | 12.3 | 25.8 | | | | | | |
| 5/21/2007 | XX | LTLPD209F | 200 | 7.23 | 9.7 | | | | | 8.4 | 2.2 | | | | | | |
| 8/6/2007 | XX | LTLPD20B8 | 597 | 7.19 | 20.6 | | | | | 6.46 | 39 | | | | | | |
| 10/24/2007 | XX | LTLPD20D0 | 200 | 7.37 | 11.7 | | | | | 9.6 | 4.8 | | | | | | |
| 5/28/2008 | XX | LTLPD20F8 | 280 | 6.96 | 13.7 | | | | | 7.9 | 5.4 | | | | | | |
| 8/11/2008 | XX | LTLPD20H8 | 236 | 7.08 | 18.4 | | | | | 3 | 2.5 | | | | | | |
| 10/15/2008 | XX | LTLPD20IG | 243 | 7.11 | 9.7 | | | | | 3.8 | 5.1 | | | | | | |
| 5/6/2009 | XX | LTLPD210G | 202 | 6.72 | 11.7 | | | | | 6.8 | 3.4 | | | | | | |
| 8/4/2009 | XX | LTLPD212G | 177 | 6.6 | 19.6 | | | | | 5.45 | 2.4 | | | | | | |
| 10/19/2009 | XX | LTLPD2144 | 198 | 6.67 | 4.6 | | | | | 6.1 | 4.7 | | | | | | |
| 5/25/2010 | XX | LTLPD2165 | 344 | 6.97 | 19.4 | | | | | 4.25 | 6.53 | | | | | | |
| 8/2/2010 | XX | LTLPD2186 | 479 | 6.91 | 16.8 | | | | | | 54 | | | | | | |
| 10/12/2010 | XX | LTLPD219E | 232 | 7.13 | 9.1 | | | | | 6.61 | 5.61 | | | | | | |
| 5/18/2011 | XX | LTXXXX1EE | 94 | 7.8 | 9.9 | | | | | 6 | 1.2 | | | | | | |
| 8/10/2011 | XX | LTXXXX1G5 | 588 | 7.49 | 19 | | | | | 1 | 25.8 | | | | | | |
| 11/2/2011 | XX | LTXXXX1HG | 413 | 6.3 | 8.8 | | | | | 3 | 55.3 | | | | | | |
| 5/14/2012 | XX | LTXXXX1JA | 143 | 6.8 | 12.9 | | | | | 5 | 1.4 | | | | | | |
| 8/14/2012 | XX | LTXXXX213 | 503 | 7.3 | 21.1 | | | | | 3 | 22.3 | | | | | | |
| 10/30/2012 | XX | LTXXXX22H | 729 | 6.7 | 14.6 | | | | | 6 | 0 | | | | | | |
| 5/21/2013 | XX | LTXXXX24B | 112 | 6.7 | 15.1 | | | | | 5 | 3.1 | | | | | | |
| 7/25/2013 | XX | LTXXXX265 | 220 | 7.6 | 19.1 | | | | | 5 | 5.3 | | | | | | |
| 10/1/2013 | XX | LTXXXX27J | 265 | 6.9 | 20.4 | | | | | 3 | 2.1 | | | | | | |
| 6/5/2014 | XX | LTXXXX29D | 181 | 6.9 | 16.5 | | | | | 1 | 2.8 | | | | | | |
| 8/21/2014 | XX | LTXXXX2B7 | 461 | 7.9 | 16.9 | | | | | 5 | 5.7 | | | | | | |
| 11/13/2014 | XX | LTXXXX2D1 | 314 | 7 | 2.8 | | | | | 1 | 4.6 | | | | | | |
| 6/4/2015 | XX | LTXXXX2EH | 133 | 7.6 | 11.9 | | | | | 5.7 | 2.6 | | | | | | |
| 9/3/2015 | XX | LTXXXX2GC | 249 | 8.2 | 20.5 | | | | | 4.9 | 1.9 | | | | | | |
| 11/5/2015 | XX | LTXXXX2I6 | 334 | 6.6 | 8.6 | | | | | 6.4 | 4.8 | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(LPD2)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/16/2016 | XX | LTXXXX31G | 517 | 6.5 | 16.7 | | | | | 5.9 | 17.6 |
| 9/22/2016 | XX | LTXXXX33A | D | D | D | | | | | D | D |
| 11/10/2016 | XX | LTXXXX354 | D | D | D | | | | | D | D |
| 6/15/2017 | XX | LTXXXX36J | 162 | 7.4 | 16.9 | | | | | 4.9 | 7.9 |
| 8/31/2017 | XX | LTXXXX38D | 523 | 8 | 14.9 | | | | | 2 | 8.2 |
| 11/16/2017 | XX | LTXXXX3A7 | 285 | 6.8 | 3.7 | | | | | 3.4 | 5.6 |
| 6/21/2018 | XX | LTXXXX3C2 | 352 | 7 | 18.4 | | | | | 4.6 | 8.1 |
| 8/16/2018 | XX | LTXXXX3CH | 300 | 7.5 | 20.5 | | | | | 2.9 | 1.3 |
| 11/29/2018 | XX | LTXXXX3FA | 299 | 7.5 | 1.8 | | | | | 2.8 | 1.2 |
| 6/6/2019 | XX | LTXXXX3H5 | 123 | 7.8 | 19.3 | | | | | 8.5 | 0.8 |
| 8/15/2019 | XX | LTXXXX3I0 | 451 | 7.5 | 18.1 | | | | | 0.5 | 2.6 |
| 10/24/2019 | XX | LTXXXX40D | 231 | 7.6 | 11.5 | | | | | 2.3 | 2.1 |
| 6/18/2020 | XX | LTXXXX428 | 343 | 7 | 21.4 | | | | | 3.2 | 1.6 |
| 8/6/2020 | XX | LTXXXX433 | 476 | 7.5 | 21.9 | | | | | 4.2 | 3.6 |
| 10/22/2020 | XX | LTXXXX45G | 172 | 6.6 | 10.1 | | | | | 6.5 | 1.3 |
| 6/24/2021 | XX | LTXXXX47B | 402 | 6.7 | 16.3 | | | | | 5.8 | 1.8 |
| 9/23/2021 | XX | LTXXXX496 | 142 | 7 | 18.3 | | | | | 6.8 | 1.8 |
| **ND** | | | | | | | | | | | |
| 5/3/2000 | XX | NDXX36649 | D | D | D | | | | | | |
| 8/9/2000 | XX | NDXX36747 | D | D | D | | | | | | |
| 11/8/2000 | XX | NDXX36838 | D | D | D | | | | | | |
| 5/16/2001 | XX | NDXX37027 | D | D | D | | | | | D | D |
| 7/31/2001 | XX | NDXX37103 | D | D | D | | | | | D | D |
| 10/23/2001 | XX | NDXX37187 | D | D | D | | | | | D | D |
| 5/21/2002 | XX | NDXX37397 | D | D | D | | | | | D | D |
| 7/30/2002 | XX | NDXX37467 | D | D | D | | | | | D | D |
| 10/22/2002 | XX | NDXX37551 | D | D | D | | | | | D | D |
| 6/23/2003 | XX | NDXX37795 | D | D | D | | | | | D | D |
| 8/13/2003 | XX | NDXX37846 | D | D | D | | | | | D | D |
| 10/20/2003 | XX | NDXX37914 | D | D | D | | | | | D | D |
| 5/6/2004 | XX | NDXX38113 | D | D | D | | | | | D | D |
| 7/27/2004 | XX | NDXX38195 | D | D | D | | | | | D | D |
| 10/25/2004 | XX | NDXX38285 | D | D | D | | | | | D | D |
| 5/12/2005 | XX | SWNDXX016 | D | D | D | | | | | D | D |
| 7/25/2005 | XX | SWNDXX02I | D | D | D | | | | | D | D |
| 11/10/2005 | XX | SWNDXX04A | 162 | 8.58 | 2.8 | | | | | 14.5 | 16.5 |
| 5/2/2006 | XX | SWNDXX096 | 138.5 | 6.86 | 11.5 | | | | | 12.7 | 158 |
| 8/3/2006 | XX | SWNDXX07E | D | D | D | | | | | D | D |
| 10/18/2006 | XX | SWNDXX062 | D | D | D | | | | | D | D |
| 5/21/2007 | XX | SWNDXX0AI | D | D | D | | D | | | D | D |
| 8/8/2007 | XX | SWNDXX0CB | D | D | D | | | | | D | D |
| 11/6/2007 | XX | SWNDXX0E3 | D | D | D | | | | | D | D |
| 6/11/2008 | XX | SWNDXX0GB | 264 | 7.57 | 19.9 | | | | | 7.6 | 9.4 |
| 8/19/2008 | XX | SWNDXX0IB | D | D | D | | D | | | D | D |
| 10/22/2008 | XX | SWNDXX0JJ | D | D | D | | | | | D | D |
| 5/18/2009 | XX | SWNDXX11J | D | D | D | | | | | D | D |
| 8/17/2009 | XX | SWNDXX13J | D | D | D | | | | | D | D |
| 10/29/2009 | XX | SWNDXX157 | D | D | D | | | | | D | D |
| 6/7/2010 | XX | SWNDXX178 | 259 | 8.27 | 21.4 | | | | | 7.01 | 1.76 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (ND) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/18/2010 | XX | SWNDXX199 | D | D | D | | | | | D | D | | | | | | |
| 10/21/2010 | XX | SWNDXX1AH | D | D | D | | | | | D | D | | | | | | |
| 5/18/2011 | XX | SWXXXX1E9 | 186 | 7.5 | 9.4 | | | | | 6 | 0.4 | | | | | | |
| 8/10/2011 | XX | SWXXXX1G0 | D | D | D | | | | | D | D | | | | | | |
| 11/2/2011 | XX | SWXXXX1HB | D | D | D | | | | | D | D | | | | | | |
| 5/14/2012 | XX | SWXXXX1J5 | D | D | D | | | | | D | D | | | | | | |
| 8/14/2012 | XX | SWXXXX20I | F6 | F6 | F6 | | | | | F6 | F6 | | | | | | |
| 10/29/2012 | XX | SWXXXX22C | D | D | D | | | | | D | D | | | | | | |
| 5/21/2013 | XX | SWXXXX246 | D | D | D | | | | | D | D | | | | | | |
| 7/24/2013 | XX | SWXXXX260 | D | D | D | | | | | D | D | | | | | | |
| 10/1/2013 | XX | SWXXXX27E | D | D | D | | | | | D | D | | | | | | |
| 6/5/2014 | XX | SWXXXX298 | D | D | D | | | | | D | D | | | | | | |
| 8/21/2014 | XX | SWXXXX2B2 | D | D | D | | | | | D | D | | | | | | |
| 11/13/2014 | XX | SWXXXX2CG | D | D | D | | | | | D | D | | | | | | |
| 6/4/2015 | XX | SWXXXX2EC | D | D | D | | | | | D | D | | | | | | |
| 9/3/2015 | XX | SWXXXX2G7 | D | D | D | | | | | D | D | | | | | | |
| 11/5/2015 | XX | SWXXXX2I1 | I | I | I | | | | | I | I | | | | | | |
| 6/16/2016 | XX | SWXXXX31B | D | D | D | | | | | D | D | | | | | | |
| 9/22/2016 | XX | SWXXXX335 | D | D | D | | | | | D | D | | | | | | |
| 11/10/2016 | XX | SWXXXX34J | D | D | D | | | | | D | D | | | | | | |
| 6/15/2017 | XX | SWXXXX36E | D | D | D | | | | | D | D | | | | | | |
| 8/31/2017 | XX | SWXXXX388 | D | D | D | | | | | D | D | | | | | | |
| 11/16/2017 | XX | SWXXXX3A2 | D | D | D | | | | | D | D | | | | | | |
| 6/21/2018 | XX | SWXXXX3BH | D | D | D | | | | | D | D | | | | | | |
| 8/16/2018 | XX | SWXXXX3CC | D | D | D | | | | | D | D | | | | | | |
| 11/29/2018 | XX | SWXXXX3F5 | D | D | D | | | | | D | D | | | | | | |
| 6/6/2019 | XX | SWXXXX3H0 | D | D | D | | | | | D | D | | | | | | |
| 8/15/2019 | XX | SWXXXX3HF | D | D | D | | | | | D | D | | | | | | |
| 10/24/2019 | XX | SWXXXX408 | I | I | I | | | | | I | I | | | | | | |
| 6/18/2020 | XX | SWXXXX423 | D | D | D | | | | | D | D | | | | | | |
| 8/6/2020 | XX | SWXXXX42I | D | D | D | | | | | D | D | | | | | | |
| 10/22/2020 | XX | SWXXXX45B | D | D | D | | | | | D | D | | | | | | |
| 6/24/2021 | XX | SWXXXX476 | D | D | D | | | | | D | D | | | | | | |
| 9/23/2021 | XX | SWXXXX491 | D | D | D | | | | | D | D | | | | | | |
| **PBFR** | | | | | | | | | | | | | | | | | |
| 5/14/2012 | XX | SWXXXX1J4 | 108 | 6.8 | 11.4 | | | | | 6 | 0.1 | | | | | | |
| 8/14/2012 | XX | SWXXXX20H | 99 | 7.1 | 20.1 | | | | | 5 | 11.6 | | | | | | |
| 10/29/2012 | XX | SWXXXX22B | 133 | 6.9 | 12.4 | | | | | 5 | 5.9 | | | | | | |
| 5/21/2013 | XX | SWXXXX245 | 50 | 7.3 | 13.8 | | | | | 6 | 1 | | | | | | |
| 7/24/2013 | XX | SWXXXX25J | 57 | 6.3 | 22.8 | | | | | 5 | 1.8 | | | | | | |
| 10/1/2013 | XX | SWXXXX27D | 70 | 6.4 | 13.7 | | | | | 5 | 1.2 | | | | | | |
| 6/5/2014 | XX | SWXXXX297 | 45 | 7.2 | 19.7 | | | | | 5 | 0.9 | | | | | | |
| 8/21/2014 | XX | SWXXXX2B1 | 49 | 7.5 | 19.8 | | | | | 6 | 2.1 | | | | | | |
| 11/13/2014 | XX | SWXXXX2CF | 78 | 7.1 | 4.3 | | | | | 5 | 1.2 | | | | | | |
| 6/4/2015 | XX | SWXXXX2EB | 112 | 7.5 | 12.3 | | | | | 6.9 | 1.5 | | | | | | |
| 9/3/2015 | XX | SWXXXX2G6 | 74 | 7.9 | 21.5 | | | | | 4 | 1.7 | | | | | | |
| 11/5/2015 | XX | SWXXXX2I0 | 55 | 7.6 | 6.3 | | | | | 9.2 | 1.1 | | | | | | |
| 6/16/2016 | XX | SWXXXX31A | 54 | 7.9 | 17.2 | | | | | 5.6 | 2.3 | | | | | | |
| 9/22/2016 | XX | SWXXXX334 | 70 | 8.2 | 17.1 | | | | | 4.7 | 1.7 | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (PBFR) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/10/2016 | XX | SWXXXX34I | 109 | 8.6 | 4.4 | | | | | 9.3 | 1.1 |
| 6/15/2017 | XX | SWXXXX36D | 65 | 8.2 | 18 | | | | | 5.4 | 1.4 |
| 8/31/2017 | XX | SWXXXX387 | 84 | 8.4 | 17.8 | | | | | 5.6 | 2.7 |
| 11/16/2017 | XX | SWXXXX3A1 | 89 | 7.6 | 1.2 | | | | | 9.7 | 5.4 |
| 6/21/2018 | XX | SWXXXX3BG | 60 | 8.2 | 20.8 | | | | | 5 | 1.3 |
| 8/16/2018 | XX | SWXXXX3CB | 67 | 7.1 | 23.1 | | | | | 3.7 | 1.1 |
| 11/29/2018 | XX | SWXXXX3F4 | 332 | 7.6 | 1.9 | | | | | 9.1 | 1.1 |
| 6/6/2019 | XX | SWXXXX3GJ | 156 | 7.3 | 21.5 | | | | | 5.8 | 0.6 |
| 8/15/2019 | XX | SWXXXX3HE | 61 | 8 | 21.7 | | | | | 8.1 | 0.8 |
| 10/24/2019 | XD | SWDP3X40G | 378 | 3.8 | 11.6 | | | | | 7.1 | 0.8 |
| 6/18/2020 | XX | SWXXXX422 | 53 | 7.6 | 26.4 | | | | | 5 | 1.1 |
| 8/6/2020 | XX | SWXXXX42H | 56 | 8.3 | 22.9 | | | | | 6.1 | 1.2 |
| 10/22/2020 | XX | SWXXXX45A | 105 | 7.9 | 10 | | | | | 11.3 | 0.8 |
| 6/24/2021 | XX | SWXXXX475 | 53 | 7.6 | 17.6 | | | | | 7.3 | 0.8 |
| 9/23/2021 | XX | SWXXXX490 | 54 | 6.4 | 20 | | | | | 4.7 | 0.7 |
| **PBFB** | | | | | | | | | | | |
| 5/3/2000 | XX | PBFBXX36649 | 50 | 6.61 | 12.2 | | | | | | |
| 8/9/2000 | XX | PBFBXX36747 | 56 | 6.35 | 21 | | | | | | |
| 11/8/2000 | XX | PBFBXX36838 | 44 | 7.29 | 9.7 | | | | | | |
| 5/16/2001 | XX | PBFBXX37027 | 37 | 6.75 | 10.5 | | | | | 8.4 | 1.7 |
| 7/31/2001 | XX | PBFBXX37103 | 47 | 7.38 | 28.7 | | | | | 7.3 | 2.8 |
| 10/24/2001 | XX | PBFBXX37188 | 147 | 6.96 | 12 | | | | | 5.5 | 2.5 |
| 5/21/2002 | XX | PBFBXX37397 | 322 | 7.13 | 14 | | | | | 9.1 | 0.5 |
| 8/6/2002 | XX | PBFBXX37474 | 63.5 | 7.03 | 21.3 | | | | | 2.9 | 2.7 |
| 10/24/2002 | XX | PBFBXX37553 | 70 | 6.42 | 4.8 | | | | | 3.7 | 0.7 |
| 6/26/2003 | XX | PBFBXX37798 | 48 | 6.81 | 23.2 | | | | | 7.43 | 1.8 |
| 8/13/2003 | XX | PBFBXX37846 | 48.7 | 7.03 | 25.3 | | | | | 4.8 | 2.04 |
| 10/23/2003 | XX | PBFBXX37917 | 40.3 | 6.92 | 4.6 | | | | | 3.9 | 1.86 |
| 5/6/2004 | XX | PBFBXX38113 | 53.2 | 7.23 | 12.2 | | | | | 4.4 | 1.94 |
| 7/27/2004 | XX | PBFBXX38195 | 49.6 | 7.48 | 15.8 | | | | | 6 | 3.33 |
| 10/25/2004 | XX | PBFBXX38285 | 48.3 | 8.84 | 7.1 | | | | | 5.6 | 4.48 |
| 5/12/2005 | XX | SWPBFB018 | 53 | 8.36 | 14.3 | | | | | 5.3 | 2 |
| 7/25/2005 | XX | SWPBFB030 | 60 | 8.51 | 18.8 | | | | | 4.2 | 3.4 |
| 11/10/2005 | XX | SWPBFB04C | 38 | 9.02 | 5.7 | | | | | 4.2 | 1.8 |
| 5/2/2006 | XX | SWPBFB098 | 36.9 | 7.53 | 9.4 | | | | | 8.4 | 2.8 |
| 8/3/2006 | XX | SWPBFB07G | 52 | 8.63 | 22.4 | | | | | 2.6 | 2.4 |
| 10/18/2006 | XX | SWPBFB064 | 40 | 8.61 | 8.7 | | | | | 8.2 | 3 |
| 5/21/2007 | XX | SWPBFB0B0 | 29 | 8.05 | 9.8 | | | | | 7.6 | 1.4 |
| 8/8/2007 | XX | SWPBFB0CD | 55.2 | 6.62 | 20.2 | | | | | 5 | 2.6 |
| 11/6/2007 | XX | SWPBFB0E5 | 30.8 | 8.04 | 5.4 | | | | | 6.3 | 1.2 |
| 6/11/2008 | XX | SWPBFB0GD | 27 | 7.1 | 14.2 | | | | | 5.9 | 7.6 |
| 8/19/2008 | XX | SWPBFB0ID | 50 | 6.52 | 21 | | | | | 4.4 | 1.7 |
| 10/22/2008 | XX | SWPBFB101 | 48 | 6.96 | 4.5 | | | | | 7.8 | 1.8 |
| 5/7/2009 | XX | SWPBFB121 | 51.5 | 6.78 | 10.3 | | | | | 5.4 | 2.9 |
| 8/12/2009 | XX | SWPBFB141 | 54.2 | 6.8 | 15.7 | | | | | 2.3 | 3.6 |
| 10/27/2009 | XX | SWPBFB159 | 35.5 | 6.39 | 4.1 | | | | | 6.3 | 1.6 |
| 6/7/2010 | XX | SWPBFB17A | 36 | 7.21 | 13.1 | | | | | 4.38 | 3.73 |
| 8/18/2010 | XX | SWPBFB19B | 60.5 | 7.63 | 17.8 | | | | | | 2.1 |
| 10/21/2010 | XX | SWPBFB1AJ | 35.9 | 7.29 | 6.3 | | | | | 6.8 | 0.75 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (PBFB) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/18/2011 | XX | SWXXXX1E7 | 33 | 7.8 | 12.9 | | | | | 8 | 1.2 | | | | | | |
| 8/10/2011 | XX | SWXXXX1FI | 48 | 7.32 | 20.6 | | | | | 5 | 2.43 | | | | | | |
| 11/2/2011 | XX | SWXXXX1H9 | 45 | 7.2 | 6 | | | | | 8 | 19.8 | | | | | | |
| 5/14/2012 | XX | SWXXXX1J3 | 49 | 6.8 | 18.9 | | | | | 10 | 1.1 | | | | | | |
| 8/14/2012 | XX | SWXXXX20G | 58 | 6.9 | 24.5 | | | | | 5 | 7 | | | | | | |
| 10/29/2012 | XX | SWXXXX22A | 51 | 6.6 | 12.9 | | | | | 6 | 4 | | | | | | |
| 5/21/2013 | XX | SWXXXX244 | 48 | 7.1 | 15.3 | | | | | 6 | 1.5 | | | | | | |
| 7/24/2013 | XX | SWXXXX25I | 63 | 5.8 | 24.8 | | | | | 6 | 2.2 | | | | | | |
| 10/1/2013 | XX | SWXXXX27C | 110 | 7.1 | 22.4 | | | | | 5 | 1.1 | | | | | | |
| 6/5/2014 | XX | SWXXXX296 | 60 | 7 | 16.7 | | | | | 5 | 0.8 | | | | | | |
| 8/21/2014 | XX | SWXXXX2B0 | 50 | 7.8 | 18.8 | | | | | 4 | 2.6 | | | | | | |
| 11/13/2014 | XX | SWXXXX2CE | 46 | 7.5 | 3.3 | | | | | 5 | 0.6 | | | | | | |
| 6/4/2015 | XX | SWXXXX2EA | 46 | 8 | 13.7 | | | | | 7.1 | 2.1 | | | | | | |
| 9/3/2015 | XX | SWXXXX2G5 | 44 | 7.8 | 23.3 | | | | | 5.1 | 2.7 | | | | | | |
| 11/5/2015 | XX | SWXXXX2HJ | 39 | 7.7 | 7 | | | | | 9.1 | 1.3 | | | | | | |
| 6/16/2016 | XX | SWXXXX319 | 69 | 8.2 | 17.3 | | | | | 5.9 | 2.7 | | | | | | |
| 9/22/2016 | XX | SWXXXX333 | 48 | 8 | 19.1 | | | | | 5.2 | 1.2 | | | | | | |
| 11/10/2016 | XX | SWXXXX34H | 50 | 8.6 | 5.2 | | | | | 8.8 | 0.4 | | | | | | |
| 6/15/2017 | XX | SWXXXX36C | 45 | 8 | 19.2 | | | | | 6.2 | 1.1 | | | | | | |
| 8/31/2017 | XX | SWXXXX386 | 58 | 8.1 | 19.3 | | | | | 6 | 1.2 | | | | | | |
| 11/16/2017 | XX | SWXXXX3A0 | 68 | 7.8 | 2.4 | | | | | 10.9 | 0.8 | | | | | | |
| 6/21/2018 | XX | SWXXXX3BF | 49 | 7.6 | 22 | | | | | 4.9 | 1.3 | | | | | | |
| 8/16/2018 | XX | SWXXXX3CA | 61 | 7.7 | 23.9 | | | | | 4.3 | 1.8 | | | | | | |
| 11/29/2018 | XX | SWXXXX3F3 | 71 | 8.1 | 1.2 | | | | | 11.4 | 0.8 | | | | | | |
| 6/6/2019 | XX | SWXXXX3GI | 43 | 7.9 | 23.4 | | | | | 7.5 | 0.6 | | | | | | |
| 8/15/2019 | XX | SWXXXX3HD | 48 | 7.9 | 22.8 | | | | | 9.1 | 1.1 | | | | | | |
| 10/24/2019 | XX | SWXXXX406 | M7 | 7.7 | 11 | | | | | 7.6 | 1.3 | | | | | | |
| 6/18/2020 | XX | SWXXXX421 | 42 | 7 | 28.1 | | | | | 5 | 1.1 | | | | | | |
| 8/6/2020 | XX | SWXXXX42G | 42 | 7.4 | 24.4 | | | | | 5.3 | 1.1 | | | | | | |
| 10/22/2020 | XX | SWXXXX459 | 48 | 7 | 10.4 | | | | | 9.1 | 0.9 | | | | | | |
| 6/24/2021 | XX | SWXXXX474 | 51 | 7.4 | 16.2 | | | | | 5.1 | 1.2 | | | | | | |
| 9/23/2021 | XX | SWXXXX48J | 5.7 | 6.2 | 19.5 | | | | | 3.5 | 0.6 | | | | | | |
| **SPO** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | SPOXX36649 | D | D | D | | | | | | | | | | | | |
| 8/9/2000 | XX | SPOXX36747 | D | D | D | | | | | | | | | | | | |
| 11/8/2000 | XX | SPOXX36838 | D | D | D | | | | | | | | | | | | |
| 5/16/2001 | XX | SPOXX37027 | D | D | D | | | | | D | D | | | | | | |
| 7/31/2001 | XX | SPOXX37103 | D | D | D | | | | | D | D | | | | | | |
| 10/23/2001 | XX | SPOXX37187 | D | D | D | | | | | D | D | | | | | | |
| 5/21/2002 | XX | SPOXX37397 | D | D | D | | | | | D | D | | | | | | |
| 7/30/2002 | XX | SPOXX37467 | D | D | D | | | | | D | D | | | | | | |
| 10/22/2002 | XX | SPOXX37551 | D | D | D | | | | | D | D | | | | | | |
| 6/23/2003 | XX | SPOXX37795 | D | D | D | | | | | D | D | | | | | | |
| 8/13/2003 | XX | SPOXX37846 | D | D | D | | | | | D | D | | | | | | |
| 10/20/2003 | XX | SPOXX37914 | D | D | D | | | | | D | D | | | | | | |
| 5/6/2004 | XX | SPOXX38113 | 174.3 | 6.69 | 8.2 | | | | | 7.1 | 4.49 | | | | | | |
| 7/27/2004 | XX | SPOXX38195 | D | D | D | | | | | D | D | | | | | | |
| 10/25/2004 | XX | SPOXX38285 | D | D | D | | | | | D | D | | | | | | |
| 5/12/2005 | XX | SWSPOX01A | D | D | D | | | | | D | D | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(SPO)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/25/2005 | XX | SWSPOX032 | D | D | D | | | | | D | D | | | | | | |
| 11/10/2005 | XX | SWSPOX04E | 196 | 8.71 | 3.6 | | | | | 5 | 1.1 | | | | | | |
| 5/2/2006 | XX | SWSPOX09A | 195.3 | 6.55 | 8.1 | | | | | 8.7 | 4.21 | | | | | | |
| 8/3/2006 | XX | SWSPOX07I | 174 | 7.34 | 21.1 | | | | | 2.3 | 8.7 | | | | | | |
| 10/18/2006 | XX | SWSPOX066 | 121 | 8.36 | 8.5 | | | | | 5.6 | 5.9 | | | | | | |
| 5/21/2007 | XX | SWSPOX0B2 | 146 | 7.07 | 10.6 | | | | | 10 | 2.9 | | | | | | |
| 8/9/2007 | XX | SWSPOX0CF | D | D | D | | | | | D | D | | | | | | |
| 11/6/2007 | XX | SWSPOX0E7 | 87 | 8.15 | 2.7 | | | | | 9.6 | 4.4 | | | | | | |
| 6/11/2008 | XX | SWSPOX0GF | 72 | 5.83 | 17.9 | | | | | 4.3 | 12 | | | | | | |
| 8/19/2008 | XX | SWSPOX0GJ | D | D | D | | D | | | D | D | | | | | | |
| 10/22/2008 | XX | SWSPOX103 | D | D | D | | | | | D | D | | | | | | |
| 5/7/2009 | XX | SWSPOX123 | 159.2 | 7.1 | 11.9 | | | | | 6 | 4.9 | | | | | | |
| 8/17/2009 | XX | SWSPOX127 | D | D | D | | | | | D | D | | | | | | |
| 10/27/2009 | XX | SWSPOX15B | 92.5 | 7.27 | 4.6 | | | | | 6.9 | 2.2 | | | | | | |
| 6/7/2010 | XX | SWSPOX17C | 106 | 7.38 | 16.9 | | | | | 4.65 | 2.25 | | | | | | |
| 8/18/2010 | XX | SWSPOX17H | D | D | D | | | | | D | D | | | | | | |
| 10/21/2010 | XX | SWSPOX1B1 | D | D | D | | | | | D | D | | | | | | |
| 5/18/2011 | XX | SWXXXX1EA | 96 | 8 | 13.3 | | | | | 8 | 1.4 | | | | | | |
| 8/10/2011 | XX | SWXXXX1G1 | D | D | D | | | | | D | D | | | | | | |
| 11/2/2011 | XX | SWXXXX1HC | F6 | F6 | F6 | | | | | F6 | F6 | | | | | | |
| 5/14/2012 | XX | SWXXXX1J6 | 115 | 6.7 | 15.1 | | | | | 5 | 0.6 | | | | | | |
| 8/14/2012 | XX | SWXXXX20J | F6 | F6 | F6 | | | | | F6 | F6 | | | | | | |
| 10/29/2012 | XX | SWXXXX22D | 114 | 6.8 | 12.7 | | | | | 3 | 2.7 | | | | | | |
| 5/21/2013 | XX | SWXXXX247 | 153 | 6.7 | 14.2 | | | | | 6 | 1.8 | | | | | | |
| 7/24/2013 | XX | SWXXXX261 | 99 | 6.1 | 22.7 | | | | | 6 | 2.8 | | | | | | |
| 10/1/2013 | XX | SWXXXX27F | I | I | I | | | | | I | I | | | | | | |
| 6/5/2014 | XX | SWXXXX299 | D | D | D | | | | | D | D | | | | | | |
| 8/21/2014 | XX | SWXXXX2B3 | I | I | I | | | | | I | I | | | | | | |
| 11/13/2014 | XX | SWXXXX2CH | 97 | 7.8 | 3.6 | | | | | 3 | 1.2 | | | | | | |
| 6/4/2015 | XX | SWXXXX2ED | 101 | 7.5 | 13.2 | | | | | 4 | 2.2 | | | | | | |
| 9/3/2015 | XX | SWXXXX2G8 | D | D | D | | | | | D | D | | | | | | |
| 11/5/2015 | XX | SWXXXX2I2 | 94 | 7.4 | 5.4 | | | | | 8.3 | 1.2 | | | | | | |
| 6/16/2016 | XX | SWXXXX31C | D | D | D | | | | | D | D | | | | | | |
| 9/22/2016 | XX | SWXXXX336 | D | D | D | | | | | D | D | | | | | | |
| 11/10/2016 | XX | SWXXXX350 | I | I | I | | | | | I | I | | | | | | |
| 6/15/2017 | XX | SWXXXX36F | I | I | I | | | | | I | I | | | | | | |
| 8/31/2017 | XX | SWXXXX389 | D | D | D | | | | | D | D | | | | | | |
| 11/16/2017 | XX | SWXXXX3A3 | D | D | D | | | | | D | D | | | | | | |
| 6/21/2018 | XX | SWXXXX3BI | D | D | D | | | | | D | D | | | | | | |
| 8/16/2018 | XX | SWXXXX3CD | D | D | D | | | | | D | D | | | | | | |
| 11/29/2018 | XX | SWXXXX3F6 | D | D | D | | | | | D | D | | | | | | |
| 6/6/2019 | XX | SWXXXX3H1 | 134 | 7.5 | 21.2 | | | | | 8.5 | 0.8 | | | | | | |
| 8/15/2019 | XX | SWXXXX3HG | D | D | D | | | | | D | D | | | | | | |
| 10/24/2019 | XX | SWXXXX409 | 105 | 7.8 | 11.8 | | | | | 7.8 | 0.9 | | | | | | |
| 6/18/2020 | XX | SWXXXX424 | D | D | D | | | | | D | D | | | | | | |
| 8/6/2020 | XX | SWXXXX42J | I | I | I | | | | | I | I | | | | | | |
| 10/22/2020 | XX | SWXXXX45C | I | I | I | | | | | I | I | | | | | | |
| 6/24/2021 | XX | SWXXXX477 | D | D | D | | | | | D | D | | | | | | |
| 9/23/2021 | XX | SWXXXX492 | D | D | D | | | | | D | D | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(SPON)**

| Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SPON** | | | | | | | | | | | | | | | | | |
| 5/12/2005 | XX | SWSPON01B | 581 | 7.96 | 9.7 | | | | | 6.5 | 9.4 | | | | | | |
| 7/25/2005 | XX | SWSPON033 | D | D | D | | | | | D | D | | | | | | |
| 11/10/2005 | XX | SWSPON04F | 674 | 8.03 | 2.1 | | | | | 8.7 | 4.6 | | | | | | |
| 5/2/2006 | XX | SWSPON09B | 525 | 7.14 | 4 | | | | | 7.9 | 21.6 | | | | | | |
| 8/3/2006 | XX | SWSPON07J | 1483 | 7.17 | 19.4 | | | | | 2 | 9.1 | | | | | | |
| 10/18/2006 | XX | SWSPON067 | 696 | 7.62 | 7.3 | | | | | 5.2 | 4.8 | | | | | | |
| 5/21/2007 | XX | SWSPON0B3 | 546 | 6.94 | 7.1 | | | | | 5.2 | 2.1 | | | | | | |
| 8/9/2007 | XX | SWSPON0CG | D | D | D | | | | | D | D | | | | | | |
| 11/6/2007 | XX | SWSPON0E8 | 395 | 7.7 | 3.1 | | | | | 8.2 | 16.8 | | | | | | |
| 6/11/2008 | XX | SWSPON0GG | 315 | 7.32 | 19 | | | | | 7.1 | 29.6 | | | | | | |
| 8/19/2008 | XX | SWSPON0H0 | 563 | 6.93 | 18.2 | | | | | 4.2 | 10.5 | | | | | | |
| 10/22/2008 | XX | SWSPON104 | 755 | 6.72 | 5.1 | | | | | 5.7 | 6.2 | | | | | | |
| 5/7/2009 | XX | SWSPON124 | 667 | 7.43 | 10.3 | | | | | 6 | 3.9 | | | | | | |
| 8/12/2009 | XX | SWSPON128 | 462 | 7.24 | 17.4 | | | | | 6.1 | 6.5 | | | | | | |
| 10/27/2009 | XX | SWSPON15C | 446 | 6.2 | 3 | | | | | 10.6 | 3.1 | | | | | | |
| 6/7/2010 | XX | SWSPON17D | 291 | 7.12 | 13.5 | | | | | 5.66 | 3 | | | | | | |
| 8/18/2010 | XX | SWSPON17I | D | D | D | | | | | D | D | | | | | | |
| 10/21/2010 | XX | SWSPON1B2 | 694 | 7.18 | 7.3 | | | | | | 1.82 | | | | | | |
| 5/18/2011 | XX | SWXXXX1EB | 292 | 7.8 | 8.3 | | | | | 6 | 0.6 | | | | | | |
| 8/10/2011 | XX | SWXXXX1G2 | D | D | D | | | | | D | D | | | | | | |
| 11/2/2011 | XX | SWXXXX1HD | 878 | 6.9 | 5.1 | | | | | 8 | 1.8 | | | | | | |
| 5/14/2012 | XX | SWXXXX1J7 | 287 | 7.1 | 11.3 | | | | | 5 | 2.4 | | | | | | |
| 8/14/2012 | XX | SWXXXX210 | F6 | F6 | F6 | | | | | F6 | F6 | | | | | | |
| 10/29/2012 | XX | SWXXXX22E | 753 | 6.7 | 12.2 | | | | | 6 | 8.2 | | | | | | |
| 5/21/2013 | XX | SWXXXX248 | 713 | 6.9 | 11.9 | | | | | 6 | 1.1 | | | | | | |
| 7/24/2013 | XX | SWXXXX262 | 412 | 6.4 | 19.3 | | | | | 5 | 2.8 | | | | | | |
| 10/1/2013 | XX | SWXXXX27G | 709 | 7 | 15.9 | | | | | 6 | 2.6 | | | | | | |
| 6/5/2014 | XX | SWXXXX29A | 843 | 7.2 | 13 | | | | | 3 | 0.6 | | | | | | |
| 8/21/2014 | XX | SWXXXX2B4 | 626 | 7.5 | 15.7 | | | | | 2 | 4.5 | | | | | | |
| 11/13/2014 | XX | SWXXXX2CI | 672 | 7.3 | 2.3 | | | | | 3 | 0.8 | | | | | | |
| 6/4/2015 | XX | SWXXXX2EE | 747 | 7.1 | 11 | | | | | 4 | 0.8 | | | | | | |
| 9/3/2015 | XX | SWXXXX2G9 | 812 | 7.6 | 18.8 | | | | | 5 | 2.2 | | | | | | |
| 11/5/2015 | XX | SWXXXX2I3 | 564 | 6.9 | 5.1 | | | | | 5.4 | 2.6 | | | | | | |
| 6/16/2016 | XX | SWXXXX31D | 717 | 7.6 | 13.7 | | | | | 3.9 | 6.1 | | | | | | |
| 9/22/2016 | XX | SWXXXX337 | D | D | D | | | | | D | D | | | | | | |
| 11/10/2016 | XX | SWXXXX351 | 1213 | 7.8 | 4.9 | | | | | 9.4 | 7.8 | | | | | | |
| 6/15/2017 | XX | SWXXXX36G | 647 | 7.7 | 15 | | | | | 5.2 | 2.1 | | | | | | |
| 8/31/2017 | XX | SWXXXX38A | D | D | D | | | | | D | D | | | | | | |
| 11/16/2017 | XX | SWXXXX3A4 | 1033 | 7.1 | 2.6 | | | | | 11.5 | 1.3 | | | | | | |
| 6/21/2018 | XX | SWXXXX3BJ | D | D | D | | | | | D | D | | | | | | |
| 8/16/2018 | XX | SWXXXX3CE | D | D | D | | | | | D | D | | | | | | |
| 11/29/2018 | XX | SWXXXX3F7 | 227 | 7.6 | 1.2 | | | | | 8.3 | 0.6 | | | | | | |
| 6/6/2019 | XX | SWXXXX3H2 | 601 | 7.3 | 18.1 | | | | | 3.4 | 0.6 | | | | | | |
| 8/15/2019 | XX | SWXXXX3HH | 481 | 7.5 | 17.5 | | | | | 3 | 0.8 | | | | | | |
| 10/24/2019 | XX | SWXXXX40A | 473 | 7.7 | 8.5 | | | | | 7.9 | 1.1 | | | | | | |
| 6/18/2020 | XX | SWXXXX425 | D | D | D | | | | | D | D | | | | | | |
| 8/6/2020 | XX | SWXXXX430 | I | I | I | | | | | I | I | | | | | | |
| 10/22/2020 | XX | SWXXXX45D | 317 | 7 | 8.8 | | | | | 9.5 | 0.6 | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (SPON) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/24/2021 | XX | SWXXXX478 | D | D | D | | | | | D | D | | | | | | |
| 9/23/2021 | XX | SWXXXX493 | 383 | 7 | 16.3 | | | | | 4.4 | 1.3 | | | | | | |
| **SPOS** | | | | | | | | | | | | | | | | | |
| 5/12/2005 | XX | SWSPOS01C | 111 | 8.42 | 9.9 | | | | | 6.1 | 0.8 | | | | | | |
| 7/25/2005 | XX | SWSPOS034 | 202 | 7.83 | 15.9 | | | | | 6.3 | 14.9 | | | | | | |
| 11/10/2005 | XX | SWSPOS04G | 109 | 8.8 | 2.5 | | | | | 11.4 | 1 | | | | | | |
| 5/2/2006 | XX | SWSPOS09C | 116.8 | 6.97 | 6.7 | | | | | 8.2 | 5.45 | | | | | | |
| 8/3/2006 | XX | SWSPOS080 | 174 | 7.51 | 19.1 | | | | | 3 | 0.9 | | | | | | |
| 10/18/2006 | XX | SWSPOS068 | 143 | 8.31 | 7.6 | | | | | 7.7 | 6.3 | | | | | | |
| 5/21/2007 | XX | SWSPOS0B4 | 102 | 7.68 | 7.3 | | | | | 9.7 | 0.7 | | | | | | |
| 8/8/2007 | XX | SWSPOS0CH | 140 | 6.7 | 17.1 | | | | | 6 | 3.9 | | | | | | |
| 11/6/2007 | XX | SWSPOS0E9 | 102 | 7.71 | 3 | | | | | 12.1 | 0.8 | | | | | | |
| 6/11/2008 | XX | SWSPOS0GH | 101 | 7.25 | 16 | | | | | 7.6 | 4.9 | | | | | | |
| 8/19/2008 | XX | SWSPOS0H1 | 195 | 6.87 | 17.2 | | | | | 3.6 | 1.1 | | | | | | |
| 10/22/2008 | XX | SWSPOS105 | 185 | 7.12 | 4.5 | | | | | 7.8 | 0.8 | | | | | | |
| 5/7/2009 | XX | SWSPOS125 | 125.7 | 6.64 | 8.9 | | | | | 4.9 | 0.8 | | | | | | |
| 8/12/2009 | XX | SWSPOS129 | 171 | 6.9 | 16.5 | | | | | 3.5 | 0.8 | | | | | | |
| 10/27/2009 | XX | SWSPOS15D | 95.1 | 6.41 | 3.2 | | | | | 10.5 | 0.7 | | | | | | |
| 6/7/2010 | XX | SWSPOS17E | 116 | 7.22 | 12.9 | | | | | 7.08 | 0.97 | | | | | | |
| 8/18/2010 | XX | SWSPOS17J | D | D | D | | | | | D | D | | | | | | |
| 10/21/2010 | XX | SWSPOS1B3 | 149.7 | 7.07 | 6.5 | | | | | 8.66 | 0.37 | | | | | | |
| 5/18/2011 | XX | SWXXXX1EC | 88 | 7.5 | 10.3 | | | | | 8 | 0.4 | | | | | | |
| 8/10/2011 | XX | SWXXXX1G3 | D | D | D | | | | | D | D | | | | | | |
| 11/2/2011 | XX | SWXXXX1HE | 127 | 7.3 | 5.2 | | | | | 6 | 0.3 | | | | | | |
| 5/14/2012 | XX | SWXXXX1J8 | 137 | 7.5 | 9.7 | | | | | 8 | 0.3 | | | | | | |
| 8/14/2012 | XX | SWXXXX211 | F6 | F6 | F6 | | | | | F6 | F6 | | | | | | |
| 10/29/2012 | XX | SWXXXX22F | 143 | 6.9 | 12 | | | | | 2 | 3.1 | | | | | | |
| 5/21/2013 | XX | SWXXXX249 | 123 | 7 | 7.1 | | | | | 6 | 1.1 | | | | | | |
| 7/24/2013 | XX | SWXXXX263 | 120 | 6.4 | 18.8 | | | | | 5 | 0.8 | | | | | | |
| 10/1/2013 | XX | SWXXXX27H | 171 | 6.9 | 13.3 | | | | | 6 | 0.8 | | | | | | |
| 6/5/2014 | XX | SWXXXX29B | 173 | 7.2 | 13.3 | | | | | 4 | 0.3 | | | | | | |
| 8/21/2014 | XX | SWXXXX2B5 | 166 | 7.8 | 16.9 | | | | | 5 | 1.4 | | | | | | |
| 11/13/2014 | XX | SWXXXX2CJ | 107 | 7.3 | 3.2 | | | | | 4 | 0.8 | | | | | | |
| 6/4/2015 | XX | SWXXXX2EF | 132 | 8 | 10.5 | | | | | 6.5 | 0.3 | | | | | | |
| 9/3/2015 | XX | SWXXXX2GA | 233 | 7.9 | 17.9 | | | | | 5.6 | 2.2 | | | | | | |
| 11/5/2015 | XX | SWXXXX2I4 | 97 | 7.4 | 4.6 | | | | | 9 | 1.3 | | | | | | |
| 6/16/2016 | XX | SWXXXX31E | D | D | D | | | | | D | D | | | | | | |
| 9/22/2016 | XX | SWXXXX338 | D | D | D | | | | | D | D | | | | | | |
| 11/10/2016 | XX | SWXXXX352 | 261 | 8.3 | 5.3 | | | | | 8.8 | 0.8 | | | | | | |
| 6/15/2017 | XX | SWXXXX36H | 172 | 8.1 | 16.7 | | | | | 5.8 | 3.6 | | | | | | |
| 8/31/2017 | XX | SWXXXX38B | D | D | D | | | | | D | D | | | | | | |
| 11/16/2017 | XX | SWXXXX3A5 | 155 | 7.6 | 3.5 | | | | | 9.4 | 0.8 | | | | | | |
| 6/21/2018 | XX | SWXXXX3C0 | 191 | 7.8 | 20.1 | | | | | 5.3 | 1.6 | | | | | | |
| 8/16/2018 | XX | SWXXXX3CF | 172 | 7.9 | 21.1 | | | | | 5.4 | 0.5 | | | | | | |
| 11/29/2018 | XX | SWXXXX3F8 | 135 | 8.1 | 1.9 | | | | | 10.5 | 0.6 | | | | | | |
| 6/6/2019 | XX | SWXXXX3H3 | 111 | 7.8 | 20.6 | | | | | 8.1 | 0.8 | | | | | | |
| 8/15/2019 | XX | SWXXXX3HI | 169 | 8.1 | 19.6 | | | | | 9 | 1.6 | | | | | | |
| 10/24/2019 | XX | SWXXXX40B | 106 | 7.8 | 9.7 | | | | | 9.2 | 1.2 | | | | | | |
| 6/18/2020 | XX | SWXXXX426 | 187 | 7.5 | 21.3 | | | | | 4.4 | 0.8 | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (SPOS) Date | Type | Sample ID | Specific Conductance µmhos/cm @25°C | pH STU | Temperature Deg C | Water Level Depth Feet | Water Level Elevation Feet | Water Level Reference Point Feet | Well Depth Feet | Dissolved Oxygen mg/L | Turbidity (field) NTU | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/6/2020 | XX | SWXXXX431 | 205 | 7.9 | 22.4 | | | | | 6.1 | 1.3 | | | | | | |
| 10/22/2020 | XX | SWXXXX45E | 102 | 6.8 | 9.5 | | | | | 8.8 | 0.6 | | | | | | |
| 6/24/2021 | XX | SWXXXX479 | 122 | 6.9 | 17.2 | | | | | 6.6 | 0.9 | | | | | | |
| 9/23/2021 | XX | SWXXXX494 | 113 | 7.2 | 18 | | | | | 5.1 | 0.9 | | | | | | |
| **UDLP** | | | | | | | | | | | | | | | | | |
| 6/24/2021 | XX | LFXXXX47J | 788 | 7.1 | 16.5 | | | | | 1.5 | 0.5 | | | | | | |
| 9/23/2021 | XX | LFXXXX49F | 538 | 6.6 | 17.9 | | | | | 1.6 | 0.6 | | | | | | |

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

Blank Cells appear when a parameter was not analyzed.

**Concentration Qualifier Notes:**

- ! - The sampling location was damaged or destroyed.
- A - The sampling location was Inaccessible
- D - The sampling location was dry.
- D3 - Sample too dark to take reading.
- F - The sampling location was frozen.
- F6 - No flow. Sample not taken.
- I - The sampling location yielded insufficient quantity to collect a sample.
- M7 - No reading taken at this location.
- U - Not Detected above the laboratory reporting limit.
- Z3 - Reference Point (Top of PVC) Changed.

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (104B) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| **104B** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 104BXX36643 | 0.1 U | 1 U | | 102 | 186 | 16.5 | 63.6 | 41 | 50.5 | 2.2 | 2.6 | | | | |
| 8/1/2000 | XX | 104BXX36739 | 0.1 U | 1 U | | 95 | 1 | 17.9 | 39.5 | 47 | 50.5 | 1 U | 3.9 | | | | |
| 10/24/2000 | XX | 104BXX36823 | 0.1 U | 1 U | | 92 | 1 | 17 | 29.7 | 48 | 50.5 | 1 U | 2.4 | | | | |
| 5/8/2001 | XX | 104BXX37019 | 0.1 U | 1.5 | | 91 | 5 | 17.4 | 29.9 | 48 | 51 | 1 U | 2.6 | | | | |
| 7/24/2001 | XX | 104BXX37096 | 0.1 U | 1 U | | 95 | 1 U | 18.2 | 32.2 | 47 | 50 | 1 U | 2 | | | | |
| 10/16/2001 | XX | 104BXX37180 | 0.1 U | 1 U | | 89 | 1 | 16.4 | 31.5 | 46 | 50 | 1 U | 2.9 | | | | |
| 5/15/2002 | XX | 104BXX37391 | 0.1 U | 1 U | | 78 | 1 U | 18.7 | 31.3 | 42 | 46 | 1 U | 1.5 | | | | |
| 7/29/2002 | XX | 104BXX37466 | 0.1 U | 1 U | | 100 | 1 | 17.9 | 32.5 | 48 | 50 | 1 U | 2.2 | | | | |
| 10/15/2002 | XX | 104BXX37544 | 0.1 U | 1 U | | 88 | 1 U | 18.2 | 29.2 | 40 | 42 | 1 U | 2.4 | | | | |
| 6/19/2003 | XX | 104BXX37791 | 0.2 U | 2 U | | 80 | 1 U | 18 | 73 | 44 | 51 | 1 U | 2 U | | | | |
| 8/5/2003 | XX | 104BXX37838 | 0.2 U | 2 U | | 82 | 1 U | 16 | 68 | 48 | 50 | 1 U | 2 U | | | | |
| 10/7/2003 | XX | 104BXX37901 | 0.2 U | 2 U | | 75 | 1 U | 17 | 62 | 44 | 50 | 1 | 2 U | | | | |
| 4/26/2004 | XX | 104BXX38103 | 0.2 U | 0.5 U | | 34 | 1 U | 18 | 71 | 44 | 50 | 1 | 2.7 | | | | |
| 8/9/2004 | XX | 104BXX38208 | 0.2 U | 2 U | | 82 | 1 U | 16 | 62 | 47 | 49 | 1 U | 3 | | | | |
| 10/11/2004 | XX | 104BXX38271 | 0.2 U | 2 U | | 78 | 1 U | 16 | 65 | 46 | 49 | 1 U | 3 | | | | |
| 5/24/2005 | XX | GW104B005 | 0.29 | 2 U | | 91 | 1 U | 18 | 57 | 46 | 48 | 1 U | 2 | | | | |
| 8/1/2005 | XX | GW104B01H | 0.2 U | 2 U | | 140 | 1 U | 15 | 59 | 42 | 46 | 1 U | 2 U | | | | |
| 10/25/2005 | XX | GW104B039 | 0.2 U | 2 U | | 79 | 1 U | 16 | 67 | 49 | 51 | 1 U | 2 U | | | | |
| 5/10/2006 | XX | GW104B085 | 0.2 U | 2 U | | 70 | 1 U | 18 | 75 | 44 | 47 | 1 U | 2 U | | | | |
| 7/24/2006 | XX | GW104B06D | 0.2 U | 2 U | | 77 | 1 U | 18 | 70 | 50 | 50 | 1 U | 2 U | | | | |
| 10/10/2006 | XX | GW104B051 | 0.2 U | 2 U | | 88 | 1 U | 16 | 65 | 51 | 52 | 1 U | 2 U | | | | |
| 5/10/2007 | XX | GW104B09H | 0.9 | 0.5 U | | 98 | 1 U | 15 | 64 | 52 | 54 | 1 U | 2 U | | | | |
| 8/6/2007 | XX | GW104B0BA | 0.2 U | 0.5 U | | 78 | 1 U | 15 | 70 | 46 | 47 | 1.8 | 2 U | | | | |
| 10/24/2007 | XX | GW104B0D2 | 0.2 U | 0.5 U | | 100 | 1 U | 16 | 62 | 37 | 37 | 1 U | 2 U | | | | |
| 10/24/2007 | XD | GWDP2X0EJ | 0.2 U | 0.5 U | | 110 | 1 U | 16 | 64 | | 49 | 1 U | 2 U | | | | |
| 5/28/2008 | XX | GW104B0FA | 0.2 U | 0.5 U | | 140 | 1 U | 17 | 65 | 53 | 53 | 1 U | 2 U | | | | |
| 8/11/2008 | XX | GW104B0HA | 0.2 U | 0.5 U | | 79 | 1 U | 15 | 54 | 49 | 50 | 1 U | 2 U | | | | |
| 10/15/2008 | XX | GW104B0II | 0.2 U | 0.5 U | | 110 | 1 U | 17 | 57 | 48 | 49 | 1 U | 2 U | | | | |
| 10/15/2008 | XD | GWDP1X106 | 0.2 U | 0.5 U | | 100 | 1 U | 17 | 57 | | 49 | 1 U | 2 U | | | | |
| 5/6/2009 | XX | GW104B10I | 0.2 U | 0.5 U | | 120 | 0.6 U | 18 | 54 | 50 | 50 | 1 U | 2 U | | | | |
| 8/4/2009 | XX | GW104B12I | 0.2 U | 0.5 U | | 100 | 2 U | 17 | 51 | 49 | 50 | 1 U | 2 U | | | | |
| 10/19/2009 | XX | GW104B146 | 0.2 U | 0.5 U | | 35 | 1 U | 18 | 59 | 48 | 49 | 1 U | 2 U | | | | |
| 5/25/2010 | XX | GW104B167 | 0.2 U | 0.5 U | | 91 | 1 U | 15 | 57 | 49 | 49 | 1 U | 2 U | | | | |
| 5/25/2010 | XD | GWDP1X15J | 0.2 U | 0.5 U | | 98 | 1 U | 15 | 57 | | 49 | 1 U | 2 U | | | | |
| 8/2/2010 | XX | GW104B188 | 0.2 U | 0.5 UH | | 87 | 1.1 U | 17 | 57 | 50 | 50 | 1 U | 2 U | | | | |
| 10/12/2010 | XX | GW104B19G | 0.2 U | 0.5 U | | 110 | 1.1 U | 17 | 58 | 49 | 50 | 1 U | 2 U | | | | |
| 5/16/2011 | XX | GW104B1DI | 0.2 U | 0.5 U | | 96 | 5 U | 18 | 59 | 48 | 48 | 1 U | 2 U | | | | |
| 5/16/2011 | XD | GWXXXX1EG | 0.2 U | 0.5 U | | 80 | 5 U | 17 | 59 | 47 | 47 | 1 U | 2 U | | | | |
| 8/9/2011 | XX | GW104B1F9 | 0.08 U | 0.2 U | | 79 | 0.46 U | 17 | 59 | 50 | 50 | 0.57 J | 1.3 J | | | | |
| 11/3/2011 | XX | GW104B1H0 | 0.082 U | 0.2 U | | 80 | 0.32 U | 17 | 57 | 51 | 51 | 0.82 J | 1.2 J | | | | |
| 11/3/2011 | XD | GWDP2X1HJ | 0.082 U | 0.2 U | | 56 | 0.32 U | 17 | 51 | 50 | 50 | 0.63 J | 1.2 U | | | | |
| 5/14/2012 | XX | GW104B1IE | 0.2 U | 0.5 U | | 64 | 2.5 U | 15 | 57 | 47 | 47 | 1 U | 2 U | | | | |
| 5/14/2012 | XD | GWXXXX1JC | 0.2 U | 0.5 U | | 70 | 2.5 U | 16 | 59 | 47 | 47 | 1 U | 2 U | | | | |
| 8/14/2012 | XX | GW104B207 | 0.2 U | 0.25 U | | 74 | 2.5 U | 15 | 52 | 46 | 46 | 1 U | 1 | | | | |
| 8/14/2012 | XD | GWDP1X215 | 0.2 U | 0.25 U | | 82 | 2.7 U | 15 | 51 | 48 | 48 | 1 U | 1 | | | | |
| 10/31/2012 | XX | GW104B221 | 0.2 U | 0.25 U | | 140 | 2.5 U | 15 | 59 | 43 | 43 | 0.64 | 1 | | | | |
| 5/22/2013 | XX | GW104B23F | 0.2 U | 0.25 U | | 90 | 2.5 U | 17 | 54 | 51 | 51 | 0.76 | 1.1 | | | | |
| 5/22/2013 | XD | GWDP3X24F | 0.2 U | 0.25 U | | 88 | 2.5 U | 16 | 42 | 48 | 48 | 0.67 | 1.2 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (104B) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/23/2013 | XX | GW104B259 | 0.2 U | 0.25 U | | 85 | 2.5 U | 16 | 62 | 51 | 51 | 0.6 | 1.1 |
| 10/1/2013 | XX | GW104B273 | 0.2 U | 0.25 U | | 75 | 2.5 U | 17 | 57 | 49 | 49 | 0.5 U | 1.1 |
| 6/4/2014 | XX | GW104B28H | 0.16 | 0.05 U | | 100 | 4 U | 18 | 61.4 | 48 | 48 | 1 U | 2.9 |
| 6/4/2014 | XD | GWDP3X29H | 0.1 U | 0.05 U | | 99 | 4 U | 18 | 61.8 | 47 | 47 | 1 U | 3.7 |
| 8/19/2014 | XX | GW104B2AB | 0.1 U | 0.05 U | | 97 | 4 U | 17 | 63.1 | 50 | 50 | 1 U | 2.6 |
| 11/12/2014 | XX | GW104B2C5 | 0.1 U | 0.05 U | | 92 | 4 U | 17 | 58.8 | 53 | 53 | 1 U | 2 U |
| 6/3/2015 | XX | GW104B2E1 | 0.1 U | 0.05 U | | 90 | 4 U | 16 | 58.3 | 47 | 47 | 1 U | 2.5 |
| 6/3/2015 | XD | GWDP3X2F1 | 0.1 U | 0.05 U | | 96 | 4 U | 16 | 56.8 | 48 | 48 | 1 U | 2.6 |
| 9/2/2015 | XX | GW104B2FG | 0.1 U | 0.074 | | 87 | 4 U | 16 | 63.5 | 49 | 49 | 1 U | 2 U |
| 11/4/2015 | XX | GW104B2HA | 0.1 U | 0.05 U | | 100 | 4 U | 16 | 60.4 | 50 | 50 | 1 U | 2 |
| 6/14/2016 | XD | GWDP3X320 | 0.1 U | 0.088 | | 94 | 4 U | 17 | 62 | 46 | 46 | 1 U | 3.4 |
| 6/14/2016 | XX | GW104B310 | 0.1 U | 0.092 | | 110 | 4 U | 17 | 59.6 | 50 | 50 | 1 U | 2 U |
| 9/20/2016 | XX | GW104B32E | 0.1 U | 0.05 U | | 100 | 4 U | 18 | 62.2 | 53 | 53 | 1 U | 2.4 |
| 11/8/2016 | XX | GW104B348 | 0.1 U | 0.05 U | | 94 | 4 U | 19 | 63 | 57 | 57 | 1 U | 2.5 |
| 6/14/2017 | XD | GWDP3X373 | 0.1 U | 0.092 | | 82 | 4 U | 23 | 63.2 | 44 | 44 | 1 U | 2.9 |
| 6/14/2017 | XX | GW104B363 | 0.1 U | 0.11 | | 66 | 4 U | 18 | 62.2 | 49 | 49 | 1 U | 3.1 |
| 8/30/2017 | XX | GW104B37H | 0.1 U | 0.065 | | 100 | 4 U | 17 | 62.2 | 49 | 49 | 1 U | 2.6 |
| 11/15/2017 | XX | GW104B39B | 0.1 U | 0.05 U | | 85 | 4 U | 16 | 62.2 | 52 | 52 | 1 U | 2 U |
| 6/19/2018 | XD | GWDP3X3C6 | 0.1 U | 0.095 | | 110 | 4 U | 18 | 56.3 | 55 | 55 | 1 U | 2 U |
| 6/19/2018 | XX | GW104B3B6 | 0.1 U | 0.096 | | 110 | 4 U | 18 | 60.6 | 52 | 52 | 1 U | 2.2 |
| 8/14/2018 | XX | GW104B3DF | 0.1 U | 0.089 | | 110 | 4 U | 18 | 61.1 | 51 | 51 | 1 U | 2 U |
| 11/27/2018 | XX | GW104B3EE | 0.1 U | 0.05 U | | 87 | 4 U | 19 | 64.2 | 53 | 53 | 1 U | 3.2 |
| 6/4/2019 | XD | GWDP3X3H9 | 0.1 U | 0.092 | | 120 | 4 U | 18 | 61.3 | 53 | 53 | 1 U | 2 U |
| 6/4/2019 | XX | GW104B3G9 | 0.1 U | 0.092 | | 100 | 4 U | 18 | 66.8 | 54 | 54 | 1 U | 2 U |
| 8/14/2019 | XX | GW104B3II | 0.1 U | 0.076 | | 120 | 4 U | 18 | 63.5 | 53 | 53 | 1 U | 3.4 |
| 10/22/2019 | XX | GW104B3JH | 0.1 U | 0.082 | | 130 | 4 U | 17 | 62.5 | 50 | 50 | 1 U | 2.3 |
| 6/16/2020 | XD | GWDP3X42C | 0.1 U | 0.096 | | 100 | 4 U | 14 | 61.8 | 56 | 56 | 1 U | 2 U |
| 6/16/2020 | XX | GW104B41C | 0.1 U | 0.063 | | 100 | 4 U | 15 | 62.3 | 53 | 53 | 1 U | 2 U |
| 8/4/2020 | XX | GW104B441R | | | | | | | 68.7 | | | | |
| 8/4/2020 | XX | GW104B441 | 0.1 U | 0.06 | | 53 | 4 U | 14 | | 53 | 53 | 1 U | 2 U |
| 10/20/2020 | XX | GW104B450 | 0.1 U | 0.05 U | | 98 | 4 U | 15 | 63.5 | 52 | 52 | 1 U | 2 U |
| 6/22/2021 | XD | GWDP3X47F | 0.1 U | 0.05 U | | 100 | 4 U | 18 | 66.6 | 56 | 56 | 1 U | 2 U |
| 6/22/2021 | XX | GW104B46F | 0.1 U | 0.057 | | 99 | 4 U | 17 | 64.4 | 53 | 53 | 1 U | 2 U |
| 9/21/2021 | XX | GW104B48A | 0.1 U | 0.05 U | | 87 | 13 | 17 | 60.8 | 58 | 58 | 1 U | 2 U |
| **107A** | | | | | | | | | | | | | |
| 5/3/2000 | XX | 107AXX36649 | 0.1 U | 2 | | 757 | 43 | 12.9 | 642.7 | 440 | 526.2 | 12.9 | 105 |
| 8/10/2000 | XX | 107AXX36748 | 0.1 U | 1.3 | | 621 | 1 | 10.4 | 487 | 350 | 452.5 | 6.3 | 75.2 |
| 11/9/2000 | XX | 107AXX36839 | 0.1 U | 1.5 | | 524 | 3 | 8 | 359.1 | 398 | 404 | 6.1 | 82.1 |
| 5/16/2001 | XX | 107AXX37027 | 0.1 U | 2 | | 703 | 1 | 12.7 | 522.5 | 440 | 470 | 9.6 | 111 |
| 8/1/2001 | XX | 107AXX37104 | 0.1 U | 1.4 | | 1324 | 5 | 11.2 | 1068 | 1000 | 1020 | 23.3 | 151.4 |
| 10/24/2001 | XX | 107AXX37188 | 0.1 U | 1.7 | | 1834 | 7 | 11.4 | 1548.1 | 1429 | 1440 | 33.4 | 222 |
| 5/22/2002 | XX | 107AXX37398 | 0.1 U | 1.85 | | 1811 | 6 | 15.4 | 1466.7 | 1210 | 1378 | 62.6 | 193 |
| 8/2/2002 | XX | 107AXX37470 | 0.1 U | 1.8 | | 1831 | 3 | 10 | 1316 | 1320 | 1428 | 34.8 | 186.4 |
| 10/23/2002 | XX | 107AXX37552 | 0.1 U | 1 U | | 1360 | 3 | 14.6 | 1071.3 | 1100 | 1148 | 24.7 | 118.4 |
| 6/24/2003 | XX | 107AXX37796 | 0.2 U | 2 U | | 1400 | 2 | 11 | 1200 | 1000 | 1100 | 24 | 140 |
| 8/13/2003 | XX | 107AXX37846 | 0.2 U | 2 U | | 1300 | 1 | 9.1 | 1000 | 970 | 1000 | 21 | 110 |
| 10/16/2003 | XX | 107AXX37910 | 0.2 U | 2 U | | 1100 | 1 U | 9.5 | 1000 | 900 | 950 | 18 | 98 |
| 5/13/2004 | XX | 107AXX38120 | 0.2 U | 2 U | | 540 | 1 U | 8.4 | 600 | 420 | 450 | 6.5 | 47 |
| 8/2/2004 | XX | 107AXX38201 | 0.2 U | 2 U | | 440 | 1 U | 9.6 | 420 | 405 | 430 | 6 | 36 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(107A)**

| Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/19/2004 | XX | 107AXX38279 | 0.2 U | 2 U | | 480 | 1 U | 9.8 | 460 | 420 | 460 | 5.6 | 45 |
| 5/10/2005 | XX | GW107A006 | 0.2 U | 2 U | | 910 | 1 U | 10 | 810 | 500 | 550 | 6.5 | 100 |
| 7/27/2005 | XX | GW107A01I | 0.2 U | 2 U | | 910 | 1 U | 9.5 | 850 | 615 | 690 | 11 | 93 |
| 10/27/2005 | XX | GW107A03A | 0.2 U | 2 U | | 610 | 3 | 8.8 | 640 | 530 | 620 | 7.1 | 57 |
| 5/3/2006 | XX | GW107A086 | 0.2 U | 2 U | | 340 | 1 U | 7.7 | 410 | 350 | 370 | 4 | 26 |
| 8/1/2006 | XX | GW107A06E | 0.24 | 2 U | | 300 | 1 U | 8.6 | 310 | 270 | 290 | 3.2 | 17 |
| 10/25/2006 | XX | GW107A052 | 0.2 U | 2 U | | 280 | 1 U | 8.4 | 200 | 240 | 260 | 2.9 | 14 |
| 5/8/2007 | XX | GW107A09I | 0.5 U | 0.5 U | | 310 | 1 U | 7.5 | 290 | 290 | 310 | 1.5 | 15 |
| 5/8/2007 | XD | GWDP3X0EC | 0.5 U | 0.5 U | | 290 | 1 U | 7.4 | 270 | | 310 | 1.5 | 15 |
| 8/7/2007 | XX | GW107A0BB | 0.2 U | 0.5 U | | 430 | 1.2 | 6.5 | 340 | 280 | 320 | 11 | 22 |
| 10/31/2007 | XX | GW107A0D3 | 0.2 U | 0.5 U | | 510 | 1 U | 6.9 | 480 | 390 | 420 | 6.3 | 48 |
| 5/28/2008 | XX | GW107A0FB | 0.2 U | 0.5 U | | 500 | 1 U | 8.4 | 430 | 360 | 380 | 5.1 | 41 |
| 8/18/2008 | XX | GW107A0HB | 0.2 U | 0.5 U | | 440 | 1 U | 7.3 | 310 | 350 | 380 | 5.5 | 22 |
| 10/23/2008 | XX | GW107A0IJ | 0.2 U | 0.5 U | | 330 | 1 U | 7 | 310 | 270 | 290 | 5.2 | 23 |
| 5/12/2009 | XX | GW107A10J | 0.2 U | 0.5 U | | 300 | 0.6 U | 6.9 | 240 | 250 | 270 | 3.9 | 15 |
| 5/12/2009 | XD | GWDP3X10C | 0.2 U | 0.5 U | | 300 | 0.6 U | 7 | 260 | | 270 | 2.2 | 15 |
| 8/11/2009 | XX | GW107A12J | 0.2 U | 0.5 U | | 320 | 0.6 U | 7.4 | 270 | 270 | 290 | 4.2 | 17 |
| 10/26/2009 | XX | GW107A147 | 0.2 U | 0.5 U | | 400 | 1 U | 6.4 | 260 | 270 | 290 | 4.3 | 37 |
| 6/2/2010 | XX | GW107A168 | 0.2 U | 0.5 U | | 310 | 1 U | 6.2 | 290 | 245 | 260 | 6.1 | 20 |
| 8/5/2010 | XX | GW107A189 | 0.2 U | 0.5 U | | 360 | 1.1 U | 5.9 | 300 | 290 | 320 | 4.2 | 25 |
| 8/5/2010 | XD | GWDP3X182 | 0.2 U | 0.5 U | | 360 | 1 U | 6 | 310 | | 320 | 2.7 | 25 |
| 10/18/2010 | XX | GW107A19H | 0.2 U | 0.5 U | | 580 | 1.2 U | 6.7 | 390 | 450 | 480 | 13 | 57 |
| 5/18/2011 | XX | GW107A1D8 | 0.2 U | 0.5 U | | 680 | 5 U | 7.3 | 440 | 550 | 550 | 16 | 83 |
| 8/9/2011 | XX | GW107A1EJ | 0.08 U | 0.2 U | | 450 | 0.7 J | 6 | 260 | 380 | 380 | 9 | 40 |
| 11/2/2011 | XX | GW107A1GA | 0.082 U | 0.2 U | | 410 | 0.32 U | 6 | 300 | 360 | 360 | 6.9 | 36 |
| 5/17/2012 | XX | GW107A1I4 | 0.2 U | 0.09 U | | 418 | 2.5 U | 6.4 | 380 | 420 | 420 | 6.81 | 54 |
| 8/14/2012 | XX | GW107A1JH | 0.2 U | 0.25 U | | 720 | 2.6 U | 5 | 430 | 590 | 590 | 11.1 | 60 |
| 10/31/2012 | XX | GW107A21B | 0.2 U | 0.25 U | | 680 | 2.5 U | 4.9 | 490 | 540 | 540 | 9.3 | 62 |
| 5/21/2013 | XX | GW107A235 | 0.2 U | 0.25 U | | 740 | 2.5 U | 6.2 | 510 | 580 | 580 | 10 | 77 |
| 7/22/2013 | XX | GW107A24J | 0.2 U | 0.25 U | | 710 | 2.5 U | 5.8 | 440 | 500 | 500 | 7.6 | 58 |
| 10/1/2013 | XX | GW107A26D | 0.2 U | 0.25 U | | 580 | 2.5 U | 5.4 | 390 | 500 | 500 | 6.8 | 45 |
| 6/4/2014 | XX | GW107A287 | 0.1 U | 0.05 U | | 320 | 4 U | 12 | 222 | 250 | 250 | 1.7 | 24 |
| 8/19/2014 | XX | GW107A2A1 | 0.1 U | 0.05 U | | 680 | 4.8 | 8.1 | 386 | 560 | 560 | 6.6 | 47 |
| 11/12/2014 | XX | GW107A2BF | 0.16 | 0.05 U | | 780 | 4 U | 6.5 | 465 | 560 | 560 | 8 | 47 |
| 6/3/2015 | XX | GW107A2DB | 0.1 U | 0.05 U | | 540 | 4 U | 7.3 | 509 | 430 | 430 | 13 | 72 |
| 9/2/2015 | XX | GW107A2F6 | 0.1 | 0.05 U | | 710 | 4 U | 6.9 | 476 | 590 | 590 | 11 | 46 |
| 11/4/2015 | XX | GW107A2H0 | 0.11 | 0.05 U | | 780 | 4 U | 1 U | 536 | 670 | 670 | 11 | 45 |
| 6/15/2016 | XX | GW107A30A | 0.1 U | 0.05 U | | 420 | 4 U | 6.6 | 315 | 330 | 330 | 4.1 | 19 |
| 9/20/2016 | XX | GW107A324 | 0.63 | 0.05 U | | 420 | 4 U | 6.6 | 299 | 360 | 360 | 5.2 | 18 |
| 11/8/2016 | XX | GW107A33I | 2.2 | 0.05 U | | 510 | 4 U | 3.5 | 420 | 540 | 540 | 10 | 32 |
| 6/14/2017 | XX | GW107A35D | 0.26 | 0.15 | | 930 | 4 U | 1 U | 867 | 900 | 900 | 25 | 88 |
| 8/29/2017 | XX | GW107A377 | 0.59 | 0.05 U | | 930 | 4 | 1 U | 720 | 840 | 840 | 17 | 57 |
| 11/15/2017 | XX | GW107A391 | 1.5 | 0.05 U | | 880 | 4 U | 1 U | 682 | 880 | 880 | 16 | 42 |
| 6/19/2018 | XX | GW107A3AG | 0.17 | 0.05 U | | 770 | 4 U | 4.1 | 476 | 670 | 670 | 12 | 45 |
| 8/16/2018 | XX | GW107A3D5 | 0.36 | 0.05 U | | 670 | 4 U | 2.3 | 548 | 660 | 660 | 9.5 | 36 |
| 11/28/2018 | XX | GW107A3E4 | 0.92 | 0.21 | | 560 | 4 U | 6.2 | 448 | 560 | 570 | 7.8 | 27 |
| 6/5/2019 | XX | GW107A3FJ | 0.1 U | 0.22 | | 760 | 4 U | 3.4 | 419 | 570 | 570 | 6.5 | 56 |
| 8/14/2019 | XX | GW107A3I8 | 0.21 | 0.05 U | | 610 | 4 U | 10 | 470 | 540 | 540 | 7.9 | 36 |
| 10/23/2019 | XX | GW107A3J7 | 0.92 | 0.05 U | | 540 | 4 U | 6.2 | 474 | 500 | 500 | 7.6 | 24 |
| 6/17/2020 | XX | GW107A412 | 0.35 | 0.05 U | | 580 | 4 U | 5.8 | 399 | 570 | 570 | 7.2 | 39 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (107A) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/4/2020 | XX | GW107A43B | 0.6 | 0.05 U | | 530 | 4 U | 7.3 | | 520 | 520 | 6.7 | 28 |
| 8/4/2020 | XX | GW107A43BR | | | | | | | 445 | | | | |
| 10/22/2020 | XX | GW107A44A | 5.6 | 0.05 U | | 930 | 4 U | 1 U | 780 | 1000 | 1000 | 21 | 54 |
| 6/22/2021 | XX | GW107A465 | 2.2 | 0.05 U | | 860 | 4 U | 1 U | 626 | 930 | 930 | 13 | 46 |
| 9/21/2021 | XX | GW107A480 | 3.2 | 0.05 U | | 1100 | 5.6 | 1 U | 783 | 1100 | 1100 | 18 | 54 |
| **202AR** | | | | | | | | | | | | | |
| 4/27/2000 | XX | 202ARXX36643 | 2.42 | 2.2 | | 1046 | 17 | 7 | 984.8 | 820 | 985.8 | 15.1 | 38.4 |
| 8/2/2000 | XX | 202ARXX36740 | 2.21 | 1.7 | | 1095 | 4 | 7.5 | 998.6 | 920 | 1056.5 | 14.7 | 35.6 |
| 10/24/2000 | XX | 202ARXX36823 | 1.22 | 2.7 | | 1043 | 3 | 6 | 933.3 | 950 | 1090.8 | 18.2 | 38.1 |
| 5/9/2001 | XX | 202ARXX37020 | 1.69 | 2.7 | | 1128 | 2 | 7.9 | 944.2 | 1000 | 1060 | 14.1 | 41.2 |
| 7/24/2001 | XX | 202ARXX37096 | 0.784 | 1 U | | 1142 | 2 | 7.5 | 946.8 | 1020 | 1075 | 13.6 | 27.9 |
| 10/16/2001 | XX | 202ARXX37180 | 1.37 | 1 U | | 1176 | 2 | 2.5 | 1126 | 1105 | 1110 | 12.6 | 37.7 |
| 5/16/2002 | XX | 202ARXX37392 | 1.28 | 1 U | | 1135 | 1 | 9.9 | 1061.2 | 990 | 1060 | 13 | 38.8 |
| 7/31/2002 | XX | 202ARXX37468 | 2.02 | 1 U | | 1118 | 3 | 9.7 | 469.3 | 952.5 | 1036 | 15.2 | 28.9 |
| 10/16/2002 | XX | 202ARXX37545 | 2.14 | 1 U | | 1129 | 5 | 12.5 | 943.4 | 1000 | 1064 | 14.9 | 34.2 |
| 6/17/2003 | XX | 202ARXX37789 | 2.8 | 2 U | | 1100 | 2 | 10 | 1100 | 960 | 1000 | 11 | 34 |
| 8/6/2003 | XX | 202ARXX37839 | 2.6 | 2 U | | 1000 | 2 | 8.6 | 1100 | 970 | 1000 | 15 | 24 |
| 10/8/2003 | XX | 202ARXX37902 | 2.8 | 2 U | | 1100 | 2 | 9.4 | 1100 | 920 | 1000 | 14 | 27 |
| 4/28/2004 | XX | 202ARXX38105 | 1.8 | 2 U | | 1100 | 1 U | 8.5 | 1200 | 920 | 960 | 14 | 33 |
| 8/11/2004 | XX | 202ARXX38210 | 4.1 | 2 U | | 950 | 3 | 8.4 | 1000 | 930 | 1000 | 14 | 26 |
| 10/12/2004 | XX | 202ARXX38272 | 3.6 | 2 U | | 1000 | 1 U | 7.2 | 1100 | 920 | 1000 | 21 | 23 |
| 5/19/2005 | XX | GW202A009 | 3.8 | 2 U | | 1100 | 7 | 7.7 | 950 | 900 | 980 | 10 | 31 |
| 8/4/2005 | XX | GW202A021 | 4.3 | 2 U | | 1000 | 1 U | 6.6 | 890 | 98 | 100 | 11 | 23 |
| 10/25/2005 | XX | GW202A03D | 3.3 | 2 U | | 1000 | 6 | 6.4 | 1100 | 940 | 1000 | 13 | 26 |
| 5/9/2006 | XX | GW202A089 | 1.4 | 2 U | | 1000 | 8.5 | 6.6 | 1700 | 1000 | 1000 | 13 | 27 |
| 7/25/2006 | XX | GW202A06H | 3.6 | 2 U | | 1000 | 2.6 | 6.3 | 1300 | 820 | 860 | 13 | 21 |
| 10/19/2006 | XX | GW202A055 | 3.8 | 2 U | | 1000 | 1.7 | 5.3 | 1000 | 960 | 1000 | 12 | 22 |
| 5/10/2007 | XX | GW202A0A1 | 3.6 | 0.5 U | | 1000 | 3.1 | 5.1 | 1100 | 1040 | 1100 | 8.4 | 25 |
| 8/6/2007 | XX | GW202A0BE | 4.8 | 0.5 U | | 1000 | 1.8 | 4.4 | 1200 | 960 | 1000 | 47 | 23 |
| 10/25/2007 | XX | GW202A0D6 | 2 | 0.5 U | | 1000 | 3.7 | 5.4 | 1400 | 920 | 1000 | 18 | 24 |
| 5/29/2008 | XX | GW202A0FE | 2.1 | 0.5 U | | 990 | 1 U | 5.3 | 1000 | 920 | 1000 | 11 | 23 |
| 8/12/2008 | XX | GW202A0HE | 1.9 | 0.5 U | | 1000 | 1.4 | 5.5 | 950 | 920 | 1000 | 15 | 19 |
| 8/12/2008 | XD | GWDP1X0H2 | 1.8 | 0.5 U | | 1000 | 1.1 | 5.4 | 900 | | 1000 | 15 | 20 |
| 10/16/2008 | XX | GW202A0J2 | 1.7 | 0.5 U | | 950 | 1.9 | 5.6 | 830 | 950 | 990 | 11 | 21 |
| 5/4/2009 | XX | GW202A112 | 2.9 | 0.5 U | | 1000 | 0.6 U | 5.3 | 1200 | 940 | 1000 | 19 | 23 |
| 8/5/2009 | XX | GW202A132 | 2.8 | 0.5 U | | 1100 | 2 U | 5.2 | 1300 | 920 | 1000 | 14 | 24 |
| 8/5/2009 | XD | GWDP1X12A | 2.7 | 0.5 U | | 1100 | 2 | 4.9 | 1300 | | 1000 | 18 | 23 |
| 10/20/2009 | XX | GW202A14A | 2.2 | 0.5 U | | 980 | 1.9 | 4.7 | 840 | 910 | 970 | 19 | 23 |
| 5/26/2010 | XX | GW202A16B | 2.4 | 0.5 U | | 890 | 1.8 | 4 | 1100 | 880 | 920 | 11 | 19 |
| 8/2/2010 | XX | GW202A18C | 2.3 | 0.5 UH | | 930 | 1.4 | 4.2 | 1000 | 920 | 980 | 15 | 22 |
| 10/12/2010 | XX | GW202A1A0 | 2.8 | 0.5 U | | 970 | 1.7 | 4.5 | 860 | 920 | 990 | 19 | 23 |
| 5/17/2011 | XX | GW202A1DJ | 2.1 | 0.5 U | | 990 | 5 U | 3.8 | 920 | 920 | 920 | 20 | 26 |
| 8/10/2011 | XX | GW202A1FA | 2.7 | 0.2 U | | 910 | 2.4 J | 5.2 | 870 | 920 | 920 | 16 | 23 |
| 8/10/2011 | XD | GWDP1X1G7 | 2.6 | 0.2 U | | 890 | 2.8 J | 4.3 | 860 | 950 | 950 | 16 | 22 |
| 11/3/2011 | XX | GW202A1H1 | 2.9 | 0.2 U | | 960 | 2.7 | 5.8 | 820 | 990 | 990 | 16 | 22 |
| 5/16/2012 | XX | GW202A1IF | 2.6 | 0.5 U | | 940 | 2.5 U | 1 U | 820 | 860 | 860 | 11.1 | 20 |
| 8/15/2012 | XX | GW202A208 | 2.9 | 0.25 U | | 920 | 2.5 U | 4.3 | 770 | 890 | 890 | 12.4 | 17 |
| 10/31/2012 | XX | GW202A222 | 3.4 | 0.25 U | | 940 | 2.5 | 4.1 | 840 | 960 | 960 | 12 | 18 |
| 5/20/2013 | XX | GW202A23G | 2.7 | 0.25 U | | 950 | 2.5 U | 4.4 | 780 | 930 | 930 | 11 | 18 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (202AR) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 7/23/2013 | XX | GW202A25A | 2.9 | 0.25 U | | 920 | 2.5 U | 4.2 | 790 | 890 | 890 | 10 | 16 | | | | |
| 10/2/2013 | XX | GW202A274 | 3.1 | 0.25 U | | 910 | 2.6 | 4.3 | 790 | 930 | 930 | 10 | 16 | | | | |
| 6/3/2014 | XX | GW202A28I | 3.4 | 0.05 U | | 940 | 4 U | 1 U | 818 | 890 | 890 | 8.9 | 18 | | | | |
| 8/19/2014 | XX | GW202A2AC | 3.8 | 0.05 U | | 940 | 4 U | 1 U | 812 | 910 | 910 | 9 | 17 | | | | |
| 11/12/2014 | XX | GW202A2C6 | 4.1 | 0.05 U | | 950 | 4 U | 1 U | 846 | 940 | 940 | 9.1 | 18 | | | | |
| 6/2/2015 | XX | GW202A2E2 | 3.3 | 0.05 U | | 960 | 4.8 | 1 U | 813 | 880 | 880 | 8.9 | 22 | | | | |
| 9/2/2015 | XX | GW202A2FH | 3.6 | 0.05 U | | 910 | 4 U | 1 U | 864 | 870 | 870 | 9.8 | 18 | | | | |
| 11/3/2015 | XX | GW202A2HB | 3.5 | 0.05 U | | 950 | 4 U | 1.6 | 839 | 930 | 930 | 9.6 | 18 | | | | |
| 6/14/2016 | XX | GW202A311 | 3.1 | 0.05 U | | 900 | 4.4 | 1 U | 815 | 830 | 830 | 7.5 | 17 | | | | |
| 9/22/2016 | XX | GW202A32F | 3.5 | 0.05 U | | 900 | 4 U | 1 U | 800 | 810 | 810 | 8.6 | 18 | | | | |
| 11/9/2016 | XX | GW202A349 | 3.5 | 0.05 U | | 840 | 4 U | 1 U | 818 | 900 | 900 | 9.7 | 16 | | | | |
| 6/13/2017 | XX | GW202A364 | 3.6 | 0.05 U | | 920 | 4 U | 1 U | 822 | 870 | 870 | 9.4 | 18 | | | | |
| 8/30/2017 | XX | GW202A37I | 3.7 | 0.05 U | | 900 | 4 U | 1 U | 801 | 880 | 880 | 8.9 | 16 | | | | |
| 11/16/2017 | XX | GW202A39C | 3.5 | 0.05 U | | 860 | 4 U | 1 U | 822 | 830 | 830 | 8.6 | 17 | | | | |
| 6/20/2018 | XX | GW202A3B7 | 3.5 | 0.05 U | | 920 | 4 U | 1 U | 849 | 900 | 900 | 8.8 | 18 | | | | |
| 8/14/2018 | XX | GW202A3DG | 3.6 | 0.05 U | | 920 | 4 U | 1.1 | 802 | 890 | 890 | 8.9 | 16 | | | | |
| 6/4/2019 | XX | GW202A3GA | 3.5 | 0.05 U | | 950 | 4 U | 1 U | 804 | 860 | 860 | 9.2 | 15 | | | | |
| 8/13/2019 | XX | GW202A3IJ | 3.4 | 0.05 U | | 880 | 4 U | 1 U | 802 | 910 | 910 | 9.4 | 18 | | | | |
| 10/24/2019 | XX | GW202A3JI | 3.2 | 0.05 U | | 860 | 5.6 | 1 U | 784 | 850 | 850 | 9.5 | 15 | | | | |
| 6/16/2020 | XX | GW202A41D | 3 | 0.05 U | | 920 | 4 U | 1 U | 795 | 940 | 940 | 9.3 | 15 | | | | |
| 8/5/2020 | XX | GW202A442 | 3.2 | 0.05 U | | 850 | 4.4 | 2.1 | 874 | 860 | 860 | 9.5 | 15 | | | | |
| 10/22/2020 | XX | GW202A451 | 3.6 | 0.05 U | | 880 | 4 U | 1 U | 864 | 870 | 870 | 9.8 | 14 | | | | |
| 6/23/2021 | XX | GW202A46G | 3 | 0.82 | | 900 | 4 U | 1 U | 846 | 900 | 900 | 10 | 16 | | | | |
| 9/23/2021 | XX | GW202A48B | 3.5 | 0.05 U | | 820 | 4 U | 1 U | 794 | 910 | 910 | 9.8 | 15 | | | | |
| **202B & 202BR** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 202BXX36643 | 1.9 | 1.4 | | 538 | 247 | 6.7 | 478.6 | 410 | 474.7 | 10.4 | 20.6 | | | | |
| 8/2/2000 | XX | 202BXX36740 | 3 | 1.7 | | 986 | 7 | 7 | 840.3 | 810 | 923.1 | 19.2 | 35.5 | | | | |
| 10/24/2000 | XX | 202BXX36823 | 2.52 | 2.8 | | 1241 | 56 | 5.5 | 962.4 | 1100 | 1196.9 | 24.6 | 55.3 | | | | |
| 5/9/2001 | XX | 202BXX37020 | 1.35 | 2.2 | | 752 | 6 | 8.2 | 599.7 | 660 | 692.5 | 13.4 | 33.9 | | | | |
| 7/25/2001 | XX | 202BXX37097 | 0.424 | 1 U | | 1200 | 10 | 5.8 | 1001.5 | 1130 | 1130 | 15.2 | 37.5 | | | | |
| 10/16/2001 | XX | 202BXX37180 | 1.04 | 3.2 | | 1021 | 8 | 14.4 | 779.5 | 904 | 910 | 11.8 | 42.2 | | | | |
| 5/16/2002 | XX | 202BXX37392 | 1.15 | 1 U | | 695 | 1 | 9.1 | 648.8 | 530 | 635 | 10.1 | 28.3 | | | | |
| 7/31/2002 | XX | 202BXX37468 | 1.71 | 1 U | | 1008 | 1 | 15.2 | 879.5 | 847.5 | 916 | 17.2 | 33.5 | | | | |
| 10/16/2002 | XX | 202BXX37545 | 1.47 | 1.7 | | 1039 | 15 | 17.3 | 893.2 | 850 | 952 | 17.2 | 37.8 | | | | |
| 6/17/2003 | XX | 202BXX37789 | 2 | 2 U | | 670 | 20 | 10 | 350 | 590 | 640 | 11 | 23 | | | | |
| 8/6/2003 | XX | 202BXX37839 | 2.1 | 2 U | | 820 | 1 U | 12 | 930 | 720 | 750 | 15 | 23 | | | | |
| 10/8/2003 | XX | 202BXX37902 | 2.8 | 4.4 | | 920 | 1 U | 12 | 860 | 780 | 830 | 16 | 27 | | | | |
| 4/28/2004 | XX | 202BXX38105 | 1.8 | 2 U | | 630 | 1 U | 8.9 | 730 | 540 | 560 | 11 | 22 | | | | |
| 8/11/2004 | XX | 202BXX38210 | 4.6 | 2 U | | 870 | 1 U | 9.7 | 990 | 880 | 960 | 17 | 30 | | | | |
| 10/12/2004 | XX | 202BXX38272 | 4.9 | 2 U | | 1000 | 1 U | 9 | 1100 | 920 | 1000 | 33 | 31 | | | | |
| 5/19/2005 | XX | GW202B00A | 2.6 | 2 U | | 510 | 4 | 6.5 | 530 | 440 | 480 | 7.1 | 15 | | | | |
| 8/4/2005 | XX | GW202B022 | 4 | 2 U | | 770 | 22 | 8 | 720 | 680 | 710 | 13 | 9.4 | | | | |
| 10/25/2005 | XX | GW202B03E | 2.3 | 2 U | | 660 | 22 | 7.2 | 580 | 680 | 730 | 12 | 25 | | | | |
| 5/9/2006 | XX | GW202B08A | 0.2 U | 2 U | | 500 | 5 | 5.7 | 590 | 470 | 500 | 10 | 14 | | | | |
| 7/25/2006 | XX | GW202B06I | 3.8 | 2 U | | 560 | 21 | 6.2 | 690 | 540 | 570 | 11 | 17 | | | | |
| 10/19/2006 | XX | GW202B056 | 2.8 | 2 U | | 810 | 43 | 6 | 830 | 780 | 810 | 14 | 22 | | | | |
| 5/10/2007 | XX | GW202B0A2 | 2.2 | 0.5 U | | 500 | 17 | 4.3 | 490 | 520 | 550 | 4.9 | 12 | | | | |
| 5/10/2007 | XD | GWDP1X0EA | 2.4 | 0.5 U | | 510 | 51 | 4.4 | 480 | | 540 | 4.6 | 12 | | | | |
| 8/6/2007 | XX | GW202B0BF | 5.4 | 0.5 U | | 770 | 540 | 4.9 | 800 | 740 | 770 | 47 | 21 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (202B & 202BR) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 10/25/2007 | XX | GW202B0D7 | 1.2 | 1.2 | | 680 | 32 | 6.4 | 640 | 640 | 680 | 14 | 20 | | | | |
| 5/29/2008 | XX | GW202B0FF | 1.6 | 0.5 U | | 440 | 9.7 | 5.3 | 460 | 440 | 460 | 12 | 9.6 | | | | |
| 8/26/2008 | XX | GW202B0HF | 1.8 | 0.5 U | | 470 | 19 | 4.9 | 410 | 460 | 490 | 8.1 | 11 | | | | |
| 10/16/2008 | XX | GW202B0J3 | 1.9 | 0.5 U | | 640 | 22 | 5.8 | 490 | 640 | 670 | 16 | 18 | | | | |
| 5/4/2009 | XX | GW202B113 | 2.1 | 10 | | 480 | 41 | 33 | 580 | 430 | 460 | 9 | 44 | | | | |
| 8/5/2009 | XX | GW202B133 | 2.4 | 0.5 U | | 490 | 9.6 | 4.3 | 630 | 450 | 480 | 8.6 | 12 | | | | |
| 10/20/2009 | XX | GW202B14B | 1.9 | 0.5 U | | 640 | 1 U | 5.4 | 480 | 660 | 700 | 16 | 21 | | | | |
| 5/26/2010 | XX | GW202B16C | 1.9 | 0.5 U | | 490 | 12 | 4.3 | 490 | 470 | 500 | 12 | 13 | | | | |
| 8/2/2010 | XX | GW202B18D | 2.7 | 0.5 UH | | 680 | 46 | 4.8 | 170 | 670 | 700 | 13 | 19 | | | | |
| 10/12/2010 | XX | GW202B1A1 | 0.2 U | 2.6 | | 570 | 2.8 | 4.9 | 440 | 480 | 500 | 12 | 15 | | | | |
| 5/17/2011 | XX | GW202B1E0 | 1.1 | 0.5 U | | 380 | 4.2 U | 4.7 | 240 | 370 | 370 | 7.5 | 9.6 | | | | |
| 8/10/2011 | XX | GW202B1FB | 2.1 | 0.2 U | | 690 | 4.6 | 7.6 | 550 | 720 | 720 | 15 | 22 | | | | |
| 11/3/2011 | XX | GW202B1H2 | 1.8 | 0.2 U | | 480 | 4.2 | 6.5 | 420 | 500 | 500 | 11 | 11 | | | | |
| 5/16/2012 | XX | GW202B1IG | 1.5 | 0.5 U | | 390 | 5 | 4.9 | 360 | 400 | 400 | 5.66 | 7.7 | | | | |
| 8/15/2012 | XX | GW202B209 | 2.3 | 0.25 U | | 650 | 2.5 U | 5.7 | 580 | 660 | 660 | 10.5 | 15 | | | | |
| 10/31/2012 | XX | GW202B223 | 1.2 | 0.25 U | | 380 | 8.8 | 3.8 | 400 | 400 | 400 | 8.4 | 8.3 | | | | |
| 5/20/2013 | XX | GW202B23H | 1.4 | 0.25 U | | 430 | 14 | 4.3 | 350 | 420 | 420 | 5.9 | 8.3 | | | | |
| 7/23/2013 | XX | GW202B25B | 1.8 | 0.25 U | | 460 | 19 | 4.4 | 400 | 480 | 480 | 6.7 | 9.6 | | | | |
| 10/2/2013 | XX | GW202B275 | 2.3 | 0.25 U | | 550 | 4.5 | 4.5 | 410 | 580 | 580 | 7.4 | 12 | | | | |
| 6/3/2014 | XX | GW202B28J | 2 | 0.05 U | | 490 | 16 | 4 | 383 | 460 | 460 | 4.6 | 12 | | | | |
| 8/19/2014 | XX | GW202B2AD | 3.3 | 0.05 U | | 760 | 84 | 1 U | 644 | 730 | 730 | 8.5 | 17 | | | | |
| 11/12/2014 | XX | GW202B2C7 | 2.1 | 1.2 | | 710 | 12 | 1.7 | 624 | 700 | 700 | 7.7 | 18 | | | | |
| 6/2/2015 | XX | GW202B2E3 | 1.7 | 0.05 U | | 440 | 26 | 6.2 | 347 | 390 | 390 | 4 | 10 | | | | |
| 9/2/2015 | XX | GW202B2FI | 3.3 | 0.05 U | | 760 | 29 | 3.3 | 694 | 710 | 710 | 9.8 | 17 | | | | |
| 11/3/2015 | XX | GW202B2HC | 2.7 | 0.1 | | 620 | 10 | 1.2 | 562 | 600 | 600 | 7.3 | 15 | | | | |
| 6/14/2016 | XX | GW202B312 | 1.8 | 0.05 U | | 480 | 8 | 3.3 | 404 | 410 | 410 | 4.4 | 10 | | | | |
| 9/22/2016 | XX | GW202B32G | I | I | | I | I | I | I | I | I | I | I | | | | |
| 11/9/2016 | XX | GW202B34A | I | I | | I | I | I | I | I | I | I | I | | | | |
| 6/13/2017 | XX | GW202B365 | 1.6 | 0.05 U | | 560 | 5.6 | 8.4 | 472 | 480 | 480 | 5.4 | 13 | | | | |
| 8/30/2017 | XX | GW202B37J | I | I | | I | I | I | I | I | I | I | I | | | | |
| 11/16/2017 | XX | GW202B39D | 1.9 | 0.16 | | 720 | 14 | 15 | 673 | 670 | 670 | 9.2 | 17 | | | | |
| 6/20/2018 | XX | GW202B3B8 | 2 | 0.05 U | | 550 | 17 | 19 | 398 | 510 | 510 | 5.2 | 13 | | | | |
| 8/14/2018 | XX | GW202B3DH | 2.9 | 0.35 | | 780 | 4 U | 27 | 675 | 730 | 730 | 7.5 | 14 | | | | |
| 11/27/2018 | XX | GW202B3EG | 2.2 | 0.14 | | 710 | 13 | 23 | 674 | 690 | 700 | 8 | 17 | | | | |
| 6/4/2019 | XX | GW202B3GB | 1.5 | 0.05 U | | 390 | 8.8 | 15 | 320 | 360 | 360 | 3.7 | 6.5 | | | | |
| 8/13/2019 | XX | GW202B3J0 | 2.6 | 0.052 | | 600 | 4 U | 18 | 539 | 610 | 610 | 6.9 | 14 | | | | |
| 10/24/2019 | XX | GW202B3JJ | 2.3 | 0.24 | | 620 | 6.8 | 16 | 446 | 570 | 570 | 7.3 | 14 | | | | |
| 6/16/2020 | XX | GW202B41E | ! | ! | | ! | ! | ! | ! | ! | ! | ! | ! | | | | |
| 8/5/2020 | XX | GW202B443 | ! | ! | | ! | ! | ! | ! | ! | ! | ! | ! | | | | |
| 10/22/2020 | XX | GW202B452 | ! | ! | | ! | ! | ! | ! | ! | ! | ! | ! | | | | |
| 6/23/2021 | XX | GW202B46H | ! | ! | | ! | ! | ! | ! | ! | ! | ! | ! | | | | |
| 9/23/2021 | XX | GW202B48C | 4.5 | 0.074 | | 950 | 5.6 | 1 U | 922 | 1000 | 1000 | 14 | 21 | | | | |
| **205A** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 205AXX36643 | 0.217 | 1.7 | | 265 | 6 | 8.9 | 222.7 | 160 | 189.9 | 3 | 30.9 | | | | |
| 8/2/2000 | XX | 205AXX36740 | 0.348 | 1.8 | | 435 | 5 | 6.4 | 307.78 | 280 | 322.2 | 4.9 | 57 | | | | |
| 10/25/2000 | XX | 205AXX36824 | 0.297 | 2 | | 351 | 1 | 3.1 | 200.6 | 230 | 240.4 | 4.7 | 52.8 | | | | |
| 5/9/2001 | XX | 205AXX37020 | 0.157 | 3 | | 382 | 1 | 6.3 | 235.2 | 235 | 252 | 5 | 62.1 | | | | |
| 7/25/2001 | XX | 205AXX37097 | 0.1 U | 1 U | | 372 | 1 | 8.3 | 249.3 | 230 | 253 | 3.4 | 48 | | | | |
| 10/17/2001 | XX | 205AXX37181 | 0.147 | 1 U | | 319 | 1 | 4.9 | 237.3 | 215 | 222 | 3.1 | 54.9 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(205A)**

| Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/15/2002 | XX | 205AXX37391 | 0.184 | 1 U | | 510 | 1 U | 5.3 | 380.9 | 330 | 376 | 5 | 74.5 |
| 8/1/2002 | XX | 205AXX37469 | 0.1 U | 1 U | | 452 | 3 | 7.6 | 292.4 | 280 | 309 | 63.7 | 53 |
| 10/16/2002 | XX | 205AXX37545 | 0.173 | 1 U | | 405 | 3 | 5.9 | 274.9 | 270 | 296 | 4.3 | 59.8 |
| 6/19/2003 | XX | 205AXX37791 | 0.42 | 2 U | | 460 | 4 | 11 | 480 | 370 | 390 | 5.6 | 57 |
| 8/20/2003 | XX | 205AXX37853 | 0.34 | 2 U | | 320 | 3 | 8.8 | 340 | 290 | 310 | 5.2 | 45 |
| 10/9/2003 | XX | 205AXX37903 | 0.29 | 2 U | | 240 | 1 U | 9.4 | 330 | 230 | 250 | 4.9 | 41 |
| 4/27/2004 | XX | 205AXX38104 | 0.2 U | 2 U | | 290 | 1 U | 9.2 | 400 | 260 | 270 | 7.7 | 45 |
| 8/12/2004 | XX | 205AXX38211 | 0.46 | 2 U | | 260 | 1 U | 12 | 610 | 190 | 200 | 3.9 | 34 |
| 10/14/2004 | XX | 205AXX38274 | 0.2 U | 2 U | | 320 | 1 U | 9.3 | 330 | 230 | 250 | 6 | 47 |
| 5/17/2005 | XX | GW205A00B | 0.34 | 2 U | | 95 | 1 U | 10 | 450 | 260 | 290 | 4.3 | 48 |
| 8/4/2005 | XX | GW205A023 | 0.55 | 2 U | | 390 | 1 U | 10 | 440 | 230 | 250 | 5.7 | 38 |
| 10/27/2005 | XX | GW205A03F | 0.2 U | 2 U | | 320 | 3.5 | 8.8 | 410 | 280 | 310 | 4.5 | 42 |
| 5/9/2006 | XX | GW205A08B | 0.2 U | 2 U | | 400 | 3.5 | 11 | 480 | 340 | 360 | 4.4 | 40 |
| 7/25/2006 | XX | GW205A06J | 0.3 | 2 U | | 540 | 3 | 12 | 580 | 480 | 500 | 5.7 | 43 |
| 10/23/2006 | XX | GW205A057 | 0.35 | 2 U | | 370 | 2 | 9.4 | 330 | 270 | 290 | 3.3 | 35 |
| 5/14/2007 | XX | GW205A0A3 | 0.2 U | 2 U | | 520 | 3.5 | 11 | 460 | 480 | 500 | 2.2 | 39 |
| 8/16/2007 | XX | GW205A0BG | 0.5 U | 0.5 U | | 490 | 1.7 | 9 | 410 | 380 | 40 | 14 | 37 |
| 8/16/2007 | XD | GWDP1X0EE | 0.5 U | 0.5 U | | 480 | 1.8 | 9.2 | 380 | | 38 | 9.8 | 37 |
| 10/25/2007 | XX | GW205A0D8 | 0.2 U | 0.5 U | | 400 | 1.9 | 9.7 | 400 | 330 | 350 | 4.2 | 39 |
| 5/29/2008 | XX | GW205A0FG | 0.2 U | 0.5 U | | 530 | 1.9 | 11 | 510 | 470 | 500 | 7.8 | 36 |
| 8/12/2008 | XX | GW205A0HG | 0.2 U | 0.5 U | | 550 | 2.1 | 11 | 450 | 480 | 500 | 4.9 | 33 |
| 10/16/2008 | XX | GW205A0J4 | 0.2 U | 0.5 U | | 470 | 1.6 | 11 | 410 | 420 | 440 | 5.8 | 32 |
| 10/16/2008 | XD | GWDP2X107 | 0.2 U | 0.5 U | | 480 | 2.3 | 12 | 410 | | 440 | 5.3 | 32 |
| 5/4/2009 | XX | GW205A114 | 0.2 U | 10 | | 530 | 2.9 | 33 | 520 | 425 | 450 | 5.8 | 44 |
| 8/5/2009 | XX | GW205A134 | 0.2 U | 0.5 U | | 530 | 2 U | 11 | 560 | 440 | 470 | 4.9 | 33 |
| 10/20/2009 | XX | GW205A14C | 0.2 U | 0.5 U | | 430 | 1 U | 12 | 350 | 360 | 380 | 4.6 | 33 |
| 5/26/2010 | XX | GW205A16D | 0.2 U | 0.5 U | | 480 | 1.4 | 10 | 480 | 390 | 410 | 5.4 | 29 |
| 5/26/2010 | XD | GWDP2X160 | 0.2 U | 0.5 U | | 460 | 2 | 9.6 | 400 | | 410 | 5 | 28 |
| 8/3/2010 | XX | GW205A18E | 0.2 U | 0.5 U | | 430 | 2.1 | 11 | 350 | 350 | 360 | 3.9 | 33 |
| 10/13/2010 | XX | GW205A1A2 | 0.2 U | 0.5 U | | 360 | 1.2 U | 9.9 | 240 | 240 | 260 | 2.3 | 34 |
| 5/17/2011 | XX | GW205A1E1 | 0.2 U | 0.5 U | | 440 | 4.2 U | 10 | 380 | 380 | 380 | 4.1 | 35 |
| 8/9/2011 | XX | GW205A1FC | 0.08 U | 0.2 U | | 450 | 1.5 J | 10 | 250 | 380 | 380 | 4 | 39 |
| 11/3/2011 | XX | GW205A1H3 | 0.12 J | 0.2 U | | 390 | 1.16 J | 10 | 300 | 330 | 330 | 4 | 35 |
| 5/16/2012 | XX | GW205A1IH | 0.2 U | 0.5 U | | 320 | 2.5 U | 13 | 250 | 240 | 240 | 2.15 | 36 |
| 8/16/2012 | XX | GW205A20A | 0.2 U | 0.25 U | | 380 | 2.6 U | 9.5 | 270 | 290 | 290 | 3.09 | 37 |
| 10/30/2012 | XX | GW205A224 | 0.2 U | 0.25 U | | 300 | 2.5 U | 7.8 | 260 | 240 | 240 | 2.2 | 37 |
| 5/20/2013 | XX | GW205A23I | 0.2 U | 0.25 U | | 320 | 2.5 U | 9.2 | 210 | 230 | 230 | 1.7 | 41 |
| 7/23/2013 | XX | GW205A25C | 0.2 U | 0.25 U | | 340 | 2.5 U | 8.8 | 240 | 230 | 230 | 2.2 | 41 |
| 10/2/2013 | XX | GW205A276 | 0.2 U | 0.25 U | | 270 | 2.5 U | 7.8 | 190 | 190 | 190 | 1.7 | 41 |
| 6/3/2014 | XX | GW205A290 | 0.24 | 0.05 U | | 310 | 4 U | 8.8 | 188 | 190 | 190 | 1.4 | 43 |
| 8/19/2014 | XX | GW205A2AE | 0.32 | 0.05 U | | 340 | 4 U | 7.3 | 234 | 200 | 210 | 1.5 | 44 |
| 11/12/2014 | XX | GW205A2C8 | 0.34 | 0.05 U | | 290 | 4 U | 8.2 | 216 | 200 | 200 | 1.4 | 40 |
| 6/2/2015 | XX | GW205A2E4 | 0.18 | 0.05 U | | 300 | 4 U | 8.5 | 211 | 200 | 200 | 1.4 | 42 |
| 9/2/2015 | XX | GW205A2FJ | 0.35 | 0.05 U | | 270 | 4 U | 7.9 | 216 | 190 | 190 | 1.5 | 39 |
| 11/3/2015 | XX | GW205A2HD | 0.37 | 0.05 U | | 250 | 4 U | 8.2 | 218 | 190 | 190 | 1.5 | 43 |
| 6/14/2016 | XX | GW205A313 | 0.2 | 0.05 U | | 310 | 4 U | 9.5 | 233 | 200 | 200 | 1.4 | 44 |
| 9/21/2016 | XX | GW205A32H | 0.34 | 0.05 U | | 280 | 4 U | 8.5 | 206 | 170 | 170 | 2.1 | 42 |
| 11/9/2016 | XX | GW205A34B | 0.32 | 0.05 U | | 260 | 4 U | 7.7 | 220 | 200 | 200 | 2 | 40 |
| 6/13/2017 | XX | GW205A366 | 0.1 U | 0.05 U | | 340 | 4 U | 10 | 220 | 200 | 200 | 1.4 | 40 |
| 8/30/2017 | XX | GW205A380 | 0.19 | 0.05 U | | 320 | 4 U | 9.3 | 228 | 210 | 210 | 1.3 | 40 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (205A) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 11/16/2017 | XX | GW205A39E | 0.36 | 0.05 U | | 260 | 4 U | 7.7 | 213 | 180 | 180 | 1.3 | 41 | | | | |
| 6/19/2018 | XX | GW205A3B9 | 0.1 U | 0.05 U | | 340 | 4 U | 11 | 228 | 220 | 220 | 1.1 | 40 | | | | |
| 8/14/2018 | XX | GW205A3DI | 0.18 | 0.05 U | | 300 | 4 U | 8.9 | 210 | 190 | 190 | 1.4 | 44 | | | | |
| 11/27/2018 | XX | GW205A3EH | 0.14 | 0.075 | | 240 | 4 U | 9.3 | 199 | 170 | 170 | 1.5 | 40 | | | | |
| 6/4/2019 | XX | GW205A3GC | 0.1 U | 0.05 U | | 300 | 4 U | 9.4 | 217 | 200 | 200 | 1.3 | 38 | | | | |
| 8/13/2019 | XX | GW205A3J1 | 0.13 | 0.05 U | | 280 | 4 U | 7.9 | 215 | 210 | 210 | 1.3 | 41 | | | | |
| 10/23/2019 | XX | GW205A400 | 0.29 | 0.05 U | | 250 | 4 U | 7.5 | 212 | 170 | 170 | 1.6 | 38 | | | | |
| 6/16/2020 | XX | GW205A41F | 0.12 | 0.05 U | | 290 | 4 U | 7.4 | 219 | 230 | 230 | 1.2 | 38 | | | | |
| 8/5/2020 | XX | GW205A444 | 0.13 | 0.05 U | | 260 | 4 U | 6.8 | 225 | 220 | 220 | 1.5 | 36 | | | | |
| 10/20/2020 | XX | GW205A453 | 0.16 | 0.05 U | | 270 | 4 U | 7.1 | 215 | 180 | 180 | 1.3 | 36 | | | | |
| 6/23/2021 | XX | GW205A46I | 0.1 U | 0.13 | | 290 | 4 U | 8.8 | 217 | 200 | 200 | 2.2 | 38 | | | | |
| 9/22/2021 | XX | GW205A48D | 0.3 | 0.05 U | | 230 | 4 U | 7 | 189 | 180 | 180 | 1.3 | 39 | | | | |
| **205B** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 205BXX36643 | 0.1 U | 1.3 | | 215 | 36 | 11.5 | 184.1 | 150 | 172.7 | 2.3 | 3.5 | | | | |
| 8/2/2000 | XX | 205BXX36740 | 0.1 U | 1.1 | | 226 | 2 | 13.2 | 166.6 | 160 | 169.7 | 2.8 | 3.4 | | | | |
| 10/25/2000 | XX | 205BXX36824 | 0.1 U | 1.4 | | 254 | 1 U | 11.5 | 168.8 | 210 | 214.1 | 3.4 | 4.7 | | | | |
| 5/9/2001 | XX | 205BXX37020 | 0.1 U | 2.3 | | 413 | 1 | 12.4 | 290.1 | 360 | 366 | 3.5 | 7.1 | | | | |
| 7/25/2001 | XX | 205BXX37097 | 0.1 U | 1 U | | 295 | 2 | 9.5 | 218.1 | 229 | 244 | 2.7 | 8.3 | | | | |
| 10/17/2001 | XX | 205BXX37181 | 0.1 U | 1 U | | 418 | 1 U | 9.8 | 352 | 345 | 364 | 3 | 20.5 | | | | |
| 5/15/2002 | XX | 205BXX37391 | 0.1 U | 1 U | | 547 | 1 | 13.2 | 430.3 | 330 | 478 | 4.3 | 33.6 | | | | |
| 8/1/2002 | XX | 205BXX37469 | 0.1 U | 1 U | | 507 | 2 | 9.6 | 403.9 | 400 | 430 | 90.6 | 23.1 | | | | |
| 10/16/2002 | XX | 205BXX37545 | 0.1 U | 1 U | | 664 | 2 | 14.6 | 540.7 | 540 | 586 | 6.4 | 34.4 | | | | |
| 6/19/2003 | XX | 205BXX37791 | 0.2 U | 2 U | | 410 | 1 U | 12 | 440 | 350 | 370 | 4.4 | 13 | | | | |
| 8/19/2003 | XX | 205BXX37852 | 0.2 | 2 U | | 280 | 1 U | 11 | 330 | 280 | 300 | 3 | 8.6 | | | | |
| 10/9/2003 | XX | 205BXX37903 | 0.2 U | 2 U | | 330 | 1 U | 11 | 340 | 290 | 310 | 3.3 | 7.9 | | | | |
| 4/27/2004 | XX | 205BXX38104 | 0.2 U | 2 U | | 250 | 1 U | 12 | 260 | 220 | 220 | 3 | 8.4 | | | | |
| 8/12/2004 | XX | 205BXX38211 | 0.2 U | 2 U | | 210 | 1 U | 13 | 220 | 195 | 210 | 2 | 6.1 | | | | |
| 10/14/2004 | XX | 205BXX38274 | 0.2 U | 2 U | | 220 | 1 U | 11 | 230 | 210 | 230 | 4.5 | 5.8 | | | | |
| 5/17/2005 | XX | GW205B00C | 0.2 U | 2 U | | 280 | 1 U | 12 | 400 | 200 | 220 | 2.9 | 6 | | | | |
| 8/4/2005 | XX | GW205B024 | 0.46 | 2 U | | 240 | 1 U | 11 | 170 | 155 | 160 | 1.5 | 2.4 | | | | |
| 10/27/2005 | XX | GW205B03G | 0.2 U | 2 U | | 300 | 1 U | 12 | 500 | 315 | 340 | 3.2 | 6.2 | | | | |
| 5/9/2006 | XX | GW205B08C | 0.2 U | 2 U | | 200 | 4 | 12 | 330 | 195 | 210 | 2 | 2.9 | | | | |
| 7/25/2006 | XX | GW205B070 | 0.2 U | 2 U | | 140 | 1 U | 11 | 170 | 135 | 140 | 1.6 | 2 U | | | | |
| 10/19/2006 | XX | GW205B058 | 0.2 U | 2 U | | 130 | 1 U | 9.8 | 110 | 105 | 110 | 1.2 | 2 U | | | | |
| 5/14/2007 | XX | GW205B0A4 | 0.2 U | 2 U | | 260 | 1 U | 11 | 310 | 250 | 270 | 1 U | 2 U | | | | |
| 8/16/2007 | XX | GW205B0BH | 0.2 U | 0.5 U | | 240 | 1 U | 10 | 240 | 200 | 220 | 5.8 | 2 U | | | | |
| 10/25/2007 | XX | GW205B0D9 | 0.2 U | 0.5 U | | 210 | 1 U | 10 | 200 | 170 | 180 | 2.2 | 2 U | | | | |
| 5/27/2008 | XX | GW205B0FH | 0.2 U | 0.5 U | | 240 | 1 U | 10 | 230 | 190 | 210 | 2.9 | 2 U | | | | |
| 5/27/2008 | XD | GWDP2X0F3 | 0.2 U | 0.5 U | | 230 | 1 U | 10 | 220 | | 220 | 3.4 | 2 U | | | | |
| 8/12/2008 | XX | GW205B0HH | 0.2 U | 0.5 U | | 340 | 1 U | 10 | 280 | 300 | 320 | 2.5 | 2 U | | | | |
| 10/16/2008 | XX | GW205B0J5 | 0.2 U | 0.5 U | | 160 | 1 U | 10 | 160 | 120 | 130 | 2.1 | 2 U | | | | |
| 5/4/2009 | XX | GW205B115 | 0.2 U | 0.5 U | | 280 | 0.6 U | 10 | 310 | 220 | 230 | 2.6 | 2 U | | | | |
| 8/5/2009 | XX | GW205B135 | 0.2 U | 0.5 U | | 270 | 2 U | 10 | 370 | 260 | 280 | 2.4 | 2 U | | | | |
| 10/20/2009 | XX | GW205B14D | 0.2 U | 0.5 U | | 160 | 1 U | 8.9 | 120 | 125 | 130 | 1.9 | 2 U | | | | |
| 10/20/2009 | XD | GWDP1X15E | 0.2 U | 0.5 U | | 160 | 1 U | 9.3 | 130 | | 130 | 1.9 | 2 U | | | | |
| 5/26/2010 | XX | GW205B16E | 0.2 U | 0.5 U | | 170 | 1 U | 8.1 | 200 | 155 | 160 | 2.3 | 2 U | | | | |
| 8/3/2010 | XX | GW205B18F | 0.2 U | 0.5 U | | 170 | 2.5 U | 7.8 | 180 | 140 | 150 | 2.1 | 2 U | | | | |
| 8/3/2010 | XD | GWDP1X180 | 0.2 U | 0.5 U | | 170 | 1.1 U | 7.9 | 160 | | 150 | 2.1 | 2 U | | | | |
| 10/13/2010 | XX | GW205B1A3 | 0.2 U | 0.5 U | | 160 | 1.1 U | 6.4 | 120 | 135 | 140 | 2 | 2 U | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (205B) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/17/2011 | XX | GW205B1E2 | 0.2 U | 0.5 U | | 260 | 4.2 U | 7.9 | 190 | 240 | 240 | 2.1 | 2 U |
| 8/9/2011 | XX | GW205B1FD | 0.08 U | 0.2 U | | 130 | 0.38 U | 6.4 | 97 | 100 | 100 | 1.4 | 1.2 U |
| 11/3/2011 | XX | GW205B1H4 | 0.082 U | 0.22 J | | 130 | 0.32 U | 6.8 | 110 | 130 | 130 | 1.6 | 1.2 U |
| 5/16/2012 | XX | GW205B1II | 0.2 U | 0.5 U | | 140 | 2.5 U | 6.1 | 120 | 120 | 120 | 1.09 | 2 U |
| 8/16/2012 | XX | GW205B20B | 0.2 U | 0.331 | | 140 | 2.5 U | 6.3 | 100 | 110 | 110 | 1.54 | 0.5 U |
| 10/30/2012 | XX | GW205B225 | 0.2 U | 0.25 U | | 170 | 2.5 U | 4.9 | 190 | 180 | 180 | 1.4 | 0.5 U |
| 5/20/2013 | XX | GW205B23J | 0.2 U | 0.25 U | | 150 | 2.5 U | 6.2 | 100 | 120 | 120 | 1.3 | 0.5 U |
| 7/23/2013 | XX | GW205B25D | 0.2 U | 0.26 | | 170 | 2.5 U | 6.2 | 120 | 130 | 130 | 1.5 | 0.52 |
| 10/2/2013 | XX | GW205B277 | 0.2 U | 0.25 U | | 130 | 2.5 U | 5.1 | 110 | 120 | 120 | 0.98 | 0.5 U |
| 6/3/2014 | XX | GW205B291 | 0.1 U | 0.05 U | | 170 | 4 U | 5.1 | 194 | 140 | 140 | 1 U | 2 |
| 8/19/2014 | XX | GW205B2AF | 0.1 U | 0.05 U | | 140 | 4 U | 4.2 | 128 | 130 | 130 | 1 U | 4.3 |
| 11/12/2014 | XX | GW205B2C9 | 0.1 U | 0.05 U | | 170 | 4 U | 4 | 158 | 150 | 150 | 1 U | 2.9 |
| 6/2/2015 | XX | GW205B2E5 | 0.1 U | 0.05 U | | 170 | 4 U | 4.6 | 120 | 110 | 110 | 1 U | 3.2 |
| 9/2/2015 | XX | GW205B2G0 | 0.1 U | 0.091 | | 120 | 4 U | 4.5 | 108 | 100 | 100 | 1 U | 2.1 |
| 11/3/2015 | XX | GW205B2HE | 0.1 U | 0.079 | | 160 | 4 U | 4.7 | 153 | 150 | 150 | 1 U | 2 U |
| 6/14/2016 | XX | GW205B314 | 0.1 U | 0.08 | | 140 | 4 U | 6.9 | 114 | 110 | 110 | 1 U | 2 U |
| 9/21/2016 | XX | GW205B32I | 0.1 U | 0.05 U | | 140 | 4 U | 4.9 | 87.7 | 87 | 87 | 1 U | 3 |
| 11/9/2016 | XX | GW205B34C | 0.1 U | 0.05 U | | 91 | 4 U | 4.6 | 93 | 97 | 97 | 1.1 | 2.4 |
| 6/13/2017 | XX | GW205B367 | 0.1 U | 0.05 U | | 210 | 4 U | 4.5 | 166 | 160 | 160 | 1 U | 2.3 |
| 8/30/2017 | XX | GW205B381 | 0.5 | 0.05 U | | 130 | 4 U | 3.9 | 103 | 110 | 110 | 1 U | 2 U |
| 11/16/2017 | XX | GW205B39F | 0.12 | 0.05 U | | 200 | 4 U | 2.7 | 165 | 160 | 160 | 1 U | 4.3 |
| 6/19/2018 | XX | GW205B3BA | 0.1 U | 0.05 U | | 220 | 4 U | 5.7 | 135 | 140 | 140 | 1 U | 2 U |
| 8/14/2018 | XX | GW205B3DJ | 0.1 U | 0.05 U | | 160 | 4 U | 3.8 | 117 | 110 | 110 | 1 U | 2 U |
| 11/27/2018 | XX | GW205B3EI | 0.1 U | 0.05 U | | 160 | 4 U | 4.2 | 170 | 160 | 160 | 1 U | 2.6 |
| 6/4/2019 | XX | GW205B3GD | 0.1 U | 0.05 U | | 220 | 4 U | 4.3 | 202 | 190 | 190 | 1.1 | 2 U |
| 8/13/2019 | XX | GW205B3J2 | 0.1 U | 0.05 U | | 130 | 4 U | 3.6 | 96.5 | 110 | 110 | 1 U | 2.6 |
| 10/23/2019 | XX | GW205B401 | 0.1 U | 0.05 U | | 170 | 4 U | 3.9 | 148 | 140 | 140 | 1.2 | 2 U |
| 6/16/2020 | XX | GW205B41G | 0.1 U | 0.05 U | | 150 | 4 U | 4.3 | 133 | 140 | 140 | 1 U | 2 U |
| 8/5/2020 | XX | GW205B445 | 0.1 U | 0.05 U | | 130 | 4 U | 3.9 | 118 | 110 | 110 | 1 U | 2 U |
| 10/20/2020 | XX | GW205B454 | 0.1 U | 0.05 U | | 130 | 4 U | 3.6 | 97.4 | 99 | 99 | 1 U | 2 U |
| 6/23/2021 | XX | GW205B46J | 0.1 U | 0.05 U | | 140 | 4 U | 3.5 | 125 | 120 | 120 | 1.6 | 2 U |
| 9/22/2021 | XX | GW205B48E | 0.1 U | 0.05 U | | 150 | 4 U | 2.8 | 134 | 140 | 140 | 1 | 2 U |
| **206A** | | | | | | | | | | | | | |
| 4/27/2000 | XX | 206AXX36643 | 21 | 2 | | 774 | 16 | 8.4 | 545.3 | 135 | 141.4 | 14.7 | 24.2 |
| 8/2/2000 | XX | 206AXX36740 | 20.8 | 3.3 | | 1605 | 9 | 11.1 | 1218.2 | 1350 | 1531.2 | 33.8 | 70.7 |
| 10/25/2000 | XX | 206AXX36824 | 29.1 | 5.1 | | 1971 | 24 | 1.8 | 1468 | 1850 | 1948.7 | 48.5 | 95.3 |
| 5/8/2001 | XX | 206AXX37019 | 34.2 | 4 | | 1480 | 4 | 10.4 | 902.9 | 1100 | 1225 | 27.6 | 56.5 |
| 7/25/2001 | XX | 206AXX37097 | 34.2 | 1 U | | 1862 | 13 | 10.5 | 1419.5 | 1680 | 1715 | 29.4 | 62.7 |
| 10/17/2001 | XX | 206AXX37181 | 49.3 | 1 U | | 2088 | 33 | 1 U | 1375.2 | 1997 | 2010 | 37.6 | 101 |
| 5/16/2002 | XX | 206AXX37392 | 28.5 | 1 U | | 1065 | 2 | 13.5 | 817.5 | 990 | 1010 | 14.4 | 46.3 |
| 8/1/2002 | XX | 206AXX37469 | 38.6 | 1.4 | | 1682 | 14 | 11.5 | 1157.3 | 1440 | 1558 | 334.4 | 71.2 |
| 10/17/2002 | XX | 206AXX37546 | 40.3 | 1 U | | 1943 | 31 | 8.8 | 1436.9 | 1850 | 1912 | 41.7 | 102 |
| 6/19/2003 | XX | 206AXX37791 | 36 | 2 U | | 920 | 46 | 15 | 1000 | 1000 | 1100 | 4.9 | 38 |
| 8/18/2003 | XX | 206AXX37851 | 33 | 2 U | | 1100 | 35 | 13 | 1000 | 1150 | 1200 | 25 | 33 |
| 10/13/2003 | XX | 206AXX37907 | 38 | 2 U | | 1100 | 43 | 12 | 960 | 1040 | 1100 | 30 | 30 |
| 4/29/2004 | XX | 206AXX38106 | 38 | 2 U | | 1100 | 51 | 11 | 1100 | 1020 | 1100 | 30 | 40 |
| 8/16/2004 | XX | 206AXX38215 | 54 | 2 U | | 1700 | 58 | 8.5 | 1300 | 1560 | 1600 | 32 | 50 |
| 10/12/2004 | XX | 206AXX38272 | 48 | 2 U | | 1300 | 17 | 9.2 | 1300 | 1400 | 1500 | 53 | 42 |
| 5/17/2005 | XX | GW206A00D | 31 | 2 U | | 1100 | 48 | 8 | 1000 | 1320 | 1500 | 19 | 35 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(206A)**

| Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/15/2005 | XX | GW206A025 | 45 | 2 U | | 1400 | 80 | 7.7 | 1200 | 1400 | 1400 | 33 | 46 |
| 10/24/2005 | XX | GW206A03H | 37 | 2 U | | 1100 | 63 | 7.6 | 1100 | 1140 | 1200 | 29 | 36 |
| 5/11/2006 | XX | GW206A08D | 48 | 2 U | | 1200 | 61 | 7.2 | 1500 | 1220 | 1300 | 30 | 37 |
| 7/26/2006 | XX | GW206A071 | 45 | 2 U | | 1100 | 65 | 8.1 | 740 | 1000 | 1100 | 24 | 27 |
| 10/23/2006 | XX | GW206A059 | 29 | 2 U | | 1100 | 60 | 6.3 | 1000 | 1160 | 1200 | 31 | 33 |
| 5/14/2007 | XX | GW206A0A5 | 31 | 2 U | | 960 | 52 | 6.2 | 980 | 115 | 1200 | 17 | 26 |
| 5/14/2007 | XD | GWDP2X0EB | 32 | 2 U | | 880 | 45 | 6.1 | 930 | | 1300 | 17 | 26 |
| 8/16/2007 | XX | GW206A0BI | 34 | 0.5 U | | 1400 | 70 | 3.6 | 470 | 1440 | 1500 | 65 | 40 |
| 10/29/2007 | XX | GW206A0DA | 30 | 0.5 U | | 1400 | 80 | 6.4 | 1500 | 1400 | 1500 | 48 | 44 |
| 5/27/2008 | XX | GW206A0FI | 28 | 0.5 U | | 1000 | 58 | 5.5 | 1000 | 1030 | 1100 | 36 | 26 |
| 5/27/2008 | XD | GWDP1X0F2 | 28 | 0.5 U | | 1000 | 61 | 5.3 | 930 | | 1200 | 35 | 26 |
| 8/13/2008 | XX | GW206A0HI | 20 | 0.5 U | | 980 | 54 | 5.8 | 790 | 1000 | 1100 | 26 | 25 |
| 10/20/2008 | XX | GW206A0J6 | 19 | 0.5 U | | 1200 | 61 | 5.5 | 950 | 1300 | 1400 | 37 | 34 |
| 5/5/2009 | XX | GW206A116 | 32 | 0.5 U | | 970 | 26 | 5 | 910 | 950 | 1100 | 32 | 21 |
| 8/6/2009 | XX | GW206A136 | 26 | 0.5 U | | 880 | 44 | 13 | 1200 | 900 | 980 | 28 | 19 |
| 8/6/2009 | XD | GWDP2X12B | 28 | 0.5 U | | 880 | 49 | 13 | 1300 | | 970 | 24 | 19 |
| 10/21/2009 | XX | GW206A14E | 34 | 0.5 U | | 1000 | 66 | 4.3 | 910 | 1120 | 1200 | 47 | 32 |
| 5/27/2010 | XX | GW206A16F | 28 | 0.5 U | | 980 | 70 | 5.5 | 710 | 1000 | 1100 | 19 | 24 |
| 8/3/2010 | XX | GW206A18G | 35 | 0.5 U | | 1100 | 55 | 3.9 | 1000 | 1200 | 1300 | 36 | 31 |
| 10/13/2010 | XX | GW206A1A4 | 25 | 0.5 U | | 770 | 47 | 6.6 | 620 | 880 | 930 | 31 | 22 |
| 10/13/2010 | XD | GWDP1X1B4 | 25 | 0.5 U | | 820 | 50 | 6.8 | 670 | | 920 | 28 | 22 |
| 5/17/2011 | XX | GW206A1E3 | 23 | 0.5 U | | 760 | 42 | 5 | 630 | 810 | 810 | 24 | 19 |
| 8/9/2011 | XX | GW206A1FE | 29 | 0.2 U | | 1300 | 91 | 4 | 1000 | 1400 | 1400 | 47 | 43 |
| 11/3/2011 | XX | GW206A1H5 | 27 | 0.2 U | | 1000 | 59 | 4.9 | 790 | 1100 | 1100 | 36 | 25 |
| 5/16/2012 | XX | GW206A1IJ | 26 | 0.5 U | | 720 | 45 | 4.5 | 670 | 830 | 830 | 17.1 | 15 |
| 8/15/2012 | XX | GW206A20C | 25 | 0.25 U | | 1200 | 77 | 3.7 | 940 | 1200 | 1200 | 28.3 | 26 |
| 10/30/2012 | XX | GW206A226 | 29 | 0.25 U | | 630 | 20 | 3.9 | 810 | 700 | 700 | 21 | 15 |
| 5/20/2013 | XX | GW206A240 | 29 | 0.25 U | | 990 | 65 | 3.7 | 740 | 1100 | 1100 | 20 | 19 |
| 7/23/2013 | XX | GW206A25E | 24 | 0.25 U | | 950 | 29 | 2.7 | 590 | 1000 | 1000 | 14 | 19 |
| 10/2/2013 | XX | GW206A278 | 29 | 0.25 U | | 1000 | 77 | 2.8 | 860 | 1200 | 1200 | 23 | 23 |
| 6/3/2014 | XX | GW206A292 | 22 | 0.05 U | | 1000 | 61 | 1 U | 465 | 1100 | 1100 | 8.2 | 22 |
| 8/20/2014 | XX | GW206A2AG | 37 | 0.05 U | | 1200 | 91 | 1 U | 1040 | 1400 | 1400 | 26 | 33 |
| 11/11/2014 | XX | GW206A2CA | 3.1 | 0.05 U | | 440 | 11 | 1 U | 107 | 450 | 450 | 1.2 | 19 |
| 6/2/2015 | XX | GW206A2E6 | 29 | 0.05 U | | 900 | 52 | 1.4 | 748 | 920 | 920 | 18 | 24 |
| 9/2/2015 | XX | GW206A2G1 | 36 | 0.05 U | | 1100 | 82 | 1 U | 1090 | 1200 | 1200 | 30 | 30 |
| 11/3/2015 | XX | GW206A2HF | 15 | 0.05 U | | 820 | 45 | 1 U | 307 | 870 | 870 | 10 | 21 |
| 6/15/2016 | XX | GW206A315 | 28 | 0.1 U | | 1000 | 71 | 7.4 | 794 | 980 | 980 | 15 | 22 |
| 9/21/2016 | XX | GW206A32J | 40 | 0.05 U | | 1300 | 75 | 2.2 | 1100 | 1300 | 1300 | 27 | 34 |
| 11/9/2016 | XX | GW206A34D | 42 | 0.05 U | | 1400 | 94 | 1.4 | 1240 | 1400 | 1400 | 32 | 39 |
| 6/13/2017 | XX | GW206A368 | 28 | 0.05 U | | 1000 | 44 | 1 U | 778 | 970 | 970 | 18 | 21 |
| 8/30/2017 | XX | GW206A382 | 39 | 0.05 U | | 1400 | 64 | 1 U | 1080 | 1400 | 1400 | 30 | 34 |
| 11/15/2017 | XX | GW206A39G | 41 | 0.5 U | | 1200 | 60 | 1.1 | 1220 | 1400 | 1400 | 29 | 30 |
| 6/19/2018 | XX | GW206A3BB | 32 | 0.05 U | | 1000 | 76 | 3.4 | 863 | 1100 | 1100 | 21 | 23 |
| 8/14/2018 | XX | GW206A3E0 | 41 | 0.25 U | | 1300 | 48 | 1 | 1030 | 1400 | 1400 | 26 | 32 |
| 11/27/2018 | XX | GW206A3EJ | 36 | 0.05 U | | 840 | 45 | 9.8 | 776 | 36 | 36 | 22 | 27 |
| 6/4/2019 | XX | GW206A3GE | 23 | 0.2 | | 730 | 24 | 2.3 | 614 | 810 | 810 | 17 | 16 |
| 8/13/2019 | XX | GW206A3J3 | 39 | 0.05 U | | 1200 | 90 | 1 U | 1020 | 1200 | 1200 | 27 | 27 |
| 10/23/2019 | XX | GW206A402 | 47 | 0.05 U | | 1200 | 96 | 1 U | 1320 | 1600 | 1600 | 34 | 30 |
| 6/16/2020 | XX | GW206A41H | 32 | 0.05 U | | 1000 | 44 | 1 U | 755 | 1300 | 1300 | 20 | 20 |
| 8/5/2020 | XX | GW206A446 | 36 | 0.05 U | | 1100 | 75 | 2.4 | 936 | 1300 | 1300 | 24 | 27 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (206A) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/20/2020 | XX | GW206A455 | 46 | 0.05 U | | 1400 | 45 | 1 U | 1300 | 1600 | 1600 | 34 | 32 | | | | |
| 6/23/2021 | XX | GW206A470 | 35 | 0.05 U | | 1000 | 72 | 1 U | 960 | 1100 | 1100 | 25 | 25 | | | | |
| 9/22/2021 | XX | GW206A48F | 41 | 0.05 U | | 1400 | 53 | 1 U | 1210 | 1400 | 1400 | 31 | 32 | | | | |
| **206B** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 206BXX36643 | 0.1 U | 1 U | | 48 | 22 | 12.5 | 23.3 | 10.5 | 11.1 | 3.7 | 2.5 | | | | |
| 8/2/2000 | XX | 206BXX36740 | D | D | | | D | D | D | D | D | D | D | | | | |
| 10/25/2000 | XX | 206BXX36824 | D | D | | | D | D | D | D | D | D | D | | | | |
| 5/8/2001 | XX | 206BXX37019 | 0.1 U | 1.4 | | 55 | 1 | 13.8 | 22.1 | 8 | 8 | 2.5 | 2.4 | | | | |
| 7/25/2001 | XX | 206BXX37097 | D | D | | | D | D | D | D | D | D | D | | | | |
| 10/17/2001 | XX | 206BXX37181 | D | D | | | D | D | D | D | D | D | D | | | | |
| 5/16/2002 | XX | 206BXX37392 | 0.1 U | 1.2 | | 88 | 2 | 17.4 | 47.8 | 44 | 48 | 2.5 | 2.2 | | | | |
| 7/29/2002 | XX | 206BXX37466 | D | D | | D | D | D | D | D | D | D | D | | | | |
| 10/15/2002 | XX | 206BXX37544 | D | D | | D | D | D | D | D | D | D | D | | | | |
| 6/17/2003 | XX | 206BXX37789 | 0.2 U | 2 U | | 100 | 1 U | 23 | 89 | 68 | 73 | 1.8 | 3.8 | | | | |
| 8/18/2003 | XX | 206BXX37851 | 0.21 | 2 U | | 56 | 1 | 19 | 68 | 54 | 57 | 2.6 | 2.3 | | | | |
| 10/13/2003 | XX | 206BXX37907 | 0.2 U | 2 U | | 31 | 1 U | 12 | 46 | 34 | 35 | 3.1 | 2 U | | | | |
| 4/29/2004 | XX | 206BXX38106 | 0.21 | 2 U | | 110 | 1 U | 19 | 88 | 64 | 64 | 1.5 | 3.1 | | | | |
| 8/16/2004 | XX | 206BXX38215 | D | D | | D | D | D | D | D | D | D | D | | | | |
| 10/12/2004 | XX | 206BXX38272 | D | D | | D | D | D | D | D | D | D | D | | | | |
| 5/17/2005 | XX | GW206B00E | 0.45 | 2 U | | 92 | 1 U | 14 | 69 | 57 | 58 | 2 | 2.7 | | | | |
| 8/15/2005 | XX | GW206B026 | D | D | | D | D | D | D | D | D | D | D | | | | |
| 10/24/2005 | XX | GW206B03I | 0.2 U | 2 U | | 28 | 1 U | 7.3 | 32 | 32 | 33 | 5.1 | 2 U | | | | |
| 5/11/2006 | XX | GW206B08E | 0.2 U | 2 U | | 69 | 1 U | 13 | 68 | 51 | 53 | 1.9 | 2 U | | | | |
| 7/26/2006 | XX | GW206B072 | 0.2 | 2 U | | 72 | 3.2 | 13 | 79 | 64 | 68 | 1.6 | 2.6 | | | | |
| 10/23/2006 | XX | GW206B05A | 0.2 U | 2 U | | 50 | 1 U | 6.6 | 37 | 39 | 39 | 3.1 | 2 U | | | | |
| 5/14/2007 | XX | GW206B0A6 | 0.2 U | 2 U | | 86 | 1 U | 11 | 82 | 81 | 83 | 1 U | 2 U | | | | |
| 8/16/2007 | XX | GW206B0BJ | D | D | | D | D | D | D | D | D | D | D | | | | |
| 10/29/2007 | XX | GW206B0DB | D | D | | D | D | D | D | D | D | D | D | | | | |
| 5/27/2008 | XX | GW206B0FJ | D | D | | D | D | D | D | | D | D | D | | | | |
| 8/13/2008 | XX | GW206B0HJ | 0.2 U | 0.71 | | 100 | 1 U | 9.9 | 78 | 80 | 82 | 1.4 | 2 U | | | | |
| 10/20/2008 | XX | GW206B0J7 | D | D | | D | D | D | D | D | D | D | D | | | | |
| 5/5/2009 | XX | GW206B117 | 0.2 U | 0.85 | | 110 | 0.6 U | 8.9 | 77 | 78 | 79 | 2.5 | 2 | | | | |
| 8/6/2009 | XX | GW206B137 | 0.2 U | 0.79 | | 90 | 2 U | 15 | 66 | 56 | 58 | 2 | 2 | | | | |
| 10/21/2009 | XX | GW206B14F | 0.2 U | 0.53 | | 200 | 1 U | 9.5 | 85 | 81 | 85 | 2.6 | 2 U | | | | |
| 5/27/2010 | XX | GW206B16G | D | D | | D | D | D | D | D | D | D | D | | | | |
| 8/3/2010 | XX | GW206B18H | D | D | | D | D | D | D | D | D | D | D | | | | |
| 10/13/2010 | XX | GW206B1A5 | 0.2 U | 0.51 | | 68 | 1.7 | 4.5 | 36 | 42 | 42 | 2.5 | 2 U | | | | |
| 5/17/2011 | XX | GW206B1E4 | 0.2 U | 0.5 U | | 35 | 4.2 U | 2.8 | 28 | 28 | 28 | 3.4 | 2 U | | | | |
| 8/9/2011 | XX | GW206B1FF | D | D | | D | D | D | D | D | D | D | D | | | | |
| 11/4/2011 | XX | GW206B1H6 | 0.082 U | 0.46 J | | 95 | 0.32 U | 10 | 67 | 76 | 76 | 2.3 | 1.2 U | | | | |
| 5/16/2012 | XX | GW206B1J0 | 0.2 U | 0.5 U | | 41 | 2.5 U | 4.4 | 43 | 37 | 37 | 2.41 | 2 U | | | | |
| 8/15/2012 | XX | GW206B20D | I | I | | I | I | I | I | I | I | I | I | | | | |
| 10/30/2012 | XX | GW206B227 | 0.2 U | 0.35 | | 66 | 2.5 U | 6 | 55 | 54 | 54 | 2.6 | 0.96 | | | | |
| 5/20/2013 | XX | GW206B241 | 0.2 U | 0.37 | | 82 | 2.5 U | 7.2 | 35 | 57 | 57 | 1.3 | 0.85 | | | | |
| 7/24/2013 | XX | GW206B25F | 0.2 U | 0.54 | | 84 | 3.4 | 6.6 | 62 | 66 | 66 | 1.5 | 1.2 | | | | |
| 10/2/2013 | XX | GW206B279 | 0.2 U | 0.3 | | 77 | 2.5 U | 6.5 | 58 | 58 | 58 | 1.2 | 0.63 | | | | |
| 6/3/2014 | XX | GW206B293 | 0.1 U | 0.82 | | 99 | 4 U | 8.4 | 75.8 | 72 | 72 | 1.2 | 3.8 | | | | |
| 8/20/2014 | XX | GW206B2AH | D | D | | D | D | D | D | D | D | D | D | | | | |
| 11/11/2014 | XX | GW206B2CB | 0.1 U | 0.36 | | 44 | 4 U | 1 U | 25.6 | 30 | 30 | 2.8 | 3.8 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (206B) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 6/2/2015 | XX | GW206B2E7 | 0.1 U | 0.25 | | 70 | 4.4 | 5.1 | 35.7 | 38 | 38 | 1.5 | 3.5 | | | | |
| 9/2/2015 | XX | GW206B2G2 | I | I | | I | I | I | I | I | I | I | I | | | | |
| 11/3/2015 | XX | GW206B2HG | 0.1 U | 0.35 | | 59 | 4 U | 2.2 | 33.2 | 36 | 36 | 2.5 | 2 U | | | | |
| 6/15/2016 | XX | GW206B316 | 0.1 U | 0.29 | | 78 | 12 | 7.4 | 58.4 | 56 | 56 | 1 U | 2.4 | | | | |
| 9/21/2016 | XX | GW206B330 | D | D | | D | D | D | D | D | D | D | D | | | | |
| 11/9/2016 | XX | GW206B34E | D | D | | D | D | D | D | D | D | D | D | | | | |
| 6/13/2017 | XX | GW206B369 | 0.37 | 0.28 | | 100 | 4 U | 3.4 | 52.1 | 36 | 36 | 1.4 | 2.3 | | | | |
| 8/30/2017 | XX | GW206B383 | I | I | | I | I | I | I | I | I | I | I | | | | |
| 11/15/2017 | XX | GW206B39H | 0.1 U | 0.62 | | 88 | 4 U | 8.7 | 75.3 | 66 | 66 | 1 | 3 | | | | |
| 6/19/2018 | XX | GW206B3BC | 0.1 U | 0.55 | | 110 | 4 U | 9.7 | 69 | 70 | 70 | 1 U | 2.2 | | | | |
| 8/14/2018 | XX | GW206B3E1 | I | I | | I | I | I | I | I | I | I | I | | | | |
| 11/27/2018 | XX | GW206B3F0 | 0.1 U | 0.47 | | 39 | 4 U | 13 | 34.6 | 36 | 36 | 2.1 | 2.3 | | | | |
| 6/4/2019 | XX | GW206B3GF | 0.1 U | 0.17 | | 81 | 4 U | 4.1 | 53 | 39 | 39 | 1.5 | 2 U | | | | |
| 8/13/2019 | XX | GW206B3J4 | 0.1 U | 0.45 | | 98 | 19 | 7.8 | 64 | 64 | 64 | 1.2 | 3 | | | | |
| 10/23/2019 | XX | GW206B403 | D | D | | D | D | D | D | D | D | D | D | | | | |
| 6/16/2020 | XX | GW206B41I | 0.1 U | 0.61 | | 95 | 11 | 6.9 | 74.6 | 77 | 77 | 1.1 | 2 U | | | | |
| 8/5/2020 | XX | GW206B447 | I | I | | I | I | I | I | I | I | I | I | | | | |
| 10/22/2020 | XX | GW206B456 | D | D | | D | D | D | D | D | D | D | D | | | | |
| 6/23/2021 | XX | GW206B471 | 0.1 U | 0.66 | | 140 | 7.6 | 8 | 79.6 | 76 | 76 | 2 | 2 U | | | | |
| 9/22/2021 | XX | GW206B48G | D | D | | D | D | D | D | D | D | D | D | | | | |
| **301** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 301XX36649 | 0.1 U | 1 U | | 212 | 41 | 9.3 | 166.3 | 110 | 125.2 | 1.8 | 28.7 | | | | |
| 8/9/2000 | XX | 301XX36747 | 0.1 U | 1 U | | 219 | 3 | 12 | 126.8 | 110 | 129.3 | 1.8 | 31.6 | | | | |
| 11/8/2000 | XX | 301XX36838 | 0.1 U | 1 U | | 242 | 1 U | 12.9 | 125.8 | 142 | 143.4 | 1.7 | 31.9 | | | | |
| 5/16/2001 | XX | 301XX37027 | 0.1 U | 1 U | | 247 | 1 U | 12.8 | 161.4 | 146 | 148 | 1.6 | 35.5 | | | | |
| 7/31/2001 | XX | 301XX37103 | 0.1 U | 1 U | | 245 | 1 | 12.7 | 159.7 | 150 | 152 | 3.8 | 35.6 | | | | |
| 10/23/2001 | XX | 301XX37187 | 0.1 U | 1 U | | 281 | 2 | 14.7 | 191 | 160 | 174 | 2.5 | 40 | | | | |
| 5/21/2002 | XX | 301XX37397 | 0.1 U | 1 U | | 293 | 2 | 16.3 | 141.9 | 175 | 178 | 2.2 | 43.1 | | | | |
| 8/2/2002 | XX | 301XX37470 | 0.1 U | 1 U | | 337 | 1 | 16.6 | 147.4 | 188 | 200 | 2.9 | 42.6 | | | | |
| 10/23/2002 | XX | 301XX37552 | 0.1 U | 1 U | | 304 | 1 | 23.1 | 205.8 | 190 | 208 | 2.4 | 43.3 | | | | |
| 6/24/2003 | XX | 301XX37796 | 0.2 U | 2 U | | 300 | 1 U | 19 | 320 | 210 | 230 | 2.2 | 37 | | | | |
| 8/12/2003 | XX | 301XX37845 | 0.2 U | 2 U | | 340 | 1 U | 23 | 320 | 200 | 230 | 2.6 | 33 | | | | |
| 10/16/2003 | XX | 301XX37910 | 0.2 U | 2 U | | 340 | 1 U | 24 | 320 | 230 | 250 | 2.9 | 33 | | | | |
| 5/5/2004 | XX | 301XX38112 | 0.2 U | 2 U | | 370 | 1 U | 23 | 350 | 250 | 270 | 2.5 | 31 | | | | |
| 8/9/2004 | XX | 301XX38208 | 0.2 U | 2 U | | 390 | 1 U | 24 | 320 | 265 | 280 | 2.5 | 35 | | | | |
| 10/20/2004 | XX | 301XX38280 | 0.2 U | 2 U | | 420 | 1 U | 23 | 330 | 260 | 280 | 3.4 | 35 | | | | |
| 5/11/2005 | XX | GW301X00F | 0.2 U | 2 U | | 410 | 1 U | 27 | 360 | 270 | 290 | 4.1 | 42 | | | | |
| 7/27/2005 | XX | GW301X027 | 0.2 U | 2 U | | 440 | 1 U | 24 | 410 | 280 | 300 | 2.8 | 38 | | | | |
| 11/7/2005 | XX | GW301X03J | 0.2 U | 2 U | | 480 | 3 | 24 | 430 | 320 | 350 | 3.5 | 40 | | | | |
| 5/1/2006 | XX | GW301X08F | 0.2 U | 2 U | | 450 | 3.5 | 24 | 450 | 330 | 350 | 3.9 | 40 | | | | |
| 7/31/2006 | XX | GW301X073 | 0.2 U | 2 U | | 480 | 1 U | 26 | 500 | 330 | 360 | 5.1 | 41 | | | | |
| 10/26/2006 | XX | GW301X05B | 0.2 U | 2 U | | 498 | 1 U | 28 | 390 | 370 | 380 | 3.8 | 36 | | | | |
| 5/9/2007 | XX | GW301X0A7 | 0.5 U | 0.5 U | | 500 | 3.2 | 27 | 500 | 420 | 442 | 1.1 | 38 | | | | |
| 8/9/2007 | XX | GW301X0C0 | 0.2 U | 0.5 U | | 620 | 1 U | 26 | 560 | 400 | 440 | 24 | 42 | | | | |
| 10/30/2007 | XX | GW301X0DC | 0.2 U | 0.5 U | | 700 | 1 U | 30 | 670 | 490 | 530 | 8.2 | 50 | | | | |
| 10/30/2007 | XD | GWDP3X0F0 | 0.2 U | 0.5 U | | 680 | 1 U | 30 | 670 | | 530 | 7.8 | 50 | | | | |
| 6/3/2008 | XX | GW301X0G0 | 0.2 U | 0.5 U | | 660 | 1 U | 26 | 670 | 520 | 580 | 15 | 49 | | | | |
| 8/14/2008 | XX | GW301X0I0 | 0.2 U | 0.5 U | | 700 | 1 U | 25 | 560 | 540 | 570 | 9 | 49 | | | | |
| 8/14/2008 | XD | GWDP3X0H4 | 0.2 U | 0.5 U | | 670 | 1 U | 25 | 620 | | 570 | 9.3 | 49 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (301) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/21/2008 | XX | GW301X0J8 | 0.2 U | 0.5 U | | 760 | 1 U | 26 | 790 | 550 | 590 | 10 | 58 | | | | |
| 5/11/2009 | XX | GW301X118 | 0.2 U | 0.5 U | | 700 | 0.6 U | 27 | 760 | 550 | 590 | 12 | 61 | | | | |
| 8/10/2009 | XX | GW301X138 | 0.2 U | 0.5 U | | 770 | 0.6 U | 27 | 910 | 550 | 590 | 10 | 62 | | | | |
| 10/22/2009 | XX | GW301X14G | 0.2 U | 0.5 U | | 750 | 1 U | 29 | 690 | 570 | 600 | 15 | 71 | | | | |
| 10/22/2009 | XD | GWDP3X15G | 0.2 U | 0.5 U | | 780 | 1 U | 28 | 810 | | 600 | 14 | 73 | | | | |
| 6/1/2010 | XX | GW301X16H | 0.2 U | 0.5 U | | 780 | 1 U | 27 | 710 | 580 | 610 | 13 | 77 | | | | |
| 8/5/2010 | XX | GW301X18I | 0.2 U | 0.5 U | | 800 | 1.1 U | 25 | 760 | 590 | 630 | 11 | 77 | | | | |
| 10/18/2010 | XX | GW301X1A6 | 0.2 U | 0.5 U | | 850 | 1.2 U | 24 | 620 | 600 | 630 | 14 | 94 | | | | |
| 5/18/2011 | XX | GW301X1D9 | 0.2 U | 0.5 U | | 820 | 4.2 U | 27 | 710 | 640 | 640 | 13 | 90 | | | | |
| 8/9/2011 | XX | GW301X1F0 | 0.08 U | 0.2 U | | 890 | 0.38 U | 25 | 730 | 670 | 670 | 14 | 100 | | | | |
| 11/2/2011 | XX | GW301X1GB | 0.082 U | 0.2 U | | 810 | 0.55 J | 27 | 660 | 640 | 640 | 13 | 87 | | | | |
| 5/15/2012 | XX | GW301X1I5 | 0.2 U | 0.09 U | | 750 | 2.5 U | 31 | 680 | 570 | 570 | 8 | 77 | | | | |
| 8/14/2012 | XX | GW301X1JI | 0.2 U | 0.25 U | | 810 | 3.5 | 26 | 620 | 610 | 610 | 8.99 | 89 | | | | |
| 10/30/2012 | XX | GW301X21C | 0.2 U | 0.25 U | | 900 | 2.5 U | 25 | 790 | 680 | 680 | 8.9 | 99 | | | | |
| 5/22/2013 | XX | GW301X236 | 0.2 U | 0.25 U | | 960 | 2.5 U | 26 | 740 | 710 | 710 | 8.9 | 100 | | | | |
| 7/25/2013 | XX | GW301X250 | 0.2 U | 0.25 U | | 1000 | 2.5 U | 24 | 810 | 730 | 730 | 10 | 110 | | | | |
| 10/1/2013 | XX | GW301X26E | 0.2 U | 0.25 U | | 960 | 2.5 U | 26 | 740 | 700 | 700 | 9.5 | 100 | | | | |
| 6/4/2014 | XX | GW301X288 | 0.1 U | 0.05 U | | 1000 | 4 U | 28 | 921 | 770 | 780 | 9.4 | 100 | | | | |
| 8/20/2014 | XX | GW301X2A2 | 0.1 U | 0.05 U | | 1100 | 4 U | 28 | 1010 | 890 | 900 | 11 | 100 | | | | |
| 11/11/2014 | XX | GW301X2BG | 0.1 U | 0.05 U | | 1100 | 4 U | 28 | 854 | 830 | 830 | 12 | 110 | | | | |
| 6/3/2015 | XX | GW301X2DC | 0.1 U | 0.05 U | | 1100 | 4 U | 24 | 876 | 840 | 840 | 11 | 110 | | | | |
| 9/1/2015 | XX | GW301X2F7 | 0.1 U | 0.05 U | | 1200 | 4 U | 23 | 1030 | 820 | 820 | 13 | 100 | | | | |
| 11/4/2015 | XX | GW301X2H1 | 0.1 U | 0.05 U | | 1100 | 4 U | 22 | 930 | 850 | 850 | 11 | 110 | | | | |
| 6/15/2016 | XX | GW301X30B | 0.1 U | 0.05 U | | 1100 | 4 U | 25 | 954 | 850 | 850 | 11 | 110 | | | | |
| 9/20/2016 | XX | GW301X325 | 0.1 U | 0.05 U | | 1300 | 4 U | 26 | 971 | 910 | 910 | 13 | 110 | | | | |
| 11/10/2016 | XX | GW301X33J | 0.1 U | 0.05 U | | 1200 | 4 U | 24 | 1000 | 1100 | 1100 | 15 | 95 | | | | |
| 6/14/2017 | XX | GW301X35E | 0.1 U | 0.05 U | | 1200 | 4 U | 26 | 1080 | 960 | 960 | 14 | 97 | | | | |
| 8/29/2017 | XX | GW301X378 | 0.1 U | 0.05 U | | 1200 | 4 U | 24 | 1020 | 980 | 980 | 14 | 96 | | | | |
| 11/14/2017 | XX | GW301X392 | 0.1 U | 0.1 | | 1200 | 4 U | 29 | 948 | 970 | 970 | 16 | 87 | | | | |
| 6/19/2018 | XX | GW301X3AH | 0.1 U | 0.05 U | | 1200 | 4 U | 49 | 972 | 1000 | 1000 | 15 | 83 | | | | |
| 8/14/2018 | XX | GW301X3D6 | 0.1 U | 0.05 U | | 1200 | 4 U | 45 | 1010 | 1000 | 1000 | 16 | 91 | | | | |
| 11/28/2018 | XX | GW301X3E5 | 0.1 U | 0.05 U | | 1200 | 12 | 47 | 1050 | 1100 | 1100 | 17 | 82 | | | | |
| 6/5/2019 | XX | GW301X3G0 | 0.1 U | 0.05 U | | 1300 | 4 U | 44 | 1040 | 1000 | 1000 | 17 | 77 | | | | |
| 8/13/2019 | XX | GW301X3I9 | 0.1 U | 0.05 U | | 1200 | 4 U | 42 | 999 | 1000 | 1000 | 17 | 78 | | | | |
| 10/23/2019 | XX | GW301X3J8 | 0.1 U | 0.05 U | | 1200 | 4 U | 38 | 1020 | 1000 | 1000 | 17 | 69 | | | | |
| 6/16/2020 | XX | GW301X413 | 0.1 U | 0.05 U | | 1200 | 4 U | 34 | 984 | 1100 | 1100 | 15 | 61 | | | | |
| 8/4/2020 | XX | GW301X43C | 0.1 U | 0.05 U | | 1000 | 4 U | 34 | | 970 | 980 | 16 | 56 | | | | |
| 8/4/2020 | XX | GW301X43CR | | | | | | | 997 | | | | | | | | |
| 10/21/2020 | XX | GW301X44B | 0.1 U | 0.05 U | | 1000 | 4 U | 32 | 1080 | 1000 | 1000 | 16 | 59 | | | | |
| 6/22/2021 | XX | GW301X466 | 0.1 U | 0.05 U | | 1100 | 4 U | 27 | 977 | 1000 | 1000 | 15 | 53 | | | | |
| 9/22/2021 | XX | GW301X481 | 0.1 U | 0.05 U | | 1000 | 4 U | 30 | 946 | 1000 | 1000 | 16 | 58 | | | | |
| **302B** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 302BXX36649 | 0.1 U | 1 U | | 224 | 9 | 11.1 | 143.9 | 81 | 88.9 | 3.5 | 50.9 | | | | |
| 8/9/2000 | XX | 302BXX36747 | 0.1 U | 1 U | | 307 | 1 | 12.1 | 175.8 | 165 | 181.8 | 3.1 | 39.3 | | | | |
| 11/8/2000 | XX | 302BXX36838 | 0.1 U | 1 U | | 303 | 1 U | 12 | 153 | 144 | 147.5 | 4.3 | 52.1 | | | | |
| 5/16/2001 | XX | 302BXX37027 | 0.1 U | 1 U | | 368 | 1 | 14.5 | 223.2 | 210 | 230 | 4.1 | 47.5 | | | | |
| 7/31/2001 | XX | 302BXX37103 | 0.1 U | 1 U | | 300 | 1 | 12.8 | 189.7 | 158 | 158 | 7.4 | 46.5 | | | | |
| 10/23/2001 | XX | 302BXX37187 | 0.1 U | 1 U | | 314 | 2 | 14.8 | 177.4 | 158 | 162 | 4.3 | 53.4 | | | | |
| 5/21/2002 | XX | 302BXX37397 | 0.1 U | 1 U | | 394 | 1 U | 19 | 259.6 | 200 | 230 | 6.3 | 69.2 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(302B)**

| Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/7/2002 | XX | 302BXX37475 | 0.1 U | 1 U | | 438 | 4 | 17.7 | 288.1 | 265 | 290 | 14.7 | 49.9 |
| 10/23/2002 | XX | 302BXX37552 | 0.1 U | 1 U | | 362 | 1 U | 20 | 245.4 | 230 | 244 | 6.7 | 57.7 |
| 6/23/2003 | XX | 302BXX37795 | 0.2 U | 2 U | | 530 | 1 U | 39 | 460 | 325 | 350 | 13 | 50 |
| 8/12/2003 | XX | 302BXX37845 | 0.2 U | 2 U | | 460 | 1 U | 27 | 370 | 330 | 360 | 9.6 | 39 |
| 10/20/2003 | XX | 302BXX37914 | 0.27 | 2 U | | 500 | 1 U | 45 | 460 | 330 | 350 | 13 | 41 |
| 5/4/2004 | XX | 302BXX38111 | 0.2 U | 2 U | | 540 | 1 U | 63 | 540 | 370 | 390 | 24 | 41 |
| 8/5/2004 | XX | 302BXX38204 | 0.2 U | 2 U | | 520 | 1 U | 37 | 460 | 340 | 360 | 10 | 38 |
| 10/20/2004 | XX | 302BXX38280 | 0.2 U | 2 U | | 520 | 1 U | 36 | 490 | 325 | 350 | 16 | 40 |
| 5/11/2005 | XX | GW302B00G | 0.2 U | 2 U | | 600 | 1 U | 78 | 490 | 330 | 350 | 12 | 52 |
| 7/27/2005 | XX | GW302B028 | 0.2 U | 2 U | | 690 | 1 U | 59 | 570 | 390 | 390 | 12 | 43 |
| 11/7/2005 | XX | GW302B040 | 0.2 U | 2 U | | 600 | 3 | 63 | 520 | 390 | 410 | 13 | 50 |
| 5/1/2006 | XX | GW302B08G | 0.2 U | 2 U | | 620 | 1 U | 63 | 640 | 415 | 460 | 22 | 51 |
| 7/31/2006 | XX | GW302B074 | 0.2 U | 2 U | | 660 | 1 U | 61 | 630 | 450 | 480 | 17 | 49 |
| 10/25/2006 | XX | GW302B05C | 0.25 | 2 U | | 640 | 1 U | 53 | 620 | 480 | 500 | 13 | 45 |
| 5/9/2007 | XX | GW302B0A8 | 0.5 U | 0.5 U | | 610 | 1 U | 50 | 530 | 440 | 470 | 8.2 | 42 |
| 8/9/2007 | XX | GW302B0C1 | 0.2 U | 0.5 U | | 670 | 1 U | 46 | 550 | 385 | 400 | 34 | 42 |
| 10/30/2007 | XX | GW302B0DD | 0.2 U | 0.5 U | | 670 | 1 U | 41 | 630 | 450 | 490 | 16 | 48 |
| 6/2/2008 | XX | GW302B0G1 | 0.2 U | 0.5 U | | 640 | 1 U | 38 | 530 | 480 | 520 | 32 | 44 |
| 8/14/2008 | XX | GW302B0I1 | 0.2 U | 0.5 U | | 680 | 1 U | 37 | 570 | 530 | 560 | 23 | 47 |
| 10/21/2008 | XX | GW302B0J9 | 0.2 U | 0.5 U | | 680 | 1 U | 40 | 640 | 470 | 490 | 21 | 47 |
| 10/21/2008 | XD | GWDP3X108 | 0.2 U | 0.5 U | | 680 | 1 U | 40 | 660 | | 500 | 22 | 46 |
| 5/11/2009 | XX | GW302B119 | 0.2 U | 0.5 U | | 700 | 0.6 U | 35 | 720 | 540 | 560 | 28 | 44 |
| 8/10/2009 | XX | GW302B139 | 0.2 U | 0.5 U | | 720 | 0.6 U | 35 | 670 | 520 | 560 | 24 | 46 |
| 8/10/2009 | XD | GWDP3X12C | 0.2 U | 0.5 U | | 730 | 0.6 U | 35 | 680 | | 560 | 22 | 45 |
| 10/22/2009 | XX | GW302B14H | 0.2 U | 0.5 U | | 650 | 1 U | 39 | 520 | 490 | 520 | 22 | 50 |
| 6/1/2010 | XX | GW302B16I | 0.2 U | 0.5 U | | 700 | 1.1 U | 36 | 610 | 510 | 550 | 24 | 49 |
| 8/4/2010 | XX | GW302B18J | 0.2 U | 0.5 UH | | 680 | 1 U | 41 | 570 | 520 | 550 | 22 | 52 |
| 10/14/2010 | XX | GW302B1A7 | 0.2 U | 0.5 U | | 750 | 1.1 U | 37 | 490 | 530 | 570 | 22 | 56 |
| 5/18/2011 | XX | GW302B1DA | 0.2 U | 0.5 U | | 640 | 5 U | 26 | 510 | 540 | 540 | 22 | 60 |
| 8/8/2011 | XX | GW302B1F1 | 0.08 U | 0.2 U | | 770 | 0.39 U | 30 | 300 | 600 | 600 | 22 | 69 |
| 11/1/2011 | XX | GW302B1GC | 0.082 U | 0.2 U | | 830 | 0.32 U | 24 | 650 | 670 | 670 | 28 | 63 |
| 5/15/2012 | XX | GW302B1I6 | 0.2 U | 0.09 U | | 760 | 2.5 U | 17 | 640 | 650 | 650 | 19 | 57 |
| 8/16/2012 | XX | GW302B1JJ | 0.2 U | 0.25 U | | 820 | 2.5 U | 25 | 540 | 630 | 630 | 19.6 | 62 |
| 10/30/2012 | XX | GW302B21D | 0.2 U | 0.25 U | | 790 | 2.5 U | 20 | 690 | 670 | 670 | 20 | 63 |
| 5/21/2013 | XX | GW302B237 | 0.2 U | 0.25 U | | 870 | 2.5 U | 16 | 410 | 720 | 720 | 21 | 70 |
| 7/25/2013 | XX | GW302B251 | 0.2 U | 0.25 U | | 940 | 2.5 U | 17 | 670 | 730 | 730 | 22 | 70 |
| 10/1/2013 | XX | GW302B26F | 0.2 U | 0.25 U | | 910 | 2.5 U | 19 | 660 | 700 | 700 | 21 | 75 |
| 6/3/2014 | XX | GW302B289 | 0.1 U | 0.23 | | 840 | 4 U | 19 | 654 | 670 | 680 | 18 | 64 |
| 8/20/2014 | XX | GW302B2A3 | 0.11 | 0.14 | | 850 | 4 U | 22 | 716 | 700 | 700 | 16 | 70 |
| 11/11/2014 | XX | GW302B2BH | 0.1 U | 0.14 | | 860 | 4 U | 18 | 642 | 660 | 660 | 18 | 72 |
| 6/3/2015 | XX | GW302B2DD | 0.11 | 0.05 U | | 960 | 4 U | 11 | 712 | 720 | 720 | 21 | 78 |
| 9/1/2015 | XX | GW302B2F8 | 0.15 | 0.46 | | 900 | 4 U | 18 | 768 | 650 | 650 | 22 | 75 |
| 11/4/2015 | XX | GW302B2H2 | 0.13 | 0.05 U | | 960 | 4 U | 1 U | 745 | 770 | 770 | 21 | 80 |
| 6/15/2016 | XX | GW302B30C | 0.67 | 0.05 U | | 990 | 4 U | 7.9 | 764 | 740 | 740 | 20 | 82 |
| 9/21/2016 | XX | GW302B326 | 0.31 | 0.05 U | | 930 | 4 U | 13 | 678 | 720 | 720 | 19 | 75 |
| 11/8/2016 | XX | GW302B340 | 0.16 | 0.1 | | 850 | 4 U | 18 | 706 | 770 | 770 | 20 | 73 |
| 6/13/2017 | XX | GW302B35F | 0.46 | 0.05 U | | 1000 | 4 U | 14 | 763 | 760 | 760 | 21 | 74 |
| 8/29/2017 | XX | GW302B379 | 0.34 | 0.05 U | | 950 | 4 U | 14 | 719 | 740 | 740 | 20 | 75 |
| 11/14/2017 | XX | GW302B393 | 0.4 | 0.05 U | | 960 | 4 U | 8.6 | 738 | 780 | 780 | 22 | 72 |
| 6/19/2018 | XX | GW302B3AI | 0.69 | 0.11 | | 940 | 4 U | 11 | 758 | 810 | 810 | 19 | 68 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (302B) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/14/2018 | XX | GW302B3D7 | 0.79 | 0.05 U | | 990 | 4 U | 12 | 733 | 840 | 840 | 21 | 79 | | | | |
| 11/28/2018 | XX | GW302B3E6 | 0.58 | 0.05 U | | 950 | 4 U | 10 | 754 | 840 | 840 | 23 | 70 | | | | |
| 6/5/2019 | XX | GW302B3G1 | 0.81 | 0.068 | | 1000 | 4.4 | 1 U | 837 | 880 | 880 | 25 | 69 | | | | |
| 8/13/2019 | XX | GW302B3IA | 1.1 | 0.05 U | | 1100 | 4 U | 1 U | 863 | 900 | 900 | 28 | 76 | | | | |
| 10/23/2019 | XX | GW302B3J9 | 0.86 | 0.05 U | | 1000 | 4 U | 13 | 861 | 820 | 820 | 24 | 72 | | | | |
| 6/17/2020 | XX | GW302B414 | 0.85 | 0.05 U | | 990 | 4 U | 1 U | 808 | 940 | 940 | 25 | 65 | | | | |
| 8/5/2020 | XX | GW302B43D | 0.91 | 0.05 U | | 930 | 6 | 13 | 2160 | 820 | 820 | 24 | 65 | | | | |
| 10/21/2020 | XX | GW302B44C | 0.7 | 0.05 U | | 1000 | 4 U | 1 U | 471 | 880 | 880 | 26 | 68 | | | | |
| 6/22/2021 | XX | GW302B467 | 0.96 | 0.05 U | | 1100 | 4 U | 1 U | 891 | 940 | 940 | 28 | 67 | | | | |
| 9/22/2021 | XX | GW302B482 | 1.1 | 0.05 U | | 1100 | 4 U | 1 U | 908 | 980 | 980 | 28 | 73 | | | | |
| **302C** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 302CXX36649 | 0.1 U | 1 U | | 189 | 23 | 9.6 | 105.5 | 39 | 47.3 | 2.6 | 55 | | | | |
| 8/9/2000 | XX | 302CXX36747 | 0.1 U | 1 U | | 293 | 1 | 15.5 | 117 | 120 | 132.3 | 4.3 | 59.8 | | | | |
| 11/8/2000 | XX | 302CXX36838 | 0.1 U | 1 U | | 281 | 1 U | 12.2 | 144.9 | 135 | 135.3 | 4.7 | 55.4 | | | | |
| 5/16/2001 | XX | 302CXX37027 | 0.1 U | 1 U | | 294 | 1 | 14.1 | 144 | 155 | 160 | 6.5 | 55.2 | | | | |
| 7/31/2001 | XX | 302CXX37103 | 0.1 U | 1 U | | 308 | 2 | 12.1 | 138 | 154 | 156 | 8.1 | 44.4 | | | | |
| 10/23/2001 | XX | 302CXX37187 | 0.1 U | 1 U | | 327 | 2 | 14.5 | 210.8 | 165 | 174 | 5.7 | 58.3 | | | | |
| 5/21/2002 | XX | 302CXX37397 | 0.1 U | 1 U | | 270 | 1 U | 19.4 | 176.5 | 110 | 118 | 5.1 | 60.4 | | | | |
| 8/7/2002 | XX | 302CXX37475 | 0.1 U | 1 U | | 465 | 1 U | 21.5 | 283 | 240 | 264 | 11.8 | 74.3 | | | | |
| 10/23/2002 | XX | 302CXX37552 | 0.1 U | 1 U | | 453 | 1 U | 29.6 | 299.5 | 270 | 296 | 11.9 | 71.1 | | | | |
| 6/23/2003 | XX | 302CXX37795 | 0.2 U | 2 U | | 410 | 1 U | 46 | 370 | 240 | 260 | 13 | 51 | | | | |
| 8/12/2003 | XX | 302CXX37845 | 0.2 U | 2 U | | 540 | 1 U | 48 | 520 | 370 | 390 | 19 | 44 | | | | |
| 10/20/2003 | XX | 302CXX37914 | 0.2 U | 2 U | | 400 | 1 U | 50 | 340 | 220 | 240 | 12 | 41 | | | | |
| 5/4/2004 | XX | 302CXX38111 | 0.2 U | 2 U | | 410 | 1 U | 69 | 420 | 250 | 270 | 14 | 40 | | | | |
| 8/5/2004 | XX | 302CXX38204 | 0.27 | 2 U | | 510 | 1 U | 56 | 690 | 315 | 340 | 12 | 34 | | | | |
| 10/20/2004 | XX | 302CXX38280 | 0.2 U | 2 U | | 490 | 1 U | 55 | 420 | 280 | 310 | 14 | 140 | | | | |
| 5/11/2005 | XX | GW302C00H | 0.2 U | 2 U | | 470 | 1 U | 79 | 390 | 230 | 250 | 12 | 55 | | | | |
| 7/27/2005 | XX | GW302C029 | 0.2 U | 2 U | | 630 | 1 U | 78 | 570 | 380 | 400 | 12 | 53 | | | | |
| 11/7/2005 | XX | GW302C041 | 0.2 U | 2 U | | 580 | 3 | 74 | 490 | 350 | 370 | 16 | 56 | | | | |
| 5/1/2006 | XX | GW302C08H | 0.2 U | 2 U | | 580 | 1.5 | 66 | 540 | 370 | 390 | 18 | 55 | | | | |
| 7/31/2006 | XX | GW302C075 | 0.2 U | 2 U | | 640 | 1 U | 57 | 610 | 460 | 490 | 16 | 48 | | | | |
| 10/25/2006 | XX | GW302C05D | 0.2 U | 2 U | | 560 | 1 U | 55 | 380 | 340 | 360 | 14 | 39 | | | | |
| 5/9/2007 | XX | GW302C0A9 | 0.5 U | 0.5 U | | 550 | 1 U | 51 | 450 | 425 | 450 | 9.4 | 42 | | | | |
| 8/9/2007 | XX | GW302C0C2 | 0.26 | 0.5 U | | 640 | 2 | 41 | 490 | 390 | 410 | 48 | 40 | | | | |
| 8/9/2007 | XD | GWDP3X0EG | 0.24 | 0.5 U | | 620 | 1.6 | 41 | 490 | | 410 | 48 | 40 | | | | |
| 10/30/2007 | XX | GW302C0DE | 0.2 U | 0.5 U | | 600 | 1 U | 43 | 530 | 400 | 420 | 18 | 44 | | | | |
| 6/2/2008 | XX | GW302C0G2 | 0.2 U | 0.5 U | | 670 | 1 U | 35 | 600 | 520 | 580 | 32 | 46 | | | | |
| 6/2/2008 | XD | GWDP3X0F4 | 0.2 U | 0.5 U | | 670 | 1 U | 36 | 570 | | 560 | 31 | 46 | | | | |
| 8/14/2008 | XX | GW302C0I2 | 0.2 U | 0.5 U | | 610 | 1 U | 34 | 470 | 470 | 500 | 24 | 43 | | | | |
| 10/21/2008 | XX | GW302C0JA | 0.2 U | 0.5 U | | 620 | 1.2 | 32 | 590 | 470 | 490 | 22 | 38 | | | | |
| 5/11/2009 | XX | GW302C11A | 0.2 U | 0.5 U | | 640 | 0.6 U | 32 | 540 | 525 | 530 | 18 | 40 | | | | |
| 8/10/2009 | XX | GW302C13A | 0.2 U | 0.5 U | | 670 | 0.6 U | 33 | 480 | 490 | 540 | 26 | 45 | | | | |
| 10/22/2009 | XX | GW302C14I | 0.2 U | 0.5 U | | 580 | 1 U | 31 | 460 | 440 | 460 | 22 | 35 | | | | |
| 6/1/2010 | XX | GWXXXX17F | 0.2 U | 0.5 U | | 700 | 1 U | 26 | 650 | 510 | 550 | 25 | 44 | | | | |
| 6/1/2010 | XD | GWDP3X161 | 0.2 U | 0.5 U | | 680 | 1 U | 26 | 680 | | 550 | 24 | 44 | | | | |
| 8/4/2010 | XX | GW302C190 | 0.2 U | 0.5 UH | | 600 | 1.1 U | 23 | 490 | 480 | 510 | 20 | 42 | | | | |
| 10/14/2010 | XX | GW302C1A8 | 0.2 U | 0.5 U | | 630 | 1.3 U | 23 | 450 | 505 | 530 | 23 | 48 | | | | |
| 5/18/2011 | XX | GW302C1DB | 0.2 U | 0.5 U | | 320 | 5 U | 18 | 280 | 290 | 290 | 12 | 26 | | | | |
| 5/18/2011 | XD | GWXXXX1EH | 0.2 U | 0.5 U | | 320 | 5 U | 18 | 270 | 290 | 290 | 12 | 25 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(302C)**

| Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/8/2011 | XX | GW302C1F2 | 0.08 U | 0.2 U | | 800 | 1.3 J | 19 | 530 | 650 | 650 | 28 | 71 |
| 11/1/2011 | XX | GW302C1GD | 0.082 U | 0.2 U | | 750 | 0.32 U | 17 | 560 | 650 | 650 | 28 | 57 |
| 11/1/2011 | XD | GWDP1X1HI | 0.082 U | 0.2 U | | 780 | 0.32 U | 17 | 590 | 670 | 670 | 30 | 57 |
| 5/15/2012 | XX | GW302C1I7 | 0.2 U | 0.09 U | | 470 | 2.5 U | 12 | 380 | 430 | 430 | 14 | 34 |
| 5/15/2012 | XD | GWDP2X1JD | 0.2 U | 0.09 U | | 480 | 2.5 U | 14 | 370 | 430 | 430 | 14 | 33 |
| 8/16/2012 | XX | GW302C200 | 0.2 U | 0.25 U | | 800 | 2.5 U | 13 | 580 | 640 | 640 | 24 | 64 |
| 8/16/2012 | XD | GWDP2X216 | 0.2 U | 0.25 U | | 810 | 2.5 U | 13 | 620 | 650 | 650 | 24 | 62 |
| 10/30/2012 | XX | GW302C21E | 0.2 U | 0.25 U | | 760 | 2.6 U | 12 | 650 | 670 | 670 | 20 | 60 |
| 10/30/2012 | XD | GWDP3X231 | 0.2 U | 0.25 U | | 770 | 2.5 U | 12 | 590 | 650 | 650 | 20 | 59 |
| 5/21/2013 | XX | GW302C238 | 0.2 U | 0.25 U | | 860 | 2.5 U | 12 | 650 | 750 | 750 | 21 | 70 |
| 7/25/2013 | XX | GW302C252 | 0.2 U | 0.25 U | | 940 | 2.5 U | 12 | 650 | 740 | 740 | 22 | 69 |
| 7/25/2013 | XD | GWDP1X267 | 0.2 U | 0.25 U | | 960 | 2.5 U | 12 | 640 | 770 | 770 | 23 | 71 |
| 10/1/2013 | XX | GW302C26G | 0.2 U | 0.25 U | | 800 | 2.5 U | 10 | 620 | 680 | 680 | 21 | 58 |
| 10/1/2013 | XD | GWDP1X281 | 0.2 U | 0.25 U | | 800 | 2.5 U | 10 | 610 | 660 | 660 | 21 | 58 |
| 6/3/2014 | XX | GW302C28A | 0.18 | 0.05 U | | 860 | 4 U | 9 | 636 | 700 | 700 | 19 | 62 |
| 8/20/2014 | XX | GW302C2A4 | 0.12 | 0.05 U | | 740 | 4 U | 22 | 575 | 620 | 620 | 17 | 52 |
| 8/20/2014 | XD | GWDP3X2BB | 0.12 | 0.05 U | | 730 | 4 U | 15 | 551 | 630 | 630 | 17 | 53 |
| 11/11/2014 | XX | GW302C2BI | 0.68 | 0.05 U | | 760 | 4 U | 6.2 | 595 | 670 | 670 | 19 | 64 |
| 11/11/2014 | XD | GWDP1X2D3 | 0.66 | 0.05 U | | 800 | 4 U | 5.5 | 589 | 650 | 660 | 19 | 63 |
| 6/3/2015 | XX | GW302C2DE | 0.98 | 0.05 U | | 930 | 4 U | 1.5 | 631 | 730 | 730 | 20 | 71 |
| 9/1/2015 | XX | GW302C2F9 | 0.3 | 0.05 U | | 820 | 4 U | 5.4 | 617 | 650 | 650 | 19 | 56 |
| 9/1/2015 | XD | GWDP3X2GG | 0.3 | 0.05 U | | 830 | 4 U | 4.8 | 577 | 660 | 660 | 19 | 57 |
| 11/4/2015 | XX | GW302C2H3 | 1.4 | 0.05 U | | 860 | 4 U | 1 U | 667 | 710 | 710 | 21 | 66 |
| 11/4/2015 | XD | GWDP1X2I8 | 1.4 | 0.05 U | | 870 | 4 U | 1 U | 688 | 700 | 700 | 21 | 63 |
| 6/15/2016 | XX | GW302C30D | 0.32 | 0.05 U | | 970 | 4 U | 1 U | 731 | 770 | 770 | 20 | 74 |
| 9/21/2016 | XD | GWDP3X33E | 0.32 | 0.05 U | | 810 | 4 U | 1 U | 582 | 640 | 640 | 19 | 55 |
| 9/21/2016 | XX | GW302C327 | 0.32 | 0.05 U | | 800 | 4 U | 1 U | 563 | 640 | 640 | 19 | 53 |
| 11/8/2016 | XD | GWDP1X356 | 0.82 | 0.05 U | | 790 | 4 U | 1.7 | 636 | 740 | 740 | 22 | 63 |
| 11/8/2016 | XX | GW302C341 | 0.83 | 0.05 U | | 820 | 4 U | 1.3 | 674 | 740 | 740 | 22 | 64 |
| 6/13/2017 | XX | GW302C35G | 1.2 | 0.05 U | | 1000 | 4 U | 1 U | 728 | 810 | 810 | 24 | 67 |
| 8/29/2017 | XD | GWDP3X38H | 0.75 | 0.05 U | | 830 | 4 U | 1 U | 623 | 710 | 710 | 20 | 54 |
| 8/29/2017 | XX | GW302C37A | 0.7 | 0.05 U | | 840 | 4 U | 1 U | 626 | 710 | 710 | 19 | 52 |
| 11/14/2017 | XD | GWDP1X3A9 | 2.4 | 0.05 U | | 880 | 4 U | 1 U | 566 | 730 | 730 | 22 | 55 |
| 11/14/2017 | XX | GW302C394 | 2.3 | 0.05 U | | 880 | 4 U | 1 U | 590 | 720 | 720 | 22 | 55 |
| 6/19/2018 | XX | GW302C3AJ | 1.5 | 0.05 U | | 1000 | 4 U | 1 U | 744 | 880 | 880 | 24 | 62 |
| 8/14/2018 | XD | GWDP3X3D1 | 1.6 | 0.05 U | | 880 | 4 U | 1 U | 654 | 780 | 780 | 21 | 59 |
| 8/14/2018 | XX | GW302C3D8 | 1.5 | 0.05 U | | 910 | 4 U | 1 U | 658 | 790 | 790 | 22 | 57 |
| 11/28/2018 | XD | GWDP1X3FC | 3.6 | 0.05 U | | 1000 | 4 U | 1 U | 772 | 890 | 890 | 27 | 61 |
| 11/28/2018 | XX | GW302C3E7 | 3.6 | 0.05 U | | 1000 | 4 U | 1 U | 756 | 880 | 880 | 26 | 62 |
| 6/5/2019 | XX | GW302C3G2 | 4 | 0.05 U | | 1100 | 4 U | 1 U | 767 | 870 | 880 | 28 | 60 |
| 8/13/2019 | XD | GWDP3X3I4 | 0.65 | 0.05 U | | 980 | 4 U | 1 U | 700 | 900 | 900 | 27 | 61 |
| 8/13/2019 | XX | GW302C3IB | 0.72 | 0.05 U | | 990 | 4 U | 1 U | 736 | 890 | 890 | 27 | 60 |
| 10/23/2019 | XD | GWDP1X40F | 1.9 | 0.05 U | | 860 | 6 | 1 U | 692 | 750 | 750 | 23 | 47 |
| 10/23/2019 | XX | GW302C3JA | 0.71 | 0.05 U | | 860 | 4 U | 6.1 | 661 | 730 | 730 | 22 | 45 |
| 6/17/2020 | XX | GW302C415 | 1.9 | 0.05 U | | 1000 | 4 U | 1 U | 801 | 1000 | 1000 | 27 | 54 |
| 8/5/2020 | XD | GWDP3X437 | 1 | 0.05 U | | 900 | 4.8 | 1.4 | 775 | 800 | 800 | 24 | 46 |
| 8/5/2020 | XX | GW302C43E | 1.5 | 0.05 U | | 900 | 4 U | 1.3 | 735 | 820 | 820 | 24 | 44 |
| 10/21/2020 | XD | GWDP1X45I | 5.3 | 0.05 U | | 1000 | 4 U | 6.4 | 824 | 920 | 920 | 30 | 53 |
| 10/21/2020 | XX | GW302C44D | 5.3 | 0.05 U | | 970 | 4 U | 1 U | 723 | 910 | 910 | 30 | 52 |
| 6/22/2021 | XX | GW302C468 | 1.9 | 0.05 U | | 1200 | 5.2 | 1 U | 977 | 1100 | 1100 | 33 | 60 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (302C) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 9/22/2021 | XX | GW302C483 | 3.3 | 0.05 U | | 1000 | 4 U | 1 U | 812 | 990 | 990 | 29 | 55 | | | | |
| 9/22/2021 | XD | GWDP1X498 | 3.4 | 0.05 U | | 1100 | 4 U | 1 U | 782 | 990 | 990 | 29 | 54 | | | | |
| **303A** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 303AXX36643 | 8.15 | 6.3 | | 815 | 7 | 13.8 | 693.9 | 680 | 747.4 | 10.1 | 33 | | | | |
| 8/2/2000 | XX | 303AXX36740 | 7.83 | 2.7 | | 853 | 6 | 15.7 | 665.3 | 680 | 773.7 | 10.4 | 44.4 | | | | |
| 10/25/2000 | XX | 303AXX36824 | 5.21 | 3.5 | | 1262 | 4 | 12.4 | 1065.1 | 1180 | 1254.9 | 22.7 | 75.8 | | | | |
| 5/9/2001 | XX | 303AXX37020 | 11.7 | 8 | | 1537 | 6 | 12.4 | 1260.7 | 1470 | 1470 | 25.4 | 79.8 | | | | |
| 7/25/2001 | XX | 303AXX37097 | 5.48 | 4.1 | | 1120 | 4 | 14.5 | 927.8 | 1030 | 1035 | 11.2 | 43.8 | | | | |
| 10/17/2001 | XX | 303AXX37181 | 6.52 | 1.2 | | 1476 | 4 | 13.2 | 1274.3 | 1385 | 1395 | 11.9 | 83.9 | | | | |
| 5/16/2002 | XX | 303AXX37392 | 11.2 | 3.6 | | 993 | 1 | 13 | 829 | 840 | 916 | 10.7 | 39.2 | | | | |
| 8/1/2002 | XX | 303AXX37469 | 10.78 | 7.1 | | 920 | 4 | 20.7 | 728.3 | 770 | 842 | 158.5 | 39.1 | | | | |
| 10/17/2002 | XX | 303AXX37546 | 9.66 | 1.2 | | 1104 | 1 | 21.4 | 863.4 | 1000 | 1040 | 14 | 61.9 | | | | |
| 6/23/2003 | XX | 303AXX37795 | 12 | 7.7 | | 820 | 1 U | 16 | 700 | 740 | 760 | 9.4 | 28 | | | | |
| 8/19/2003 | XX | 303AXX37852 | 13 | 3.1 | | 870 | 1 U | 14 | 800 | 790 | 830 | 10 | 29 | | | | |
| 10/14/2003 | XX | 303AXX37908 | 15 | 2 U | | 1000 | 1 U | 20 | 980 | 920 | 1000 | 15 | 37 | | | | |
| 5/3/2004 | XX | 303AXX38110 | 16 | 2.4 | | 920 | 1 U | 21 | 1000 | 820 | 840 | 12 | 31 | | | | |
| 8/17/2004 | XX | 303AXX38216 | 17 | 2 U | | 1000 | 1 U | 18 | 990 | 930 | 1000 | 15 | 35 | | | | |
| 10/19/2004 | XX | 303AXX38279 | 18 | 2 U | | 1100 | 1 U | 14 | 1200 | 1120 | 1200 | 27 | 42 | | | | |
| 5/18/2005 | XX | GW303A00I | 24 | 3 | | 930 | 1 U | 15 | 1000 | 600 | 200 | 12 | 31 | | | | |
| 8/15/2005 | XX | GW303A02A | 15 | 2.3 | | 690 | 1.5 | 16 | 710 | 180 | 650 | 7.4 | 24 | | | | |
| 11/3/2005 | XX | GW303A042 | 12 | 2 U | | 970 | 6.5 | 14 | 970 | 960 | 1000 | 13 | 46 | | | | |
| 5/11/2006 | XX | GW303A08I | 12 | 2 U | | 600 | 1 U | 19 | 690 | 520 | 580 | 8.7 | 25 | | | | |
| 7/26/2006 | XX | GW303A076 | 10 | 2 U | | 580 | 1 U | 18 | 640 | 540 | 590 | 7.2 | 19 | | | | |
| 10/24/2006 | XX | GW303A05E | 11 | 2 U | | 770 | 1 U | 18 | 640 | 720 | 750 | 11 | 32 | | | | |
| 5/15/2007 | XX | GW303A0AA | 9.3 | 2 U | | 810 | 1 U | 15 | 660 | 840 | 890 | 9.9 | 24 | | | | |
| 8/15/2007 | XX | GW303A0C3 | 8.4 | 0.56 | | 690 | 1 U | 16 | 540 | 550 | 590 | 29 | 23 | | | | |
| 8/15/2007 | XD | GWDP2X0EF | 8.7 | 0.56 | | 700 | 1 U | 16 | 540 | | 610 | 21 | 23 | | | | |
| 10/29/2007 | XX | GW303A0DF | 6.1 | 0.5 U | | 970 | 1 U | 14 | 1000 | 900 | 950 | 23 | 42 | | | | |
| 6/2/2008 | XX | GW303A0G3 | 7.9 | 1.6 | | 660 | 1 U | 17 | 640 | 640 | 690 | 8 | 20 | | | | |
| 8/13/2008 | XX | GW303A0I3 | 7.1 | 1.1 | | 560 | 1 U | 17 | 440 | 530 | 580 | 7.4 | 14 | | | | |
| 10/20/2008 | XX | GW303A0JB | 6.3 | 0.78 | | 590 | 1 U | 18 | 470 | 530 | 570 | 9.7 | 19 | | | | |
| 5/5/2009 | XX | GW303A11B | 8.5 | 0.86 | | 730 | 0.6 U | 15 | 780 | 690 | 730 | 15 | 19 | | | | |
| 8/6/2009 | XX | GW303A13B | 7.6 | 3.1 | | 580 | 2 U | 41 | 650 | 520 | 560 | 9.7 | 38 | | | | |
| 10/21/2009 | XX | GW303A14J | 6.8 | 1 | | 560 | 1 U | 16 | 390 | 480 | 510 | 10 | 15 | | | | |
| 5/27/2010 | XX | GW303A170 | 6.6 | 2 | | 510 | 1.1 U | 18 | 530 | 470 | 490 | 8.3 | 11 | | | | |
| 8/4/2010 | XX | GW303A191 | 7.5 | 0.55 H | | 530 | 1 U | 14 | 530 | 540 | 560 | 12 | 16 | | | | |
| 10/14/2010 | XX | GW303A1A9 | 4.8 | 0.5 U | | 710 | 1.2 | 14 | 540 | 730 | 750 | 15 | 26 | | | | |
| 5/17/2011 | XX | GW303A1E5 | 6.5 | 2.8 | | 500 | 4.2 U | 11 | 420 | 490 | 490 | 9.3 | 8.8 | | | | |
| 8/9/2011 | XX | GW303A1FG | 6.6 | 1.4 | | 390 | 0.38 U | 14 | 310 | 380 | 380 | 7.6 | 9.4 | | | | |
| 11/3/2011 | XX | GW303A1H7 | 7.9 | 0.46 J | | 540 | 0.32 U | 14 | 440 | 560 | 560 | 13 | 15 | | | | |
| 5/17/2012 | XX | GW303A1J1 | 7.9 | 1.4 | | 300 | 2.5 U | 13 | 450 | 490 | 490 | 6.99 | 8.6 | | | | |
| 8/15/2012 | XX | GW303A20E | 7.1 | 0.83 | | 480 | 2.5 U | 15 | 400 | 490 | 490 | 6.82 | 9.5 | | | | |
| 11/1/2012 | XX | GW303A228 | 8.5 | 0.25 U | | 550 | 2.5 U | 12 | 510 | 530 | 530 | 8.7 | 15 | | | | |
| 5/21/2013 | XX | GW303A242 | 6.3 | 1.7 | | 460 | 2.5 U | 16 | 390 | 480 | 480 | 5.2 | 8.6 | | | | |
| 7/24/2013 | XX | GW303A25G | 6.6 | 2.1 | | 460 | 2.5 U | 15 | 320 | 440 | 440 | 4.8 | 7.3 | | | | |
| 10/2/2013 | XX | GW303A27A | 6.6 | 0.41 | | 430 | 2.5 U | 15 | 340 | 430 | 430 | 4.8 | 9.2 | | | | |
| 6/3/2014 | XX | GW303A294 | 6 | 2.5 | | 500 | 4 U | 13 | 388 | 440 | 440 | 5.3 | 9.6 | | | | |
| 8/20/2014 | XX | GW303A2AI | 6.7 | 0.57 | | 450 | 4 U | 13 | 363 | 450 | 450 | 5.1 | 11 | | | | |
| 11/12/2014 | XX | GW303A2CC | 9.2 | 0.05 U | | 620 | 4 U | 10 | 511 | 610 | 610 | 7.8 | 17 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (303A) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 6/3/2015 | XX | GW303A2E8 | 6.5 | 2.3 | | 430 | 4 U | 10 | 322 | 400 | 400 | 4.8 | 9 | | | | |
| 9/1/2015 | XX | GW303A2G3 | 6.3 | 0.86 | | 300 | 4 U | 11 | 305 | 360 | 360 | 4.6 | 8 | | | | |
| 11/3/2015 | XX | GW303A2HH | 7.1 | 0.24 | | 500 | 4 U | 15 | 401 | 480 | 480 | 6.3 | 13 | | | | |
| 6/15/2016 | XX | GW303A317 | 4.4 | 2.6 | | 350 | 4 U | 15 | 255 | 270 | 270 | 2.9 | 5.8 | | | | |
| 9/20/2016 | XX | GW303A331 | 5.9 | 0.093 | | 350 | 4 U | 14 | 320 | 370 | 370 | 4.9 | 13 | | | | |
| 11/8/2016 | XX | GW303A34F | 6.1 | 0.05 U | | 550 | 4 U | 14 | 434 | 630 | 630 | 7.1 | 19 | | | | |
| 6/13/2017 | XX | GW303A36A | 5.3 | 1.2 | | 420 | 4 U | 13 | 304 | 370 | 370 | 4.5 | 7.7 | | | | |
| 8/30/2017 | XX | GW303A384 | 5.1 | 0.76 | | 380 | 4 U | 13 | 289 | 360 | 360 | 3.9 | 7.8 | | | | |
| 11/15/2017 | XX | GW303A39I | 6.3 | 0.05 U | | 510 | 4 U | 11 | 461 | 510 | 510 | 7.2 | 17 | | | | |
| 6/20/2018 | XX | GW303A3BD | 5.1 | 2.1 | | 360 | 4 U | 14 | 292 | 330 | 330 | 3.7 | 5.3 | | | | |
| 8/15/2018 | XX | GW303A3E2 | 5.1 | 0.05 U | | 360 | 4 U | 15 | 263 | 340 | 340 | 4 | 6.7 | | | | |
| 11/27/2018 | XX | GW303A3F1 | 7.5 | 0.66 | | 690 | 4 U | 11 | 570 | 690 | 690 | 10 | 20 | | | | |
| 6/4/2019 | XX | GW303A3GG | 5 | 2.5 | | 410 | 4 U | 12 | 286 | 350 | 350 | 4.7 | 5.9 | | | | |
| 8/14/2019 | XD | GWDP1X3I2 | 5.3 | 1.1 | | 360 | 4 U | 15 | 240 | 320 | 320 | 3.9 | 6.4 | | | | |
| 8/14/2019 | XX | GW303A3J5 | 5.3 | 0.94 | | 350 | 4 U | 16 | 221 | 350 | 350 | 3.9 | 6.9 | | | | |
| 10/22/2019 | XX | GW303A404 | 5.7 | 0.05 U | | 430 | 4 U | 12 | 330 | 380 | 380 | 5.9 | 11 | | | | |
| 6/16/2020 | XX | GW303A41J | 5.6 | 2.3 | | 400 | 4 U | 9 | 318 | 400 | 400 | 4.9 | 4.2 | | | | |
| 8/4/2020 | XD | GWDP1X435 | 5.7 | 0.74 | | 360 | 4 U | 11 | | 380 | 380 | 4.9 | 5.8 | | | | |
| 8/4/2020 | XD | GWDP1X435R | | | | | | | 326 | | | | | | | | |
| 8/4/2020 | XX | GW303A448 | 5.7 | 0.96 | | 340 | 4 U | 10 | | 360 | 360 | 4.8 | 5 | | | | |
| 8/4/2020 | XX | GW303A448R | | | | | | | 328 | | | | | | | | |
| 10/20/2020 | XX | GW303A457 | 7.4 | 0.05 U | | 510 | 4 U | 9.9 | 462 | 520 | 520 | 7.7 | 17 | | | | |
| 6/22/2021 | XX | GW303A472 | 5.7 | 2.1 | | 380 | 4 U | 13 | 331 | 370 | 370 | 5.3 | 5.8 | | | | |
| 9/21/2021 | XX | GW303A48H | 6.2 | 0.064 | | 440 | 4 U | 11 | 386 | 500 | 500 | 6.3 | 12 | | | | |
| **303B** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 303BXX36643 | 5.36 | 8 | | 444 | 35 | 8.1 | 349.6 | 300 | 364.6 | 5 | 18 | | | | |
| 8/2/2000 | XX | 303BXX36740 | 4.94 | 2.8 | | 826 | 1 | 12.1 | 675.3 | 700 | 784.8 | 12.7 | 51.6 | | | | |
| 10/25/2000 | XX | 303BXX36824 | 3.92 | 5.1 | | 1605 | 7 | 7.6 | 1337.8 | 1480 | 1545.3 | 30.5 | 85.4 | | | | |
| 5/9/2001 | XX | 303BXX37020 | 10.2 | 12.5 | | 1051 | 1 | 8.1 | 733 | 950 | 982.5 | 14 | 49.6 | | | | |
| 7/25/2001 | XX | 303BXX37097 | 6.26 | 3.6 | | 1143 | 2 | 10.7 | 890.3 | 860 | 930 | 16.4 | 51.1 | | | | |
| 10/17/2001 | XX | 303BXX37181 | 8.7 | 5.7 | | 1604 | 5 | 11.3 | 1392.2 | 1514 | 1523 | 24.4 | 86.1 | | | | |
| 5/16/2002 | XX | 303BXX37392 | 7.28 | 8.2 | | 673 | 1 | 8.3 | 505.3 | 485 | 560 | 1 U | 20.6 | | | | |
| 8/2/2002 | XX | 303BXX37470 | 5.16 | 10.5 | | 650 | 2 | 11.9 | 460 | 480 | 528 | 7.9 | 33.9 | | | | |
| 10/17/2002 | XX | 303BXX37546 | 4.38 | 1.9 | | 1296 | 7 | 19.9 | 999.1 | 1150 | 1198 | 20.4 | 75.8 | | | | |
| 6/23/2003 | XX | 303BXX37795 | 9.9 | 13 | | 510 | 1 U | 16 | 450 | 420 | 470 | 7.1 | 16 | | | | |
| 8/19/2003 | XX | 303BXX37852 | 11 | 2.8 | | 810 | 1 U | 11 | 770 | 780 | 820 | 13 | 30 | | | | |
| 10/14/2003 | XX | 303BXX37908 | 12 | 2 U | | 1100 | 1 U | 9.9 | 1100 | 1040 | 1100 | 21 | 38 | | | | |
| 5/3/2004 | XX | 303BXX38110 | 12 | 5.5 | | 680 | 1 U | 12 | 650 | 590 | 610 | 10 | 20 | | | | |
| 8/17/2004 | XX | 303BXX38216 | 14 | 2 | | 1100 | 1 U | 10 | 970 | 970 | 1100 | 16 | 39 | | | | |
| 10/19/2004 | XX | 303BXX38279 | 15 | 2.5 | | 1100 | 1 U | 9 | 1100 | 1120 | 1200 | 23 | 35 | | | | |
| 5/18/2005 | XX | GW303B00J | 20 U | 6.8 | | 520 | 1 U | 13 | 170 | 440 | 480 | 6.1 | 12 | | | | |
| 8/15/2005 | XX | GW303B02B | 10 | 4 | | 490 | 1 U | 14 | 410 | 400 | 440 | 7.1 | 26 | | | | |
| 11/3/2005 | XX | GW303B043 | 12 | 3.4 | | 840 | 3.5 | 9 | 890 | 800 | 850 | 12 | 35 | | | | |
| 5/11/2006 | XX | GW303B08J | 7.8 | 2 U | | 530 | 1 U | 16 | 570 | 485 | 510 | 9.3 | 24 | | | | |
| 7/26/2006 | XX | GW303B077 | 7.7 | 2.7 | | 420 | 1 U | 15 | 440 | 400 | 420 | 6 | 15 | | | | |
| 10/24/2006 | XX | GW303B05F | 6.9 | 2 U | | 790 | 1 U | 13 | 920 | 780 | 810 | 13 | 35 | | | | |
| 5/15/2007 | XX | GW303B0AB | 7.5 | 4.3 | | 480 | 1 U | 15 | 390 | 460 | 480 | 5.2 | 8.6 | | | | |
| 8/15/2007 | XX | GW303B0C4 | 0.21 | 1.6 | | 650 | 1 U | 13 | 490 | 470 | 510 | 37 | 29 | | | | |
| 10/29/2007 | XX | GW303B0DG | 4.9 | 0.68 | | 1100 | 1 U | 10 | 1200 | 920 | 1000 | 26 | 44 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (303B) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 6/3/2008 | XX | GW303B0G4 | 6.5 | 4.4 | | 370 | 1 U | 15 | 390 | 380 | 380 | 8 | 7.1 | | | | |
| 8/13/2008 | XX | GW303B0I4 | 5.5 | 2.5 | | 350 | 1 U | 17 | 280 | 330 | 360 | 6.3 | 9.5 | | | | |
| 10/20/2008 | XX | GW303B0JC | 4.5 | 1.1 | | 540 | 1 U | 15 | 450 | 490 | 520 | 11 | 21 | | | | |
| 5/5/2009 | XX | GW303B11C | 7.5 | 3.1 | | 460 | 0.6 U | 13 | 410 | 430 | 440 | 8.5 | 8.5 | | | | |
| 8/6/2009 | XX | GW303B13C | 5.9 | 7.3 | | 340 | 2 U | 35 | 240 | 290 | 320 | 5.9 | 20 | | | | |
| 10/21/2009 | XX | GW303B150 | 4.4 | 1.5 | | 460 | 1 U | 13 | 360 | 410 | 420 | 12 | 17 | | | | |
| 5/27/2010 | XX | GW303B171 | 4.7 | 3.4 | | 320 | 1 U | 17 | 260 | 290 | 300 | 6.1 | 6.2 | | | | |
| 8/4/2010 | XX | GW303B192 | 6 | 0.84 H | | 540 | 1 U | 10 | 550 | 550 | 580 | 12 | 19 | | | | |
| 8/4/2010 | XD | GWDP2X181 | 6.2 | 0.7 H | | 550 | 1.1 U | 10 | 430 | | 580 | 12 | 18 | | | | |
| 10/14/2010 | XX | GW303B1AA | 2.4 | 4.6 | | 720 | 1.1 U | 10 | 530 | 705 | 720 | 16 | 24 | | | | |
| 5/17/2011 | XX | GW303B1E6 | 4.4 | 4.4 | | 280 | 4.2 U | 12 | 220 | 260 | 260 | 5.3 | 4.3 | | | | |
| 8/9/2011 | XX | GW303B1FH | 4.2 | 1.7 | | 320 | 0.38 U | 13 | 180 | 290 | 290 | 6.5 | 11 | | | | |
| 11/3/2011 | XX | GW303B1H8 | 5.2 | 1.1 J | | 500 | 0.32 U | 11 | 400 | 510 | 510 | 11 | 11 | | | | |
| 5/17/2012 | XX | GW303B1J2 | 6.4 | 2.6 | | 120 | 2.5 U | 12 | 290 | 330 | 330 | 5.08 | 5.4 | | | | |
| 8/15/2012 | XX | GW303B20F | 5.7 | 2 | | 370 | 2.5 U | 12 | 300 | 350 | 350 | 6 | 7.2 | | | | |
| 11/1/2012 | XX | GW303B229 | 6.8 | 0.89 | | 670 | 2.5 U | 11 | 580 | 600 | 600 | 10 | 14 | | | | |
| 5/21/2013 | XX | GW303B243 | 4.8 | 3.8 | | 250 | 2.5 U | 14 | 230 | 270 | 270 | 3.7 | 4 | | | | |
| 7/24/2013 | XX | GW303B25H | 4.4 | 3.2 | | 290 | 2.5 U | 12 | 190 | 250 | 250 | 3.9 | 4 | | | | |
| 10/2/2013 | XX | GW303B27B | 4.6 | 0.35 | | 370 | 2.5 U | 9.6 | 300 | 390 | 390 | 5.6 | 8.7 | | | | |
| 6/3/2014 | XX | GW303B295 | 4.6 | 3.3 | | 340 | 4 U | 12 | 239 | 280 | 280 | 3.5 | 6.2 | | | | |
| 8/20/2014 | XX | GW303B2AJ | 5.7 | 1.2 | | 410 | 4 U | 11 | 326 | 400 | 400 | 5.3 | 11 | | | | |
| 11/12/2014 | XX | GW303B2CD | 7.3 | 2.1 | | 700 | 4 U | 6.4 | 572 | 660 | 660 | 9.1 | 18 | | | | |
| 6/3/2015 | XX | GW303B2E9 | 4.2 | 3.4 | | 310 | 4 U | 9.6 | 229 | 270 | 270 | 3.5 | 6.3 | | | | |
| 9/1/2015 | XX | GW303B2G4 | 2.8 | 1.9 | | 350 | 4 U | 9.7 | 268 | 280 | 280 | 4.4 | 8.2 | | | | |
| 11/3/2015 | XX | GW303B2HI | 4.7 | 1.6 | | 420 | 4 U | 9.6 | 348 | 390 | 390 | 5.4 | 8.5 | | | | |
| 6/15/2016 | XX | GW303B318 | 2.6 | 2.4 | | 230 | 4 U | 13 | 157 | 170 | 170 | 2.3 | 5 | | | | |
| 9/20/2016 | XX | GW303B332 | 4.3 | 1.3 | | 510 | 4 U | 10 | 400 | 430 | 430 | 6.6 | 15 | | | | |
| 11/8/2016 | XX | GW303B34G | 4.2 | 2.6 | | 600 | 4 U | 8.4 | 523 | 620 | 620 | 9.2 | 19 | | | | |
| 6/13/2017 | XX | GW303B36B | 3.2 | 2 | | 100 | 4 U | 12 | 191 | 210 | 210 | 3.3 | 4.2 | | | | |
| 8/30/2017 | XX | GW303B385 | 2.7 | 3 | | 300 | 4 U | 13 | 220 | 240 | 240 | 3.4 | 8.4 | | | | |
| 11/15/2017 | XX | GW303B39J | 5 | 0.98 | | 610 | 4 U | 6.2 | 554 | 640 | 640 | 9 | 18 | | | | |
| 6/20/2018 | XX | GW303B3BE | 3.8 | 2.4 | | 240 | 4 U | 13 | 168 | 190 | 190 | 2.8 | 3 | | | | |
| 8/15/2018 | XX | GW303B3E3 | 2.7 | 0.82 | | 340 | 4 U | 13 | 252 | 270 | 270 | 4.2 | 9.1 | | | | |
| 11/27/2018 | XX | GW303B3F2 | 5.4 | 3.8 | | 650 | 4 U | 7.2 | 565 | 680 | 680 | 9.7 | 17 | | | | |
| 6/4/2019 | XX | GW303B3GH | 3.9 | 2.6 | | 260 | 4 U | 12 | 182 | 220 | 220 | 3.4 | 3.1 | | | | |
| 8/14/2019 | XX | GW303B3J6 | 3.2 | 1.8 | | 250 | 4 U | 14 | 178 | 210 | 210 | 3.2 | 6.3 | | | | |
| 10/22/2019 | XX | GW303B405 | 4.6 | 0.16 | | 490 | 4 U | 9.6 | 415 | 430 | 430 | 7.6 | 15 | | | | |
| 6/16/2020 | XX | GW303B420 | 4.6 | 2.9 | | 280 | 4 U | 9.7 | 205 | 260 | 260 | 3.4 | 2.8 | | | | |
| 8/4/2020 | XX | GW303B449 | 5.5 | 0.62 | | 290 | 4 U | 10 | | 320 | 320 | 4.9 | 7.6 | | | | |
| 8/4/2020 | XX | GW303B449R | | | | | | | 301 | | | | | | | | |
| 10/20/2020 | XX | GW303B458 | 6.2 | 3.1 | | 570 | 4 U | 6.5 | 508 | 580 | 580 | 9.7 | 16 | | | | |
| 6/22/2021 | XX | GW303B473 | 3.4 | 2.3 | | 270 | 4 U | 12 | 229 | 250 | 250 | 4.2 | 4.8 | | | | |
| 9/21/2021 | XX | GW303B48I | 4.9 | 0.61 | | 500 | 4 U | 8.2 | 464 | 560 | 560 | 8.7 | 15 | | | | |
| **304A** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 304AXX36649 | 0.1 U | 1.4 | | 216 | 14 | 13.7 | 164.3 | 145 | 164.6 | 1.6 | 9.5 | | | | |
| 8/9/2000 | XX | 304AXX36747 | 0.1 U | 1.3 | | 191 | 2 | 15.4 | 114.8 | 135 | 148.5 | 2.9 | 8.5 | | | | |
| 11/9/2000 | XX | 304AXX36839 | 0.1 U | 1.1 | | 289 | 1 U | 14.5 | 70.3 | 170 | 180.8 | 1 | 10.3 | | | | |
| 5/16/2001 | XX | 304AXX37027 | 0.1 U | 1.4 | | 210 | 1 | 16.9 | 108.5 | 160 | 164 | 1.6 | 13.2 | | | | |
| 7/31/2001 | XX | 304AXX37103 | 0.1 U | 1 U | | 198 | 2 | 15.8 | 102.6 | 146 | 146 | 7.6 | 9 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(304A)**

| Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/23/2001 | XX | 304AXX37187 | 0.1 U | 1 U | | 236 | 3 | 15.9 | 165.3 | 166 | 175 | 1.7 | 15.4 |
| 5/21/2002 | XX | 304AXX37397 | 0.12 | 1 U | | 241 | 1 U | 17.9 | 117.4 | 180 | 180 | 1 U | 16.8 |
| 7/30/2002 | XX | 304AXX37467 | 0.1 U | 1 U | | 232 | 1 | 19.4 | 109.1 | 165 | 170 | 1.1 | 14 |
| 10/22/2002 | XX | 304AXX37551 | 0.1 U | 1 U | | 265 | 2 | 19.5 | 137.9 | 205 | 220 | 1 U | 18 |
| 6/24/2003 | XX | 304AXX37796 | 0.2 U | 2 U | | 220 | 1 U | 15 | 230 | 195 | 210 | 1 U | 11 |
| 8/7/2003 | XX | 304AXX37840 | 0.2 U | 2 U | | 210 | 1 U | 15 | 210 | 170 | 180 | 1 U | 7.2 |
| 10/21/2003 | XX | 304AXX37915 | 0.2 U | 2 U | | 260 | 1 U | 17 | 250 | 200 | 220 | 1.2 | 12 |
| 5/10/2004 | XX | 304AXX38117 | 0.2 U | 2 U | | 210 | 1 U | 14 | 220 | 190 | 210 | 1 | 9.1 |
| 7/28/2004 | XX | 304AXX38196 | 0.2 U | 2 U | | 210 | 1 U | 16 | 190 | 195 | 210 | 1 U | 9.6 |
| 10/21/2004 | XX | 304AXX38281 | 0.2 U | 2 U | | 320 | 1 U | 16 | 240 | 200 | 220 | 1 U | 11 |
| 5/10/2005 | XX | GW304A010 | 0.2 U | 2 U | | 290 | 1 U | 5.6 | 260 | 180 | 190 | 1 U | 4.8 |
| 7/28/2005 | XX | GW304A02C | 0.2 U | 2 U | | 200 | 1.2 | 13 | 190 | 180 | 190 | 1 U | 6.2 |
| 11/8/2005 | XX | GW304A044 | 0.2 U | 2 U | | 240 | 1 U | 13 | 130 | 200 | 220 | 1.2 | 7.6 |
| 5/3/2006 | XX | GW304A090 | 0.2 U | 2 U | | 170 | 1.5 | 13 | 200 | 145 | 180 | 1.3 | 8.5 |
| 8/1/2006 | XX | GW304A078 | 0.24 | 2 U | | 230 | 23 | 12 | 240 | 190 | 200 | 1.1 | 8.7 |
| 10/26/2006 | XX | GW304A05G | 0.2 U | 2 U | | 239 | 5.5 | 13 | 180 | 180 | 190 | 1 U | 9.7 |
| 5/8/2007 | XX | GW304A0AC | 0.5 U | 0.5 U | | 190 | 1.9 | 5.8 | 190 | 190 | 200 | 1 U | 7 |
| 8/7/2007 | XX | GW304A0C5 | 0.2 U | 0.5 U | | 250 | 1 U | 11 | 190 | 180 | 190 | 3.8 | 12 |
| 8/7/2007 | XD | GWDP4X0EH | 0.2 U | 0.5 U | | 240 | 1 U | 11 | 230 | | 180 | 2.8 | 12 |
| 10/31/2007 | XX | GW304A0DH | 0.2 U | 0.5 U | | 260 | 1 U | 13 | 270 | 180 | 190 | 1 U | 18 |
| 6/3/2008 | XX | GW304A0G5 | 0.2 U | 0.5 U | | 210 | 1 U | 11 | 160 | 150 | 160 | 1.8 | 8.2 |
| 8/18/2008 | XX | GW304A0I5 | 0.2 U | 0.5 U | | 240 | 1 U | 13 | 150 | 160 | 170 | 1.1 | 9.4 |
| 10/23/2008 | XX | GW304A0JD | 0.2 U | 0.5 U | | 210 | 1 U | 11 | 180 | 160 | 170 | 1 U | 9 |
| 10/23/2008 | XD | SWDP4X109 | 0.2 U | 0.5 U | | 210 | 1 U | 11 | 170 | | 170 | 1.2 | 9.1 |
| 5/12/2009 | XX | GW304A11D | 0.2 U | 0.5 U | | 190 | 0.6 U | 13 | 140 | 155 | 160 | 1.2 | 7.4 |
| 8/11/2009 | XX | GW304A13D | 0.2 U | 0.5 U | | 240 | 1.7 | 13 | 170 | 120 | 150 | 1.6 | 5.8 |
| 10/26/2009 | XX | GW304A151 | 0.2 U | 0.5 U | | 290 | 1.1 | 13 | 160 | 155 | 160 | 1.3 | 7.1 |
| 6/2/2010 | XX | GW304A172 | 0.2 U | 0.5 U | | 190 | 2.3 | 14 | 170 | 150 | 150 | 2.2 | 6.8 |
| 8/5/2010 | XX | GW304A193 | 0.2 U | 0.5 U | | 170 | 1.1 U | 13 | 160 | 150 | 150 | 1 | 6.1 |
| 10/18/2010 | XX | GW304A1AB | 0.2 U | 0.5 U | | 200 | 1.3 U | 12 | 130 | 130 | 130 | 1.3 | 11 |
| 5/19/2011 | XX | GW304A1DC | 0.2 U | 0.5 U | | 150 | 5 U | 12 | 130 | 140 | 140 | 1.1 | 5.1 |
| 8/8/2011 | XX | GW304A1F3 | 0.08 U | 0.2 U | | 180 | 0.38 U | 13 | 90 | 140 | 140 | 0.94 J | 5.1 |
| 8/8/2011 | XD | GWDP2X1G8 | 0.08 U | 0.2 U | | 720 | 0.38 U | 7.6 | 130 | 680 | 680 | 0.8 J | 33 |
| 11/2/2011 | XX | GW304A1GE | 0.082 U | 0.2 U | | 170 | 0.32 U | 13 | 130 | 140 | 140 | 1.3 | 3.8 |
| 5/15/2012 | XX | GW304A1I8 | 0.2 U | 0.09 U | | 130 | 2.5 U | 9.9 | 130 | 130 | 130 | 1 | 4.1 |
| 5/15/2012 | XD | GWDP3X1JE | 0.2 U | 0.09 U | | 130 | 2.5 U | 10 | 140 | 130 | 130 | 1.2 | 4.5 |
| 8/15/2012 | XX | GW304A201 | 0.2 U | 0.25 U | | 140 | 2.5 U | 12 | 110 | 120 | 120 | 1.36 | 2.5 |
| 10/31/2012 | XX | GW304A21F | 0.2 U | 0.25 U | | 140 | 2.5 U | 11 | 130 | 130 | 130 | 0.8 | 8.6 |
| 10/31/2012 | XD | GWDP1X22J | 0.2 U | 0.25 U | | 150 | 2.5 U | 11 | 130 | 130 | 130 | 0.6 | 9.3 |
| 5/21/2013 | XX | GW304A239 | 0.2 U | 0.25 U | | 140 | 2.5 U | 13 | 120 | 130 | 130 | 0.63 | 6.1 |
| 5/21/2013 | XD | GWDP1X24D | 0.8 | 0.25 U | | 160 | 2.5 U | 12 | 120 | 130 | 130 | 0.8 | 9.7 |
| 7/25/2013 | XX | GW304A253 | 0.2 U | 0.25 U | | 180 | 2.5 U | 12 | 120 | 130 | 130 | 0.64 | 6.5 |
| 7/25/2013 | XD | GWDP3X269 | 0.2 U | 0.25 U | | 180 | 2.5 U | 13 | 120 | 130 | 130 | 0.82 | 6.9 |
| 10/2/2013 | XX | GW304A26H | 0.2 U | 0.25 U | | 170 | 2.5 U | 12 | 120 | 130 | 130 | 0.58 | 9.5 |
| 10/2/2013 | XD | GWDP2X283 | 0.2 U | 0.25 U | | 180 | 2.5 U | 12 | 120 | 130 | 130 | 0.53 | 9.9 |
| 6/4/2014 | XX | GW304A28B | 0.1 U | 0.05 U | | 160 | 4 U | 13 | 121 | 110 | 110 | 1 U | 6.9 |
| 6/4/2014 | XD | GWDP1X29F | 0.1 U | 0.05 U | | 160 | 4 U | 13 | 118 | 120 | 120 | 1 U | 6.5 |
| 8/20/2014 | XX | GW304A2A5 | 0.1 U | 0.05 U | | 160 | 6 | 13 | 121 | 140 | 140 | 1 U | 7 |
| 8/20/2014 | XD | GWDP1X2B9 | 0.1 U | 0.05 U | | 150 | 4 U | 13 | 119 | 130 | 130 | 1 U | 7.8 |
| 11/12/2014 | XX | GW304A2BJ | 0.1 U | 0.05 U | | 160 | 4 U | 10 | 103 | 120 | 120 | 1 U | 6 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (304A) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 11/12/2014 | XD | GWDP2X2D5 | 0.1 U | 0.05 U | | 140 | 4 U | 10 | 106 | 130 | 130 | 1 U | 6.1 | | | | |
| 6/3/2015 | XX | GW304A2DF | 0.1 U | 0.05 U | | 160 | 4 U | 11 | 112 | 120 | 120 | 1 U | 5.1 | | | | |
| 6/3/2015 | XD | GWDP1X2EJ | 0.1 U | 0.05 U | | 150 | 4 U | 11 | 108 | 120 | 120 | 1 U | 5.1 | | | | |
| 9/2/2015 | XX | GW304A2FA | 0.1 U | 0.052 | | 160 | 4 U | 12 | 117 | 120 | 120 | 1 U | 4.3 | | | | |
| 9/2/2015 | XD | GWDP1X2GE | 0.1 U | 0.05 U | | 160 | 4 U | 12 | 125 | 120 | 120 | 1 U | 4.6 | | | | |
| 11/4/2015 | XX | GW304A2H4 | 0.1 U | 0.05 U | | 180 | 4 U | 11 | 121 | 130 | 130 | 1 U | 5.6 | | | | |
| 11/4/2015 | XD | GWDP2X2IA | 0.1 U | 0.05 U | | 180 | 4 U | 11 | 116 | 130 | 130 | 1 U | 5.5 | | | | |
| 6/16/2016 | XD | GWDP1X31I | 0.1 U | 0.05 U | | 150 | 4 U | 13 | 114 | 120 | 120 | 1 U | 4.7 | | | | |
| 6/16/2016 | XX | GW304A30E | 0.1 U | 0.05 U | | 150 | 4 U | 13 | 112 | 120 | 120 | 1 U | 4.5 | | | | |
| 9/21/2016 | XD | GWDP1X33C | 0.1 U | 0.05 U | | 190 | 4 U | 14 | 107 | 120 | 120 | 1 U | 3.6 | | | | |
| 9/21/2016 | XX | GW304A328 | 0.1 U | 0.05 U | | 140 | 4 U | 14 | 109 | 110 | 110 | 1 U | 3.3 | | | | |
| 11/8/2016 | XD | GWDP2X358 | 0.1 U | 0.05 U | | 140 | 4 U | 13 | 117 | 140 | 140 | 1 U | 5.6 | | | | |
| 11/8/2016 | XX | GW304A342 | 0.1 U | 0.05 U | | 150 | 4 U | 13 | 118 | 140 | 140 | 1 U | 4.6 | | | | |
| 6/14/2017 | XD | GWDP1X371 | 0.1 U | 0.05 U | | 140 | 4 U | 14 | 116 | 120 | 120 | 1 U | 4 | | | | |
| 6/14/2017 | XX | GW304A35H | 0.1 U | 0.05 U | | 140 | 4 U | 14 | 121 | 180 | 180 | 1 U | 3.4 | | | | |
| 8/29/2017 | XD | GWDP1X38F | 0.1 U | 0.05 U | | 180 | 4 U | 12 | 108 | 120 | 120 | 1 U | 2.9 | | | | |
| 8/29/2017 | XX | GW304A37B | 0.1 U | 0.05 U | | 160 | 4 U | 12 | 111 | 120 | 120 | 1 U | 3.5 | | | | |
| 11/14/2017 | XD | GWDP2X3AB | 0.1 U | 0.05 U | | 160 | 4 U | 11 | 109 | 120 | 120 | 1 U | 3.9 | | | | |
| 11/14/2017 | XX | GW304A395 | 0.1 U | 0.05 U | | 150 | 4 U | 12 | 104 | 120 | 120 | 1 U | 3.8 | | | | |
| 6/21/2018 | XD | GWDP1X3C4 | 0.1 U | 0.05 U | | 190 | 4 U | 13 | 113 | 120 | 120 | 1 U | 2 U | | | | |
| 6/21/2018 | XX | GW304A3B0 | 0.1 U | 0.05 U | | 170 | 4.8 | 13 | 125 | 120 | 120 | 1 U | 2 U | | | | |
| 8/15/2018 | XD | GWDP1X3CJ | 0.1 U | 0.05 U | | 170 | 4 U | 14 | 109 | 120 | 120 | 1 U | 2.7 | | | | |
| 8/15/2018 | XX | GW304A3D9 | 0.1 U | 0.05 U | | 150 | 8 | 14 | 111 | 120 | 120 | 1 U | 2.2 | | | | |
| 11/30/2018 | XD | GWDP2X3FE | 0.1 U | 0.05 U | | 140 | 4 U | 12 | 118 | 120 | 120 | 1 U | 4.7 | | | | |
| 11/30/2018 | XX | GW304A3E8 | 0.1 U | 0.05 U | | 110 | 4 U | 12 | 119 | 120 | 120 | 1 U | 4.5 | | | | |
| 6/5/2019 | XD | GWDP1X3H7 | 0.1 U | 0.05 U | | 170 | 4 U | 12 | 110 | 120 | 120 | 1 U | 3.7 | | | | |
| 6/5/2019 | XX | GW304A3G3 | 0.1 U | 0.05 U | | 160 | 4 U | 12 | 107 | 120 | 120 | 1 U | 3 | | | | |
| 8/14/2019 | XX | GW304A3IC | 0.1 U | 0.05 U | | 160 | 4 U | 14 | | 120 | 120 | 1 U | 3.1 | | | | |
| 8/14/2019 | XX | GW304A3ICR | | | | | | | 117 | | | | | | | | |
| 10/24/2019 | XD | GWDP2X40H | 0.1 U | 0.05 U | | 160 | 5.2 | 12 | 107 | 120 | 120 | 1 U | 2.9 | | | | |
| 10/24/2019 | XX | GW304A3JB | 0.1 U | 0.05 U | | 150 | 4 U | 12 | 112 | 120 | 120 | 1 U | 3.3 | | | | |
| 6/17/2020 | XD | GWDP1X42A | 0.1 U | 0.05 U | | 150 | 4 U | 10 | 114 | 140 | 140 | 1 U | 2.8 | | | | |
| 6/17/2020 | XX | GW304A416 | 0.1 U | 0.05 U | | 140 | 4 U | 11 | 106 | 130 | 130 | 1 U | 2.1 | | | | |
| 8/5/2020 | XX | GW304A43F | 0.1 U | 0.05 U | | 120 | 4 U | 11 | 113 | 120 | 120 | 1 U | 2.1 | | | | |
| 10/22/2020 | XD | GWDP2X460 | 0.1 U | 0.05 U | | 160 | 4 U | 9.2 | 128 | 130 | 130 | 1 U | 4.8 | | | | |
| 10/22/2020 | XX | GW304A44E | 0.1 U | 0.05 U | | 170 | 4 U | 9.4 | 129 | 130 | 130 | 1 U | 4.5 | | | | |
| 6/22/2021 | XD | GWDP1X47D | 0.1 U | 0.05 U | | 140 | 4 U | 13 | 110 | 130 | 130 | 1 U | 3 | | | | |
| 6/22/2021 | XX | GW304A469 | 0.1 U | 0.05 U | | 99 | 4 U | 13 | 114 | 130 | 130 | 1 U | 2.8 | | | | |
| 9/22/2021 | XX | GW304A484 | 0.1 U | 0.05 U | | 150 | 4 U | 11 | 127 | 140 | 140 | 1 U | 4.6 | | | | |
| 9/22/2021 | XD | GWDP2X49A | 0.1 U | 0.05 U | | 150 | 7.2 | 11 | 130 | 140 | 140 | 1 U | 4.5 | | | | |
| **304B** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 304BXX36649 | 0.1 U | 1 U | | 67 | 86 | 2.9 | 22 | 22 | 24.2 | 5 | 1.4 | | | | |
| 8/9/2000 | XX | 304BXX36747 | 0.1 U | 1 U | | 122 | 16 | 7.7 | 39.4 | 54 | 61.6 | 1 | 20.3 | | | | |
| 11/9/2000 | XX | 304BXX36839 | 0.1 U | 1 U | | 168 | 1 | 6.5 | 74.3 | 58 | 58.6 | 1 U | 63.7 | | | | |
| 5/16/2001 | XX | 304BXX37027 | 0.1 U | 1 U | | 163 | 1 U | 13.4 | 47.6 | 74 | 75 | 1 U | 34.1 | | | | |
| 7/31/2001 | XX | 304BXX37103 | D | D | | | D | D | D | D | D | D | D | | | | |
| 10/23/2001 | XX | 304BXX37187 | 0.1 U | 1 U | | 204 | 16 | 20.7 | 121.4 | 110 | 115 | 1.7 | 25.7 | | | | |
| 5/21/2002 | XX | 304BXX37397 | 0.1 | 1 U | | 125 | 1 | 8.9 | 49.8 | 76 | 80 | 1 | 13.4 | | | | |
| 7/30/2002 | XX | 304BXX37467 | 0.1 U | 1 U | | 187 | 1 U | 14 | 68.7 | 120 | 122 | 1.4 | 15.6 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(304B)**

| Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/22/2002 | XX | 304BXX37551 | 0.1 U | 1 U | | 175 | 2 | 13.3 | 73.8 | 110 | 116 | 1.5 | 21.7 |
| 6/24/2003 | XX | 304BXX37796 | 0.2 U | 2 U | | 120 | 1 U | 12 | 130 | 100 | 100 | 1 U | 19 |
| 8/7/2003 | XX | 304BXX37840 | 0.2 U | 2 U | | 120 | 1 U | 11 | 110 | 96 | 100 | 1 U | 13 |
| 10/21/2003 | XX | 304BXX37915 | 0.2 U | 2 U | | 140 | 1 U | 11 | 100 | 92 | 93 | 1.4 | 14 |
| 5/10/2004 | XX | 304BXX38117 | 0.2 U | 2 U | | 63 | 1 U | 10 | 87 | 70 | 70 | 1 U | 12 |
| 7/28/2004 | XX | 304BXX38196 | 0.2 U | 2 U | | 98 | 1 U | 10 | 74 | 78 | 81 | 1 U | 9.7 |
| 10/21/2004 | XX | 304BXX38281 | 0.2 U | 2 U | | 180 | 1 U | 11 | 92 | 78 | 83 | 1 U | 8.7 |
| 5/10/2005 | XX | GW304B011 | 0.2 U | 2 U | | 100 | 1 U | 6.8 | 59 | 58 | 59 | 1 U | 11 |
| 7/28/2005 | XX | GW304B02D | 0.2 U | 2 U | | 180 | 16 | 7.6 | 110 | 60 | 63 | 1 U | 34 |
| 11/8/2005 | XX | GW304B045 | 0.2 U | 2 U | | 150 | 1 U | 6.8 | 99 | 62 | 65 | 1 U | 33 |
| 5/3/2006 | XX | GW304B091 | 0.2 U | 2 U | | 120 | 1 U | 6.8 | 62 | 56 | 57 | 1 U | 11 |
| 8/1/2006 | XX | GW304B079 | 0.24 | 2 U | | 120 | 1 U | 7.1 | 85 | 60 | 61 | 1 U | 24 |
| 10/26/2006 | XX | GW304B05H | 0.2 U | 2 U | | 96 | 1 U | 5.9 | 77 | 56 | 56 | 1 U | 26 |
| 5/8/2007 | XX | GW304B0AD | 0.5 U | 0.5 U | | 98 | 1 U | 6.7 | 74 | 68 | 69 | 1 U | 13 |
| 8/7/2007 | XX | GW304B0C6 | 0.2 U | 0.5 U | | 160 | 2.1 | 6.1 | 98 | 68 | 69 | 2.2 | 28 |
| 10/31/2007 | XX | GW304B0DI | 0.2 U | 0.5 U | | 160 | 1 U | 6.1 | 85 | 68 | 69 | 1 U | 29 |
| 6/5/2008 | XX | GW304B0G6 | 0.2 U | 0.5 U | | 98 | 1 U | 6.9 | 53 | 54 | 54 | 1 U | 5.8 |
| 6/5/2008 | XD | LTDP4X0F5 | 0.2 U | 0.5 U | | 100 | 1 U | 6.9 | 56 | | 54 | 1 U | 5.9 |
| 8/18/2008 | XX | GW304B0I6 | 0.2 U | 0.5 U | | 100 | 1 U | 5.4 | 35 | 46 | 46 | 1.2 | 3.1 |
| 10/23/2008 | XX | GW304B0JE | 0.2 U | 0.5 U | | 93 | 3.7 | 6.5 | 50 | 53 | 53 | 1.4 | 3.3 |
| 5/12/2009 | XX | GW304B11E | 0.2 U | 0.5 U | | 67 | 0.6 U | 3.5 | 20 | 28 | 28 | 1 | 4.3 |
| 8/11/2009 | XX | GW304B13E | 0.2 U | 0.5 U | | 140 | 0.6 U | 3.5 | 69 | 33 | 33 | 1 | 30 |
| 10/26/2009 | XX | GW304B152 | 0.2 U | 0.5 U | | 110 | 5.8 | 4.1 | 44 | 31 | 33 | 1.6 | 20 |
| 6/2/2010 | XX | GW304B173 | 0.2 U | 0.5 U | | 72 | 1 U | 4.4 | 38 | 42 | 42 | 1.1 | 5.4 |
| 8/5/2010 | XX | GW304B194 | 0.2 U | 0.5 U | | 89 | 1.7 | 5.2 | 47 | 40 | 40 | 1.2 | 21 |
| 10/18/2010 | XX | GW304B1AC | 0.2 U | 0.5 U | | 85 | 1.6 | 3.8 | 38 | 34 | 34 | 2.2 | 21 |
| 10/18/2010 | XD | GWDP3X1B6 | 0.2 U | 0.5 U | | 100 | 1.4 | 3.9 | 35 | | 34 | 2.4 | 21 |
| 5/19/2011 | XX | GW304B1DD | 0.2 U | 0.5 U | | 25 | 5 U | 2.9 | 19 | 26 | 26 | 1 U | 3.8 |
| 8/8/2011 | XX | GW304B1F4 | 0.08 U | 0.2 U | | 87 | 0.38 U | Y4 | 28 | 39 | 39 | 0.72 J | 18 |
| 11/2/2011 | XX | GW304B1GF | 0.082 U | 0.2 U | | 75 | 0.32 U | 3.8 | 44 | 34 | 34 | 1.3 | 15 |
| 5/15/2012 | XX | GW304B1I9 | 0.2 U | 0.09 U | | 13 | 2.5 U | 2.5 | 29 | 26 | 26 | 1 | 6.5 |
| 8/15/2012 | XX | GW304B202 | 0.2 U | 0.25 U | | 160 | 2.5 U | 3.6 | 68 | 36 | 36 | 1 U | 46 |
| 10/31/2012 | XX | GW304B21G | 0.2 U | 0.25 U | | 52 | 2.5 U | 3.1 | 53 | 34 | 34 | 0.96 | 22 |
| 5/21/2013 | XX | GW304B23A | 0.67 | 0.25 U | | 34 | 2.5 U | 3.8 | 32 | 37 | 37 | 0.69 | 9.8 |
| 7/25/2013 | XX | GW304B254 | 0.2 U | 0.25 U | | 90 | 2.5 U | 5.1 | 41 | 41 | 41 | 0.85 | 9.8 |
| 10/2/2013 | XX | GW304B26I | 0.2 U | 0.25 U | | 72 | 2.5 U | 5.8 | 36 | 42 | 42 | 0.7 | 7.5 |
| 6/4/2014 | XX | GW304B28C | 0.1 U | 0.05 U | | 69 | 4 U | 5.5 | 37.3 | 44 | 44 | 1 U | 5 |
| 8/20/2014 | XX | GW304B2A6 | 0.1 U | 0.053 | | 68 | 4 U | 4.6 | 36.9 | 43 | 43 | 1 U | 9.4 |
| 11/12/2014 | XX | GW304B2C0 | 0.1 U | 0.05 U | | 63 | 4 U | 3.1 | 26.5 | 31 | 31 | 1.2 | 7.2 |
| 6/3/2015 | XX | GW304B2DG | 0.1 U | 0.05 U | | 29 | 4 U | 2.9 | 20.2 | 26 | 26 | 1 U | 3.3 |
| 9/2/2015 | XX | GW304B2FB | 0.1 U | 0.05 U | | 75 | 4 U | 5 | 35.9 | 43 | 43 | 1 U | 4.7 |
| 11/4/2015 | XX | GW304B2H5 | 0.1 U | 0.05 U | | 73 | 4 U | 5.8 | 27 | 35 | 35 | 1 U | 4.2 |
| 6/16/2016 | XX | GW304B30F | 0.1 U | 0.05 U | | 64 | 4 U | 3.6 | 29.2 | 39 | 39 | 1 U | 5.1 |
| 9/21/2016 | XX | GW304B329 | 0.1 U | 0.05 U | | 75 | 16 | 4.5 | 33.2 | 44 | 44 | 1 U | 3.6 |
| 11/8/2016 | XX | GW304B343 | 0.1 U | 0.057 | | 96 | 4 U | 5.3 | 52.2 | 71 | 71 | 1 U | 7.5 |
| 6/14/2017 | XX | GW304B35I | 0.1 U | 0.05 U | | 72 | 4 U | 4.7 | 37.1 | 48 | 48 | 1 U | 3.4 |
| 8/29/2017 | XX | GW304B37C | 0.1 U | 0.05 U | | 71 | 14 | 1.8 | 27.8 | 38 | 38 | 1 U | 2.9 |
| 11/14/2017 | XX | GW304B396 | 0.1 U | 0.05 U | | 75 | 4 U | 2.7 | 37.8 | 48 | 48 | 1 U | 3.9 |
| 6/21/2018 | XX | GW304B3B1 | 0.1 U | 0.05 U | | 84 | 4 U | 3.8 | 36.8 | 43 | 43 | 1 U | 3.8 |
| 8/15/2018 | XX | GW304B3DA | 0.1 U | 0.05 U | | 88 | 4.4 | 2.8 | 40.1 | 40 | 40 | 1 U | 9 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (304B) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/30/2018 | XX | GW304B3E9 | 0.1 U | 0.05 U | | 22 | 4 U | 1 U | 18.2 | 24 | 24 | 2.1 | 2.3 | | | | |
| 6/5/2019 | XX | GW304B3G4 | 0.1 U | 0.05 U | | 110 | 5.2 | 2.3 | 36.7 | 45 | 45 | 1 U | 3.8 | | | | |
| 8/14/2019 | XX | GW304B3ID | 0.1 U | 0.05 U | | 77 | 47 | 4.6 | 42.4 | 55 | 55 | 1 U | 6 | | | | |
| 10/24/2019 | XX | GW304B3JC | 0.1 U | 0.05 U | | 65 | 47 | 4.2 | 37.7 | 49 | 49 | 1 U | 5.3 | | | | |
| 6/17/2020 | XX | GW304B417 | 0.1 U | 0.05 U | | 84 | 6 | 3.6 | 40.1 | 62 | 62 | 1 U | 4.1 | | | | |
| 8/5/2020 | XX | GW304B43G | 0.1 U | 0.05 U | | 39 | 66 | 3.6 | 50.7 | 58 | 58 | 1 U | 5.2 | | | | |
| 10/22/2020 | XX | GW304B44F | 0.1 U | 0.05 U | | 68 | 6.8 | 3.2 | 22.6 | 34 | 34 | 2.6 | 2.9 | | | | |
| 6/22/2021 | XX | GW304B46A | 0.1 U | 0.05 U | | 100 | 10 | 3.8 | 60.7 | 72 | 72 | 1.1 | 6.2 | | | | |
| 9/22/2021 | XX | GW304B485 | 0.1 U | 0.05 U | | 220 | 4 U | 3.8 | 95.3 | 110 | 110 | 1 U | 15 | | | | |
| **401A** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 401AXX36649 | 0.1 U | 1 U | | 128 | 15 | 5.4 | 78.7 | 78 | 87.9 | 1.1 | 3.6 | | | | |
| 8/10/2000 | XX | 401AXX36748 | 0.1 U | 1 U | | 136 | 1 | 6.2 | 56 | 78 | 80.8 | 1.2 | 4.3 | | | | |
| 11/9/2000 | XX | 401AXX36839 | 0.1 U | 1 U | | 125 | 1 U | 6.8 | 49.8 | 100 | 103.2 | 1 U | 4.6 | | | | |
| 5/17/2001 | XX | 401AXX37028 | 0.1 U | 1 U | | 126 | 1 | 7.5 | 59.2 | 95 | 96 | 1 U | 3.7 | | | | |
| 8/1/2001 | XX | 401AXX37104 | 0.1 U | 1 U | | 131 | 3 | 8.3 | 61.7 | 79 | 79 | 3.2 | 4 | | | | |
| 10/24/2001 | XX | 401AXX37188 | 0.1 U | 1 U | | 133 | 3 | 10.1 | 71.6 | 94 | 99 | 1.1 | 4.1 | | | | |
| 5/22/2002 | XX | 401AXX37398 | 0.1 U | 1 U | | 137 | 4 | 9.2 | 60.6 | 90 | 94 | 1 U | 3.2 | | | | |
| 7/30/2002 | XX | 401AXX37467 | 0.1 U | 1 U | | 145 | 2 | 9.9 | 59.5 | 98 | 100 | 1.1 | 3.4 | | | | |
| 10/22/2002 | XX | 401AXX37551 | 0.1 U | 1 U | | 125 | 1 U | 11.1 | 60.7 | 98 | 102 | 1 U | 4 | | | | |
| 6/25/2003 | XX | 401AXX37797 | 0.2 U | 2 U | | 99 | 1 U | 10 | 110 | 100 | 100 | 1 U | 2.8 | | | | |
| 8/11/2003 | XX | 401AXX37844 | 0.2 U | 2 U | | 78 | 1 U | 9.9 | 100 | 95 | 99 | 1 U | 3.6 | | | | |
| 10/21/2003 | XX | 401AXX37915 | 0.2 U | 2 U | | 120 | 1 U | 11 | 110 | 95 | 98 | 1 U | 4.2 | | | | |
| 5/10/2004 | XX | 401AXX38117 | 0.2 U | 2 U | | 90 | 1 U | 12 | 110 | 95 | 96 | 1 U | 5.3 | | | | |
| 7/29/2004 | XX | 401AXX38197 | 0.2 U | 2 U | | 100 | 1 U | 11 | 95 | 78 | 80 | 1 U | 5.3 | | | | |
| 10/21/2004 | XX | 401AXX38281 | 0.2 U | 2 U | | 180 | 1 U | 12 | 110 | 95 | 96 | 1 U | 5.6 | | | | |
| 5/9/2005 | XX | GW401A012 | 0.2 U | 2 U | | 140 | 1 U | 11 | 100 | 74 | 76 | 1 U | 5.7 | | | | |
| 7/28/2005 | XX | GW401A02E | 0.2 U | 2 U | | 160 | 1.2 | 12 | 130 | 95 | 97 | 1 U | 5.8 | | | | |
| 11/8/2005 | XX | GW401A046 | 0.2 U | 2 U | | 120 | 1 U | 13 | 120 | 90 | 95 | 1 U | 6.2 | | | | |
| 5/4/2006 | XX | GW401A092 | 0.2 U | 2 U | | 120 | 1 U | 12 | 120 | 97 | 99 | 1 U | 6.1 | | | | |
| 8/2/2006 | XX | GW401A07A | 0.2 U | 2 U | | 120 | 1 U | 14 | 100 | 93 | 94 | 12 | 5.7 | | | | |
| 10/30/2006 | XX | GW401A05I | 0.2 U | 2 U | | 140 | 1 U | 15 | 110 | 93 | 94 | 1 U | 5.9 | | | | |
| 5/7/2007 | XX | GW401A0AE | 0.5 U | 0.5 U | | 130 | 1 U | 13 | 110 | 100 | 110 | 1 U | 5.7 | | | | |
| 8/14/2007 | XX | GW401A0C7 | 0.2 U | 0.5 U | | 150 | 1 U | 14 | 88 | 93 | 95 | 2.3 | 6.8 | | | | |
| 11/5/2007 | XX | GW401A0DJ | 0.2 U | 0.5 U | | 160 | 1 U | 17 | 130 | 98 | 99 | 1 U | 7.7 | | | | |
| 6/5/2008 | XX | GW401A0G7 | 0.2 U | 0.5 U | | 140 | 1 U | 15 | 110 | 97 | 97 | 1 U | 6.1 | | | | |
| 8/20/2008 | XX | GW401A0I7 | 0.2 U | 0.5 U | | 160 | 1 U | 17 | 110 | 98 | 99 | 1 | 6.4 | | | | |
| 10/27/2008 | XX | GW401A0JF | 0.2 U | 0.5 U | | 140 | 1 U | 15 | 120 | 96 | 98 | 1 U | 7.2 | | | | |
| 5/13/2009 | XX | GW401A11F | 0.2 U | 0.5 U | | 160 | 0.6 U | 18 | 98 | 95 | 96 | 1 U | 7.8 | | | | |
| 8/13/2009 | XX | GW401A13F | 0.2 U | 0.5 U | | 150 | 0.6 U | 17 | 110 | 97 | 99 | 1 U | 6.9 | | | | |
| 10/28/2009 | XX | GW401A153 | 0.2 U | 0.5 U | | 120 | 1 U | 18 | 92 | 95 | 98 | 1 U | 8.1 | | | | |
| 10/28/2009 | XD | SWDP4X15H | 0.2 U | 0.5 U | | 140 | 1 U | 18 | 90 | | 100 | 1.3 | 8 | | | | |
| 6/3/2010 | XX | GW401A174 | 0.2 U | 0.5 U | | 120 | 1 U | 19 | 120 | 95 | 95 | 1.6 | 8 | | | | |
| 8/17/2010 | XX | GW401A195 | 0.2 U | 0.5 U | | 150 | 1 U | 19 | 93 | 95 | 99 | 1.7 | 8.4 | | | | |
| 10/19/2010 | XX | GW401A1AD | 0.2 U | 0.5 U | | 140 | 1.3 U | 20 | 93 | 94 | 97 | 1 U | 9.1 | | | | |
| 5/16/2011 | XX | GW401A1DE | 0.2 U | 0.5 U | | 140 | 5 U | 18 | 100 | 86 | 86 | 1.1 | 9 | | | | |
| 8/8/2011 | XX | GW401A1F5 | 0.08 U | 0.2 U | | 2 J | 0.7 J | 20 | 72 | 99 | 99 | 1.8 | 10 | | | | |
| 11/1/2011 | XX | GW401A1GG | 0.082 U | 0.2 U | | 140 | 0.32 U | 20 | 110 | 100 | 100 | 1 | 7.9 | | | | |
| 5/14/2012 | XX | GW401A1IA | 0.2 U | 0.5 U | | 100 | 2.5 U | 19 | 110 | 89 | 89 | 1 U | 8 | | | | |
| 8/14/2012 | XX | GW401A203 | 0.2 U | 0.25 U | | 160 | 2.8 U | 20 | 99 | 95 | 95 | 1.14 | 8.4 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (401A) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 11/1/2012 | XX | GW401A21H | 0.2 U | 0.25 U | | 150 | 2.5 U | 19 | 110 | 85 | 85 | 0.86 | 8.6 | | | | |
| 5/21/2013 | XX | GW401A23B | 0.2 U | 0.25 U | | 130 | 2.5 U | 21 | 100 | 96 | 96 | 0.68 | 9.4 | | | | |
| 7/22/2013 | XX | GW401A255 | 0.2 U | 0.25 U | | 120 | 2.5 U | 21 | 100 | 90 | 90 | 0.81 | 9.4 | | | | |
| 9/30/2013 | XX | GW401A26J | 0.2 U | 0.25 U | | 120 | 2.5 U | 22 | 78 | 94 | 94 | 0.53 | 9.4 | | | | |
| 6/4/2014 | XX | GW401A28D | 0.1 U | 0.069 | | 160 | 4 U | 23 | 113 | 93 | 94 | 1 U | 10 | | | | |
| 8/19/2014 | XX | GW401A2A7 | 0.1 U | 0.065 | | 180 | 7.2 | 22 | 113 | 110 | 110 | 1 | 14 | | | | |
| 11/11/2014 | XX | GW401A2C1 | 0.1 U | 0.05 U | | 160 | 6 | 24 | 106 | 100 | 100 | 1 U | 12 | | | | |
| 6/2/2015 | XX | GW401A2DH | 0.1 U | 0.05 U | | 160 | 8.8 | 23 | 108 | 94 | 94 | 1 U | 11 | | | | |
| 9/1/2015 | XX | GW401A2FC | 0.1 U | 0.23 | | 180 | 4 U | 23 | 121 | 98 | 98 | 1 U | 11 | | | | |
| 11/3/2015 | XX | GW401A2H6 | 0.1 U | 0.05 U | | 150 | 4 U | 24 | 118 | 100 | 100 | 1 U | 11 | | | | |
| 6/14/2016 | XX | GW401A30G | 0.1 U | 0.05 U | | 160 | 4 U | 23 | 123 | 99 | 99 | 1 U | 12 | | | | |
| 9/20/2016 | XX | GW401A32A | 0.1 U | 0.05 U | | 200 | 4 U | 24 | 122 | 100 | 100 | 1 U | 11 | | | | |
| 11/9/2016 | XX | GW401A344 | 0.1 U | 0.05 U | | 170 | 5.2 | 25 | 119 | 110 | 110 | 1.1 | 12 | | | | |
| 6/14/2017 | XX | GW401A35J | 0.1 U | 0.05 U | | 150 | 4 U | 25 | 119 | 12 | 12 | 1 U | 10 | | | | |
| 8/29/2017 | XX | GW401A37D | 0.1 U | 0.05 U | | 180 | 4 U | 24 | 120 | 100 | 100 | 1 U | 11 | | | | |
| 11/14/2017 | XX | GW401A397 | 0.1 U | 0.05 U | | 160 | 4 U | 23 | 115 | 93 | 93 | 1 U | 9.9 | | | | |
| 6/20/2018 | XX | GW401A3B2 | 0.1 U | 0.05 U | | 190 | 4 U | 24 | 122 | 100 | 100 | 1 U | 12 | | | | |
| 8/15/2018 | XX | GW401A3DB | 0.1 U | 0.05 U | | 170 | 4 U | 25 | 119 | 110 | 110 | 1 U | 11 | | | | |
| 11/30/2018 | XX | GW401A3EA | 0.1 U | 0.064 | | 150 | 4 U | 28 | 120 | 96 | 96 | 1 U | 8.9 | | | | |
| 6/5/2019 | XX | GW401A3G5 | 0.1 U | 0.05 U | | 190 | 4 U | 24 | 116 | 100 | 100 | 1 U | 10 | | | | |
| 8/14/2019 | XX | GW401A3IE | 0.1 U | 0.05 U | | 170 | 4 U | 24 | 125 | 100 | 100 | 1 U | 11 | | | | |
| 10/22/2019 | XX | GW401A3JD | 0.1 U | 0.05 U | | 180 | 4 U | 24 | 127 | 110 | 110 | 1 U | 8.9 | | | | |
| 6/17/2020 | XX | GW401A418 | 0.1 U | 0.05 U | | 160 | 4 U | 22 | 120 | 120 | 120 | 1 U | 8.9 | | | | |
| 8/4/2020 | XX | GW401A43H | 0.1 U | 0.05 U | | 120 | 4 U | 22 | | 110 | 110 | 1 U | 9.6 | | | | |
| 8/4/2020 | XX | GW401A43HR | | | | | | | 130 | | | | | | | | |
| 10/21/2020 | XX | GW401A44G | 0.1 U | 0.05 U | | 180 | 4 U | 41 | 135 | 110 | 110 | 1 U | 8.8 | | | | |
| 6/23/2021 | XX | GW401A46B | 0.1 U | 0.05 U | | 190 | 4 U | 23 | 125 | 110 | 110 | 1 U | 10 | | | | |
| 9/21/2021 | XX | GW401A486 | 0.1 U | 0.05 U | | 140 | 4.4 | 24 | 121 | 120 | 120 | 1 U | 9.7 | | | | |
| **401B** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 401BXX36649 | 0.1 U | 1.1 | | 195 | 30 | 25 | 142.6 | 83 | 92.9 | 2 | 29.8 | | | | |
| 8/10/2000 | XX | 401BXX36748 | 0.1 U | 1.1 | | 352 | 2 | 27.5 | 109.5 | 92 | 99 | 1.3 | 30.1 | | | | |
| 11/9/2000 | XX | 401BXX36839 | 0.1 U | 1.1 | | 198 | 1 | 27.8 | 77.8 | 99 | 101 | 1.1 | 26 | | | | |
| 5/17/2001 | XX | 401BXX37028 | 0.1 U | 1.6 | | 203 | 12 | 30 | 117 | 98 | 99 | 1.1 | 23.1 | | | | |
| 8/1/2001 | XX | 401BXX37104 | 0.1 U | 1 U | | 213 | 3 | 31.8 | 128.2 | 102 | 102 | 3.7 | 25.1 | | | | |
| 10/24/2001 | XX | 401BXX37188 | 0.1 U | 1 U | | 215 | 29 | 29.8 | 119.6 | 98 | 104 | 1.4 | 26.1 | | | | |
| 5/22/2002 | XX | 401BXX37398 | 0.15 | 1 U | | 213 | 6 | 32 | 85.4 | 100 | 104 | 1.3 | 25.5 | | | | |
| 7/30/2002 | XX | 401BXX37467 | 0.1 U | 1 U | | 218 | 1 U | 34.5 | 92.9 | 97 | 108 | 1.4 | 25.4 | | | | |
| 10/22/2002 | XX | 401BXX37551 | 0.1 U | 1 U | | 191 | 1 U | 30.4 | 87.9 | 109 | 112 | 1 U | 25.3 | | | | |
| 6/25/2003 | XX | 401BXX37797 | 0.2 U | 2 U | | 170 | 1 U | 33 | 160 | 110 | 110 | 1.3 | 25 | | | | |
| 8/11/2003 | XX | 401BXX37844 | 0.2 U | 2 U | | 170 | 1 U | 30 | 150 | 107 | 110 | 1.1 | 19 | | | | |
| 10/21/2003 | XX | 401BXX37915 | 0.2 U | 2 U | | 200 | 1 U | 29 | 160 | 108 | 110 | 1 | 20 | | | | |
| 5/10/2004 | XX | 401BXX38117 | 0.2 U | 2 U | | 150 | 1 U | 35 | 160 | 98 | 110 | 1 | 21 | | | | |
| 7/29/2004 | XX | 401BXX38197 | 0.2 U | 2 U | | 170 | 1 U | 32 | 140 | 100 | 110 | 1.2 | 20 | | | | |
| 10/21/2004 | XX | 401BXX38281 | 0.2 U | 2 U | | 270 | 1 U | 32 | 160 | 110 | 120 | 1 U | 20 | | | | |
| 5/9/2005 | XX | GW401B013 | 0.2 U | 2 U | | 210 | 1.2 | 32 | 160 | 98 | 100 | 1.2 | 20 | | | | |
| 7/28/2005 | XX | GW401B02F | 0.2 U | 2 U | | 230 | 3.6 | 30 | 170 | 115 | 120 | 1 U | 17 | | | | |
| 11/8/2005 | XX | GW401B047 | 0.2 U | 2 U | | 200 | 1 U | 34 | 150 | 120 | 130 | 1.1 | 20 | | | | |
| 5/4/2006 | XX | GW401B093 | 0.2 U | 2 U | | 210 | 1 U | 30 | 170 | 115 | 120 | 1.8 | 18 | | | | |
| 8/2/2006 | XX | GW401B07B | 0.2 U | 2 U | | 190 | 1 U | 32 | 160 | 115 | 120 | 1 U | 17 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (401B) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 10/30/2006 | XX | GW401B05J | 0.32 | 2 U | | 210 | 1 U | 32 | 140 | 120 | 130 | 1 U | 16 | | | | |
| 5/7/2007 | XX | GW401B0AF | 0.5 U | 0.5 U | | 210 | 1 U | 32 | 170 | 140 | 150 | 1 U | 14 | | | | |
| 8/14/2007 | XX | GW401B0C8 | 0.2 U | 0.5 U | | 220 | 1 U | 31 | 150 | 110 | 130 | 3.6 | 15 | | | | |
| 11/5/2007 | XX | GW401B0E0 | 0.2 U | 0.5 U | | 230 | 1 U | 33 | 210 | 130 | 140 | 1 | 17 | | | | |
| 6/5/2008 | XX | GW401B0G8 | 0.2 U | 0.5 U | | 220 | 1 U | 29 | 160 | 130 | 140 | 1.4 | 11 | | | | |
| 8/20/2008 | XX | GW401B0I8 | 0.2 U | 0.5 U | | 230 | 1 U | 31 | 160 | 120 | 140 | 1.4 | 12 | | | | |
| 10/27/2008 | XX | GW401B0JG | 0.2 U | 0.5 U | | 180 | 1 U | 28 | 190 | 120 | 140 | 1.7 | 13 | | | | |
| 5/13/2009 | XX | GW401B11G | 0.2 U | 0.5 U | | 230 | 0.6 U | 32 | 150 | 135 | 140 | 1.6 | 12 | | | | |
| 8/13/2009 | XX | GW401B13G | 0.2 U | 0.5 U | | 220 | 0.6 U | 33 | 180 | 120 | 140 | 1.3 | 11 | | | | |
| 10/28/2009 | XX | GW401B154 | 0.2 U | 0.5 U | | 190 | 1 U | 30 | 150 | 145 | 150 | 2.1 | 11 | | | | |
| 6/3/2010 | XX | GW401B175 | 0.2 U | 0.5 U | | 220 | 1 U | 31 | 170 | 140 | 140 | 2.2 | 10 | | | | |
| 8/17/2010 | XX | GW401B196 | 0.2 U | 0.5 U | | 220 | 1 U | 28 | 160 | 150 | 150 | 2.4 | 10 | | | | |
| 10/19/2010 | XX | GW401B1AE | 0.2 U | 0.5 U | | 220 | 1.3 U | 31 | 140 | 145 | 150 | 1.6 | 10 | | | | |
| 5/16/2011 | XX | GW401B1DF | 0.2 U | 0.5 U | | 230 | 5 U | 29 | 160 | 150 | 150 | 3.1 | 9.8 | | | | |
| 8/8/2011 | XX | GW401B1F6 | 0.08 U | 0.2 U | | 220 | 0.38 U | 31 | 150 | 160 | 160 | 1.4 | 9.6 | | | | |
| 11/1/2011 | XX | GW401B1GH | 0.082 U | 0.2 U | | 220 | 0.32 U | 27 | 160 | 170 | 170 | 1.6 | 6.9 | | | | |
| 5/14/2012 | XX | GW401B1IB | 0.2 U | 0.5 U | | 200 | 2.5 U | 26 | 160 | 150 | 150 | 1 U | 6.9 | | | | |
| 8/14/2012 | XX | GW401B204 | 0.2 U | 0.25 U | | 150 | 2.8 U | 26 | 140 | 160 | 160 | 1.43 | 6.3 | | | | |
| 11/1/2012 | XX | GW401B21I | 0.2 U | 0.25 U | | 230 | 2.5 U | 26 | 170 | 160 | 160 | 1 | 6.5 | | | | |
| 5/21/2013 | XX | GW401B23C | 0.2 U | 0.25 U | | 200 | 2.5 U | 26 | 160 | 160 | 160 | 1 | 6.7 | | | | |
| 7/22/2013 | XX | GW401B256 | 0.2 U | 0.25 U | | 230 | 2.5 U | 25 | 160 | 150 | 150 | 1.1 | 6.3 | | | | |
| 9/30/2013 | XX | GW401B270 | 0.2 U | 0.25 U | | 220 | 2.5 U | 26 | 170 | 170 | 170 | 0.99 | 6.4 | | | | |
| 6/4/2014 | XX | GW401B28E | 0.1 U | 0.05 U | | 240 | 4 U | 24 | 176 | 160 | 160 | 1 U | 7 | | | | |
| 8/19/2014 | XX | GW401B2A8 | 0.1 U | 0.05 U | | 240 | 5.6 | 24 | 175 | 180 | 180 | 1 U | 9 | | | | |
| 11/11/2014 | XX | GW401B2C2 | 0.1 U | 0.05 U | | 220 | 4 U | 24 | 157 | 180 | 180 | 1 U | 8.1 | | | | |
| 6/2/2015 | XX | GW401B2DI | 0.1 U | 0.05 U | | 230 | 4 U | 20 | 165 | 160 | 160 | 1 U | 6.8 | | | | |
| 9/1/2015 | XX | GW401B2FD | 0.1 U | 0.05 U | | 220 | 4 U | 20 | 189 | 180 | 180 | 1 U | 6.6 | | | | |
| 11/3/2015 | XX | GW401B2H7 | 0.1 U | 0.05 U | | 230 | 4 U | 21 | 186 | 180 | 180 | 1 U | 7.2 | | | | |
| 6/14/2016 | XX | GW401B30H | 0.1 U | 0.05 U | | 230 | 4 U | 21 | 191 | 180 | 180 | 1 U | 6.7 | | | | |
| 9/20/2016 | XX | GW401B32B | 0.1 U | 0.05 U | | 270 | 4 U | 20 | 191 | 190 | 190 | 1 U | 5.8 | | | | |
| 11/9/2016 | XX | GW401B345 | 0.1 U | 0.05 U | | 230 | 4 U | 20 | 185 | 200 | 200 | 1.1 | 7.8 | | | | |
| 6/14/2017 | XX | GW401B360 | 0.1 U | 0.05 U | | 200 | 4 U | 20 | 197 | 190 | 190 | 1.2 | 6 | | | | |
| 8/29/2017 | XX | GW401B37E | 0.1 U | 0.05 U | | 240 | 4 U | 17 | 183 | 200 | 200 | 1 U | 4.6 | | | | |
| 11/14/2017 | XX | GW401B398 | 0.1 U | 0.05 U | | 230 | 4 U | 17 | 180 | 200 | 200 | 1 U | 4.8 | | | | |
| 6/20/2018 | XX | GW401B3B3 | 0.1 U | 0.05 U | | 270 | 4 U | 17 | 210 | 200 | 200 | 1 U | 5.2 | | | | |
| 8/15/2018 | XX | GW401B3DC | 0.1 U | 0.05 U | | 240 | 4 U | 17 | 200 | 240 | 300 | 1 U | 4.6 | | | | |
| 11/30/2018 | XX | GW401B3EB | 0.1 U | 0.05 U | | 220 | 4 U | 15 | 198 | 200 | 200 | 1 U | 4.1 | | | | |
| 6/5/2019 | XX | GW401B3G6 | 0.1 U | 0.05 U | | 250 | 4 U | 14 | 194 | 210 | 210 | 1 U | 3.6 | | | | |
| 8/14/2019 | XX | GW401B3IF | 0.1 U | 0.05 U | | 260 | 4 U | 15 | 194 | 210 | 210 | 1 U | 5.7 | | | | |
| 10/22/2019 | XX | GW401B3JE | 0.1 U | 0.05 U | | 260 | 4 U | 14 | 205 | 200 | 200 | 1 U | 4.3 | | | | |
| 6/17/2020 | XX | GW401B419 | 0.1 U | 0.05 U | | 220 | 4 U | 12 | 202 | 240 | 240 | 1 U | 2.6 | | | | |
| 8/4/2020 | XX | GW401B43I | 0.1 U | 0.05 U | | 200 | 4 U | 11 | | 210 | 210 | 1 U | 3.6 | | | | |
| 8/4/2020 | XX | GW401B43IR | | | | | | | 210 | | | | | | | | |
| 10/21/2020 | XX | GW401B44H | 0.1 U | 0.05 U | | 240 | 4.4 | 11 | 217 | 210 | 210 | 1 U | 2.2 | | | | |
| 6/23/2021 | XX | GW401B46C | 0.1 U | 0.05 U | | 240 | 4 U | 12 | 204 | 220 | 220 | 1 U | 3.4 | | | | |
| 9/21/2021 | XX | GW401B487 | 0.1 U | 0.05 U | | 220 | 4 U | 11 | 197 | 220 | 220 | 1 U | 3.2 | | | | |
| **402A** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 402AXX36649 | 0.178 | 1 U | | 128 | 2 | 9.3 | 86.9 | 78 | 88.9 | 1 U | 4.4 | | | | |
| 8/10/2000 | XX | 402AXX36748 | 0.119 | 1 U | | 81 | 1 U | 10.8 | 67.2 | 85 | 92.9 | 1 U | 4.5 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(402A)**

| Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/9/2000 | XX | 402AXX36839 | 0.1 U | 1 U | | 131 | 1 U | 8.4 | 57.4 | 90 | 94.9 | 1 U | 5.3 | | | | |
| 5/17/2001 | XX | 402AXX37028 | 0.1 U | 1 U | | 125 | 2 | 9.2 | 58.7 | 91 | 92 | 1 U | 7.2 | | | | |
| 8/1/2001 | XX | 402AXX37104 | 0.1 U | 1 U | | 180 | 1 | 9.7 | 63.4 | 90 | 90 | 3.2 | 7.2 | | | | |
| 10/24/2001 | XX | 402AXX37188 | 0.1 U | 1 U | | 137 | 4 | 8.6 | 62.3 | 82 | 90 | 1.6 | 8.3 | | | | |
| 5/22/2002 | XX | 402AXX37398 | 0.18 | 1 U | | 141 | 1 U | 9 | 63.9 | 83 | 86 | 1 U | 6.7 | | | | |
| 7/30/2002 | XX | 402AXX37467 | 0.1 U | 1 U | | 142 | 1 U | 9.4 | 68.9 | 85 | 90 | 1 U | 8.1 | | | | |
| 10/22/2002 | XX | 402AXX37551 | 0.1 U | 1 U | | 121 | 1 U | 9.3 | 61.8 | 76 | 82 | 1 U | 8.3 | | | | |
| 6/25/2003 | XX | 402AXX37797 | 0.2 U | 2 U | | 100 | 1 U | 10 | 110 | 89 | 91 | 1 U | 10 | | | | |
| 8/11/2003 | XX | 402AXX37844 | 0.2 U | 2 U | | 86 | 1 U | 8.6 | 100 | 86 | 90 | 1 U | 8.6 | | | | |
| 10/22/2003 | XX | 402AXX37916 | 0.2 U | 2 U | | 120 | 1 U | 9.5 | 99 | 88 | 90 | 1 U | 9.8 | | | | |
| 5/11/2004 | XX | 402AXX38118 | 0.2 U | 2 U | | 87 | 1 U | 10 | 120 | 90 | 91 | 1 U | 12 | | | | |
| 7/29/2004 | XX | 402AXX38197 | 0.2 U | 2 U | | 100 | 1 U | 9.4 | 100 | 79 | 82 | 1 U | 12 | | | | |
| 10/26/2004 | XX | 402AXX38286 | 0.2 U | 2 U | | 120 | 1 U | 10 | 110 | 85 | 90 | 1 U | 14 | | | | |
| 5/9/2005 | XX | GW402A014 | 0.2 U | 2 U | | 150 | 1 U | 8.5 | 110 | 79 | 81 | 1 U | 14 | | | | |
| 8/1/2005 | XX | GW402A02G | 0.2 U | 2 U | | 190 | 1 U | 8.8 | 120 | 88 | 91 | 1 U | 12 | | | | |
| 11/9/2005 | XX | GW402A048 | 0.47 | 2 U | | 110 | 1 U | 8.3 | 120 | 94 | 96 | 1.2 | 15 | | | | |
| 5/4/2006 | XX | GW402A094 | 0.2 U | 2 U | | 130 | 1 U | 8 | 120 | 90 | 93 | 1 U | 16 | | | | |
| 8/2/2006 | XX | GW402A07C | 0.2 U | 2 U | | 120 | 1 U | 8.4 | 110 | 89 | 90 | 1.2 | 15 | | | | |
| 10/30/2006 | XX | GW402A060 | 0.2 | 2 U | | 120 | 1 U | 8.7 | 120 | 88 | 89 | 1 U | 16 | | | | |
| 5/7/2007 | XX | GW402A0AG | 0.5 U | 0.5 U | | 140 | 1 U | 7.8 | 120 | 95 | 100 | 1 U | 16 | | | | |
| 8/14/2007 | XX | GW402A0C9 | 0.2 U | 0.5 U | | 160 | 1 U | 8.5 | 99 | 89 | 90 | 2.8 | 19 | | | | |
| 11/5/2007 | XX | GW402A0E1 | 0.2 U | 0.5 U | | 160 | 1 U | 8.6 | 150 | 93 | 94 | 1 U | 21 | | | | |
| 6/5/2008 | XX | GW402A0G9 | 0.2 U | 0.5 U | | 150 | 1 U | 7.7 | 120 | 94 | 94 | 1 U | 16 | | | | |
| 8/20/2008 | XX | GW402A0I9 | 0.2 U | 0.5 U | | 170 | 1 U | 8.2 | 120 | 93 | 95 | 1.3 | 18 | | | | |
| 10/27/2008 | XX | GW402A0JH | 0.2 U | 0.5 U | | 130 | 1 U | 7.1 | 130 | 94 | 95 | 1.3 | 22 | | | | |
| 5/13/2009 | XX | GW402A11H | 0.2 U | 0.5 U | | 160 | 0.6 U | 8.3 | 110 | 94 | 95 | 1.2 | 22 | | | | |
| 5/13/2009 | XD | LTDP4X10D | 0.2 U | 0.5 U | | 130 | 0.6 U | 8.3 | 110 | | 94 | 1 U | 22 | | | | |
| 8/13/2009 | XX | GW402A13H | 0.2 U | 0.5 U | | 170 | 0.6 U | 8.8 | 130 | 94 | 95 | 1 U | 21 | | | | |
| 10/28/2009 | XX | GW402A155 | 0.2 U | 0.5 U | | 130 | 1 U | 7.1 | 100 | 93 | 96 | 1.6 | 24 | | | | |
| 6/3/2010 | XX | GW402A176 | 0.2 U | 0.5 U | | 160 | 1.1 U | 7.2 | 120 | 85 | 94 | 1.5 | 21 | | | | |
| 8/17/2010 | XX | GW402A197 | 0.2 U | 0.5 U | | 180 | 1 U | 6.4 | 110 | 96 | 97 | 1.8 | 27 | | | | |
| 10/19/2010 | XX | GW402A1AF | 0.2 U | 0.5 U | | 170 | 1.4 U | 8.3 | 110 | 94 | 96 | 1.7 | 29 | | | | |
| 5/16/2011 | XX | GW402A1DG | 0.2 U | 0.5 U | | 170 | 5 U | 8.3 | 120 | 98 | 98 | 1.6 | 32 | | | | |
| 8/8/2011 | XX | GW402A1F7 | 0.08 U | 0.2 U | | 190 | 0.38 U | 12 | 110 | 93 | 93 | 1.4 | 34 | | | | |
| 11/1/2011 | XX | GW402A1GI | 0.082 U | 0.2 U | | 170 | 0.32 U | 8 | 120 | 100 | 100 | 1.8 | 27 | | | | |
| 5/16/2012 | XX | GW402A1IC | 0.2 U | 0.5 U | | 180 | 2.5 U | 7.1 | 120 | 91 | 91 | 1.65 | 33 | | | | |
| 8/15/2012 | XX | GW402A205 | 0.2 U | 0.25 U | | 180 | 2.5 U | 7.1 | 120 | 96 | 96 | 1.87 | 32 | | | | |
| 10/31/2012 | XX | GW402A21J | 0.2 U | 0.25 U | | 170 | 3.3 | 6.6 | 140 | 85 | 85 | 1.4 | 29 | | | | |
| 5/20/2013 | XX | GW402A23D | 0.2 U | 0.25 U | | 180 | 2.5 U | 7.8 | 110 | 94 | 94 | 1.2 | 26 | | | | |
| 7/22/2013 | XX | GW402A257 | 0.2 U | 0.25 U | | 190 | 2.5 U | 7.1 | 130 | 94 | 94 | 1.5 | 31 | | | | |
| 9/30/2013 | XX | GW402A271 | 0.2 U | 0.25 U | | 190 | 2.5 U | 7.2 | 130 | 100 | 100 | 1.5 | 31 | | | | |
| 6/4/2014 | XX | GW402A28F | 0.1 U | 0.05 U | | 210 | 4 U | 7.7 | 157 | 100 | 100 | 1.1 | 34 | | | | |
| 8/19/2014 | XX | GW402A2A9 | 0.1 U | 0.05 U | | 220 | 4 U | 7.6 | 149 | 110 | 110 | 1.3 | 34 | | | | |
| 11/11/2014 | XX | GW402A2C3 | 0.1 U | 0.05 U | | 170 | 4 U | 8 | 130 | 110 | 110 | 1.1 | 32 | | | | |
| 6/4/2015 | XX | GW402A2DJ | 0.1 U | 0.05 U | | 190 | 4 U | 6.9 | 144 | 100 | 100 | 1.3 | 35 | | | | |
| 9/1/2015 | XX | GW402A2FE | 0.1 U | 0.05 U | | 200 | 4 U | 6.8 | 154 | 110 | 110 | 1.5 | 34 | | | | |
| 11/3/2015 | XX | GW402A2H8 | 0.1 U | 0.05 U | | 170 | 4 U | 7.8 | 150 | 110 | 110 | 1.3 | 33 | | | | |
| 6/14/2016 | XX | GW402A30I | 0.1 U | 0.05 U | | 220 | 4 U | 7.8 | 162 | 110 | 110 | 1.3 | 38 | | | | |
| 9/20/2016 | XX | GW402A32C | 0.1 U | 0.05 U | | 220 | 4 U | 8 | 171 | 120 | 120 | 1.5 | 39 | | | | |
| 11/9/2016 | XX | GW402A346 | 0.1 U | 0.05 U | | 190 | 4 U | 7.9 | 180 | 130 | 130 | 1.8 | 40 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (402A) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/14/2017 | XX | GW402A361 | 0.1 U | 0.05 U | | 180 | 4 U | 13 | 166 | 110 | 110 | 1.7 | 36 | | | | |
| 8/29/2017 | XX | GW402A37F | 0.1 U | 0.05 U | | 200 | 4 U | 6.8 | 172 | 120 | 120 | 1.3 | 38 | | | | |
| 11/15/2017 | XX | GW402A399 | 0.1 U | 0.05 U | | 180 | 4 U | 6.4 | 168 | 120 | 120 | 1.3 | 33 | | | | |
| 6/20/2018 | XX | GW402A3B4 | 0.1 U | 0.05 U | | 220 | 4 U | 7.4 | 182 | 120 | 120 | 1.3 | 39 | | | | |
| 8/15/2018 | XX | GW402A3DD | 0.1 U | 0.05 U | | 650 | 4 U | 4.5 | 172 | 650 | 650 | 1.4 | 15 | | | | |
| 11/28/2018 | XX | GW402A3EC | 0.1 U | 0.05 U | | 170 | 4 U | 6.7 | 170 | 120 | 120 | 1.4 | 32 | | | | |
| 6/5/2019 | XX | GW402A3G7 | 0.1 U | 0.05 U | | 250 | 4 U | 6.5 | 184 | 130 | 130 | 1.5 | 36 | | | | |
| 8/13/2019 | XX | GW402A3IG | 0.1 U | 0.05 U | | 240 | 4 U | 6.6 | 180 | 140 | 140 | 1.6 | 40 | | | | |
| 10/22/2019 | XX | GW402A3JF | 0.1 U | 0.44 | | 240 | 4 U | 7.4 | 177 | 130 | 130 | 1.9 | 34 | | | | |
| 6/17/2020 | XX | GW402A41A | 0.1 U | 0.05 U | | 200 | 4 U | 6.5 | 177 | 140 | 140 | 1.7 | 35 | | | | |
| 8/4/2020 | XX | GW402A43J | 0.1 U | 0.05 U | | 180 | 4 U | 6.6 | | 140 | 140 | 1.8 | 34 | | | | |
| 8/4/2020 | XX | GW402A43JR | | | | | | | 206 | | | | | | | | |
| 10/21/2020 | XX | GW402A44I | 0.1 U | 0.85 | | 250 | 4 U | 6.6 | 203 | 140 | 140 | 1.7 | 36 | | | | |
| 6/23/2021 | XX | GW402A46D | 0.1 U | 0.05 U | | 230 | 4 U | 7.2 | 211 | 160 | 160 | 2.3 | 39 | | | | |
| 9/21/2021 | XX | GW402A488 | 0.1 U | 0.05 U | | 220 | 4 U | 6.4 | 203 | 170 | 170 | 1.9 | 37 | | | | |
| **402B** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 402BXX36649 | 0.1 U | 2.9 | | 796 | 91 | 8.5 | 689.4 | 610 | 680.7 | 16.5 | 58 | | | | |
| 8/10/2000 | XX | 402BXX36748 | 0.1 U | 3.8 | | 1299 | 4 | 7.8 | 1084.4 | 1000 | 1131.2 | 23.1 | 122 | | | | |
| 11/9/2000 | XX | 402BXX36839 | 0.221 | 3 | | 1205 | 5 | 7.6 | 926.4 | 1000 | 1071.6 | 21.4 | 98.7 | | | | |
| 5/17/2001 | XX | 402BXX37028 | 0.1 U | 2.5 | | 1308 | 1 | 7.9 | 1038.7 | 1050 | 1148 | 21.9 | 79.4 | | | | |
| 8/1/2001 | XX | 402BXX37104 | 0.1 U | 1.1 | | 1305 | 3 | 7.2 | 1137.5 | 1100 | 1130 | 22.2 | 75.8 | | | | |
| 10/24/2001 | XX | 402BXX37188 | 0.115 | 1 U | | 1258 | 5 | 30.9 | 1082.1 | 1029 | 1045 | 18.7 | 82.8 | | | | |
| 5/22/2002 | XX | 402BXX37398 | 0.1 U | 1.45 | | 1089 | 3 | 10.1 | 958.6 | 880 | 974 | 15.3 | 65.3 | | | | |
| 8/7/2002 | XX | 402BXX37475 | 0.1 U | 1.1 | | 1079 | 2 | 10.9 | 866.8 | 864 | 934 | 16.5 | 63.8 | | | | |
| 10/24/2002 | XX | 402BXX37553 | 0.1 U | 1 U | | 1068 | 3 | 17.2 | 937.6 | 1000 | 1040 | 211.2 | 70.8 | | | | |
| 6/25/2003 | XX | 402BXX37797 | 0.2 U | 2 U | | 830 | 1 U | 13 | 920 | 720 | 780 | 16 | 50 | | | | |
| 8/11/2003 | XX | 402BXX37844 | 0.37 | 2 U | | 880 | 1 U | 7.6 | 840 | 890 | 940 | 13 | 51 | | | | |
| 10/22/2003 | XX | 402BXX37916 | 0.25 | 2 U | | 890 | 1 U | 7.1 | 900 | 760 | 810 | 14 | 40 | | | | |
| 5/11/2004 | XX | 402BXX38118 | 0.2 U | 2 U | | 730 | 1 U | 10 | 680 | 680 | 710 | 14 | 39 | | | | |
| 8/2/2004 | XX | 402BXX38201 | 0.28 | 2 U | | 770 | 1 U | 9.4 | 710 | 690 | 740 | 13 | 42 | | | | |
| 10/26/2004 | XX | 402BXX38286 | 0.2 U | 2 U | | 810 | 1 U | 7.8 | 820 | 700 | 730 | 10 | 39 | | | | |
| 5/9/2005 | XX | GW402B015 | 0.2 U | 2 U | | 700 | 1 U | 8.4 | 640 | 460 | 480 | 8.6 | 34 | | | | |
| 8/1/2005 | XX | GW402B02H | 0.2 U | 2 U | | 940 | 1 U | 8.2 | 870 | 760 | 810 | 9.3 | 44 | | | | |
| 11/9/2005 | XX | GW402B049 | 0.2 U | 2 U | | 670 | 1 U | 7.4 | 950 | 700 | 750 | 8.7 | 41 | | | | |
| 5/5/2006 | XX | GW402B095 | 0.2 U | 2 U | | 640 | 2.5 | 7.1 | 760 | 600 | 640 | 8.7 | 30 | | | | |
| 8/2/2006 | XX | GW402B07D | 0.2 U | 2 U | | 800 | 1 U | 7.3 | 820 | 740 | 790 | 9.8 | 39 | | | | |
| 10/30/2006 | XX | GW402B061 | 0.34 | 2 U | | 630 | 1 U | 6 | 610 | 600 | 630 | 7.6 | 27 | | | | |
| 5/7/2007 | XX | GW402B0AH | 0.5 U | 0.5 U | | 680 | 1 U | 6.5 | 650 | 690 | 730 | 6 | 24 | | | | |
| 8/14/2007 | XX | GW402B0CA | 0.2 U | 0.5 U | | 780 | 1 U | 7.7 | 720 | 720 | 750 | 37 | 33 | | | | |
| 11/5/2007 | XX | GW402B0E2 | 4.6 | 0.5 U | | 660 | 1 U | 7.8 | 710 | 610 | 670 | 11 | 26 | | | | |
| 6/11/2008 | XX | GW402B0GA | 0.2 U | 0.5 U | | 770 | 1 U | 7.3 | 740 | 710 | 770 | 13 | 25 | | | | |
| 8/20/2008 | XX | GW402B0IA | 0.2 U | 0.5 U | | 800 | 1 U | 8.6 | 710 | 710 | 770 | 10 | 25 | | | | |
| 8/20/2008 | XD | GWDP4X0H5 | 0.2 U | 0.5 U | | 790 | 1 U | 8.7 | 700 | | 770 | 11 | 25 | | | | |
| 10/27/2008 | XX | GW402B0JI | 0.2 U | 0.5 U | | 720 | 1 U | 7 | 800 | 680 | 740 | 13 | 26 | | | | |
| 5/13/2009 | XX | GW402B11I | 0.2 U | 0.5 U | | 750 | 0.6 U | 8 | 730 | 690 | 720 | 13 | 26 | | | | |
| 8/13/2009 | XX | GW402B13I | 0.2 U | 0.5 U | | 400 | 0.6 U | 8.3 | 910 | 680 | 720 | 9.5 | 25 | | | | |
| 8/13/2009 | XD | GWDP4X12D | 0.2 U | 0.5 U | | 760 | 0.6 U | 8.3 | 860 | | 720 | 9.6 | 26 | | | | |
| 10/28/2009 | XX | GW402B156 | 0.2 U | 0.5 U | | 490 | 1 U | 7 | 540 | 670 | 700 | 15 | 26 | | | | |
| 6/3/2010 | XX | GW402B177 | 0.2 U | 0.5 U | | 690 | 1.1 U | 7.3 | 790 | 620 | 680 | 13 | 27 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (402B) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 8/17/2010 | XX | GW402B198 | 0.2 U | 0.5 U | | 720 | 1 U | 7 | 630 | 670 | 700 | 13 | 28 | | | | |
| 8/17/2010 | XD | GWDP4X183 | 0.2 U | 0.5 U | | 720 | 2.2 U | 7.3 | 590 | | 700 | 12 | 28 | | | | |
| 10/19/2010 | XX | GW402B1AG | 0.2 U | 0.5 U | | 700 | 2.5 U | 8.1 | 570 | 650 | 690 | 10 | 30 | | | | |
| 5/16/2011 | XX | GW402B1DH | 0.2 U | 0.5 U | | 580 | 5 U | 6.6 | 550 | 540 | 540 | 12 | 23 | | | | |
| 8/8/2011 | XX | GW402B1F8 | 0.08 U | 0.2 U | | 170 | 0.38 U | 14 | 590 | 140 | 140 | 11 | 4.6 | | | | |
| 11/1/2011 | XX | GW402B1GJ | 0.082 U | 0.2 U | | 670 | 0.32 U | 7.4 | 630 | 710 | 710 | 11 | 26 | | | | |
| 5/16/2012 | XX | GW402B1ID | 0.2 U | 0.5 U | | 600 | 2.5 U | 6.8 | 540 | 580 | 580 | 5.64 | 22 | | | | |
| 8/15/2012 | XX | GW402B206 | 0.2 U | 0.25 U | | 690 | 2.5 U | 6.9 | 460 | 640 | 640 | 7.05 | 26 | | | | |
| 10/31/2012 | XX | GW402B220 | 0.2 U | 0.25 U | | 590 | 2.5 U | 6.4 | 610 | 590 | 590 | 6 | 22 | | | | |
| 5/20/2013 | XX | GW402B23E | 0.2 U | 0.25 U | | 650 | 2.5 U | 7.2 | 510 | 630 | 630 | 5.9 | 23 | | | | |
| 7/22/2013 | XX | GW402B258 | 0.2 U | 0.25 U | | 700 | 2.5 U | 7.1 | 560 | 620 | 620 | 5.9 | 23 | | | | |
| 9/30/2013 | XX | GW402B272 | 0.2 U | 0.25 U | | 640 | 2.5 U | 6.8 | 590 | 670 | 670 | 6.1 | 23 | | | | |
| 6/4/2014 | XX | GW402B28G | 0.1 U | 0.05 U | | 700 | 4.4 | 7 | 626 | 630 | 630 | 4.4 | 21 | | | | |
| 8/19/2014 | XX | GW402B2AA | 0.1 U | 0.05 U | | 710 | 4 U | 6.9 | 614 | 670 | 670 | 5 | 20 | | | | |
| 11/11/2014 | XX | GW402B2C4 | 0.1 U | 0.05 U | | 640 | 4 U | 6.8 | 576 | 630 | 630 | 4.8 | 20 | | | | |
| 6/4/2015 | XX | GW402B2E0 | 0.1 U | 0.05 U | | 660 | 4 U | 6.2 | 578 | 590 | 590 | 4.7 | 17 | | | | |
| 9/1/2015 | XX | GW402B2FF | 0.15 | 0.39 | | 710 | 4 U | 5.9 | 688 | 640 | 640 | 5.4 | 18 | | | | |
| 11/3/2015 | XX | GW402B2H9 | 0.13 | 0.05 U | | 620 | 4 U | 1.5 | 581 | 600 | 600 | 5.1 | 17 | | | | |
| 6/14/2016 | XX | GW402B30J | 0.1 U | 0.05 U | | 690 | 4 U | 6.1 | 625 | 600 | 600 | 4.3 | 20 | | | | |
| 9/20/2016 | XX | GW402B32D | 0.11 | 0.05 U | | 670 | 4 U | 5.7 | 630 | 620 | 620 | 4.9 | 17 | | | | |
| 11/9/2016 | XX | GW402B347 | 0.11 | 0.05 U | | 660 | 4 U | 5.7 | 638 | 660 | 660 | 5.5 | 18 | | | | |
| 6/14/2017 | XX | GW402B362 | 0.1 U | 0.05 U | | 640 | 4 U | 8.5 | 646 | 620 | 620 | 4.9 | 14 | | | | |
| 8/29/2017 | XX | GW402B37G | 0.1 U | 0.05 U | | 640 | 4 U | 3.8 | 582 | 620 | 620 | 4.5 | 14 | | | | |
| 11/15/2017 | XX | GW402B39A | 0.1 | 0.05 U | | 630 | 4 U | 3.9 | 596 | 650 | 650 | 4.6 | 13 | | | | |
| 6/20/2018 | XX | GW402B3B5 | 0.1 U | 0.05 U | | 650 | 4 U | 4.9 | 620 | 640 | 640 | 4.3 | 18 | | | | |
| 8/15/2018 | XX | GW402B3DE | 0.1 U | 0.54 | | 650 | 4 U | 4.5 | 586 | 140 | 140 | 4.5 | 14 | | | | |
| 11/28/2018 | XX | GW402B3ED | 0.1 | 0.05 U | | 640 | 10 | 7.3 | 590 | 620 | 620 | 4.5 | 13 | | | | |
| 6/5/2019 | XX | GW402B3G8 | 0.1 U | 0.05 U | | 650 | 4 U | 4.9 | 588 | 600 | 600 | 4.3 | 11 | | | | |
| 8/13/2019 | XX | GW402B3IH | 0.1 U | 0.05 U | | 600 | 4 U | 5.6 | 572 | 610 | 620 | 4.9 | 14 | | | | |
| 10/22/2019 | XX | GW402B3JG | 0.1 U | 0.05 U | | 660 | 4 U | 6.4 | 588 | 590 | 590 | 5 | 12 | | | | |
| 6/17/2020 | XX | GW402B41B | 0.1 U | 0.05 U | | 590 | 4 U | 5.7 | 546 | 630 | 630 | 4.5 | 10 | | | | |
| 8/4/2020 | XX | GW402B440 | 0.1 U | 0.05 U | | 540 | 4 U | 6.4 | | 580 | 580 | 4.5 | 11 | | | | |
| 8/4/2020 | XX | GW402B440R | | | | | | | 607 | | | | | | | | |
| 10/21/2020 | XX | GW402B44J | 0.11 | 0.05 U | | 590 | 4 U | 6.2 | 606 | 580 | 580 | 4.7 | 9.8 | | | | |
| 6/23/2021 | XX | GW402B46E | 0.1 U | 0.05 U | | 590 | 4 U | 7.3 | 563 | 600 | 600 | 4.9 | 11 | | | | |
| 9/21/2021 | XX | GW402B489 | 0.16 | 0.05 U | | 570 | 6 | 6.5 | 554 | 600 | 600 | 4.6 | 11 | | | | |
| **LDS** | | | | | | | | | | | | | | | | | |
| 6/10/2008 | XX | LDSXX39597 | 0.21 | 0.5 U | 0.045 | 550 | 8.6 | 22 | 480 | 430 | 460 | 19 | 28 | | | | |
| 8/19/2008 | XX | LDSXX39687 | 0.2 U | 0.5 U | 0.053 | 600 | 8.8 | 22 | 510 | 470 | 500 | 20 | 25 | | | | |
| 10/22/2008 | XX | LDSXX39736 | 0.2 U | 0.5 U | 0.06 | 640 | 9.9 | 13 | 640 | 520 | 550 | 11 | 25 | | | | |
| 5/7/2009 | XX | LDSXX39940 | 2.7 | 0.5 U | | 880 | 37 | 1 U | 870 | 790 | 820 | 30 | 49 | | | | |
| 8/12/2009 | XX | LDSXX40037 | 2.8 | 0.5 U | 0.05 U | 800 | 72 | 1 U | 680 | 725 | 770 | 19 | 40 | | | | |
| 10/27/2009 | XX | LDSXX40113 | 2.2 | 0.5 U | 0.02 U | 820 | 24 | 9.5 | 650 | 740 | 770 | 49 | 41 | | | | |
| 6/7/2010 | XX | GWXXXX1B8 | 5.9 | 0.5 U | 0.02 U | 970 | 42 | 1 U | 790 | 840 | 880 | 25 | 47 | | | | |
| 8/18/2010 | XX | GWXXXX1B9 | 7.1 | 0.5 U | 0.02 U | 1000 | 34 | 1 U | 660 | 880 | 950 | 42 | 54 | | | | |
| 10/21/2010 | XX | GWXXXX1BA | 4.5 | 0.5 U | 0.24 | 860 | 32 | 1 U | 590 | 785 | 810 | 29 | 49 | | | | |
| 5/18/2011 | XX | LTXXXX1EF | 1.4 | 0.5 U | 0.045 | 560 | 20 | 18 | 440 | 510 | 510 | 18 | 38 | | | | |
| 8/10/2011 | XX | LTXXXX1G6 | 1.5 | 0.2 U | 0.079 | 580 | 17 | 19 | 360 | 520 | 520 | 11 | 40 | | | | |
| 11/2/2011 | XX | LTXXXX1HH | 1.6 | 0.2 U | 0.044 | 620 | 13 | 19 | 430 | 500 | 500 | 12 | 35 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LDS) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/14/2012 | XX | LTXXXX1JB | 5.1 | 0.5 U | 0.02 U | 850 | 18 | 30 | 730 | 676 | 676 | 21 | 41 |
| 8/14/2012 | XX | LTXXXX214 | 7.1 | 0.25 U | 0.086 | 370 | 46 | 3.7 | 180 | 320 | 320 | 41.3 | 4 |
| 10/30/2012 | XX | LTXXXX22I | 5.4 | 0.25 U | 0.043 | 790 | 14 | 27 | 650 | 710 | 710 | 20 | 42 |
| 5/21/2013 | XX | LTXXXX24C | 5 | 0.25 U | 0.041 | 830 | 15 | 24 | 600 | 740 | 740 | 18 | 40 |
| 7/25/2013 | XX | LTXXXX266 | 4.9 | 0.25 U | 0.042 | 840 | 14 | 21 | 580 | 690 | 690 | 19 | 38 |
| 10/1/2013 | XX | LTXXXX280 | 4.9 | 0.25 U | 0.02 U | 800 | 15 | 13 | 620 | 710 | 710 | 17 | 38 |
| 6/5/2014 | XX | LTXXXX29E | 7.9 | 0.05 U | 0.1 U | 1000 | 14 | 1 U | 738 | 830 | 830 | 23 | 49 |
| 8/21/2014 | XX | LTXXXX2B8 | 1.4 | 0.05 U | 0.1 U | 550 | 4.4 | 16 | 406 | 440 | 440 | 7.2 | 37 |
| 11/13/2014 | XX | LTXXXX2D2 | 0.66 | 0.19 | 0.1 U | 560 | 4 U | 29 | 428 | 480 | 480 | 8.4 | 38 |
| 6/4/2015 | XX | LTXXXX2EI | 1.2 | 0.05 U | 0.1 U | 590 | 10 | 20 | 419 | 440 | 440 | 6.5 | 37 |
| 9/3/2015 | XX | LTXXXX2GD | 1 | 0.05 U | 0.1 U | 570 | 9.6 | 16 | 436 | 460 | 460 | 6.8 | 32 |
| 11/5/2015 | XX | LTXXXX2I7 | 1.1 | 0.05 U | 0.1 U | 580 | 8.8 | 16 | 452 | 470 | 470 | 6.2 | 37 |
| 6/16/2016 | XX | LTXXXX31H | 1.6 | 0.05 U | 0.1 U | 630 | 6.4 | 26 | 496 | 500 | 500 | 7.6 | 34 |
| 9/22/2016 | XX | LTXXXX33B | 1.5 | 0.05 U | 0.1 U | 620 | 9.6 | 1 U | 473 | 480 | 480 | 7.6 | 34 |
| 11/10/2016 | XX | LTXXXX355 | 1.3 | 0.05 U | 0.1 U | 590 | 10 | 1 U | 444 | 540 | 540 | 8 | 36 |
| 6/15/2017 | XX | LTXXXX370 | 3.9 | 0.05 U | 0.1 U | 780 | 6.8 | 36 | 658 | 640 | 640 | 16 | 38 |
| 8/31/2017 | XX | LTXXXX38E | 2.4 | 0.05 U | 0.1 U | 720 | 7.6 | 22 | 547 | 590 | 590 | 11 | 38 |
| 11/16/2017 | XX | LTXXXX3A8 | 2.6 | 0.05 U | 0.1 U | 680 | 8 | 51 | 503 | 560 | 560 | 12 | 35 |
| 6/21/2018 | XX | LTXXXX3C3 | 3.2 | 0.05 U | 0.1 U | 760 | 5.6 | 30 | 578 | 620 | 620 | 13 | 35 |
| 8/16/2018 | XX | LTXXXX3CI | 2.8 | 0.05 U | 0.1 U | 750 | 8.8 | 24 | 555 | 630 | 630 | 12 | 38 |
| 11/29/2018 | XX | LTXXXX3FB | 6.2 | 0.05 U | 0.1 U | 820 | 4 U | 29 | 712 | 720 | 720 | 24 | 42 |
| 6/6/2019 | XX | LTXXXX3H6 | 6.6 | 0.05 U | 0.1 U | 900 | 4.8 | 26 | 755 | 810 | 810 | 21 | 39 |
| 8/15/2019 | XX | LTXXXX3I1 | 6 | 0.05 U | 0.1 U | 880 | 8 | 23 | 651 | 760 | 760 | 19 | 40 |
| 10/24/2019 | XX | LTXXXX40E | 2.3 | 0.05 U | 0.1 U | 620 | 23 | 16 | 533 | 550 | 550 | 12 | 31 |
| 6/18/2020 | XX | LTXXXX429 | 2.4 | 0.05 U | 0.1 U | 860 | 13 | 12 | 531 | 630 | 630 | 11 | 150 |
| 8/6/2020 | XX | LTXXXX434 | 2.6 | 0.05 U | 0.1 U | 790 | 17 | 5.8 | 573 | 580 | 580 | 11 | 120 |
| 10/22/2020 | XX | LTXXXX45H | 2.4 | 0.05 U | 0.1 U | 780 | 10 | 10 U | 559 | 580 | 580 | 10 | 110 |
| 6/24/2021 | XX | LTXXXX47C | 1.5 | 0.5 U | 0.34 | 580 | 4 U | 110 | 382 | 420 | 420 | 85 | 54 |
| 9/23/2021 | XX | LTXXXX497 | 0.46 | 0.05 U | 0.1 U | 570 | 11 | 16 | 508 | 520 | 520 | 7.2 | 34 |
| **LPD2** | | | | | | | | | | | | | |
| 5/19/2005 | XX | LTLPD2003 | 0.79 | 2 U | 0.1 U | 160 | 4 | 4.5 | 120 | 115 | 120 | 6.9 | 2 U |
| 8/2/2005 | XX | LTLPD201F | 3.3 | 2 U | | 410 | 16 | 6.9 | 410 | 345 | 370 | 17 | 4.5 |
| 10/26/2005 | XX | LTLPD2037 | 2.9 | 2 U | 0.12 | 160 | 12 | 18 | 130 | 110 | 120 | 11 | 2 U |
| 5/10/2006 | XX | LTLPD2083 | 0.2 U | 2 U | 0.02 U | 95 | 3 | 3.5 | 120 | 97 | 99 | 8.1 | 2 |
| 7/24/2006 | XX | LTLPD206B | 0.21 | 2 U | 0.024 | 100 | 7 | 1.9 | 110 | 100 | 100 | 9.2 | 2 U |
| 10/10/2006 | XX | LTLPD204J | 4.9 | 2 U | 0.02 U | 320 | 22 | 12 | 340 | 290 | 310 | 24 | 5.2 |
| 5/21/2007 | XX | LTLPD209F | 0.65 | 2 U | 0.02 U | 94 | 1 U | 1.8 | 100 | 100 | 110 | 4.2 | 1 |
| 8/6/2007 | XX | LTLPD20B8 | 1.5 | 0.5 U | 0.17 | 370 | 30 | 6.9 | 360 | 300 | 330 | 40 | 6.1 |
| 10/24/2007 | XX | LTLPD20D0 | 0.43 | 0.5 U | 0.074 | 170 | 5.7 | 24 | 100 | 62 | 63 | 9.7 | 2 U |
| 5/28/2008 | XX | LTLPD20F8 | 1.7 | 0.5 U | 0.02 U | 140 | 1 U | 3.4 | 140 | 145 | 150 | 8 | 2 U |
| 8/11/2008 | XX | LTLPD20H8 | 0.2 U | 0.5 U | 0.03 | 130 | 1.3 | 1.5 | 120 | 110 | 130 | 8.2 | 2 U |
| 10/15/2008 | XX | LTLPD20IG | 2.4 | 0.67 | 0.04 | 140 | 3.7 | 17 | 130 | 100 | 110 | 10 | 2 U |
| 5/6/2009 | XX | LTLPD210G | 0.2 U | 0.5 U | | 120 | 0.6 U | 1.3 | 90 | 98 | 100 | 5.8 | 1.1 |
| 5/6/2009 | XD | GWDP2X10B | 0.2 U | 0.5 U | | 150 | 0.6 U | 1.2 | 90 | | 100 | 4.8 | 2 U |
| 8/4/2009 | XX | LTLPD212G | 0.2 U | 0.5 U | 0.03 | 120 | 2 U | 1 U | 86 | 89 | 91 | 6.4 | 2 U |
| 10/19/2009 | XX | LTLPD2144 | 0.71 | 0.5 U | 0.04 | 140 | 5.2 | 15 | 86 | 71 | 72 | 9.9 | 2 U |
| 10/19/2009 | XD | GWDP2X15F | 0.71 | 2.2 | 0.05 | 120 | 1.3 | 15 | 90 | | 100 | 10 | 2 U |
| 5/25/2010 | XX | LTLPD2165 | 2.8 | 0.5 U | 0.02 U | 190 | 2.7 | 3.6 | 180 | 165 | 170 | 11 | 2 U |
| 8/2/2010 | XX | LTLPD2186 | 1.9 | 0.5 UH | 0.029 | 280 | 25 | 1 U | 110 | 240 | 260 | 28 | 3.3 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LPD2) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 10/12/2010 | XX | LTLPD219E | 0.62 | 1.5 | 0.062 | 150 | 4.8 | 30 | 97 | 73 | 74 | 9.6 | 2 U | | | | |
| 10/12/2010 | XD | GWDP2X1B5 | 0.55 | 1.6 | 0.035 | 160 | 4.7 | 31 | 51 | | 74 | 9.8 | 2 U | | | | |
| 5/18/2011 | XX | LTXXXX1EE | 0.2 U | 0.5 U | 0.02 U | 26 | 5 U | 2.9 | 44 | 44 | 44 | 4 | 2 U | | | | |
| 8/10/2011 | XX | LTXXXX1G5 | 4.3 | 0.2 U | 0.12 | 330 | 13 | 5 | 240 | 300 | 300 | 39 | 6.2 | | | | |
| 11/2/2011 | XX | LTXXXX1HG | 6.3 | 0.2 U | 0.039 | 200 | 17 | 15 | 170 | 210 | 210 | 13 | 1.2 U | | | | |
| 5/14/2012 | XX | LTXXXX1JA | 0.2 U | 0.5 U | 0.02 U | 70 | 2.5 U | 2.6 | 66 | 63 | 63 | 7 | 2 U | | | | |
| 8/14/2012 | XX | LTXXXX213 | 4.6 | 0.25 U | 0.03 | 810 | 14 | 21 | 550 | 710 | 710 | 23.1 | 41 | | | | |
| 10/30/2012 | XX | LTXXXX22H | 3.4 | 0.58 | 0.041 | 200 | 13 | 35 | 140 | 120 | 120 | 9.5 | 1 | | | | |
| 5/21/2013 | XX | LTXXXX24B | 0.2 U | 0.25 U | 0.025 | 28 | 3.1 | 2.4 | 48 | 53 | 53 | 6.2 | 0.58 | | | | |
| 7/25/2013 | XX | LTXXXX265 | 0.86 | 0.25 U | 2.4 | 130 | 11 | 13 | 70 | 91 | 91 | 8.2 | 0.7 | | | | |
| 10/1/2013 | XX | LTXXXX27J | 2.1 | 0.4 | 0.031 | 140 | 6.9 | 14 | 88 | 120 | 120 | 9.4 | 0.58 | | | | |
| 6/5/2014 | XX | LTXXXX29D | 0.16 | 0.05 U | 0.1 U | 98 | 8 | 1 U | 67.2 | 82 | 82 | 5.6 | 2 U | | | | |
| 8/21/2014 | XX | LTXXXX2B7 | 3.4 | 0.05 U | 0.14 | 310 | 25 | 1 U | 218 | 250 | 250 | 23 | 7.2 | | | | |
| 11/13/2014 | XX | LTXXXX2D1 | 2.7 | 0.81 | 0.1 U | 190 | 29 | 33 | 125 | 110 | 110 | 7.4 | 2.6 | | | | |
| 6/4/2015 | XX | LTXXXX2EH | 0.1 U | 0.05 U | 0.1 U | 68 | 4 U | 3.4 | 56.3 | 56 | 56 | 4.4 | 2.7 | | | | |
| 9/3/2015 | XX | LTXXXX2GC | 1.6 | 1.6 | 0.1 U | 180 | 4 U | 24 | 110 | 91 | 91 | 15 | 2.7 | | | | |
| 11/5/2015 | XX | LTXXXX2I6 | 4.3 | 0.49 | 0.1 U | 200 | 34 | 16 | 151 | 150 | 150 | 8.8 | 3.1 | | | | |
| 6/16/2016 | XX | LTXXXX31G | 4.6 | 0.31 | 0.1 U | 290 | 4 U | 1 U | 268 | 260 | 260 | 11 | 7.1 | | | | |
| 9/22/2016 | XX | LTXXXX33A | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 11/10/2016 | XX | LTXXXX354 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 6/15/2017 | XX | LTXXXX36J | 0.54 | 2.4 | 0.1 U | 94 | 4 U | 4.9 | 82.7 | 79 | 79 | 7.4 | 2.2 | | | | |
| 8/31/2017 | XX | LTXXXX38D | 6.2 | 0.19 | 0.1 U | 310 | 8.4 | 15 | 235 | 250 | 250 | 27 | 6.8 | | | | |
| 11/16/2017 | XX | LTXXXX3A7 | 2.1 | 1 | 0.1 U | 190 | 10 | 43 | 135 | 78 | 78 | 7.1 | 2.9 | | | | |
| 6/21/2018 | XX | LTXXXX3C2 | 2.6 | 0.076 | 0.1 U | 200 | 6 | 1.9 | 168 | 160 | 160 | 12 | 2.1 | | | | |
| 8/16/2018 | XX | LTXXXX3CH | 0.8 | 5.3 | 0.1 U | 230 | 4 U | 22 | 108 | 92 | 92 | 11 | 2.1 | | | | |
| 11/29/2018 | XX | LTXXXX3FA | 2.7 | 0.39 | 0.1 U | 180 | 19 | 38 | 136 | 94 | 94 | 8.2 | 3.9 | | | | |
| 6/6/2019 | XX | LTXXXX3H5 | 0.1 U | 0.05 U | 0.1 U | 76 | 4 U | 2.9 | 50.5 | 45 | 45 | 5.2 | 2 U | | | | |
| 8/15/2019 | XX | LTXXXX3I0 | 4.5 | 0.05 U | 0.1 U | 250 | 7.2 | 11 | 213 | 220 | 220 | 15 | 4.4 | | | | |
| 10/24/2019 | XX | LTXXXX40D | 1 | 2.7 | 0.1 U | 130 | 8 | 23 | 89.7 | 58 | 58 | 12 | 3.6 | | | | |
| 6/18/2020 | XX | LTXXXX428 | 3.6 | 0.05 U | 0.1 U | 200 | 4 U | 6.3 | 192 | 220 | 220 | 10 | 2.2 | | | | |
| 8/6/2020 | XX | LTXXXX433 | 3.7 | 0.05 U | 0.18 | 370 | 12 | 1 U | 297 | 280 | 280 | 43 | 14 | | | | |
| 10/22/2020 | XX | LTXXXX45G | 0.18 | 6.2 | 0.1 U | 150 | 4 U | 40 | 90.2 | 21 | 21 | 9.8 | 2 U | | | | |
| 6/24/2021 | XX | LTXXXX47B | 3.6 | 0.1 | 0.1 U | 260 | 6.4 | 14 | 244 | 240 | 240 | 14 | 2.8 | | | | |
| 9/23/2021 | XX | LTXXXX496 | 0.1 U | 4 | 0.19 | 92 | 4 U | 21 | 74.7 | 45 | 45 | 9.9 | 2 U | | | | |
| **ND** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | NDXX36649 | D | | D | | | D | D | | | D | D | | | | |
| 8/9/2000 | XX | NDXX36747 | D | | D | | | D | D | | | D | D | | | | |
| 11/8/2000 | XX | NDXX36838 | D | | D | | | D | D | | | D | D | | | | |
| 5/16/2001 | XX | NDXX37027 | D | D | | | D | D | D | D | D | D | D | | | | |
| 7/31/2001 | XX | NDXX37103 | D | D | | | D | D | D | D | D | D | D | | | | |
| 10/23/2001 | XX | NDXX37187 | D | D | D | | D | D | D | D | D | D | D | | | | |
| 5/21/2002 | XX | NDXX37397 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 7/30/2002 | XX | NDXX37467 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 10/22/2002 | XX | NDXX37551 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 6/23/2003 | XX | NDXX37795 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 8/13/2003 | XX | NDXX37846 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 10/20/2003 | XX | NDXX37914 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 5/6/2004 | XX | NDXX38113 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 7/27/2004 | XX | NDXX38195 | D | D | D | D | D | D | D | D | D | D | D | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(ND)**

| Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/25/2004 | XX | NDXX38285 | D | D | D | D | D | D | D | D | D | D | D |
| 5/12/2005 | XX | SWNDXX016 | D | D | | D | D | D | D | D | D | D | D |
| 7/25/2005 | XX | SWNDXX02I | D | D | | D | D | D | D | D | D | D | D |
| 11/10/2005 | XX | SWNDXX04A | 0.2 U | 2 U | 0.1 U | 96 | 20 | 10 | 77 | 61 | 63 | 8.6 | 2 U |
| 5/2/2006 | XX | SWNDXX096 | 0.21 | 2 U | 0.16 | 73 | 160 | 9.2 | 79 | 53 | 56 | 16 | 2 U |
| 8/3/2006 | XX | SWNDXX07E | D | D | D | D | D | D | D | D | D | D | D |
| 10/18/2006 | XX | SWNDXX062 | D | D | D | D | D | D | D | D | D | D | D |
| 5/21/2007 | XX | SWNDXX0AI | D | D | | D | D | D | D | D | D | D | D |
| 8/8/2007 | XX | SWNDXX0CB | D | D | | D | D | D | D | D | D | D | D |
| 11/6/2007 | XX | SWNDXX0E3 | D | D | | D | D | D | D | D | D | D | D |
| 6/11/2008 | XX | SWNDXX0GB | 0.2 U | 0.5 U | 0.12 | 200 | 5.5 | 21 | 150 | 105 | 110 | 21 | 2 U |
| 8/19/2008 | XX | SWNDXX0IB | D | D | D | D | D | D | D | D | D | D | D |
| 10/22/2008 | XX | SWNDXX0JJ | D | D | D | D | D | D | D | D | D | D | D |
| 5/18/2009 | XX | SWNDXX11J | D | D | | D | D | D | D | D | D | D | D |
| 8/17/2009 | XX | SWNDXX13J | D | D | D | D | D | D | D | D | D | D | D |
| 10/29/2009 | XX | SWNDXX157 | D | D | D | D | D | D | D | D | D | D | D |
| 6/7/2010 | XX | SWNDXX178 | 0.2 U | 0.5 U | 0.031 | 160 | 1.5 | 5.1 | 160 | 120 | 120 | 16 | 2 U |
| 8/18/2010 | XX | SWNDXX199 | D | D | | D | D | D | D | D | D | D | D |
| 10/21/2010 | XX | SWNDXX1AH | D | D | | D | D | D | D | D | D | D | D |
| 5/18/2011 | XX | SWXXXX1E9 | 0.2 U | 0.5 U | 0.02 U | 86 | 5 U | 4.2 | 86 | 89 | 89 | 5 | 2 U |
| 8/10/2011 | XX | SWXXXX1G0 | D | D | D | D | D | D | D | D | D | D | D |
| 11/2/2011 | XX | SWXXXX1HB | D | D | D | D | D | D | D | D | D | D | D |
| 5/14/2012 | XX | SWXXXX1J5 | D | D | D | D | D | D | D | D | D | D | D |
| 8/14/2012 | XX | SWXXXX20I | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 |
| 10/29/2012 | XX | SWXXXX22C | D | D | D | D | D | D | D | D | D | D | D |
| 5/21/2013 | XX | SWXXXX246 | D | D | D | D | D | D | D | D | D | D | D |
| 7/24/2013 | XX | SWXXXX260 | D | D | D | D | D | D | D | D | D | D | D |
| 10/1/2013 | XX | SWXXXX27E | D | D | D | D | D | D | D | D | D | D | D |
| 6/5/2014 | XX | SWXXXX298 | D | D | D | D | D | D | D | D | D | D | D |
| 8/21/2014 | XX | SWXXXX2B2 | D | D | D | D | D | D | D | D | D | D | D |
| 11/13/2014 | XX | SWXXXX2CG | D | D | D | D | D | D | D | D | D | D | D |
| 6/4/2015 | XX | SWXXXX2EC | D | D | D | D | D | D | D | D | D | D | D |
| 9/3/2015 | XX | SWXXXX2G7 | D | D | D | D | D | D | D | D | D | D | D |
| 11/5/2015 | XX | SWXXXX2I1 | I | I | I | I | I | I | I | I | I | I | I |
| 6/16/2016 | XX | SWXXXX31B | D | D | D | D | D | D | D | D | D | D | D |
| 9/22/2016 | XX | SWXXXX335 | D | D | D | D | D | D | D | D | D | D | D |
| 11/10/2016 | XX | SWXXXX34J | D | D | D | D | D | D | D | D | D | D | D |
| 6/15/2017 | XX | SWXXXX36E | D | D | D | D | D | D | D | D | D | D | D |
| 8/31/2017 | XX | SWXXXX388 | D | D | D | D | D | D | D | D | D | D | D |
| 11/16/2017 | XX | SWXXXX3A2 | D | D | D | D | D | D | D | D | D | D | D |
| 6/21/2018 | XX | SWXXXX3BH | D | D | D | D | D | D | D | D | D | D | D |
| 8/16/2018 | XX | SWXXXX3CC | D | D | D | D | D | D | D | D | D | D | D |
| 6/6/2019 | XX | SWXXXX3H0 | D | D | D | D | D | D | D | D | D | D | D |
| 8/15/2019 | XX | SWXXXX3HF | D | D | D | D | D | D | D | D | D | D | D |
| 10/24/2019 | XX | SWXXXX408 | I | I | | I | I | I | I | I | I | I | I |
| 6/18/2020 | XX | SWXXXX423 | D | D | D | D | D | D | D | D | D | D | D |
| 8/6/2020 | XX | SWXXXX42I | D | D | D | D | D | D | D | D | D | D | D |
| 10/22/2020 | XX | SWXXXX45B | D | D | | D | D | D | D | D | D | D | D |
| 6/24/2021 | XX | SWXXXX476 | D | D | D | D | D | D | D | D | D | D | D |
| 9/23/2021 | XX | SWXXXX491 | D | D | D | D | D | D | D | D | D | D | D |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (PBF) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| **PBF** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | PBFXX36649 | 0.1 U | 1 U | 0.084 | 59 | 1 | 3.4 | 30.4 | 20 | 25.3 | 8.6 | 5.6 | | | | |
| 8/9/2000 | XX | PBFXX36747 | 0.1 U | 1.7 | 0.018 | 328 | 4 | 10.7 | 192 | 145 | 187.9 | 7.4 | 50.2 | | | | |
| 11/8/2000 | XX | PBFXX36838 | 0.1 U | 2.2 | 0.02 | 78 | 3 | 1.2 | 20.2 | 26 | 26.3 | 7.6 | 7.2 | | | | |
| 5/16/2001 | XX | PBFXX37027 | 0.1 U | 1.9 | 0.012 | 378 | 4 | 16 | 230.5 | 215 | 236 | 5.8 | 53.8 | | | | |
| 7/31/2001 | XX | PBFXX37103 | 0.1 U | 6 | 0.038 | 125 | 7 | 2.6 | 57.2 | 37 | 40 | 12.9 | 15.9 | | | | |
| 10/23/2001 | XX | PBFXX37187 | 0.1 U | 1 U | 0.034 | 408 | 4 | 14.1 | 175.1 | 232 | 246 | 6.6 | 57.7 | | | | |
| 5/21/2002 | XX | PBFXX37397 | 0.1 U | 1 U | 0.005 | 330 | 4 | 15.9 | 210.5 | 185 | 198 | 8.8 | 45.1 | | | | |
| 8/8/2002 | XX | PBFXX37476 | 0.1 U | 1 U | 0.055 | 105 | 21 | 4.2 | 42.6 | 38 | 42 | 11.5 | 9 | | | | |
| 10/24/2002 | XX | PBFXX37553 | 0.1 U | 1 U | 0.029 | 45 | 2 | 3.9 | 14.4 | 18 | 18 | 13.2 | 4.3 | | | | |
| 6/26/2003 | XX | PBFXX37798 | 0.2 U | 2 U | 0.1 U | 41 | 2 | 2.1 | 30 | 24 | 24 | 11 | 2.9 | | | | |
| 8/13/2003 | XX | PBFXX37846 | 0.2 U | 2 U | 0.1 U | 54 | 12 | 2.3 | 36 | 26 | 27 | 9.8 | 3.4 | | | | |
| 10/23/2003 | XX | PBFXX37917 | 0.2 U | 2 U | 0.1 U | 54 | 4 | 5 | 40 | 26 | 27 | 14 | 3.9 | | | | |
| 5/6/2004 | XX | PBFXX38113 | 0.2 U | 2 U | 0.1 U | 18 | 1 U | 2.6 | 29 | 22 | 22 | 11 | 3.3 | | | | |
| 7/27/2004 | XX | PBFXX38195 | 0.2 U | 0.5 U | 0.1 U | 79 | 2 | 10 | 73 | 62 | 65 | 7.3 | 4.6 | | | | |
| 10/25/2004 | XX | PBFXX38285 | 0.2 U | 2 U | 0.1 U | 68 | 1 U | 2.8 | 30 | 27 | 27 | 8.8 | 3.7 | | | | |
| 5/12/2005 | XX | SWPBFX017 | 0.2 U | 2 U | 0.1 U | 66 | 2 | 4.4 | 29 | 23 | 23 | 8.7 | 2.7 | | | | |
| 7/25/2005 | XX | SWPBFX02J | 0.2 U | 2 U | 0.1 U | 86 | 2.5 | 2.8 | 25 | 22 | 23 | 13 | 3.5 | | | | |
| 11/10/2005 | XX | SWPBFX04B | 0.2 U | 2 U | 0.1 U | 42 | 1 U | 4.3 | 24 | 18 | 18 | 8 | 2.5 | | | | |
| 5/2/2006 | XX | SWPBFX097 | 0.2 U | 2 U | 0.02 U | 20 | 2.5 | 3.6 | 46 | 30 | 31 | 6.4 | 3.8 | | | | |
| 8/3/2006 | XX | SWPBFX07F | 0.2 U | 2 U | 0.02 U | 650 | 4 | 5.4 | 35 | 35 | 35 | 11 | 2.8 | | | | |
| 10/18/2006 | XX | SWPBFX063 | 0.2 U | 2 U | 0.02 U | 59 | 1.1 | 7.4 | 38 | 37 | 37 | 8.6 | 3.6 | | | | |
| 5/21/2007 | XX | SWPBFX0AJ | 0.95 | 2 U | 0.02 U | 43 | 2.9 | 4.4 | 31 | 30 | 30 | 5 | 3.1 | | | | |
| 8/8/2007 | XX | SWPBFX0CC | 0.2 U | 0.5 U | 0.022 | 61 | 1 U | 1.7 | 23 | 19 | 19 | 9.3 | 2 U | | | | |
| 11/6/2007 | XX | SWPBFX0E4 | 0.2 U | 0.5 U | 0.02 | 67 | 2.6 | 9.2 | 26 | 22 | 22 | 8.6 | 3.3 | | | | |
| 6/11/2008 | XX | SWPBFX0GC | 0.2 U | 0.5 U | 0.082 | 280 | 3.4 | 19 | 150 | 162 | 170 | 17 | 16 | | | | |
| 8/19/2008 | XX | SWPBFX0IC | 0.2 U | 0.5 U | 0.026 | 81 | 1 U | 2.2 | 34 | 35 | 35 | 9.6 | 2.5 | | | | |
| 10/22/2008 | XX | SWPBFX100 | 0.2 U | 0.5 U | 0.03 | 60 | 1.8 | 2.1 | 24 | 21 | 21 | 9.2 | 2 U | | | | |
| 5/7/2009 | XX | SWPBFX120 | 0.2 U | 0.5 U | | 34 | 1.7 | 1.9 | 19 | 21 | 21 | 6.3 | 1.3 | | | | |
| 8/12/2009 | XX | SWPBFX140 | 0.2 U | 0.5 U | 0.05 U | 93 | 1.1 | 3.2 | 71 | 60 | 61 | 6.4 | 3.3 | | | | |
| 10/27/2009 | XX | SWPBFX158 | 0.2 U | 0.5 U | 0.02 U | 84 | 1 U | 8.9 | 32 | 30 | 30 | 6.4 | 4.4 | | | | |
| 6/7/2010 | XX | SWPBFX179 | 0.2 U | 0.5 U | 0.02 U | 82 | 3.8 | 3 | 43 | 52 | 52 | 6 | 9.6 | | | | |
| 8/18/2010 | XX | SWPBFX19A | 0.2 U | 0.5 U | 0.02 U | 44 | 1.1 U | 1 U | 14 | 21 | 21 | 7.9 | 2 U | | | | |
| 10/21/2010 | XX | SWPBFX1AI | 0.2 U | 0.5 U | 0.024 | 1 U | 1.4 U | 3.2 | 17 | 15 | 15 | 7.3 | 2 U | | | | |
| 5/18/2011 | XX | SWXXXX1E8 | 0.2 U | 0.5 U | 0.02 U | 17 | 5 U | 1.8 | 19 | 17 | 17 | 7.2 | 3 | | | | |
| 8/10/2011 | XX | SWXXXX1FJ | 0.08 U | 0.2 U | 0.021 | 26 | 0.45 U | 1.5 | 16 | 16 | 16 | 9 | 1.2 J | | | | |
| 8/10/2011 | XD | LTDP3X1G9 | 0.08 U | 0.2 U | 0.016 | 33 | 0.46 U | 1.5 | 16 | 16 | 16 | 9.2 | 1.3 J | | | | |
| 11/2/2011 | XX | SWXXXX1HA | 0.082 U | 0.2 U | 0.02 | 69 | 2.35 J | 6.7 | 37 | 36 | 36 | 5 | 4.4 | | | | |
| **PBFR** | | | | | | | | | | | | | | | | | |
| 5/14/2012 | XX | SWXXXX1J4 | 0.2 U | 0.5 U | 0.02 U | 39 | 2.5 U | 4.8 | 34 | 32 | 32 | 4.5 | 4.3 | | | | |
| 8/14/2012 | XX | SWXXXX20H | 0.2 U | 0.25 U | 0.18 | 85 | 16 | 5.2 | 39 | 45 | 45 | 16.9 | 2.2 | | | | |
| 10/29/2012 | XX | SWXXXX22B | 0.2 U | 0.5 | 0.16 | 58 | 2.5 U | 7.6 | 50 | 36 | 36 | 8 | 4.1 | | | | |
| 10/29/2012 | XD | SWDP2X230 | 0.2 U | 0.25 U | 0.03 | 58 | 2.5 U | 5.9 | 48 | 32 | 32 | 7.8 | 3.8 | | | | |
| 5/21/2013 | XX | SWXXXX245 | 0.2 U | 0.25 U | 0.02 U | 30 | 2.5 U | 1.1 | 18 | 21 | 21 | 6.8 | 1 | | | | |
| 5/21/2013 | XD | SWDP2X24E | 0.2 U | 0.25 U | 0.02 U | 35 | 2.5 U | 1 | 18 | 21 | 21 | 6.5 | 1 | | | | |
| 7/24/2013 | XX | SWXXXX25J | 0.2 U | 0.25 U | 0.03 | 33 | 2.7 | 0.82 | 16 | 22 | 22 | 9.1 | 1 | | | | |
| 7/24/2013 | XD | SWDP2X268 | 0.2 U | 0.25 U | 0.02 U | 23 | 2.5 U | 0.83 | 15 | 21 | 21 | 9.5 | 1 | | | | |
| 10/1/2013 | XX | SWXXXX27D | 0.2 U | 0.37 | 1.1 | 33 | 12 | 4.2 | 18 | 14 | 14 | 9.2 | 1.3 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (PBFR) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/1/2013 | XD | SWDP3X282 | 0.2 U | 2 | 1.2 | 18 | 5 U | 5.1 | 21 | 17 | 17 | 10 | 1.2 |
| 6/5/2014 | XX | SWXXXX297 | 0.1 U | 0.05 U | 0.1 U | 35 | 4 U | 1 U | 19 | 15 | 15 | 6.2 | 2.5 |
| 6/5/2014 | XD | SWDP2X29G | 0.1 U | 0.05 U | 0.1 U | 36 | 4 U | 1 U | 18.3 | 16 | 16 | 6.2 | 2.2 |
| 8/21/2014 | XX | SWXXXX2B1 | 0.1 U | 0.05 U | 0.1 U | 41 | 7.2 | 1 U | 20 | 20 | 20 | 6.6 | 2.8 |
| 8/21/2014 | XD | SWDP2X2BA | 0.1 U | 0.05 U | 0.1 U | 32 | 4 U | 1 U | 19.8 | 22 | 22 | 6.7 | 2.8 |
| 11/13/2014 | XX | SWXXXX2CF | 0.1 U | 0.36 | 0.1 U | 61 | 6.8 | 12 | 23.5 | 15 | 15 | 6.8 | 4.4 |
| 11/13/2014 | XD | SWDP3X2D4 | 0.1 U | 0.05 U | 0.1 U | 50 | 4 U | 4.5 | 23.1 | 16 | 16 | 6.7 | 4.1 |
| 6/4/2015 | XX | SWXXXX2EB | 0.1 U | 0.05 U | 0.1 U | 72 | 8 | 4.9 | 37.1 | 38 | 38 | 3.9 | 4 |
| 6/4/2015 | XD | SWDP2X2F0 | 0.1 U | 0.05 U | 0.1 U | 61 | 13 | 4.8 | 36.4 | 39 | 39 | 4.1 | 3.6 |
| 9/3/2015 | XX | SWXXXX2G6 | 0.1 U | 0.05 U | 0.1 U | 47 | 4.8 | 1 U | 29 | 27 | 27 | 8.4 | 3.6 |
| 9/3/2015 | XD | SWDP2X2GF | 0.1 U | 0.05 U | 0.1 U | 57 | 4 U | 1 U | 28.4 | 25 | 25 | 8.4 | 3.7 |
| 11/5/2015 | XX | SWXXXX2I0 | 0.1 U | 0.05 U | 0.1 U | 71 | 4 U | 1 U | 25.4 | 23 | 23 | 8.1 | 2.8 |
| 11/5/2015 | XD | SWDP3X2I9 | 0.1 U | 0.05 U | 0.1 U | 64 | 10 | 1 U | 27.2 | 22 | 22 | 7.8 | 3.7 |
| 6/16/2016 | XD | SWDP2X31J | 0.1 U | 0.05 U | 0.1 U | 30 | 4 U | 1 U | 21.7 | 20 | 20 | 6 | 3.6 |
| 6/16/2016 | XX | SWXXXX31A | 0.1 U | 0.05 U | 0.1 U | 45 | 4 U | 1 U | 22 | 20 | 20 | 6 | 5.1 |
| 9/22/2016 | XD | SWDP2X33D | 0.1 U | 0.05 U | 0.1 U | 47 | 4 U | 1 U | 22.8 | 20 | 20 | 6.5 | 3.3 |
| 9/22/2016 | XX | SWXXXX334 | 0.1 U | 0.05 U | 0.1 U | 51 | 4 U | 1 U | 22.3 | 21 | 21 | 6.4 | 3 |
| 11/10/2016 | XD | SWDP3X357 | 0.1 U | 0.46 | 0.1 U | 57 | 4 U | 15 | 26 | 19 | 19 | 6.3 | 6.2 |
| 11/10/2016 | XX | SWXXXX34I | 0.1 U | 0.45 | 0.1 U | 51 | 4 U | 14 | 25.7 | 17 | 17 | 6.3 | 6.3 |
| 6/15/2017 | XD | SWDP2X372 | 0.1 U | 0.05 U | 0.1 U | 43 | 4 U | 1 U | 23.7 | 18 | 18 | 9 | 2.6 |
| 6/15/2017 | XX | SWXXXX36D | 0.1 U | 0.05 U | 0.1 U | 46 | 4 U | 1 U | 24.2 | 18 | 18 | 9.1 | 3.4 |
| 8/31/2017 | XD | SWDP2X38G | 0.1 U | 0.05 U | 0.1 U | 69 | 8.8 | 1.5 | 35 | 28 | 28 | 9.9 | 3.6 |
| 8/31/2017 | XX | SWXXXX387 | 0.1 U | 0.5 | 0.1 U | 72 | 18 | 1 U | 31.2 | 22 | 22 | 9.7 | 3.1 |
| 11/16/2017 | XD | SWDP3X3AA | 0.1 U | 0.77 | 0.18 | 97 | 76 | 37 | 38 | 7.4 | 7.4 | 11 | 3.7 |
| 11/16/2017 | XX | SWXXXX3A1 | 0.1 U | 0.86 | 0.16 | 99 | 190 | 25 | 37.8 | 5.1 | 5.1 | 11 | 4.3 |
| 6/21/2018 | XD | SWDP2X3C5 | 0.1 U | 0.05 U | 0.1 U | 83 | 4 U | 1 U | 22.8 | 18 | 18 | 7.9 | 2 U |
| 6/21/2018 | XX | SWXXXX3BG | 0.1 U | 0.05 U | 0.1 U | 94 | 4 U | 1 U | 22.7 | 17 | 17 | 7.9 | 2 U |
| 8/16/2018 | XD | SWDP2X3D0 | 0.1 U | 0.05 U | 0.1 U | 56 | 4 U | 1 U | 23.4 | 17 | 17 | 8.8 | 2.1 |
| 8/16/2018 | XX | SWXXXX3CB | 0.1 U | 0.12 | 0.1 U | 76 | 4 U | 1 | 24.4 | 19 | 19 | 8.9 | 2 U |
| 11/29/2018 | XD | SWDP3X3FD | 0.1 U | 0.5 | 0.1 U | 200 | 20 | 89 | 150 | 53 | 53 | 6.4 | 5.8 |
| 11/29/2018 | XX | SWXXXX3F4 | 0.1 U | 1.9 | 0.1 U | 200 | 14 | 89 | 144 | 40 | 40 | 6.9 | 5.7 |
| 6/6/2019 | XD | SWDP2X3H8 | 0.1 U | 0.05 U | 0.1 U | 48 | 4 U | 1 U | 27.1 | 23 | 23 | 8.6 | 2.3 |
| 6/6/2019 | XX | SWXXXX3GJ | 0.1 U | 0.05 U | 0.1 U | 46 | 4 U | 1 U | 45.6 | 24 | 24 | 8.9 | 2.2 |
| 8/15/2019 | XD | SWDP2X3I3 | 0.1 U | 0.05 U | 0.1 U | 48 | 4 U | 1 U | 23.3 | 20 | 20 | 9 | 3.7 |
| 8/15/2019 | XX | SWXXXX3HE | 0.1 U | 0.05 U | 0.1 U | 55 | 4.4 | 1 U | 23.4 | 20 | 20 | 8.9 | 4 |
| 10/24/2019 | XD | SWDP3X40G | 0.1 U | 0.14 | 0.1 U | 70 | 4 U | 11 | 38.1 | 25 | 25 | 13 | 4.3 |
| 10/24/2019 | XX | SWXXXX407 | 0.1 U | 0.14 | 0.1 U | 62 | 4 U | 11 | 37.4 | 25 | 25 | 13 | 4.1 |
| 6/18/2020 | XD | SWDP2X42B | 0.1 U | 0.05 U | 0.1 U | 51 | 4 U | 1 U | 20.9 | 18 | 18 | 8.8 | 2 U |
| 6/18/2020 | XX | SWXXXX422 | 0.1 U | 0.26 | 0.1 U | 43 | 17 | 4.3 | 20.5 | 17 | 17 | 8.8 | 2 U |
| 8/6/2020 | XD | SWDP2X436 | 0.1 U | 0.05 U | 0.1 U | 29 | 4 U | 1.2 | 20.8 | 16 | 16 | 9.4 | 2 U |
| 8/6/2020 | XX | SWXXXX42H | 0.1 U | 0.05 U | 0.1 U | 55 | 4 U | 1.1 | 20 | 16 | 16 | 9.4 | 2 U |
| 10/22/2020 | XD | SWDP3X45J | 0.1 U | 0.05 U | 0.1 U | 78 | 4 U | 25 | 49.7 | 24 | 24 | 9.1 | 2.4 |
| 10/22/2020 | XX | SWXXXX45A | 0.1 U | 0.05 U | 0.1 U | 79 | 4 U | 16 | 51.1 | 26 | 26 | 9.5 | 2.2 |
| 6/24/2021 | XX | SWXXXX475 | 0.1 U | 0.09 | 0.1 U | 36 | 4 U | 1 U | 23.3 | 20 | 20 | 11 | 2 U |
| 6/24/2021 | XD | SWDP2X47E | 0.1 U | 1.2 | 0.1 U | 21 | 4 U | 1 U | 23.3 | 17 | 17 | 10 | 2.1 |
| 9/23/2021 | XX | SWXXXX490 | 0.1 U | 0.05 U | 0.1 U | 31 | 4 U | 1 U | 26 | 28 | 28 | 8.7 | 2 U |
| 9/23/2021 | XD | SWDP3X499 | 0.1 U | 0.05 U | 0.1 U | 44 | 4 U | 1 U | 25.9 | 28 | 28 | 8.8 | 2 U |
| **PBFB** | | | | | | | | | | | | | |
| 5/3/2000 | XX | PBFBXX36649 | 0.1 U | 1 U | 0.068 | 37 | 3 | 3.2 | 16.8 | 12 | 13.1 | 16.7 | 3 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(PBFB)**

| Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/9/2000 | XX | PBFBXX36747 | 0.1 U | 1 U | 0.007 | 58 | 8 | 1 U | 14.9 | 190 | 200 | 13.3 | 1.5 |
| 11/8/2000 | XX | PBFBXX36838 | 0.1 U | 1.1 | 0.003 | 47 | 5 | 3.2 | 10.2 | 5 | 5.1 | 9.1 | 2.9 |
| 5/16/2001 | XX | PBFBXX37027 | 0.1 U | 1.9 | 0.018 | 48 | 2 | 3.3 | 11.6 | 7 | 7 | 10.4 | 2.1 |
| 7/31/2001 | XX | PBFBXX37103 | 0.1 U | 1 U | 0.016 | 54 | 12 | 5.7 | 13.4 | 14 | 14 | 11.2 | 3.8 |
| 10/24/2001 | XX | PBFBXX37188 | 0.1 U | 1 U | 0.022 | 114 | 12 | 17.1 | 30.1 | 1 U | 1 U | 6.7 | 3.1 |
| 5/21/2002 | XX | PBFBXX37397 | 0.1 U | 1.2 | 0.009 | 57 | 2 | 5.1 | 12.9 | 2.58 | 4 | 10.4 | 1 U |
| 8/6/2002 | XX | PBFBXX37474 | 0.1 U | 1 U | 0.014 | 73 | 15 | 3.8 | 25 | 24 | 25 | 14 | 1.1 |
| 10/24/2002 | XX | PBFBXX37553 | 0.1 U | 1 U | 0.016 | 41 | 1 | 11.4 | 10.6 | 8 | 8 | 9.7 | 2.2 |
| 6/26/2003 | XX | PBFBXX37798 | 0.2 U | 2 U | 0.1 U | 36 | 9 | 1 U | 19 | 12 | 12 | 15 | 2 U |
| 8/13/2003 | XX | PBFBXX37846 | 0.2 U | 2 U | 0.1 U | 34 | 2 | 2.1 | 21 | 14 | 14 | 11 | 2.4 |
| 10/23/2003 | XX | PBFBXX37917 | 0.2 U | 2 U | 0.1 U | 71 | 4 | 3.2 | 16 | 4 | 4 | 38 | 2 |
| 5/6/2004 | XX | PBFBXX38113 | 0.2 U | 2 U | 0.1 U | 29 | 1 U | 2.4 | 24 | 16 | 16 | 13 | 2.8 |
| 7/27/2004 | XX | PBFBXX38195 | 0.2 U | 0.5 U | 0.1 U | 10 | 3 | 1.5 | 18 | 29 | 30 | 21 | 2 U |
| 10/25/2004 | XX | PBFBXX38285 | 0.2 U | 2 U | 0.1 U | 67 | 1 U | 5.3 | 19 | 11 | 11 | 10 | 2.8 |
| 5/12/2005 | XX | SWPBFB018 | 0.2 U | 2 U | 0.1 U | 51 | 1 U | 3.5 | 21 | 17 | 17 | 8.6 | 2 |
| 7/25/2005 | XX | SWPBFB030 | 0.2 U | 2 U | 0.1 U | 70 | 2.5 | 2.3 | 26 | 21 | 22 | 13 | 3.2 |
| 11/10/2005 | XX | SWPBFB04C | 0.2 U | 2 U | 0.1 U | 52 | 2.5 | 3.4 | 10 | 18 | 18 | 16 | 2 U |
| 5/2/2006 | XX | SWPBFB098 | 0.2 U | 2 U | 0.05 | 57 | 2 | 2 | 16 | 10 | 11 | 10 | 2 U |
| 8/3/2006 | XX | SWPBFB07G | 0.2 U | 2 U | 0.03 | 42 | 3.3 | 1.3 | 23 | 20 | 20 | 13 | 2 U |
| 10/18/2006 | XX | SWPBFB064 | 0.2 U | 2 U | 0.02 U | 43 | 1.7 | 4.2 | 10 U | 11 | 11 | 14 | 2 U |
| 5/21/2007 | XX | SWPBFB0B0 | 0.98 | 2 U | 0.025 | 20 | 1 U | 2.4 | 13 | 8 | 7.9 | 7.1 | 2 U |
| 8/8/2007 | XX | SWPBFB0CD | 0.2 U | 0.5 U | 0.03 | 65 | 2 | 1.2 | 25 | 23 | 23 | 11 | 2 U |
| 11/6/2007 | XX | SWPBFB0E5 | 0.2 U | 0.5 U | 0.02 | 83 | 1 U | 5.6 | 10 U | 2 | 3 | 21 | 2 U |
| 6/11/2008 | XX | SWPBFB0GD | 0.2 U | 0.5 U | 0.032 | 77 | 1.2 | 2.5 | 12 | 4 | 4.7 | 23 | 2 U |
| 8/19/2008 | XX | SWPBFB0ID | 0.2 U | 0.5 U | 0.023 | 66 | 1.4 | 1.6 | 24 | 21 | 21 | 11 | 2 U |
| 10/22/2008 | XX | SWPBFB101 | 0.2 U | 0.5 U | 0.05 | 76 | 3.4 | 2.6 | 23 | 16 | 16 | 14 | 2 U |
| 5/7/2009 | XX | SWPBFB121 | 0.2 U | 0.5 U |  | 51 | 1.2 | 1.3 | 14 | 12 | 12 | 8.4 | 2 U |
| 8/12/2009 | XX | SWPBFB141 | 0.2 U | 0.5 U | 0.05 U | 90 | 3.3 | 1 U | 26 | 22 | 22 | 22 | 2 U |
| 10/27/2009 | XX | SWPBFB159 | 0.2 U | 0.5 U | 0.02 U | 87 | 1 U | 5 | 10 | 6 | 5.7 | 14 | 2 U |
| 6/7/2010 | XX | SWPBFB17A | 0.2 U | 0.5 U | 0.22 | 58 | 50 | 1.8 | 10 U | 20 | 20 | 20 | 2 U |
| 8/18/2010 | XX | SWPBFB19B | 0.2 U | 0.5 U | 0.021 | 49 | 9.6 | 1 U | 20 | 27 | 27 | 11 | 2 U |
| 10/21/2010 | XX | SWPBFB1AJ | 0.2 U | 0.5 U | 0.03 | 47 | 8 | 7.1 | 10 U | 5 | 5.1 | 10 | 2 U |
| 5/18/2011 | XX | SWXXXX1E7 | 0.2 U | 0.5 U | 0.02 U | 15 | 5 U | 2 | 14 | 11 | 11 | 8.2 | 2 U |
| 8/10/2011 | XX | SWXXXX1FI | 0.08 U | 0.2 U | 0.023 | 29 | 6.6 | 1.3 | 16 | 15 | 15 | 9.4 | 1.3 J |
| 11/2/2011 | XX | SWXXXX1H9 | 0.082 U | 0.2 U | 0.046 | 50 | 28 | 1.6 | 13 | 12 | 12 | 18 | 1.4 J |
| 5/14/2012 | XX | SWXXXX1J3 | 0.2 U | 0.5 U | 0.19 | 37 | 8.7 | 28 | 17 | 2 U | 2 U | 15 | 2 U |
| 8/14/2012 | XX | SWXXXX20G | 0.2 U | 0.25 U | 0.11 | 42 | 140 | 0.86 | 16 | 27 | 27 | 18.6 | 1.7 |
| 10/29/2012 | XX | SWXXXX22A | 0.2 U | 0.25 U | 0.02 U | 10 | 23 | 1.1 | 17 | 14 | 14 | 9.5 | 1.1 |
| 5/21/2013 | XX | SWXXXX244 | 0.2 U | 0.25 U | 0.02 U | 8 | 2.5 U | 2 | 10 U | 13 | 13 | 7.5 | 1.1 |
| 7/24/2013 | XX | SWXXXX25I | 0.2 U | 0.25 U | 0.02 U | 36 | 2.5 U | 0.67 | 16 | 20 | 20 | 10 | 0.96 |
| 10/1/2013 | XX | SWXXXX27C | 0.2 U | 0.25 U | 0.02 U | 21 | 2.5 U | 0.76 | 17 | 2 U | 2 U | 9.3 | 0.86 |
| 6/5/2014 | XX | SWXXXX296 | 0.1 U | 0.05 U | 0.1 U | 40 | 28 | 1 U | 17 | 14 | 14 | 7.2 | 2.4 |
| 8/21/2014 | XX | SWXXXX2B0 | 0.1 U | 0.05 U | 0.1 U | 40 | 5.2 | 1 U | 17.6 | 18 | 18 | 6.6 | 3.9 |
| 11/13/2014 | XX | SWXXXX2CE | 0.1 U | 0.05 U | 0.1 U | 42 | 4 U | 1 U | 17.8 | 16 | 16 | 7.6 | 2.9 |
| 6/4/2015 | XX | SWXXXX2EA | 0.1 U | 0.18 | 0.1 | 22 | 4.4 | 1 U | 13.7 | 13 | 13 | 7.3 | 2.9 |
| 9/3/2015 | XX | SWXXXX2G5 | 0.1 U | 0.066 | 0.1 U | 28 | 4 U | 5.5 | 18.3 | 16 | 16 | 8.4 | 2 U |
| 11/5/2015 | XX | SWXXXX2HJ | 0.1 U | 0.05 U | 0.1 U | 52 | 4 U | 1 U | 17.9 | 16 | 16 | 8.9 | 3 |
| 6/16/2016 | XX | SWXXXX319 | 0.1 U | 0.05 U | 0.1 U | 67 | 4 U | 1 U | 18.4 | 16 | 16 | 6.3 | 4.1 |
| 9/22/2016 | XX | SWXXXX333 | 0.12 | 0.05 U | 0.1 U | 61 | 4 U | 1 U | 19.6 | 18 | 18 | 6.6 | 3.2 |
| 11/10/2016 | XX | SWXXXX34H | 0.1 U | 0.05 U | 0.1 U | 43 | 4 U | 1 U | 16.5 | 18 | 18 | 6.4 | 3.4 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (PBFB) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/15/2017 | XX | SWXXXX36C | 0.1 U | 0.05 U | 0.1 U | 45 | 4 U | 1 U | 20.7 | 16 | 16 | 9.9 | 2 U | | | | |
| 8/31/2017 | XX | SWXXXX386 | 0.1 U | 0.073 | 0.1 U | 58 | 4 U | 1 U | 22.6 | 18 | 18 | 9.1 | 3.1 | | | | |
| 11/16/2017 | XX | SWXXXX3A0 | 0.1 U | 0.05 U | 0.1 U | 67 | 4 U | 1 U | 26.6 | 20 | 20 | 11 | 3.8 | | | | |
| 6/21/2018 | XX | SWXXXX3BF | 0.1 U | 0.05 U | 0.1 U | 54 | 10 | 1 U | 19.6 | 15 | 15 | 8.6 | 2 U | | | | |
| 8/16/2018 | XX | SWXXXX3CA | 0.1 U | 0.05 U | 0.1 U | 82 | 4 U | 1 U | 21.9 | 19 | 19 | 9.4 | 2 U | | | | |
| 11/29/2018 | XX | SWXXXX3F3 | 0.1 U | 0.3 | 0.1 U | 57 | 4 U | 9.9 | 26.4 | 13 | 13 | 11 | 3.5 | | | | |
| 6/6/2019 | XX | SWXXXX3GI | 0.1 U | 0.05 U | 0.1 U | 48 | 4 U | 1 U | 18.3 | 14 | 14 | 11 | 2 U | | | | |
| 8/15/2019 | XX | SWXXXX3HD | 0.1 U | 0.05 U | 0.1 U | 51 | 4 U | 1 U | 17.4 | 18 | 18 | 9.1 | 3.2 | | | | |
| 10/24/2019 | XX | SWXXXX406 | 0.1 U | 0.06 | 0.1 U | 44 | 7.2 | 1 U | 20.2 | 12 | 12 | 16 | 3.5 | | | | |
| 6/18/2020 | XX | SWXXXX421 | 0.1 U | 0.05 U | 0.1 U | 57 | 15 | 1 U | 18.3 | 16 | 16 | 9.4 | 2 U | | | | |
| 8/6/2020 | XX | SWXXXX42G | 0.1 U | 1.1 | 0.1 U | 41 | 4 U | 3.4 | 18.8 | 9.1 | 9.1 | 9.5 | 2 U | | | | |
| 10/22/2020 | XX | SWXXXX459 | 0.1 U | 0.05 U | 0.1 U | 63 | 8.4 | 5.8 | 22.4 | 13 | 13 | 13 | 2 U | | | | |
| 6/24/2021 | XX | SWXXXX474 | 0.1 U | 0.05 U | 0.1 U | 45 | 6.8 | 1 U | 20.5 | 18 | 18 | 10 | 2.3 | | | | |
| 9/23/2021 | XX | SWXXXX48J | 0.1 U | 0.05 U | 0.1 U | 46 | 16 | 1 U | 21.6 | 18 | 18 | 15 | 2 U | | | | |
| **SPO** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | SPOXX36649 | D | | D | | | D | D | | | D | D | | | | |
| 8/9/2000 | XX | SPOXX36747 | D | | D | | | D | D | | | D | D | | | | |
| 11/8/2000 | XX | SPOXX36838 | D | | D | | | D | D | | | D | D | | | | |
| 5/16/2001 | XX | SPOXX37027 | D | D | | | D | D | D | D | D | D | D | | | | |
| 7/31/2001 | XX | SPOXX37103 | D | D | | | D | D | D | D | D | D | D | | | | |
| 10/23/2001 | XX | SPOXX37187 | D | D | D | | D | D | D | D | D | D | D | | | | |
| 5/21/2002 | XX | SPOXX37397 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 7/30/2002 | XX | SPOXX37467 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 10/22/2002 | XX | SPOXX37551 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 6/23/2003 | XX | SPOXX37795 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 8/13/2003 | XX | SPOXX37846 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 10/20/2003 | XX | SPOXX37914 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 5/6/2004 | XX | SPOXX38113 | 0.2 U | 2 U | 0.12 | 100 | 3 | 4.1 | 81 | 65 | 67 | 17 | 4.8 | | | | |
| 7/27/2004 | XX | SPOXX38195 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 10/25/2004 | XX | SPOXX38285 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 5/12/2005 | XX | SWSPOX01A | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 7/25/2005 | XX | SWSPOX032 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 11/10/2005 | XX | SWSPOX04E | 0.2 U | 2 U | 0.1 U | 140 | 3 | 15 | 110 | 75 | 77 | 12 | 6.8 | | | | |
| 5/2/2006 | XX | SWSPOX09A | 0.2 U | 2 U | 0.05 | 98 | 1.5 | 2.3 | 86 | 67 | 69 | 15 | 19 | | | | |
| 8/3/2006 | XX | SWSPOX07I | 0.2 U | 2 U | 0.12 | 130 | 7.5 | 1 U | 76 | 74 | 75 | 17 | 4.8 | | | | |
| 10/18/2006 | XX | SWSPOX066 | 0.2 U | 2 U | 0.06 | 82 | 5.7 | 4.3 | 45 | 45 | 46 | 13 | 6.8 | | | | |
| 5/21/2007 | XX | SWSPOX0B2 | 0.2 U | 2 U | 0.042 | 92 | 2 | 3.2 | 58 | 54 | 55 | 9.3 | 13 | | | | |
| 8/9/2007 | XX | SWSPOX0CF | D | D | | D | D | D | D | D | D | D | D | | | | |
| 11/6/2007 | XX | SWSPOX0E7 | 0.2 U | 0.5 U | 0.03 | 94 | 2 | 14 | 30 | 21 | 21 | 13 | 2.1 | | | | |
| 6/11/2008 | XX | SWSPOX0GF | 0.2 U | 0.5 U | 0.1 | 90 | 6.5 | 4.7 | 36 | 27 | 27 | 18 | 2 U | | | | |
| 8/19/2008 | XX | SWSPOX0GJ | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 10/22/2008 | XX | SWSPOX103 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 5/7/2009 | XX | SWSPOX123 | 0.2 U | 0.5 U | | 100 | 0.6 U | 6.7 | 57 | 53 | 54 | 10 | 9.4 | | | | |
| 8/17/2009 | XX | SWSPOX127 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 10/27/2009 | XX | SWSPOX15B | 0.2 U | 0.5 U | 0.02 | 70 | 1 U | 10 | 33 | 27 | 27 | 10 | 3.7 | | | | |
| 6/7/2010 | XX | SWSPOX17C | 0.2 U | 0.5 U | 0.038 | 80 | 2.1 | 2 | 35 | 36 | 36 | 16 | 7.4 | | | | |
| 8/18/2010 | XX | SWSPOX17H | D | D | | D | D | D | D | D | D | D | D | | | | |
| 10/21/2010 | XX | SWSPOX1B1 | D | D | | D | D | D | D | D | D | D | D | | | | |
| 5/18/2011 | XX | SWXXXX1EA | 0.2 U | 0.5 U | 0.02 U | 43 | 5 U | 9.2 | 39 | 29 | 29 | 13 | 3.9 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (SPO) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/10/2011 | XX | SWXXXX1G1 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 |
| 11/2/2011 | XX | SWXXXX1HC | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 |
| 5/14/2012 | XX | SWXXXX1J6 | 0.2 U | 0.5 U | 0.041 | 59 | 3.1 | 5.7 | 40 | 32 | 32 | 13 | 5.9 |
| 8/14/2012 | XX | SWXXXX20J | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 |
| 10/29/2012 | XX | SWXXXX22D | 0.2 U | 0.25 U | 0.12 | 80 | 26 | 3.6 | 42 | 33 | 33 | 16 | 6.6 |
| 5/21/2013 | XX | SWXXXX247 | 0.2 U | 0.53 | 0.11 | 54 | 23 | 2.7 | 27 | 31 | 31 | 11 | 7.2 |
| 7/24/2013 | XX | SWXXXX261 | 0.21 | 0.25 U | 0.083 | 69 | 37 | 3.9 | 21 | 38 | 38 | 12 | 4.7 |
| 10/1/2013 | XX | SWXXXX27F | I | I | I | I | I | I | I | I | I | I | I |
| 6/5/2014 | XX | SWXXXX299 | D | D | D | D | D | D | D | D | D | D | D |
| 8/21/2014 | XX | SWXXXX2B3 | I | I | I | I | I | I | I | I | I | I | I |
| 11/13/2014 | XX | SWXXXX2CH | 0.1 U | 0.05 U | 0.1 U | 75 | 4 U | 6.5 | 30 | 25 | 25 | 11 | 3.3 |
| 6/4/2015 | XX | SWXXXX2ED | 0.1 U | 0.05 U | 0.1 U | 79 | 24 | 1 U | 40.2 | 41 | 41 | 11 | 3.7 |
| 9/3/2015 | XX | SWXXXX2G8 | D | D | D | D | D | D | D | D | D | D | D |
| 11/5/2015 | XX | SWXXXX2I2 | 0.1 U | 0.05 U | 0.1 U | 82 | 4 U | 6.2 | 36.2 | 28 | 28 | 9.8 | 2.5 |
| 6/16/2016 | XX | SWXXXX31C | D | D | D | D | D | D | D | D | D | D | D |
| 9/22/2016 | XX | SWXXXX336 | D | D | D | D | D | D | D | D | D | D | D |
| 11/10/2016 | XX | SWXXXX350 | I | I | I | I | I | I | I | I | I | I | I |
| 6/15/2017 | XX | SWXXXX36F | I | I | I | I | I | I | I | I | I | I | I |
| 8/31/2017 | XX | SWXXXX389 | D | D | D | D | D | D | D | D | D | D | D |
| 11/16/2017 | XX | SWXXXX3A3 | D | D | D | D | D | D | D | D | D | D | D |
| 6/21/2018 | XX | SWXXXX3BI | D | D | D | D | D | D | D | D | D | D | D |
| 8/16/2018 | XX | SWXXXX3CD | D | D | D | D | D | D | D | D | D | D | D |
| 6/6/2019 | XX | SWXXXX3H1 | 0.1 U | 0.05 U | 0.1 U | 96 | 16 | 1 U | 62.5 | 51 | 52 | 15 | 2.8 |
| 8/15/2019 | XX | SWXXXX3HG | D | D | D | D | D | D | D | D | D | D | D |
| 10/24/2019 | XX | SWXXXX409 | 0.1 U | 0.34 | 0.1 U | 64 | 5.2 | 7.9 | 34.8 | 24 | 24 | 15 | 3.1 |
| 6/18/2020 | XX | SWXXXX424 | D | D | D | D | D | D | D | D | D | D | D |
| 8/6/2020 | XX | SWXXXX42J | I | I | I | I | I | I | I | I | I | I | I |
| 10/22/2020 | XX | SWXXXX45C | I | I | I | I | I | I | I | I | I | I | I |
| 6/24/2021 | XX | SWXXXX477 | D | D | D | D | D | D | D | D | D | D | D |
| 9/23/2021 | XX | SWXXXX492 | D | D | D | D | D | D | D | D | D | D | D |
| **SPON** | | | | | | | | | | | | | |
| 5/12/2005 | XX | SWSPON01B | 0.32 | 2 U | 0.1 U | 400 | 16 | 42 | 270 | 240 | 260 | 16 | 19 |
| 7/25/2005 | XX | SWSPON033 | D | D | | D | D | D | D | D | D | D | D |
| 11/10/2005 | XX | SWSPON04F | 0.2 U | 2 U | 0.1 U | 380 | 2.5 | 28 | 360 | 260 | 290 | 9.5 | 24 |
| 5/2/2006 | XX | SWSPON09B | 0.2 U | 2 U | 0.09 | 270 | 20 | 18 | 280 | 220 | 240 | 15 | 22 |
| 8/3/2006 | XX | SWSPON07J | 2.3 | 2 U | 0.05 | 960 | 3.6 | 80 | 750 | 640 | 670 | 30 | 41 |
| 10/18/2006 | XX | SWSPON067 | 2 | 2 U | 0.06 | 440 | 6.2 | 41 | 320 | 270 | 290 | 13 | 33 |
| 5/21/2007 | XX | SWSPON0B3 | 0.46 | 2 U | 0.033 | 360 | 1.4 | 50 | 260 | 220 | 240 | 12 | 20 |
| 8/9/2007 | XX | SWSPON0CG | D | D | | D | D | D | D | D | D | D | D |
| 11/6/2007 | XX | SWSPON0E8 | 0.2 U | 1 | 0.06 | 310 | 8.9 | 74 | 130 | 105 | 110 | 16 | 6.3 |
| 6/11/2008 | XX | SWSPON0GG | 0.2 U | 0.5 U | 0.15 | 230 | 13 | 29 | 150 | 115 | 120 | 22 | 4.4 |
| 8/19/2008 | XX | SWSPON0H0 | 0.3 | 0.5 U | 0.13 | 330 | 6.9 | 1.9 | 250 | 270 | 290 | 22 | 9.3 |
| 10/22/2008 | XX | SWSPON104 | 0.78 | 0.5 U | 0.12 | 480 | 4.1 | 12 | 430 | 360 | 380 | 18 | 25 |
| 5/7/2009 | XX | SWSPON124 | 0.2 U | 0.5 U | | 380 | 3 | 5.4 | 290 | 300 | 320 | 14 | 25 |
| 8/12/2009 | XX | SWSPON128 | 0.2 U | 0.5 U | 0.05 U | 270 | 3.1 | 3.3 | 240 | 210 | 230 | 12 | 8.6 |
| 10/27/2009 | XX | SWSPON15C | 0.2 U | 0.5 U | 0.02 U | 260 | 1 U | 22 | 220 | 180 | 190 | 10 | 13 |
| 6/7/2010 | XX | SWSPON17D | 0.2 U | 0.5 U | 0.02 U | 190 | 1.3 | 5 | 180 | 140 | 140 | 15 | 2.9 |
| 8/18/2010 | XX | SWSPON17I | D | D | | D | D | D | D | D | D | D | D |
| 10/21/2010 | XX | SWSPON1B2 | 0.2 U | 0.5 U | 0.11 | 420 | 1.4 U | 64 | 280 | 240 | 260 | 11 | 29 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (SPON) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | | | | |
| 5/18/2011 | XX | SWXXXX1EB | 0.2 U | 0.5 U | 0.022 | 170 | 5 U | 7.3 | 150 | 150 | 150 | 9.2 | 9.6 | | | | |
| 8/10/2011 | XX | SWXXXX1G2 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 11/2/2011 | XX | SWXXXX1HD | 1.6 | 0.2 U | 0.059 | 470 | 1.46 J | 17 | 360 | 400 | 400 | 14 | 49 | | | | |
| 5/14/2012 | XX | SWXXXX1J7 | 0.2 U | 0.5 U | 0.024 | 140 | 2.5 U | 5.7 | 130 | 130 | 130 | 13 | 5.4 | | | | |
| 8/14/2012 | XX | SWXXXX210 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | | | | |
| 10/29/2012 | XX | SWXXXX22E | 1.7 | 0.25 U | 0.049 | 440 | 5 U | 23 | 360 | 370 | 370 | 11 | 34 | | | | |
| 5/21/2013 | XX | SWXXXX248 | 0.2 U | 0.25 U | 0.04 | 420 | 2.5 U | 5.3 | 300 | 340 | 340 | 15 | 36 | | | | |
| 7/24/2013 | XX | SWXXXX262 | 0.29 | 0.25 U | 0.5 | 250 | 18 | 6.8 | 140 | 190 | 190 | 16 | 9.2 | | | | |
| 10/1/2013 | XX | SWXXXX27G | 1.3 | 0.25 U | 0.02 U | 380 | 8.7 | 4.1 | 320 | 330 | 330 | 13 | 26 | | | | |
| 6/5/2014 | XX | SWXXXX29A | 0.3 | 0.16 | 0.1 U | 540 | 8.8 | 1 U | 396 | 400 | 400 | 14 | 36 | | | | |
| 8/21/2014 | XX | SWXXXX2B4 | 0.28 | 0.05 U | 0.1 U | 410 | 13 | 32 | 232 | 270 | 270 | 12 | 30 | | | | |
| 11/13/2014 | XX | SWXXXX2CI | 1.2 | 0.12 | 0.13 | 400 | 4 U | 20 | 291 | 320 | 320 | 20 | 27 | | | | |
| 6/4/2015 | XX | SWXXXX2EE | 0.87 | 0.05 U | 0.1 U | 440 | 30 | 1 U | 289 | 330 | 330 | 15 | 29 | | | | |
| 9/3/2015 | XX | SWXXXX2G9 | 0.7 | 0.11 | 0.15 | 550 | 26 | 1 U | 404 | 450 | 450 | 22 | 29 | | | | |
| 11/5/2015 | XX | SWXXXX2I3 | 1.2 | 0.18 | 0.1 U | 390 | 4.8 | 1 U | 286 | 320 | 320 | 11 | 31 | | | | |
| 6/16/2016 | XX | SWXXXX31D | 0.14 | 0.9 | 0.1 U | 450 | 24 | 1 U | 350 | 330 | 330 | 16 | 38 | | | | |
| 9/22/2016 | XX | SWXXXX337 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 11/10/2016 | XX | SWXXXX351 | 0.1 U | 18 | 0.1 U | 890 | 4 U | 380 | 640 | 240 | 240 | 21 | 25 | | | | |
| 6/15/2017 | XX | SWXXXX36G | 0.1 U | 0.096 | 0.1 U | 440 | 4 U | 77 | 378 | 300 | 300 | 17 | 13 | | | | |
| 8/31/2017 | XX | SWXXXX38A | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 11/16/2017 | XX | SWXXXX3A4 | 0.11 | 0.085 | 0.1 U | 750 | 4 U | 270 | 600 | 300 | 300 | 17 | 14 | | | | |
| 6/21/2018 | XX | SWXXXX3BJ | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 8/16/2018 | XX | SWXXXX3CE | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 11/29/2018 | XX | SWXXXX3F7 | 0.1 U | 0.72 | 0.1 U | 390 | 4 U | 140 | 310 | 170 | 170 | 11 | 5.3 | | | | |
| 6/6/2019 | XX | SWXXXX3H2 | 0.26 | 0.093 | 0.1 U | 400 | 5.6 | 34 | 336 | 310 | 310 | 15 | 11 | | | | |
| 8/15/2019 | XX | SWXXXX3HH | 0.1 U | 0.05 U | 0.1 U | 310 | 16 | 22 | 243 | 240 | 240 | 11 | 11 | | | | |
| 10/24/2019 | XX | SWXXXX40A | 0.1 U | 0.52 | 0.1 U | 330 | 7.6 | 89 | 265 | 170 | 170 | 16 | 3.7 | | | | |
| 6/18/2020 | XX | SWXXXX425 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 8/6/2020 | XX | SWXXXX430 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 10/22/2020 | XX | SWXXXX45D | 0.1 U | 0.05 U | 0.1 U | 260 | 4 U | 38 | 190 | 160 | 160 | 13 | 4.8 | | | | |
| 6/24/2021 | XX | SWXXXX478 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 9/23/2021 | XX | SWXXXX493 | 0.1 U | 0.05 U | 0.1 U | 270 | 15 | 28 | 224 | 220 | 220 | 15 | 4 | | | | |
| **SPOS** | | | | | | | | | | | | | | | | | |
| 5/12/2005 | XX | SWSPOS01C | 0.2 U | 2 U | 0.13 | 93 | 1 U | 5.8 | 190 | 43 | 44 | 8.5 | 2.5 | | | | |
| 7/25/2005 | XX | SWSPOS034 | 0.2 U | 2 U | 0.1 U | 150 | 7 | 1.9 | 100 | 98 | 100 | 15 | 2.1 | | | | |
| 11/10/2005 | XX | SWSPOS04G | 0.2 U | 2 U | 0.1 U | 71 | 1 U | 5.4 | 55 | 46 | 47 | 7.6 | 3 | | | | |
| 5/2/2006 | XX | SWSPOS09C | 0.2 U | 2 U | 0.02 U | 49 | 3 | 3.9 | 56 | 49 | 50 | 9.7 | 5.5 | | | | |
| 8/3/2006 | XX | SWSPOS080 | 0.2 U | 2 U | 0.02 U | 120 | 1.2 U | 1 U | 89 | 82 | 83 | 13 | 2.9 | | | | |
| 10/18/2006 | XX | SWSPOS068 | 0.2 U | 2 U | 0.02 U | 94 | 1 U | 3.2 | 64 | 63 | 64 | 10 | 6.2 | | | | |
| 5/21/2007 | XX | SWSPOS0B4 | 0.2 U | 2 U | 0.02 U | 66 | 1 U | 3.8 | 44 | 40 | 41 | 8.8 | 6.3 | | | | |
| 8/8/2007 | XX | SWSPOS0CH | 0.2 U | 0.5 U | 0.021 | 120 | 4.6 | 1 U | 68 | 63 | 64 | 13 | 2 U | | | | |
| 11/6/2007 | XX | SWSPOS0E9 | 0.2 U | 0.5 U | 0.02 U | 92 | 1 U | 8.8 | 46 | 34 | 34 | 12 | 3.9 | | | | |
| 11/6/2007 | XD | SWDP4X0F1 | 0.2 U | 0.5 U | 0.02 U | 170 | 1 U | 8.6 | 46 | | 36 | 12 | 3.9 | | | | |
| 6/11/2008 | XX | SWSPOS0GH | 0.2 U | 0.5 U | 0.034 | 97 | 1 U | 4.3 | 50 | 40 | 40 | 15 | 3.4 | | | | |
| 8/19/2008 | XX | SWSPOS0H1 | 0.2 U | 0.5 U | 0.038 | 160 | 1 U | 1 U | 88 | 94 | 95 | 12 | 3 | | | | |
| 10/22/2008 | XX | SWSPOS105 | 0.2 U | 0.5 U | 0.03 | 140 | 1 U | 3.2 | 83 | 73 | 74 | 8.8 | 11 | | | | |
| 5/7/2009 | XX | SWSPOS125 | 0.2 U | 0.5 U | | 80 | 0.6 U | 2.7 | 49 | 50 | 51 | 7.5 | 6 | | | | |
| 8/12/2009 | XX | SWSPOS129 | 0.2 U | 0.5 U | 0.05 U | 130 | 0.6 U | 1 U | 94 | 80 | 81 | 12 | 3.1 | | | | |
| 10/27/2009 | XX | SWSPOS15D | 0.2 U | 0.5 U | 0.02 U | 16 | 1 U | 5.4 | 41 | 35 | 36 | 12 | 3.1 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (SPOS) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Chloride mg/L | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/7/2010 | XX | SWSPOS17E | 0.2 U | 0.5 U | 0.02 U | 78 | 1 U | 2.5 | 44 | 52 | 52 | 11 | 4 | | | | |
| 8/18/2010 | XX | SWSPOS17J | D | D | | D | D | D | D | D | D | D | D | | | | |
| 10/21/2010 | XX | SWSPOS1B3 | 0.2 U | 0.5 U | 0.025 | 120 | 1.4 U | 21 | 59 | 39 | 39 | 8.4 | 4.2 | | | | |
| 10/21/2010 | XD | SWDP4X1B7 | 0.2 U | 0.5 U | 0.022 | 140 | 1.4 U | 22 | 59 | | 39 | 8.4 | 4.2 | | | | |
| 5/18/2011 | XX | SWXXXX1EC | 0.2 U | 0.5 U | 0.02 U | 33 | 8.3 U | 3.8 | 38 | 37 | 37 | 8.8 | 2.3 | | | | |
| 8/10/2011 | XX | SWXXXX1G3 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | | | | |
| 11/2/2011 | XX | SWXXXX1HE | 0.082 U | 0.2 U | 0.0079 J | 75 | 0.32 U | 2.5 | 53 | 56 | 56 | 9.5 | 3 | | | | |
| 5/14/2012 | XX | SWXXXX1J8 | 0.2 U | 0.5 U | 0.02 U | 62 | 2.5 U | 3.1 | 45 | 41 | 41 | 12 | 2.3 | | | | |
| 8/14/2012 | XX | SWXXXX211 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | F6 | | | | |
| 10/29/2012 | XX | SWXXXX22F | 0.2 U | 0.25 U | 0.02 U | 78 | 2.5 U | 6.2 | 63 | 56 | 56 | 7.8 | 3.7 | | | | |
| 5/21/2013 | XX | SWXXXX249 | 0.2 U | 0.25 U | 0.02 U | 53 | 2.5 U | 2 | 49 | 54 | 54 | 8.3 | 2.4 | | | | |
| 7/24/2013 | XX | SWXXXX263 | 0.2 U | 0.25 U | 0.02 U | 79 | 2.5 U | 2.4 | 53 | 52 | 52 | 14 | 1.1 | | | | |
| 10/1/2013 | XX | SWXXXX27H | 0.2 U | 0.25 U | 0.02 U | 88 | 2.5 U | 0.58 | 83 | 87 | 87 | 11 | 1.4 | | | | |
| 6/5/2014 | XX | SWXXXX29B | 0.1 U | 0.05 U | 0.1 U | 110 | 4.4 | 1 U | 83.4 | 91 | 91 | 7.3 | 2 U | | | | |
| 8/21/2014 | XX | SWXXXX2B5 | 0.1 U | 0.12 | 0.1 U | 130 | 7.2 | 14 | 78.6 | 83 | 83 | 9.9 | 3.3 | | | | |
| 11/13/2014 | XX | SWXXXX2CJ | 0.1 U | 0.05 U | 0.1 U | 84 | 4 U | 5 | 45.5 | 41 | 41 | 8.2 | 3 | | | | |
| 6/4/2015 | XX | SWXXXX2EF | 0.1 U | 0.05 U | 0.1 U | 73 | 4 U | 1 U | 44 | 45 | 45 | 7.6 | 2 U | | | | |
| 9/3/2015 | XX | SWXXXX2GA | 0.1 U | 0.05 U | 0.1 U | 150 | 7.2 | 1 U | 101 | 100 | 100 | 13 | 2.3 | | | | |
| 11/5/2015 | XX | SWXXXX2I4 | 0.1 U | 0.05 U | 0.1 U | 88 | 4 U | 1 U | 48.8 | 45 | 45 | 8.6 | 2.8 | | | | |
| 6/16/2016 | XX | SWXXXX31E | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 9/22/2016 | XX | SWXXXX338 | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 11/10/2016 | XX | SWXXXX352 | 0.1 U | 0.05 U | 0.1 U | 140 | 4 U | 39 | 94 | 74 | 74 | 7.2 | 5.7 | | | | |
| 6/15/2017 | XX | SWXXXX36H | 0.1 U | 0.05 U | 0.1 U | 93 | 4 U | 1 U | 72 | 71 | 71 | 8.2 | 2 U | | | | |
| 8/31/2017 | XX | SWXXXX38B | D | D | D | D | D | D | D | D | D | D | D | | | | |
| 11/16/2017 | XX | SWXXXX3A5 | 0.1 U | 0.05 U | 0.1 U | 82 | 4 U | 7.6 | 55.2 | 43 | 43 | 8 | 4 | | | | |
| 6/21/2018 | XX | SWXXXX3C0 | 0.1 U | 0.05 U | 0.1 U | 140 | 4 U | 1 U | 90.4 | 97 | 97 | 10 | 2 U | | | | |
| 8/16/2018 | XX | SWXXXX3CF | 0.1 U | 0.05 U | 0.1 U | 120 | 4 U | 1 U | 75.6 | 78 | 78 | 10 | 2 U | | | | |
| 11/29/2018 | XX | SWXXXX3F8 | 0.1 U | 0.05 U | 0.1 U | 45 | 4 U | 3 | 45 | 38 | 38 | 7.7 | 2.7 | | | | |
| 6/6/2019 | XX | SWXXXX3H3 | 0.1 U | 0.05 U | 0.1 U | 80 | 4 U | 1 U | 56 | 54 | 54 | 9.2 | 2 U | | | | |
| 8/15/2019 | XX | SWXXXX3HI | 0.1 U | 0.05 U | 0.1 U | 120 | 4 U | 1 U | 85.2 | 88 | 88 | 8.6 | 2.5 | | | | |
| 10/24/2019 | XX | SWXXXX40B | 0.1 U | 0.05 U | 0.1 U | 96 | 4 U | 1 U | 51.1 | 47 | 47 | 18 | 3.1 | | | | |
| 6/18/2020 | XX | SWXXXX426 | 0.1 U | 0.35 | 0.1 U | 120 | 6 | 1 U | 88.7 | 100 | 100 | 10 | 2 U | | | | |
| 8/6/2020 | XX | SWXXXX431 | 0.1 U | 0.05 U | 0.1 U | 120 | 6.4 | 1 U | 96.2 | 94 | 94 | 8.7 | 2 U | | | | |
| 10/22/2020 | XX | SWXXXX45E | 0.1 U | 0.05 U | 0.1 U | 100 | 4 U | 18 | 58.7 | 38 | 38 | 14 | 2 U | | | | |
| 6/24/2021 | XX | SWXXXX479 | 0.1 U | 0.05 U | 0.1 U | 98 | 4 U | 1 U | 69 | 75 | 75 | 9 | 2 U | | | | |
| 9/23/2021 | XX | SWXXXX494 | 0.1 U | 0.05 U | 0.1 U | 84 | 8.8 | 1 U | 61.7 | 60 | 60 | 11 | 2 U | | | | |
| **UDLP** | | | | | | | | | | | | | | | | | |
| 6/24/2021 | XX | LFXXXX47J | 0.19 | 0.098 | | 540 | 4 U | 24 | 452 | 420 | 420 | 6.9 | 30 | | | | |
| 9/23/2021 | XX | LFXXXX49F | 0.16 | 0.096 | | 310 | 4 U | 13 | 282 | 310 | 310 | 4.2 | 13 | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (UDLP) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

Blank Cells appear when a parameter was not analyzed.

**Concentration Qualifier Notes:**

- ! - The sampling location was damaged or destroyed.
- D - The sampling location was dry.
- F6 - No flow. Sample not taken.
- H - Analyzed outside U.S.EPA's recommended hold time
- I - The sampling location yielded insufficient quantity to collect a sample.
- J - Analyte was positively identified/Associated value is an estimate.
- U - Not Detected above the laboratory reporting limit.
- UH - Not Detected above the laboratory reporting limit. Analyzed outside U.S.EPA's recommended hold time
- Y4 - Laboratory instrument malfunction, therefore no data available to report.

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LP) | | | Ammonia (N) | Nitrate (N) | Total Phosphorus | Total Dissolved Solids | Total Suspended Solids | Sulfate | Ca-mg Hardness (CaCO3) | Bicarbonate Alkalinity (CaCO3) | Alkalinity (CaCO3) | Organic Carbon | Biochemical Oxygen Demand | Chemical Oxygen Demand | Chloride | Cyanide | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | ug/L | |
| **LP** | | | | | | | | | | | | | | | | | |
| 4/7/1986 | XX | LPXX31509 | 0.32 | | | | | 10 | | | | 37 | | 130 | 12 | | |
| 6/23/1986 | XX | LPXX31586 | 0.13 | | | | | 11 | | | | 103 | | 334 | 30 | | |
| 9/17/1986 | XX | LPXX31672 | 3.1 | | | | | 15 | | | | 136 | | 514 | 44 | | |
| 11/11/1986 | XX | LPXX31727 | 0.1 U | | | | | 3 | | | | 158 | | 475 | 58 | | |
| 4/6/1987 | XX | LPXX31873 | 20 | | | | | 200 | | | | 428 | | 1890 | 72 | | |
| 6/29/1987 | XX | LPXX31957 | 12 | | | | | 4 | | | | 260 | | 877 | 115 | | |
| 10/5/1987 | XX | LPXX32055 | 2 | | | | | 1100 | 4320 | | | 5615 | | 1630 | 300 | | |
| 11/16/1987 | XX | LPXX32097 | 8 | | 3 | | | 900 | 4734 | | | 5680 | | 9238 | 270 | | |
| 3/29/1988 | XX | LPXX32231 | 5 | | 2 | | | 125 | 780 | | | 574 | | 1730 | 48 | | |
| 6/27/1988 | XX | LPXX32321 | 12 | | 1.45 | | | 250 | 2428 | | | 2080 | | 6185 | 240 | | |
| 9/26/1988 | XX | LPXX32412 | 11 | | 1.47 | | | 14 | 2174 | | | 1235 | | 4965 | 180 | | |
| 11/10/1988 | XX | LPXX32457 | 19 | | 0.955 | | | 164 | 1987 | | | 1068 | | 3190 | 280 | | |
| 3/26/1989 | XX | LPXX32593 | 17 | | 0.86 | | | 260 | 957 | | | 560 | | | 46 | | |
| 6/23/1989 | XX | LPXX32682 | 21 | | 0.33 | | | 155 | 1789 | | | 1168 | | 2200 | 330 | | |
| 9/25/1989 | XX | LPXX32776 | 20 | | 0.15 | | | 71 | 1990 | | | 1140 | | 2098 | 560 | | |
| 12/4/1989 | XX | LPXX32846 | 24 | | 1.58 | | | 30 | 2130 | | | | | 1892 | 320 | | |
| 3/22/1990 | XX | LPXX32954 | 9 | | 1.46 | | | 192 | 1078 | | | 238 | | 599 | 130 | | |
| 6/19/1990 | XX | LPXX33043 | 4 | | 0.77 | | | 73 | 683 | | | 190 | | 1016 | 120 | | |
| 9/6/1990 | XX | LPXX33122 | 18 | | 0.104 | | | 45 | 1688 | | | 284 | | 750 | 238 | | |
| 10/23/1990 | XX | LPXX33169 | 5 | | 0.42 | | | 109 | 730 | | | 274 | | 577 | 90 | | |
| 3/13/1991 | XX | LPXX33310 | 7.8 | | 0.97 | | | 69.6 | 384.6 | | | 164.8 | | 480 | 60 | | |
| 6/7/1991 | XX | LPXX33396 | 18.5 | | | | | 10 | 1272.7 | | | 225 | | 290 | 171 | | |
| 8/23/1991 | XX | LPXX33473 | 1.7 | | 0.08 | | | 30 | 761.7 | | | 116 | | 436 | 111 | | |
| 10/14/1991 | XX | LPXX33525 | 7.6 | | 1.29 | | | 41 | 1089.4 | | | 210 | | 800 | 178 | | |
| 3/17/1992 | XX | LPXX33680 | 13.8 | | 1.04 | | | 292 | 1487 | | | 365 | | 1200 | 187 | | |
| 6/11/1992 | XX | LPXX33766 | 8.4 | | 1.26 | | | 30 | 1627 | | | 440 | | 3100 | 266 | | |
| 8/13/1992 | XX | LPXX33829 | 8.3 | | 0.69 | | | 22 | 1942.3 | | | 375 | | 1461 | 296 | | |
| 10/20/1992 | XX | LPXX33897 | 21.8 | | 0.15 | | | 25 | 1869 | | | 470 | | 1132 | 302 | | |
| 4/13/1993 | XX | LPXX34072 | 9.3 | | 0.71 | | | 568 | 3589 | | | 581 | | 1648 | 171 | | |
| 8/3/1993 | XX | LPXX34184 | 17.6 | | 2.12 | | | 6.7 | 2204 | | | 615 | | 1911 | 314 | | |
| 10/19/1993 | XX | LPXX34261 | 3.1 | | 0.16 | | | 230 | 1320.5 | | | 297 | | 1020 | 130 | | |
| 5/10/1994 | XX | LPXX34464 | 12.5 | | 0.24 | | | 156 | 6430.2 | | | 252 | | 932 | 143 | | |
| 8/2/1994 | XX | LPXX34548 | 10.5 | | 0.52 | | | 150 | 1557.3 | | | 188 | | 598 | 220 | | |
| 10/19/1994 | XX | LPXX34626 | 18.4 | | 0.23 | | | 14.4 | 1254.8 | | | 172 | | 605 | 271.5 | | |
| 5/2/1995 | XX | LPXX34821 | 8.3 | | 0.165 | | | 39 | 1458.8 | | | 143 | | | 224 | | |
| 7/7/1995 | XX | LPXX34887 | 8.16 | | 1.33 | | | 62.5 | 1760.9 | | | 260 | | | 244 | | |
| 10/16/1995 | XX | LPXX34988 | 8.9 | | 1.04 | | | 128 | 1311.4 | | | 136 | | | 250 | | |
| 5/15/1996 | XX | LPXX35200 | 11 | | 0.06 | | | 18.5 | 1217.6 | | | 258 | | | 265 | | |
| 8/12/1996 | XX | LPXX35289 | 10.8 | | 1.76 | | | 20.8 | 1657.6 | | | 355 | | | 209 | | |
| 10/9/1996 | XX | LPXX35347 | 12.8 | | 0.395 | | | 30.6 | 1760.1 | | | 357 | | | 222 | | |
| 6/5/1997 | XX | LPXX35586 | 13.24 | | 0.16 | | | 32 | 1777.6 | | | 450 | | | 166 | | |
| 8/14/1997 | XX | LPXX35656 | 13.7 | | 1.97 | | | 58 | 2450.9 | | | 457 | | | 211 | | |
| 10/31/1997 | XX | LPXX35734 | 12.6 | | 1.67 | | | 17.3 | 1345.5 | | | 276.8 | | | 175 | | |
| 5/5/1998 | XX | LPXX35920 | 12.8 | | 0.156 | | | 61.3 | 1421 | | | 195.7 | | | 181 | | |
| 8/14/1998 | XX | LPXX36021 | 13.6 | | 0.208 | | | 72.1 | 1423 | | | 129.1 | | | 140 | | |
| 10/21/1998 | XX | LPXX36089 | 14.2 | | 0.984 | | | 79.5 | 1264 | | | 193.4 | | | 154 | | |
| 4/28/1999 | XX | LPXX36278 | 19.35 | | 0.301 | | | 39.4 | 1257.2 | | | 111.5 | | | 102 | | |
| 7/23/1999 | XX | LPXX36364 | 17.46 | | 0.276 | | | 3.5 | 1470.5 | | | 118.9 | | | 218 | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(LP)**

| Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Biochemical Oxygen Demand mg/L | Chemical Oxygen Demand mg/L | Chloride mg/L | Cyanide ug/L | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/14/1999 | XX | LPXX36447 | 17.68 | | 0.978 | 2582 | | 59.4 | 1573.4 | | | 462 | | | 156 | | |
| 5/3/2000 | XX | LPXX36649 | 23.4 | 6.1 | 1.364 | 1943 | 133 | 61.7 | 1243.8 | 1180 | 1351.4 | 263 | | | 95.2 | | |
| 8/9/2000 | XX | LPXX36747 | 14.56 | 15.5 | 1.18 | 2440 | 101 | 8.4 | 1407.3 | 1475 | 1835.7 | 238.8 | | | 136.8 | | |
| 11/8/2000 | XX | LPXX36838 | 22.05 | 13.5 | 0.861 | 2464 | 80 | 78 | 1351.7 | 1900 | 1979.6 | 203.3 | | | 110.6 | | |
| 5/16/2001 | XX | LPXX37027 | 22.8 | 10 | 0.503 | 2563 | 125 | 50 | 1418.9 | 1800 | 1865 | 253 | | | 141.4 | | |
| 7/31/2001 | XX | LPXX37103 | 27 | 2.4 | 0.287 | 3903 | 128 | 20 | 1035.2 | 2550 | 2700 | 383.4 | | | 208 | | |
| 10/23/2001 | XX | LPXX37187 | 22.4 | 4.4 | 1.1 | 3556 | 50 | 17.4 | 1810.8 | 2415 | 2475 | 325.2 | | | 248 | | |
| 5/21/2002 | XX | LPXX37397 | 15.75 | 1.88 | 0.093 | 1828 | 129 | 91 | 1229.7 | 1230 | 1354 | 56.3 | | | 107 | | |
| 8/6/2002 | XX | LPXX37474 | 22.05 | 3.1 | 0.585 | 2684 | 119 | 3.2 | 1302.4 | 1914 | 2005 | 140.1 | | | 161.5 | | |
| 10/24/2002 | XX | LPXX37553 | 21.1 | 1.35 | 0.575 | 2118 | 45 | 52.2 | 1167.1 | 1650 | 1720 | 144.5 | | | 139.6 | | |
| 6/26/2003 | XX | LPXX37798 | 14 | 2 U | 0.23 | 1400 | 83 | 70 | 1100 | 1000 | 1100 | 68 | | | 78 | | |
| 8/13/2003 | XX | LPXX37846 | 14 | 2 U | 0.36 | 1400 | 50 | 51 | 870 | 1080 | 1100 | 74 | | | 58 | | |
| 10/22/2003 | XX | LPXX37916 | 11 | 2 U | 0.13 | 1000 | 58 | 180 | 930 | 680 | 710 | 60 | 36 | 180 | 27 | 27 | |
| 5/6/2004 | XX | LPXX38113 | 9.9 | 2 U | 0.1 U | 1000 | 54 | 77 | 870 | 800 | 840 | 46 | 54 | 140 | 37 | 10 U | |
| 7/27/2004 | XX | LPXX38195 | 15 | 0.5 U | 0.1 U | 1400 | 55 | 47 | 2300 | 1120 | 1200 | 80 | 68 | 220 | 93 | 10 U | |
| 10/25/2004 | XX | LPXX38285 | 21 | 2 U | 0.1 U | 1700 | 24 | 13 | 1300 | 1300 | 1400 | 64 | | | 100 | | |
| 5/12/2005 | XX | LTLPXX002 | 11 | 2 U | 0.28 | 1100 | 35 | 61 | 970 | 840 | 880 | 69 | | | 48 | | |
| 7/25/2005 | XX | LTLPXX01E | 14 | 2 U | 0.27 | 1800 | 86 | 30 | 1300 | 1600 | 1700 | 77 | | | 88 | | |
| 11/9/2005 | XX | LTLPXX036 | 12 | 2 U | 0.1 U | 920 | 50 | 95 | 1000 | 900 | 980 | 40 | 22 | 140 | 48 | 10 U | |
| 5/2/2006 | XX | LTLPXX082 | 12 | 2 U | 0.3 | 1300 | 54 | 80 | 1100 | 890 | 980 | 47 | | | 53 | | |
| 8/3/2006 | XX | LTLPXX06A | 12 | 2 U | 0.41 | 910 | 58 | 32 | 820 | 780 | 810 | 52 | | | 41 | | |
| 10/18/2006 | XX | LTLPXX04I | 17 | 2 U | 0.65 | 1400 | 50 | 120 | 650 | 1040 | 1100 | 48 | 20 | 170 | 65 | 19 | |
| 5/21/2007 | XX | LTLPXX09E | 1.1 | 2 U | 0.43 | 1000 | 65 | 66 | 790 | 780 | 820 | 59 | | | 47 | | |
| 5/21/2007 | XD | LTXXXX0ED | 1.1 | 2 U | 0.47 | 1100 | 64 | 54 | 850 | | 860 | 77 | | | 38 | | |
| 8/8/2007 | XX | LTLPXX0B7 | A | A | | A | A | A | A | A | A | A | | | A | | |
| 11/6/2007 | XX | LTLPXX0CJ | 4.2 | 1.9 | 0.28 | 1200 | 82 | 320 | 680 | 590 | 640 | 67 | 64 | 200 | 38 | 0.015 | |
| 5/27/2008 | XX | LTLPXX0F7 | 1.2 | 0.5 U | 0.22 | 1200 | 63 | 15 | 810 | 880 | 930 | 92 | | | 69 | | |
| 8/19/2008 | XX | LTLPXX0H7 | 4.3 | 0.5 U | 0.28 | 1100 | 66 | 33 | 740 | 860 | 920 | 56 | | | 45 | | |
| 10/22/2008 | XX | LTLPXX0IF | 6 | 0.5 U | 0.55 | 1900 | 69 | 100 | 1500 | 1300 | 1400 | 120 | 110 | 300 | 92 | 0.01 U | |
| 5/7/2009 | XX | LTLPXX10F | 7.5 | 0.5 U | | 1400 | 50 | 50 | 1200 | 940 | 1000 | 170 | | | 33 | | |
| 8/12/2009 | XX | LTLPXX12F | 8.3 | 0.5 U | 0.26 | 1400 | 30 | 4 | 1300 | 1120 | 1200 | 260 | | | 59 | | |
| 10/27/2009 | XX | LTLPXX143 | 4.9 | 0.59 | 0.14 | 840 | 59 | 65 | 680 | 675 | 710 | 150 | 170 | 400 | 34 | 0.18 | |
| 6/7/2010 | XX | LTLPXX164 | 8.2 | 0.5 U | 0.19 | 1300 | 87 | 48 | 670 | 960 | 1000 | 130 | | | 62 | | |
| 6/7/2010 | XD | LTDP4X162 | 8 | 0.5 U | 0.21 | 1300 | 95 | 48 | 680 | | 1000 | 130 | | | 62 | | |
| 8/18/2010 | XX | LTLPXX185 | 15 | 0.5 U | 0.022 | 2000 | 46 | 11 | 760 | 1560 | 1700 | 110 | | | 140 | | |
| 10/21/2010 | XX | LTLPXX19D | 10 | 0.5 U | 0.37 | 1400 | 45 | 150 | 920 | 1060 | 1100 | 68 | 18 | 140 | 66 | 0.01 U | |
| 5/18/2011 | XX | LTXXXX1ED | 5 | 0.5 U | 0.11 | 710 | 31 | 37 | 500 | 610 | 610 | 37 | | | 24 | | |
| 5/18/2011 | XD | LTXXXX1EI | 5 | 0.5 U | 0.11 | 710 | 33 | 37 | 510 | 620 | 620 | 36 | | | 24 | | |
| 8/10/2011 | XX | LTXXXX1G4 | 6.6 | 0.2 U | 0.51 | 1300 | 68 | 15 | 680 | 1200 | 1300 | 89 | | | 130 | | |
| 11/2/2011 | XX | LTXXXX1HF | 11 | 0.2 U | 0.16 | 1200 | 17 | 67 | 750 | 1100 | 1100 | 51 | | | 48 | | |
| 11/2/2011 | XD | LTDP3X1I0 | 11 | 0.2 U | 0.15 | 1100 | 20 | 66 | 770 | 980 | 980 | 51 | | | 48 | | |
| 5/14/2012 | XX | LTXXXX1J9 | 5.6 | 0.52 | 0.035 | 640 | 24 | 33 | 490 | 520 | 520 | 26 | | | 17 | | |
| 8/15/2012 | XX | LTXXXX212 | 5.3 | 0.25 U | 0.33 | 1300 | 100 | 13 | 690 | 1100 | 1100 | 96.5 | | | 85 | | |
| 8/15/2012 | XD | LTDP3X217 | 5.3 | 0.25 U | 0.34 | 1300 | 92 | 13 | 650 | 1000 | 1000 | 97.7 | | | 84 | | |
| 10/30/2012 | XX | LTXXXX22G | 9.6 | 0.25 U | 0.12 | 940 | 23 | 70 | 680 | 780 | 780 | 32 | | | 33 | | |
| 5/21/2013 | XX | LTXXXX24A | 8 | 0.25 U | 0.14 | 960 | 42 | 26 | 650 | 810 | 810 | 31 | | | 42 | | |
| 7/25/2013 | XX | LTXXXX264 | 6.4 | 0.25 U | 0.17 | 900 | 70 | 11 | 370 | 740 | 760 | 43 | | | 47 | | |
| 10/1/2013 | XX | LTXXXX27I | 11 | 0.25 U | 0.066 | 1000 | 18 | 18 | 510 | 890 | 890 | 33 | | | 37 | | |
| 6/5/2014 | XX | LTXXXX29C | 11 | 0.05 U | 0.1 U | 1100 | 7.2 | 1 U | 749 | 850 | 850 | 27 | | | 39 | | |
| 8/21/2014 | XX | LTXXXX2B6 | 27 | 0.05 U | 0.14 | 1800 | 82 | 1.1 | 1160 | 1400 | 1400 | 51 | | | 82 | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LP) Date | Type | Sample ID | Ammonia (N) mg/L | Nitrate (N) mg/L | Total Phosphorus mg/L | Total Dissolved Solids mg/L | Total Suspended Solids mg/L | Sulfate mg/L | Ca-mg Hardness (CaCO3) mg/L | Bicarbonate Alkalinity (CaCO3) mg/L | Alkalinity (CaCO3) mg/L | Organic Carbon mg/L | Biochemical Oxygen Demand mg/L | Chemical Oxygen Demand mg/L | Chloride mg/L | Cyanide ug/L | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/13/2014 | XX | LTXXXX2D0 | 6.9 | 1.1 | 0.1 U | 830 | 7.2 | 100 | 556 | 590 | 590 | 23 | | | 23 | | |
| 6/4/2015 | XX | LTXXXX2EG | 6.2 | 0.36 | 0.1 U | 700 | 15 | 28 | 500 | 550 | 560 | 18 | | | 19 | | |
| 9/3/2015 | XX | LTXXXX2GB | 7.8 | 0.16 | 0.14 | 1100 | 26 | 1.5 | 705 | 870 | 880 | 47 | | | 50 | | |
| 11/5/2015 | XX | LTXXXX2I5 | 7.6 | 0.39 | 0.1 U | 800 | 25 | 3.1 | 548 | 640 | 640 | 24 | | | 24 | | |
| 6/16/2016 | XX | LTXXXX31F | 11 | 0.38 | 0.1 U | 1100 | 6.8 | 1 U | 760 | 930 | 930 | 30 | | | 48 | | |
| 9/22/2016 | XX | LTXXXX339 | 4.2 | 0.84 | 0.19 | 1400 | 24 | 1 U | 871 | 1000 | 1100 | 54 | | | 82 | | |
| 11/10/2016 | XX | LTXXXX353 | 14 | 0.69 | 0.1 U | 1500 | 14 | 1 U | 918 | 1200 | 1200 | 51 | | | 82 | | |
| 6/15/2017 | XX | LTXXXX36I | 12 | 0.12 | 0.1 U | 1000 | 4 U | 26 | 810 | 910 | 910 | 30 | | | 39 | | |
| 8/31/2017 | XX | LTXXXX38C | 27 | 0.05 U | 0.11 | 1800 | 10 | 1 U | 1230 | 1600 | 1600 | 55 | | | 91 | | |
| 11/16/2017 | XX | LTXXXX3A6 | 7.4 | 0.75 | 0.1 U | 780 | 8.4 | 77 | 610 | 600 | 600 | 22 | | | 26 | | |
| 6/21/2018 | XX | LTXXXX3C1 | 9.2 | 1.4 | 0.1 U | 1300 | 8.8 | 1 U | 875 | 1000 | 1000 | 34 | | | 50 | | |
| 8/16/2018 | XX | LTXXXX3CG | 5.5 | 0.53 | 0.15 | 1000 | 49 | 54 | 644 | 810 | 820 | 35 | | | 50 | | |
| 11/29/2018 | XX | LTXXXX3F9 | 3.2 | 0.6 | 0.1 U | 270 | 4 U | 33 | 259 | 260 | 260 | 9.9 | | | 11 | | |
| 6/6/2019 | XX | LTXXXX3H4 | 7.5 | 0.18 | 0.1 U | 680 | 17 | 23 | 551 | 630 | 630 | 19 | | | 20 | | |
| 8/15/2019 | XX | LTXXXX3HJ | 16 | 0.05 U | 0.1 U | 1200 | 4 U | 1 U | 824 | 1100 | 1100 | 45 | | | 51 | | |
| 10/24/2019 | XX | LTXXXX40C | 12 | 0.68 | 0.1 U | 950 | 6.8 | 35 | 696 | 850 | 850 | 30 | | | 39 | | |
| 6/18/2020 | XX | LTXXXX427 | 12 | 0.05 U | 0.1 U | 1000 | 4 U | 1 U | 742 | 1000 | 1000 | 32 | | | 39 | | |
| 8/6/2020 | XX | LTXXXX432 | 4.4 | 0.31 | 0.1 U | 1200 | 10 | 1.4 | 907 | 1000 | 1000 | 43 | | | 57 | | |
| 10/22/2020 | XX | LTXXXX45F | 3.7 | 4.4 | 0.1 U | 750 | 9.6 | 88 | 565 | 540 | 540 | 24 | | | 27 | | |
| 6/24/2021 | XX | LTXXXX47A | 8.5 | 0.084 | 0.1 U | 1200 | 4.8 | 1 U | 822 | 1000 | 1000 | 40 | | | 50 | | |
| 10/5/2021 | XX | LTXXXX49J | 5.6 | 0.52 | 0.1 U | 710 | 7.2 | 55 | 523 | 580 | 580 | 23 | | | 21 | | |

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

Blank Cells appear when a parameter was not analyzed.

**Concentration Qualifier Notes:**

A - The sampling location was Inaccessible

U - Not Detected above the laboratory reporting limit.

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (103) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| **103** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 103XX36643 | | | | 0.02 U | | 0.01 U | 0.36 | 1.38 | | | | | | | |
| 8/1/2000 | XX | 103XX36739 | | | | 0.058 | | 0.01 U | 0.3 | 1.49 | | | | | | | |
| 10/24/2000 | XX | 103XX36823 | | | | D | | | | D | | | | | | | |
| 5/8/2001 | XX | 103XX37019 | 0.008 U | | | 0.119 | | 0.01 U | 0.24 | 1.2 | | | | | | | |
| 7/24/2001 | XX | 103XX37096 | D | | | D | | D | D | D | | | | | | | |
| 10/16/2001 | XX | 103XX37180 | D | | | D | | D | D | D | | | | | | | |
| 5/15/2002 | XX | 103XX37391 | 0.01 U | 0.9 | | 0.095 | 0.4 | 0.01 U | 0.36 | 1.5 | | | | | | | |
| 7/29/2002 | XX | 103XX37466 | 0.01 | 1.3 | | 0.034 | 0.4 | 0.01 U | 0.28 | 1.5 | | | | | | | |
| 10/18/2002 | XX | 103XX37547 | D | D | | D | D | D | D | D | | | | | | | |
| 6/18/2003 | XX | 103XX37790 | 0.005 U | 2.8 | | 0.032 | 1 U | 0.01 U | 1 U | 1.3 | | | | | | | |
| 8/6/2003 | XX | 103XX37839 | 0.005 U | 3.1 | | 0.02 | 1 U | 0.01 U | 1 U | 1.4 | | | | | | | |
| 10/6/2003 | XX | 103XX37900 | 0.005 U | 3.5 | | 0.031 | 1 U | 0.01 U | 1 U | 1.8 | | | | | | | |
| 5/12/2004 | XX | 103XX38119 | 0.005 U | 3.1 | | 0.022 | 1 U | 0.01 U | 1 U | 1 U | | | | | | | |
| 8/19/2004 | XX | 103XX38218 | 0.005 U | 3.5 | | 0.031 | 1 U | 0.01 U | 1 U | 1.9 | | | | | | | |
| 10/18/2004 | XX | 103XX38278 | D | D | | D | D | D | D | D | | | | | | | |
| 5/24/2005 | XX | GW103X004 | 0.005 U | 2.9 | | 0.03 | 1 U | 0.01 U | 1 U | 1.2 | | | | | | | |
| 8/17/2005 | XX | GW103X01G | 0.005 U | 2.8 | | 0.02 | 1 U | 0.01 U | 1 U | 1.6 | | | | | | | |
| 10/13/2005 | XX | GW103X038 | D | D | | D | D | D | D | D | | | | | | | |
| 5/15/2006 | XX | GW103X084 | 0.005 U | 3.7 | | 0.02 | 1 U | 0.01 U | 1 U | 1.7 | | | | | | | |
| 8/7/2006 | XX | GW103X06C | 0.005 U | 4.1 | | 0.02 | 1 U | 0.01 U | 1 U | 1.8 | | | | | | | |
| 10/11/2006 | XX | GW103X050 | 0.005 U | 3.9 | | 0.02 B | 1 U | 0.01 U | 1 U | 1.7 | | | | | | | |
| 5/22/2007 | XX | GW103X09G | 0.005 U | 3.6 | | 0.11 | 1 U | 0.01 U | 1 U | 1.7 | | | | | | | |
| 8/21/2007 | XX | GW103X0B9 | D | D | | D | D | D | D | D | | | | | | | |
| 11/1/2007 | XX | GW103X0D1 | 0.005 U | 4.1 | | 0.059 | 1 U | 0.01 U | 1 U | 1.8 | | | | | | | |
| 5/28/2008 | XX | GW103X0F9 | 0.005 U | 3.8 | | 0.024 | 1 U | 0.01 U | 1 U | 1.6 | | | | | | | |
| 8/26/2008 | XX | GW103X0H9 | 0.005 U | 3.3 | | 0.03 | 1 U | 0.01 U | 1 U | 1.5 | | | | | | | |
| 10/28/2008 | XX | GW103X0IH | 0.005 U | 4.3 | | 0.043 | 1 U | 0.01 U | 1 U | 1.8 | | | | | | | |
| 5/18/2009 | XX | GW103X10H | 0.005 U | 2.9 | | 0.017 | 1 U | 0.01 U | 1 U | 1.4 | | | | | | | |
| 8/17/2009 | XX | GW103X12H | 0.005 U | 3.4 | | 0.072 | 1 U | 0.01 U | 1 U | 1.3 | | | | | | | |
| 10/29/2009 | XX | GW103X145 | 0.005 U | 3 | | 0.068 | 1 U | 0.01 U | 1 U | 1.4 | | | | | | | |
| 6/10/2010 | XX | GW103X166 | 0.005 U | 3.2 | | 0.019 | 1 U | 0.01 U | 1 U | 1.4 | | | | | | | |
| 8/19/2010 | XX | GW103X187 | D | D | | D | D | D | D | D | | | | | | | |
| 10/26/2010 | XX | GW103X19F | 0.005 U | 4 | | 0.36 | 1 U | 0.013 | 1 U | 1.6 | | | | | | | |
| 9/20/2021 | XX | GW103X49B | D | D | | D | D | D | D | D | | | | | | | |
| **104B** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 104BXX36643 | | | | 0.049 | | 0.132 | 1.12 | 4.25 | | | | | | | |
| 8/1/2000 | XX | 104BXX36739 | | | | 0.043 | | 0.08 | 1.01 | 4.05 | | | | | | | |
| 10/24/2000 | XX | 104BXX36823 | 0.008 U | | | 0.189 | | 0.08 | 1.01 | 4.2 | | | | | | | |
| 5/8/2001 | XX | 104BXX37019 | 0.008 U | | | 0.329 | | 0.09 | 1.14 | 4.6 | | | | | | | |
| 7/24/2001 | XX | 104BXX37096 | 0.008 U | | | 0.063 | | 0.08 | 1.12 | 4.3 | | | | | | | |
| 10/16/2001 | XX | 104BXX37180 | 0.01 U | | | 0.064 | | 0.06 | 1.04 | 4.1 | | | | | | | |
| 5/15/2002 | XX | 104BXX37391 | 0.01 U | 9.6 | | 0.13 | 1.8 | 0.07 | 1.177 | 4.7 | | | | | | | |
| 7/29/2002 | XX | 104BXX37466 | 0.01 U | 10.2 | | 0.036 | 1.7 | 0.07 | 1.03 | 4.1 | | | | | | | |
| 10/15/2002 | XX | 104BXX37544 | 0.01 U | 9.1 | | 0.062 | 1.6 | 0.06 | 1 | 3.8 | | | | | | | |
| 6/19/2003 | XX | 104BXX37791 | 0.005 U | 26 | | 0.016 | 2 | 0.08 | 1 U | 4 | | | | | | | |
| 8/5/2003 | XX | 104BXX37838 | 0.005 U | 24 | | 0.01 U | 1.9 | 0.064 | 1 | 3.5 | | | | | | | |
| 10/7/2003 | XX | 104BXX37901 | 0.005 U | 22 | | 0.01 | 1.8 | 0.056 | 1 U | 3.6 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(104B)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/26/2004 | XX | 104BXX38103 | 0.005 U | 25 | | 0.01 U | 2 | 0.063 | 1.2 | 5.1 | | | | | | | |
| 8/9/2004 | XX | 104BXX38208 | 0.005 U | 22 | | 0.044 | 1.8 | 0.063 | 1 U | 3.5 | | | | | | | |
| 10/11/2004 | XX | 104BXX38271 | 0.005 U | 23 | | 0.024 | 1.8 | 0.063 | 1 U | 3.7 | | | | | | | |
| 5/24/2005 | XX | GW104B005 | 0.005 U | 20 | | 0.03 | 1.6 | 0.04 | 1 U | 3.5 | | | | | | | |
| 8/1/2005 | XX | GW104B01H | 0.005 U | 21 | | 0.02 | 1.7 | 0.05 | 1 U | 4.1 | | | | | | | |
| 10/25/2005 | XX | GW104B039 | 0.005 U | 24 | | 0.03 | 1.7 | 0.04 | 1 U | 4.1 | | | | | | | |
| 5/10/2006 | XX | GW104B085 | 0.005 U | 27 | | 0.01 B | 1.8 | 0.04 | 1 U | 3.9 | | | | | | | |
| 7/24/2006 | XX | GW104B06D | 0.005 U | 25 | | 0.02 B | 1.8 | 0.04 | 1.2 | 4.3 | | | | | | | |
| 10/10/2006 | XX | GW104B051 | 0.005 U | 23 | | 0.04 B | 1.8 | 0.05 | 1 | 4 | | | | | | | |
| 5/10/2007 | XX | GW104B09H | 0.005 U | 23 | | 0.041 | 1.7 | 0.032 | 1 U | 3.6 | | | | | | | |
| 8/6/2007 | XX | GW104B0BA | 0.005 U | 25 | | 0.02 | 1.8 | 0.045 | 1.2 | 4.7 | | | | | | | |
| 10/24/2007 | XX | GW104B0D2 | 0.005 U | 22 | | 0.01 | 1.7 | 0.04 | 1 U | 4 | | | | | | | |
| 10/24/2007 | XD | GWDP2X0EJ | 0.005 U | 23 | | 0.01 U | 1.7 | 0.04 | 1 U | 4.2 | | | | | | | |
| 5/28/2008 | XX | GW104B0FA | 0.005 U | 23 | | 0.04 | 1.8 | 0.03 | 1 | 4.3 | | | | | | | |
| 8/11/2008 | XX | GW104B0HA | 0.005 U | 19 | | 0.011 | 1.6 | 0.03 | 1 U | 3.8 | | | | | | | |
| 10/15/2008 | XX | GW104B0II | 0.005 U | 20 | | 0.02 | 1.6 | 0.03 | 1 | 3.7 | | | | | | | |
| 10/15/2008 | XD | GWDP1X106 | 0.005 U | 20 | | 0.01 U | 1.6 | 0.03 | 1 | 3.7 | | | | | | | |
| 5/6/2009 | XX | GW104B10I | 0.005 U | 19 | | 0.02 | 1.5 | 0.027 | 1 U | 3.6 | | | | | | | |
| 8/4/2009 | XX | GW104B12I | 0.005 U | 18 | | 0.015 | 1.5 | 0.026 | 1 U | 3.3 | | | | | | | |
| 10/19/2009 | XX | GW104B146 | 0.005 U | 21 | | 0.02 | 1.7 | 0.03 | 1 | 4.3 | | | | | | | |
| 5/25/2010 | XX | GW104B167 | 0.005 U | 20 | | 0.01 U | 1.6 | 0.024 | 1.1 | 3.9 | | | | | | | |
| 5/25/2010 | XD | GWDP1X15J | 0.005 U | 20 | | 0.025 | 1.6 | 0.024 | 1.1 | 3.9 | | | | | | | |
| 8/2/2010 | XX | GW104B188 | 0.005 U | 20 | | 0.025 | 1.6 | 0.022 | 1.1 | 3.8 | | | | | | | |
| 10/12/2010 | XX | GW104B19G | 0.005 U | 20 | | 0.16 | 2 | 0.022 | 1 U | 3.5 | | | | | | | |
| 5/16/2011 | XX | GW104B1DI | 0.005 U | 21 | | 0.01 U | 1.6 | 0.023 | 1.1 | 3.8 | | | | | | | |
| 5/16/2011 | XD | GWXXXX1EG | 0.005 U | 21 | | 0.01 U | 1.7 | 0.024 | 1.1 | 4 | | | | | | | |
| 8/9/2011 | XX | GW104B1F9 | 0.0016 U | 21 | | 0.017 | 1.7 | 0.028 | 1 | 4 | | | | | | | |
| 11/3/2011 | XX | GW104B1H0 | 0.0016 U | 20 | | 0.011 | 1.6 | 0.031 | 0.91 J | 3.9 | | | | | | | |
| 11/3/2011 | XD | GWDP2X1HJ | 0.0016 U | 18 | | 0.0088 J | 1.5 | 0.027 | 0.86 J | 3.6 | | | | | | | |
| 5/14/2012 | XX | GW104B1IE | 0.005 U | 20 | | 0.02 | 1.7 | 0.03 | 1.1 | 4.1 | | | | | | | |
| 5/14/2012 | XD | GWXXXX1JC | 0.005 U | 21 | | 0.014 | 1.7 | 0.03 | 1.1 | 4.1 | | | | | | | |
| 8/14/2012 | XX | GW104B207 | 0.005 U | 18 | | 0.01 | 1.6 | 0.029 | 1 U | 3.9 | | | | | | | |
| 8/14/2012 | XD | GWDP1X215 | 0.005 U | 18 | | 0.029 | 1.5 | 0.03 | 1 U | 3.9 | | | | | | | |
| 10/31/2012 | XX | GW104B221 | 0.005 U | 21 | | 0.01 U | 1.7 | 0.028 | 1.1 | 4.2 | | | | | | | |
| 5/22/2013 | XX | GW104B23F | 0.005 U | 19 | | 0.01 U | 1.5 | 0.023 | 1 U | 3.5 | | | | | | | |
| 5/22/2013 | XD | GWDP3X24F | 0.005 U | 15 | | 0.01 U | 1.2 | 0.018 | 1 U | 2.8 | | | | | | | |
| 7/23/2013 | XX | GW104B259 | 0.005 U | 22 | | 0.01 U | 1.6 | 0.021 | 1.3 | 4.1 | | | | | | | |
| 10/1/2013 | XX | GW104B273 | 0.005 U | 20 | | 0.01 U | 1.6 | 0.026 | 1 U | 4.1 | | | | | | | |
| 6/4/2014 | XX | GW104B28H | 0.008 U | 21.5 | | 0.1 U | 1.87 | 0.0176 | 1 | 4.29 | | | | | | | |
| 6/4/2014 | XD | GWDP3X29H | 0.008 U | 21.6 | | 0.1 U | 1.89 | 0.0183 | 1 U | 4.29 | | | | | | | |
| 8/19/2014 | XX | GW104B2AB | 0.008 U | 22.5 | | 0.1 U | 1.7 | 0.0213 | 1 U | 4.29 | | | | | | | |
| 11/12/2014 | XX | GW104B2C5 | 0.008 U | 20.7 | | 0.1 U | 1.71 | 0.0223 | 1 U | 4.23 | | | | | | | |
| 6/3/2015 | XX | GW104B2E1 | 0.008 U | 20.4 | | 0.1 U | 1.77 | 0.019 | 1.05 | 4.16 | | | | | | | |
| 6/3/2015 | XD | GWDP3X2F1 | 0.008 U | 20 | | 0.1 U | 1.7 | 0.019 | 1 U | 4.03 | | | | | | | |
| 9/2/2015 | XX | GW104B2FG | 0.008 U | 22.4 | | 0.1 U | 1.83 | 0.014 | 1 U | 4.66 | | | | | | | |
| 11/4/2015 | XX | GW104B2HA | 0.008 U | 21.2 | | 0.1 U | 1.78 | 0.019 | 1.01 | 4.39 | | | | | | | |
| 6/14/2016 | XD | GWDP3X320 | 0.008 U | 21.8 | | 0.1 U | 1.84 | 0.021 | 1.1 | 4.4 | | | | | | | |
| 6/14/2016 | XX | GW104B310 | 0.008 U | 20.9 | | 0.1 U | 1.81 | 0.021 | 1.1 | 4.35 | | | | | | | |
| 9/20/2016 | XX | GW104B32E | 0.008 U | 22 | | 0.1 U | 1.78 | 0.018 | 1 | 4.49 | | | | | | | |
| 11/8/2016 | XX | GW104B348 | 0.008 U | 22.6 | | 0.1 U | 1.61 | 0.016 | 1 | 4.54 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (104B) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 6/14/2017 | XD | GWDP3X373 | 0.008 U | 22.3 | | 0.1 U | 1.82 | 0.0223 | 1.15 | 4.41 | | | | | | | |
| 6/14/2017 | XX | GW104B363 | 0.008 U | 21.9 | | 0.1 U | 1.83 | 0.0277 | 1.22 | 4.32 | | | | | | | |
| 8/30/2017 | XX | GW104B37H | 0.008 U | 22 | | 0.297 | 1.76 | 0.0552 | 1.05 | 4.5 | | | | | | | |
| 11/15/2017 | XX | GW104B39B | 0.008 U | 22.1 | | 0.1 U | 1.7 | 0.0166 | 1 | 4.51 | | | | | | | |
| 6/19/2018 | XD | GWDP3X3C6 | 0.008 U | 19.5 | | 0.1 U | 1.86 | 0.0253 | 1 U | 3.95 | | | | | | | |
| 6/19/2018 | XX | GW104B3B6 | 0.008 U | 21 | | 0.1 U | 2.01 | 0.0273 | 1 U | 4.22 | | | | | | | |
| 8/14/2018 | XX | GW104B3DF | 0.008 U | 21.6 | | 0.1 U | 1.74 | 0.0172 | 1 U | 4.26 | | | | | | | |
| 11/27/2018 | XX | GW104B3EE | 0.008 U | 22.9 | | 0.1 U | 1.7 | 0.0197 | 1.12 | 4.65 | | | | | | | |
| 6/4/2019 | XD | GWDP3X3H9 | 0.008 U | 21.7 | | 0.1 U | 1.7 | 0.0123 | 1 U | 4.18 | | | | | | | |
| 6/4/2019 | XX | GW104B3G9 | 0.008 U | 23.7 | | 0.1 U | 1.84 | 0.0132 | 1.04 | 4.62 | | | | | | | |
| 8/14/2019 | XX | GW104B3II | 0.008 U | 22.5 | | 0.1 U | 1.78 | 0.0144 | 1 U | 4.38 | | | | | | | |
| 10/22/2019 | XX | GW104B3JH | 0.008 U | 22.1 | | 0.1 U | 1.78 | 0.0079 | 1.03 | 4.81 | | | | | | | |
| 6/16/2020 | XD | GWDP3X42C | 0.008 U | 21.8 | | 0.1 U | 1.77 | 0.0137 | 1 U | 4.35 | | | | | | | |
| 6/16/2020 | XX | GW104B41C | 0.008 U | 22.1 | | 0.1 U | 1.75 | 0.0131 | 1 U | 4.35 | | | | | | | |
| 8/4/2020 | XX | GW104B441 | 0.008 U | | | 0.1 U | 1.9 | 0.019 | 1.02 | 4.68 | | | | | | | |
| 8/4/2020 | XX | GW104B441R | | 24.4 | | | | | | | | | | | | | |
| 10/20/2020 | XX | GW104B450 | 0.008 U | 22.6 | | 0.1 U | 1.7 | 0.0159 | 1.1 | 4.65 | | | | | | | |
| 6/22/2021 | XD | GWDP3X47F | 0.008 U | 23.5 | | 0.135 | 1.96 | 0.0335 | 1.03 | 4.48 | | | | | | | |
| 6/22/2021 | XX | GW104B46F | 0.008 U | 22.6 | | 0.108 | 1.94 | 0.0302 | 1 U | 4.29 | | | | | | | |
| 9/21/2021 | XX | GW104B48A | 0.008 U | 21 | | 1.01 | 2.05 | 0.057 | 1.12 | 4.56 | | | | | | | |
| **107A** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 107AXX36649 | | | | 0.02 U | | 0.951 | 1.98 | 37.35 | | | | | | | |
| 8/10/2000 | XX | 107AXX36748 | | | | 0.75 | | 0.94 | 1.86 | 31.9 | | | | | | | |
| 11/9/2000 | XX | 107AXX36839 | 0.008 U | | | 1.669 | | 0.99 | 1.48 | 25.8 | | | | | | | |
| 5/16/2001 | XX | 107AXX37027 | 0.008 U | | | 0.366 | | 0.94 | 1.68 | 30.2 | | | | | | | |
| 8/1/2001 | XX | 107AXX37104 | 0.008 U | | | 0.87 | | 12.96 | 2.56 | 67.1 | | | | | | | |
| 10/24/2001 | XX | 107AXX37188 | 0.008 U | | | 1.85 | | 24.96 | 3.12 | 93.2 | | | | | | | |
| 5/22/2002 | XX | 107AXX37398 | 0.01 U | 370.2 | | 1.74 | 131.7 | 7.05 | 2.751 | 89.2 | | | | | | | |
| 8/2/2002 | XX | 107AXX37470 | 0.03 | 307.2 | 0.01 U | 1.22 | 133.3 | 13.92 | 3.6 | 90.9 | | | | | | | |
| 10/23/2002 | XX | 107AXX37552 | 0.043 | 226.2 | 0.01 U | 1.007 | 123 | 13.17 | 2.43 | 73.8 | | | | | | | |
| 6/24/2003 | XX | 107AXX37796 | 0.005 U | 270 | 0.003 U | 1.2 | 140 | 17 | 4 | 57 | | | | | | | |
| 8/13/2003 | XX | 107AXX37846 | 0.005 U | 220 | 0.011 | 0.9 | 120 | 15 | 3.8 | 56 | | | | | | | |
| 10/16/2003 | XX | 107AXX37910 | 0.005 U | 210 | 0.003 U | 0.65 | 120 | 16 | 4.3 | 64 | | | | | | | |
| 5/13/2004 | XX | 107AXX38120 | 0.005 U | 130 | 0.005 | 0.36 | 67 | 0.79 | 2.9 | 46 | | | | | | | |
| 8/2/2004 | XX | 107AXX38201 | 0.005 U | 98 | 0.0081 | 0.42 | 43 | 7.6 | 2.5 | 32 | | | | | | | |
| 10/19/2004 | XX | 107AXX38279 | 0.005 U | 100 | 0.003 U | 0.62 | 52 | 7.6 | 2.3 | 33 | | | | | | | |
| 5/10/2005 | XX | GW107A006 | 0.005 U | 160 | 0.003 U | 0.36 | 100 | 20 | 3 | 38 | | | | | | | |
| 7/27/2005 | XX | GW107A01I | 0.005 U | 160 | 0.003 U | 0.46 | 110 | 9.8 | 3 | 45 | | | | | | | |
| 10/27/2005 | XX | GW107A03A | 0.005 U | 130 | 0.003 U | 0.94 | 76 | 14 | 2.3 | 37 | | | | | | | |
| 5/3/2006 | XX | GW107A086 | 0.005 U | 88 | 0.005 B | 0.14 | 46 | 7.2 | 1.5 | 28 | | | | | | | |
| 8/1/2006 | XX | GW107A06E | 0.005 U | 73 | 0.003 U | 0.27 | 31 | 5.3 | 1.9 | 19 | | | | | | | |
| 10/25/2006 | XX | GW107A052 | 0.005 U | 50 | 0.003 U | 0.16 | 19 | 4.4 | 1.1 | 12 | | | | | | | |
| 5/8/2007 | XX | GW107A09I | 0.005 U | 62 | | 0.12 | 32 | 6.1 | 1.4 | 18 | | | | | | | |
| 5/8/2007 | XD | GWDP3X0EC | 0.005 U | 58 | | 0.12 | 30 | 5.8 | 1.4 | 18 | | | | | | | |
| 8/7/2007 | XX | GW107A0BB | 0.005 U | 75 | | 0.26 | 37 | 11 | 1.9 | 18 | | | | | | | |
| 10/31/2007 | XX | GW107A0D3 | 0.005 U | 99 | | 0.42 | 56 | 19 | 2.4 | 19 | | | | | | | |
| 5/28/2008 | XX | GW107A0FB | 0.005 U | 90 | | 0.2 | 51 | 18 | 2.9 | 20 | | | | | | | |
| 8/18/2008 | XX | GW107A0HB | 0.005 U | 68 | | 0.26 | 35 | 14 | 1.4 | 18 | | | | | | | |
| 10/23/2008 | XX | GW107A0IJ | 0.005 U | 70 | | 0.32 | 32 | 12 | 1.6 | 20 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (107A) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 5/12/2009 | XX | GW107A10J | 0.005 U | 55 | | 0.059 | 24 | 10 | 1.1 | 16 | | | | | | | |
| 5/12/2009 | XD | GWDP3X10C | 0.005 U | 65 | | 0.083 | 23 | 12 | 1.1 | 15 | | | | | | | |
| 8/11/2009 | XX | GW107A12J | 0.005 U | 67 | | 0.17 | 26 | 13 | 2 | 15 | | | | | | | |
| 10/26/2009 | XX | GW107A147 | 0.005 U | 57 | | 0.24 | 29 | 13 | 2.3 | 15 | | | | | | | |
| 6/2/2010 | XX | GW107A168 | 0.005 U | 75 | | 0.054 | 24 | 16 | 1.8 | 12 | | | | | | | |
| 8/5/2010 | XX | GW107A189 | 0.005 U | 79 | | 0.17 | 25 | 22 | 3 | 14 | | | | | | | |
| 8/5/2010 | XD | GWDP3X182 | 0.005 U | 84 | | 0.19 | 25 | 24 | 3 | 14 | | | | | | | |
| 10/18/2010 | XX | GW107A19H | 0.005 U | 90 | | 0.28 | 41 | 33 | 4.3 | 24 | | | | | | | |
| 5/18/2011 | XX | GW107A1D8 | 0.005 U | 100 | | 0.12 | 46 | 39 | 3.3 | 28 | | | | | | | |
| 8/9/2011 | XX | GW107A1EJ | 0.0016 U | 65 | | 0.19 | 24 | 24 | 2.2 | 24 | | | | | | | |
| 11/2/2011 | XX | GW107A1GA | 0.0016 U | 74 | | 0.61 | 28 | 26 | 4 | 28 | | | | | | | |
| 5/17/2012 | XX | GW107A1I4 | 0.005 U | 92 | | 0.15 | 37 | 36 | 3.7 | 27 | | | | | | | |
| 8/14/2012 | XX | GW107A1JH | 0.005 U | 93 | | 0.23 | 47 | 50 | 7.3 | 38 | | | | | | | |
| 10/31/2012 | XX | GW107A21B | 0.005 U | 110 | | 0.42 | 52 | 56 | 7.7 | 45 | | | | | | | |
| 5/21/2013 | XX | GW107A235 | 0.005 U | 120 | | 0.22 | 52 | 61 | 5.8 | 44 | | | | | | | |
| 7/22/2013 | XX | GW107A24J | 0.005 U | 110 | | 0.3 | 40 | 51 | 5.5 | 37 | | | | | | | |
| 10/1/2013 | XX | GW107A26D | 0.005 U | 94 | | 0.41 | 37 | 41 | 5.2 | 34 | | | | | | | |
| 6/4/2014 | XX | GW107A287 | 0.008 U | 58.2 | | 0.134 | 18.6 | 1.2 | 1.63 | 18.1 | | | | | | | |
| 8/19/2014 | XX | GW107A2A1 | 0.008 U | 96.6 | | 0.178 | 35.2 | 26.4 | 2.26 | 29.8 | | | | | | | |
| 11/12/2014 | XX | GW107A2BF | 0.008 U | 103 | | 0.213 | 50.3 | 37.6 | 5 | 38 | | | | | | | |
| 6/3/2015 | XX | GW107A2DB | 0.008 U | 106 | | 0.387 | 59 | 45.5 | 3.78 | 37.7 | | | | | | | |
| 9/2/2015 | XX | GW107A2F6 | 0.008 U | 103 | | 0.32 | 53.3 | 29.8 | 4.02 | 38.1 | | | | | | | |
| 11/4/2015 | XX | GW107A2H0 | 0.04 U | 106 | | 0.5 U | 66 | 54.5 | 4.49 | 48.7 | | | | | | | |
| 6/15/2016 | XX | GW107A30A | 0.008 U | 70.6 | | 0.349 | 33.7 | 12.3 | 2.5 | 26.8 | | | | | | | |
| 9/20/2016 | XX | GW107A324 | 0.008 U | 64.1 | | 0.5 | 33.7 | 9.57 | 8.3 | 24.6 | | | | | | | |
| 11/8/2016 | XX | GW107A33I | 0.008 U | 75.7 | | 0.424 | 56 | 17.9 | 28.9 | 28 | | | | | | | |
| 6/14/2017 | XX | GW107A35D | 0.008 U | 143 | | 0.519 | 124 | 72.5 | 12.2 | 52.4 | | | | | | | |
| 8/29/2017 | XX | GW107A377 | 0.008 U | 126 | | 0.678 | 98.2 | 43 | 13.6 | 47.3 | | | | | | | |
| 11/15/2017 | XX | GW107A391 | 0.008 U | 108 | | 0.597 | 99.9 | 36.2 | 24 | 56 | | | | | | | |
| 6/19/2018 | XX | GW107A3AG | 0.008 U | 77.1 | | 0.283 | 68.8 | 14.6 | 10.7 | 32.1 | | | | | | | |
| 8/16/2018 | XX | GW107A3D5 | 0.008 U | 91.6 | | 0.3 | 77.6 | 24.4 | 11.1 | 37.7 | | | | | | | |
| 11/28/2018 | XX | GW107A3E4 | 0.008 U | 78.2 | | 0.487 | 61.4 | 13 | 18.4 | 33.7 | | | | | | | |
| 6/5/2019 | XX | GW107A3FJ | 0.008 U | 74.3 | | 0.1 U | 56.6 | 8.16 | 10.6 | 27.1 | | | | | | | |
| 8/14/2019 | XX | GW107A3I8 | 0.008 U | 80.5 | | 0.1 U | 65.4 | 17 | 9.96 | 28.2 | | | | | | | |
| 10/23/2019 | XX | GW107A3J7 | 0.008 U | 84.3 | | 0.197 | 63.9 | 18.6 | 15.6 | 32.3 | | | | | | | |
| 6/17/2020 | XX | GW107A412 | 0.008 U | 70 | | 0.1 U | 54.4 | 13.7 | 12.6 | 26.5 | | | | | | | |
| 8/4/2020 | XX | GW107A43B | 0.008 U | | | 0.182 | 63.2 | 11.3 | 17.7 | 28.5 | | | | | | | |
| 8/4/2020 | XX | GW107A43BR | | 74 | | | | | | | | | | | | | |
| 10/22/2020 | XX | GW107A44A | 0.02 U | 99.8 | | 0.212 | 129 | 22.6 | 59.2 | 51.2 | | | | | | | |
| 6/22/2021 | XX | GW107A465 | 0.008 U | 93.2 | | 0.537 | 95.5 | 14.1 | 31.3 | 39.5 | | | | | | | |
| 9/21/2021 | XX | GW107A480 | 0.008 U | 101 | | 0.576 | 129 | 26 | 45.8 | 55.4 | | | | | | | |
| **113** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 113XX36643 | | | | 40.65 | | 7.1 | 6.53 | 11.77 | | | | | | | |
| 8/1/2000 | XX | 113XX36739 | | | | 66.14 | | 9.14 | 9.68 | 11.97 | | | | | | | |
| 11/8/2000 | XX | 113XX36838 | 0.107 | | | 54.75 | | 7.95 | 9.8 | 10.9 | | | | | | | |
| 5/8/2001 | XX | 113XX37019 | 0.072 | | | 54.55 | | 6.81 | 6.94 | 9.4 | | | | | | | |
| 7/24/2001 | XX | 113XX37096 | 0.096 | | | 76.6 | | 9.64 | 9.51 | 9.5 | | | | | | | |
| 10/16/2001 | XX | 113XX37180 | 0.104 | | | 59.1 | | 7.78 | 9.18 | 9.5 | | | | | | | |
| 5/15/2002 | XX | 113XX37391 | 0.094 | 116 | | 61.38 | 62.3 | 7.8 | 7.48 | 10.7 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (113) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 7/31/2002 | XX | 113XX37468 | 0.12 | 118.5 | 0.01 U | 81.42 | 75.3 | 9.24 | 9.29 | 10.9 | | | | | | | |
| 10/18/2002 | XX | 113XX37547 | 0.21 | 102.6 | 0.014 | 65.2 | 69.7 | 7.05 | 9.09 | 9.6 | | | | | | | |
| 6/18/2003 | XX | 113XX37790 | 0.093 | 120 | 0.003 U | 56 | 71 | 8.5 | 11 | 11 | | | | | | | |
| 8/6/2003 | XX | 113XX37839 | 0.005 U | 130 | 0.003 U | 60 | 78 | 9 | 10 | 12 | | | | | | | |
| 10/6/2003 | XX | 113XX37900 | 0.1 | 120 | 0.003 U | 62 | 76 | 8.1 | 9.9 | 12 | | | | | | | |
| 5/12/2004 | XX | 113XX38119 | 0.078 | 130 | 0.005 | 58 | 70 | 8.3 | 20 | 15 | | | | | | | |
| 8/19/2004 | XX | 113XX38218 | 0.079 | 120 | 0.003 U | 62 | 74 | 8.7 | 11 | 12 | | | | | | | |
| 10/18/2004 | XX | 113XX38278 | 0.1 | 110 | 0.003 U | 68 | 79 | 8.8 | 14 | 11 | | | | | | | |
| 5/24/2005 | XX | GW113X008 | 0.058 | 110 | 0.003 U | 54 | 63 | 8.1 | 8.4 | 9.5 | | | | | | | |
| 8/17/2005 | XX | GW113X020 | 0.1 | 77 | 0.003 U | 38 | 44 | 6.5 | 7.8 | 8.2 | | | | | | | |
| 10/13/2005 | XX | GW113X03C | 0.097 | 120 | 0.008 | 71 | 81 | 10 | 10 | 11 | | | | | | | |
| 5/15/2006 | XX | GW113X088 | 0.06 | 140 | 0.003 U | 68 | 79 | 9.4 | 9.9 | 13 | | | | | | | |
| 8/7/2006 | XX | GW113X06G | 0.086 | 120 | 0.005 B | 63 | 69 | 8.8 | 11 | 11 | | | | | | | |
| 10/11/2006 | XX | GW113X054 | 0.097 | 130 | 0.003 U | 79 B | 78 | 9.9 | 12 | 11 | | | | | | | |
| 5/22/2007 | XX | GW113X0A0 | 0.058 | 100 | | 58 | 58 | 7.8 | 10 | 12 | | | | | | | |
| 8/21/2007 | XX | GW113X0BD | 0.092 | 110 | | 70 | 64 | 9.1 | 10 | 9.3 | | | | | | | |
| 11/1/2007 | XX | GW113X0D5 | 0.095 | 98 | | 63 | 62 | 8.2 | 9 | 8.3 | | | | | | | |
| 11/1/2007 | XD | GWDP1X0EI | 0.097 | 100 | | 66 | 65 | 8.7 | 9.3 | 8.6 | | | | | | | |
| 5/28/2008 | XX | GW113X0FD | 0.08 | 110 | | 70 | 69 | 9.1 | 14 | 11 | | | | | | | |
| 8/26/2008 | XX | GW113X0HD | 0.069 | 110 | | 72 | 56 | 9.6 | 9.4 | 9.2 | | | | | | | |
| 10/28/2008 | XX | GW113X0J1 | 0.09 | 140 | | 78 | 86 | 11 | 11 | 9.8 | | | | | | | |
| 5/18/2009 | XX | GW113X111 | 0.049 | 140 | | 59 | 71 | 10 | 8.9 | 9.5 | | | | | | | |
| 5/18/2009 | XD | GWDP1X10A | 0.045 | 150 | | 76 | 62 | 11 | 8.5 | 9 | | | | | | | |
| 8/17/2009 | XX | GW113X131 | 0.064 | 110 | | 65 | 59 | 8.6 | 9.5 | 9.5 | | | | | | | |
| 10/29/2009 | XX | GW113X149 | 0.07 | 94 | | 54 | 52 | 7 | 7.9 | 8.2 | | | | | | | |
| 6/10/2010 | XX | GW113X16A | 0.066 | 130 | | 78 | 70 | 11 | 9.3 | 7.8 | | | | | | | |
| 8/19/2010 | XX | GW113X18B | 0.078 | 97 | | 68 | 58 | 8.9 | 8.8 | 6.7 | | | | | | | |
| 10/26/2010 | XX | GW113X19J | 0.082 | 78 | | 56 | 45 | 6.8 | 8.8 | 6.7 | | | | | | | |
| **202AR** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 202ARXX36643 | | | | 0.35 | | 19.46 | 8.32 | 28.77 | | | | | | | |
| 8/2/2000 | XX | 202ARXX36740 | | | | 1.047 | | 15.03 | 9.42 | 27.22 | | | | | | | |
| 10/24/2000 | XX | 202ARXX36823 | 0.015 | | | 1.615 | | 20.25 | 10.33 | 27.8 | | | | | | | |
| 5/9/2001 | XX | 202ARXX37020 | 0.011 | | | 0.882 | | 18.78 | 9.13 | 26.2 | | | | | | | |
| 7/24/2001 | XX | 202ARXX37096 | 0.014 | | | 1.528 | | 19.17 | 9.9 | 24.4 | | | | | | | |
| 10/16/2001 | XX | 202ARXX37180 | 0.015 | | | 1.834 | | 22.32 | 12.15 | 29 | | | | | | | |
| 5/16/2002 | XX | 202ARXX37392 | 0.01 U | 276.9 | | 0.94 | 89.8 | 19.77 | 10.296 | 30 | | | | | | | |
| 7/31/2002 | XX | 202ARXX37468 | 0.045 | 122.8 | 0.01 U | 0.898 | 39.5 | 16.83 | 8.8 | 24.7 | | | | | | | |
| 7/31/2002 | XD | 202ARXD37468 | | | 0.01 U | | | | | | | | | | | | |
| 10/16/2002 | XX | 202ARXX37545 | 0.01 U | 235.8 | 0.01 U | 1.404 | 86.1 | 16.5 | 9.98 | 21.9 | | | | | | | |
| 6/17/2003 | XX | 202ARXX37789 | 0.071 | 290 | 0.003 U | 0.76 | 94 | 20 | 11 | 34 | | | | | | | |
| 8/6/2003 | XX | 202ARXX37839 | 0.007 | 290 | 0.003 U | 0.95 | 100 | 22 | 12 | 32 | | | | | | | |
| 10/8/2003 | XX | 202ARXX37902 | 0.056 | 290 | 0.003 U | 0.99 | 95 | 20 | 12 | 30 | | | | | | | |
| 4/28/2004 | XX | 202ARXX38105 | 0.0095 | 320 | 0.003 U | 1 | 100 | 22 | 14 | 34 | | | | | | | |
| 8/11/2004 | XX | 202ARXX38210 | 0.0076 | 260 | 0.0031 | 1.2 | 95 | 20 | 13 | 27 | | | | | | | |
| 10/12/2004 | XX | 202ARXX38272 | 0.012 | 280 | 0.003 U | 1.3 | 100 | 19 | 11 | 27 | | | | | | | |
| 5/19/2005 | XX | GW202A009 | 0.008 | 230 | 0.003 U | 0.83 | 91 | 19 | 11 | 29 | | | | | | | |
| 8/4/2005 | XX | GW202A021 | 0.01 | 220 | 0.003 | 1 | 82 | 18 | 13 | 28 | | | | | | | |
| 10/25/2005 | XX | GW202A03D | 0.011 | 270 | 0.003 U | 1.2 | 92 | 19 | 13 | 29 | | | | | | | |
| 5/9/2006 | XX | GW202A089 | 0.01 | 500 | 0.003 U | 0.76 | 98 | 20 | 13 | 30 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(202AR)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/25/2006 | XX | GW202A06H | 0.009 | 360 | 0.003 B | 0.83 B | 97 | 20 | 13 | 30 | | | | | | | |
| 10/19/2006 | XX | GW202A055 | 0.012 | 260 | 0.003 U | 1.2 | 89 | 19 | 14 | 26 | | | | | | | |
| 5/10/2007 | XX | GW202A0A1 | 0.015 | 290 | | 0.91 | 93 | 19 | 13 | 31 | | | | | | | |
| 8/6/2007 | XX | GW202A0BE | 0.013 | 310 | | 1.3 | 96 | 21 | 17 | 32 | | | | | | | |
| 10/25/2007 | XX | GW202A0D6 | 0.012 | 340 | | 1.4 | 130 | 26 | 13 | 39 | | | | | | | |
| 5/29/2008 | XX | GW202A0FE | 0.009 | 260 | | 0.94 | 93 | 19 | 12 | 30 | | | | | | | |
| 8/12/2008 | XX | GW202A0HE | 0.007 | 240 | | 0.95 | 84 | 17 | 12 | 29 | | | | | | | |
| 8/12/2008 | XD | GWDP1X0H2 | 0.007 | 230 | | 0.98 | 79 | 17 | 11 | 28 | | | | | | | |
| 10/16/2008 | XX | GW202A0J2 | 0.008 | 210 | | 0.98 | 74 | 15 | 11 | 26 | | | | | | | |
| 5/4/2009 | XX | GW202A112 | 0.005 U | 300 | | 0.96 | 100 | 21 | 14 | 27 | | | | | | | |
| 8/5/2009 | XX | GW202A132 | 0.013 | 340 | | 1 | 120 | 23 | 12 | 26 | | | | | | | |
| 8/5/2009 | XD | GWDP1X12A | 0.012 | 340 | | 1 | 120 | 19 | 12 | 26 | | | | | | | |
| 10/20/2009 | XX | GW202A14A | 0.01 | 210 | | 1.3 | 77 | 18 | 12 | 25 | | | | | | | |
| 5/26/2010 | XX | GW202A16B | 0.01 | 270 | | 1.1 | 93 | 20 | 17 | 26 | | | | | | | |
| 8/2/2010 | XX | GW202A18C | 0.011 | 265 | | 1.2 | 84 | 18 | 17 | 25 | | | | | | | |
| 10/12/2010 | XX | GW202A1A0 | 0.0069 | 210 | | 1.5 | 81 | 16 | 13 | 23 | | | | | | | |
| 5/17/2011 | XX | GW202A1DJ | 0.005 U | 240 | | 1 | 79 | 16 | 15 | 22 | | | | | | | |
| 8/10/2011 | XX | GW202A1FA | 0.0052 | 220 | | 1.2 | 77 | 18 | 12 | 26 | | | | | | | |
| 8/10/2011 | XD | GWDP1X1G7 | 0.0024 | 220 | | 1.2 | 76 | 18 | 12 | 25 | | | | | | | |
| 11/3/2011 | XX | GW202A1H1 | 0.0085 | 200 | | 1.2 | 78 | 17 | 14 | 25 | | | | | | | |
| 5/16/2012 | XX | GW202A1IF | 0.005 U | 200 | | 1.1 | 78 | 16 | 14 | 26 | | | | | | | |
| 8/15/2012 | XX | GW202A208 | 0.0086 | 190 | | 1.2 | 72 | 16 | 12 | 24 | | | | | | | |
| 10/31/2012 | XX | GW202A222 | 0.012 | 200 | | 1.6 | 83 | 16 | 15 | 25 | | | | | | | |
| 5/20/2013 | XX | GW202A23G | 0.005 U | 200 | | 0.95 | 69 | 16 | 13 | 22 | | | | | | | |
| 7/23/2013 | XX | GW202A25A | 0.0065 | 200 | | 1 | 70 | 16 | 15 | 23 | | | | | | | |
| 10/2/2013 | XX | GW202A274 | 0.0085 | 200 | | 1.3 | 71 | 16 | 14 | 22 | | | | | | | |
| 6/3/2014 | XX | GW202A28I | 0.012 | 205 | | 1.39 | 74.2 | 14.6 | 12.3 | 22.8 | | | | | | | |
| 8/19/2014 | XX | GW202A2AC | 0.015 | 213 | | 1.54 | 68.3 | 15.1 | 12.1 | 21.2 | | | | | | | |
| 11/12/2014 | XX | GW202A2C6 | 0.018 | 212 | | 2.04 | 77.2 | 15.6 | 13.3 | 22.5 | | | | | | | |
| 6/2/2015 | XX | GW202A2E2 | 0.016 | 207 | | 1.38 | 71.9 | 15.8 | 12.3 | 22.7 | | | | | | | |
| 9/2/2015 | XX | GW202A2FH | 0.013 | 217 | | 1.83 | 78.3 | 15.8 | 13.2 | 22.8 | | | | | | | |
| 11/3/2015 | XX | GW202A2HB | 0.011 | 211 | | 1.7 | 75.9 | 16.2 | 13 | 22.9 | | | | | | | |
| 6/14/2016 | XX | GW202A311 | 0.016 | 205 | | 1.87 | 73.8 | 14.5 | 12.8 | 23.1 | | | | | | | |
| 9/22/2016 | XX | GW202A32F | 0.015 | 202 | | 1.84 | 71.6 | 14.9 | 12.4 | 22.5 | | | | | | | |
| 11/9/2016 | XX | GW202A349 | 0.015 | 216 | | 1.89 | 68 | 15.1 | 13.4 | 23 | | | | | | | |
| 6/13/2017 | XX | GW202A364 | 0.0125 | 206 | | 1.73 | 74.8 | 15.2 | 13.1 | 22.6 | | | | | | | |
| 8/30/2017 | XX | GW202A37I | 0.014 | 204 | | 1.52 | 71 | 15.3 | 12.8 | 21.9 | | | | | | | |
| 11/16/2017 | XX | GW202A39C | 0.014 | 209 | | 1.75 | 72.8 | 15.5 | 13.1 | 23 | | | | | | | |
| 6/20/2018 | XX | GW202A3B7 | 0.015 | 222 | | 1.48 | 71.6 | 15.7 | 13.8 | 23.7 | | | | | | | |
| 8/14/2018 | XX | GW202A3DG | 0.012 | 204 | | 1.6 | 71 | 14.8 | 12.8 | 21.5 | | | | | | | |
| 6/4/2019 | XX | GW202A3GA | 0.026 | 204 | | 1.66 | 71.6 | 15 | 12.6 | 21.5 | | | | | | | |
| 8/13/2019 | XX | GW202A3IJ | 0.016 | 198 | | 1.48 | 75 | 14.5 | 12.9 | 22.1 | | | | | | | |
| 10/24/2019 | XX | GW202A3JI | 0.014 | 190 | | 1.58 | 75 | 14.5 | 12.7 | 21.6 | | | | | | | |
| 6/16/2020 | XX | GW202A41D | 0.008 U | 203 | | 0.559 | 70.1 | 13.7 | 13 | 21.9 | | | | | | | |
| 8/5/2020 | XX | GW202A442 | 0.012 | 221 | | 1.35 | 78.4 | 15.4 | 13.8 | 23 | | | | | | | |
| 10/22/2020 | XX | GW202A451 | 0.013 | 220 | | 1.82 | 76.6 | 16.3 | 14 | 22.7 | | | | | | | |
| 6/23/2021 | XX | GW202A46G | 0.008 U | 219 | | 0.666 | 72.8 | 14.1 | 13.8 | 23 | | | | | | | |
| 9/23/2021 | XX | GW202A48B | 0.012 | 200 | | 2.01 | 71.3 | 14.7 | 12.8 | 20.7 | | | | | | | |

**202B & 202BR**

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(202B & 202BR)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/27/2000 | XX | 202BXX36643 | | | | 0.02 U | | 8.14 | 4.32 | 17.37 | | | | | | | |
| 8/2/2000 | XX | 202BXX36740 | | | | 0.552 | | 9.06 | 7.18 | 30.35 | | | | | | | |
| 10/24/2000 | XX | 202BXX36823 | 0.008 U | | | 1.861 | | 15.96 | 10.26 | 38.3 | | | | | | | |
| 5/9/2001 | XX | 202BXX37020 | 0.008 U | | | 0.266 | | 10.35 | 6.17 | 21.8 | | | | | | | |
| 7/25/2001 | XX | 202BXX37097 | 0.008 U | | | 1.099 | | 15.75 | 11.14 | 33.8 | | | | | | | |
| 10/16/2001 | XX | 202BXX37180 | 0.01 U | | | 0.201 | | 9.33 | 10.8 | 30.2 | | | | | | | |
| 5/16/2002 | XX | 202BXX37392 | 0.01 U | 140.6 | | 0.043 | 72.3 | 8.24 | 7.958 | 23.5 | | | | | | | |
| 7/31/2002 | XX | 202BXX37468 | 0.031 | 183.2 | 0.01 U | 0.142 | 102.5 | 10.96 | 10.15 | 30.2 | | | | | | | |
| 10/16/2002 | XX | 202BXX37545 | 0.01 U | 188.5 | 0.011 | 0.36 | 102.6 | 8.82 | 11.52 | 29.2 | | | | | | | |
| 6/17/2003 | XX | 202BXX37789 | 0.031 | 25 | 0.03 | 1.9 | 69 | 8 | 9.9 | 20 | | | | | | | |
| 8/6/2003 | XX | 202BXX37839 | 0.005 U | 190 | 0.003 U | 0.14 | 110 | 11 | 11 | 32 | | | | | | | |
| 10/8/2003 | XX | 202BXX37902 | 0.005 U | 180 | 0.004 | 0.051 | 100 | 11 | 13 | 32 | | | | | | | |
| 4/28/2004 | XX | 202BXX38105 | 0.005 U | 160 | 0.0058 | 0.1 | 81 | 10 | 9.9 | 25 | | | | | | | |
| 8/11/2004 | XX | 202BXX38210 | 0.017 | 200 | 0.0089 | 0.41 | 120 | 14 | 13 | 31 | | | | | | | |
| 10/12/2004 | XX | 202BXX38272 | 0.005 U | 230 | 0.003 U | 0.46 | 130 | 14 | 13 | 35 | | | | | | | |
| 5/19/2005 | XX | GW202B00A | 0.005 U | 110 | 0.005 | 1.1 | 62 | 7.5 | 9.1 | 18 | | | | | | | |
| 8/4/2005 | XX | GW202B022 | 0.005 U | 150 | 0.01 | 1.3 | 84 | 10 | 11 | 26 | | | | | | | |
| 10/25/2005 | XX | GW202B03E | 0.005 U | 120 | 0.006 | 0.49 | 68 | 7.6 | 13 E | 21 | | | | | | | |
| 5/9/2006 | XX | GW202B08A | 0.005 U | 120 | 0.003 U | 0.47 | 71 | 8.1 | 9.7 | 20 | | | | | | | |
| 7/25/2006 | XX | GW202B06I | 0.005 U | 140 | 0.005 B | 1 B | 82 | 9.6 | 12 E | 20 | | | | | | | |
| 10/19/2006 | XX | GW202B056 | 0.005 U | 170 | 0.008 | 2.4 | 98 | 9.7 | 13 | 26 | | | | | | | |
| 5/10/2007 | XX | GW202B0A2 | 0.005 U | 99 | | 0.67 | 60 | 7.8 | 8.8 | 17 | | | | | | | |
| 5/10/2007 | XD | GWDP1X0EA | 0.005 U | 97 | | 0.97 | 58 | 7.5 | 8.6 | 17 | | | | | | | |
| 8/6/2007 | XX | GW202B0BF | 0.007 | 160 | | 4.6 | 97 | 12 | 15 | 28 | | | | | | | |
| 10/25/2007 | XX | GW202B0D7 | 0.005 U | 130 | | 3.1 | 76 | 8.8 | 9.5 | 24 | | | | | | | |
| 5/29/2008 | XX | GW202B0FF | 0.005 U | 95 | | 3 | 53 | 7.8 | 7.7 | 15 | | | | | | | |
| 8/26/2008 | XX | GW202B0HF | 0.005 U | 87 | | 0.59 | 48 | 7.4 | 8.2 | 16 | | | | | | | |
| 10/16/2008 | XX | GW202B0J3 | 0.005 U | 100 | | 2.7 | 58 | 8.1 | 8 | 17 | | | | | | | |
| 5/4/2009 | XX | GW202B113 | 0.005 U | 120 | | 1.3 | 68 | 10 | 8.5 | 14 | | | | | | | |
| 8/5/2009 | XX | GW202B133 | 0.0057 | 130 | | 1.6 | 73 | 11 | 8 | 15 | | | | | | | |
| 10/20/2009 | XX | GW202B14B | 0.005 U | 100 | | 4.1 | 57 | 8 | 8.2 | 16 | | | | | | | |
| 5/26/2010 | XX | GW202B16C | 0.005 U | 100 | | 1.1 | 58 | 8.8 | 11 | 15 | | | | | | | |
| 8/2/2010 | XX | GW202B18D | 0.005 U | 33 | | 1.2 | 22 | 3.1 | 4 | 6 | | | | | | | |
| 10/12/2010 | XX | GW202B1A1 | 0.005 U | 99 | | 0.22 | 48 | 4.6 | 9.1 | 15 | | | | | | | |
| 5/17/2011 | XX | GW202B1E0 | 0.005 U | 51 | | 0.22 | 27 | 3.8 | 5.6 | 8.7 | | | | | | | |
| 8/10/2011 | XX | GW202B1FB | 0.0016 U | 120 | | 0.31 | 62 | 12 | 9.6 | 20 | | | | | | | |
| 11/3/2011 | XX | GW202B1H2 | 0.0016 U | 86 | | 0.62 | 51 | 7.3 | 10 | 16 | | | | | | | |
| 5/16/2012 | XX | GW202B1IG | 0.005 U | 74 | | 0.28 | 43 | 6.8 | 9.1 | 13 | | | | | | | |
| 8/15/2012 | XX | GW202B209 | 0.005 U | 120 | | 0.38 | 69 | 11 | 11 | 20 | | | | | | | |
| 10/31/2012 | XX | GW202B223 | 0.005 U | 83 | | 0.2 | 47 | 6.1 | 11 | 16 | | | | | | | |
| 5/20/2013 | XX | GW202B23H | 0.005 U | 76 | | 0.6 | 40 | 6.3 | 8.8 | 12 | | | | | | | |
| 7/23/2013 | XX | GW202B25B | 0.005 U | 87 | | 0.39 | 45 | 6.9 | 10 | 14 | | | | | | | |
| 10/2/2013 | XX | GW202B275 | 0.005 U | 87 | | 0.38 | 47 | 6.5 | 10 | 13 | | | | | | | |
| 6/3/2014 | XX | GW202B28J | 0.008 U | 78.3 | | 1.38 | 45.5 | 5.8 | 8.16 | 15.4 | | | | | | | |
| 8/19/2014 | XX | GW202B2AD | 0.008 U | 135 | | 3.07 | 74.4 | 10.2 | 13.2 | 19.4 | | | | | | | |
| 11/12/2014 | XX | GW202B2C7 | 0.008 U | 125 | | 0.642 | 75.6 | 8.26 | 13.2 | 20.2 | | | | | | | |
| 6/2/2015 | XX | GW202B2E3 | 0.008 U | 72.2 | | 10.6 | 40.6 | 5.52 | 8.54 | 19.1 | | | | | | | |
| 9/2/2015 | XX | GW202B2FI | 0.008 U | 144 | | 1.9 | 81 | 11 | 14.4 | 20.9 | | | | | | | |
| 11/3/2015 | XX | GW202B2HC | 0.008 U | 117 | | 1.1 | 65.3 | 8.72 | 12.5 | 20.7 | | | | | | | |
| 6/14/2016 | XX | GW202B312 | 0.008 U | 85.4 | | 1.32 | 46.4 | 6.8 | 9 | 12.9 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (202B & 202BR) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 9/22/2016 | XX | GW202B32G | I | I | | I | I | I | I | I | | | | | | | |
| 11/9/2016 | XX | GW202B34A | I | I | | I | I | I | I | I | | | | | | | |
| 6/13/2017 | XX | GW202B365 | 0.008 U | 101 | | 2.86 | 53 | 7.08 | 11 | 15.2 | | | | | | | |
| 8/30/2017 | XX | GW202B37J | I | I | | I | I | I | I | I | | | | | | | |
| 11/16/2017 | XX | GW202B39D | 0.008 U | 141 | | 3.11 | 78 | 8.42 | 15.2 | 26.4 | | | | | | | |
| 6/20/2018 | XX | GW202B3B8 | 0.008 U | 89.4 | | 6.26 | 42.4 | 5.77 | 10.9 | 20.8 | | | | | | | |
| 8/14/2018 | XX | GW202B3DH | 0.008 U | 143 | | 2.74 | 77.3 | 9.8 | 15.3 | 20.3 | | | | | | | |
| 11/27/2018 | XX | GW202B3EG | 0.008 U | 145 | | 1.49 | 75.7 | 7.09 | 15.8 | 21.9 | | | | | | | |
| 6/4/2019 | XX | GW202B3GB | 0.008 U | 70.8 | | 1.68 | 34.8 | 4.66 | 9.12 | 15.8 | | | | | | | |
| 8/13/2019 | XX | GW202B3J0 | 0.008 U | 111 | | 1.16 | 63.5 | 8.13 | 14.1 | 17.3 | | | | | | | |
| 10/24/2019 | XX | GW202B3JJ | 0.008 U | 86.2 | | 0.538 | 56.1 | 5.89 | 13.1 | 17 | | | | | | | |
| 6/16/2020 | XX | GW202B41E | ! | ! | | ! | ! | ! | ! | ! | | | | | | | |
| 8/5/2020 | XX | GW202B443 | ! | ! | | ! | ! | ! | ! | ! | | | | | | | |
| 10/22/2020 | XX | GW202B452 | ! | ! | | ! | ! | ! | ! | ! | | | | | | | |
| 6/23/2021 | XX | GW202B46H | ! | ! | | ! | ! | ! | ! | ! | | | | | | | |
| 9/23/2021 | XX | GW202B48C | 0.008 U | 186 | | 0.147 | 111 | 14.2 | 24.5 | 27.8 | | | | | | | |
| **205A** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 205AXX36643 | | | | 0.538 | | 1.11 | 1.44 | 14.13 | | | | | | | |
| 8/2/2000 | XX | 205AXX36740 | | | | 2.492 | | 0.84 | 1.83 | 20.3 | | | | | | | |
| 10/25/2000 | XX | 205AXX36824 | 0.008 U | | | 2.124 | | 0.93 | 1.66 | 16.7 | | | | | | | |
| 5/9/2001 | XX | 205AXX37020 | 0.008 U | | | 1.848 | | 1.07 | 1.62 | 18.5 | | | | | | | |
| 7/25/2001 | XX | 205AXX37097 | 0.008 U | | | 2.28 | | 1.29 | 1.76 | 17.2 | | | | | | | |
| 10/17/2001 | XX | 205AXX37181 | 0.01 U | | | 2.18 | | 0.94 | 1.98 | 19.7 | | | | | | | |
| 5/15/2002 | XX | 205AXX37391 | 0.01 U | 104.9 | | 3.326 | 28.9 | 1.35 | 2.079 | 23.4 | | | | | | | |
| 8/1/2002 | XX | 205AXX37469 | 0.016 | 80.5 | 0.01 U | 2.806 | 22.2 | 1.17 | 1.83 | 20.5 | | | | | | | |
| 10/16/2002 | XX | 205AXX37545 | 0.01 U | 76.5 | 0.01 U | 2.84 | 20.4 | 1.11 | 1.81 | 16.4 | | | | | | | |
| 6/19/2003 | XX | 205AXX37791 | 0.005 U | 140 | 0.003 U | 2.5 | 31 | 1.5 | 2.6 | 26 | | | | | | | |
| 8/20/2003 | XX | 205AXX37853 | 0.005 U | 98 | 0.012 | 2.2 | 23 | 1.2 | 2.8 | 22 | | | | | | | |
| 10/9/2003 | XX | 205AXX37903 | 0.005 U | 96 | 0.003 U | 2.2 | 22 | 1.2 | 2.4 | 20 | | | | | | | |
| 4/27/2004 | XX | 205AXX38104 | 0.005 U | 120 | 0.003 U | 2 | 25 | 1.1 | 3.9 | 27 | | | | | | | |
| 8/12/2004 | XX | 205AXX38211 | 0.005 U | 180 | 0.003 U | 2.5 | 38 | 1.7 | 4.5 | 42 | | | | | | | |
| 10/14/2004 | XX | 205AXX38274 | 0.005 U | 97 | 0.003 U | 1.4 | 21 | 0.9 | 2.3 | 18 | | | | | | | |
| 5/17/2005 | XX | GW205A00B | 0.005 U | 130 | 0.003 U | 1.7 | 30 | 0.89 | 2.9 | 25 | | | | | | | |
| 8/4/2005 | XX | GW205A023 | 0.005 U | 130 | 0.003 U | 1.4 | 29 | 1 | 2.6 | 28 | | | | | | | |
| 10/27/2005 | XX | GW205A03F | 0.005 U | 120 | 0.003 U | 1.4 | 26 | 0.93 | 2.9 | 28 | | | | | | | |
| 5/9/2006 | XX | GW205A08B | 0.005 U | 140 | 0.003 U | 1.8 | 32 | 0.97 | 3.4 | 30 | | | | | | | |
| 7/25/2006 | XX | GW205A06J | 0.005 U | 170 | 0.003 U | 1.7 B | 39 | 1 | 3.7 | 32 | | | | | | | |
| 10/23/2006 | XX | GW205A057 | 0.005 U | 100 | 0.003 U | 1.3 B | 20 | 0.8 | 2.1 | 26 | | | | | | | |
| 5/14/2007 | XX | GW205A0A3 | 0.009 | 130 | | 2.3 | 33 | 0.97 | 3.9 | 37 | | | | | | | |
| 8/16/2007 | XX | GW205A0BG | 0.005 U | 120 | | 1.5 | 27 | 0.96 | 3 | 24 | | | | | | | |
| 8/16/2007 | XD | GWDP1X0EE | 0.005 U | 110 | | 1.5 | 26 | 0.97 | 3 | 23 | | | | | | | |
| 10/25/2007 | XX | GW205A0D8 | 0.005 U | 120 | | 1.4 | 24 | 0.89 | 2.5 | 27 | | | | | | | |
| 5/29/2008 | XX | GW205A0FG | 0.005 U | 150 | | 1.7 | 33 | 1.1 | 2.6 | 33 | | | | | | | |
| 8/12/2008 | XX | GW205A0HG | 0.005 U | 130 | | 1.4 | 30 | 0.94 | 2.5 | 31 | | | | | | | |
| 10/16/2008 | XX | GW205A0J4 | 0.005 U | 120 | | 1.3 | 28 | 0.91 | 2 | 30 | | | | | | | |
| 10/16/2008 | XD | GWDP2X107 | 0.005 U | 120 | | 1.3 | 28 | 0.91 | 2 | 31 | | | | | | | |
| 5/4/2009 | XX | GW205A114 | 0.005 U | 160 | | 1.8 | 29 | 0.93 | 3.8 | 29 | | | | | | | |
| 8/5/2009 | XX | GW205A134 | 0.005 U | 180 | | 1.2 | 27 | 0.97 | 2.4 | 30 | | | | | | | |
| 10/20/2009 | XX | GW205A14C | 0.005 U | 100 | | 1.1 | 24 | 0.84 | 3.5 | 25 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (205A) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 5/26/2010 | XX | GW205A16D | 0.005 U | 150 | | 1.2 | 25 | 0.82 | 3.5 | 28 | | | | | | | |
| 5/26/2010 | XD | GWDP2X160 | 0.005 U | 120 | | 1.2 | 24 | 0.81 | 3.3 | 28 | | | | | | | |
| 8/3/2010 | XX | GW205A18E | 0.005 U | 100 | | 0.82 | 24 | 0.8 | 3.5 | 28 | | | | | | | |
| 10/13/2010 | XX | GW205A1A2 | 0.005 U | 69 | | 0.44 | 16 | 0.59 | 1.8 | 21 | | | | | | | |
| 5/17/2011 | XX | GW205A1E1 | 0.005 U | 110 | | 0.4 | 25 | 1 | 3.6 | 23 | | | | | | | |
| 8/9/2011 | XX | GW205A1FC | 0.0016 U | 73 | | 0.86 | 17 | 0.75 | 2.3 | 20 | | | | | | | |
| 11/3/2011 | XX | GW205A1H3 | 0.0016 U | 85 | | 0.79 | 22 | 0.79 | 3.4 | 25 | | | | | | | |
| 5/16/2012 | XX | GW205A1IH | 0.005 U | 73 | | 0.23 | 16 | 0.99 | 3.2 | 23 | | | | | | | |
| 8/16/2012 | XX | GW205A20A | 0.0079 | 80 | | 1.1 | 18 | 1.2 | 3.5 | 25 | | | | | | | |
| 10/30/2012 | XX | GW205A224 | 0.0057 | 78 | | 0.88 | 17 | 0.9 | 3.6 | 22 | | | | | | | |
| 5/20/2013 | XX | GW205A23I | 0.005 U | 64 | | 0.18 | 13 | 0.75 | 2.9 | 20 | | | | | | | |
| 7/23/2013 | XX | GW205A25C | 0.005 U | 72 | | 0.68 | 15 | 1.2 | 3.4 | 21 | | | | | | | |
| 10/2/2013 | XX | GW205A276 | 0.0094 | 57 | | 1.7 | 12 | 1 | 2.5 | 19 | | | | | | | |
| 6/3/2014 | XX | GW205A290 | 0.008 U | 55.8 | | 0.388 | 12 | 1.09 | 1.62 | 19.5 | | | | | | | |
| 8/19/2014 | XX | GW205A2AE | 0.012 | 70.8 | | 0.821 | 13.9 | 1.09 | 1.8 | 22.1 | | | | | | | |
| 11/12/2014 | XX | GW205A2C8 | 0.008 | 63.8 | | 0.706 | 13.8 | 0.976 | 1.8 | 20.8 | | | | | | | |
| 6/2/2015 | XX | GW205A2E4 | 0.008 U | 61.9 | | 0.385 | 13.8 | 0.734 | 1.71 | 20.7 | | | | | | | |
| 9/2/2015 | XX | GW205A2FJ | 0.008 U | 64.2 | | 0.366 | 13.5 | 1.16 | 1.74 | 21.9 | | | | | | | |
| 11/3/2015 | XX | GW205A2HD | 0.008 U | 64.4 | | 0.418 | 13.8 | 0.738 | 1.86 | 21.7 | | | | | | | |
| 6/14/2016 | XX | GW205A313 | 0.008 U | 68.6 | | 0.168 | 15.1 | 0.807 | 2 | 24.6 | | | | | | | |
| 9/21/2016 | XX | GW205A32H | 0.008 U | 60.3 | | 0.449 | 13.5 | 1.1 | 2 | 22.4 | | | | | | | |
| 11/9/2016 | XX | GW205A34B | 0.008 | 66.2 | | 0.715 | 13.2 | 0.97 | 2.1 | 23.6 | | | | | | | |
| 6/13/2017 | XX | GW205A366 | 0.008 U | 65.6 | | 0.162 | 13.7 | 0.302 | 1.81 | 21.2 | | | | | | | |
| 8/30/2017 | XX | GW205A380 | 0.008 U | 68 | | 0.175 | 14.3 | 1.28 | 1.9 | 22.4 | | | | | | | |
| 11/16/2017 | XX | GW205A39E | 0.008 U | 63.6 | | 0.378 | 13.2 | 0.816 | 1.9 | 21.9 | | | | | | | |
| 6/19/2018 | XX | GW205A3B9 | 0.008 U | 65.7 | | 0.1 U | 15.5 | 0.214 | 2.06 | 22.7 | | | | | | | |
| 8/14/2018 | XX | GW205A3DI | 0.008 U | 62.7 | | 0.119 | 13 | 0.631 | 1.82 | 22 | | | | | | | |
| 11/27/2018 | XX | GW205A3EH | 0.008 U | 60.6 | | 0.1 U | 11.7 | 0.258 | 1.88 | 20.4 | | | | | | | |
| 6/4/2019 | XX | GW205A3GC | 0.008 U | 64.7 | | 0.1 U | 13.6 | 0.16 | 1.82 | 21.5 | | | | | | | |
| 8/13/2019 | XX | GW205A3J1 | 0.008 U | 62.3 | | 0.112 | 14.4 | 0.913 | 1.84 | 22.1 | | | | | | | |
| 10/23/2019 | XX | GW205A400 | 0.008 U | 63.3 | | 0.138 | 13.1 | 0.911 | 1.98 | 22.1 | | | | | | | |
| 6/16/2020 | XX | GW205A41F | 0.008 U | 65.3 | | 0.108 | 13.6 | 0.247 | 1.9 | 23 | | | | | | | |
| 8/5/2020 | XX | GW205A444 | 0.008 U | 66.5 | | 0.168 | 14.3 | 0.802 | 1.9 | 22.3 | | | | | | | |
| 10/20/2020 | XX | GW205A453 | 0.008 U | 64.5 | | 0.387 | 13.2 | 0.989 | 1.93 | 21.5 | | | | | | | |
| 6/23/2021 | XX | GW205A46I | 0.008 U | 65.1 | | 0.202 | 13.4 | 0.197 | 1.9 | 21.9 | | | | | | | |
| 9/22/2021 | XX | GW205A48D | 0.008 U | 55.7 | | 0.217 | 12.2 | 0.785 | 1.85 | 20.3 | | | | | | | |
| **205B** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 205BXX36643 | | | | 0.02 U | | 0.756 | 0.97 | 11.06 | | | | | | | |
| 8/2/2000 | XX | 205BXX36740 | | | | 0.231 | | 1.39 | 1.03 | 9.11 | | | | | | | |
| 10/25/2000 | XX | 205BXX36824 | 0.008 U | | | 0.377 | | 2.36 | 0.96 | 9.4 | | | | | | | |
| 5/9/2001 | XX | 205BXX37020 | 0.008 U | | | 0.623 | | 0.68 | 1.49 | 20 | | | | | | | |
| 7/25/2001 | XX | 205BXX37097 | 0.008 U | | | 0.35 | | 2.75 | 1.15 | 9.6 | | | | | | | |
| 10/17/2001 | XX | 205BXX37181 | 0.01 U | | | 0.363 | | 5.66 | 1.45 | 11.6 | | | | | | | |
| 5/15/2002 | XX | 205BXX37391 | 0.01 U | 111.8 | | 0.607 | 36.7 | 0.89 | 2.047 | 21.4 | | | | | | | |
| 8/1/2002 | XX | 205BXX37469 | 0.021 | 88.2 | 0.01 U | 0.553 | 44.6 | 6.3 | 1.56 | 10.7 | | | | | | | |
| 10/16/2002 | XX | 205BXX37545 | 0.01 U | 116.1 | 0.011 | 0.63 | 60.9 | 9.33 | 1.78 | 10.5 | | | | | | | |
| 10/16/2002 | XD | 205BXX37468 | | | 0.01 U | | | | | | | | | | | | |
| 6/19/2003 | XX | 205BXX37791 | 0.005 U | 110 | 0.003 U | 0.41 | 40 | 3 | 1.9 | 12 | | | | | | | |
| 8/19/2003 | XX | 205BXX37852 | 0.005 U | 76 | 0.011 | 0.47 | 35 | 5.3 | 1.8 | 9.5 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(205B)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L |
|---|---|---|---|---|---|---|---|---|---|---|
| 10/9/2003 | XX | 205BXX37903 | 0.005 U | 79 | 0.003 U | 0.36 | 34 | 5.3 | 1.7 | 10 |
| 4/27/2004 | XX | 205BXX38104 | 0.005 U | 67 | 0.0032 | 0.26 | 22 | 1.9 | 1.8 | 11 |
| 8/12/2004 | XX | 205BXX38211 | 0.005 U | 50 | 0.003 U | 0.2 | 22 | 3.1 | 1.2 | 7.4 |
| 10/14/2004 | XX | 205BXX38274 | 0.005 U | 54 | 0.0058 | 0.3 | 24 | 3.3 | 1.3 | 7.3 |
| 5/17/2005 | XX | GW205B00C | 0.005 U | 110 | 0.003 U | 0.22 | 30 | 0.65 | 1.8 | 16 |
| 8/4/2005 | XX | GW205B024 | 0.005 U | 46 | 0.003 | 0.16 | 13 | 1.1 | 1.4 | 7.1 |
| 10/27/2005 | XX | GW205B03G | 0.005 U | 140 | 0.003 U | 0.47 | 36 | 0.82 | 2.4 | 27 |
| 5/9/2006 | XX | GW205B08C | 0.005 U | 97 | 0.003 U | 0.11 | 22 | 0.41 | 1.8 | 15 |
| 7/25/2006 | XX | GW205B070 | 0.005 U | 49 | 0.003 U | 0.08 B | 11 | 0.13 | 1.2 | 7.4 |
| 10/19/2006 | XX | GW205B058 | 0.005 U | 26 | 0.003 U | 0.11 | 9.8 | 1 | 1 U | 4.8 |
| 5/14/2007 | XX | GW205B0A4 | 0.009 | 86 | | 0.091 | 22 | 0.21 | 2.1 | 17 |
| 8/16/2007 | XX | GW205B0BH | 0.005 U | 68 | | 0.14 | 18 | 0.58 | 1.8 | 12 |
| 10/25/2007 | XX | GW205B0D9 | 0.005 U | 57 | | 0.1 | 15 | 0.61 | 1.3 | 9.2 |
| 5/27/2008 | XX | GW205B0FH | 0.005 U | 66 | | 0.2 | 16 | 0.31 | 1.4 | 12 |
| 5/27/2008 | XD | GWDP2X0F3 | 0.005 U | 63 | | 0.18 | 16 | 0.2 | 1.4 | 12 |
| 8/12/2008 | XX | GW205B0HH | 0.005 U | 79 | | 0.2 | 20 | 0.15 | 1.8 | 16 |
| 10/16/2008 | XX | GW205B0J5 | 0.005 U | 46 | | 0.09 | 12 | 0.2 | 1 | 8 |
| 5/4/2009 | XX | GW205B115 | 0.005 U | 96 | | 0.16 | 17 | 0.24 | 1.9 | 12 |
| 8/5/2009 | XX | GW205B135 | 0.005 U | 120 | | 0.15 | 17 | 0.14 | 1.7 | 14 |
| 10/20/2009 | XX | GW205B14D | 0.005 U | 35 | | 0.062 | 8.8 | 0.19 | 1.2 | 6.1 |
| 10/20/2009 | XD | GWDP1X15E | 0.005 U | 36 | | 0.071 | 9.1 | 0.19 | 1.3 | 6.3 |
| 5/26/2010 | XX | GW205B16E | 0.005 U | 63 | | 0.043 | 11 | 0.065 | 1.6 | 7.5 |
| 8/3/2010 | XX | GW205B18F | 0.005 U | 53 | | 0.034 | 11 | 0.19 | 1.6 | 7.4 |
| 8/3/2010 | XD | GWDP1X180 | 0.005 U | 47 | | 0.028 | 10 | 0.16 | 1.6 | 7.3 |
| 10/13/2010 | XX | GW205B1A3 | 0.005 U | 33 | | 0.096 | 9.6 | 0.66 | 1.1 | 5.9 |
| 5/17/2011 | XX | GW205B1E2 | 0.005 U | 54 | | 0.16 | 13 | 0.11 | 1.8 | 9.6 |
| 8/9/2011 | XX | GW205B1FD | 0.0016 U | 27 | | 0.11 | 7.3 | 0.23 | 1.2 | 4.4 |
| 11/3/2011 | XX | GW205B1H4 | 0.0016 U | 31 | | 0.02 | 7.8 | 0.15 | 1.1 | 5.6 |
| 5/16/2012 | XX | GW205B1II | 0.005 U | 33 | | 0.01 U | 8.4 | 0.069 | 1.2 | 5.9 |
| 8/16/2012 | XX | GW205B20B | 0.005 U | 29 | | 0.01 U | 7.4 | 0.15 | 1.3 | 4.7 |
| 10/30/2012 | XX | GW205B225 | 0.005 U | 54 | | 0.032 | 13 | 0.31 | 2.2 | 9.4 |
| 5/20/2013 | XX | GW205B23J | 0.005 U | 30 | | 0.063 | 6.8 | 0.3 | 1 | 4.2 |
| 7/23/2013 | XX | GW205B25D | 0.005 U | 35 | | 0.027 | 7.7 | 0.13 | 1.4 | 5.3 |
| 10/2/2013 | XX | GW205B277 | 0.005 U | 31 | | 0.024 | 7.8 | 0.35 | 1.2 | 4.8 |
| 6/3/2014 | XX | GW205B291 | 0.008 U | 55.6 | | 0.1 U | 13.4 | 0.451 | 1.19 | 8.2 |
| 8/19/2014 | XX | GW205B2AF | 0.008 U | 37.9 | | 0.27 | 8.2 | 1.07 | 1 U | 4.49 |
| 11/12/2014 | XX | GW205B2C9 | 0.008 U | 44.2 | | 0.1 U | 11.5 | 0.305 | 1.19 | 6.55 |
| 6/2/2015 | XX | GW205B2E5 | 0.008 U | 34.1 | | 0.1 U | 8.45 | 0.228 | 1 U | 5.01 |
| 9/2/2015 | XX | GW205B2G0 | 0.008 U | 29.4 | | 0.1 U | 8.39 | 0.534 | 1 U | 4.21 |
| 11/3/2015 | XX | GW205B2HE | 0.008 U | 43.6 | | 0.1 U | 10.8 | 0.201 | 1.19 | 6.48 |
| 6/14/2016 | XX | GW205B314 | 0.008 U | 33.2 | | 0.1 U | 7.57 | 0.127 | 1 | 4.57 |
| 9/21/2016 | XX | GW205B32I | 0.008 U | 23.8 | | 0.164 | 6.86 | 0.737 | 1 | 4.47 |
| 11/9/2016 | XX | GW205B34C | 0.008 U | 25.8 | | 0.179 | 6.98 | 0.94 | 1 | 3.84 |
| 6/13/2017 | XX | GW205B367 | 0.008 U | 48.4 | | 0.1 U | 10.9 | 0.227 | 1.18 | 6.93 |
| 8/30/2017 | XX | GW205B381 | 0.008 U | 30.1 | | 0.1 U | 6.89 | 0.232 | 1 U | 4.09 |
| 11/16/2017 | XX | GW205B39F | 0.008 U | 48.2 | | 0.1 U | 11 | 0.145 | 1.3 | 6.46 |
| 6/19/2018 | XX | GW205B3BA | 0.008 U | 38.2 | | 0.1 U | 9.57 | 0.137 | 1.17 | 5.1 |
| 8/14/2018 | XX | GW205B3DJ | 0.008 U | 34 | | 0.1 U | 7.76 | 0.126 | 1 U | 4.1 |
| 11/27/2018 | XX | GW205B3EI | 0.008 U | 50 | | 0.1 U | 11 | 0.0761 | 1.28 | 6.17 |
| 6/4/2019 | XX | GW205B3GD | 0.008 U | 58.5 | | 0.1 U | 13.5 | 0.14 | 1.24 | 9.01 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (205B) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 8/13/2019 | XX | GW205B3J2 | 0.008 U | 27.3 | | 0.1 U | 6.88 | 0.0924 | 1 U | 3.64 | | | | | | | |
| 10/23/2019 | XX | GW205B401 | 0.008 U | 43 | | 0.1 U | 9.89 | 0.205 | 1.16 | 4.93 | | | | | | | |
| 6/16/2020 | XX | GW205B41G | 0.008 U | 39 | | 0.1 U | 8.72 | 0.118 | 1 U | 4.4 | | | | | | | |
| 8/5/2020 | XX | GW205B445 | 0.008 U | 34.2 | | 0.1 U | 8.02 | 0.26 | 1.02 | 3.96 | | | | | | | |
| 10/20/2020 | XX | GW205B454 | 0.008 U | 27.4 | | 0.142 | 7.04 | 0.479 | 1.09 | 3.73 | | | | | | | |
| 6/23/2021 | XX | GW205B46J | 0.008 U | 37.1 | | 0.174 | 7.89 | 0.443 | 1.04 | 4.14 | | | | | | | |
| 9/22/2021 | XX | GW205B48E | 0.008 U | 37.4 | | 0.1 U | 9.91 | 0.21 | 1.15 | 4.21 | | | | | | | |
| **206A** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 206AXX36643 | | | | 8.51 | | 3.92 | 49.8 | 23.2 | | | | | | | |
| 8/2/2000 | XX | 206AXX36740 | | | | 29.14 | | 7.66 | 103.5 | 52.47 | | | | | | | |
| 10/25/2000 | XX | 206AXX36824 | 0.236 | | | 28.38 | | 6.92 | 116 | 58.7 | | | | | | | |
| 5/8/2001 | XX | 206AXX37019 | 0.176 | | | 21.58 | | 5.1 | 83.8 | 39.7 | | | | | | | |
| 7/25/2001 | XX | 206AXX37097 | 0.237 | | | 37.5 | | 7.95 | 119.3 | 56.9 | | | | | | | |
| 10/17/2001 | XX | 206AXX37181 | 0.267 | | | 35.92 | | 5.64 | 110.6 | 58.2 | | | | | | | |
| 5/16/2002 | XX | 206AXX37392 | 0.051 | 88.6 | | 15.64 | 144.8 | 7.88 | 70.1 | 34.4 | | | | | | | |
| 8/1/2002 | XX | 206AXX37469 | 0.19 | 107.6 | 0.01 U | 31.32 | 215.8 | 6.98 | 90.2 | 48.8 | | | | | | | |
| 10/17/2002 | XX | 206AXX37546 | 0.45 | 121.6 | 0.01 U | 40.36 | 275.2 | 6.22 | 115.2 | 57.6 | | | | | | | |
| 6/19/2003 | XX | 206AXX37791 | 0.24 | 88 | 0.003 U | 25 | 190 | 6 | 81 | 44 | | | | | | | |
| 8/18/2003 | XX | 206AXX37851 | 0.22 | 92 | 0.012 | 27 | 190 | 6.5 | 79 | 45 | | | | | | | |
| 10/13/2003 | XX | 206AXX37907 | 0.21 | 89 | 0.003 U | 24 | 180 | 5.2 | 84 | 44 | | | | | | | |
| 4/29/2004 | XX | 206AXX38106 | 0.2 | 89 | 0.003 U | 27 | 220 | 6.7 | 91 | 41 | | | | | | | |
| 8/16/2004 | XX | 206AXX38215 | 0.18 | 120 | 0.0037 | 42 | 250 | 7.9 | 110 | 53 | | | | | | | |
| 10/12/2004 | XX | 206AXX38272 | 0.25 | 120 | 0.003 U | 37 | 250 | 6.7 | 96 | 49 | | | | | | | |
| 5/17/2005 | XX | GW206A00D | 0.17 | 88 | 0.003 U | 31 | 190 | 6 | 84 | 36 | | | | | | | |
| 8/15/2005 | XX | GW206A025 | 0.25 | 120 | 0.003 U | 37 | 230 | 7.9 | 110 | 51 | | | | | | | |
| 10/24/2005 | XX | GW206A03H | 0.26 | 110 | 0.003 U | 33 | 210 | 6.6 | 86 | 48 | | | | | | | |
| 5/11/2006 | XX | GW206A08D | 0.21 | 130 | 0.003 U | 32 | 290 | 8.4 | 110 | 51 | | | | | | | |
| 7/26/2006 | XX | GW206A071 | 0.2 | 100 | 0.003 U | 35 B | 120 | 9 | 100 | 39 | | | | | | | |
| 10/23/2006 | XX | GW206A059 | 0.24 | 92 | 0.003 U | 34 B | 190 | 6 | 90 | 38 | | | | | | | |
| 5/14/2007 | XX | GW206A0A5 | 0.2 | 94 | | 33 | 180 | 6.6 | 170 | 41 | | | | | | | |
| 5/14/2007 | XD | GWDP2X0EB | 0.19 | 92 | | 31 | 170 | 6.3 | 100 | 39 | | | | | | | |
| 8/16/2007 | XX | GW206A0BI | 0.25 | 47 | | 16 | 86 | 2.9 | 35 | 16 | | | | | | | |
| 10/29/2007 | XX | GW206A0DA | 0.26 | 140 | | 48 | 270 | 8.2 | 120 | 49 | | | | | | | |
| 5/27/2008 | XX | GW206A0FI | 0.19 | 110 | | 33 | 180 | 8.3 | 100 | 39 | | | | | | | |
| 5/27/2008 | XD | GWDP1X0F2 | 0.18 | 91 | | 30 | 170 | 7.5 | 88 | 34 | | | | | | | |
| 8/13/2008 | XX | GW206A0HI | 0.17 | 85 | | 29 | 140 | 5.6 | 76 | 30 | | | | | | | |
| 10/20/2008 | XX | GW206A0J6 | 0.23 | 100 | | 38 | 170 | 8.4 | 93 | 36 | | | | | | | |
| 5/5/2009 | XX | GW206A116 | 0.17 | 99 | | 33 | 160 | 6.3 | 92 | 30 | | | | | | | |
| 8/6/2009 | XX | GW206A136 | 0.16 | 110 | | 48 | 230 | 7.5 | 110 | 26 | | | | | | | |
| 8/6/2009 | XD | GWDP2X12B | 0.15 | 140 | | 38 | 230 | 8.9 | 130 | 24 | | | | | | | |
| 10/21/2009 | XX | GW206A14E | 0.23 | 99 | | 36 | 160 | 5.8 | 91 | 34 | | | | | | | |
| 5/27/2010 | XX | GW206A16F | 0.12 | 85 | | 29 | 120 | 7.2 | 82 | 26 | | | | | | | |
| 8/3/2010 | XX | GW206A18G | 0.28 | 110 | | 39 | 180 | 6.2 | 82 | 34 | | | | | | | |
| 10/13/2010 | XX | GW206A1A4 | 0.18 | 65 | | 26 | 110 | 3.9 | 66 | 24 | | | | | | | |
| 10/13/2010 | XD | GWDP1X1B4 | 0.2 | 71 | | 28 | 120 | 4.2 | 71 | 23 | | | | | | | |
| 5/17/2011 | XX | GW206A1E3 | 0.12 | 70 | | 21 | 110 | 4.1 | 58 | 20 | | | | | | | |
| 8/9/2011 | XX | GW206A1FE | 0.25 | 110 | | 45 | 180 | 6.2 | 98 | 37 | | | | | | | |
| 11/3/2011 | XX | GW206A1H5 | 0.24 | 85 | | 31 | 140 | 4 | 89 | 30 | | | | | | | |
| 5/16/2012 | XX | GW206A1IJ | 0.18 | 72 | | 28 | 120 | 4.2 | 72 | 24 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (206A) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 8/15/2012 | XX | GW206A20C | 0.25 | 98 | | 37 | 170 | 5.5 | 81 | 34 | | | | | | | |
| 10/30/2012 | XX | GW206A226 | 0.21 | 93 | | 27 | 140 | 4 | 86 | 30 | | | | | | | |
| 5/20/2013 | XX | GW206A240 | 0.19 | 82 | | 32 | 130 | 3.9 | 70 | 25 | | | | | | | |
| 7/23/2013 | XX | GW206A25E | 0.19 | 73 | | 27 | 100 | 3.5 | 68 | 24 | | | | | | | |
| 10/2/2013 | XX | GW206A278 | 0.27 | 97 | | 38 | 150 | 4.1 | 77 | 28 | | | | | | | |
| 6/3/2014 | XX | GW206A292 | 0.062 | 54.9 | | 15.8 | 79.7 | 2.04 | 66.5 | 19.3 | | | | | | | |
| 8/20/2014 | XX | GW206A2AG | 0.333 | 126 | | 44.4 | 177 | 4.69 | 97.7 | 35.6 | | | | | | | |
| 11/11/2014 | XX | GW206A2CA | 0.039 | 17.2 | | 2.84 | 15.6 | 0.52 | 14 | 4.28 | | | | | | | |
| 6/2/2015 | XX | GW206A2E6 | 0.224 | 82.6 | | 30 | 132 | 3.3 | 82.5 | 26.5 | | | | | | | |
| 9/2/2015 | XX | GW206A2G1 | 0.302 | 122 | | 44.1 | 190 | 4.08 | 108 | 38.3 | | | | | | | |
| 11/3/2015 | XX | GW206A2HF | 0.059 | 38.6 | | 7.09 | 51.1 | 1.6 | 47.6 | 13.8 | | | | | | | |
| 6/15/2016 | XX | GW206A315 | 0.231 | 93.4 | | 39.5 | 136 | 4.03 | 81.4 | 25.8 | | | | | | | |
| 9/21/2016 | XX | GW206A32J | 0.324 | 121 | | 47.6 | 193 | 4.72 | 103 | 37.5 | | | | | | | |
| 11/9/2016 | XX | GW206A34D | 0.323 | 146 | | 52.2 | 212 | 5.4 | 132 | 51.2 | | | | | | | |
| 6/13/2017 | XX | GW206A368 | 0.177 | 89.6 | | 29.9 | 135 | 3.69 | 81.9 | 26.5 | | | | | | | |
| 8/30/2017 | XX | GW206A382 | 0.308 | 124 | | 44.9 | 188 | 4.75 | 100 | 37.7 | | | | | | | |
| 11/15/2017 | XX | GW206A39G | 0.291 | 129 | | 41.8 | 218 | 3.97 | 115 | 42.8 | | | | | | | |
| 6/19/2018 | XX | GW206A3BB | 0.252 | 91.3 | | 35.8 | 154 | 4.08 | 82.5 | 26.9 | | | | | | | |
| 8/14/2018 | XX | GW206A3E0 | 0.251 | 120 | | 43 | 179 | 4.33 | 99.8 | 35.2 | | | | | | | |
| 11/27/2018 | XX | GW206A3EJ | 0.177 | 91.7 | | 26.1 | 133 | 2.67 | 92.6 | 30.8 | | | | | | | |
| 6/4/2019 | XX | GW206A3GE | 0.122 | 70.5 | | 19.6 | 106 | 2.62 | 66.2 | 20.1 | | | | | | | |
| 8/13/2019 | XX | GW206A3J3 | 0.309 | 111 | | 45.4 | 179 | 3.95 | 101 | 33.9 | | | | | | | |
| 10/23/2019 | XX | GW206A402 | 0.316 | 147 | | 49.2 | 232 | 4.19 | 129 | 44.3 | | | | | | | |
| 6/16/2020 | XX | GW206A41H | 0.286 | 92 | | 40.4 | 127 | 3.34 | 90.4 | 25.8 | | | | | | | |
| 8/5/2020 | XX | GW206A446 | 0.303 | 112 | | 43.7 | 159 | 3.89 | 105 | 32.4 | | | | | | | |
| 10/20/2020 | XX | GW206A455 | 0.273 | 146 | | 52.3 | 226 | 4.7 | 128 | 44.2 | | | | | | | |
| 6/23/2021 | XX | GW206A470 | 0.27 | 119 | | 42.8 | 161 | 3.85 | 104 | 33.6 | | | | | | | |
| 9/22/2021 | XX | GW206A48F | 0.307 | 135 | | 46.6 | 212 | 4.37 | 119 | 41.8 | | | | | | | |
| **206B** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 206BXX36643 | | | | 0.02 U | | 0.12 | 3.18 | 2.42 | | | | | | | |
| 8/2/2000 | XX | 206BXX36740 | | | | D | | D | D | D | | | | | | | |
| 10/25/2000 | XX | 206BXX36824 | | | | D | | D | D | D | | | | | | | |
| 5/8/2001 | XX | 206BXX37019 | 0.008 U | | | 0.171 | | 0.01 | 3.03 | 1.9 | | | | | | | |
| 7/25/2001 | XX | 206BXX37097 | D | | | D | | D | D | D | | | | | | | |
| 10/17/2001 | XX | 206BXX37181 | D | | | D | | D | D | D | | | | | | | |
| 5/16/2002 | XX | 206BXX37392 | 0.01 U | 6.1 | | 0.166 | 7.9 | 0.03 | 3.964 | 4.2 | | | | | | | |
| 7/29/2002 | XX | 206BXX37466 | D | D | | D | D | D | D | D | | | | | | | |
| 10/15/2002 | XX | 206BXX37544 | D | D | | D | D | D | D | D | | | | | | | |
| 6/17/2003 | XX | 206BXX37789 | 0.005 U | 16 | | 0.24 | 12 | 0.03 | 5.4 | 4.4 | | | | | | | |
| 8/18/2003 | XX | 206BXX37851 | 0.005 U | 13 | | 0.22 | 8.6 | 0.04 | 4 | 3.9 | | | | | | | |
| 10/13/2003 | XX | 206BXX37907 | 0.005 U | 9.2 | | 0.087 | 5.6 | 0.018 | 3.8 | 3.5 | | | | | | | |
| 4/29/2004 | XX | 206BXX38106 | 0.005 U | 17 | | 0.082 | 11 | 0.011 | 4.6 | 3.3 | | | | | | | |
| 8/16/2004 | XX | 206BXX38215 | D | D | | D | D | D | D | D | | | | | | | |
| 10/12/2004 | XX | 206BXX38272 | D | D | | D | D | D | D | D | | | | | | | |
| 5/17/2005 | XX | GW206B00E | 0.005 U | 13 | | 0.04 | 8.8 | 0.01 U | 3.9 | 2.9 | | | | | | | |
| 8/15/2005 | XX | GW206B026 | D | D | | D | D | D | D | D | | | | | | | |
| 10/24/2005 | XX | GW206B03I | 0.005 U | 8.4 | | 0.08 | 2.7 | 0.01 | 3.9 | 4 | | | | | | | |
| 5/11/2006 | XX | GW206B08E | 0.005 U | 14 | | 0.03 | 8.1 | 0.01 | 5 | 2.5 | | | | | | | |
| 7/26/2006 | XX | GW206B072 | 0.005 U | 16 | | 1.5 B | 9.4 | 0.06 | 6.1 | 2.6 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(206B)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/23/2006 | XX | GW206B05A | 0.005 U | 9.7 | | 0.07 | 3.1 | 0.01 | 4 | 2.4 | | | | | | | |
| 5/14/2007 | XX | GW206B0A6 | 0.005 U | 17 | | 0.34 | 9.7 | 0.022 | 6.4 | 3.1 | | | | | | | |
| 8/16/2007 | XX | GW206B0BJ | D | D | | D | D | D | D | D | | | | | | | |
| 10/29/2007 | XX | GW206B0DB | D | D | | D | D | D | D | D | | | | | | | |
| 5/27/2008 | XX | GW206B0FJ | D | D | | D | D | D | D | D | | | | | | | |
| 8/13/2008 | XX | GW206B0HJ | 0.005 U | 17 | | 0.06 | 8.7 | 0.02 | 7 | 2.8 | | | | | | | |
| 10/20/2008 | XX | GW206B0J7 | D | D | | D | D | D | D | D | | | | | | | |
| 5/5/2009 | XX | GW206B117 | 0.005 U | 17 | | 0.09 | 8.4 | 0.013 | 5.7 | 2.5 | | | | | | | |
| 8/6/2009 | XX | GW206B137 | 0.005 U | 15 | | 0.039 | 7 | 0.01 U | 5.8 | 2.2 | | | | | | | |
| 10/21/2009 | XX | GW206B14F | 0.005 U | 19 | | 0.29 | 9.1 | 0.062 | 7.5 | 2.8 | | | | | | | |
| 5/27/2010 | XX | GW206B16G | D | D | | D | D | D | D | D | | | | | | | |
| 8/3/2010 | XX | GW206B18H | D | D | | D | D | D | D | D | | | | | | | |
| 10/13/2010 | XX | GW206B1A5 | 0.005 U | 10 | | 0.54 | 2.6 | 0.065 | 4.7 | 1.1 | | | | | | | |
| 5/17/2011 | XX | GW206B1E4 | 0.005 U | 9 | | 0.02 | 1.4 | 0.01 U | 3.6 | 1.3 | | | | | | | |
| 8/9/2011 | XX | GW206B1FF | D | D | | D | D | D | D | D | | | | | | | |
| 11/4/2011 | XX | GW206B1H6 | 0.0016 U | 16 | | 0.032 | 6.6 | 0.013 | 6.1 | 2.1 | | | | | | | |
| 5/16/2012 | XX | GW206B1J0 | 0.005 U | 12 | | 0.014 | 3.1 | 0.01 U | 4 | 1.7 | | | | | | | |
| 8/15/2012 | XX | GW206B20D | I | I | | I | I | I | I | I | | | | | | | |
| 10/30/2012 | XX | GW206B227 | 0.005 U | 15 | | 0.064 | 4.3 | 0.036 | 5.2 | 1.8 | | | | | | | |
| 5/20/2013 | XX | GW206B241 | 0.005 U | 8.6 | | 0.18 | 3.3 | 0.03 | 3 | 1 U | | | | | | | |
| 7/24/2013 | XX | GW206B25F | 0.005 U | 15 | | 0.41 | 5.9 | 0.051 | 5.6 | 1.6 | | | | | | | |
| 10/2/2013 | XX | GW206B279 | 0.005 U | 14 | | 0.41 | 5.6 | 0.05 | 5.8 | 1.6 | | | | | | | |
| 6/3/2014 | XX | GW206B293 | 0.008 U | 18.3 | | 0.174 | 7.33 | 0.0144 | 5.85 | 1.97 | | | | | | | |
| 8/20/2014 | XX | GW206B2AH | D | D | | D | D | D | D | D | | | | | | | |
| 11/11/2014 | XX | GW206B2CB | 0.008 U | 7.48 | | 0.243 | 1.69 | 0.0178 | 3.5 | 2.45 | | | | | | | |
| 6/2/2015 | XX | GW206B2E7 | 0.008 U | 9.95 | | 0.439 | 2.64 | 0.036 | 3.32 | 1.05 | | | | | | | |
| 9/2/2015 | XX | GW206B2G2 | I | I | | I | I | I | I | I | | | | | | | |
| 11/3/2015 | XX | GW206B2HG | 0.008 U | 10 | | 0.1 U | 2 | 0.015 | 3.73 | 2.34 | | | | | | | |
| 6/15/2016 | XX | GW206B316 | 0.008 U | 14 | | 0.362 | 5.69 | 0.042 | 5.2 | 1.51 | | | | | | | |
| 9/21/2016 | XX | GW206B330 | D | D | | D | D | D | D | D | | | | | | | |
| 11/9/2016 | XX | GW206B34E | D | D | | D | D | D | D | D | | | | | | | |
| 6/13/2017 | XX | GW206B369 | 0.008 U | 13.4 | | 0.1 U | 4.51 | 0.009 | 4.73 | 1.55 | | | | | | | |
| 8/30/2017 | XX | GW206B383 | I | I | | I | I | I | I | I | | | | | | | |
| 11/15/2017 | XX | GW206B39H | 0.008 U | 18.5 | | 0.35 | 7.06 | 0.0368 | 6.5 | 2.1 | | | | | | | |
| 6/19/2018 | XX | GW206B3BC | 0.008 U | 16.3 | | 0.374 | 6.89 | 0.0924 | 5.51 | 1.9 | | | | | | | |
| 8/14/2018 | XX | GW206B3E1 | I | I | | I | I | I | I | I | | | | | | | |
| 11/27/2018 | XX | GW206B3F0 | 0.008 U | 10.5 | | 0.192 | 2.03 | 0.0161 | 3.56 | 1.42 | | | | | | | |
| 6/4/2019 | XX | GW206B3GF | 0.008 U | 14.4 | | 0.1 U | 4.12 | 0.0182 | 4.2 | 1.54 | | | | | | | |
| 8/13/2019 | XX | GW206B3J4 | 0.008 U | 15.3 | | 2.43 | 6.24 | 0.194 | 5.56 | 1.93 | | | | | | | |
| 10/23/2019 | XX | GW206B403 | D | D | | D | D | D | D | D | | | | | | | |
| 6/16/2020 | XX | GW206B41I | 0.008 U | 18.6 | | 1.61 | 6.84 | 0.102 | 5.75 | 2.66 | | | | | | | |
| 8/5/2020 | XX | GW206B447 | I | I | | I | I | I | I | I | | | | | | | |
| 10/22/2020 | XX | GW206B456 | D | D | | D | D | D | D | D | | | | | | | |
| 6/23/2021 | XX | GW206B471 | 0.008 U | 20 | | 1.18 | 7.18 | 0.135 | 6.22 | 2.21 | | | | | | | |
| 9/22/2021 | XX | GW206B48G | D | D | | D | D | D | D | D | | | | | | | |
| **301** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 301XX36649 | | | | 0.02 U | | 0.128 | 0.98 | 5.93 | | | | | | | |
| 8/9/2000 | XX | 301XX36747 | | | | 0.051 | | 0.38 | 1.29 | 6.94 | | | | | | | |
| 11/8/2000 | XX | 301XX36838 | 0.008 U | | | 0.049 | | 0.21 | 1.07 | 6.4 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(301)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L |
|---|---|---|---|---|---|---|---|---|---|---|
| 5/16/2001 | XX | 301XX37027 | 0.008 U | | | 0.02 U | | 0.77 | 1.19 | 8.2 |
| 7/31/2001 | XX | 301XX37103 | 0.008 U | | | 0.037 | | 0.77 | 1.18 | 8.5 |
| 10/23/2001 | XX | 301XX37187 | 0.008 U | | | 0.02 U | | 0.94 | 1.66 | 11 |
| 5/21/2002 | XX | 301XX37397 | 0.01 U | 41.9 | | 0.043 | 9 | 0.93 | 1.449 | 10.6 |
| 8/2/2002 | XX | 301XX37470 | 0.01 U | 44.1 | 0.01 U | 0.038 | 9.1 | 0.7 | 1.45 | 10.7 |
| 10/23/2002 | XX | 301XX37552 | 0.01 U | 67.7 | 0.01 U | 0.047 | 9 | 0.63 | 1.83 | 10.1 |
| 6/24/2003 | XX | 301XX37796 | 0.005 U | 110 | 0.003 U | 0.042 | 11 | 0.74 | 1.7 | 11 |
| 8/12/2003 | XX | 301XX37845 | 0.005 U | 110 | 0.009 | 0.03 | 11 | 0.4 | 1.9 | 12 |
| 10/16/2003 | XX | 301XX37910 | 0.005 U | 110 | 0.003 U | 0.089 | 11 | 0.43 | 1.9 | 12 |
| 5/5/2004 | XX | 301XX38112 | 0.005 U | 120 | 0.003 U | 0.029 | 13 | 0.21 | 2.2 | 15 |
| 8/9/2004 | XX | 301XX38208 | 0.005 U | 110 | 0.0043 | 0.041 | 12 | 0.034 | 1.9 | 14 |
| 10/20/2004 | XX | 301XX38280 | 0.005 U | 110 | 0.003 U | 0.048 | 13 | 0.64 | 2.3 | 18 |
| 5/11/2005 | XX | GW301X00F | 0.005 U | 120 | 0.003 | 0.1 | 14 | 0.47 | 1.7 | 16 |
| 7/27/2005 | XX | GW301X027 | 0.005 U | 140 | 0.003 U | 0.05 | 14 | 0.47 | 2.4 | 19 |
| 11/7/2005 | XX | GW301X03J | 0.005 U | 150 | 0.003 U | 0.03 | 14 | 0.32 | 2.8 | 18 |
| 5/1/2006 | XX | GW301X08F | 0.005 U | 150 | 0.006 B | 0.03 | 18 | 0.72 | 2.1 | 24 |
| 7/31/2006 | XX | GW301X073 | 0.005 U | 170 | 0.007 B | 0.05 B | 18 | 0.78 | 3.6 | 29 |
| 10/26/2006 | XX | GW301X05B | 0.005 U | 130 | 0.003 U | 0.05 B | 17 | 0.52 | 3.5 | 26 |
| 5/9/2007 | XX | GW301X0A7 | 0.005 U | 170 | | 0.09 | 18 | 0.67 | 2.5 | 26 |
| 8/9/2007 | XX | GW301X0C0 | 0.005 U | 190 | | 0.087 | 20 | 0.68 | 3.9 | 31 |
| 10/30/2007 | XX | GW301X0DC | 0.005 U | 220 | | 0.076 | 29 | 0.85 | 2.5 | 31 |
| 10/30/2007 | XD | GWDP3X0F0 | 0.005 U | 220 | | 0.066 | 29 | 0.84 | 2.5 | 30 |
| 6/3/2008 | XX | GW301X0G0 | 0.005 U | 220 | | 0.17 | 30 | 1.1 | 4.5 | 29 |
| 8/14/2008 | XX | GW301X0I0 | 0.005 U | 190 | | 0.1 | 22 | 0.82 | 2.3 | 25 |
| 8/14/2008 | XD | GWDP3X0H4 | 0.005 U | 210 | | 0.11 | 24 | 0.86 | 2.5 | 27 |
| 10/21/2008 | XX | GW301X0J8 | 0.005 U | 270 | | 0.2 | 27 | 1.1 | 4.4 | 27 |
| 5/11/2009 | XX | GW301X118 | 0.005 U | 260 | | 0.4 | 28 | 1.2 | 2.2 | 28 |
| 8/10/2009 | XX | GW301X138 | 0.005 U | 320 | | 0.2 | 26 | 0.85 | 2.4 | 27 |
| 10/22/2009 | XX | GW301X14G | 0.005 U | 230 | | 0.15 | 28 | 0.83 | 4.2 | 29 |
| 10/22/2009 | XD | GWDP3X15G | 0.005 U | 280 | | 0.15 | 27 | 0.83 | 4.1 | 28 |
| 6/1/2010 | XX | GW301X16H | 0.005 U | 240 | | 0.22 | 28 | 0.56 | 3.9 | 28 |
| 8/5/2010 | XX | GW301X18I | 0.005 U | 260 | | 0.11 | 28 | 0.55 | 4.2 | 28 |
| 10/18/2010 | XX | GW301X1A6 | 0.005 U | 200 | | 0.43 | 29 | 0.92 | 2.8 | 30 |
| 5/18/2011 | XX | GW301X1D9 | 0.005 U | 230 | | 0.13 | 34 | 0.56 | 4.1 | 28 |
| 8/9/2011 | XX | GW301X1F0 | 0.0016 U | 240 | | 0.093 | 32 | 0.55 | 4.1 | 30 |
| 11/2/2011 | XX | GW301X1GB | 0.0016 U | 210 | | 0.24 | 32 | 0.53 | 4.6 | 30 |
| 5/15/2012 | XX | GW301X1I5 | 0.005 U | 220 | | 0.26 | 32 | 0.48 | 4.4 | 27 |
| 8/14/2012 | XX | GW301X1JI | 0.005 U | 200 | | 0.14 | 29 | 0.4 | 4.4 | 30 |
| 10/30/2012 | XX | GW301X21C | 0.005 U | 260 | | 0.15 | 34 | 0.43 | 5.4 | 31 |
| 5/22/2013 | XX | GW301X236 | 0.005 U | 240 | | 0.24 | 34 | 0.49 | 4.5 | 27 |
| 7/25/2013 | XX | GW301X250 | 0.005 U | 260 | | 0.54 | 40 | 0.95 | 5.8 | 37 |
| 10/1/2013 | XX | GW301X26E | 0.005 U | 240 | | 0.83 | 35 | 0.47 | 4.6 | 31 |
| 6/4/2014 | XX | GW301X288 | 0.008 U | 290 | | 0.565 | 47.9 | 1.1 | 2.74 | 40 |
| 8/20/2014 | XX | GW301X2A2 | 0.008 U | 321 | | 0.423 | 49.9 | 0.91 | 3.14 | 45.1 |
| 11/11/2014 | XX | GW301X2BG | 0.008 U | 270 | | 0.179 | 43.3 | 0.496 | 2.98 | 38.7 |
| 6/3/2015 | XX | GW301X2DC | 0.008 U | 276 | | 0.209 | 45.7 | 0.572 | 2.55 | 37.5 |
| 9/1/2015 | XX | GW301X2F7 | 0.008 U | 318 | | 0.216 | 57.4 | 0.692 | 3.33 | 56.7 |
| 11/4/2015 | XX | GW301X2H1 | 0.008 U | 292 | | 0.137 | 49.2 | 0.521 | 3.1 | 44.4 |
| 6/15/2016 | XX | GW301X30B | 0.008 U | 290 | | 0.101 | 55.8 | 0.625 | 2.8 | 51.4 |
| 9/20/2016 | XX | GW301X325 | 0.008 U | 290 | | 0.136 | 59.8 | 0.58 | 3 | 60.7 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (301) Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/10/2016 | XX | GW301X33J | 0.008 U | 296 | | 0.302 | 64.6 | 0.761 | 3.1 | 62.9 | | | | | | | |
| 6/14/2017 | XX | GW301X35E | 0.008 U | 328 | | 0.161 | 64.4 | 0.48 | 3.2 | 60.8 | | | | | | | |
| 8/29/2017 | XX | GW301X378 | 0.008 U | 305 | | 0.1 U | 61.8 | 0.481 | 3.19 | 65.5 | | | | | | | |
| 11/14/2017 | XX | GW301X392 | 0.008 U | 286 | | 0.1 U | 57 | 0.306 | 3 | 58.6 | | | | | | | |
| 6/19/2018 | XX | GW301X3AH | 0.008 U | 268 | | 0.161 | 73.8 | 0.57 | 2.86 | 65.4 | | | | | | | |
| 8/14/2018 | XX | GW301X3D6 | 0.008 U | 297 | | 0.163 | 66.6 | 0.468 | 3.08 | 67.3 | | | | | | | |
| 11/28/2018 | XX | GW301X3E5 | 0.008 U | 313 | | 0.349 | 64.6 | 0.35 | 3.18 | 64.4 | | | | | | | |
| 6/5/2019 | XX | GW301X3G0 | 0.008 U | 288 | | 0.197 | 77.8 | 0.709 | 2.85 | 72.6 | | | | | | | |
| 8/13/2019 | XX | GW301X3I9 | 0.008 U | 269 | | 0.106 | 79.4 | 0.597 | 3.2 | 82.3 | | | | | | | |
| 10/23/2019 | XX | GW301X3J8 | 0.008 U | 282 | | 0.166 | 77 | 0.631 | 3.2 | 80.8 | | | | | | | |
| 6/16/2020 | XX | GW301X413 | 0.008 U | 277 | | 0.106 | 70.9 | 0.552 | 2.77 | 74.6 | | | | | | | |
| 8/4/2020 | XX | GW301X43C | 0.008 U | | | 0.1 U | 75.9 | 0.581 | 3.05 | 81.2 | | | | | | | |
| 8/4/2020 | XX | GW301X43CR | | 274 | | | | | | | | | | | | | |
| 10/21/2020 | XX | GW301X44B | 0.008 U | 301 | | 0.114 | 79.9 | 0.51 | 3.42 | 80.9 | | | | | | | |
| 6/22/2021 | XX | GW301X466 | 0.008 U | 259 | | 0.143 | 79.9 | 0.685 | 2.92 | 77.6 | | | | | | | |
| 9/22/2021 | XX | GW301X481 | 0.008 U | 255 | | 0.17 | 75 | 0.55 | 3.12 | 77.8 | | | | | | | |
| **302B** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 302BXX36649 | | | | 0.02 U | | 1.118 | 1.16 | 7.03 | | | | | | | |
| 8/9/2000 | XX | 302BXX36747 | | | | 0.069 | | 1.87 | 1.41 | 7.07 | | | | | | | |
| 11/8/2000 | XX | 302BXX36838 | 0.008 U | | | 0.202 | | 1.54 | 1.3 | 6.5 | | | | | | | |
| 5/16/2001 | XX | 302BXX37027 | 0.008 U | | | 0.021 | | 1.88 | 1.24 | 7.1 | | | | | | | |
| 7/31/2001 | XX | 302BXX37103 | 0.008 U | | | 0.039 | | 1.42 | 1.54 | 7.5 | | | | | | | |
| 10/23/2001 | XX | 302BXX37187 | 0.008 U | | | 0.149 | | 1.15 | 1.53 | 7.3 | | | | | | | |
| 5/21/2002 | XX | 302BXX37397 | 0.01 U | 92 | | 0.039 | 7.3 | 3.32 | 1.48 | 11.3 | | | | | | | |
| 8/7/2002 | XX | 302BXX37475 | 0.01 U | 100.8 | 0.01 U | 0.02 U | 8.9 | 2.68 | 1.45 | 9.7 | | | | | | | |
| 10/23/2002 | XX | 302BXX37552 | 0.012 | 82.2 | 0.01 U | 0.063 | 9.8 | 1.36 | 1.63 | 8.1 | | | | | | | |
| 6/23/2003 | XX | 302BXX37795 | 0.005 U | 160 | 0.003 U | 0.012 | 14 | 4.7 | 2.2 | 18 | | | | | | | |
| 8/12/2003 | XX | 302BXX37845 | 0.005 U | 130 | 0.02 | 0.034 | 11 | 3.7 | 1.8 | 13 | | | | | | | |
| 10/20/2003 | XX | 302BXX37914 | 0.005 U | 160 | 0.007 | 0.021 | 15 | 4.8 | 2.4 | 22 | | | | | | | |
| 5/4/2004 | XX | 302BXX38111 | 0.005 U | 180 | 0.0035 | 0.036 | 21 | 6.2 | 3.8 | 26 | | | | | | | |
| 8/5/2004 | XX | 302BXX38204 | 0.005 U | 160 | 0.0044 | 0.064 | 14 | 9.5 | 2.3 | 19 | | | | | | | |
| 10/20/2004 | XX | 302BXX38280 | 0.005 U | 170 | 0.003 U | 0.028 | 16 | 4.1 | 2.8 | 20 | | | | | | | |
| 5/11/2005 | XX | GW302B00G | 0.005 U | 170 | 0.004 | 0.02 | 17 | 8.1 | 2 | 25 | | | | | | | |
| 7/27/2005 | XX | GW302B028 | 0.005 U | 200 | 0.003 U | 0.01 | 17 | 6.3 | 2.7 | 26 | | | | | | | |
| 11/7/2005 | XX | GW302B040 | 0.005 U | 180 | 0.003 U | 0.13 | 17 | 7.8 | 3.4 | 26 | | | | | | | |
| 5/1/2006 | XX | GW302B08G | 0.005 U | 220 | 0.009 B | 0.02 | 21 | 9.7 | 2.2 | 34 | | | | | | | |
| 7/31/2006 | XX | GW302B074 | 0.005 U | 210 | 0.006 B | 0.03 B | 26 | 11 | 3.7 | 35 | | | | | | | |
| 10/25/2006 | XX | GW302B05C | 0.005 U | 220 | 0.003 U | 0.02 | 18 | 9 | 3.1 | 27 | | | | | | | |
| 5/9/2007 | XX | GW302B0A8 | 0.005 U | 180 | | 0.017 | 19 | 7.4 | 2.8 | 38 | | | | | | | |
| 8/9/2007 | XX | GW302B0C1 | 0.005 U | 190 | | 0.031 | 19 | 1.6 | 3.7 | 31 | | | | | | | |
| 10/30/2007 | XX | GW302B0DD | 0.005 U | 220 | | 0.03 | 19 | 11 | 2 | 29 | | | | | | | |
| 6/2/2008 | XX | GW302B0G1 | 0.005 U | 170 | | 0.019 | 25 | 13 | 3.7 | 31 | | | | | | | |
| 8/14/2008 | XX | GW302B0I1 | 0.005 U | 190 | | 0.02 | 23 | 14 | 2 | 34 | | | | | | | |
| 10/21/2008 | XX | GW302B0J9 | 0.005 U | 220 | | 0.03 | 22 | 16 | 3.2 | 27 | | | | | | | |
| 10/21/2008 | XD | GWDP3X108 | 0.005 U | 230 | | 0.02 | 22 | 16 | 3.3 | 28 | | | | | | | |
| 5/11/2009 | XX | GW302B119 | 0.005 U | 230 | | 0.21 | 36 | 24 | 1.8 | 39 | | | | | | | |
| 8/10/2009 | XX | GW302B139 | 0.005 U | 230 | | 0.019 | 23 | 16 | 1.7 | 31 | | | | | | | |
| 8/10/2009 | XD | GWDP3X12C | 0.005 U | 230 | | 0.012 | 25 | 17 | 3.2 | 35 | | | | | | | |
| 10/22/2009 | XX | GW302B14H | 0.005 U | 170 | | 0.014 | 23 | 9.2 | 3.3 | 29 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (302B) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 6/1/2010 | XX | GW302B16I | 0.005 U | 200 | | 0.011 | 26 | 15 | 3.2 | 31 | | | | | | | |
| 8/4/2010 | XX | GW302B18J | 0.005 U | 190 | | 0.013 | 23 | 13 | 3.1 | 30 | | | | | | | |
| 10/14/2010 | XX | GW302B1A7 | 0.005 U | 160 | | 0.033 | 21 | 13 | 2 | 31 | | | | | | | |
| 5/18/2011 | XX | GW302B1DA | 0.005 U | 150 | | 0.024 | 34 | 17 | 3.3 | 38 | | | | | | | |
| 8/8/2011 | XX | GW302B1F1 | 0.0016 U | 90 | | 0.01 | 18 | 14 | 1.6 | 20 | | | | | | | |
| 11/1/2011 | XX | GW302B1GC | 0.0016 U | 200 | | 0.022 | 36 | 20 | 4.3 | 43 | | | | | | | |
| 5/15/2012 | XX | GW302B1I6 | 0.005 U | 190 | | 0.01 | 39 | 21 | 4 | 40 | | | | | | | |
| 8/16/2012 | XX | GW302B1JJ | 0.005 U | 160 | | 0.01 U | 34 | 14 | 4.2 | 40 | | | | | | | |
| 10/30/2012 | XX | GW302B21D | 0.005 U | 220 | | 0.12 | 34 | 20 | 4.7 | 42 | | | | | | | |
| 5/21/2013 | XX | GW302B237 | 0.005 U | 120 | | 0.017 | 27 | 16 | 2.5 | 27 | | | | | | | |
| 7/25/2013 | XX | GW302B251 | 0.005 U | 200 | | 0.02 | 41 | 22 | 4.6 | 43 | | | | | | | |
| 10/1/2013 | XX | GW302B26F | 0.005 U | 200 | | 0.015 | 38 | 22 | 4 | 43 | | | | | | | |
| 6/3/2014 | XX | GW302B289 | 0.008 U | 193 | | 0.1 U | 41.9 | 22.3 | 2.01 | 43.1 | | | | | | | |
| 8/20/2014 | XX | GW302B2A3 | 0.008 U | 223 | | 0.1 U | 38.8 | 23.8 | 2.1 | 42.6 | | | | | | | |
| 11/11/2014 | XX | GW302B2BH | 0.008 U | 200 | | 0.1 U | 34.8 | 19.9 | 2.19 | 40.7 | | | | | | | |
| 6/3/2015 | XX | GW302B2DD | 0.008 U | 206 | | 0.1 U | 47.7 | 27.9 | 2.16 | 44 | | | | | | | |
| 9/1/2015 | XX | GW302B2F8 | 0.008 U | 230 | | 0.1 U | 47.4 | 28.7 | 2.5 | 51.3 | | | | | | | |
| 11/4/2015 | XX | GW302B2H2 | 0.02 U | 224 | | 0.2 U | 45.2 | 25.6 | 2.51 | 49.2 | | | | | | | |
| 6/15/2016 | XX | GW302B30C | 0.008 U | 220 | | 0.1 U | 52.3 | 30.6 | 2.7 | 50.7 | | | | | | | |
| 9/21/2016 | XX | GW302B326 | 0.008 U | 198 | | 0.1 U | 44.3 | 24.6 | 2.5 | 44.5 | | | | | | | |
| 11/8/2016 | XX | GW302B340 | 0.008 U | 213 | | 0.1 U | 42.1 | 19.7 | 2.6 | 43.5 | | | | | | | |
| 6/13/2017 | XX | GW302B35F | 0.008 U | 217 | | 0.146 | 53.6 | 33.8 | 2.88 | 54.6 | | | | | | | |
| 8/29/2017 | XX | GW302B379 | 0.008 U | 212 | | 0.1 U | 46.3 | 24.6 | 2.79 | 50 | | | | | | | |
| 11/14/2017 | XX | GW302B393 | 0.008 U | 219 | | 0.1 U | 46.5 | 28 | 2.9 | 52.6 | | | | | | | |
| 6/19/2018 | XX | GW302B3AI | 0.008 U | 203 | | 0.151 | 60.8 | 35.6 | 3.37 | 55.8 | | | | | | | |
| 8/14/2018 | XX | GW302B3D7 | 0.008 U | 209 | | 0.1 U | 51.5 | 30.6 | 3.41 | 51.1 | | | | | | | |
| 11/28/2018 | XX | GW302B3E6 | 0.008 U | 224 | | 0.1 U | 47.4 | 27.6 | 3.4 | 53.5 | | | | | | | |
| 6/5/2019 | XX | GW302B3G1 | 0.008 U | 230 | | 0.1 U | 63.6 | 35.5 | 4.22 | 61.1 | | | | | | | |
| 8/13/2019 | XX | GW302B3IA | 0.008 U | 234 | | 0.1 U | 67.7 | 39.8 | 5.06 | 65.2 | | | | | | | |
| 10/23/2019 | XX | GW302B3J9 | 0.008 U | 247 | | 0.1 U | 59.3 | 37.5 | 4.85 | 60.6 | | | | | | | |
| 6/17/2020 | XX | GW302B414 | 0.008 U | 231 | | 0.1 U | 56.1 | 37 | 4.2 | 62.4 | | | | | | | |
| 8/5/2020 | XX | GW302B43D | 0.04 U | 610 | | 0.5 U | 156 | 89.5 | 12.4 | 152 | | | | | | | |
| 10/21/2020 | XX | GW302B44C | 0.008 U | 137 | | 0.1 U | 31.5 | 18.4 | 2.64 | 32.4 | | | | | | | |
| 6/22/2021 | XX | GW302B467 | 0.008 U | 244 | | 0.1 U | 68.7 | 38.4 | 5.8 | 64.3 | | | | | | | |
| 9/22/2021 | XX | GW302B482 | 0.008 U | 254 | | 0.1 U | 66.6 | 38.4 | 7 | 69.7 | | | | | | | |
| **302C** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 302CXX36649 | | | | 0.02 U | | 0.171 | 1.19 | 6.98 | | | | | | | |
| 8/9/2000 | XX | 302CXX36747 | | | | 1.039 | | 0.62 | 1.6 | 9.74 | | | | | | | |
| 11/8/2000 | XX | 302CXX36838 | 0.008 U | | | 0.873 | | 0.51 | 1.32 | 7.7 | | | | | | | |
| 5/16/2001 | XX | 302CXX37027 | 0.008 U | | | 0.534 | | 0.45 | 1.42 | 9.9 | | | | | | | |
| 7/31/2001 | XX | 302CXX37103 | 0.008 U | | | 2.442 | | 1.03 | 1.51 | 8.8 | | | | | | | |
| 10/23/2001 | XX | 302CXX37187 | 0.008 U | | | 1.818 | | 1.01 | 1.81 | 9.8 | | | | | | | |
| 5/21/2002 | XX | 302CXX37397 | 0.01 U | 93.3 | | 0.037 | 9.2 | 0.59 | 1.454 | 11.7 | | | | | | | |
| 8/7/2002 | XX | 302CXX37475 | 0.01 U | 90.4 | 0.01 U | 1.365 | 13.9 | 0.97 | 1.85 | 16.4 | | | | | | | |
| 10/23/2002 | XX | 302CXX37552 | 0.012 | 94.7 | 0.01 U | 1.069 | 15.3 | 0.76 | 2.28 | 16.1 | | | | | | | |
| 6/23/2003 | XX | 302CXX37795 | 0.005 U | 120 | 0.004 | 0.38 | 18 | 2.2 | 2.3 | 20 | | | | | | | |
| 8/12/2003 | XX | 302CXX37845 | 0.005 U | 170 | 0.015 | 0.95 | 24 | 2.3 | 3.4 | 29 | | | | | | | |
| 10/20/2003 | XX | 302CXX37914 | 0.005 U | 110 | 0.006 | 0.26 | 17 | 2.7 | 2.6 | 23 | | | | | | | |
| 5/4/2004 | XX | 302CXX38111 | 0.005 U | 130 | 0.0056 | 0.26 | 22 | 4.1 | 3.5 | 25 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(302C)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L |
|---|---|---|---|---|---|---|---|---|---|---|
| 8/5/2004 | XX | 302CXX38204 | 0.005 U | 240 | 0.0058 | 1.2 | 22 | 8 | 2.9 | 47 |
| 10/20/2004 | XX | 302CXX38280 | 0.005 U | 140 | 0.003 U | 2.3 | 18 | 3.8 | 2.7 | 24 |
| 5/11/2005 | XX | GW302C00H | 0.005 U | 120 | 0.005 | 0.08 | 23 | 5.9 | 2 | 28 |
| 7/27/2005 | XX | GW302C029 | 0.005 U | 180 | 0.003 U | 1.6 | 30 | 8.2 | 3.2 | 34 |
| 11/7/2005 | XX | GW302C041 | 0.005 U | 150 | 0.003 | 0.4 | 29 | 9.8 | 3.5 | 33 |
| 5/1/2006 | XX | GW302C08H | 0.005 U | 160 | 0.01 B | 0.41 | 35 | 13 | 2.1 | 38 |
| 7/31/2006 | XX | GW302C075 | 0.005 U | 190 | 0.004 B | 1.2 B | 34 | 15 | 4.4 | 41 |
| 10/25/2006 | XX | GW302C05D | 0.005 U | 120 | 0.003 U | 0.28 | 20 | 11 | 2.5 | 38 |
| 5/9/2007 | XX | GW302C0A9 | 0.005 U | 130 | | 0.21 | 30 | 14 | 2.7 | 36 |
| 8/9/2007 | XX | GW302C0C2 | 0.005 U | 160 | | 2.3 | 22 | 12 | 3.4 | 32 |
| 8/9/2007 | XD | GWDP3X0EG | 0.005 U | 160 | | 2.2 | 21 | 12 | 3.5 | 30 |
| 10/30/2007 | XX | GW302C0DE | 0.005 U | 160 | | 0.86 | 31 | 17 | 2.1 | 34 |
| 6/2/2008 | XX | GW302C0G2 | 0.005 U | 180 | | 1 | 37 | 20 | 4 | 38 |
| 6/2/2008 | XD | GWDP3X0F4 | 0.005 U | 170 | | 1 | 35 | 19 | 3.9 | 36 |
| 8/14/2008 | XX | GW302C0I2 | 0.005 U | 140 | | 0.21 | 29 | 18 | 2 | 38 |
| 10/21/2008 | XX | GW302C0JA | 0.005 U | 190 | | 1.2 | 27 | 22 | 3.8 | 33 |
| 5/11/2009 | XX | GW302C11A | 0.005 U | 160 | | 0.21 | 35 | 25 | 1.8 | 38 |
| 8/10/2009 | XX | GW302C13A | 0.005 U | 140 | | 0.18 | 32 | 21 | 1.9 | 37 |
| 10/22/2009 | XX | GW302C14I | 0.005 U | 140 | | 0.64 | 26 | 19 | 3.3 | 30 |
| 6/1/2010 | XX | GWXXXX17F | 0.005 U | 210 | | 0.7 | 31 | 28 | 3.2 | 33 |
| 6/1/2010 | XD | GWDP3X161 | 0.005 U | 220 | | 0.72 | 31 | 30 | 3.2 | 34 |
| 8/4/2010 | XX | GW302C190 | 0.005 U | 150 | | 0.83 | 27 | 20 | 3.2 | 31 |
| 10/14/2010 | XX | GW302C1A8 | 0.005 U | 130 | | 0.4 | 31 | 19 | 2 | 36 |
| 5/18/2011 | XX | GW302C1DB | 0.005 U | 72 | | 0.049 | 24 | 11 | 1.9 | 23 |
| 5/18/2011 | XD | GWXXXX1EH | 0.005 U | 72 | | 0.045 | 23 | 11 | 1.9 | 22 |
| 8/8/2011 | XX | GW302C1F2 | 0.0016 U | 150 | | 0.6 | 38 | 25 | 3 | 41 |
| 11/1/2011 | XX | GW302C1GD | 0.0016 U | 150 | | 0.17 | 44 | 25 | 4 | 42 |
| 11/1/2011 | XD | GWDP1X1HI | 0.0016 U | 160 | | 0.19 | 47 | 27 | 4.3 | 46 |
| 5/15/2012 | XX | GW302C1I7 | 0.005 U | 100 | | 0.096 | 32 | 18 | 2.6 | 26 |
| 5/15/2012 | XD | GWDP2X1JD | 0.005 U | 98 | | 0.11 | 31 | 18 | 2.6 | 27 |
| 8/16/2012 | XX | GW302C200 | 0.005 U | 160 | | 0.68 | 45 | 30 | 4.8 | 47 |
| 8/16/2012 | XD | GWDP2X216 | 0.005 U | 170 | | 0.69 | 47 | 30 | 4.6 | 50 |
| 10/30/2012 | XX | GW302C21E | 0.005 U | 180 | | 0.03 | 49 | 28 | 5 | 46 |
| 10/30/2012 | XD | GWDP3X231 | 0.005 U | 160 | | 0.32 | 47 | 28 | 4.6 | 44 |
| 5/21/2013 | XX | GW302C238 | 0.005 U | 180 | | 0.42 | 49 | 30 | 4.3 | 45 |
| 7/25/2013 | XX | GW302C252 | 0.005 U | 180 | | 0.56 | 48 | 31 | 5 | 48 |
| 7/25/2013 | XD | GWDP1X267 | 0.005 U | 180 | | 0.51 | 47 | 30 | 5.1 | 46 |
| 10/1/2013 | XX | GW302C26G | 0.005 U | 170 | | 0.49 | 47 | 29 | 4.3 | 46 |
| 10/1/2013 | XD | GWDP1X281 | 0.005 U | 170 | | 0.49 | 45 | 28 | 4.2 | 45 |
| 6/3/2014 | XX | GW302C28A | 0.008 U | 173 | | 0.505 | 49.3 | 29.9 | 2.17 | 44.6 |
| 8/20/2014 | XX | GW302C2A4 | 0.008 U | 165 | | 0.702 | 39.6 | 28.8 | 2.26 | 39 |
| 8/20/2014 | XD | GWDP3X2BB | 0.008 U | 158 | | 0.684 | 38.1 | 29.1 | 2.16 | 37.5 |
| 11/11/2014 | XX | GW302C2BI | 0.008 U | 155 | | 0.192 | 50.3 | 35.8 | 2.81 | 45.9 |
| 11/11/2014 | XD | GWDP1X2D3 | 0.008 U | 153 | | 0.175 | 50.3 | 36.3 | 2.79 | 45.7 |
| 6/3/2015 | XX | GW302C2DE | 0.008 U | 159 | | 0.229 | 57 | 42 | 2.69 | 43.9 |
| 9/1/2015 | XX | GW302C2F9 | 0.008 U | 168 | | 0.534 | 47.7 | 31.5 | 2.72 | 47.3 |
| 9/1/2015 | XD | GWDP3X2GG | 0.008 U | 158 | | 0.488 | 44.2 | 29.6 | 2.6 | 44.8 |
| 11/4/2015 | XX | GW302C2H3 | 0.02 U | 170 | | 0.2 U | 58.8 | 39.2 | 3.62 | 51.6 |
| 11/4/2015 | XD | GWDP1X2I8 | 0.02 U | 176 | | 0.2 U | 60.6 | 40.4 | 3.68 | 54 |
| 6/15/2016 | XX | GW302C30D | 0.008 U | 196 | | 0.606 | 58.7 | 36.6 | 3.1 | 54 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (302C) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 9/21/2016 | XD | GWDP3X33E | 0.008 U | 157 | | 0.724 | 46.4 | 32.8 | 2.8 | 47.3 | | | | | | | |
| 9/21/2016 | XX | GW302C327 | 0.008 U | 152 | | 0.705 | 44.8 | 33 | 2.8 | 45.9 | | | | | | | |
| 11/8/2016 | XD | GWDP1X356 | 0.008 U | 180 | | 0.752 | 45.2 | 37.4 | 3.6 | 44.1 | | | | | | | |
| 11/8/2016 | XX | GW302C341 | 0.008 U | 192 | | 0.796 | 46.9 | 40 | 3.8 | 44 | | | | | | | |
| 6/13/2017 | XX | GW302C35G | 0.008 U | 191 | | 0.444 | 61 | 43.6 | 3.99 | 56.4 | | | | | | | |
| 8/29/2017 | XD | GWDP3X38H | 0.008 U | 169 | | 0.68 | 48.9 | 34.6 | 3.23 | 51.3 | | | | | | | |
| 8/29/2017 | XX | GW302C37A | 0.008 U | 170 | | 0.687 | 48.9 | 34.8 | 3.23 | 51.6 | | | | | | | |
| 11/14/2017 | XD | GWDP1X3A9 | 0.008 U | 144 | | 0.242 | 50.5 | 37 | 5.8 | 48.1 | | | | | | | |
| 11/14/2017 | XX | GW302C394 | 0.008 U | 150 | | 0.251 | 52.4 | 37.8 | 6 | 50.1 | | | | | | | |
| 6/19/2018 | XX | GW302C3AJ | 0.008 U | 184 | | 0.572 | 68.8 | 45.3 | 5.06 | 57.6 | | | | | | | |
| 8/14/2018 | XD | GWDP3X3D1 | 0.008 U | 172 | | 0.575 | 54.6 | 36.4 | 5.56 | 52.7 | | | | | | | |
| 8/14/2018 | XX | GW302C3D8 | 0.008 U | 176 | | 0.585 | 53.3 | 36 | 5.72 | 53.7 | | | | | | | |
| 11/28/2018 | XD | GWDP1X3FC | 0.008 U | 191 | | 0.22 | 71.8 | 53 | 10.7 | 61.8 | | | | | | | |
| 11/28/2018 | XX | GW302C3E7 | 0.008 U | 188 | | 0.223 | 69.5 | 50.5 | 10.5 | 60.8 | | | | | | | |
| 6/5/2019 | XX | GW302C3G2 | 0.008 U | 185 | | 0.167 | 74 | 55 | 11.4 | 60.7 | | | | | | | |
| 8/13/2019 | XD | GWDP3X3I4 | 0.008 U | 178 | | 1 | 62.1 | 0.01 U | 4.25 | 56.9 | | | | | | | |
| 8/13/2019 | XX | GW302C3IB | 0.008 U | 187 | | 1.11 | 65.2 | 44.7 | 4.49 | 60.1 | | | | | | | |
| 10/23/2019 | XD | GWDP1X40F | 0.008 U | 178 | | 0.598 | 60.1 | 44.9 | 8.28 | 55.2 | | | | | | | |
| 10/23/2019 | XX | GW302C3JA | 0.008 U | 173 | | 0.673 | 55.7 | 41.3 | 4.75 | 51.6 | | | | | | | |
| 6/17/2020 | XX | GW302C415 | 0.008 U | 208 | | 0.693 | 68.1 | 57.5 | 8.06 | 65.4 | | | | | | | |
| 8/5/2020 | XD | GWDP3X437 | 0.04 U | 202 | | 0.99 | 66 | 47 | 6 | 60 | | | | | | | |
| 8/5/2020 | XX | GW302C43E | 0.04 U | 191 | | 0.88 | 62.5 | 45.4 | 7.3 | 57.5 | | | | | | | |
| 10/21/2020 | XD | GWDP1X45I | 0.008 U | 198 | | 0.314 | 80.5 | 60.5 | 19.8 | 61.6 | | | | | | | |
| 10/21/2020 | XX | GW302C44D | 0.008 U | 186 | | 0.306 | | 60.5 | 18.5 | 57.1 | | | | | | | |
| 10/21/2020 | XX | GW302C44DR | | | | | 62.9 | | | | | | | | | | |
| 6/22/2021 | XX | GW302C468 | 0.008 U | 243 | | 0.832 | 89.7 | 60 | 10.8 | 77.6 | | | | | | | |
| 9/22/2021 | XX | GW302C483 | 0.008 U | 200 | | 0.763 | 76 | 52 | 16.2 | 69.4 | | | | | | | |
| 9/22/2021 | XD | GWDP1X498 | 0.008 U | 191 | | 0.658 | 74.1 | 52 | 16.2 | 67 | | | | | | | |
| **303A** | | | | | | | | | | | | | | | | | |
| 4/27/2000 | XX | 303AXX36643 | | | | 0.071 | | 8.8 | 38 | 31.88 | | | | | | | |
| 8/2/2000 | XX | 303AXX36740 | | | | 0.634 | | 10.06 | 41.1 | 29.21 | | | | | | | |
| 10/25/2000 | XX | 303AXX36824 | 0.008 U | | | 0.579 | | 15.36 | 54.6 | 48 | | | | | | | |
| 5/9/2001 | XX | 303AXX37020 | 0.008 U | | | 0.023 | | 17.73 | 60.5 | 54.3 | | | | | | | |
| 7/25/2001 | XX | 303AXX37097 | 0.008 U | | | 0.942 | | 11.91 | 47.1 | 37.8 | | | | | | | |
| 10/17/2001 | XX | 303AXX37181 | 0.01 U | | | 0.02 U | | 17.34 | 67.1 | 53.1 | | | | | | | |
| 5/16/2002 | XX | 303AXX37392 | 0.01 U | 125.7 | | 0.25 | 125.1 | 11.61 | 50.48 | 34 | | | | | | | |
| 8/1/2002 | XX | 303AXX37469 | 0.022 | 130.4 | 0.01 U | 0.316 | 97.8 | 9.36 | 44.4 | 30.7 | | | | | | | |
| 10/17/2002 | XX | 303AXX37546 | 0.01 U | 142.6 | 0.01 U | 0.158 | 123.2 | 11.67 | 48.2 | 32.6 | | | | | | | |
| 6/23/2003 | XX | 303AXX37795 | 0.005 U | 120 | 0.003 | 0.42 | 98 | 9.7 | 39 | 30 | | | | | | | |
| 8/19/2003 | XX | 303AXX37852 | 0.005 U | 140 | 0.013 | 0.49 | 110 | 11 | 52 | 37 | | | | | | | |
| 10/14/2003 | XX | 303AXX37908 | 0.005 U | 180 | 0.003 U | 0.15 | 130 | 12 | 53 | 42 | | | | | | | |
| 5/3/2004 | XX | 303AXX38110 | 0.005 U | 170 | 0.003 U | 0.84 | 140 | 13 | 56 | 39 | | | | | | | |
| 8/17/2004 | XX | 303AXX38216 | 0.005 U | 150 | 0.0036 | 0.016 | 150 | 14 | 52 | 37 | | | | | | | |
| 10/19/2004 | XX | 303AXX38279 | 0.005 U | 160 | 0.0043 | 0.2 | 190 | 16 | 71 | 43 | | | | | | | |
| 5/18/2005 | XX | GW303A00I | 0.005 U | 150 | 0.003 U | 0.09 | 160 | 13 | 62 | 40 | | | | | | | |
| 8/15/2005 | XX | GW303A02A | 0.005 U | 120 | 0.003 U | 0.26 | 100 | 10 | 57 | 30 | | | | | | | |
| 11/3/2005 | XX | GW303A042 | 0.005 U | 140 | 0.007 | 0.08 | 150 | 14 | 71 | 40 | | | | | | | |
| 5/11/2006 | XX | GW303A08I | 0.005 U | 110 | 0.005 B | 0.05 | 100 | 12 | 47 | 26 | | | | | | | |
| 7/26/2006 | XX | GW303A076 | 0.005 U | 100 | 0.003 U | 0.19 B | 94 | 11 | 46 | 26 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(303A)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/24/2006 | XX | GW303A05E | 0.005 U | 96 | 0.005 | 0.25 B | 97 | 15 | 47 | 26 | | | | | | | |
| 5/15/2007 | XX | GW303A0AA | 0.005 U | 100 | | 0.084 | 100 | 12 | 50 | 36 | | | | | | | |
| 8/15/2007 | XX | GW303A0C3 | 0.005 U | 94 | | 0.3 | 75 | 9.8 | 34 | 20 | | | | | | | |
| 8/15/2007 | XD | GWDP2X0EF | 0.005 U | 94 | | 0.29 | 75 | 9.9 | 34 | 20 | | | | | | | |
| 10/29/2007 | XX | GW303A0DF | 0.005 U | 140 | | 0.22 | 160 | 21 | 62 | 36 | | | | | | | |
| 6/2/2008 | XX | GW303A0G3 | 0.005 U | 100 | | 0.48 | 96 | 12 | 43 | 28 | | | | | | | |
| 8/13/2008 | XX | GW303A0I3 | 0.005 U | 73 | | 0.42 | 63 | 9.8 | 35 | 19 | | | | | | | |
| 10/20/2008 | XX | GW303A0JB | 0.005 U | 81 | | 0.56 | 66 | 9.9 | 34 | 18 | | | | | | | |
| 5/5/2009 | XX | GW303A11B | 0.005 U | 130 | | 0.3 | 110 | 17 | 48 | 24 | | | | | | | |
| 8/6/2009 | XX | GW303A13B | 0.005 U | 110 | | 0.39 | 91 | 14 | 34 | 17 | | | | | | | |
| 10/21/2009 | XX | GW303A14J | 0.005 U | 72 | | 0.67 | 50 | 8.8 | 32 | 17 | | | | | | | |
| 5/27/2010 | XX | GW303A170 | 0.005 U | 91 | | 0.51 | 74 | 12 | 41 | 16 | | | | | | | |
| 8/4/2010 | XX | GW303A191 | 0.005 U | 87 | | 0.35 | 76 | 13 | 40 | 16 | | | | | | | |
| 10/14/2010 | XX | GW303A1A9 | 0.005 U | 95 | | 2.3 | 73 | 13 | 33 | 23 | | | | | | | |
| 5/17/2011 | XX | GW303A1E5 | 0.005 U | 75 | | 0.89 | 57 | 9.4 | 31 | 17 | | | | | | | |
| 8/9/2011 | XX | GW303A1FG | 0.0016 U | 53 | | 0.062 | 43 | 8.2 | 28 | 12 | | | | | | | |
| 11/3/2011 | XX | GW303A1H7 | 0.0016 U | 64 | | 0.023 | 68 | 12 | 33 | 17 | | | | | | | |
| 5/17/2012 | XX | GW303A1J1 | 0.005 U | 73 | | 0.013 | 64 | 11 | 32 | 18 | | | | | | | |
| 8/15/2012 | XX | GW303A20E | 0.005 U | 68 | | 0.52 | 56 | 9.8 | 28 | 15 | | | | | | | |
| 11/1/2012 | XX | GW303A228 | 0.005 U | 77 | | 0.066 | 76 | 15 | 44 | 20 | | | | | | | |
| 5/21/2013 | XX | GW303A242 | 0.005 U | 74 | | 0.43 | 50 | 7.9 | 23 | 14 | | | | | | | |
| 7/24/2013 | XX | GW303A25G | 0.005 U | 61 | | 0.58 | 40 | 7.1 | 27 | 13 | | | | | | | |
| 10/2/2013 | XX | GW303A27A | 0.005 U | 68 | | 0.64 | 42 | 7.7 | 25 | 12 | | | | | | | |
| 6/3/2014 | XX | GW303A294 | 0.008 U | 57.3 | | 0.1 U | 59.4 | 9.04 | 30.6 | 13.1 | | | | | | | |
| 8/20/2014 | XX | GW303A2AI | 0.008 U | 61.4 | | 0.1 U | 51 | 9.04 | 31.6 | 11.2 | | | | | | | |
| 11/12/2014 | XX | GW303A2CC | 0.008 U | 75.5 | | 0.1 U | 78.4 | 12.5 | 40.4 | 17 | | | | | | | |
| 6/3/2015 | XX | GW303A2E8 | 0.008 U | 47.3 | | 0.1 U | 49.5 | 8.48 | 29.3 | 10.8 | | | | | | | |
| 9/1/2015 | XX | GW303A2G3 | 0.008 U | 45.8 | | 0.1 U | 46.3 | 7.41 | 31.8 | 10.6 | | | | | | | |
| 11/3/2015 | XX | GW303A2HH | 0.008 U | 60.5 | | 0.1 U | 60.8 | 10.6 | 36.5 | 13.9 | | | | | | | |
| 6/15/2016 | XX | GW303A317 | 0.008 U | 42.1 | | 0.1 U | 36.5 | 6 | 25.3 | 8.37 | | | | | | | |
| 9/20/2016 | XX | GW303A331 | 0.008 U | 50.6 | | 0.1 U | 47 | 9.21 | 31.9 | 10.1 | | | | | | | |
| 11/8/2016 | XX | GW303A34F | 0.008 U | 74.4 | | 0.121 | 60.3 | 11.8 | 34.8 | 14.4 | | | | | | | |
| 6/13/2017 | XX | GW303A36A | 0.008 U | 47.7 | | 0.1 U | 45 | 7.41 | 27.9 | 10.9 | | | | | | | |
| 8/30/2017 | XX | GW303A384 | 0.008 U | 49.9 | | 0.637 | 40 | 6.72 | 27.6 | 9.95 | | | | | | | |
| 11/15/2017 | XX | GW303A39I | 0.008 U | 75.2 | | 0.554 | 66.4 | 11.8 | 35.6 | 14.7 | | | | | | | |
| 6/20/2018 | XX | GW303A3BD | 0.008 U | 55 | | 0.865 | 37.5 | 6.66 | 28.3 | 10.4 | | | | | | | |
| 8/15/2018 | XX | GW303A3E2 | 0.008 U | 46 | | 0.561 | 36 | 5.88 | 25.1 | 8.54 | | | | | | | |
| 11/27/2018 | XX | GW303A3F1 | 0.008 U | 92.6 | | 0.56 | 82.2 | 13.3 | 38.4 | 19.1 | | | | | | | |
| 6/4/2019 | XX | GW303A3GG | 0.008 U | 43.8 | | 0.1 U | 43 | 6.83 | 27.1 | 9.84 | | | | | | | |
| 8/14/2019 | XD | GWDP1X3I2 | 0.008 U | 40 | | 0.1 U | 34.1 | 5.58 | 26.2 | 8.22 | | | | | | | |
| 8/14/2019 | XX | GW303A3J5 | 0.008 U | 37.2 | | 0.1 U | 31.2 | 5.11 | 23.9 | 7.6 | | | | | | | |
| 10/22/2019 | XX | GW303A404 | 0.008 U | 50.9 | | 0.1 U | 49.2 | 8.19 | 31.5 | 9.56 | | | | | | | |
| 6/16/2020 | XX | GW303A41J | 0.008 U | 48.6 | | 0.1 U | 47.6 | 7.47 | 30.5 | 10.9 | | | | | | | |
| 8/4/2020 | XD | GWDP1X435 | 0.008 U | | | 0.1 U | 48.1 | 7.14 | 30.6 | 10.4 | | | | | | | |
| 8/4/2020 | XD | GWDP1X435R | | 51.5 | | | | | | | | | | | | | |
| 8/4/2020 | XX | GW303A448 | 0.008 U | | | 0.1 U | 48.6 | 7.21 | 30.5 | 10.4 | | | | | | | |
| 8/4/2020 | XX | GW303A448R | | 51.2 | | | | | | | | | | | | | |
| 10/20/2020 | XX | GW303A457 | 0.008 U | 72 | | 0.1 U | 68.6 | 11.3 | 37 | 13.5 | | | | | | | |
| 6/22/2021 | XX | GW303A472 | 0.008 U | 52.3 | | 0.109 | 48.6 | 7.27 | 30.5 | 10.5 | | | | | | | |
| 9/21/2021 | XX | GW303A48H | 0.008 U | 60.6 | | 0.376 | 57 | 8.56 | 31.6 | 11.7 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(303B)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L |
|---|---|---|---|---|---|---|---|---|---|---|
| **303B** | | | | | | | | | | |
| 4/27/2000 | XX | 303BXX36643 | | | | 0.02 U | | 6.1 | 23.7 | 16.36 |
| 8/2/2000 | XX | 303BXX36740 | | | | 0.035 | | 11.9 | 37.3 | 29.06 |
| 10/25/2000 | XX | 303BXX36824 | 0.008 U | | | 0.182 | | 17.96 | 51.9 | 59.3 |
| 5/9/2001 | XX | 303BXX37020 | 0.008 U | | | 0.03 | | 11.61 | 41.1 | 35 |
| 7/25/2001 | XX | 303BXX37097 | 0.008 U | | | 0.025 | | 16.44 | 56.3 | 37 |
| 10/17/2001 | XX | 303BXX37181 | 0.01 U | | | 0.03 | | 19.32 | 69.3 | 59.8 |
| 5/16/2002 | XX | 303BXX37392 | 0.01 U | 77.5 | | 0.027 | 75.7 | 9.09 | 37.06 | 22.3 |
| 8/2/2002 | XX | 303BXX37470 | 0.021 | 71.1 | 0.01 U | 0.02 U | 68.6 | 9.22 | 37.2 | 19.5 |
| 10/17/2002 | XX | 303BXX37546 | 0.01 U | 144.5 | 0.01 U | 0.041 | 155 | 28.06 | 47.9 | 41.3 |
| 6/23/2003 | XX | 303BXX37795 | 0.005 U | 65 | 0.003 U | 0.011 | 70 | 6.7 | 31 | 19 |
| 8/19/2003 | XX | 303BXX37852 | 0.005 U | 110 | 0.014 | 0.072 | 120 | 11 | 51 | 37 |
| 10/14/2003 | XX | 303BXX37908 | 0.005 U | 150 | 0.003 | 0.01 U | 170 | 13 | 56 | 46 |
| 5/3/2004 | XX | 303BXX38110 | 0.005 U | 79 | 0.003 | 0.06 | 110 | 10 | 46 | 27 |
| 8/17/2004 | XX | 303BXX38216 | 0.005 U | 110 | 0.0051 | 0.011 | 170 | 13 | 51 | 35 |
| 10/19/2004 | XX | 303BXX38279 | 0.005 U | 140 | 0.0043 | 0.02 | 190 | 13 | 67 | 47 |
| 5/18/2005 | XX | GW303B00J | 0.005 U | 55 | 0.003 U | 0.05 | 10 U | 7.2 | 37 | 18 |
| 8/15/2005 | XX | GW303B02B | 0.005 U | 54 | 0.003 | 0.01 U | 68 | 8.3 | 44 | 16 |
| 11/3/2005 | XX | GW303B043 | 0.005 U | 110 | 0.007 | 0.01 | 150 | 13 | 65 | 38 |
| 5/11/2006 | XX | GW303B08J | 0.005 U | 76 | 0.004 B | 0.01 U | 93 | 13 | 39 | 24 |
| 7/26/2006 | XX | GW303B077 | 0.005 U | 58 | 0.003 U | 0.01 B | 72 | 10 | 37 | 17 |
| 10/24/2006 | XX | GW303B05F | 0.005 U | 120 | 0.006 | 0.02 B | 150 | 18 | 48 | 34 |
| 5/15/2007 | XX | GW303B0AB | 0.005 U | 54 | | 0.017 | 63 | 8.5 | 36 | 19 |
| 8/15/2007 | XX | GW303B0C4 | 0.005 U | 69 | | 0.039 | 78 | 12 | 33 | 18 |
| 10/29/2007 | XX | GW303B0DG | 0.005 U | 150 | | 0.036 | 190 | 18 | 59 | 38 |
| 6/3/2008 | XX | GW303B0G4 | 0.005 U | 52 | | 0.02 | 63 | 9.1 | 37 | 17 |
| 8/13/2008 | XX | GW303B0I4 | 0.005 U | 42 | | 0.01 | 42 | 8.4 | 28 | 13 |
| 10/20/2008 | XX | GW303B0JC | 0.005 U | 65 | | 0.01 | 69 | 11 | 31 | 17 |
| 5/5/2009 | XX | GW303B11C | 0.005 U | 60 | | 0.01 | 62 | 9.9 | 24 | 14 |
| 8/6/2009 | XX | GW303B13C | 0.005 U | 37 | | 0.01 U | 37 | 9.8 | 23 | 10 |
| 10/21/2009 | XX | GW303B150 | 0.005 U | 53 | | 0.01 U | 55 | 7.6 | 32 | 14 |
| 5/27/2010 | XX | GW303B171 | 0.005 U | 45 | | 0.011 | 37 | 7.5 | 27 | 9.2 |
| 8/4/2010 | XX | GW303B192 | 0.005 U | 83 | | 0.02 | 83 | 14 | 39 | 18 |
| 8/4/2010 | XD | GWDP2X181 | 0.005 U | 64 | | 0.014 | 66 | 11 | 31 | 18 |
| 10/14/2010 | XX | GW303B1AA | 0.005 U | 79 | | 0.02 | 80 | 7.6 | 30 | 22 |
| 5/17/2011 | XX | GW303B1E6 | 0.005 U | 34 | | 0.01 U | 32 | 5.8 | 21 | 8.6 |
| 8/9/2011 | XX | GW303B1FH | 0.0016 U | 28 | | 0.016 | 26 | 5.5 | 19 | 6.8 |
| 11/3/2011 | XX | GW303B1H8 | 0.0016 U | 59 | | 0.0039 J | 62 | 8.9 | 25 | 16 |
| 5/17/2012 | XX | GW303B1J2 | 0.005 U | 44 | | 0.01 U | 44 | 7.4 | 24 | 12 |
| 8/15/2012 | XX | GW303B20F | 0.005 U | 44 | | 0.01 U | 45 | 8.2 | 23 | 12 |
| 11/1/2012 | XX | GW303B229 | 0.005 U | 89 | | 0.01 U | 86 | 12 | 40 | 23 |
| 5/21/2013 | XX | GW303B243 | 0.005 U | 35 | | 0.01 U | 34 | 5.7 | 18 | 7.3 |
| 7/24/2013 | XX | GW303B25H | 0.005 U | 31 | | 0.01 U | 28 | 5.3 | 20 | 7.8 |
| 10/2/2013 | XX | GW303B27B | 0.005 U | 48 | | 0.01 U | 43 | 7.4 | 23 | 11 |
| 6/3/2014 | XX | GW303B295 | 0.008 U | 37.9 | | 0.1 U | 35.1 | 5.08 | 21.1 | 8.04 |
| 8/20/2014 | XX | GW303B2AJ | 0.008 U | 56.9 | | 0.1 U | 44.6 | 8.09 | 28.4 | 11 |
| 11/12/2014 | XX | GW303B2CD | 0.008 U | 89.5 | | 0.129 | 84.6 | 7.47 | 36 | 18.9 |
| 6/3/2015 | XX | GW303B2E9 | 0.008 U | 35.8 | | 0.1 U | 33.8 | 5.76 | 22.1 | 7.98 |
| 9/1/2015 | XX | GW303B2G4 | 0.008 U | 42.2 | | 0.1 U | 39.5 | 5.54 | 27.1 | 9.93 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (303B) Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/3/2015 | XX | GW303B2HI | 0.008 U | 54.2 | | 0.1 U | 51.7 | 7.8 | 28.7 | 12.3 | | | | | | | |
| 6/15/2016 | XX | GW303B318 | 0.008 U | 24.6 | | 0.1 U | 23.3 | 4.07 | 17.5 | 4.96 | | | | | | | |
| 9/20/2016 | XX | GW303B332 | 0.008 U | 62.9 | | 0.1 U | 59 | 10.5 | 30.8 | 14.4 | | | | | | | |
| 11/8/2016 | XX | GW303B34G | 0.008 U | 86.7 | | 0.1 U | 74.5 | 12.7 | 34.1 | 16.7 | | | | | | | |
| 6/13/2017 | XX | GW303B36B | 0.008 U | 32.1 | | 0.1 U | 27 | 4.3 | 19.5 | 6.59 | | | | | | | |
| 8/30/2017 | XX | GW303B385 | 0.008 U | 37.7 | | 0.1 U | 30.6 | 5.36 | 21.9 | 6.8 | | | | | | | |
| 11/15/2017 | XX | GW303B39J | 0.008 U | 90.9 | | 0.1 U | 79.3 | 7.99 | 33.8 | 19.3 | | | | | | | |
| 6/20/2018 | XX | GW303B3BE | 0.008 U | 28.8 | | 0.1 U | 23.3 | 4.14 | 20.7 | 5.94 | | | | | | | |
| 8/15/2018 | XX | GW303B3E3 | 0.008 U | 39.8 | | 0.1 U | 37.2 | 4.96 | 25.4 | 7.46 | | | | | | | |
| 11/27/2018 | XX | GW303B3F2 | 0.008 U | 90.7 | | 0.1 U | 82.1 | 8.85 | 34.9 | 19.6 | | | | | | | |
| 6/4/2019 | XX | GW303B3GH | 0.008 U | 29.1 | | 0.1 U | 26.5 | 4.24 | 19.9 | 6.37 | | | | | | | |
| 8/14/2019 | XX | GW303B3J6 | 0.008 U | 28.8 | | 0.1 U | 25.7 | 4.34 | 21 | 5.46 | | | | | | | |
| 10/22/2019 | XX | GW303B405 | 0.008 U | 63.7 | | 0.1 U | 62.2 | 10.1 | 33.8 | 13.9 | | | | | | | |
| 6/16/2020 | XX | GW303B420 | 0.008 U | 33.2 | | 0.1 U | 29.7 | 4.61 | 22.2 | 6.49 | | | | | | | |
| 8/4/2020 | XX | GW303B449 | 0.008 U | | | 0.1 U | 44.9 | 6.64 | 29.8 | 8.2 | | | | | | | |
| 8/4/2020 | XX | GW303B449R | | 46.4 | | | | | | | | | | | | | |
| 10/20/2020 | XX | GW303B458 | 0.008 U | 81.4 | | 0.1 U | 73.9 | 11.1 | 38.8 | 17.2 | | | | | | | |
| 6/22/2021 | XX | GW303B473 | 0.008 U | 36.5 | | 0.1 U | 33.5 | 5.06 | 21.8 | 7.02 | | | | | | | |
| 9/21/2021 | XX | GW303B48I | 0.008 U | 71.1 | | 0.187 | 69.7 | 9.45 | 33.2 | 15.5 | | | | | | | |
| **304A** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 304AXX36649 | | | | 0.02 U | | 0.01 U | 1.11 | 17.08 | | | | | | | |
| 8/9/2000 | XX | 304AXX36747 | | | | 0.02 | | 0.02 | 1.14 | 14.52 | | | | | | | |
| 11/9/2000 | XX | 304AXX36839 | 0.008 U | | | 0.039 | | 0.07 | 1.21 | 15.7 | | | | | | | |
| 5/16/2001 | XX | 304AXX37027 | 0.008 U | | | 0.02 U | | 0.01 | 1.08 | 15.3 | | | | | | | |
| 7/31/2001 | XX | 304AXX37103 | 0.008 U | | | 0.042 | | 0.02 | 1.14 | 14.6 | | | | | | | |
| 10/23/2001 | XX | 304AXX37187 | 0.008 U | | | 0.03 | | 0.17 | 1.55 | 17 | | | | | | | |
| 5/21/2002 | XX | 304AXX37397 | 0.01 U | 55.5 | | 0.043 | 10.4 | 0.01 U | 1.268 | 16.5 | | | | | | | |
| 7/30/2002 | XX | 304AXX37467 | 0.01 U | 28.8 | | 0.022 | 9 | 0.02 | 1.18 | 15.4 | | | | | | | |
| 10/22/2002 | XX | 304AXX37551 | 0.01 U | 36.3 | | 0.032 | 11.5 | 0.06 | 1.54 | 15.2 | | | | | | | |
| 6/24/2003 | XX | 304AXX37796 | 0.005 U | 75 | | 0.012 | 10 | 0.14 | 1.7 | 12 | | | | | | | |
| 8/7/2003 | XX | 304AXX37840 | 0.005 U | 65 | | 0.021 | 11 | 0.14 | 1.8 | 15 | | | | | | | |
| 10/21/2003 | XX | 304AXX37915 | 0.005 U | 77 | | 0.01 U | 13 | 0.24 | 2 | 18 | | | | | | | |
| 5/10/2004 | XX | 304AXX38117 | 0.005 U | 68 | | 0.034 | 11 | 0.043 | 1.7 | 14 | | | | | | | |
| 7/28/2004 | XX | 304AXX38196 | 0.005 U | 59 | | 0.01 | 11 | 0.07 | 1.3 | 16 | | | | | | | |
| 10/21/2004 | XX | 304AXX38281 | 0.005 U | 75 | | 0.031 | 13 | 0.15 | 1.7 | 18 | | | | | | | |
| 5/10/2005 | XX | GW304A010 | 0.005 U | 93 | | 0.02 | 7.4 | 0.05 | 2 | 7 | | | | | | | |
| 7/28/2005 | XX | GW304A02C | 0.005 U | 61 | | 0.02 | 8.3 | 0.01 U | 1.7 | 12 | | | | | | | |
| 11/8/2005 | XX | GW304A044 | 0.005 U | 37 | | 0.02 | 9.8 | 0.01 U | 2.1 | 13 | | | | | | | |
| 5/3/2006 | XX | GW304A090 | 0.005 U | 64 | | 0.03 | 9.3 | 0.01 U | 1.4 | 13 | | | | | | | |
| 8/1/2006 | XX | GW304A078 | 0.005 U | 82 | | 2.1 | 9 | 0.12 | 2.4 | 11 | | | | | | | |
| 10/26/2006 | XX | GW304A05G | 0.005 U | 59 | | 0.07 B | 7.9 | 0.01 | 1.9 | 12 | | | | | | | |
| 5/8/2007 | XX | GW304A0AC | 0.005 U | 68 | | 0.097 | 5.5 | 0.014 | 1.1 | 8.7 | | | | | | | |
| 8/7/2007 | XX | GW304A0C5 | 0.005 U | 58 | | 0.026 | 8.5 | 0.019 | 1.9 | 14 | | | | | | | |
| 8/7/2007 | XD | GWDP4X0EH | 0.005 U | 59 | | 0.017 | 8.6 | 0.019 | 1.9 | 14 | | | | | | | |
| 10/31/2007 | XX | GW304A0DH | 0.005 U | 93 | | 0.01 U | 9.9 | 0.034 | 1.5 | 14 | | | | | | | |
| 6/3/2008 | XX | GW304A0G5 | 0.005 U | 52 | | 0.024 | 8.2 | 0.01 U | 1.7 | 11 | | | | | | | |
| 8/18/2008 | XX | GW304A0I5 | 0.005 U | 47 | | 0.02 | 8.7 | 0.01 U | 1.2 | 13 | | | | | | | |
| 10/23/2008 | XX | GW304A0JD | 0.005 U | 56 | | 0.02 | 8.8 | 0.01 U | 1.3 | 12 | | | | | | | |
| 10/23/2008 | XD | SWDP4X109 | 0.005 U | 53 | | 0.02 | 8.7 | 0.01 U | 1.3 | 12 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(304A)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/12/2009 | XX | GW304A11D | 0.005 U | 44 | | 0.015 | 8.4 | 0.01 U | 1 | 12 | | | | | | | |
| 8/11/2009 | XX | GW304A13D | 0.005 U | 54 | | 0.14 | 8.4 | 0.011 | 1.6 | 11 | | | | | | | |
| 10/26/2009 | XX | GW304A151 | 0.005 U | 49 | | 0.038 | 8.3 | 0.01 U | 1.8 | 12 | | | | | | | |
| 6/2/2010 | XX | GW304A172 | 0.005 U | 54 | | 0.068 | 8.4 | 0.01 U | 1.6 | 11 | | | | | | | |
| 8/5/2010 | XX | GW304A193 | 0.005 U | 52 | | 0.049 | 8.2 | 0.01 U | 1.6 | 12 | | | | | | | |
| 10/18/2010 | XX | GW304A1AB | 0.005 U | 40 | | 0.023 | 7.8 | 0.01 U | 1.2 | 11 | | | | | | | |
| 5/19/2011 | XX | GW304A1DC | 0.005 U | 40 | | 0.015 | 8 | 0.01 U | 1.6 | 12 | | | | | | | |
| 8/8/2011 | XX | GW304A1F3 | 0.0016 U | 28 | | 0.014 | 5 | 0.0069 | 0.89 | 7.7 | | | | | | | |
| 8/8/2011 | XD | GWDP2X1G8 | 0.0016 U | 40 | | 0.034 | 7.2 | 0.0071 | 1.4 | 11 | | | | | | | |
| 11/2/2011 | XX | GW304A1GE | 0.0016 U | 39 | | 0.0054 J | 7.8 | 0.0072 J | 1.7 | 12 | | | | | | | |
| 5/15/2012 | XX | GW304A1I8 | 0.005 U | 41 | | 0.016 | 7 | 0.01 U | 1.5 | 9.6 | | | | | | | |
| 5/15/2012 | XD | GWDP3X1JE | 0.005 U | 42 | | 0.018 | 7.4 | 0.01 U | 1.7 | 9.9 | | | | | | | |
| 8/15/2012 | XX | GW304A201 | 0.005 U | 34 | | 0.01 U | 6.9 | 0.01 U | 2.1 | 11 | | | | | | | |
| 10/31/2012 | XX | GW304A21F | 0.005 U | 39 | | 0.016 | 7.7 | 0.01 U | 1.8 | 11 | | | | | | | |
| 10/31/2012 | XD | GWDP1X22J | 0.005 U | 38 | | 0.046 | 8 | 0.01 U | 1.8 | 12 | | | | | | | |
| 5/21/2013 | XX | GW304A239 | 0.005 U | 37 | | 0.032 | 6.8 | 0.01 U | 1.4 | 9.6 | | | | | | | |
| 5/21/2013 | XD | GWDP1X24D | 0.005 U | 38 | | 0.041 | 6.8 | 0.01 U | 1.4 | 9.4 | | | | | | | |
| 7/25/2013 | XX | GW304A253 | 0.005 U | 38 | | 0.018 | 6.8 | 0.01 U | 1.6 | 10 | | | | | | | |
| 7/25/2013 | XD | GWDP3X269 | 0.005 U | 37 | | 0.016 | 6.6 | 0.01 U | 1.5 | 10 | | | | | | | |
| 10/2/2013 | XX | GW304A26H | 0.005 U | 35 | | 0.011 | 6.8 | 0.01 U | 1.5 | 10 | | | | | | | |
| 10/2/2013 | XD | GWDP2X283 | 0.005 U | 36 | | 0.018 | 7.2 | 0.01 U | 1.5 | 11 | | | | | | | |
| 6/4/2014 | XX | GW304A28B | 0.008 U | 36 | | 0.1 U | 7.55 | 0.005 U | 1.03 | 11.2 | | | | | | | |
| 6/4/2014 | XD | GWDP1X29F | 0.008 U | 35.1 | | 0.1 U | 7.35 | 0.005 U | 1 U | 10.8 | | | | | | | |
| 8/20/2014 | XX | GW304A2A5 | 0.008 U | 36.8 | | 0.105 | 7.03 | 0.0124 | 1.07 | 10.7 | | | | | | | |
| 8/20/2014 | XD | GWDP1X2B9 | 0.008 U | 36.2 | | 0.122 | 6.99 | 0.0136 | 1.03 | 10.7 | | | | | | | |
| 11/12/2014 | XX | GW304A2BJ | 0.008 U | 31.7 | | 0.217 | 5.88 | 0.0139 | 1.07 | 9.12 | | | | | | | |
| 11/12/2014 | XD | GWDP2X2D5 | 0.008 U | 32.4 | | 0.534 | 6.04 | 0.034 | 1.1 | 8.88 | | | | | | | |
| 6/3/2015 | XX | GW304A2DF | 0.008 U | 32.7 | | 0.205 | 7.32 | 0.012 | 1 U | 10.3 | | | | | | | |
| 6/3/2015 | XD | GWDP1X2EJ | 0.008 U | 31.7 | | 0.145 | 7.08 | 0.01 | 1 U | 9.99 | | | | | | | |
| 9/2/2015 | XX | GW304A2FA | 0.008 U | 34.8 | | 0.1 U | 7.42 | 0.005 U | 1 | 11.2 | | | | | | | |
| 9/2/2015 | XD | GWDP1X2GE | 0.008 U | 37.4 | | 0.1 U | 7.72 | 0.005 U | 1.04 | 12.1 | | | | | | | |
| 11/4/2015 | XX | GW304A2H4 | 0.008 U | 36 | | 0.1 U | 7.51 | 0.007 | 1.2 | 10.7 | | | | | | | |
| 11/4/2015 | XD | GWDP2X2IA | 0.008 U | 34.7 | | 0.1 U | 7.24 | 0.009 | 1.07 | 10.1 | | | | | | | |
| 6/16/2016 | XD | GWDP1X31I | 0.008 U | 33.1 | | 0.1 U | 7.58 | 0.005 U | 1 U | 10.8 | | | | | | | |
| 6/16/2016 | XX | GW304A30E | 0.008 U | 32.4 | | 0.1 U | 7.45 | 0.005 U | 1 | 10.6 | | | | | | | |
| 9/21/2016 | XD | GWDP1X33C | 0.008 U | 31.1 | | 0.1 U | 7.04 | 0.005 U | 1 | 11.1 | | | | | | | |
| 9/21/2016 | XX | GW304A328 | 0.008 U | 32.1 | | 0.1 U | 7.1 | 0.005 U | 1 | 11.6 | | | | | | | |
| 11/8/2016 | XD | GWDP2X358 | 0.008 U | 36 | | 0.1 U | 6.66 | 0.005 | 1.1 | 10.6 | | | | | | | |
| 11/8/2016 | XX | GW304A342 | 0.008 U | 36.2 | | 0.1 U | 6.64 | 0.005 | 1.1 | 10.6 | | | | | | | |
| 6/14/2017 | XD | GWDP1X371 | 0.008 U | 34.6 | | 0.116 | 7.33 | 0.0109 | 1.16 | 11.1 | | | | | | | |
| 6/14/2017 | XX | GW304A35H | 0.008 U | 36 | | 0.1 U | 7.62 | 0.0083 | 1.17 | 11.5 | | | | | | | |
| 8/29/2017 | XD | GWDP1X38F | 0.008 U | 32.4 | | 0.181 | 6.57 | 0.0196 | 1.02 | 10.7 | | | | | | | |
| 8/29/2017 | XX | GW304A37B | 0.008 U | 33.4 | | 0.205 | 6.76 | 0.0186 | 1.06 | 11 | | | | | | | |
| 11/14/2017 | XD | GWDP2X3AB | 0.008 U | 33.6 | | 0.1 U | 6.15 | 0.0089 | 1.1 | 10.3 | | | | | | | |
| 11/14/2017 | XX | GW304A395 | 0.008 U | 31.5 | | 0.156 | 6.24 | 0.0139 | 1.1 | 10.3 | | | | | | | |
| 6/21/2018 | XD | GWDP1X3C4 | 0.008 U | 33.9 | | 0.171 | 6.88 | 0.0215 | 1.08 | 10 | | | | | | | |
| 6/21/2018 | XX | GW304A3B0 | 0.008 U | 38.2 | | 0.217 | 7.29 | 0.0302 | 1.47 | 10.1 | | | | | | | |
| 8/15/2018 | XD | GWDP1X3CJ | 0.008 U | 32 | | 0.762 | 6.99 | 0.069 | 1.05 | 10.6 | | | | | | | |
| 8/15/2018 | XX | GW304A3D9 | 0.008 U | 32.7 | | 0.945 | 7.09 | 0.0829 | 1.14 | 11 | | | | | | | |
| 11/30/2018 | XD | GWDP2X3FE | 0.008 U | 35.9 | | 0.1 U | 6.78 | 0.005 U | 1.12 | 11 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (304A) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 11/30/2018 | XX | GW304A3E8 | 0.008 U | 36.4 | | 0.1 U | 6.83 | 0.005 U | 1.16 | 11 | | | | | | | |
| 6/5/2019 | XD | GWDP1X3H7 | 0.008 U | 32.6 | | 0.1 U | 7 | 0.0066 | 1 U | 10.7 | | | | | | | |
| 6/5/2019 | XX | GW304A3G3 | 0.008 U | 31.6 | | 0.1 U | 6.75 | 0.0057 | 1 U | 10.4 | | | | | | | |
| 8/14/2019 | XX | GW304A3IC | | | | 0.134 | | | 1 | 11.2 | | | | | | | |
| 8/14/2019 | XX | GW304A3ICR | 0.008 U | 33.7 | | | 7.95 | 0.0327 | | | | | | | | | |
| 10/24/2019 | XD | GWDP2X40H | 0.008 U | 31.1 | | 0.114 | 7.2 | 0.0233 | 1.03 | 11 | | | | | | | |
| 10/24/2019 | XX | GW304A3JB | 0.008 U | 32.5 | | 0.13 | 7.49 | 0.0264 | 1.1 | 11.3 | | | | | | | |
| 6/17/2020 | XD | GWDP1X42A | 0.008 U | 34.1 | | 0.1 U | 6.97 | 0.0086 | 1.04 | 12.3 | | | | | | | |
| 6/17/2020 | XX | GW304A416 | 0.008 U | 31.5 | | 0.1 U | 6.55 | 0.0081 | 1 U | 11.4 | | | | | | | |
| 8/5/2020 | XX | GW304A43F | 0.008 U | 33.5 | | 0.1 U | 7.12 | 0.0175 | 1 U | 11.4 | | | | | | | |
| 10/22/2020 | XD | GWDP2X460 | 0.008 U | 39.7 | | 0.1 U | 7.05 | 0.0158 | 1.3 | 13.1 | | | | | | | |
| 10/22/2020 | XX | GW304A44E | 0.008 U | 40 | | 0.1 U | 7.07 | 0.0175 | 1.35 | 13.4 | | | | | | | |
| 6/22/2021 | XD | GWDP1X47D | 0.008 U | 32 | | 0.279 | 7.26 | 0.0422 | 1 U | 10.7 | | | | | | | |
| 6/22/2021 | XX | GW304A469 | 0.008 U | 33.5 | | 0.349 | 7.26 | 0.0465 | 1.02 | 11.2 | | | | | | | |
| 9/22/2021 | XX | GW304A484 | 0.008 U | 38.4 | | 0.377 | 7.56 | 0.0491 | 1.24 | 12.2 | | | | | | | |
| 9/22/2021 | XD | GWDP2X49A | 0.008 U | 39.6 | | 0.312 | 7.7 | 0.0444 | 1.26 | 12.5 | | | | | | | |
| **304B** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 304BXX36649 | | | | 0.658 | | 0.012 | 0.44 | 3.15 | | | | | | | |
| 8/9/2000 | XX | 304BXX36747 | | | | 0.239 | | 0.03 | 0.91 | 14.67 | | | | | | | |
| 11/9/2000 | XX | 304BXX36839 | 0.008 U | | | 0.099 | | 0.01 | 0.89 | 16.9 | | | | | | | |
| 5/16/2001 | XX | 304BXX37027 | 0.008 U | | | 0.09 | | 0.01 U | 0.85 | 19.1 | | | | | | | |
| 7/31/2001 | XX | 304BXX37103 | D | | | D | | D | D | D | | | | | | | |
| 10/23/2001 | XX | 304BXX37187 | 0.008 U | | | 0.518 | | 0.15 | 1.29 | 21 | | | | | | | |
| 5/21/2002 | XX | 304BXX37397 | 0.01 U | 29.9 | | 0.061 | 3 | 0.01 U | 0.911 | 13.3 | | | | | | | |
| 7/30/2002 | XX | 304BXX37467 | 0.01 U | 20.9 | | 0.076 | 4 | 0.03 | 1 | 15.8 | | | | | | | |
| 10/22/2002 | XX | 304BXX37551 | 0.01 U | 22.6 | | 0.104 | 4.2 | 0.01 U | 1.07 | 13 | | | | | | | |
| 6/24/2003 | XX | 304BXX37796 | 0.005 U | 43 | | 0.028 | 5 | 0.01 U | 1 U | 11 | | | | | | | |
| 8/7/2003 | XX | 304BXX37840 | 0.005 U | 38 | | 0.021 | 4.2 | 0.01 U | 1.1 | 12 | | | | | | | |
| 10/21/2003 | XX | 304BXX37915 | 0.005 U | 35 | | 0.042 | 4.1 | 0.012 | 1.1 | 13 | | | | | | | |
| 5/10/2004 | XX | 304BXX38117 | 0.005 U | 29 | | 0.033 | 3.5 | 0.01 U | 1 U | 11 | | | | | | | |
| 7/28/2004 | XX | 304BXX38196 | 0.005 U | 25 | | 0.035 | 2.9 | 0.01 | 1 U | 9.4 | | | | | | | |
| 10/21/2004 | XX | 304BXX38281 | 0.005 U | 31 | | 0.043 | 3.5 | 0.01 U | 1 U | 11 | | | | | | | |
| 5/10/2005 | XX | GW304B011 | 0.005 U | 20 | | 0.02 | 2.3 | 0.01 U | 1 U | 7 | | | | | | | |
| 7/28/2005 | XX | GW304B02D | 0.005 U | 39 | | 0.03 | 4 | 0.01 U | 1.1 | 12 | | | | | | | |
| 11/8/2005 | XX | GW304B045 | 0.005 U | 34 | | 0.03 | 3.4 | 0.01 U | 1.1 | 12 | | | | | | | |
| 5/3/2006 | XX | GW304B091 | 0.005 U | 21 | | 0.02 | 2.4 | 0.01 U | 1 U | 9.4 | | | | | | | |
| 8/1/2006 | XX | GW304B079 | 0.005 U | 29 | | 0.02 | 3 | 0.01 U | 1.2 | 11 | | | | | | | |
| 10/26/2006 | XX | GW304B05H | 0.005 U | 26 | | 0.01 B | 2.9 | 0.01 U | 1.1 | 12 | | | | | | | |
| 5/8/2007 | XX | GW304B0AD | 0.005 U | 25 | | 0.02 | 2.7 | 0.01 U | 1 U | 14 | | | | | | | |
| 8/7/2007 | XX | GW304B0C6 | 0.005 U | 34 | | 0.13 | 3.3 | 0.025 | 1.4 | 16 | | | | | | | |
| 10/31/2007 | XX | GW304B0DI | 0.005 U | 29 | | 0.021 | 3.1 | 0.01 U | 0.92 | 12 | | | | | | | |
| 6/5/2008 | XX | GW304B0G6 | 0.005 U | 18 | | 0.022 | 2 | 0.01 U | 1 U | 8.5 | | | | | | | |
| 6/5/2008 | XD | LTDP4X0F5 | 0.005 U | 19 | | 0.018 | 2.1 | 0.01 U | 1 U | 8.8 | | | | | | | |
| 8/18/2008 | XX | GW304B0I6 | 0.005 U | 12 | | 0.03 | 1.3 | 0.05 | 1 U | 6.8 | | | | | | | |
| 10/23/2008 | XX | GW304B0JE | 0.005 U | 17 | | 0.28 | 1.9 | 0.05 | 1 U | 8.9 | | | | | | | |
| 5/12/2009 | XX | GW304B11E | 0.005 U | 8.2 | | 0.07 | 1 U | 0.01 U | 1 U | 4.3 | | | | | | | |
| 8/11/2009 | XX | GW304B13E | 0.005 U | 24 | | 0.17 | 2.1 | 0.06 | 1.1 | 7.5 | | | | | | | |
| 10/26/2009 | XX | GW304B152 | 0.005 U | 15 | | 0.42 | 1.7 | 0.03 | 1 U | 6.6 | | | | | | | |
| 6/2/2010 | XX | GW304B173 | 0.005 U | 13 | | 0.1 | 1.4 | 0.02 | 1 U | 7.1 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (304B) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 8/5/2010 | XX | GW304B194 | 0.005 U | 16 | | 0.44 | 1.8 | 0.13 | 1 | 8.4 | | | | | | | |
| 10/18/2010 | XX | GW304B1AC | 0.005 U | 13 | | 0.24 | 1.4 | 0.015 | 1 U | 8.1 | | | | | | | |
| 10/18/2010 | XD | GWDP3X1B6 | 0.005 U | 12 | | 0.23 | 1.3 | 0.017 | 1 U | 7.6 | | | | | | | |
| 5/19/2011 | XX | GW304B1DD | 0.005 U | 7.6 | | 0.067 | 1 U | 0.012 | 1 U | 5.1 | | | | | | | |
| 8/8/2011 | XX | GW304B1F4 | 0.0016 U | 9.7 | | 0.03 | 1 | 0.0061 | 0.53 | 6.3 | | | | | | | |
| 11/2/2011 | XX | GW304B1GF | 0.0016 U | 15 | | 0.043 | 1.6 | 0.0089 J | 0.9 J | 7.7 | | | | | | | |
| 5/15/2012 | XX | GW304B1I9 | 0.005 U | 9.9 | | 0.035 | 1.1 | 0.01 U | 1 U | 4.5 | | | | | | | |
| 8/15/2012 | XX | GW304B202 | 0.005 U | 23 | | 0.035 | 2.6 | 0.01 U | 1.9 | 12 | | | | | | | |
| 10/31/2012 | XX | GW304B21G | 0.005 U | 18 | | 0.078 | 1.9 | 0.013 | 1 U | 10 | | | | | | | |
| 5/21/2013 | XX | GW304B23A | 0.005 U | 11 | | 0.01 U | 1.2 | 0.04 | 1 U | 6.7 | | | | | | | |
| 7/25/2013 | XX | GW304B254 | 0.005 U | 14 | | 0.034 | 1.5 | 0.01 U | 1 U | 9.3 | | | | | | | |
| 10/2/2013 | XX | GW304B26I | 0.005 U | 12 | | 0.01 U | 1.4 | 0.01 U | 1 U | 8.6 | | | | | | | |
| 6/4/2014 | XX | GW304B28C | 0.008 U | 12.6 | | 0.1 U | 1.42 | 0.0059 | 1 U | 9.13 | | | | | | | |
| 8/20/2014 | XX | GW304B2A6 | 0.008 U | 12.6 | | 0.127 | 1.3 | 0.0184 | 1 U | 8.88 | | | | | | | |
| 11/12/2014 | XX | GW304B2C0 | 0.008 U | 8.95 | | 0.197 | 1.02 | 0.0158 | 1 U | 6.15 | | | | | | | |
| 6/3/2015 | XX | GW304B2DG | 0.008 U | 6.78 | | 0.189 | 0.8 | 0.023 | 1 U | 4.15 | | | | | | | |
| 9/2/2015 | XX | GW304B2FB | 0.008 U | 12.2 | | 0.127 | 1.34 | 0.022 | 1 U | 9.19 | | | | | | | |
| 11/4/2015 | XX | GW304B2H5 | 0.008 U | 9.09 | | 0.1 U | 1.06 | 0.005 U | 1 U | 6.24 | | | | | | | |
| 6/16/2016 | XX | GW304B30F | 0.008 U | 9.69 | | 0.122 | 1.21 | 0.033 | 1 U | 7.47 | | | | | | | |
| 9/21/2016 | XX | GW304B329 | 0.008 U | 11 | | 0.312 | 1.37 | 0.034 | 1 U | 10.9 | | | | | | | |
| 11/8/2016 | XX | GW304B343 | 0.008 U | 18.1 | | 0.204 | 1.69 | 0.037 | 1 U | 12.7 | | | | | | | |
| 6/14/2017 | XX | GW304B35I | 0.008 U | 12.6 | | 0.1 U | 1.4 | 0.0295 | 1 U | 9.68 | | | | | | | |
| 8/29/2017 | XX | GW304B37C | 0.008 U | 9.5 | | 0.202 | 1 | 0.0647 | 1 U | 7.31 | | | | | | | |
| 11/14/2017 | XX | GW304B396 | 0.008 U | 13.1 | | 0.103 | 1.26 | 0.0242 | 1 U | 8.1 | | | | | | | |
| 6/21/2018 | XX | GW304B3B1 | 0.008 U | 12.4 | | 0.101 | 1.41 | 0.0304 | 1 U | 8.79 | | | | | | | |
| 8/15/2018 | XX | GW304B3DA | 0.008 U | 13.6 | | 0.206 | 1.51 | 0.169 | 1 U | 9.24 | | | | | | | |
| 11/30/2018 | XX | GW304B3E9 | 0.008 U | 6.34 | | 0.429 | 0.584 | 0.048 | 1 U | 1.89 | | | | | | | |
| 6/5/2019 | XX | GW304B3G4 | 0.008 U | 12.4 | | 0.1 U | 1.39 | 0.015 | 1 U | 8.54 | | | | | | | |
| 8/14/2019 | XX | GW304B3ID | 0.008 U | 14.2 | | 0.198 | 1.67 | 0.0337 | 1 U | 9.81 | | | | | | | |
| 10/24/2019 | XX | GW304B3JC | 0.008 U | 12.4 | | 0.952 | 1.66 | 0.108 | 1 U | 8.36 | | | | | | | |
| 6/17/2020 | XX | GW304B417 | 0.008 U | 13.6 | | 0.226 | 1.5 | 0.0709 | 1 U | 9.37 | | | | | | | |
| 8/5/2020 | XX | GW304B43G | 0.008 U | 16.6 | | 2.48 | 2.26 | 0.315 | 1.11 | 11 | | | | | | | |
| 10/22/2020 | XX | GW304B44F | 0.008 U | 7.68 | | 0.777 | 0.833 | 0.11 | 1 U | 3.15 | | | | | | | |
| 6/22/2021 | XX | GW304B46A | 0.008 U | 20.4 | | 0.334 | 2.39 | 0.0574 | 1 U | 10.8 | | | | | | | |
| 9/22/2021 | XX | GW304B485 | 0.008 U | 32.1 | | 1.22 | 3.68 | 0.154 | 1.2 | 14 | | | | | | | |
| **401A** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 401AXX36649 | | | | 0.047 | | 0.016 | 1.43 | 9.71 | | | | | | | |
| 8/10/2000 | XX | 401AXX36748 | | | | 0.027 | | 0.01 U | 1.46 | 9.47 | | | | | | | |
| 11/9/2000 | XX | 401AXX36839 | 0.09 | | | 0.044 | | 0.08 | 1.19 | 8.2 | | | | | | | |
| 5/17/2001 | XX | 401AXX37028 | 0.08 | | | 0.067 | | 0.01 U | 1.35 | 9.2 | | | | | | | |
| 8/1/2001 | XX | 401AXX37104 | 0.11 | | | 0.027 | | 0.01 U | 1.47 | 9.3 | | | | | | | |
| 10/24/2001 | XX | 401AXX37188 | 0.12 | | | 0.02 U | | 0.01 U | 1.72 | 9.5 | | | | | | | |
| 5/22/2002 | XX | 401AXX37398 | 0.13 | 14.9 | | 0.066 | 5.5 | 0.01 | 1.544 | 9.6 | | | | | | | |
| 7/30/2002 | XX | 401AXX37467 | 0.15 | 15.8 | | 0.023 | 4.9 | 0.01 U | 1.27 | 8.3 | | | | | | | |
| 10/22/2002 | XX | 401AXX37551 | 0.18 | 15.5 | | 0.039 | 5.4 | 0.01 U | 1.53 | 7.8 | | | | | | | |
| 6/25/2003 | XX | 401AXX37797 | 0.19 | 34 | | 0.01 U | 6 | 0.01 U | 1.7 | 8.6 | | | | | | | |
| 8/11/2003 | XX | 401AXX37844 | 0.18 | 31 | | 0.016 | 5.7 | 0.01 U | 1.5 | 8.1 | | | | | | | |
| 10/21/2003 | XX | 401AXX37915 | 0.19 | 33 | | 0.01 U | 6.2 | 0.01 U | 1.6 | 9 | | | | | | | |
| 5/10/2004 | XX | 401AXX38117 | 0.16 | 33 | | 0.022 | 6.3 | 0.01 U | 1.7 | 10 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(401A)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/29/2004 | XX | 401AXX38197 | 0.15 | 29 | | 0.017 | 5.6 | 0.01 U | 1.4 | 8.9 | | | | | | | |
| 10/21/2004 | XX | 401AXX38281 | 0.18 | 33 | | 0.048 | 6.2 | 0.01 U | 1.5 | 9.1 | | | | | | | |
| 5/9/2005 | XX | GW401A012 | 0.17 | 31 | | 0.01 U | 5.7 | 0.01 U | 1.7 | 9.1 | | | | | | | |
| 7/28/2005 | XX | GW401A02E | 0.2 | 40 | | 0.01 | 6.3 | 0.01 U | 1.8 | 10 | | | | | | | |
| 11/8/2005 | XX | GW401A046 | 0.2 | 36 | | 0.02 | 6.1 | 0.01 U | 1.7 | 9.8 | | | | | | | |
| 5/4/2006 | XX | GW401A092 | 0.18 | 36 | | 0.01 | 6.3 | 0.01 U | 1.7 | 10 | | | | | | | |
| 8/2/2006 | XX | GW401A07A | 0.2 | 32 | | 0.02 | 5.9 | 0.01 U | 1.7 | 9.8 | | | | | | | |
| 10/30/2006 | XX | GW401A05I | 0.23 | 33 | | 0.01 | 6.2 | 0.01 U | 2.1 | 10 | | | | | | | |
| 5/7/2007 | XX | GW401A0AE | 0.21 | 33 | | 0.01 U | 6.5 | 0.01 U | 1.8 | 10 | | | | | | | |
| 8/14/2007 | XX | GW401A0C7 | 0.18 | 27 | | 0.019 | 5 | 0.01 U | 1.8 | 8.4 | | | | | | | |
| 11/5/2007 | XX | GW401A0DJ | 0.29 | 42 | | 0.019 | 6.4 | 0.01 U | 2.1 | 11 | | | | | | | |
| 6/5/2008 | XX | GW401A0G7 | 0.22 | 34 | | 0.32 | 6.4 | 0.01 U | 2.3 | 9.9 | | | | | | | |
| 8/20/2008 | XX | GW401A0I7 | 0.19 | 34 | | 0.02 | 5.5 | 0.01 U | 1.9 | 8.1 | | | | | | | |
| 10/27/2008 | XX | GW401A0JF | 0.22 | 38 | | 0.01 | 6 | 0.01 U | 1.9 | 8.7 | | | | | | | |
| 5/13/2009 | XX | GW401A11F | 0.17 | 30 | | 0.018 | 5.6 | 0.01 U | 1.5 | 9.6 | | | | | | | |
| 8/13/2009 | XX | GW401A13F | 0.2 | 35 | | 0.035 | 5.9 | 0.01 U | 2 | 8.7 | | | | | | | |
| 10/28/2009 | XX | GW401A153 | 0.17 | 28 | | 0.01 U | 5.4 | 0.01 U | 1.4 | 8.6 | | | | | | | |
| 10/28/2009 | XD | SWDP4X15H | 0.17 | 27 | | 0.01 U | 5.4 | 0.01 U | 1.4 | 8.4 | | | | | | | |
| 6/3/2010 | XX | GW401A174 | 0.18 | 37 | | 0.01 U | 5.9 | 0.01 U | 2.1 | 9.1 | | | | | | | |
| 8/17/2010 | XX | GW401A195 | 0.19 | 28 | | 0.01 | 5.6 | 0.01 U | 1.7 | 8.8 | | | | | | | |
| 10/19/2010 | XX | GW401A1AD | 0.18 | 27 | | 0.018 | 6.1 | 0.012 | 1.5 | 9.2 | | | | | | | |
| 5/16/2011 | XX | GW401A1DE | 0.19 | 30 | | 0.01 U | 6.4 | 0.01 U | 2.2 | 9.3 | | | | | | | |
| 8/8/2011 | XX | GW401A1F5 | 0.12 | 22 | | 0.012 | 4.2 | 0.00039 | 1.1 | 6.6 | | | | | | | |
| 11/1/2011 | XX | GW401A1GG | 0.19 | 34 | | 0.012 | 6.7 | 0.0002 J | 2.3 | 10 | | | | | | | |
| 5/14/2012 | XX | GW401A1IA | 0.18 | 32 | | 0.011 | 6.5 | 0.01 U | 2.4 | 9.8 | | | | | | | |
| 8/14/2012 | XX | GW401A203 | 0.18 | 30 | | 0.01 U | 5.9 | 0.01 U | 2 | 9.7 | | | | | | | |
| 11/1/2012 | XX | GW401A21H | 0.19 | 32 | | 0.01 U | 7.3 | 0.01 U | 2.4 | 12 | | | | | | | |
| 5/21/2013 | XX | GW401A23B | 0.15 | 31 | | 0.01 U | 5.7 | 0.01 U | 2 | 8.7 | | | | | | | |
| 7/22/2013 | XX | GW401A255 | 0.16 | 32 | | 0.01 U | 5.8 | 0.01 U | 2 | 9.7 | | | | | | | |
| 9/30/2013 | XX | GW401A26J | 0.11 | 24 | | 0.01 U | 4.4 | 0.01 U | 1.3 | 7.1 | | | | | | | |
| 6/4/2014 | XX | GW401A28D | 0.164 | 33.7 | | 0.1 U | 6.96 | 0.005 U | 1.63 | 10.2 | | | | | | | |
| 8/19/2014 | XX | GW401A2A7 | 0.151 | 34.2 | | 0.171 | 6.65 | 0.0113 | 1.59 | 10 | | | | | | | |
| 11/11/2014 | XX | GW401A2C1 | 0.151 | 31.5 | | 0.238 | 6.59 | 0.01 | 1.59 | 9.63 | | | | | | | |
| 6/2/2015 | XX | GW401A2DH | 0.159 | 32 | | 0.359 | 6.91 | 0.014 | 1.6 | 9.84 | | | | | | | |
| 9/1/2015 | XX | GW401A2FC | 0.166 | 36.2 | | 0.1 U | 7.54 | 0.005 U | 1.74 | 11.6 | | | | | | | |
| 11/3/2015 | XX | GW401A2H6 | 0.167 | 35 | | 0.147 | 7.35 | 0.006 | 1.73 | 10.8 | | | | | | | |
| 6/14/2016 | XX | GW401A30G | 0.157 | 36.8 | | 0.1 U | 7.61 | 0.005 U | 1.9 | 11.3 | | | | | | | |
| 9/20/2016 | XX | GW401A32A | 0.164 | 36.6 | | 0.1 U | 7.43 | 0.005 U | 1.6 | 10.8 | | | | | | | |
| 11/9/2016 | XX | GW401A344 | 0.165 | 35.8 | | 0.307 | 7.24 | 0.008 | 1.8 | 11.5 | | | | | | | |
| 6/14/2017 | XX | GW401A35J | 0.159 | 35.8 | | 0.164 | 7.24 | 0.0073 | 1.76 | 10.5 | | | | | | | |
| 8/29/2017 | XX | GW401A37D | 0.158 | 36.3 | | 0.1 U | 7.11 | 0.0089 | 1.68 | 10.7 | | | | | | | |
| 11/14/2017 | XX | GW401A397 | 0.138 | 35.5 | | 0.1 U | 6.47 | 0.0099 | 1.6 | 9.87 | | | | | | | |
| 6/20/2018 | XX | GW401A3B2 | 0.131 | 37.9 | | 0.1 U | 6.69 | 0.005 U | 1.7 | 11.1 | | | | | | | |
| 8/15/2018 | XX | GW401A3DB | 0.144 | 35.5 | | 0.1 U | 7.37 | 0.0054 | 1.67 | 10.5 | | | | | | | |
| 11/30/2018 | XX | GW401A3EA | 0.144 | 36.6 | | 0.1 U | 7.04 | 0.005 U | 1.73 | 10.4 | | | | | | | |
| 6/5/2019 | XX | GW401A3G5 | 0.141 | 34.8 | | 0.1 U | 7.19 | 0.005 U | 1.7 | 10.1 | | | | | | | |
| 8/14/2019 | XX | GW401A3IE | 0.148 | 37.5 | | 0.1 U | 7.6 | 0.0055 | 1.78 | 11 | | | | | | | |
| 10/22/2019 | XX | GW401A3JD | 0.135 | 38.5 | | 0.1 U | 7.53 | 0.0053 | 1.71 | 10.5 | | | | | | | |
| 6/17/2020 | XX | GW401A418 | 0.138 | 36.2 | | 0.1 U | 7.21 | 0.005 U | 1.7 | 10.7 | | | | | | | |
| 8/4/2020 | XX | GW401A43H | 0.152 | | | 0.1 U | 8.08 | 0.005 U | 1.82 | 11.3 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (401A) Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/4/2020 | XX | GW401A43HR | | 38.6 | | | | | | | | | | | | | |
| 10/21/2020 | XX | GW401A44G | 0.15 | 40.7 | | 0.1 U | 8.18 | 0.005 U | 1.86 | 11.3 | | | | | | | |
| 6/23/2021 | XX | GW401A46B | 0.138 | 38 | | 0.1 U | 7.28 | 0.0053 | 1.71 | 10.4 | | | | | | | |
| 9/21/2021 | XX | GW401A486 | 0.142 | 35.8 | | 0.1 U | 7.75 | 0.0246 | 1.74 | 10.6 | | | | | | | |
| **401B** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 401BXX36649 | | | | 0.023 | | 0.135 | 1.44 | 12.24 | | | | | | | |
| 8/10/2000 | XX | 401BXX36748 | | | | 0.02 | | 0.22 | 1.51 | 12.4 | | | | | | | |
| 11/9/2000 | XX | 401BXX36839 | 0.008 U | | | 0.052 | | 0.35 | 1.34 | 11.5 | | | | | | | |
| 5/17/2001 | XX | 401BXX37028 | 0.008 U | | | 0.689 | | 0.32 | 1.53 | 11.8 | | | | | | | |
| 8/1/2001 | XX | 401BXX37104 | 0.008 U | | | 0.033 | | 0.24 | 1.56 | 12.9 | | | | | | | |
| 10/24/2001 | XX | 401BXX37188 | 0.008 U | | | 0.731 | | 0.35 | 1.65 | 12 | | | | | | | |
| 5/22/2002 | XX | 401BXX37398 | 0.01 U | 23.6 | | 0.119 | 6.4 | 0.32 | 1.544 | 12.6 | | | | | | | |
| 7/30/2002 | XX | 401BXX37467 | 0.01 U | 26.4 | | 0.02 U | 6.6 | 0.26 | 1.44 | 12.7 | | | | | | | |
| 10/22/2002 | XX | 401BXX37551 | 0.015 | 25 | | 0.027 | 6.2 | 0.4 | 1.55 | 10.8 | | | | | | | |
| 6/25/2003 | XX | 401BXX37797 | 0.005 U | 52 | | 0.01 U | 7 | 0.26 | 3.8 | 12 | | | | | | | |
| 8/11/2003 | XX | 401BXX37844 | 0.005 U | 47 | | 0.01 U | 6.8 | 0.26 | 1.7 | 12 | | | | | | | |
| 10/21/2003 | XX | 401BXX37915 | 0.005 U | 51 | | 0.01 U | 7.3 | 0.27 | 1.9 | 13 | | | | | | | |
| 5/10/2004 | XX | 401BXX38117 | 0.005 U | 51 | | 0.029 | 7.7 | 0.081 | 1.8 | 15 | | | | | | | |
| 7/29/2004 | XX | 401BXX38197 | 0.005 U | 46 | | 0.021 | 6.9 | 0.33 | 1.5 | 14 | | | | | | | |
| 10/21/2004 | XX | 401BXX38281 | 0.005 U | 52 | | 0.048 | 7.5 | 0.34 | 1.8 | 14 | | | | | | | |
| 5/9/2005 | XX | GW401B013 | 0.005 U | 51 | | 0.01 U | 7 | 0.14 | 1.8 | 13 | | | | | | | |
| 7/28/2005 | XX | GW401B02F | 0.005 U | 57 | | 0.01 | 7.2 | 0.27 | 2 | 14 | | | | | | | |
| 11/8/2005 | XX | GW401B047 | 0.005 U | 49 | | 0.02 | 6.2 | 0.22 | 1.7 | 12 | | | | | | | |
| 5/4/2006 | XX | GW401B093 | 0.005 U | 57 | | 0.01 U | 7.7 | 0.01 U | 2 | 16 | | | | | | | |
| 8/2/2006 | XX | GW401B07B | 0.005 U | 53 | | 0.02 | 7.2 | 0.26 | 2.3 | 15 | | | | | | | |
| 10/30/2006 | XX | GW401B05J | 0.005 U | 45 | | 0.01 U | 6.4 | 0.29 | 2 | 14 | | | | | | | |
| 5/7/2007 | XX | GW401B0AF | 0.005 U | 55 | | 0.01 U | 7.9 | 0.056 | 2 | 15 | | | | | | | |
| 8/14/2007 | XX | GW401B0C8 | 0.005 U | 51 | | 0.015 | 6.6 | 0.26 | 2.2 | 14 | | | | | | | |
| 11/5/2007 | XX | GW401B0E0 | 0.005 U | 70 | | 0.017 | 7.4 | 0.35 | 2.4 | 17 | | | | | | | |
| 6/5/2008 | XX | GW401B0G8 | 0.005 U | 52 | | 0.013 | 7.6 | 0.23 | 2.5 | 14 | | | | | | | |
| 8/20/2008 | XX | GW401B0I8 | 0.005 U | 54 | | 0.02 | 6.8 | 0.33 | 2.2 | 12 | | | | | | | |
| 10/27/2008 | XX | GW401B0JG | 0.005 U | 66 | | 0.01 U | 7.2 | 0.39 | 2.4 | 14 | | | | | | | |
| 5/13/2009 | XX | GW401B11G | 0.005 U | 49 | | 0.018 | 7.1 | 0.048 | 1.6 | 14 | | | | | | | |
| 8/13/2009 | XX | GW401B13G | 0.005 U | 61 | | 0.01 U | 7.1 | 0.29 | 2.3 | 13 | | | | | | | |
| 10/28/2009 | XX | GW401B154 | 0.005 U | 48 | | 0.011 | 7.1 | 0.34 | 1.7 | 14 | | | | | | | |
| 6/3/2010 | XX | GW401B175 | 0.005 U | 58 | | 0.01 U | 7 | 0.21 | 2.3 | 13 | | | | | | | |
| 8/17/2010 | XX | GW401B196 | 0.005 U | 54 | | 0.01 U | 7.1 | 0.38 | 2.1 | 14 | | | | | | | |
| 10/19/2010 | XX | GW401B1AE | 0.005 U | 46 | | 0.014 | 7.2 | 0.35 | 1.8 | 14 | | | | | | | |
| 5/16/2011 | XX | GW401B1DF | 0.005 U | 50 | | 0.01 U | 7.4 | 0.087 | 2.3 | 14 | | | | | | | |
| 8/8/2011 | XX | GW401B1F6 | 0.0016 U | 49 | | 0.027 | 7.2 | 0.54 | 2 | 14 | | | | | | | |
| 11/1/2011 | XX | GW401B1GH | 0.0016 U | 52 | | 0.005 J | 7.6 | 0.47 | 2.7 | 15 | | | | | | | |
| 5/14/2012 | XX | GW401B1IB | 0.005 U | 52 | | 0.01 U | 7.8 | 0.041 | 2.7 | 14 | | | | | | | |
| 8/14/2012 | XX | GW401B204 | 0.005 U | 46 | | 0.025 | 7.1 | 0.36 | 2.4 | 14 | | | | | | | |
| 11/1/2012 | XX | GW401B21I | 0.005 U | 54 | | 0.012 | 8.7 | 0.48 | 3.1 | 17 | | | | | | | |
| 5/21/2013 | XX | GW401B23C | 0.005 U | 51 | | 0.031 | 6.9 | 0.086 | 2.5 | 13 | | | | | | | |
| 7/22/2013 | XX | GW401B256 | 0.005 U | 53 | | 0.01 U | 7.2 | 0.3 | 2.7 | 14 | | | | | | | |
| 9/30/2013 | XX | GW401B270 | 0.005 U | 54 | | 0.01 U | 7.4 | 0.48 | 2.6 | 15 | | | | | | | |
| 6/4/2014 | XX | GW401B28E | 0.008 U | 56.8 | | 0.1 U | 8.42 | 0.0641 | 1.81 | 14.7 | | | | | | | |
| 8/19/2014 | XX | GW401B2A8 | 0.008 U | 56.5 | | 0.151 | 8.16 | 0.509 | 1.88 | 14.4 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (401B) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 11/11/2014 | XX | GW401B2C2 | 0.008 U | 50.1 | | 0.164 | 7.71 | 0.399 | 1.87 | 14.2 | | | | | | | |
| 6/2/2015 | XX | GW401B2DI | 0.008 U | 52.2 | | 0.373 | 8.45 | 0.278 | 1.79 | 13.4 | | | | | | | |
| 9/1/2015 | XX | GW401B2FD | 0.008 U | 60.2 | | 0.1 U | 9.36 | 0.488 | 2.06 | 16.6 | | | | | | | |
| 11/3/2015 | XX | GW401B2H7 | 0.008 U | 59.6 | | 0.1 U | 9.06 | 0.507 | 2.07 | 15.6 | | | | | | | |
| 6/14/2016 | XX | GW401B30H | 0.008 U | 61.3 | | 0.112 | 9.16 | 0.185 | 2.1 | 15.6 | | | | | | | |
| 9/20/2016 | XX | GW401B32B | 0.008 U | 61.1 | | 0.1 U | 9.37 | 0.39 | 1.8 | 15.4 | | | | | | | |
| 11/9/2016 | XX | GW401B345 | 0.008 U | 59.1 | | 0.1 U | 9.08 | 0.401 | 2 | 14.5 | | | | | | | |
| 6/14/2017 | XX | GW401B360 | 0.008 U | 63.1 | | 0.1 U | 9.68 | 0.24 | 2 | 14.7 | | | | | | | |
| 8/29/2017 | XX | GW401B37E | 0.008 U | 58.7 | | 0.1 U | 8.83 | 0.366 | 1.85 | 14 | | | | | | | |
| 11/14/2017 | XX | GW401B398 | 0.008 U | 58.3 | | 0.138 | 8.37 | 0.534 | 1.9 | 13.5 | | | | | | | |
| 6/20/2018 | XX | GW401B3B3 | 0.008 U | 69.8 | | 0.1 U | 8.59 | 0.162 | 2.05 | 15.8 | | | | | | | |
| 8/15/2018 | XX | GW401B3DC | 0.008 U | 63.8 | | 0.1 U | 9.95 | 0.429 | 2.01 | 14.7 | | | | | | | |
| 11/30/2018 | XX | GW401B3EB | 0.008 U | 64.2 | | 0.1 U | 9.19 | 0.0642 | 2.08 | 14.3 | | | | | | | |
| 6/5/2019 | XX | GW401B3G6 | 0.008 U | 61.6 | | 0.1 U | 9.64 | 0.085 | 1.88 | 13.4 | | | | | | | |
| 8/14/2019 | XX | GW401B3IF | 0.008 U | 61.8 | | 0.1 U | 9.59 | 0.383 | 1.91 | 13.8 | | | | | | | |
| 10/22/2019 | XX | GW401B3JE | 0.008 U | 65.1 | | 0.1 U | 10.3 | 0.606 | 2.11 | 15.2 | | | | | | | |
| 6/17/2020 | XX | GW401B419 | 0.008 U | 64.8 | | 0.1 U | 9.72 | 0.23 | 1.96 | 14.7 | | | | | | | |
| 8/4/2020 | XX | GW401B43I | 0.008 U | | | 0.1 U | 10 | 0.279 | 1.92 | 14.1 | | | | | | | |
| 8/4/2020 | XX | GW401B43IR | | 67.4 | | | | | | | | | | | | | |
| 10/21/2020 | XX | GW401B44H | 0.008 U | 69.3 | | 0.136 | 10.8 | 0.873 | 2.23 | 15.4 | | | | | | | |
| 6/23/2021 | XX | GW401B46C | 0.008 U | 66 | | 0.1 U | 9.65 | 0.27 | 1.96 | 13.9 | | | | | | | |
| 9/21/2021 | XX | GW401B487 | 0.008 U | 62 | | 0.1 U | 10.3 | 0.416 | 2.03 | 14.1 | | | | | | | |
| **402A** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 402AXX36649 | | | | 0.02 U | | 0.063 | 0.58 | 6.98 | | | | | | | |
| 8/10/2000 | XX | 402AXX36748 | | | | 0.053 | | 0.13 | 0.59 | 6.63 | | | | | | | |
| 11/9/2000 | XX | 402AXX36839 | 0.008 U | | | 0.07 | | 0.08 | 0.53 | 6.4 | | | | | | | |
| 5/17/2001 | XX | 402AXX37028 | 0.008 U | | | 0.077 | | 0.11 | 0.53 | 6.5 | | | | | | | |
| 8/1/2001 | XX | 402AXX37104 | 0.008 U | | | 0.102 | | 0.11 | 0.58 | 6.7 | | | | | | | |
| 10/24/2001 | XX | 402AXX37188 | 0.008 U | | | 0.117 | | 0.1 | 0.67 | 6.9 | | | | | | | |
| 5/22/2002 | XX | 402AXX37398 | 0.019 | 14.3 | | 0.06 | 6.8 | 0.04 | 0.591 | 6.6 | | | | | | | |
| 7/30/2002 | XX | 402AXX37467 | 0.01 U | 16.2 | | 0.039 | 6.9 | 0.12 | 0.53 | 6.5 | | | | | | | |
| 10/22/2002 | XX | 402AXX37551 | 0.015 | 15.4 | | 0.086 | 5.6 | 0.13 | 0.76 | 9.7 | | | | | | | |
| 6/25/2003 | XX | 402AXX37797 | 0.005 U | 32 | | 0.027 | 8 | 0.24 | 1 U | 5.9 | | | | | | | |
| 8/11/2003 | XX | 402AXX37844 | 0.005 U | 29 | | 0.036 | 7.4 | 0.32 | 1 U | 5.8 | | | | | | | |
| 10/22/2003 | XX | 402AXX37916 | 0.005 U | 28 | | 0.085 | 7.1 | 0.22 | 1 U | 5.6 | | | | | | | |
| 5/11/2004 | XX | 402AXX38118 | 0.005 | 32 | | 0.096 | 8.6 | 0.096 | 1 U | 7.3 | | | | | | | |
| 7/29/2004 | XX | 402AXX38197 | 0.005 U | 28 | | 0.069 | 7.6 | 0.09 | 1 U | 6.7 | | | | | | | |
| 10/26/2004 | XX | 402AXX38286 | 0.005 U | 31 | | 0.099 | 8.2 | 0.1 | 1 U | 6.1 | | | | | | | |
| 5/9/2005 | XX | GW402A014 | 0.005 U | 31 | | 0.08 | 7.5 | 0.09 | 1 U | 6.5 | | | | | | | |
| 8/1/2005 | XX | GW402A02G | 0.005 | 35 | 0.003 U | 0.08 | 7.5 | 0.09 | 1 U | 6.9 | | | | | | | |
| 11/9/2005 | XX | GW402A048 | 0.005 | 36 | | 0.08 | 8.2 | 0.08 | 1 U | 6 | | | | | | | |
| 5/4/2006 | XX | GW402A094 | 0.005 | 36 | | 0.06 | 8.3 | 0.1 | 1 U | 7.5 | | | | | | | |
| 8/2/2006 | XX | GW402A07C | 0.005 U | 31 | | 0.05 | 7.7 | 0.07 | 1 U | 7 | | | | | | | |
| 10/30/2006 | XX | GW402A060 | 0.005 | 33 | | 0.07 | 8.4 | 0.1 | 1 U | 7.6 | | | | | | | |
| 5/7/2007 | XX | GW402A0AG | 0.007 | 33 | | 0.14 | 8.4 | 0.12 | 0.7 | 7.2 | | | | | | | |
| 8/14/2007 | XX | GW402A0C9 | 0.005 U | 28 | | 0.074 | 7 | 0.048 | 1 U | 6.5 | | | | | | | |
| 11/5/2007 | XX | GW402A0E1 | 0.005 U | 48 | | 0.11 | 8.5 | 0.11 | 1 U | 7.6 | | | | | | | |
| 6/5/2008 | XX | GW402A0G9 | 0.0052 | 33 | | 0.15 | 8.6 | 0.14 | 1 U | 7.3 | | | | | | | |
| 8/20/2008 | XX | GW402A0I9 | 0.005 U | 35 | | 0.1 | 7.2 | 0.09 | 1 U | 5.9 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (402A) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 10/27/2008 | XX | GW402A0JH | 0.005 U | 38 | | 0.13 | 8.7 | 0.13 | 1 U | 6.9 | | | | | | | |
| 5/13/2009 | XX | GW402A11H | 0.005 U | 30 | | 0.16 | 7.9 | 0.16 | 1 U | 7.2 | | | | | | | |
| 5/13/2009 | XD | LTDP4X10D | 0.005 U | 30 | | 0.16 | 7.9 | 0.15 | 1 U | 7.2 | | | | | | | |
| 8/13/2009 | XX | GW402A13H | 0.005 U | 39 | | 0.12 | 7.8 | 0.1 | 1 U | 6.4 | | | | | | | |
| 10/28/2009 | XX | GW402A155 | 0.005 U | 28 | | 0.11 | 7.2 | 0.1 | 1 U | 6.4 | | | | | | | |
| 6/3/2010 | XX | GW402A176 | 0.005 U | 33 | | 0.18 | 8.1 | 0.11 | 1 U | 6.9 | | | | | | | |
| 8/17/2010 | XX | GW402A197 | 0.005 U | 30 | | 0.092 | 8.2 | 0.1 | 1 U | 7.1 | | | | | | | |
| 10/19/2010 | XX | GW402A1AF | 0.005 U | 30 | | 0.079 | 9 | 0.12 | 1 U | 7.2 | | | | | | | |
| 5/16/2011 | XX | GW402A1DG | 0.005 U | 34 | | 0.14 | 9 | 0.19 | 1 | 7.6 | | | | | | | |
| 8/8/2011 | XX | GW402A1F7 | 0.0037 | 32 | | 0.098 | 8 | 0.12 | 0.71 | 7 | | | | | | | |
| 11/1/2011 | XX | GW402A1GI | 0.0035 J | 34 | | 0.088 | 8.9 | 0.13 | 0.83 J | 7.2 | | | | | | | |
| 5/16/2012 | XX | GW402A1IC | 0.005 U | 34 | | 0.1 | 9.6 | 0.14 | 1 U | 7.9 | | | | | | | |
| 8/15/2012 | XX | GW402A205 | 0.005 U | 33 | | 0.078 | 9.2 | 0.14 | 1 | 7.6 | | | | | | | |
| 10/31/2012 | XX | GW402A21J | 0.0056 | 37 | | 0.22 | 11 | 0.15 | 1 | 8.4 | | | | | | | |
| 5/20/2013 | XX | GW402A23D | 0.005 U | 30 | | 0.062 | 8.1 | 0.1 | 1 U | 7.1 | | | | | | | |
| 7/22/2013 | XX | GW402A257 | 0.005 U | 36 | | 0.08 | 9.2 | 0.13 | 1 | 7.8 | | | | | | | |
| 9/30/2013 | XX | GW402A271 | 0.005 U | 38 | | 0.089 | 9.6 | 0.14 | 1 U | 7.8 | | | | | | | |
| 6/4/2014 | XX | GW402A28F | 0.008 U | 42.5 | | 0.127 | 12.4 | 0.144 | 1 U | 8.49 | | | | | | | |
| 8/19/2014 | XX | GW402A2A9 | 0.008 U | 41.9 | | 0.143 | 10.7 | 0.148 | 1 U | 8.06 | | | | | | | |
| 11/11/2014 | XX | GW402A2C3 | 0.008 U | 35.8 | | 0.136 | 10 | 0.128 | 1 U | 7.67 | | | | | | | |
| 6/4/2015 | XX | GW402A2DJ | 0.008 U | 39.2 | | 0.159 | 11.2 | 0.149 | 1 U | 7.85 | | | | | | | |
| 9/1/2015 | XX | GW402A2FE | 0.008 U | 42.4 | | 0.1 U | 11.8 | 0.143 | 1 U | 9.04 | | | | | | | |
| 11/3/2015 | XX | GW402A2H8 | 0.008 U | 41.1 | | 0.1 U | 11.6 | 0.15 | 1 U | 8.48 | | | | | | | |
| 6/14/2016 | XX | GW402A30I | 0.008 U | 44.6 | | 0.119 | 12.2 | 0.152 | 1 U | 8.98 | | | | | | | |
| 9/20/2016 | XX | GW402A32C | 0.008 U | 47.2 | | 0.119 | 12.8 | 0.164 | 1 U | 9 | | | | | | | |
| 11/9/2016 | XX | GW402A346 | 0.008 U | 50.7 | | 0.138 | 13 | 0.189 | 1 U | 9.33 | | | | | | | |
| 6/14/2017 | XX | GW402A361 | 0.008 U | 46.1 | | 0.121 | 12.5 | 0.166 | 1 U | 9.04 | | | | | | | |
| 8/29/2017 | XX | GW402A37F | 0.008 U | 47.8 | | 0.116 | 12.7 | 0.167 | 1 U | 9.09 | | | | | | | |
| 11/15/2017 | XX | GW402A399 | 0.008 U | 46.6 | | 0.121 | 12.5 | 0.159 | 1 U | 8.89 | | | | | | | |
| 6/20/2018 | XX | GW402A3B4 | 0.008 U | 51.9 | | 0.12 | 12.8 | 0.17 | 1 U | 9.52 | | | | | | | |
| 8/15/2018 | XX | GW402A3DD | 0.008 U | 47.2 | | 0.102 | 13.2 | 0.161 | 1 U | 8.86 | | | | | | | |
| 11/28/2018 | XX | GW402A3EC | 0.008 U | 47 | | 0.122 | 12.7 | 0.161 | 1 U | 8.99 | | | | | | | |
| 6/5/2019 | XX | GW402A3G7 | 0.008 U | 50.5 | | 0.143 | 14 | 0.176 | 1 U | 9.19 | | | | | | | |
| 8/13/2019 | XX | GW402A3IG | 0.008 U | 48.4 | | 0.228 | 14.4 | 0.175 | 1 U | 9.38 | | | | | | | |
| 10/22/2019 | XX | GW402A3JF | 0.008 U | 48.4 | | 0.12 | 13.6 | 0.164 | 1 U | 9.16 | | | | | | | |
| 6/17/2020 | XX | GW402A41A | 0.008 U | 49.6 | | 0.124 | 13 | 0.166 | 1 U | 9.52 | | | | | | | |
| 8/4/2020 | XX | GW402A43J | 0.008 U | | | 0.139 | 15 | 0.178 | 1 U | 9.71 | | | | | | | |
| 8/4/2020 | XX | GW402A43JR | | 57.7 | | | | | | | | | | | | | |
| 10/21/2020 | XX | GW402A44I | 0.008 U | 55.5 | | 0.137 | 15.8 | 0.186 | 1 U | 9.86 | | | | | | | |
| 6/23/2021 | XX | GW402A46D | 0.008 U | 58.9 | | 0.322 | 15.6 | 0.201 | 1 U | 10 | | | | | | | |
| 9/21/2021 | XX | GW402A488 | 0.008 U | 54.8 | | 0.175 | 16.1 | 0.179 | 1 U | 9.94 | | | | | | | |
| **402B** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | 402BXX36649 | | | | 0.02 U | | 1.79 | 3.43 | 56.98 | | | | | | | |
| 8/10/2000 | XX | 402BXX36748 | | | | 0.078 | | 0.18 | 4.48 | 84.14 | | | | | | | |
| 11/9/2000 | XX | 402BXX36839 | 0.008 U | | | 0.073 | | 1.54 | 10.85 | 65.2 | | | | | | | |
| 5/17/2001 | XX | 402BXX37028 | 0.008 U | | | 0.106 | | 0.07 | 3.57 | 74.4 | | | | | | | |
| 8/1/2001 | XX | 402BXX37104 | 0.008 U | | | 0.059 | | 0.09 | 4.42 | 79.2 | | | | | | | |
| 10/24/2001 | XX | 402BXX37188 | 0.008 U | | | 0.042 | | 2.36 | 21.6 | 76.5 | | | | | | | |
| 5/22/2002 | XX | 402BXX37398 | 0.01 U | 266.8 | | 0.047 | 71 | 0.28 | 6.175 | 62.1 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(402B)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L |
|---|---|---|---|---|---|---|---|---|---|---|
| 8/7/2002 | XX | 402BXX37475 | 0.01 U | 214.2 | 0.01 U | 0.032 | 80.6 | 2.07 | 22 | 59.2 |
| 10/24/2002 | XX | 402BXX37553 | 0.044 | 235 | 0.01 U | 0.062 | 85.2 | 0.83 | 16.2 | 53.8 |
| 6/25/2003 | XX | 402BXX37797 | 0.005 U | 230 | 0.003 U | 0.023 | 84 | 1.3 | 17 | 46 |
| 8/11/2003 | XX | 402BXX37844 | 0.005 U | 190 | 0.019 | 0.024 | 88 | 2.9 | 33 | 54 |
| 10/22/2003 | XX | 402BXX37916 | 0.005 U | 200 | 0.003 U | 0.033 | 98 | 3 | 35 | 49 |
| 5/11/2004 | XX | 402BXX38118 | 0.005 U | 160 | 0.007 | 0.0879 | 67 | 1.1 | 15 | 41 |
| 8/2/2004 | XX | 402BXX38201 | 0.005 U | 160 | 0.0083 | 0.063 | 75 | 2.1 | 27 | 44 |
| 10/26/2004 | XX | 402BXX38286 | 0.005 U | 190 | 0.003 U | 0.27 | 85 | 1.6 | 17 | 52 |
| 5/9/2005 | XX | GW402B015 | 0.005 U | 150 | 0.003 U | 0.02 | 65 | 0.67 | 13 | 36 |
| 8/1/2005 | XX | GW402B02H | 0.005 U | 200 | 0.003 U | 0.03 | 90 | 0.16 | 7.3 | 57 |
| 11/9/2005 | XX | GW402B049 | 0.005 U | 220 | 0.003 U | 0.01 | 98 | 0.14 | 5.6 | 60 |
| 5/5/2006 | XX | GW402B095 | 0.005 U | 170 | 0.004 B | 0.02 | 81 | 1.1 | 15 | 47 |
| 8/2/2006 | XX | GW402B07D | 0.005 U | 200 | 0.003 U | 0.03 | 78 | 0.68 | 6.3 | 52 |
| 10/30/2006 | XX | GW402B061 | 0.005 U | 140 | 0.003 U | 0.02 | 64 | 1.4 | 23 | 37 |
| 5/7/2007 | XX | GW402B0AH | 0.005 U | 150 | | 0.025 | 68 | 1.5 | 10 | 38 |
| 8/14/2007 | XX | GW402B0CA | 0.005 U | 170 | | 0.03 | 72 | 0.18 | 6.1 | 47 |
| 11/5/2007 | XX | GW402B0E2 | 0.005 U | 160 | | 0.023 | 76 | 2 | 24 | 38 |
| 6/11/2008 | XX | GW402B0GA | 0.005 U | 170 | | 0.015 | 76 | 0.17 | 6.7 | 42 |
| 8/20/2008 | XX | GW402B0IA | 0.005 U | 180 | | 0.02 | 64 | 0.19 | 5.7 | 39 |
| 8/20/2008 | XD | GWDP4X0H5 | 0.005 U | 170 | | 0.02 | 68 | 0.2 | 5.8 | 41 |
| 10/27/2008 | XX | GW402B0JI | 0.005 U | 180 | | 0.02 | 86 | 0.85 | 12 | 42 |
| 5/13/2009 | XX | GW402B11I | 0.005 U | 160 | | 0.028 | 80 | 0.32 | 3.6 | 40 |
| 8/13/2009 | XX | GW402B13I | 0.005 U | 200 | | 0.015 | 100 | 0.23 | 5.6 | 50 |
| 8/13/2009 | XD | GWDP4X12D | 0.005 U | 180 | | 0.01 U | 100 | 0.21 | 5.6 | 50 |
| 10/28/2009 | XX | GW402B156 | 0.005 U | 120 | | 0.014 | 59 | 0.23 | 4.3 | 35 |
| 6/3/2010 | XX | GW402B177 | 0.005 U | 180 | | 0.017 | 82 | 0.81 | 6 | 36 |
| 8/17/2010 | XX | GW402B198 | 0.005 U | 140 | | 0.015 | 69 | 0.21 | 6.1 | 31 |
| 8/17/2010 | XD | GWDP4X183 | 0.005 U | 130 | | 0.014 | 64 | 0.23 | 5.8 | 30 |
| 10/19/2010 | XX | GW402B1AG | 0.005 U | 130 | | 0.033 | 60 | 0.17 | 5 | 33 |
| 5/16/2011 | XX | GW402B1DH | 0.005 U | 120 | | 0.015 | 62 | 0.33 | 9.2 | 26 |
| 8/8/2011 | XX | GW402B1F8 | 0.0016 U | 130 | | 0.012 | 64 | 0.19 | 6.3 | 32 |
| 11/1/2011 | XX | GW402B1GJ | 0.0016 U | 120 | | 0.014 J | 68 | 0.3 | 8.8 | 35 |
| 5/16/2012 | XX | GW402B1ID | 0.005 U | 110 | | 0.016 | 64 | 0.59 | 11 | 30 |
| 8/15/2012 | XX | GW402B206 | 0.005 U | 120 | | 0.012 | 38 | 0.35 | 9.7 | 33 |
| 10/31/2012 | XX | GW402B220 | 0.005 U | 130 | | 0.061 | 70 | 1.5 | 13 | 36 |
| 5/20/2013 | XX | GW402B23E | 0.005 U | 110 | | 0.011 | 58 | 0.34 | 8.2 | 26 |
| 7/22/2013 | XX | GW402B258 | 0.005 U | 130 | | 0.01 U | 58 | 0.3 | 8.7 | 29 |
| 9/30/2013 | XX | GW402B272 | 0.005 U | 130 | | 0.01 | 65 | 0.54 | 8.6 | 29 |
| 6/4/2014 | XX | GW402B28G | 0.008 U | 136 | | 0.1 U | 69.3 | 1.01 | 6.29 | 30.3 |
| 8/19/2014 | XX | GW402B2AA | 0.008 U | 137 | | 0.1 U | 66.2 | 0.513 | 8.46 | 29.5 |
| 11/11/2014 | XX | GW402B2C4 | 0.008 U | 124 | | 0.1 U | 64.7 | 0.418 | 8.18 | 29.3 |
| 6/4/2015 | XX | GW402B2E0 | 0.008 U | 121 | | 0.136 | 66.9 | 2.53 | 6.55 | 26.9 |
| 9/1/2015 | XX | GW402B2FF | 0.008 U | 143 | | 0.1 U | 80.5 | 0.625 | 10.8 | 34.1 |
| 11/3/2015 | XX | GW402B2H9 | 0.008 U | 119 | | 0.1 U | 68.7 | 1.63 | 13.4 | 27.6 |
| 6/14/2016 | XX | GW402B30J | 0.008 U | 132 | | 0.1 U | 71.7 | 0.656 | 7.9 | 29.1 |
| 9/20/2016 | XX | GW402B32D | 0.008 U | 139 | | 0.1 U | 68.4 | 0.69 | 10.7 | 29.3 |
| 11/9/2016 | XX | GW402B347 | 0.008 U | 138 | | 0.1 U | 70.9 | 0.454 | 11.9 | 30.9 |
| 6/14/2017 | XX | GW402B362 | 0.008 U | 135 | | 0.1 U | 75 | 0.824 | 9.28 | 28.6 |
| 8/29/2017 | XX | GW402B37G | 0.008 U | 126 | | 0.1 U | 65.1 | 0.58 | 10.4 | 27.4 |
| 11/15/2017 | XX | GW402B39A | 0.008 U | 125 | | 0.1 U | 68.6 | 0.789 | 10.9 | 27.6 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (402B) Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/20/2018 | XX | GW402B3B5 | 0.008 U | 138 | | 0.1 U | 66.9 | 2.48 | 10.2 | 28.4 | | | | | | | |
| 8/15/2018 | XX | GW402B3DE | 0.008 U | 121 | | 0.1 U | 68.8 | 0.481 | 11 | 25.6 | | | | | | | |
| 11/28/2018 | XX | GW402B3ED | 0.008 U | 128 | | 0.129 | 65.9 | 5.04 | 11.7 | 26.7 | | | | | | | |
| 6/5/2019 | XX | GW402B3G8 | 0.008 U | 124 | | 0.1 U | 67.8 | 0.452 | 8.42 | 24.5 | | | | | | | |
| 8/13/2019 | XX | GW402B3IH | 0.008 U | 117 | | 0.1 U | 68 | 0.891 | 11.9 | 25.6 | | | | | | | |
| 10/22/2019 | XX | GW402B3JG | 0.008 U | 123 | | 0.1 U | 68.3 | 1.32 | 13.4 | 26.7 | | | | | | | |
| 6/17/2020 | XX | GW402B41B | 0.008 U | 118 | | 0.1 U | 61.2 | 0.819 | 10.3 | 24.3 | | | | | | | |
| 8/4/2020 | XX | GW402B440 | 0.008 U | | | 0.1 U | 67.1 | 0.508 | 12.3 | 25.3 | | | | | | | |
| 8/4/2020 | XX | GW402B440R | | 133 | | | | | | | | | | | | | |
| 10/21/2020 | XX | GW402B44J | 0.008 U | 128 | | 0.102 | 69.4 | 1.33 | 14.8 | 26.4 | | | | | | | |
| 6/23/2021 | XX | GW402B46E | 0.008 U | 123 | | 0.274 | 62 | 2.31 | 12.2 | 24.3 | | | | | | | |
| 9/21/2021 | XX | GW402B489 | 0.008 U | 115 | | 0.133 | 64.7 | 1.83 | 14.3 | 24.8 | | | | | | | |
| **LDS** | | | | | | | | | | | | | | | | | |
| 6/10/2008 | XX | LDSXX39597 | 0.01 | 130 | | 3.2 | 38 | 6.2 | 1 U | 25 | | | | | | | |
| 8/19/2008 | XX | LDSXX39687 | 0.008 | 140 | | 5.4 | 38 | 7.7 | 18 | 22 | | | | | | | |
| 10/22/2008 | XX | LDSXX39736 | 0.006 | 190 | | 10 | 41 | 12 | 20 | 21 | | | | | | | |
| 5/7/2009 | XX | LDSXX39940 | 0.015 | 210 | | 21 | 83 | 14 | 66 | 33 | | | | | | | |
| 8/12/2009 | XX | LDSXX40037 | 0.018 | 150 | | 19 | 75 | 11 | 60 | 36 | | | | | | | |
| 10/27/2009 | XX | LDSXX40113 | 0.0092 | 160 | | 9.8 | 61 | 8.9 | 50 | 30 | | | | | | | |
| 6/7/2010 | XX | GWXXXX1B8 | 0.029 | 180 | | 24 | 83 | 8.2 | 93 | 35 | | | | | | | |
| 8/18/2010 | XX | GWXXXX1B9 | 0.034 | 140 | | 16 | 75 | 5.4 | 110 | 37 | | | | | | | |
| 10/21/2010 | XX | GWXXXX1BA | 0.021 | 130 | | 14 | 64 | 5.3 | 60 | 34 | | | | | | | |
| 5/18/2011 | XX | LTXXXX1EF | 0.013 | 110 | | 9.1 | 39 | 5.8 | 32 | 26 | | | | | | | |
| 8/10/2011 | XX | LTXXXX1G6 | 0.018 | 95 | | 6.4 | 31 | 4.6 | 23 | 21 | | | | | | | |
| 11/2/2011 | XX | LTXXXX1HH | 0.014 | 110 | | 6.8 | 37 | 5.2 | 27 | 25 | | | | | | | |
| 5/14/2012 | XX | LTXXXX1JB | 0.0062 | 170 | | 8.4 | 73 | 6.2 | 70 | 41 | | | | | | | |
| 8/14/2012 | XX | LTXXXX214 | 0.0061 | 29 | | 4.8 | 26 | 1.5 | 5.5 | 5.1 | | | | | | | |
| 10/30/2012 | XX | LTXXXX22I | 0.019 | 150 | | 6.2 | 67 | 5 | 73 | 39 | | | | | | | |
| 5/21/2013 | XX | LTXXXX24C | 0.01 | 140 | | 6.5 | 62 | 5.3 | 56 | 36 | | | | | | | |
| 7/25/2013 | XX | LTXXXX266 | 0.018 | 140 | | 6.2 | 56 | 5.2 | 58 | 36 | | | | | | | |
| 10/1/2013 | XX | LTXXXX280 | 0.017 | 150 | | 6.3 | 59 | 5.1 | 50 | 34 | | | | | | | |
| 6/5/2014 | XX | LTXXXX29E | 0.02 | 159 | | 5.91 | 82.6 | 4.53 | 89.8 | 44.1 | | | | | | | |
| 8/21/2014 | XX | LTXXXX2B8 | 0.01 | 106 | | 2.87 | 34.1 | 2.82 | 27.9 | 26.6 | | | | | | | |
| 11/13/2014 | XX | LTXXXX2D2 | 0.008 | 122 | | 3.05 | 30 | 1.71 | 17 | 27.3 | | | | | | | |
| 6/4/2015 | XX | LTXXXX2EI | 0.011 | 112 | | 5.41 | 34.1 | 3.66 | 20.7 | 27 | | | | | | | |
| 9/3/2015 | XX | LTXXXX2GD | 0.018 | 120 | | 5.98 | 33.1 | 3.95 | 23.4 | 29.6 | | | | | | | |
| 11/5/2015 | XX | LTXXXX2I7 | 0.011 | 123 | | 5.7 | 34.9 | 4.31 | 21.9 | 27.6 | | | | | | | |
| 6/16/2016 | XX | LTXXXX31H | 0.016 | 134 | | 5.33 | 39.5 | 4.5 | 27.8 | 28.7 | | | | | | | |
| 9/22/2016 | XX | LTXXXX33B | 0.018 | 128 | | 5.6 | 37.5 | 4.47 | 26.1 | 30.3 | | | | | | | |
| 11/10/2016 | XX | LTXXXX355 | 0.008 | 120 | | 5.64 | 34.9 | 4.34 | 23.3 | 26.9 | | | | | | | |
| 6/15/2017 | XX | LTXXXX370 | 0.0143 | 160 | | 5.21 | 63 | 5.55 | 57.2 | 37.9 | | | | | | | |
| 8/31/2017 | XX | LTXXXX38E | 0.016 | 140 | | 4.13 | 47.9 | 4.4 | 41.4 | 34.2 | | | | | | | |
| 11/16/2017 | XX | LTXXXX3A8 | 0.01 | 122 | | 4.08 | 48 | 3.96 | 35.4 | 29.6 | | | | | | | |
| 6/21/2018 | XX | LTXXXX3C3 | 0.018 | 143 | | 5.12 | 53.8 | 4.66 | 43.8 | 32 | | | | | | | |
| 8/16/2018 | XX | LTXXXX3CI | 0.017 | 138 | | 5.07 | 51.1 | 4.46 | 44 | 33 | | | | | | | |
| 11/29/2018 | XX | LTXXXX3FB | 0.011 | 146 | | 3.98 | 84.3 | 3.99 | 75.6 | 45 | | | | | | | |
| 6/6/2019 | XX | LTXXXX3H6 | 0.01 | 157 | | 5.06 | 87.9 | 5.46 | 70.3 | 41.1 | | | | | | | |
| 8/15/2019 | XX | LTXXXX3I1 | 0.015 | 144 | | 5.16 | 71 | 4.86 | 62.9 | 38.2 | | | | | | | |
| 10/24/2019 | XX | LTXXXX40E | 0.013 | 133 | | 7.9 | 48.7 | 3.76 | 36.6 | 33 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LDS) Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/18/2020 | XX | LTXXXX429 | 0.012 | 133 | | 5.82 | 48.3 | 4.34 | 39.4 | 125 | | | | | | | |
| 8/6/2020 | XX | LTXXXX434 | 0.017 | 142 | | 5.74 | 52.8 | 4.45 | 44.1 | 97 | | | | | | | |
| 10/22/2020 | XX | LTXXXX45H | 0.008 U | 137 | | 6.01 | 52.7 | 4.51 | 39.7 | 88.8 | | | | | | | |
| 6/24/2021 | XX | LTXXXX47C | 0.016 | 102 | | 6.16 | 31.1 | 3.55 | 66.2 | 42.2 | | | | | | | |
| 9/23/2021 | XX | LTXXXX497 | 0.008 | 132 | | 4.46 | 43.4 | 2.25 | 16.8 | 32.2 | | | | | | | |
| **LPD2** | | | | | | | | | | | | | | | | | |
| 5/19/2005 | XX | LTLPD2003 | 0.005 U | 31 | | 2.1 | 11 | 0.21 | 3 | 2.3 | | | | | | | |
| 8/2/2005 | XX | LTLPD201F | 0.005 U | 62 | | 1.8 | 61 | 0.67 | 10 | 9.8 | | | | | | | |
| 10/26/2005 | XX | LTLPD2037 | 0.005 U | 32 | | 8.7 | 12 | 3.1 | 3.4 | 2.3 | | | | | | | |
| 5/10/2006 | XX | LTLPD2083 | 0.005 U | 31 | | 0.47 | 9.3 | 0.15 | 2.6 | 2 | | | | | | | |
| 7/24/2006 | XX | LTLPD206B | 0.005 U | 28 | | 2.3 B | 10 | 0.53 | 2.7 | 2.5 | | | | | | | |
| 10/10/2006 | XX | LTLPD204J | 0.005 U | 50 | | 2 | 52 | 0.6 | 9 | 9.1 | | | | | | | |
| 5/21/2007 | XX | LTLPD209F | 0.005 U | 26 | | 0.59 | 9.3 | 0.15 | 3.2 | 2 | | | | | | | |
| 8/6/2007 | XX | LTLPD20B8 | 0.017 | 45 | | 5.6 | 60 | 0.06 | 10 | 12 | | | | | | | |
| 10/24/2007 | XX | LTLPD20D0 | 0.005 U | 22 | | 1.8 | 11 | 0.47 | 3.8 | 2.1 | | | | | | | |
| 5/28/2008 | XX | LTLPD20F8 | 0.005 U | 30 | | 1.4 | 16 | 0.45 | 3.6 | 2.9 | | | | | | | |
| 8/11/2008 | XX | LTLPD20H8 | 0.005 U | 32 | | 0.54 | 9.6 | 0.19 | 1.7 | 1.6 | | | | | | | |
| 10/15/2008 | XX | LTLPD20IG | 0.005 U | 35 | | 2.4 | 9.5 | 0.27 | 3.7 | 2.2 | | | | | | | |
| 5/6/2009 | XX | LTLPD210G | 0.005 U | 23 | | 0.77 | 7.9 | 0.11 | 2.2 | 1.5 | | | | | | | |
| 5/6/2009 | XD | GWDP2X10B | 0.005 U | 23 | | 0.77 | 7.8 | 0.11 | 2.3 | 1.5 | | | | | | | |
| 8/4/2009 | XX | LTLPD212G | 0.005 U | 23 | | 1.2 | 7 | 0.26 | 1.4 | 1.2 | | | | | | | |
| 10/19/2009 | XX | LTLPD2144 | 0.005 U | 22 | | 1.2 | 7.5 | 0.23 | 2.8 | 1.7 | | | | | | | |
| 10/19/2009 | XD | GWDP2X15F | 0.005 U | 23 | | 1.2 | 7.8 | 0.24 | 3 | 1.7 | | | | | | | |
| 5/25/2010 | XX | LTLPD2165 | 0.005 U | 45 | | 1.4 | 17 | 1 | 4 | 3 | | | | | | | |
| 8/2/2010 | XX | LTLPD2186 | 0.005 U | 19 | | 4.2 | 16 | 0.25 | 3.2 | 2.7 | | | | | | | |
| 10/12/2010 | XX | LTLPD219E | 0.005 U | 25 | | 2.6 | 8.3 | 0.7 | 3 | 1.5 | | | | | | | |
| 10/12/2010 | XD | GWDP2X1B5 | 0.005 U | 13 | | 1.4 | 4.4 | 0.38 | 1.6 | 1.2 | | | | | | | |
| 5/18/2011 | XX | LTXXXX1EE | 0.005 U | 13 | | 0.4 | 2.8 | 0.023 | 1.5 | 1 U | | | | | | | |
| 8/10/2011 | XX | LTXXXX1G5 | 0.01 | 36 | | 4.7 | 36 | 0.83 | 6.8 | 6.8 | | | | | | | |
| 11/2/2011 | XX | LTXXXX1HG | 0.0025 J | 40 | | 7.5 | 18 | 2 | 5.1 | 2.8 | | | | | | | |
| 5/14/2012 | XX | LTXXXX1JA | 0.005 U | 19 | | 0.53 | 4.6 | 0.055 | 1.8 | 1 | | | | | | | |
| 8/14/2012 | XX | LTXXXX213 | 0.023 | 130 | | 6.5 | 54 | 5.1 | 52 | 36 | | | | | | | |
| 10/30/2012 | XX | LTXXXX22H | 0.005 U | 36 | | 4.9 | 12 | 2 | 4.9 | 2.1 | | | | | | | |
| 5/21/2013 | XX | LTXXXX24B | 0.005 U | 12 | | 0.83 | 4.3 | 0.074 | 1.4 | 1 U | | | | | | | |
| 7/25/2013 | XX | LTXXXX265 | 0.005 U | 16 | | 1.4 | 7.2 | 0.29 | 2.2 | 1.6 | | | | | | | |
| 10/1/2013 | XX | LTXXXX27J | 0.005 U | 24 | | 3.4 | 6.7 | 0.43 | 2.5 | 1.3 | | | | | | | |
| 6/5/2014 | XX | LTXXXX29D | 0.008 U | 17.4 | | 1.3 | 5.74 | 0.277 | 1.62 | 1 U | | | | | | | |
| 8/21/2014 | XX | LTXXXX2B7 | 0.024 | 36.5 | | 9.6 | 31 | 1.38 | 6.58 | 5.18 | | | | | | | |
| 11/13/2014 | XX | LTXXXX2D1 | 0.008 | 35.2 | | 13 | 9.16 | 3.2 | 3.16 | 1.7 | | | | | | | |
| 6/4/2015 | XX | LTXXXX2EH | 0.008 U | 16.2 | | 1.23 | 3.82 | 0.09 | 1.61 | 1 U | | | | | | | |
| 9/3/2015 | XX | LTXXXX2GC | 0.008 U | 23.8 | | 1.76 | 12.3 | 0.261 | 3.86 | 2.39 | | | | | | | |
| 11/5/2015 | XX | LTXXXX2I6 | 0.009 | 37.4 | | 15.2 | 14 | 4.12 | 3.98 | 2.16 | | | | | | | |
| 6/16/2016 | XX | LTXXXX31G | 0.008 U | 46.1 | | 1.78 | 37.2 | 0.975 | 5.6 | 5.86 | | | | | | | |
| 9/22/2016 | XX | LTXXXX33A | D | D | | D | D | D | D | D | | | | | | | |
| 11/10/2016 | XX | LTXXXX354 | D | D | | D | D | D | D | D | | | | | | | |
| 6/15/2017 | XX | LTXXXX36J | 0.008 U | 21.5 | | 1.97 | 7.03 | 0.408 | 2.15 | 1.54 | | | | | | | |
| 8/31/2017 | XX | LTXXXX38D | 0.008 U | 41.8 | | 3.54 | 31.8 | 1.22 | 6.75 | 6.19 | | | | | | | |
| 11/16/2017 | XX | LTXXXX3A7 | 0.008 U | 38.1 | | 5.62 | 9.67 | 1.93 | 3.4 | 1.99 | | | | | | | |
| 6/21/2018 | XX | LTXXXX3C2 | 0.008 U | 32.6 | | 2.27 | 21.1 | 0.638 | 4.06 | 3.61 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(LPD2)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/16/2018 | XX | LTXXXX3CH | 0.008 U | 22.9 | | 0.792 | 12.2 | 0.245 | 3.3 | 2.21 | | | | | | | |
| 11/29/2018 | XX | LTXXXX3FA | 0.008 U | 39.2 | | 8.37 | 9.18 | 2.78 | 3.13 | 1.74 | | | | | | | |
| 6/6/2019 | XX | LTXXXX3H5 | 0.008 U | 14.8 | | 1.28 | 3.32 | 0.0706 | 1.15 | 1 U | | | | | | | |
| 8/15/2019 | XX | LTXXXX3I0 | 0.008 U | 39.9 | | 3.18 | 27.6 | 1.04 | 4.96 | 4.68 | | | | | | | |
| 10/24/2019 | XX | LTXXXX40D | 0.008 U | 23.6 | | 3.62 | 7.44 | 1.02 | 2.82 | 1.57 | | | | | | | |
| 6/18/2020 | XX | LTXXXX428 | 0.008 U | 41 | | 1.4 | 21.7 | 0.576 | 4.71 | 3.77 | | | | | | | |
| 8/6/2020 | XX | LTXXXX433 | 0.011 | 46.3 | | 13 | 44 | 1.32 | 7.67 | 10 | | | | | | | |
| 10/22/2020 | XX | LTXXXX45G | 0.008 U | 26.9 | | 0.193 | 5.6 | 0.534 | 2.69 | 1.21 | | | | | | | |
| 6/24/2021 | XX | LTXXXX47B | 0.008 U | 53.2 | | 2.94 | 27.1 | 1.23 | 5.55 | 4.37 | | | | | | | |
| 9/23/2021 | XX | LTXXXX496 | 0.008 U | 16.5 | | 0.302 | 8.14 | 0.0865 | 2.21 | 1.62 | | | | | | | |
| **ND** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | NDXX36649 | | | | D | | | | D | | | | | | | |
| 8/9/2000 | XX | NDXX36747 | | | | D | | | | D | | | | | | | |
| 11/8/2000 | XX | NDXX36838 | | | | D | | | | D | | | | | | | |
| 5/16/2001 | XX | NDXX37027 | D | | | D | | D | D | D | | | | | | | |
| 7/31/2001 | XX | NDXX37103 | D | | | D | | D | D | D | | | | | | | |
| 10/23/2001 | XX | NDXX37187 | D | | | D | | D | D | D | | | | | | | |
| 5/21/2002 | XX | NDXX37397 | D | D | | D | D | D | D | D | | | | | | | |
| 7/30/2002 | XX | NDXX37467 | D | D | | D | D | D | D | D | | | | | | | |
| 10/22/2002 | XX | NDXX37551 | D | D | | D | D | D | D | D | | | | | | | |
| 6/23/2003 | XX | NDXX37795 | D | D | | D | D | D | D | D | | | | | | | |
| 8/13/2003 | XX | NDXX37846 | D | D | | D | D | D | D | D | | | | | | | |
| 10/20/2003 | XX | NDXX37914 | D | D | | D | D | D | D | D | | | | | | | |
| 5/6/2004 | XX | NDXX38113 | D | D | | D | D | D | D | D | | | | | | | |
| 7/27/2004 | XX | NDXX38195 | D | D | | D | D | D | D | D | | | | | | | |
| 10/25/2004 | XX | NDXX38285 | D | D | | D | D | D | D | D | | | | | | | |
| 5/12/2005 | XX | SWNDXX016 | D | D | | D | D | D | D | D | | | | | | | |
| 7/25/2005 | XX | SWNDXX02I | D | D | | D | D | D | D | D | | | | | | | |
| 11/10/2005 | XX | SWNDXX04A | 0.005 U | 26 | | 0.64 | 3 | 0.04 | 4.4 | 1.3 | | | | | | | |
| 5/2/2006 | XX | SWNDXX096 | 0.005 U | 26 | | 3.5 | 3.4 | 0.26 | 6.2 | 2.1 | | | | | | | |
| 8/3/2006 | XX | SWNDXX07E | D | D | | D | D | D | D | D | | | | | | | |
| 10/18/2006 | XX | SWNDXX062 | D | D | | D | D | D | D | D | | | | | | | |
| 5/21/2007 | XX | SWNDXX0AI | D | D | | D | D | D | D | D | | | | | | | |
| 8/8/2007 | XX | SWNDXX0CB | D | D | | D | D | D | D | D | | | | | | | |
| 11/6/2007 | XX | SWNDXX0E3 | D | D | | D | D | D | D | D | | | | | | | |
| 6/11/2008 | XX | SWNDXX0GB | 0.005 U | 52 | | 0.26 | 4.9 | 0.041 | 7.1 | 2.4 | | | | | | | |
| 8/19/2008 | XX | SWNDXX0IB | D | D | | D | D | D | D | D | | | | | | | |
| 10/22/2008 | XX | SWNDXX0JJ | D | D | | D | D | D | D | D | | | | | | | |
| 5/18/2009 | XX | SWNDXX11J | D | D | | D | D | D | D | D | | | | | | | |
| 8/17/2009 | XX | SWNDXX13J | D | D | | D | D | D | D | D | | | | | | | |
| 10/29/2009 | XX | SWNDXX157 | D | D | | D | D | D | D | D | | | | | | | |
| 6/7/2010 | XX | SWNDXX178 | 0.005 U | 59 | | 0.053 | 2.6 | 0.021 | 3.8 | 1 | | | | | | | |
| 8/18/2010 | XX | SWNDXX199 | D | D | | D | D | D | D | D | | | | | | | |
| 10/21/2010 | XX | SWNDXX1AH | D | D | | D | D | D | D | D | | | | | | | |
| 5/18/2011 | XX | SWXXXX1E9 | 0.005 U | 30 | | 0.082 | 2.6 | 0.53 | 2.6 | 1.1 | | | | | | | |
| 8/10/2011 | XX | SWXXXX1G0 | D | D | | D | D | D | D | D | | | | | | | |
| 11/2/2011 | XX | SWXXXX1HB | D | D | | D | D | D | D | D | | | | | | | |
| 5/14/2012 | XX | SWXXXX1J5 | D | D | | D | D | D | D | D | | | | | | | |
| 8/14/2012 | XX | SWXXXX20I | F6 | F6 | | F6 | F6 | F6 | F6 | F6 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (ND) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 10/29/2012 | XX | SWXXXX22C | D | D | | D | D | D | D | D | | | | | | | |
| 5/21/2013 | XX | SWXXXX246 | D | D | | D | D | D | D | D | | | | | | | |
| 7/24/2013 | XX | SWXXXX260 | D | D | | D | D | D | D | D | | | | | | | |
| 10/1/2013 | XX | SWXXXX27E | D | D | | D | D | D | D | D | | | | | | | |
| 6/5/2014 | XX | SWXXXX298 | D | D | | D | D | D | D | D | | | | | | | |
| 8/21/2014 | XX | SWXXXX2B2 | D | D | | D | D | D | D | D | | | | | | | |
| 11/13/2014 | XX | SWXXXX2CG | D | D | | D | D | D | D | D | | | | | | | |
| 6/4/2015 | XX | SWXXXX2EC | D | D | | D | D | D | D | D | | | | | | | |
| 9/3/2015 | XX | SWXXXX2G7 | D | D | | D | D | D | D | D | | | | | | | |
| 11/5/2015 | XX | SWXXXX2I1 | I | I | | I | I | I | I | I | | | | | | | |
| 6/16/2016 | XX | SWXXXX31B | D | D | | D | D | D | D | D | | | | | | | |
| 9/22/2016 | XX | SWXXXX335 | D | D | | D | D | D | D | D | | | | | | | |
| 11/10/2016 | XX | SWXXXX34J | D | D | | D | D | D | D | D | | | | | | | |
| 6/15/2017 | XX | SWXXXX36E | D | D | | D | D | D | D | D | | | | | | | |
| 8/31/2017 | XX | SWXXXX388 | D | D | | D | D | D | D | D | | | | | | | |
| 11/16/2017 | XX | SWXXXX3A2 | D | D | | D | D | D | D | D | | | | | | | |
| 6/21/2018 | XX | SWXXXX3BH | D | D | | D | D | D | D | D | | | | | | | |
| 8/16/2018 | XX | SWXXXX3CC | D | D | | D | D | D | D | D | | | | | | | |
| 6/6/2019 | XX | SWXXXX3H0 | D | D | | D | D | D | D | D | | | | | | | |
| 8/15/2019 | XX | SWXXXX3HF | D | D | | D | D | D | D | D | | | | | | | |
| 10/24/2019 | XX | SWXXXX408 | I | I | | I | I | I | I | I | | | | | | | |
| 6/18/2020 | XX | SWXXXX423 | D | D | | D | D | D | D | D | | | | | | | |
| 8/6/2020 | XX | SWXXXX42I | D | D | | D | D | D | D | D | | | | | | | |
| 10/22/2020 | XX | SWXXXX45B | D | D | | D | D | D | D | D | | | | | | | |
| 6/24/2021 | XX | SWXXXX476 | D | D | | D | D | D | D | D | | | | | | | |
| 9/23/2021 | XX | SWXXXX491 | D | D | | D | D | D | D | D | | | | | | | |
| **PBF** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | PBFXX36649 | | | | 0.17 | | 0.057 | 0.84 | 2.73 | | | | | | | |
| 8/9/2000 | XX | PBFXX36747 | | | | 0.111 | | 0.06 | 2.28 | 18.94 | | | | | | | |
| 11/8/2000 | XX | PBFXX36838 | 0.008 U | | | 0.161 | | 0.02 | 0.7 | 3.6 | | | | | | | |
| 5/16/2001 | XX | PBFXX37027 | 0.008 U | | | 1.424 | | 2.53 | 2.49 | 22 | | | | | | | |
| 7/31/2001 | XX | PBFXX37103 | 0.008 U | | | 1.13 | | 1.12 | 1.25 | 6.1 | | | | | | | |
| 10/23/2001 | XX | PBFXX37187 | 0.008 U | | | 0.265 | | 0.69 | 2.32 | 19 | | | | | | | |
| 5/21/2002 | XX | PBFXX37397 | 0.01 U | 67.3 | | 5.39 | 10.3 | 2.12 | 2.356 | 19.1 | | | | | | | |
| 8/8/2002 | XX | PBFXX37476 | 0.01 U | 12.1 | 0.01 U | 2.35 | 3 | 1.53 | 0.7 | 4.4 | | | | | | | |
| 10/24/2002 | XX | PBFXX37553 | 0.01 U | 2.5 | 0.01 U | 0.216 | 2 | 0.02 | 0.69 | 2.9 | | | | | | | |
| 6/26/2003 | XX | PBFXX37798 | 0.005 U | 8 | 0.003 U | 0.67 | 2 | 0.33 | 1 U | 2.9 | | | | | | | |
| 8/13/2003 | XX | PBFXX37846 | 0.005 U | 10 | 0.012 | 0.82 | 2.7 | 0.29 | 1 U | 3.2 | | | | | | | |
| 10/23/2003 | XX | PBFXX37917 | 0.005 U | 12 | 0.003 U | 0.66 | 2.5 | 0.22 | 1.2 | 3.5 | | | | | | | |
| 5/6/2004 | XX | PBFXX38113 | 0.005 U | 7.8 | 0.003 U | 0.9 | 2.2 | 0.033 | 1 U | 1.5 | | | | | | | |
| 7/27/2004 | XX | PBFXX38195 | 0.005 U | 24 | 0.003 U | 1 | 3.2 | 1.4 | 1.3 | 5 | | | | | | | |
| 10/25/2004 | XX | PBFXX38285 | 0.005 U | 8.4 | 0.003 U | 0.23 | 2.3 | 0.088 | 1.1 | 1.9 | | | | | | | |
| 5/12/2005 | XX | SWPBFX017 | 0.005 U | 8.2 | 0.003 U | 0.51 | 2 | 0.14 | 1.5 | 1.9 | | | | | | | |
| 7/25/2005 | XX | SWPBFX02J | 0.005 U | 6.8 | 0.003 U | 1.3 | 2 | 0.82 | 1 U | 2 | | | | | | | |
| 11/10/2005 | XX | SWPBFX04B | 0.005 U | 6.5 | 0.009 | 0.25 | 1.8 | 0.04 | 1.6 | 1.9 | | | | | | | |
| 5/2/2006 | XX | SWPBFX097 | 0.005 U | 14 | 0.005 | 0.4 | 2.6 | 0.13 | 2.3 | 4.7 | | | | | | | |
| 8/3/2006 | XX | SWPBFX07F | 0.005 U | 9.4 | 0.003 U | 1.1 | 2.8 | 0.14 | 2.1 | 2.2 | | | | | | | |
| 10/18/2006 | XX | SWPBFX063 | 0.005 U | 11 | 0.003 U | 0.32 B | 2.6 | 0.3 | 2.1 | 2.6 | | | | | | | |
| 5/21/2007 | XX | SWPBFX0AJ | 0.005 U | 8.3 | 0.004 | 0.21 | 2.4 | 0.033 | 1.7 | 2.6 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (PBF) Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/8/2007 | XX | SWPBFX0CC | 0.005 U | 6 | 0.005 | 0.41 | 1.9 | 0.097 | 1 U | 1.9 | | | | | | | |
| 11/6/2007 | XX | SWPBFX0E4 | 0.005 U | 7.3 | 0.003 U | 0.3 | 1.8 | 0.06 | 1.5 | 2.4 | | | | | | | |
| 6/11/2008 | XX | SWPBFX0GC | 0.005 U | 44 | 0.0085 | 0.4 | 9.4 | 0.36 | 35 | 16 | | | | | | | |
| 8/19/2008 | XX | SWPBFX0IC | 0.005 U | 9.6 | 0.003 U | 0.45 | 2.5 | 0.15 | 2.1 | 2 | | | | | | | |
| 10/22/2008 | XX | SWPBFX100 | 0.005 U | 6.4 | 0.003 U | 0.36 | 2 | 0.12 | 1.1 | 1.7 | | | | | | | |
| 5/7/2009 | XX | SWPBFX120 | 0.005 U | 5.2 | | 0.43 | 1.4 | 0.28 | 1 U | 1.5 | | | | | | | |
| 8/12/2009 | XX | SWPBFX140 | 0.005 U | 24 | 0.003 U | 0.58 | 2.6 | 0.99 | 2.2 | 2.9 | | | | | | | |
| 10/27/2009 | XX | SWPBFX158 | 0.005 U | 10 | 0.003 U | 0.1 | 1.7 | 0.04 | 2.4 | 2.7 | | | | | | | |
| 6/7/2010 | XX | SWPBFX179 | 0.005 U | 14 | 0.001 U | 0.14 | 2 | 0.19 | 2.5 | 6.9 | | | | | | | |
| 8/18/2010 | XX | SWPBFX19A | 0.005 U | 3.6 | 0.001 U | 0.18 | 1.2 | 0.038 | 1 U | 1.4 | | | | | | | |
| 10/21/2010 | XX | SWPBFX1AI | 0.005 U | 4.7 | 0.003 U | 0.24 | 1.3 | 0.025 | 1 U | 1.6 | | | | | | | |
| 5/18/2011 | XX | SWXXXX1E8 | 0.005 U | 5.2 | 0.00029 J | 0.31 | 1.4 | 0.055 | 1 U | 2.2 | | | | | | | |
| 8/10/2011 | XX | SWXXXX1FJ | 0.0016 U | 4.1 | 0.00034 U | 0.21 | 1.5 | 0.05 | 0.43 | 1.5 | | | | | | | |
| 8/10/2011 | XD | LTDP3X1G9 | 0.0016 U | 4 | 0.00034 U | 0.2 | 1.4 | 0.048 | 0.42 | 1.4 | | | | | | | |
| 11/2/2011 | XX | SWXXXX1HA | 0.0016 U | 12 | 0.00028 U | 0.093 | 1.8 | 0.11 | 1.6 | 3.6 | | | | | | | |
| **PBFR** | | | | | | | | | | | | | | | | | |
| 5/14/2012 | XX | SWXXXX1J4 | 0.005 U | 11 | 0.003 U | 0.088 | 1.6 | 0.044 | 2 | 4.1 | | | | | | | |
| 8/14/2012 | XX | SWXXXX20H | 0.005 U | 12 | 0.0031 | 2.4 | 2.2 | 0.99 | 1.3 | 2.6 | | | | | | | |
| 10/29/2012 | XX | SWXXXX22B | 0.005 U | 15 | 0.003 U | 0.12 | 3.1 | 0.037 | 1.6 | 4.2 | | | | | | | |
| 10/29/2012 | XD | SWDP2X230 | 0.005 U | 14 | 0.003 U | 0.13 | 3.1 | 0.041 | 1.6 | 4.3 | | | | | | | |
| 5/21/2013 | XX | SWXXXX245 | 0.005 U | 5 | 0.003 U | 0.27 | 1.4 | 0.085 | 1 U | 1.3 | | | | | | | |
| 5/21/2013 | XD | SWDP2X24E | 0.005 U | 5 | 0.003 U | 0.27 | 1.4 | 0.086 | 1 U | 1.3 | | | | | | | |
| 7/24/2013 | XX | SWXXXX25J | 0.005 U | 4.4 | 0.003 U | 0.84 | 1.2 | 0.24 | 1 U | 1.2 | | | | | | | |
| 7/24/2013 | XD | SWDP2X268 | 0.005 U | 4.2 | 0.003 U | 0.44 | 1.2 | 0.079 | 1 U | 1.1 | | | | | | | |
| 10/1/2013 | XX | SWXXXX27D | 0.005 U | 5 | 0.003 U | 0.43 | 1.4 | 0.25 | 1 U | 1.5 | | | | | | | |
| 10/1/2013 | XD | SWDP3X282 | 0.005 U | 5.9 | 0.003 U | 0.27 | 1.6 | 0.064 | 1 U | 1.6 | | | | | | | |
| 6/5/2014 | XX | SWXXXX297 | 0.008 U | 5.12 | 0.025 U | 0.347 | 1.5 | 0.139 | 1 U | 1.58 | | | | | | | |
| 6/5/2014 | XD | SWDP2X29G | 0.008 U | 4.93 | 0.025 U | 0.461 | 1.47 | 0.132 | 1 U | 1.51 | | | | | | | |
| 8/21/2014 | XX | SWXXXX2B1 | 0.008 U | 5.22 | 0.025 U | 0.359 | 1.7 | 0.153 | 1 U | 1.6 | | | | | | | |
| 8/21/2014 | XD | SWDP2X2BA | 0.008 U | 5.15 | 0.025 U | 0.375 | 1.69 | 0.158 | 1 U | 1.64 | | | | | | | |
| 11/13/2014 | XX | SWXXXX2CF | 0.008 U | 6.54 | 0.025 U | 0.194 | 1.73 | 0.0262 | 1 U | 2.06 | | | | | | | |
| 11/13/2014 | XD | SWDP3X2D4 | 0.008 U | 6.41 | 0.025 U | 0.185 | 1.72 | 0.0244 | 1 U | 2.03 | | | | | | | |
| 6/4/2015 | XX | SWXXXX2EB | 0.008 U | 12.3 | 0.025 U | 0.941 | 1.56 | 0.948 | 1.45 | 4.76 | | | | | | | |
| 6/4/2015 | XD | SWDP2X2F0 | 0.008 U | 12.1 | 0.025 U | 0.21 | 1.49 | 0.652 | 1.44 | 4.9 | | | | | | | |
| 9/3/2015 | XX | SWXXXX2G6 | 0.008 U | 8.2 | 0.025 U | 0.558 | 2.06 | 0.73 | 1 U | 2.12 | | | | | | | |
| 9/3/2015 | XD | SWDP2X2GF | 0.008 U | 8.01 | 0.025 U | 0.415 | 2.03 | 0.531 | 1 U | 2.14 | | | | | | | |
| 11/5/2015 | XX | SWXXXX2I0 | 0.008 U | 7.18 | 0.025 U | 0.307 | 1.82 | 0.038 | 1 U | 2.1 | | | | | | | |
| 11/5/2015 | XD | SWDP3X2I9 | 0.008 U | 8.04 | 0.025 U | 0.28 | 1.74 | 0.052 | 1.05 | 2.48 | | | | | | | |
| 6/16/2016 | XD | SWDP2X31J | 0.008 U | 5.78 | 0.025 U | 0.267 | 1.78 | 0.073 | 1 U | 1.75 | | | | | | | |
| 6/16/2016 | XX | SWXXXX31A | 0.008 U | 5.81 | 0.025 U | 0.339 | 1.82 | 0.106 | 1 U | 1.81 | | | | | | | |
| 9/22/2016 | XD | SWDP2X33D | 0.008 U | 5.9 | 0.025 U | 0.341 | 1.95 | 0.125 | 1 U | 2.14 | | | | | | | |
| 9/22/2016 | XX | SWXXXX334 | 0.008 U | 5.69 | 0.025 U | 0.332 | 1.96 | 0.121 | 1 U | 2.08 | | | | | | | |
| 11/10/2016 | XD | SWDP3X357 | 0.008 U | 7 | 0.025 U | 0.188 | 2.08 | 0.02 | 1 U | 1.99 | | | | | | | |
| 11/10/2016 | XX | SWXXXX34I | 0.008 U | 6.89 | 0.025 U | 0.173 | 2.07 | 0.019 | 1 U | 2 | | | | | | | |
| 6/15/2017 | XD | SWDP2X372 | 0.008 U | 6.58 | 0.025 U | 0.248 | 1.77 | 0.0328 | 1 U | 1.65 | | | | | | | |
| 6/15/2017 | XX | SWXXXX36D | 0.008 U | 6.7 | 0.025 U | 0.253 | 1.8 | 0.0325 | 1 U | 1.69 | | | | | | | |
| 8/31/2017 | XD | SWDP2X38G | 0.008 U | 9.91 | 0.025 U | 1.33 | 2.48 | 1.13 | 1 U | 2.07 | | | | | | | |
| 8/31/2017 | XX | SWXXXX387 | 0.008 U | 8.62 | 0.025 U | 0.296 | 2.35 | 0.36 | 1 U | 2.09 | | | | | | | |
| 11/16/2017 | XD | SWDP3X3AA | 0.008 U | 10.8 | 0.025 U | 3.74 | 2.68 | 2.06 | 1.2 | 2.63 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (PBFR) Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/16/2017 | XX | SWXXXX3A1 | 0.008 U | 11 | 0.025 U | 3.15 | 2.5 | 1.62 | 1.3 | 2.73 | | | | | | | |
| 6/21/2018 | XD | SWDP2X3C5 | 0.008 U | 6.3 | 0.025 U | 0.346 | 1.71 | 0.0785 | 1 U | 1.68 | | | | | | | |
| 6/21/2018 | XX | SWXXXX3BG | 0.008 U | 6.3 | 0.025 U | 0.341 | 1.69 | 0.0789 | 1 U | 1.7 | | | | | | | |
| 8/16/2018 | XD | SWDP2X3D0 | 0.008 U | 6.35 | 0.025 U | 0.383 | 1.84 | 0.0957 | 1 U | 1.74 | | | | | | | |
| 8/16/2018 | XX | SWXXXX3CB | 0.008 U | 6.65 | 0.025 U | 0.369 | 1.89 | 0.0888 | 1 U | 1.8 | | | | | | | |
| 11/29/2018 | XD | SWDP3X3FD | 0.008 U | 52.5 | 0.025 U | 0.1 U | 4.6 | 0.0465 | 1.9 | 5.02 | | | | | | | |
| 11/29/2018 | XX | SWXXXX3F4 | 0.008 U | 50.3 | 0.025 U | 0.468 | 4.54 | 0.251 | 1.86 | 4.83 | | | | | | | |
| 6/6/2019 | XD | SWDP2X3H8 | 0.008 U | 7.98 | 0.025 U | 0.229 | 1.74 | 0.0502 | 1 U | 2.04 | | | | | | | |
| 6/6/2019 | XX | SWXXXX3GJ | 0.008 U | 14.7 | 0.025 U | 0.267 | 2.17 | 0.548 | 1.23 | 2.44 | | | | | | | |
| 8/15/2019 | XD | SWDP2X3I3 | 0.008 U | 6.23 | 0.025 U | 0.124 | 1.88 | 0.0361 | 1 U | 1.89 | | | | | | | |
| 8/15/2019 | XX | SWXXXX3HE | 0.008 U | 6.26 | 0.025 U | 0.133 | 1.88 | 0.0415 | 1 U | 1.9 | | | | | | | |
| 10/24/2019 | XD | SWDP3X40G | 0.008 U | 12 | 0.025 U | 0.266 | 1.96 | 0.0405 | 1.38 | 2.44 | | | | | | | |
| 10/24/2019 | XX | SWXXXX407 | 0.008 U | 11.8 | 0.025 U | 0.271 | 1.93 | 0.0402 | 1.4 | 2.44 | | | | | | | |
| 6/18/2020 | XD | SWDP2X42B | 0.008 U | 5.66 | 0.025 U | 0.426 | 1.64 | 0.164 | 1 U | 1.92 | | | | | | | |
| 6/18/2020 | XX | SWXXXX422 | 0.008 U | 5.52 | 0.025 U | 0.433 | 1.63 | 0.16 | 1 U | 1.89 | | | | | | | |
| 8/6/2020 | XD | SWDP2X436 | 0.008 U | 5.26 | 0.025 U | 0.278 | 1.87 | 0.054 | 1 U | 2.02 | | | | | | | |
| 8/6/2020 | XX | SWXXXX42H | 0.008 U | 5.01 | 0.025 U | 0.213 | 1.82 | 0.0319 | 1 U | 1.96 | | | | | | | |
| 10/22/2020 | XD | SWDP3X45J | 0.008 U | 16.2 | 0.025 U | 0.1 U | 2.27 | 0.0319 | 1.2 | 3.33 | | | | | | | |
| 10/22/2020 | XX | SWXXXX45A | 0.008 U | 16.5 | 0.025 U | 0.101 | 2.42 | 0.0353 | 1.24 | 3.42 | | | | | | | |
| 6/24/2021 | XX | SWXXXX475 | 0.008 U | 6.18 | 0.025 U | 0.264 | 1.91 | 0.0911 | 1 U | 2.01 | | | | | | | |
| 6/24/2021 | XD | SWDP2X47E | 0.008 U | 6.16 | 0.025 U | 0.468 | 1.91 | 0.188 | 1 U | 1.98 | | | | | | | |
| 9/23/2021 | XX | SWXXXX490 | 0.008 U | 6.91 | 0.025 U | 0.155 | 2.13 | 0.0982 | 1 U | 2.12 | | | | | | | |
| 9/23/2021 | XD | SWDP3X499 | 0.008 U | 6.86 | 0.025 U | 0.147 | 2.14 | 0.0994 | 1 U | 2.12 | | | | | | | |
| **PBFB** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | PBFBXX36649 | | | | 0.28 | | 0.054 | 0.55 | 1.53 | | | | | | | |
| 8/9/2000 | XX | PBFBXX36747 | | | | 2.592 | | 0.07 | 0.15 | 1.16 | | | | | | | |
| 11/8/2000 | XX | PBFBXX36838 | 0.008 U | | | 0.369 | | 0.09 | 0.48 | 1.9 | | | | | | | |
| 5/16/2001 | XX | PBFBXX37027 | 0.008 U | | | 0.502 | | 0.09 | 0.48 | 1.7 | | | | | | | |
| 7/31/2001 | XX | PBFBXX37103 | 0.008 U | | | 1.043 | | 0.23 | 0.2 | 1.7 | | | | | | | |
| 10/24/2001 | XX | PBFBXX37188 | 0.008 U | | | 0.413 | | 1.58 | 0.29 | 2.2 | | | | | | | |
| 5/21/2002 | XX | PBFBXX37397 | 0.01 U | 3.5 | | 0.388 | 1 | 0.21 | 0.146 | 2.2 | | | | | | | |
| 8/6/2002 | XX | PBFBXX37474 | 0.01 U | 6.7 | | 3.18 | 2 | 0.99 | 0.16 | 1.8 | | | | | | | |
| 10/24/2002 | XX | PBFBXX37553 | 0.01 U | 2.5 | | 0.392 | 1 | 0.15 | 0.18 | 2.1 | | | | | | | |
| 6/26/2003 | XX | PBFBXX37798 | 0.005 U | 5 | | 0.76 | 2 | 0.72 | 1 U | 2.1 | | | | | | | |
| 8/13/2003 | XX | PBFBXX37846 | 0.005 U | 5.4 | | 0.95 | 1.9 | 0.15 | 1 U | 2.2 | | | | | | | |
| 10/23/2003 | XX | PBFBXX37917 | 0.005 U | 4.6 | | 0.57 | 1 | 0.5 | 1 U | 1.5 | | | | | | | |
| 5/6/2004 | XX | PBFBXX38113 | 0.005 U | 6.6 | | 0.9 | 1.9 | 0.13 | 1 U | 1.6 | | | | | | | |
| 7/27/2004 | XX | PBFBXX38195 | 0.005 U | 4.7 | | 1.6 | 1.5 | 0.52 | 1 U | 1.9 | | | | | | | |
| 10/25/2004 | XX | PBFBXX38285 | 0.005 U | 5.8 | | 1.8 | 1.2 | 0.62 | 1 U | 1.6 | | | | | | | |
| 5/12/2005 | XX | SWPBFB018 | 0.005 U | 5.8 | | 0.53 | 1.6 | 0.12 | 1.2 | 1.5 | | | | | | | |
| 7/25/2005 | XX | SWPBFB030 | 0.005 U | 7.2 | | 1.6 | 2 | 0.52 | 1.4 | 2 | | | | | | | |
| 11/10/2005 | XX | SWPBFB04C | 0.005 U | 4.2 | | 0.71 | 1 U | 0.57 | 1 | 1.3 | | | | | | | |
| 5/2/2006 | XX | SWPBFB098 | 0.005 U | 4.4 | | 0.37 | 1.3 | 0.12 | 1.4 | 1.5 | | | | | | | |
| 8/3/2006 | XX | SWPBFB07G | 0.005 U | 6.4 | | 1.2 | 1.7 | 0.24 | 1 U | 1.6 | | | | | | | |
| 10/18/2006 | XX | SWPBFB064 | 0.005 U | 3.9 | | 0.74 B | 1 U | 0.72 | 1 U | 1.3 | | | | | | | |
| 5/21/2007 | XX | SWPBFB0B0 | 0.005 U | 3.7 | | 0.36 | 1 | 0.1 | 1 U | 1.5 | | | | | | | |
| 8/8/2007 | XX | SWPBFB0CD | 0.005 U | 7.1 | | 1.5 | 1.8 | 0.59 | 1 U | 1.6 | | | | | | | |
| 11/6/2007 | XX | SWPBFB0E5 | 0.005 U | 3.8 | | 0.34 | 1 U | 0.23 | 1 U | 1.5 | | | | | | | |
| 6/11/2008 | XX | SWPBFB0GD | 0.005 U | 4.8 | | 0.49 | 1 U | 0.13 | 1 U | 1.3 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (PBFB) | | | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | | | | | | | | | | | | | | | |
| 8/19/2008 | XX | SWPBFB0ID | 0.005 U | 6.4 | | 0.77 | 1.9 | 0.33 | 1 U | 1.4 | | | | | | | |
| 10/22/2008 | XX | SWPBFB101 | 0.005 U | 6.9 | | 0.97 | 1.5 | 0.64 | 1 U | 1.6 | | | | | | | |
| 5/7/2009 | XX | SWPBFB121 | 0.005 U | 3.7 | | 0.51 | 1.1 | 0.13 | 1 U | 1.1 | | | | | | | |
| 8/12/2009 | XX | SWPBFB141 | 0.005 U | 8.1 | | 2.2 | 1.4 | 1.4 | 1 U | 1.1 | | | | | | | |
| 10/27/2009 | XX | SWPBFB159 | 0.005 U | 4 | | 0.39 | 1 U | 0.051 | 1 U | 1.2 | | | | | | | |
| 6/7/2010 | XX | SWPBFB17A | 0.005 U | 3.2 | | 4 | 1 U | 0.29 | 1 U | 1 U | | | | | | | |
| 8/18/2010 | XX | SWPBFB19B | 0.005 U | 5.6 | | 0.77 | 1.5 | 0.9 | 1 U | 1 U | | | | | | | |
| 10/21/2010 | XX | SWPBFB1AJ | 0.005 U | 3.8 | | 0.29 | 1 U | 0.11 | 1 U | 1.1 | | | | | | | |
| 5/18/2011 | XX | SWXXXX1E7 | 0.005 U | 3.8 | | 0.35 | 1.1 | 0.021 | 1 U | 1.2 | | | | | | | |
| 8/10/2011 | XX | SWXXXX1FI | 0.0016 U | 3.9 | | 0.56 | 1.4 | 0.068 | 0.4 | 1.4 | | | | | | | |
| 11/2/2011 | XX | SWXXXX1H9 | 0.0016 U | 3.2 | | 0.89 | 1.1 | 0.052 | 0.53 J | 1.3 | | | | | | | |
| 5/14/2012 | XX | SWXXXX1J3 | 0.005 U | 4.6 | | 0.76 | 1.4 | 0.05 | 1 U | 1.6 | | | | | | | |
| 8/14/2012 | XX | SWXXXX20G | 0.005 U | 4.8 | | 2.3 | 1 | 0.18 | 1 U | 1.3 | | | | | | | |
| 10/29/2012 | XX | SWXXXX22A | 0.005 U | 4.7 | | 0.27 | 1.3 | 0.016 | 1 U | 1.6 | | | | | | | |
| 5/21/2013 | XX | SWXXXX244 | 0.005 U | 2.6 | | 0.18 | 1 U | 0.017 | 1 U | 1 U | | | | | | | |
| 7/24/2013 | XX | SWXXXX25I | 0.005 U | 4.3 | | 0.52 | 1.2 | 0.031 | 1 U | 1.1 | | | | | | | |
| 10/1/2013 | XX | SWXXXX27C | 0.005 U | 4.6 | | 0.16 | 1.3 | 0.018 | 1 U | 1.3 | | | | | | | |
| 6/5/2014 | XX | SWXXXX296 | 0.008 U | 4.65 | | 1.34 | 1.32 | 0.0816 | 1 U | 1.42 | | | | | | | |
| 8/21/2014 | XX | SWXXXX2B0 | 0.008 U | 4.48 | | 0.706 | 1.55 | 0.0598 | 1 U | 1.45 | | | | | | | |
| 11/13/2014 | XX | SWXXXX2CE | 0.008 U | 4.59 | | 0.474 | 1.54 | 0.034 | 1 U | 1.58 | | | | | | | |
| 6/4/2015 | XX | SWXXXX2EA | 0.008 U | 3.47 | | 0.256 | 1.24 | 0.027 | 1 U | 1.32 | | | | | | | |
| 9/3/2015 | XX | SWXXXX2G5 | 0.008 U | 4.74 | | 0.337 | 1.58 | 0.048 | 1 U | 1.64 | | | | | | | |
| 11/5/2015 | XX | SWXXXX2HJ | 0.008 U | 4.72 | | 0.349 | 1.48 | 0.021 | 1 U | 1.48 | | | | | | | |
| 6/16/2016 | XX | SWXXXX319 | 0.008 U | 4.7 | | 0.274 | 1.63 | 0.029 | 1 U | 1.64 | | | | | | | |
| 9/22/2016 | XX | SWXXXX333 | 0.008 U | 5.02 | | 0.311 | 1.72 | 0.041 | 1 U | 2.1 | | | | | | | |
| 11/10/2016 | XX | SWXXXX34H | 0.008 U | 4.16 | | 0.255 | 1.48 | 0.018 | 1 U | 1.62 | | | | | | | |
| 6/15/2017 | XX | SWXXXX36C | 0.008 U | 5.7 | | 0.515 | 1.57 | 0.0566 | 1 U | 1.56 | | | | | | | |
| 8/31/2017 | XX | SWXXXX386 | 0.008 U | 5.83 | | 0.457 | 1.95 | 0.0705 | 1 U | 1.7 | | | | | | | |
| 11/16/2017 | XX | SWXXXX3A0 | 0.008 U | 7.21 | | 0.337 | 2.09 | 0.0287 | 1 U | 2.05 | | | | | | | |
| 6/21/2018 | XX | SWXXXX3BF | 0.008 U | 5.28 | | 0.385 | 1.54 | 0.0437 | 1 U | 1.6 | | | | | | | |
| 8/16/2018 | XX | SWXXXX3CA | 0.008 U | 5.9 | | 0.497 | 1.75 | 0.0494 | 1 U | 1.48 | | | | | | | |
| 11/29/2018 | XX | SWXXXX3F3 | 0.008 U | 7.15 | | 0.252 | 2.09 | 0.031 | 1 U | 1.97 | | | | | | | |
| 6/6/2019 | XX | SWXXXX3GI | 0.008 U | 4.89 | | 0.511 | 1.48 | 0.0595 | 1 U | 1.65 | | | | | | | |
| 8/15/2019 | XX | SWXXXX3HD | 0.008 U | 4.38 | | 0.226 | 1.58 | 0.0267 | 1 U | 1.48 | | | | | | | |
| 10/24/2019 | XX | SWXXXX406 | 0.008 U | 5.78 | | 0.952 | 1.41 | 0.153 | 1 U | 1.73 | | | | | | | |
| 6/18/2020 | XX | SWXXXX421 | 0.008 U | 4.85 | | 0.562 | 1.51 | 0.104 | 1 U | 1.79 | | | | | | | |
| 8/6/2020 | XX | SWXXXX42G | 0.008 U | 4.77 | | 0.434 | 1.66 | 0.0323 | 1 U | 1.56 | | | | | | | |
| 10/22/2020 | XX | SWXXXX459 | 0.008 U | 6.01 | | 0.291 | 1.78 | 0.055 | 1 U | 2 | | | | | | | |
| 6/24/2021 | XX | SWXXXX474 | 0.008 U | 5.34 | | 0.497 | 1.74 | 0.0734 | 1 U | 1.98 | | | | | | | |
| 9/23/2021 | XX | SWXXXX48J | 0.008 U | 5.84 | | 0.904 | 1.7 | 0.0864 | 1 U | 1.65 | | | | | | | |
| **SPO** | | | | | | | | | | | | | | | | | |
| 5/3/2000 | XX | SPOXX36649 | | | | D | | | | D | | | | | | | |
| 8/9/2000 | XX | SPOXX36747 | | | | D | | | | D | | | | | | | |
| 11/8/2000 | XX | SPOXX36838 | | | | D | | | | D | | | | | | | |
| 5/16/2001 | XX | SPOXX37027 | D | | | D | | D | D | D | | | | | | | |
| 7/31/2001 | XX | SPOXX37103 | D | | | D | | D | D | D | | | | | | | |
| 10/23/2001 | XX | SPOXX37187 | D | | | D | | D | D | D | | | | | | | |
| 5/21/2002 | XX | SPOXX37397 | D | D | | D | D | D | D | D | | | | | | | |
| 7/30/2002 | XX | SPOXX37467 | D | D | | D | D | D | D | D | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(SPO)**

| Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/22/2002 | XX | SPOXX37551 | D | D | | D | D | D | D | D | | | | | | | |
| 6/23/2003 | XX | SPOXX37795 | D | D | | D | D | D | D | D | | | | | | | |
| 8/13/2003 | XX | SPOXX37846 | D | D | | D | D | D | D | D | | | | | | | |
| 10/20/2003 | XX | SPOXX37914 | D | D | | D | D | D | D | D | | | | | | | |
| 5/6/2004 | XX | SPOXX38113 | 0.005 U | 27 | | 0.94 | 3.3 | 0.14 | 5.2 | 3.9 | | | | | | | |
| 7/27/2004 | XX | SPOXX38195 | D | D | | D | D | D | D | D | | | | | | | |
| 10/25/2004 | XX | SPOXX38285 | D | D | | D | D | D | D | D | | | | | | | |
| 5/12/2005 | XX | SWSPOX01A | D | D | | D | D | D | D | D | | | | | | | |
| 7/25/2005 | XX | SWSPOX032 | D | D | | D | D | D | D | D | | | | | | | |
| 11/10/2005 | XX | SWSPOX04E | 0.005 U | 36 | | 1.4 | 4.7 | 0.64 | 4.6 | 4 | | | | | | | |
| 5/2/2006 | XX | SWSPOX09A | 0.005 U | 29 | | 1.3 | 3.2 | 0.2 | 7 | 8.7 | | | | | | | |
| 8/3/2006 | XX | SWSPOX07I | 0.005 U | 26 | | 5.7 | 2.6 | 3.6 | 3.7 | 4.5 | | | | | | | |
| 10/18/2006 | XX | SWSPOX066 | 0.005 U | 15 | | 2.2 B | 1.8 | 0.36 | 3.9 | 4.4 | | | | | | | |
| 5/21/2007 | XX | SWSPOX0B2 | 0.005 U | 19 | | 0.86 | 2.6 | 0.21 | 2.9 | 7.3 | | | | | | | |
| 8/9/2007 | XX | SWSPOX0CF | D | D | | D | D | D | D | D | | | | | | | |
| 11/6/2007 | XX | SWSPOX0E7 | 0.005 U | 9.8 | | 0.32 | 1.4 | 0.04 | 2.4 | 2.1 | | | | | | | |
| 6/11/2008 | XX | SWSPOX0GF | 0.005 U | 12 | | 0.91 | 1.4 | 0.17 | 1.6 | 2.1 | | | | | | | |
| 8/19/2008 | XX | SWSPOX0GJ | D | D | | D | D | D | D | D | | | | | | | |
| 10/22/2008 | XX | SWSPOX103 | D | D | | D | D | D | D | D | | | | | | | |
| 5/7/2009 | XX | SWSPOX123 | 0.005 U | 19 | | 0.52 | 2.4 | 0.14 | 2.2 | 5.8 | | | | | | | |
| 8/17/2009 | XX | SWSPOX127 | D | D | | D | D | D | D | D | | | | | | | |
| 10/27/2009 | XX | SWSPOX15B | 0.005 U | 11 | | 0.31 | 1.4 | 0.036 | 2.4 | 2.7 | | | | | | | |
| 6/7/2010 | XX | SWSPOX17C | 0.005 U | 12 | | 1.6 | 1.3 | 0.2 | 1.3 | 5 | | | | | | | |
| 8/18/2010 | XX | SWSPOX17H | D | D | | D | D | D | D | D | | | | | | | |
| 10/21/2010 | XX | SWSPOX1B1 | D | D | | D | D | D | D | D | | | | | | | |
| 5/18/2011 | XX | SWXXXX1EA | 0.005 U | 13 | | 0.3 | 1.6 | 0.036 | 1.1 | 3.1 | | | | | | | |
| 8/10/2011 | XX | SWXXXX1G1 | F6 | F6 | | F6 | F6 | F6 | F6 | F6 | | | | | | | |
| 11/2/2011 | XX | SWXXXX1HC | F6 | F6 | | F6 | F6 | F6 | F6 | F6 | | | | | | | |
| 5/14/2012 | XX | SWXXXX1J6 | 0.005 U | 13 | | 0.52 | 1.9 | 0.066 | 2.7 | 5.2 | | | | | | | |
| 8/14/2012 | XX | SWXXXX20J | F6 | F6 | | F6 | F6 | F6 | F6 | F6 | | | | | | | |
| 10/29/2012 | XX | SWXXXX22D | 0.005 U | 14 | | 1 | 1.8 | 0.71 | 3.3 | 5.5 | | | | | | | |
| 5/21/2013 | XX | SWXXXX247 | 0.005 U | 8.4 | | 2.2 | 1.4 | 0.55 | 1 U | 3.1 | | | | | | | |
| 7/24/2013 | XX | SWXXXX261 | 0.005 U | 8.4 | | 1.8 | 1 U | 0.39 | 1.1 | 1.2 | | | | | | | |
| 10/1/2013 | XX | SWXXXX27F | I | I | | I | I | I | I | I | | | | | | | |
| 6/5/2014 | XX | SWXXXX299 | D | D | | D | D | D | D | D | | | | | | | |
| 8/21/2014 | XX | SWXXXX2B3 | I | I | | I | I | I | I | I | | | | | | | |
| 11/13/2014 | XX | SWXXXX2CH | 0.008 U | 9.92 | | 0.601 | 1.27 | 0.094 | 1.76 | 1.96 | | | | | | | |
| 6/4/2015 | XX | SWXXXX2ED | 0.008 U | 13 | | 4.35 | 1.89 | 0.686 | 1.11 | 3 | | | | | | | |
| 9/3/2015 | XX | SWXXXX2G8 | D | D | | D | D | D | D | D | | | | | | | |
| 11/5/2015 | XX | SWXXXX2I2 | 0.008 U | 12 | | 0.36 | 1.5 | 0.047 | 1.54 | 1.9 | | | | | | | |
| 6/16/2016 | XX | SWXXXX31C | D | D | | D | D | D | D | D | | | | | | | |
| 9/22/2016 | XX | SWXXXX336 | D | D | | D | D | D | D | D | | | | | | | |
| 11/10/2016 | XX | SWXXXX350 | I | I | | I | I | I | I | I | | | | | | | |
| 6/15/2017 | XX | SWXXXX36F | I | I | | I | I | I | I | I | | | | | | | |
| 8/31/2017 | XX | SWXXXX389 | D | D | | D | D | D | D | D | | | | | | | |
| 11/16/2017 | XX | SWXXXX3A3 | D | D | | D | D | D | D | D | | | | | | | |
| 6/21/2018 | XX | SWXXXX3BI | D | D | | D | D | D | D | D | | | | | | | |
| 8/16/2018 | XX | SWXXXX3CD | D | D | | D | D | D | D | D | | | | | | | |
| 6/6/2019 | XX | SWXXXX3H1 | 0.008 U | 20.8 | | 2.18 | 2.55 | 0.715 | 1.44 | 2.26 | | | | | | | |
| 8/15/2019 | XX | SWXXXX3HG | D | D | | D | D | D | D | D | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (SPO) Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/24/2019 | XX | SWXXXX409 | 0.008 U | 11.7 | | 0.331 | 1.33 | 0.0434 | 3.85 | 1.33 | | | | | | | |
| 6/18/2020 | XX | SWXXXX424 | D | D | | D | D | D | D | D | | | | | | | |
| 8/6/2020 | XX | SWXXXX42J | I | I | | I | I | I | I | I | | | | | | | |
| 10/22/2020 | XX | SWXXXX45C | I | I | | I | I | I | I | I | | | | | | | |
| 6/24/2021 | XX | SWXXXX477 | D | D | | D | D | D | D | D | | | | | | | |
| 9/23/2021 | XX | SWXXXX492 | D | D | | D | D | D | D | D | | | | | | | |
| **SPON** | | | | | | | | | | | | | | | | | |
| 5/12/2005 | XX | SWSPON01B | 0.005 | 84 | | 6.2 | 14 | 8.7 | 24 | 10 | | | | | | | |
| 7/25/2005 | XX | SWSPON033 | D | D | | D | D | D | D | D | | | | | | | |
| 11/10/2005 | XX | SWSPON04F | 0.005 U | 110 | | 1.2 | 21 | 9.3 | 14 | 13 | | | | | | | |
| 5/2/2006 | XX | SWSPON09B | 0.005 U | 81 | | 3.2 | 18 | 9.9 | 10 | 14 | | | | | | | |
| 8/3/2006 | XX | SWSPON07J | 0.005 U | 200 | | 1.5 | 61 | 17 | 82 | 36 | | | | | | | |
| 10/18/2006 | XX | SWSPON067 | 0.005 U | 90 | | 1.4 B | 23 | 6.4 | 20 | 16 | | | | | | | |
| 5/21/2007 | XX | SWSPON0B3 | 0.005 U | 78 | | 0.56 | 16 | 1.5 | 14 | 14 | | | | | | | |
| 8/9/2007 | XX | SWSPON0CG | D | D | | D | D | D | D | D | | | | | | | |
| 11/6/2007 | XX | SWSPON0E8 | 0.005 U | 42 | | 0.73 | 7.1 | 0.82 | 7.6 | 4.1 | | | | | | | |
| 6/11/2008 | XX | SWSPON0GG | 0.005 U | 48 | | 1.4 | 8.1 | 0.59 | 17 | 5.8 | | | | | | | |
| 8/19/2008 | XX | SWSPON0H0 | 0.005 U | 75 | | 2.6 | 15 | 9.5 | 13 | 8.8 | | | | | | | |
| 10/22/2008 | XX | SWSPON104 | 0.005 U | 130 | | 1.2 | 26 | 8 | 22 | 16 | | | | | | | |
| 5/7/2009 | XX | SWSPON124 | 0.005 U | 77 | | 0.31 | 23 | 0.4 | 14 | 16 | | | | | | | |
| 8/12/2009 | XX | SWSPON128 | 0.005 U | 76 | | 0.8 | 13 | 1.6 | 6.9 | 7.5 | | | | | | | |
| 10/27/2009 | XX | SWSPON15C | 0.005 U | 70 | | 0.23 | 11 | 1.6 | 8.4 | 6.9 | | | | | | | |
| 6/7/2010 | XX | SWSPON17D | 0.005 U | 62 | | 0.42 | 5.6 | 0.8 | 3.8 | 2.7 | | | | | | | |
| 8/18/2010 | XX | SWSPON17I | D | D | | D | D | D | D | D | | | | | | | |
| 10/21/2010 | XX | SWSPON1B2 | 0.005 U | 81 | | 0.3 | 19 | 6 | 11 | 11 | | | | | | | |
| 5/18/2011 | XX | SWXXXX1EB | 0.005 U | 45 | | 0.16 | 8.9 | 1.1 | 6.8 | 5.8 | | | | | | | |
| 8/10/2011 | XX | SWXXXX1G2 | D | D | | D | D | D | D | D | | | | | | | |
| 11/2/2011 | XX | SWXXXX1HD | 0.0016 U | 94 | | 0.42 | 30 | 9.1 | 20 | 19 | | | | | | | |
| 5/14/2012 | XX | SWXXXX1J7 | 0.005 U | 37 | | 0.86 | 8 | 1.4 | 8.2 | 4.8 | | | | | | | |
| 8/14/2012 | XX | SWXXXX210 | F6 | F6 | | F6 | F6 | F6 | F6 | F6 | | | | | | | |
| 10/29/2012 | XX | SWXXXX22E | 0.005 U | 100 | | 1.3 | 27 | 10 | 21 | 18 | | | | | | | |
| 5/21/2013 | XX | SWXXXX248 | 0.005 U | 76 | | 0.85 | 26 | 3.4 | 18 | 18 | | | | | | | |
| 7/24/2013 | XX | SWXXXX262 | 0.005 U | 37 | | 4.7 | 12 | 4.8 | 8.9 | 5.3 | | | | | | | |
| 10/1/2013 | XX | SWXXXX27G | 0.005 U | 86 | | 1.3 | 26 | 7.6 | 17 | 16 | | | | | | | |
| 6/5/2014 | XX | SWXXXX29A | 0.008 U | 100 | | 1.38 | 35.2 | 8.36 | 25.4 | 25.2 | | | | | | | |
| 8/21/2014 | XX | SWXXXX2B4 | 0.008 U | 56.8 | | 0.686 | 21.9 | 1.58 | 27.2 | 12.2 | | | | | | | |
| 11/13/2014 | XX | SWXXXX2CI | 0.008 U | 77 | | 6.89 | 24 | 7.67 | 15.2 | 15.4 | | | | | | | |
| 6/4/2015 | XX | SWXXXX2EE | 0.008 U | 75.3 | | 8.66 | 24.4 | 8.78 | 14.7 | 20 | | | | | | | |
| 9/3/2015 | XX | SWXXXX2G9 | 0.008 U | 105 | | 3.68 | 34.6 | 16.2 | 18.6 | 24.7 | | | | | | | |
| 11/5/2015 | XX | SWXXXX2I3 | 0.008 U | 73.9 | | 1.3 | 24.7 | 5.92 | 15.2 | 17.1 | | | | | | | |
| 6/16/2016 | XX | SWXXXX31D | 0.008 U | 89 | | 0.48 | 31.1 | 3.75 | 18.6 | 30.6 | | | | | | | |
| 9/22/2016 | XX | SWXXXX337 | D | D | | D | D | D | D | D | | | | | | | |
| 11/10/2016 | XX | SWXXXX351 | 0.008 U | 196 | | 0.15 | 36.6 | 0.198 | 11.7 | 13 | | | | | | | |
| 6/15/2017 | XX | SWXXXX36G | 0.008 U | 94 | | 0.199 | 34.7 | 0.692 | 5.83 | 21.7 | | | | | | | |
| 8/31/2017 | XX | SWXXXX38A | D | D | | D | D | D | D | D | | | | | | | |
| 11/16/2017 | XX | SWXXXX3A4 | 0.008 U | 185 | | 0.17 | 33.3 | 0.383 | 9.4 | 15.6 | | | | | | | |
| 6/21/2018 | XX | SWXXXX3BJ | D | D | | D | D | D | D | D | | | | | | | |
| 8/16/2018 | XX | SWXXXX3CE | D | D | | D | D | D | D | D | | | | | | | |
| 11/29/2018 | XX | SWXXXX3F7 | 0.008 U | 98.4 | | 0.744 | 15.7 | 0.971 | 4.47 | 5.91 | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (SPON) Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/6/2019 | XX | SWXXXX3H2 | 0.008 U | 93.6 | | 0.394 | 24.9 | 4.28 | 10.9 | 13.8 | | | | | | | |
| 8/15/2019 | XX | SWXXXX3HH | 0.008 U | 62.8 | | 1.55 | 21 | 1.95 | 3.87 | 18.4 | | | | | | | |
| 10/24/2019 | XX | SWXXXX40A | 0.008 U | 87.8 | | 0.606 | 11.1 | 0.223 | 4.36 | 3.85 | | | | | | | |
| 6/18/2020 | XX | SWXXXX425 | D | D | | D | D | D | D | D | | | | | | | |
| 8/6/2020 | XX | SWXXXX430 | D | D | | D | D | D | D | D | | | | | | | |
| 10/22/2020 | XX | SWXXXX45D | 0.008 U | 56.2 | | 0.656 | 12 | 0.0753 | 6.04 | 6.8 | | | | | | | |
| 6/24/2021 | XX | SWXXXX478 | D | D | | D | D | D | D | D | | | | | | | |
| 9/23/2021 | XX | SWXXXX493 | 0.008 U | 66.1 | | 3.59 | 14.4 | 2.65 | 3.73 | 7.83 | | | | | | | |
| **SPOS** | | | | | | | | | | | | | | | | | |
| 5/12/2005 | XX | SWSPOS01C | 0.006 | 58 | | 25 | 12 | 4.2 | 3.5 | 36 | | | | | | | |
| 7/25/2005 | XX | SWSPOS034 | 0.005 U | 27 | | 6.9 | 8 | 3.7 | 1 U | 2 | | | | | | | |
| 11/10/2005 | XX | SWSPOS04G | 0.005 U | 14 | | 0.08 | 4.8 | 0.05 | 1.6 | 3.2 | | | | | | | |
| 5/2/2006 | XX | SWSPOS09C | 0.005 U | 15 | | 0.19 | 4.6 | 0.04 | 1.6 | 4.4 | | | | | | | |
| 8/3/2006 | XX | SWSPOS080 | 0.005 U | 24 | | 0.32 | 7 | 0.22 | 1.4 | 4 | | | | | | | |
| 10/18/2006 | XX | SWSPOS068 | 0.005 U | 17 | | 0.09 B | 5.3 | 0.04 | 2.6 | 3.9 | | | | | | | |
| 5/21/2007 | XX | SWSPOS0B4 | 0.005 U | 11 | | 0.051 | 3.9 | 0.011 | 1.4 | 4.7 | | | | | | | |
| 8/8/2007 | XX | SWSPOS0CH | 0.005 U | 19 | | 3.6 | 4.9 | 4.8 | 1 U | 1.5 | | | | | | | |
| 11/6/2007 | XX | SWSPOS0E9 | 0.005 U | 12 | | 0.06 | 4 | 0.01 | 1.3 | 4 | | | | | | | |
| 11/6/2007 | XD | SWDP4X0F1 | 0.005 U | 12 | | 0.06 | 4 | 0.01 | 1.3 | 4.1 | | | | | | | |
| 6/11/2008 | XX | SWSPOS0GH | 0.005 U | 14 | | 0.23 | 3.6 | 0.12 | 1.6 | 4.7 | | | | | | | |
| 8/19/2008 | XX | SWSPOS0H1 | 0.005 U | 24 | | 1 | 6.9 | 1.3 | 1.3 | 3.8 | | | | | | | |
| 10/22/2008 | XX | SWSPOS105 | 0.005 U | 23 | | 0.15 | 6.2 | 0.17 | 4.9 | 5 | | | | | | | |
| 5/7/2009 | XX | SWSPOS125 | 0.005 U | 13 | | 0.059 | 3.9 | 0.04 | 1.2 | 3.7 | | | | | | | |
| 8/12/2009 | XX | SWSPOS129 | 0.005 U | 28 | | 0.72 | 5.9 | 1.1 | 1.3 | 3.6 | | | | | | | |
| 10/27/2009 | XX | SWSPOS15D | 0.005 U | 11 | | 0.071 | 3.3 | 0.034 | 1.2 | 3 | | | | | | | |
| 6/7/2010 | XX | SWSPOS17E | 0.005 U | 12 | | 0.21 | 3.3 | 0.18 | 1.3 | 4 | | | | | | | |
| 8/18/2010 | XX | SWSPOS17J | D | D | | D | D | D | D | D | | | | | | | |
| 10/21/2010 | XX | SWSPOS1B3 | 0.005 U | 16 | | 0.1 | 4.7 | 0.063 | 1 | 4 | | | | | | | |
| 10/21/2010 | XD | SWDP4X1B7 | 0.005 U | 16 | | 0.097 | 4.7 | 0.06 | 1 U | 3.8 | | | | | | | |
| 5/18/2011 | XX | SWXXXX1EC | 0.005 U | 10 | | 0.047 | 3.1 | 0.01 U | 1.2 | 3.1 | | | | | | | |
| 8/10/2011 | XX | SWXXXX1G3 | F6 | F6 | | F6 | F6 | F6 | F6 | F6 | | | | | | | |
| 11/2/2011 | XX | SWXXXX1HE | 0.0016 U | 14 | | 0.08 | 4.4 | 0.041 | 0.84 J | 3.6 | | | | | | | |
| 5/14/2012 | XX | SWXXXX1J8 | 0.005 U | 12 | | 0.045 | 3.7 | 0.012 | 1.4 | 3.1 | | | | | | | |
| 8/14/2012 | XX | SWXXXX211 | F6 | F6 | | F6 | F6 | F6 | F6 | F6 | | | | | | | |
| 10/29/2012 | XX | SWXXXX22F | 0.005 U | 17 | | 0.076 | 5 | 0.039 | 1.5 | 4.2 | | | | | | | |
| 5/21/2013 | XX | SWXXXX249 | 0.005 U | 13 | | 0.045 | 4 | 0.029 | 1.3 | 2.9 | | | | | | | |
| 7/24/2013 | XX | SWXXXX263 | 0.005 U | 14 | | 0.2 | 4.4 | 0.14 | 1 U | 2.8 | | | | | | | |
| 10/1/2013 | XX | SWXXXX27H | 0.005 U | 22 | | 0.26 | 6.8 | 0.24 | 1 U | 3.5 | | | | | | | |
| 6/5/2014 | XX | SWXXXX29B | 0.008 U | 22.5 | | 0.175 | 6.63 | 0.507 | 1.55 | 3.73 | | | | | | | |
| 8/21/2014 | XX | SWXXXX2B5 | 0.008 U | 21.7 | | 3.13 | 5.93 | 2.37 | 1 U | 2.29 | | | | | | | |
| 11/13/2014 | XX | SWXXXX2CJ | 0.008 U | 11.7 | | 0.1 U | 3.95 | 0.0394 | 1.13 | 2.84 | | | | | | | |
| 6/4/2015 | XX | SWXXXX2EF | 0.008 U | 11.2 | | 0.223 | 3.9 | 0.122 | 1.16 | 2.57 | | | | | | | |
| 9/3/2015 | XX | SWXXXX2GA | 0.008 U | 28.8 | | 7.42 | 7.02 | 5.34 | 1 U | 3.13 | | | | | | | |
| 11/5/2015 | XX | SWXXXX2I4 | 0.008 U | 12.6 | | 0.1 U | 4.2 | 0.046 | 1.02 | 2.73 | | | | | | | |
| 6/16/2016 | XX | SWXXXX31E | D | D | | D | D | D | D | D | | | | | | | |
| 9/22/2016 | XX | SWXXXX338 | D | D | | D | D | D | D | D | | | | | | | |
| 11/10/2016 | XX | SWXXXX352 | 0.008 U | 27.5 | | 0.196 | 6.14 | 0.101 | 1.7 | 4 | | | | | | | |
| 6/15/2017 | XX | SWXXXX36H | 0.008 U | 20.6 | | 0.218 | 4.99 | 0.131 | 1 U | 3.11 | | | | | | | |
| 8/31/2017 | XX | SWXXXX38B | D | D | | D | D | D | D | D | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (SPOS) Date | Type | Sample ID | Arsenic mg/L | Calcium mg/L | Copper mg/L | Iron mg/L | Magnesium mg/L | Manganese mg/L | Potassium mg/L | Sodium mg/L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/16/2017 | XX | SWXXXX3A5 | 0.008 U | 14.9 | | 0.1 U | 4.35 | 0.0785 | 1 | 2.94 | | | | | | | |
| 6/21/2018 | XX | SWXXXX3C0 | 0.008 U | 25.7 | | 0.553 | 6.35 | 0.131 | 1 U | 3.7 | | | | | | | |
| 8/16/2018 | XX | SWXXXX3CF | 0.008 U | 21.4 | | 0.568 | 5.36 | 0.606 | 1 U | 2.7 | | | | | | | |
| 11/29/2018 | XX | SWXXXX3F8 | 0.008 U | 12.1 | | 0.1 U | 3.6 | 0.206 | 1 U | 2.56 | | | | | | | |
| 6/6/2019 | XX | SWXXXX3H3 | 0.008 U | 15.2 | | 0.33 | 4.39 | 0.0919 | 1.41 | 2.45 | | | | | | | |
| 8/15/2019 | XX | SWXXXX3HI | 0.008 U | 24.4 | | 0.704 | 5.88 | 0.211 | 1 U | 3.34 | | | | | | | |
| 10/24/2019 | XX | SWXXXX40B | 0.008 U | 14 | | 0.132 | 3.94 | 0.0265 | 1.71 | 2.67 | | | | | | | |
| 6/18/2020 | XX | SWXXXX426 | 0.008 U | 25.9 | | 2.2 | 5.86 | 1.49 | 1.75 | 3.41 | | | | | | | |
| 8/6/2020 | XX | SWXXXX431 | 0.008 U | 28.4 | | 1.85 | 6.11 | 1.13 | 1.23 | 2.57 | | | | | | | |
| 10/22/2020 | XX | SWXXXX45E | 0.008 U | 16.2 | | 0.216 | 4.45 | 0.0447 | 1.49 | 2.64 | | | | | | | |
| 6/24/2021 | XX | SWXXXX479 | 0.008 U | 19.9 | | 2.84 | 4.66 | 2.2 | 1 U | 2.7 | | | | | | | |
| 9/23/2021 | XX | SWXXXX494 | 0.008 U | 17.1 | | 1.25 | 4.6 | 0.276 | 1 U | 3.11 | | | | | | | |
| **UDLP** | | | | | | | | | | | | | | | | | |
| 6/24/2021 | XX | LFXXXX47J | 0.008 U | 121 | | 1.1 | 36.7 | 1.7 | 13.1 | 30.2 | | | | | | | |
| 9/23/2021 | XX | LFXXXX49F | 0.008 U | 81.1 | | 1.66 | 19.4 | 1.46 | 6.99 | 21.8 | | | | | | | |

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

Blank Cells appear when a parameter was not analyzed.

**Concentration Qualifier Notes:**

- ! - The sampling location was damaged or destroyed.
- B - Compound is found in the associated quality control blank as well as sample.
- D - The sampling location was dry.
- E - Compound exceeded upper level of calibration range and required dilution.
- F6 - No flow. Sample not taken.
- I - The sampling location yielded insufficient quantity to collect a sample.
- J - Analyte was positively identified/Associated value is an estimate.
- U - Not Detected above the laboratory reporting limit.

# SUMMARY REPORT

## LP Metals (part 1 of 2)



SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LP) Date | Type | Sample ID | Aluminum mg/L | Antimony mg/L | Arsenic mg/L | Barium mg/L | Beryllium mg/L | Cadmium mg/L | Calcium mg/L | Chromium mg/L | Cobalt mg/L | Copper mg/L | Iron mg/L | Lead mg/L | Magnesium mg/L | Manganese mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **LP** | | | | | | | | | | | | | | | | |
| 5/7/2009 | XX | LTLPXX10F | | | 0.0096 | | | | 280 | | | | 13 | | 110 | 20 |
| 8/12/2009 | XX | LTLPXX12F | | | 0.023 | | | | 340 | | | | 55 | | 120 | 18 |
| 10/27/2009 | XX | LTLPXX143 | 0.27 | 0.0055 | 0.015 | 0.17 | 0.002 U | 0.0004 U | 190 | 0.005 U | 0.05 U | 0.003 U | 24 | 0.003 U | 50 | 7 |
| 6/7/2010 | XX | LTLPXX164 | | | 0.022 | | | | 160 | | | | 23 | | 66 | 3.8 |
| 6/7/2010 | XD | LTDP4X162 | | | 0.027 J | | | | 160 | | | | 23 | | 68 | 5 |
| 8/18/2010 | XX | LTLPXX185 | | | 0.021 | | | | 41 | | | | 1.2 | | 160 | 1.3 |
| 10/21/2010 | XX | LTLPXX19D | 0.12 | 0.003 U | 0.0094 | 0.17 | 0.002 U | 0.00071 | 210 | 0.005 U | 0.05 U | 0.003 U | 12 | 0.003 U | 97 | 5.4 |
| 5/18/2011 | XX | LTXXXX1ED | | | 0.0097 | | | | 130 | | | | 9.2 | | 42 | 5.4 |
| 5/18/2011 | XD | LTXXXX1EI | | | 0.0091 | | | | 130 | | | | 9.7 | | 44 | 5.6 |
| 8/10/2011 | XX | LTXXXX1G4 | | | 0.028 | | | | 40 | | | | 5.6 | | 140 | 1.7 |
| 11/2/2011 | XX | LTXXXX1HF | 0.052 | 0.00035 U | 0.0036 J | 0.13 | 0.00002 U | 0.00015 J | 160 | 0.0036 J | 0.0064 J | 0.00028 U | 6.3 | 0.00077 U | 86 | 6 |
| 11/2/2011 | XD | LTDP3X1I0 | 0.054 | 0.00035 U | 0.005 | 0.13 | 0.00002 U | 0.00013 U | 160 | 0.0036 J | 0.0065 J | 0.00028 U | 6.7 | 0.00077 U | 91 | 6.4 |
| 5/14/2012 | XX | LTXXXX1J9 | | | 0.005 U | | | | 130 | | | | 8.3 | | 41 | 5.1 |
| 8/15/2012 | XX | LTXXXX212 | | | 0.027 | | | | 30 | | | | 7.6 | | 150 | 0.95 |
| 8/15/2012 | XD | LTDP3X217 | | | 0.028 | | | | 28 | | | | 7.3 | | 140 | 0.92 |
| 10/30/2012 | XX | LTXXXX22G | | | 0.01 | | | | 160 | | | | 5.4 | | 69 | 4.8 |
| 5/21/2013 | XX | LTXXXX24A | | | 0.025 U | | | | 130 | | | | 3.2 | | 78 | 3 |
| 7/25/2013 | XX | LTXXXX264 | | | 0.018 | | | | 38 | | | | 2.3 | | 67 | 1.3 |
| 10/1/2013 | XX | LTXXXX27I | 0.063 | 0.003 U | 0.0099 | 0.11 | 0.002 U | 0.0002 U | 110 | 0.005 U | 0.05 U | 0.003 U | 4.6 | 0.003 U | 58 | 3.5 |
| 6/5/2014 | XX | LTXXXX29C | | | 0.008 U | | | | 158 | | | | 1.84 | | 85.8 | 5.16 |
| 8/21/2014 | XX | LTXXXX2B6 | | | 0.021 | | | | 174 | | | | 6.87 | | 177 | 5.85 |
| 11/13/2014 | XX | LTXXXX2D0 | 0.3 U | 0.008 U | 0.014 | 0.122 | 0.005 U | 0.005 U | 149 | 0.01 U | 0.01 U | 0.025 U | 5.9 | 0.005 U | 44.6 | 3.98 |
| 6/4/2015 | XX | LTXXXX2EG | | | 0.012 | | | | 123 | | | | 7.6 | | 47 | 4.55 |
| 9/3/2015 | XX | LTXXXX2GB | | | 0.008 | | | | 97.7 | | | | 4.24 | | 112 | 1.39 |
| 11/5/2015 | XX | LTXXXX2I5 | 0.3 U | 0.008 U | 0.013 | 0.12 | 0.005 U | 0.005 U | 137 | 0.01 U | 0.01 U | 0.025 U | 7.08 | 0.005 U | 49.9 | 3.99 |
| 6/16/2016 | XX | LTXXXX31F | | | 0.009 | | | | 135 | | | | 2.88 | | 103 | 2.18 |
| 9/22/2016 | XX | LTXXXX339 | | | 0.017 | | | | 57.3 | | | | 1.43 | | 177 | 0.728 |
| 11/10/2016 | XX | LTXXXX353 | 0.3 U | 0.008 U | 0.014 | 0.0912 | 0.005 U | 0.005 U | 105 | 0.01 U | 0.01 U | 0.025 U | 1.4 | 0.005 U | 160 | 1.11 |
| 6/15/2017 | XX | LTXXXX36I | | | 0.008 | | | | 152 | | | | 1.53 | | 104 | 4.56 |
| 8/31/2017 | XX | LTXXXX38C | | | 0.008 | | | | 121 | | | | 2.5 | | 224 | 2.56 |
| 11/16/2017 | XX | LTXXXX3A6 | 0.3 U | 0.008 U | 0.009 | 0.105 | 0.005 U | 0.005 U | 144 | 0.01 U | 0.01 U | 0.025 U | 4.39 | 0.005 U | 60.8 | 3.73 |
| 6/21/2018 | XX | LTXXXX3C1 | | | 0.008 U | | | | 126 | | | | 1.59 | | 136 | 1.07 |
| 8/16/2018 | XX | LTXXXX3CG | | | 0.008 | | | | 75.1 | | | | 2.54 | | 111 | 0.865 |
| 11/29/2018 | XX | LTXXXX3F9 | 0.3 U | 0.008 U | 0.008 U | 0.0439 | 0.005 U | 0.005 U | 64.2 | 0.01 U | 0.01 U | 0.025 U | 1.18 | 0.005 U | 24 | 2.13 |
| 6/6/2019 | XX | LTXXXX3H4 | | | 0.01 | | | | 118 | | | | 3.46 | | 62 | 4.63 |
| 8/15/2019 | XX | LTXXXX3HJ | | | 0.015 | | | | 110 | | | | 1.88 | | 133 | 1.7 |
| 10/24/2019 | XX | LTXXXX40C | 0.3 U | 0.008 U | 0.012 | 0.107 | 0.005 U | 0.005 U | 115 | 0.01 U | 0.01 U | 0.025 U | 3.69 | 0.005 U | 99.4 | 2.68 |
| 6/18/2020 | XX | LTXXXX427 | | | 0.012 | | | | 122 | | | | 4.57 | | 106 | 1.6 |
| 8/6/2020 | XX | LTXXXX432 | | | 0.008 U | | | | 83.1 | | | | 1.7 | | 170 | 0.452 |
| 10/22/2020 | XX | LTXXXX45F | 0.3 U | 0.008 U | 0.008 | 0.0974 | 0.005 U | 0.005 U | 110 | 0.01 U | 0.0116 | 0.025 U | 3.78 | 0.005 U | 70.4 | 2.32 |
| 6/24/2021 | XX | LTXXXX47A | | | 0.008 U | | | | 112 | | | | 2.15 | | 132 | 0.761 |
| 10/5/2021 | XX | LTXXXX49J | 0.3 U | 0.008 U | 0.008 U | 0.0973 | 0.005 U | 0.005 U | 113 | 0.01 U | 0.01 U | 0.025 U | 4.18 | 0.005 U | 58.5 | 2.03 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LP) | Aluminum mg/L | Antimony mg/L | Arsenic mg/L | Barium mg/L | Beryllium mg/L | Cadmium mg/L | Calcium mg/L | Chromium mg/L | Cobalt mg/L | Copper mg/L | Iron mg/L | Lead mg/L | Magnesium mg/L | Manganese mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date Type Sample ID | | | | | | | | | | | | | | |

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

Blank Cells appear when a parameter was not analyzed.

**Concentration Qualifier Notes:**

J - Analyte was positively identified/Associated value is an estimate.

U - Not Detected above the laboratory reporting limit.

# SUMMARY REPORT

## LP Metals (part 2 of 2)



SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(LP)**

| Date | Type | Sample ID | Nickel mg/L | Potassium mg/L | Selenium mg/L | Silver mg/L | Sodium mg/L | Thallium mg/L | Vanadium mg/L | Zinc mg/L |
|---|---|---|---|---|---|---|---|---|---|---|
| **LP** | | | | | | | | | | |
| 5/7/2009 | XX | LTLPXX10F | | 180 | | | 55 | | | |
| 8/12/2009 | XX | LTLPXX12F | | 170 | | | 46 | | | |
| 10/27/2009 | XX | LTLPXX143 | 0.014 | 92 | 0.014 | 0.001 U | 25 | 0.0028 U | 0.05 U | 0.019 |
| 6/7/2010 | XX | LTLPXX164 | | 170 | | | 32 | | | |
| 6/7/2010 | XD | LTDP4X162 | | 190 | | | 38 | | | |
| 8/18/2010 | XX | LTLPXX185 | | 210 | | | 77 | | | |
| 10/21/2010 | XX | LTLPXX19D | 0.017 | 170 | 0.012 | 0.007 U | 47 | 0.0028 U | 0.05 U | 0.01 U |
| 5/18/2011 | XX | LTXXXX1ED | | 57 | | | 19 | | | |
| 5/18/2011 | XD | LTXXXX1EI | | 58 | | | 20 | | | |
| 8/10/2011 | XX | LTXXXX1G4 | | 160 | | | 73 | | | |
| 11/2/2011 | XX | LTXXXX1HF | 0.011 | 100 | 0.016 | 0.0014 U | 40 | 0.02 | | 0.021 U |
| 11/2/2011 | XD | LTDP3X1I0 | 0.011 | 100 | 0.018 | 0.0014 U | 44 | 0.021 | | 0.021 U |
| 5/14/2012 | XX | LTXXXX1J9 | | 55 | | | 19 | | | |
| 8/15/2012 | XX | LTXXXX212 | | 160 | | | 74 | | | |
| 8/15/2012 | XD | LTDP3X217 | | 160 | | | 72 | | | |
| 10/30/2012 | XX | LTXXXX22G | | 95 | | | 32 | | | |
| 5/21/2013 | XX | LTXXXX24A | | 89 | | | 33 | | | |
| 7/25/2013 | XX | LTXXXX264 | | 78 | | | 31 | | | |
| 10/1/2013 | XX | LTXXXX27I | 0.0098 | 73 | 0.005 U | 0.001 U | 28 | 0.002 U | | 0.005 U |
| 6/5/2014 | XX | LTXXXX29C | | 108 | | | 36.3 | | | |
| 8/21/2014 | XX | LTXXXX2B6 | | 205 | | | 68.3 | | | |
| 11/13/2014 | XX | LTXXXX2D0 | 0.01 U | 64.4 | 0.01 U | 0.01 U | 19.7 | 0.015 U | | 0.02 U |
| 6/4/2015 | XX | LTXXXX2EG | | 59.7 | | | 18.7 | | | |
| 9/3/2015 | XX | LTXXXX2GB | | 132 | | | 48.7 | | | |
| 11/5/2015 | XX | LTXXXX2I5 | 0.01 U | 67.8 | 0.01 U | 0.01 U | 20.1 | 0.015 U | | 0.02 U |
| 6/16/2016 | XX | LTXXXX31F | | 126 | | | 42.9 | | | |
| 9/22/2016 | XX | LTXXXX339 | | 257 | | | 92.1 | | | |
| 11/10/2016 | XX | LTXXXX353 | 0.0134 | 219 | 0.01 U | 0.01 U | 71.2 | 0.015 U | | 0.02 U |
| 6/15/2017 | XX | LTXXXX36I | | 114 | | | 40.2 | | | |
| 8/31/2017 | XX | LTXXXX38C | | 259 | | | 93.7 | | | |
| 11/16/2017 | XX | LTXXXX3A6 | 0.0109 | 70.1 | 0.01 U | 0.01 U | 26 | 0.015 U | | 0.02 U |
| 6/21/2018 | XX | LTXXXX3C1 | | 161 | | | 58.6 | | | |
| 8/16/2018 | XX | LTXXXX3CG | | 121 | | | 46.5 | | | |
| 11/29/2018 | XX | LTXXXX3F9 | 0.01 U | 26 | 0.01 U | 0.01 U | 9.39 | 0.015 U | | 0.02 U |
| 6/6/2019 | XX | LTXXXX3H4 | | 59.7 | | | 20.9 | | | |
| 8/15/2019 | XX | LTXXXX3HJ | | 143 | | | 54.6 | | | |
| 10/24/2019 | XX | LTXXXX40C | 0.01 U | 108 | 0.01 U | 0.01 U | 40.9 | 0.015 U | | 0.02 U |
| 6/18/2020 | XX | LTXXXX427 | | 117 | | | 43.1 | | | |
| 8/6/2020 | XX | LTXXXX432 | | 188 | | | 70.6 | | | |
| 10/22/2020 | XX | LTXXXX45F | 0.0175 | 77.5 | 0.01 U | 0.01 U | 27.1 | 0.015 U | | 0.02 U |
| 6/24/2021 | XX | LTXXXX47A | | 149 | | | 55.7 | | | |
| 10/5/2021 | XX | LTXXXX49J | 0.01 U | 63.6 | 0.01 U | 0.01 U | 23.9 | 0.015 U | | 0.02 U |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LP) Date | Type | Sample ID | Nickel mg/L | Potassium mg/L | Selenium mg/L | Silver mg/L | Sodium mg/L | Thallium mg/L | Vanadium mg/L | Zinc mg/L |
|---|---|---|---|---|---|---|---|---|---|---|

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

Blank Cells appear when a parameter was not analyzed.

**Concentration Qualifier Notes:**

U - Not Detected above the laboratory reporting limit.

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (301) | | | C9-C18 ALIPHATICS (ADJUSTED) | C19-C36 ALIPHATICS (ADJUSTED) | C11-C22 AROMATICS (ADJUSTED) | 2-Methyl naphthalene | Acenaphthylene | Acenaphthene | Fluorene | Phenanthrene | Anthracene | Fluoranthene | Pyrene | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | | | | |
| **301** | | | | | | | | | | | | | | | | | |
| 10/30/2012 | XX | GW301X21C | 96.2 U | 96.2 U | 96.2 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | | | | |
| 10/1/2013 | XX | GW301X26E | 102 U | 102 U | 102 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | | | | |
| 11/11/2014 | XX | GW301X2BG | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/4/2015 | XX | GW301X2H1 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/10/2016 | XX | GW301X33J | 94 U | 94 U | 380 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/14/2017 | XX | GW301X392 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/28/2018 | XX | GW301X3E5 | 95 U | 95 U | 95 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/23/2019 | XX | GW301X3J8RA | 93 U | 93 U | 93 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/23/2019 | XX | GW301X3J8RE | 93 U | 93 U | 93 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/21/2020 | XX | GW301X44BRA | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 9/22/2021 | XX | GW301X481RE | 93 U | 93 U | 93 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| **302B** | | | | | | | | | | | | | | | | | |
| 10/30/2012 | XX | GW302B21D | 96.2 U | 96.2 U | 96.2 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | | | | |
| 10/1/2013 | XX | GW302B26F | 101 U | 101 U | 101 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | | | | |
| 11/11/2014 | XX | GW302B2BH | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/4/2015 | XX | GW302B2H2 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/8/2016 | XX | GW302B340 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/14/2017 | XX | GW302B393 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/28/2018 | XX | GW302B3E6 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/23/2019 | XX | GW302B3J9 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/23/2019 | XX | GW302B3J9RE | 95 U | 95 U | 95 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/21/2020 | XX | GW302B44CRA | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 9/22/2021 | XX | GW302B482RE | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| **302C** | | | | | | | | | | | | | | | | | |
| 10/30/2012 | XX | GW302C21E | 96.2 U | 96.2 U | 96.2 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | | | | |
| 10/30/2012 | XD | GWDP3X231 | 96.2 U | 96.2 U | 96.2 | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | | | | |
| 10/1/2013 | XX | GW302C26G | 101 U | 101 U | 101 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | | | | |
| 10/1/2013 | XD | GWDP1X281 | 101 U | 101 U | 101 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | | | | |
| 11/11/2014 | XX | GW302C2BI | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/11/2014 | XD | GWDP1X2D3 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/4/2015 | XX | GW302C2H3 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/4/2015 | XD | GWDP1X2I8 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/8/2016 | XD | GWDP1X356 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/8/2016 | XX | GW302C341 | 95 U | 95 U | 95 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/14/2017 | XD | GWDP1X3A9 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/14/2017 | XX | GW302C394 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/28/2018 | XD | GWDP1X3FC | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/28/2018 | XX | GW302C3E7 | 150 | 1900 | 630 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/23/2019 | XD | GWDP1X40FRE | 92 U | 92 U | 92 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | | | | |
| 10/23/2019 | XD | GWDP1X40F | 93 U | 93 U | 93 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/23/2019 | XX | GW302C3JA | 95 U | 95 U | 95 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/23/2019 | XX | GW302C3JARE | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/21/2020 | XD | GWDP1X45IRA | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/21/2020 | XX | GW302C44DRA | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 9/22/2021 | XD | GWDP1X498RE | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 9/22/2021 | XX | GW302C483RE | 93 U | 93 U | 93 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LP) | | | C9-C18 ALIPHATICS (ADJUSTED) | C19-C36 ALIPHATICS (ADJUSTED) | C11-C22 AROMATICS (ADJUSTED) | 2-Methyl naphthalene | Acenaphthylene | Acenaphthene | Fluorene | Phenanthrene | Anthracene | Fluoranthene | Pyrene | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | | | | |
| **LP** | | | | | | | | | | | | | | | | | |
| 8/15/2012 | XX | LTXXXX212 | 100 U | 100 U | 100 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | | | | |
| 8/15/2012 | XD | LTDP3X217 | 100 U | 100 U | 100 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | | | | |
| 10/30/2012 | XX | LTXXXX22G | 101 U | 101 U | 101 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | | | | |
| 5/21/2013 | XX | LTXXXX24A | 104 U | 104 U | 104 U | 5.21 U | 5.21 U | 5.21 U | 5.21 U | 5.21 U | 5.21 U | 5.21 U | 5.21 U | | | | |
| 7/25/2013 | XX | LTXXXX264 | 100 U | 100 U | 100 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | | | | |
| 10/1/2013 | XX | LTXXXX27I | 102 U | 102 U | 102 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | | | | |
| 6/5/2014 | XX | LTXXXX29C | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 8/21/2014 | XX | LTXXXX2B6 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/13/2014 | XX | LTXXXX2D0 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 6/4/2015 | XX | LTXXXX2EG | 95 U | 95 U | 95 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 9/3/2015 | XX | LTXXXX2GB | 95 U | 95 U | 95 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/5/2015 | XX | LTXXXX2I5 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 6/16/2016 | XX | LTXXXX31F | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 9/22/2016 | XX | LTXXXX339RE | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/10/2016 | XX | LTXXXX353 | 94 U | 94 U | 280 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 6/15/2017 | XX | LTXXXX36I | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 8/31/2017 | XX | LTXXXX38C | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/16/2017 | XX | LTXXXX3A6 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 6/21/2018 | XX | LTXXXX3C1RE | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 6/21/2018 | XX | LTXXXX3C1 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 8/16/2018 | XX | LTXXXX3CG | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 11/29/2018 | XX | LTXXXX3F9 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 6/6/2019 | XX | LTXXXX3H4RE | 95 U | 95 U | 95 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 6/6/2019 | XX | LTXXXX3H4 | 95 U | 360 | 95 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 8/15/2019 | XX | LTXXXX3HJRE | 95 U | 95 U | 95 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/24/2019 | XX | LTXXXX40C | 93 U | 93 U | 93 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/24/2019 | XX | LTXXXX40CRE | 99 U | 99 U | 99 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | | | | |
| 6/18/2020 | XX | LTXXXX427RE | 93 U | 93 U | 93 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 8/6/2020 | XX | LTXXXX432 | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/22/2020 | XX | LTXXXX45FRA | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 6/24/2021 | XX | LTXXXX47ARE | 94 U | 94 U | 94 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |
| 10/5/2021 | XX | LTXXXX49J | 95 U | 95 U | 95 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | |

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

Blank Cells appear when a parameter was not analyzed.

**Concentration Qualifier Notes:**

U - Not Detected above the laboratory reporting limit.

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (301) Date | Type | Sample ID | Naphthalene (EPH) ug/L | Benzo(a) Anthracene ug/L | Chrysene ug/L | Benzo(b) Fluoranthene ug/L | Benzo(k) Fluoranthene ug/L | Benzo(a) Pyrene ug/L | Indeno(1,2,3-c,d) Pyrene ug/L | Dibenz(a,h) Anthracene ug/L | Benzo(g,h,i) perylene ug/L | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **301** | | | | | | | | | | | | | | | | | |
| 10/30/2012 | XX | GW301X21C | | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | | | | | | |
| 10/1/2013 | XX | GW301X26E | | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | | | | | | |
| 11/11/2014 | XX | GW301X2BG | | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/4/2015 | XX | GW301X2H1 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/10/2016 | XX | GW301X33J | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/14/2017 | XX | GW301X392 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/28/2018 | XX | GW301X3E5 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/23/2019 | XX | GW301X3J8RA | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/23/2019 | XX | GW301X3J8RE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/21/2020 | XX | GW301X44BRA | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 9/22/2021 | XX | GW301X481RE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| **302B** | | | | | | | | | | | | | | | | | |
| 10/30/2012 | XX | GW302B21D | | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | | | | | | |
| 10/1/2013 | XX | GW302B26F | | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | | | | | | |
| 11/11/2014 | XX | GW302B2BH | | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/4/2015 | XX | GW302B2H2 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/8/2016 | XX | GW302B340 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/14/2017 | XX | GW302B393 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/28/2018 | XX | GW302B3E6 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/23/2019 | XX | GW302B3J9 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/23/2019 | XX | GW302B3J9RE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/21/2020 | XX | GW302B44CRA | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 9/22/2021 | XX | GW302B482RE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| **302C** | | | | | | | | | | | | | | | | | |
| 10/30/2012 | XX | GW302C21E | | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | | | | | | |
| 10/30/2012 | XD | GWDP3X231 | | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | 4.81 U | | | | | | |
| 10/1/2013 | XX | GW302C26G | | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | | | | | | |
| 10/1/2013 | XD | GWDP1X281 | | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | | | | | | |
| 11/11/2014 | XX | GW302C2BI | | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/11/2014 | XD | GWDP1X2D3 | | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/4/2015 | XX | GW302C2H3 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/4/2015 | XD | GWDP1X2I8 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/8/2016 | XD | GWDP1X356 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/8/2016 | XX | GW302C341 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/14/2017 | XD | GWDP1X3A9 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/14/2017 | XX | GW302C394 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/28/2018 | XD | GWDP1X3FC | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/28/2018 | XX | GW302C3E7 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/23/2019 | XD | GWDP1X40FRE | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | | | | | | |
| 10/23/2019 | XD | GWDP1X40F | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/23/2019 | XX | GW302C3JA | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/23/2019 | XX | GW302C3JARE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/21/2020 | XD | GWDP1X45IRA | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/21/2020 | XX | GW302C44DRA | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 9/22/2021 | XD | GWDP1X498RE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 9/22/2021 | XX | GW302C483RE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

**(LP)**

| Date | Type | Sample ID | Naphthalene (EPH) ug/L | Benzo(a) Anthracene ug/L | Chrysene ug/L | Benzo(b) Fluoranthene ug/L | Benzo(k) Fluoranthene ug/L | Benzo(a) Pyrene ug/L | Indeno(1,2,3-c,d) Pyrene ug/L | Dibenz(a,h) Anthracene ug/L | Benzo(g,h,i) perylene ug/L | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **LP** | | | | | | | | | | | | | | | | | |
| 8/15/2012 | XX | LTXXXX212 | | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | | | | | | |
| 8/15/2012 | XD | LTDP3X217 | | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | | | | | | |
| 10/30/2012 | XX | LTXXXX22G | | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | 5.05 U | | | | | | |
| 5/21/2013 | XX | LTXXXX24A | | 5.21 U | 5.21 U | 5.21 U | 5.21 U | 5.21 U | 5.21 U | 5.21 U | 5.21 U | | | | | | |
| 7/25/2013 | XX | LTXXXX264 | | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | | | | | | |
| 10/1/2013 | XX | LTXXXX27I | | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | 5.1 U | | | | | | |
| 6/5/2014 | XX | LTXXXX29C | | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 8/21/2014 | XX | LTXXXX2B6 | | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/13/2014 | XX | LTXXXX2D0 | | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 6/4/2015 | XX | LTXXXX2EG | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 9/3/2015 | XX | LTXXXX2GB | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/5/2015 | XX | LTXXXX2I5 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 6/16/2016 | XX | LTXXXX31F | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 9/22/2016 | XX | LTXXXX339RE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/10/2016 | XX | LTXXXX353 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 6/15/2017 | XX | LTXXXX36I | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 8/31/2017 | XX | LTXXXX38C | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/16/2017 | XX | LTXXXX3A6 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 6/21/2018 | XX | LTXXXX3C1RE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 6/21/2018 | XX | LTXXXX3C1 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 8/16/2018 | XX | LTXXXX3CG | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 11/29/2018 | XX | LTXXXX3F9 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 6/6/2019 | XX | LTXXXX3H4RE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 6/6/2019 | XX | LTXXXX3H4 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 8/15/2019 | XX | LTXXXX3HJRE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/24/2019 | XX | LTXXXX40C | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/24/2019 | XX | LTXXXX40CRE | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | | | | | | |
| 6/18/2020 | XX | LTXXXX427RE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 8/6/2020 | XX | LTXXXX432 | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/22/2020 | XX | LTXXXX45FRA | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 6/24/2021 | XX | LTXXXX47ARE | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |
| 10/5/2021 | XX | LTXXXX49J | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | | | | | | |

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

Blank Cells appear when a parameter was not analyzed.

**Concentration Qualifier Notes:**

U - Not Detected above the laboratory reporting limit.

# SUMMARY REPORT

## VPH



SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (301) | | | Benzene | Toluene | Ethylbenzene | o-Xylene | m,p-Xylene | C9-C12 ALIPHATICS (ADJUSTED) | C9-C10 AROMATICS (ADJUSTED) | C5-C8 ALIPHATICS (ADJUSTED) | Methyltertiary butylether | Naphthalene | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Type | Sample ID | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | | | | | |
| **301** | | | | | | | | | | | | | | | | | |
| 10/30/2012 | XX | GW301X21C | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 4.81 U | | | | | |
| 10/1/2013 | XX | GW301X26E | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U | | | | | |
| 11/11/2014 | XX | GW301X2BG | 3 U | 5 U | 5 U | 5 U | 10 U | 94 U | 94 U | 94 U | 5 U | 5 U | | | | | |
| 11/4/2015 | XX | GW301X2H1 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/10/2016 | XX | GW301X33JVPH | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/14/2017 | XX | GW301X392 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/28/2018 | XX | GW301X3E5 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/23/2019 | XX | GW301X3J8 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/21/2020 | XX | GW301X44B | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 9/22/2021 | XX | GW301X481 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| **302B** | | | | | | | | | | | | | | | | | |
| 10/30/2012 | XX | GW302B21D | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 4.81 U | | | | | |
| 10/1/2013 | XX | GW302B26F | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U | | | | | |
| 11/11/2014 | XX | GW302B2BH | 3 U | 5 U | 5 U | 5 U | 10 U | 94 U | 94 U | 94 U | 5 U | 5 U | | | | | |
| 11/4/2015 | XX | GW302B2H2 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/8/2016 | XX | GW302B340VPH | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/14/2017 | XX | GW302B393 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/28/2018 | XX | GW302B3E6 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/23/2019 | XX | GW302B3J9 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/21/2020 | XX | GW302B44C | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 9/22/2021 | XX | GW302B482 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| **302C** | | | | | | | | | | | | | | | | | |
| 10/30/2012 | XX | GW302C21E | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 4.81 U | | | | | |
| 10/30/2012 | XD | GWDP3X231 | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 4.81 U | | | | | |
| 10/1/2013 | XX | GW302C26G | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U | | | | | |
| 10/1/2013 | XD | GWDP1X281 | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U | | | | | |
| 11/11/2014 | XX | GW302C2BI | 3 U | 5 U | 5 U | 5 U | 10 U | 94 U | 94 U | 94 U | 5 U | 5 U | | | | | |
| 11/11/2014 | XD | GWDP1X2D3 | 3 U | 5 U | 5 U | 5 U | 10 U | 94 U | 94 U | 94 U | 5 U | 5 U | | | | | |
| 11/4/2015 | XX | GW302C2H3 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/4/2015 | XD | GWDP1X2I8 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/8/2016 | XD | GWDP1X356VPH | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/8/2016 | XX | GW302C341VPH | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/14/2017 | XD | GWDP1X3A9 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/14/2017 | XX | GW302C394 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/28/2018 | XD | GWDP1X3FC | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/28/2018 | XX | GW302C3E7 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/23/2019 | XD | GWDP1X40F | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/23/2019 | XX | GW302C3JA | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/21/2020 | XD | GWDP1X45I | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/21/2020 | XX | GW302C44D | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 9/22/2021 | XX | GW302C483 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 9/22/2021 | XD | GWDP1X498 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| **LP** | | | | | | | | | | | | | | | | | |
| 8/15/2012 | XX | LTXXXX212 | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U | | | | | |
| 8/15/2012 | XD | LTDP3X217 | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U | | | | | |
| 10/30/2012 | XX | LTXXXX22G | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5.05 U | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LP) Date | Type | Sample ID | Benzene ug/L | Toluene ug/L | Ethylbenzene ug/L | o-Xylene ug/L | m,p-Xylene ug/L | C9-C12 ALIPHATICS (ADJUSTED) ug/L | C9-C10 AROMATICS (ADJUSTED) ug/L | C5-C8 ALIPHATICS (ADJUSTED) ug/L | Methyltertiary butylether ug/L | Naphthalene ug/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/21/2013 | XX | LTXXXX24A | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5.21 U |
| 7/25/2013 | XX | LTXXXX264 | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U |
| 10/1/2013 | XX | LTXXXX27I | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U |
| 6/5/2014 | XX | LTXXXX29C | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 1.9 U |
| 8/21/2014 | XX | LTXXXX2B6 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 1.9 U |
| 11/13/2014 | XX | LTXXXX2D0 | 3 U | 5 U | 5 U | 5 U | 10 U | 94 U | 94 U | 94 U | 5 U | 5 U |
| 6/4/2015 | XX | LTXXXX2EG | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 1.9 U |
| 9/3/2015 | XX | LTXXXX2GB | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 11/5/2015 | XX | LTXXXX2I5 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 6/16/2016 | XX | LTXXXX31F | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 9/22/2016 | XX | LTXXXX339 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 11/10/2016 | XX | LTXXXX353DL | 30 U | 50 U | 50 U | 50 U | 100 U | 1000 U | 1000 U | 1000 U | 50 U | 50 U |
| 6/15/2017 | XX | LTXXXX36I | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 8/31/2017 | XX | LTXXXX38C | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 11/16/2017 | XX | LTXXXX3A6 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 6/21/2018 | XX | LTXXXX3C1RA | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 8/16/2018 | XX | LTXXXX3CG | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 11/29/2018 | XX | LTXXXX3F9 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 6/6/2019 | XX | LTXXXX3H4 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 8/15/2019 | XX | LTXXXX3HJRA | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 10/24/2019 | XX | LTXXXX40C | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 6/18/2020 | XX | LTXXXX427 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 8/6/2020 | XX | LTXXXX432 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 10/22/2020 | XX | LTXXXX45F | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 6/24/2021 | XX | LTXXXX47A | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 10/5/2021 | XX | LTXXXX49J | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| **QCBT** | | | | | | | | | | | | |
| 8/15/2012 | XX | BTXXXX21A | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U |
| 10/30/2012 | XX | BTXXXX234 | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U |
| 5/21/2013 | XX | BTXXXX24I | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U |
| 7/25/2013 | XX | BTXXXX26C | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U |
| 10/1/2013 | XX | BTXXXX286 | 5 U | 5 U | 5 U | 5 U | 10 U | 25 U | 25 U | 75 U | 5 U | 5 U |
| 6/5/2014 | XX | BTXXXX2A0 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 8/21/2014 | XX | BTXXXX2BE | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 11/11/2014 | XX | BTXXXX2D8 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 11/13/2014 | XX | BTXXXX2D9 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 6/4/2015 | XX | BTXXXX2F4 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 9/3/2015 | XX | BTXXXX2GJ | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 11/4/2015 | XX | BTXXXX2ID | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 11/5/2015 | XX | BTXXXX2IE | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 6/16/2016 | XX | BTXXXX323 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 9/22/2016 | XX | BTXXXX33H | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 11/8/2016 | XX | BTXXXX35B | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 11/10/2016 | XX | BTXXXX35C | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 6/15/2017 | XX | BTXXXX376 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 8/31/2017 | XX | BTXXXX390 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 11/14/2017 | XX | BTXXXX3AE | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 11/16/2017 | XX | BTXXXX3AF | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |
| 6/21/2018 | XX | BTXXXX3C9RA | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (QCBT) Date | Type | Sample ID | Benzene ug/L | Toluene ug/L | Ethylbenzene ug/L | o-Xylene ug/L | m,p-Xylene ug/L | C9-C12 ALIPHATICS (ADJUSTED) ug/L | C9-C10 AROMATICS (ADJUSTED) ug/L | C5-C8 ALIPHATICS (ADJUSTED) ug/L | Methyltertiary butylether ug/L | Naphthalene ug/L | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/16/2018 | XX | BTXXXX3D4 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/28/2018 | XX | BTXXXX3FH | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 11/29/2018 | XX | BTXXXX3FI | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 6/6/2019 | XX | BTXXXX3HC | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 8/15/2019 | XX | BTXXXX3I7RA | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/23/2019 | XX | BTXXXX410 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/24/2019 | XX | BTXXXX411 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 6/18/2020 | XX | BTXXXX42F | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 8/6/2020 | XX | BTXXXX43A | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/21/2020 | XX | BTXXXX463 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/22/2020 | XX | BTXXXX464 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 6/24/2021 | XX | BTXXXX47I | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 9/22/2021 | XX | BTXXXX49D | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 9/23/2021 | XX | BTXXXX49E | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |
| 10/5/2021 | XX | BTXXXX4A0 | 3 U | 5 U | 5 U | 5 U | 10 U | 100 U | 100 U | 100 U | 5 U | 5 U | | | | | |

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

Blank Cells appear when a parameter was not analyzed.

**Concentration Qualifier Notes:**

U - Not Detected above the laboratory reporting limit.

WATER LEVEL SUMMARY

Water Levels

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| Location / Date | Height Above Measuring Point (feet) | Depth Below Measuring Point (feet) | Measuring Point Elevation (feet) | Water Level Elevation (feet) |
|---|---|---|---|---|
| **302** | | | Current ground surface elevation: (feet) | |
| 5/17/2012 | | 6.18 | | |
| 8/16/2012 | | 9.21 | | |
| 10/30/2012 | | 5.85 | | |
| 5/21/2013 | | 7.15 | | |
| 7/25/2013 | | 7.92 | | |
| 10/3/2013 | | 7.20 | | |
| 6/2/2014 | | 7.40 | | |
| 8/20/2014 | | 8.18 | | |
| 11/14/2014 | | 6.31 | | |
| 6/5/2015 | | 6.47 | | |
| 9/3/2015 | | 7.54 | | |
| 11/5/2015 | | 6.40 | | |
| 6/15/2016 | | 7.40 | | |
| 9/22/2016 | | 8.88 | | |
| 11/10/2016 | | 7.69 | | |
| 6/12/2017 | | 7.44 | | |
| 8/31/2017 | | 9.55 | | |
| 11/16/2017 | | 6.90 | | |
| 6/18/2018 | | 8.19 | | |
| 8/14/2018 | | 7.63 | | |
| 11/26/2018 | | 6.44 | | |
| 6/6/2019 | | 6.92 | | |
| 8/15/2019 | | 8.03 | | |
| 10/23/2019 | | 7.43 | | |
| 6/18/2020 | | 8.18 | | |
| 8/6/2020 | | 9.13 | | |
| 10/22/2020 | | 6.48 | | |
| 6/24/2021 | | 8.72 | | |
| 9/22/2021 | | 7.36 | | |
| **403** | | | Current ground surface elevation: (feet) | |
| 5/17/2012 | | 2.69 | | |
| 8/15/2012 | | 6.00 | | |
| 10/30/2012 | | 5.30 | | |
| 5/21/2013 | | 3.59 | | |
| 7/25/2013 | | 4.31 | | |
| 10/3/2013 | | 4.51 | | |
| 6/2/2014 | | 3.78 | | |
| 8/20/2014 | | 4.82 | | |
| 11/14/2014 | | 3.83 | | |
| 6/5/2015 | | 3.12 | | |
| 9/3/2015 | | 4.45 | | |
| 11/5/2015 | | 3.23 | | |
| 6/15/2016 | | 3.96 | | |
| 9/22/2016 | | 5.91 | | |
| 11/10/2016 | | 5.20 | | |
| 6/12/2017 | | 3.87 | | |
| 8/31/2017 | | 5.72 | | |
| 11/16/2017 | | 6.65 | | |

WATER LEVEL SUMMARY
Water Levels

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| Location / Date | Height Above Measuring Point (feet) | Depth Below Measuring Point (feet) | Measuring Point Elevation (feet) | Water Level Elevation (feet) |
|---|---|---|---|---|
| (403) | | | | |
| 6/18/2018 | | 4.55 | | |
| 8/14/2018 | | 4.50 | | |
| 11/26/2018 | | 3.55 | | |
| 6/6/2019 | | 3.26 | | |
| 8/15/2019 | | 4.53 | | |
| 10/23/2019 | | 3.86 | | |
| 6/18/2020 | | 4.42 | | |
| 8/6/2020 | | 5.35 | | |
| 10/22/2020 | | 4.23 | | |
| 6/24/2021 | | 5.03 | | |
| 9/22/2021 | | 4.12 | | |
| **404** | | | Current ground surface elevation: (feet) | |
| 5/17/2012 | | 4.98 | | |
| 8/15/2012 | | 6.28 | | |
| 10/30/2012 | | 2.80 | | |
| 5/21/2013 | | 6.60 | | |
| 7/25/2013 | | 7.25 | | |
| 10/3/2013 | | 16.43 | | |
| 6/2/2014 | | 6.46 | | |
| 8/20/2014 | | 7.90 | | |
| 11/14/2014 | | 6.52 | | |
| 6/5/2015 | | 5.52 | | |
| 9/3/2015 | | 7.38 | | |
| 11/5/2015 | | 5.75 | | |
| 6/15/2016 | | 6.85 | | |
| 9/22/2016 | | 9.11 | | |
| 11/10/2016 | | 8.30 | | |
| 6/12/2017 | | 6.64 | | |
| 8/31/2017 | | 8.80 | | |
| 11/16/2017 | | 1.84 | | |
| 6/18/2018 | | 7.43 | | |
| 8/14/2018 | | 7.40 | | |
| 11/26/2018 | | 6.21 | | |
| 6/6/2019 | | 5.90 | | |
| 8/15/2019 | | 6.15 | | |
| 10/23/2019 | | 5.56 | | |
| 6/18/2020 | | 7.28 | | |
| 8/6/2020 | | 8.52 | | |
| 10/22/2020 | | 7.20 | | |
| 6/24/2021 | | 7.73 | | |
| 9/22/2021 | | 7.40 | | |

**APPENDIX K**

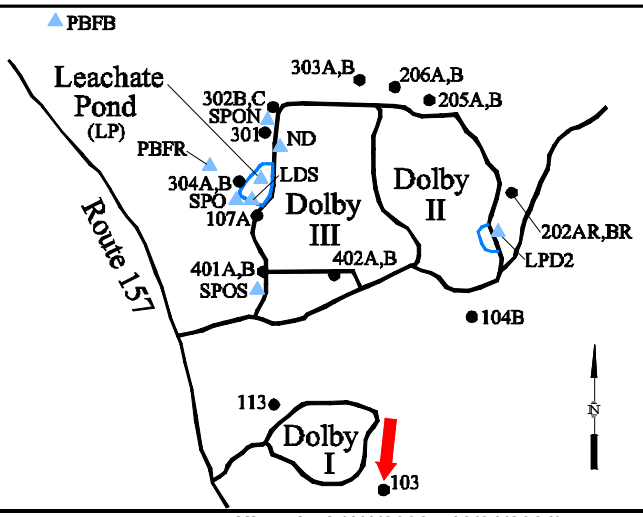
**WATER QUALITY SUMMARY REPORTS**

SME
SEVEE & MAHER
ENGINEERS

## Well Description

Well located upgradient to southeast of Dolby I Landfill.

Screen Interval: **Unknown TOS to 15 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Jun-82**
Material Screened: **Bedrock**
Well Condition: **Good**
Sampling Method: **Low Flow (Initiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | ↑135 | D | | 23 | 90 | 32 | 1.6 | 45 |
| Dissolved Oxygen (mg/L) | | 6.7 | D | | 1 | 14.3 | 8.7 | 0.43 | 44 |
| Total Dissolved Solids (mg/L) | | | D | | 1 U | 60 | 21 | 3.5 | 25 |
| Arsenic (mg/L) | | | D | | 0.005 U | 0.01 | 0.0056 | 0.000 | 23 |
| Calcium (mg/L) | | | D | | 0.9 | 4.3 | 3.2 | 0.18 | 22 |
| Manganese (mg/L) | | | D | | 0.01 U | 0.013 | 0.01 | 0.000 | 25 |
| pH (STU) | | 6.9 | D | | 4.58 | 9.1 | 6.3 | 0.12 | 45 |
| Alkalinity (CaCO3) (mg/L) | | | D | | 4 | 22 | 9.8 | 0.81 | 25 |
| Ca-mg Hardness (CaCO3) (mg/L) | | | D | | 3.9 | 11 | 9 | 0.4 | 25 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | | D | | 3.8 | 21 | 9.6 | 0.81 | 25 |
| Sodium (mg/L) | | | D | | 1 U | 1.9 | 1.5 | 0.045 | 25 |
| Chloride (mg/L) | | | D | | 1 U | 2.1 | 1.8 | 0.082 | 25 |
| Iron (mg/L) | | | D | | 0.017 | 0.36 | 0.055 | 0.014 | 25 |
| Magnesium (mg/L) | | | D | | 0.4 | 1 U | 0.95 | 0.038 | 22 |
| Potassium (mg/L) | | | D | | 0.24 | 1 U | 0.86 | 0.057 | 25 |
| Sulfate (mg/L) | | | D | | 2.4 | 6.3 | 3.6 | 0.17 | 25 |
| Total Suspended Solids (mg/L) | | | D | | 0.6 U | 198 | 12 | 8 | 25 |
| Turbidity (field) (NTU) | | 0.3 | D | | 0 | 23.4 | 1.7 | 0.53 | 44 |
| Ammonia (N) (mg/L) | | | D | | 0.1 U | 1.1 | 0.22 | 0.038 | 25 |
| Nitrate (N) (mg/L) | | | D | | 0.5 U | 2 U | 1.3 | 0.14 | 25 |
| Organic Carbon (mg/L) | | | D | | 0.9 | 4.2 | 1.3 | 0.16 | 25 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

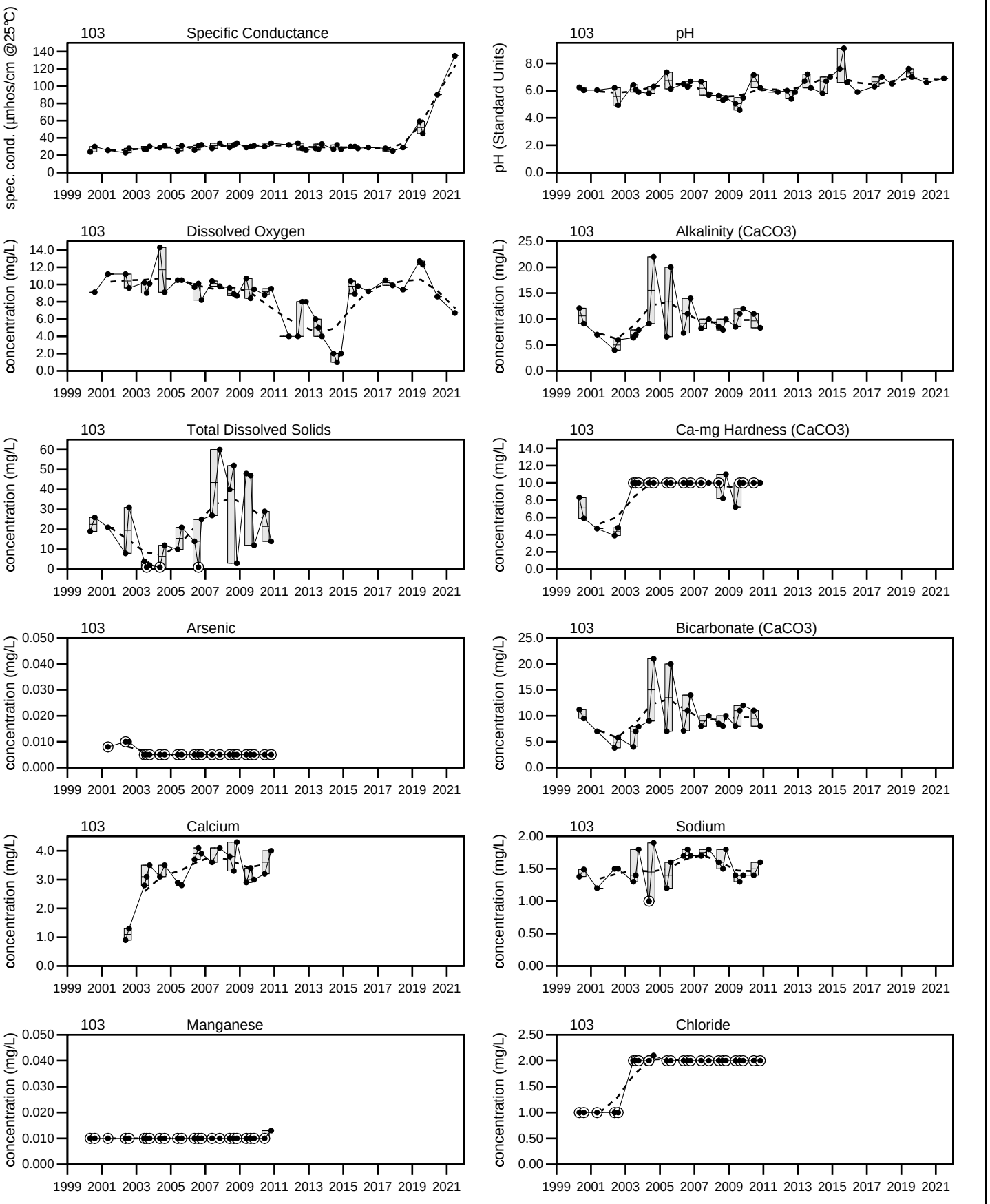
## Comments

Q2= 6 - 2021 D = The sampling location was dry.

Q3= 9 - 2021

Data Group: 179
Printed: 4/11/2022 09:32

SME SEVEE & MAHER ENGINEERS



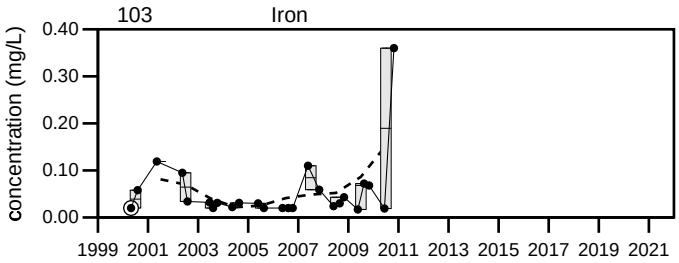

LEGEND

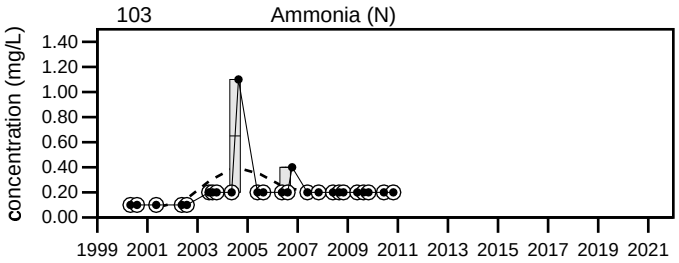
- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value
- FFT smoothing of yearly mean values.
- Sample Event
- BDL

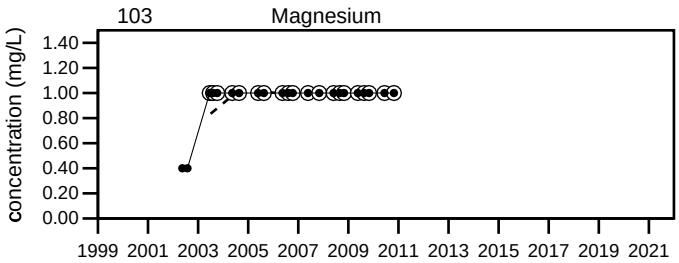
# Dolby Landfill

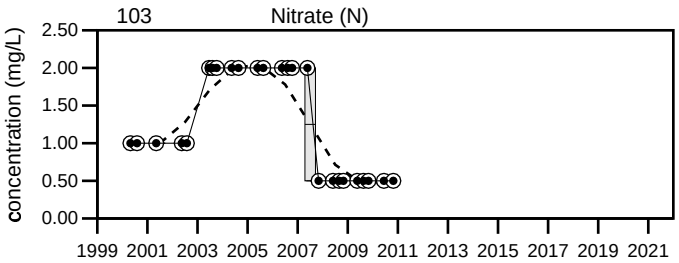
## 103

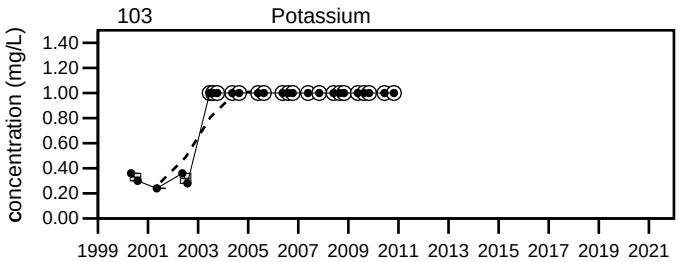
Sevee & Maher Engineers, Inc.

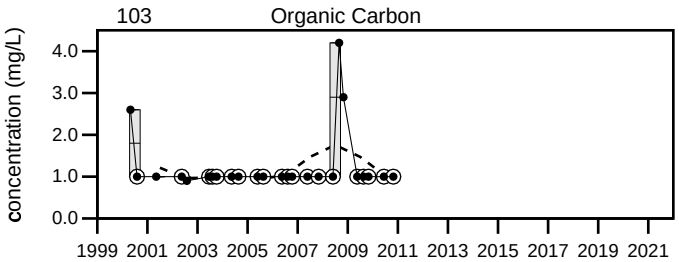


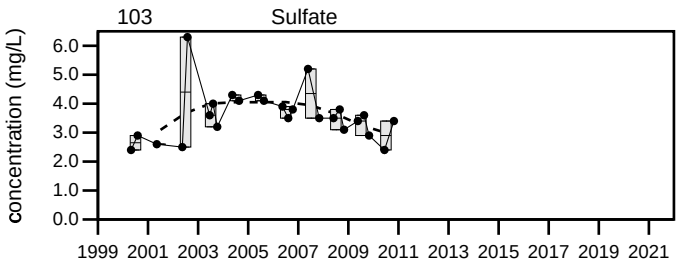



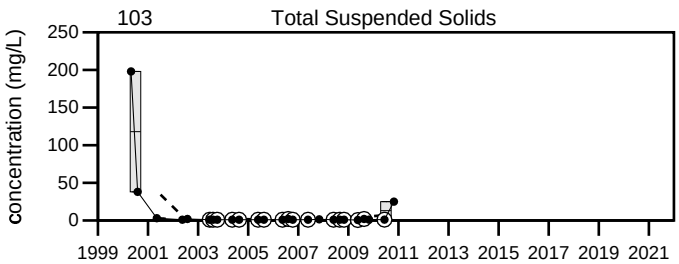



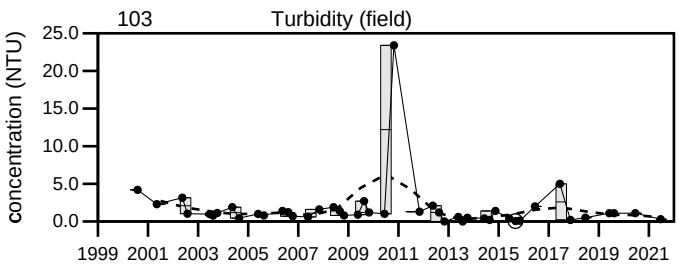



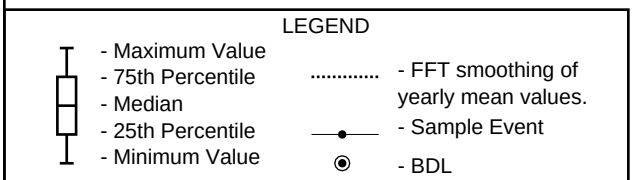




Dolby Landfill

103

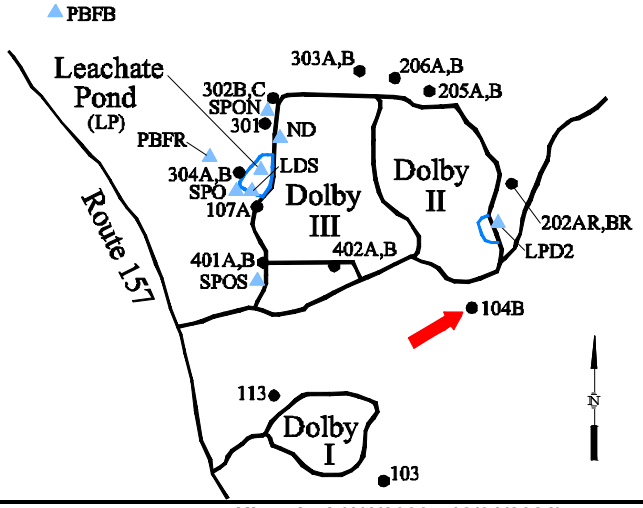
Sevee & Maher Engineers, Inc.

104B


## Well Description

Well located upgradient to south of Dolby II Landfill.

Screen Interval: **Unknown TOS to 37 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Mar-82**
Material Screened: **Bedrock**
Well Condition: **Good**
Sampling Method: **Low Flow (Initiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 125 | 126 | | 113 | to 174 | 140 | ± 1.2 | 63 |
| Dissolved Oxygen (mg/L) | | 1.4 | 0.5 | | 0.2 | to 5.5 | 1.3 | ± 0.14 | 62 |
| Total Dissolved Solids (mg/L) | | 99 | 87 | | 34 | to 140 | 92 | ± 2.5 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.01 U | 0.0064 | ± 0.000 | 61 |
| Calcium (mg/L) | | 22.6 | 21 | | 9.1 | to 27 | 21 | ± 0.44 | 57 |
| Manganese (mg/L) | | 0.0302 | 0.057 | | 0.0079 | to 0.132 | 0.038 | ± 0.003 | 63 |
| pH (STU) | | 7.1 | 7.5 | | 6.34 | to 8.5 | 7.7 | ± 0.061 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 53 | ↑58 | | 37 | to 57 | 50 | ± 0.38 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 64.4 | 60.8 | | 29.2 | to 75 | 58 | ± 1.4 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 53 | ↑58 | | 37 | to 57 | 49 | ± 0.47 | 63 |
| Sodium (mg/L) | | 4.29 | 4.56 | | 3.3 | to 5.1 | 4.1 | ± 0.049 | 63 |
| Chloride (mg/L) | | 2 U | 2 U | | 1 | to 3.9 | 2.1 | ± 0.071 | 63 |
| Iron (mg/L) | | 0.108 | ↑1.01 | | 0.01 U | to 0.329 | 0.064 | ± 0.008 | 63 |
| Magnesium (mg/L) | | 1.94 | ↑2.05 | | 1.5 | to 2.01 | 1.7 | ± 0.016 | 57 |
| Potassium (mg/L) | | 1 U | 1.12 | | 0.91 | to 1.3 | 1 | ± 0.009 | 63 |
| Sulfate (mg/L) | | 17 | 17 | | 14 | to 19 | 17 | ± 0.15 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 13 | | 0.32 U | to 186 | 5.2 | ± 2.9 | 63 |
| Turbidity (field) (NTU) | | 0.1 | 0.1 | | 0 | to 5.5 | 0.46 | ± 0.086 | 62 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.1 U | | 0.08 U | to 0.9 | 0.16 | ± 0.014 | 63 |
| Nitrate (N) (mg/L) | | 0.057 | 0.05 U | | 0.05 U | to 2 U | 0.67 | ± 0.088 | 63 |
| Organic Carbon (mg/L) | | 1 U | 1 U | | 0.5 U | to 2.2 | 1 | ± 0.027 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

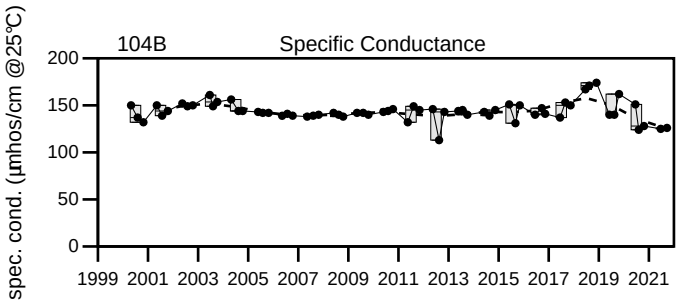
↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

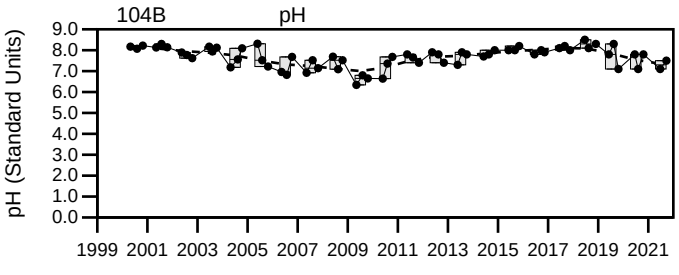
## Comments

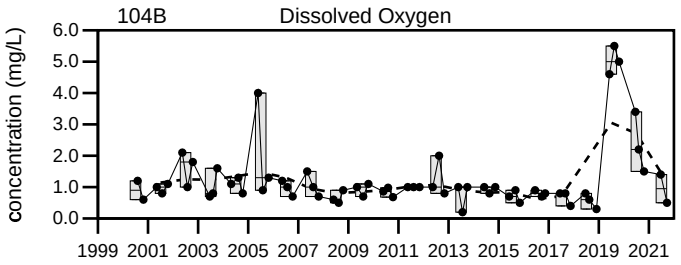
Q2= 6 - 2021
Q3= 9 - 2021

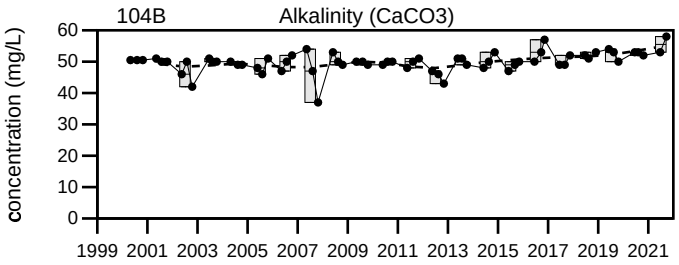
U = Not Detected above the laboratory reporting limit.

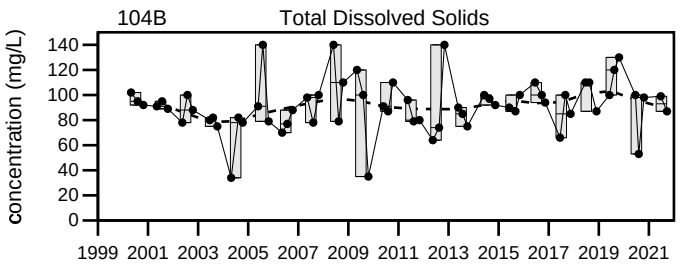
Data Group: 179
Printed: 4/11/2022 09:32

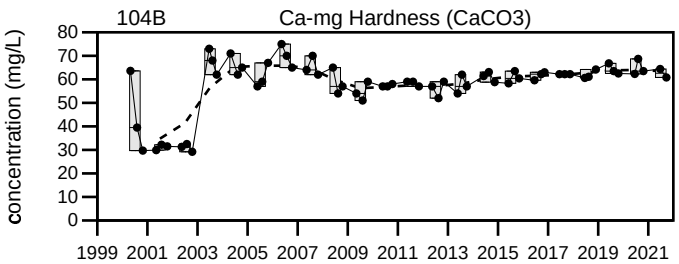


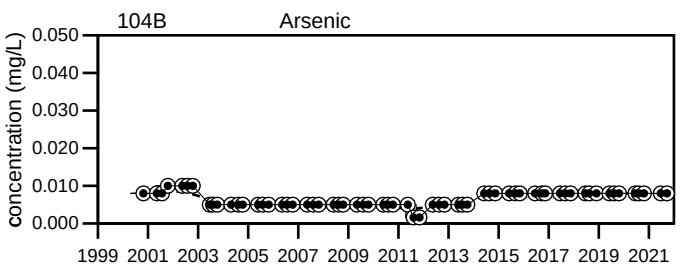



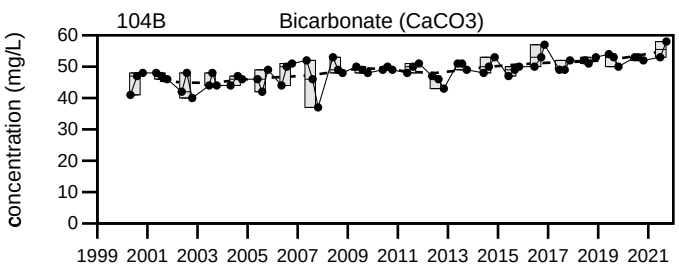



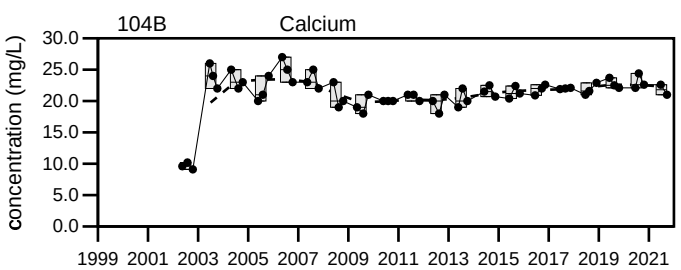



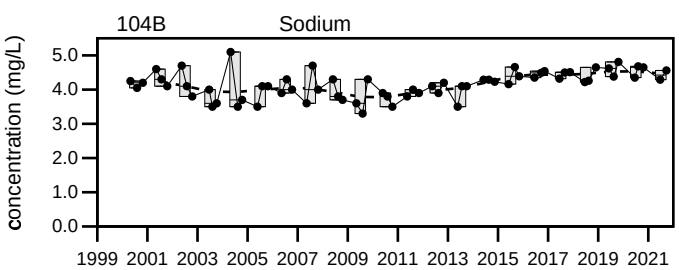



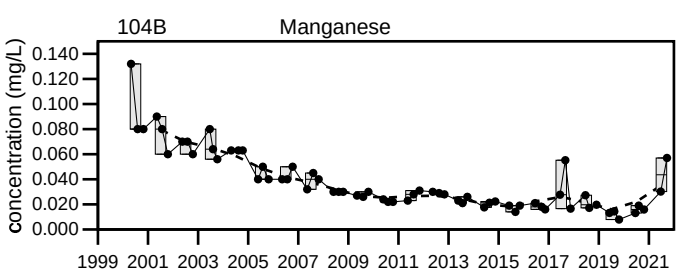



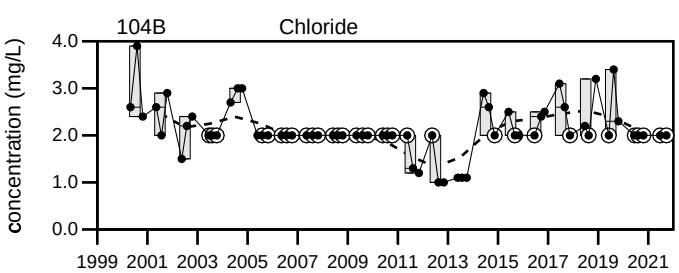



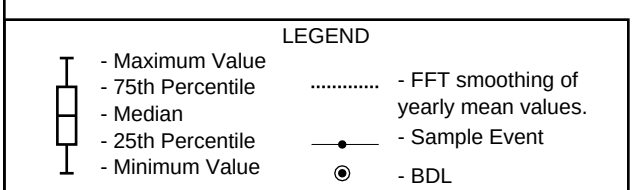



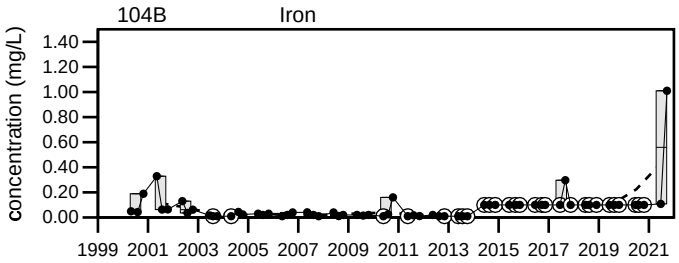



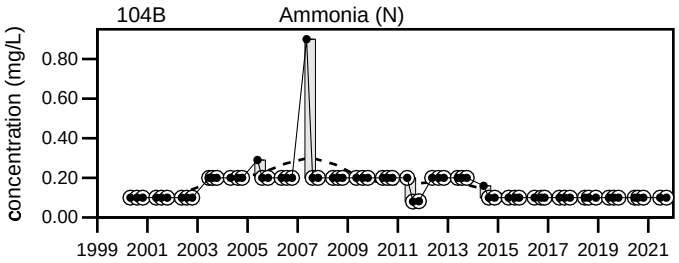



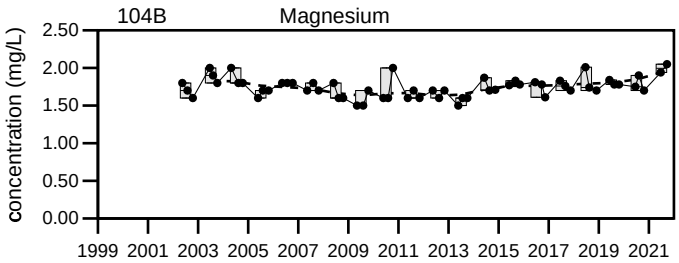

# Dolby Landfill

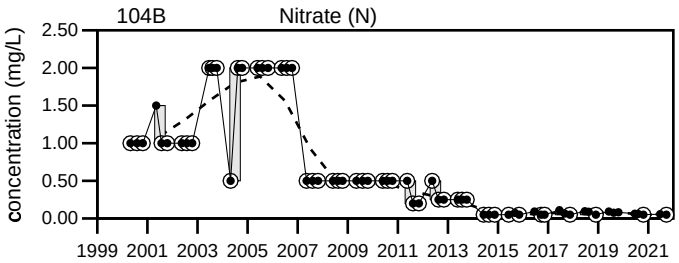
# 104B

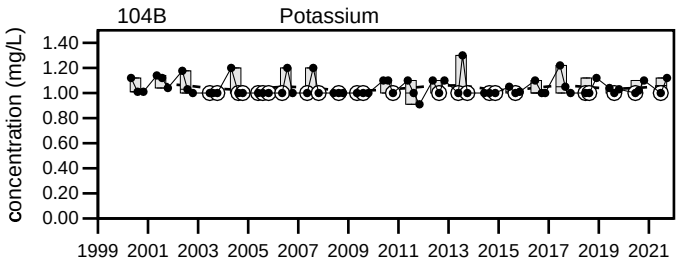
Sevee & Maher Engineers, Inc.

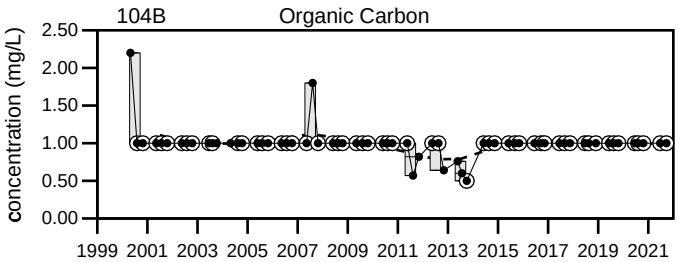


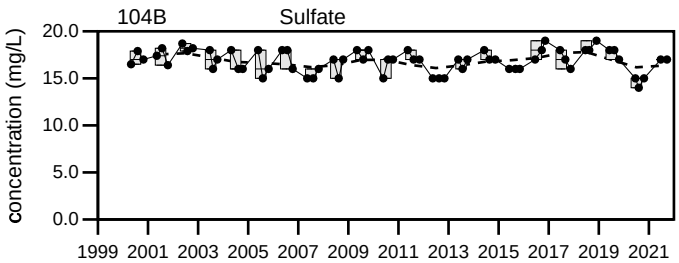



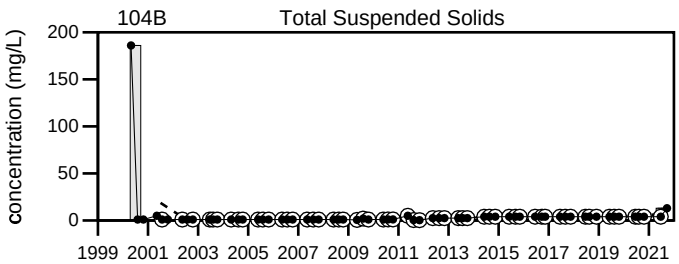



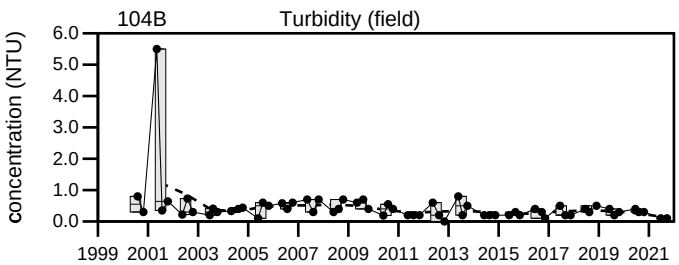



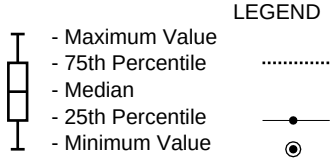



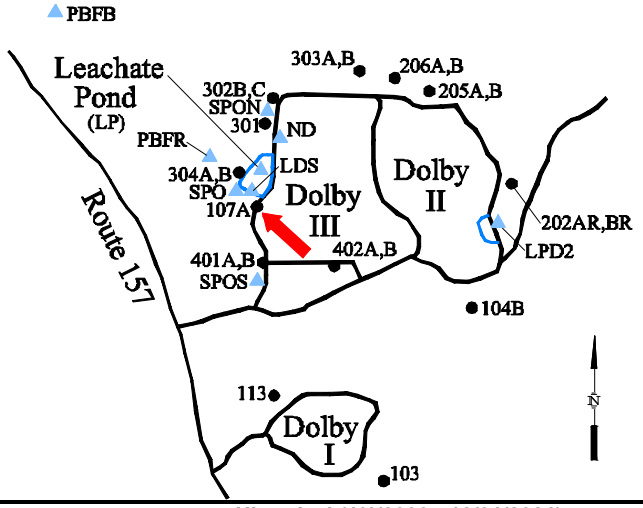

Dolby Landfill

104B

Sevee & Maher Engineers, Inc.

## Well Description

Well located downgradient to the west of the Dolby III Landfill.




| | |
|---|---|
| Screen Interval: | **Unknown TOS to 19.36 ft.** |
| Sampled: | **2 Times Annually** |
| Sampled Since: | **Jun-82** |
| Material Screened: | **Bedrock** |
| Well Condition: | **Good** |
| Sampling Method: | **Low Flow (Intiated Aug. 2000)** |

## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 972 | 1352 | | 477 | to 2710 | 1100 | ± 68 | 63 |
| Dissolved Oxygen (mg/L) | | 0.4 | 0.4 | | 0.1 U | to 3.5 | 0.69 | ± 0.063 | 62 |
| Total Dissolved Solids (mg/L) | | 860 | 1100 | | 280 | to 1834 | 690 | ± 47 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.043 | 0.008 | ± 0.000 | 61 |
| Calcium (mg/L) | | 93.2 | 101 | | 50 | to 370.2 | 110 | ± 8.3 | 57 |
| Manganese (mg/L) | | **14.1** | **26** | | 0.79 | to 72.5 | 21 | ± 2.1 | 63 |
| pH (STU) | | 6.9 | 6.8 | | 5.98 | to 7.3 | 6.7 | ± 0.031 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 930 | 1100 | | 250 | to 1440 | 580 | ± 36 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 626 | 783 | | 200 | to 1548.1 | 540 | ± 38 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 930 | 1100 | | 240 | to 1429 | 550 | ± 35 | 63 |
| Sodium (mg/L) | | **39.5** | **55.4** | | 12 | to 93.2 | 36 | ± 2.3 | 63 |
| Chloride (mg/L) | | 46 | 54 | | 14 | to 222 | 60 | ± 5.7 | 63 |
| Iron (mg/L) | | 0.537 | 0.576 | | 0.02 U | to 1.85 | 0.44 | ± 0.05 | 63 |
| Magnesium (mg/L) | | 95.5 | 129 | | 18.6 | to 140 | 61 | ± 4.5 | 57 |
| Potassium (mg/L) | | 31.3 | 45.8 | | 1.1 | to 59.2 | 6.4 | ± 1.1 | 63 |
| Sulfate (mg/L) | | 1 U | 1 U | | 1 U | to 15.4 | 7.3 | ± 0.4 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 5.6 | | 0.32 U | to 43 | 3.2 | ± 0.67 | 63 |
| Turbidity (field) (NTU) | | 0.2 | 0.8 | | 0 | to 3.1 | 0.46 | ± 0.054 | 62 |
| Ammonia (N) (mg/L) | | 2.2 | 3.2 | | 0.08 U | to 5.6 | 0.36 | ± 0.095 | 63 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 2 | 0.77 | ± 0.1 | 63 |
| Organic Carbon (mg/L) | | 13 | 18 | | 1.5 | to 62.6 | 11 | ± 1.2 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

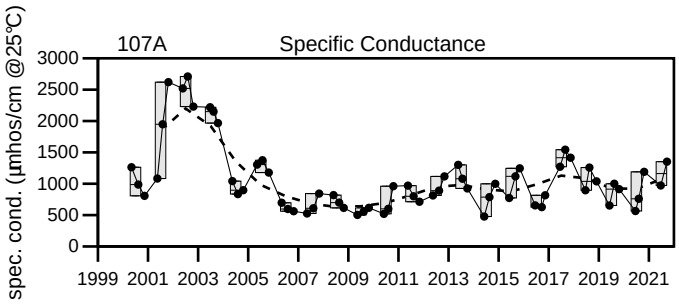
↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

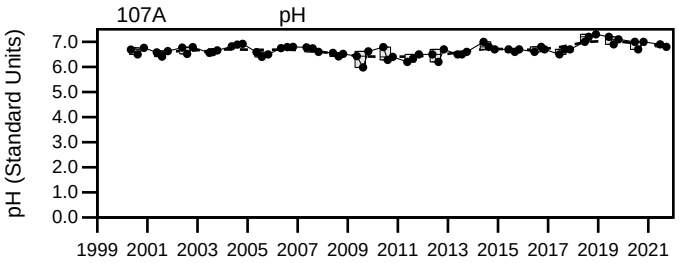
## Comments

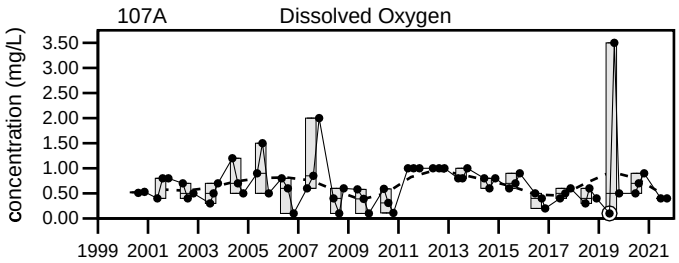
Q2= 6 - 2021
Q3= 9 - 2021

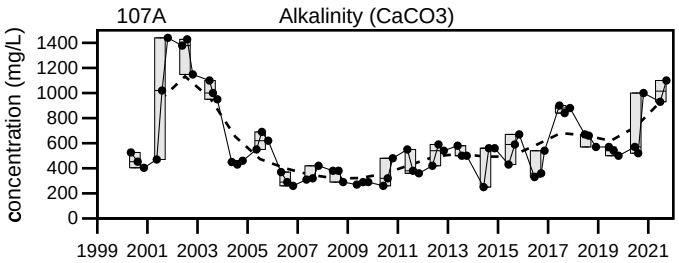
U = Not Detected above the laboratory reporting limit.

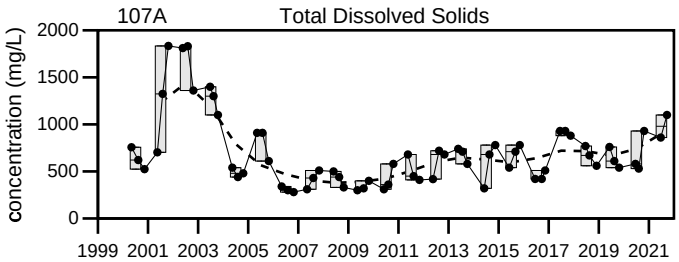
Data Group: 179
Printed: 4/11/2022 09:32

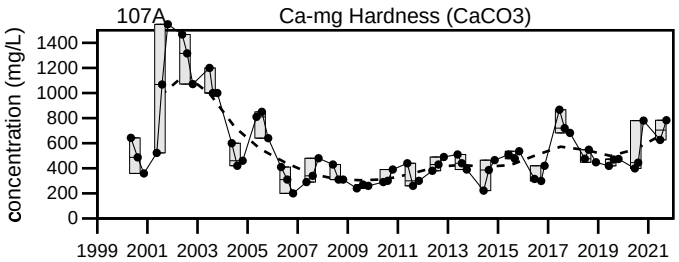


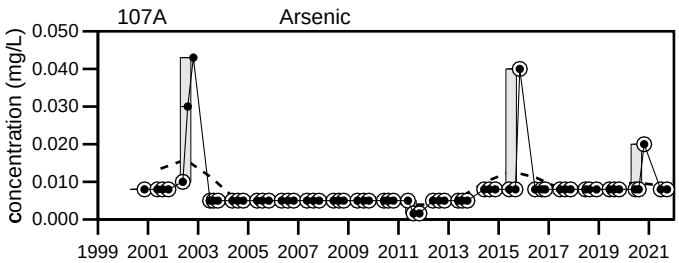



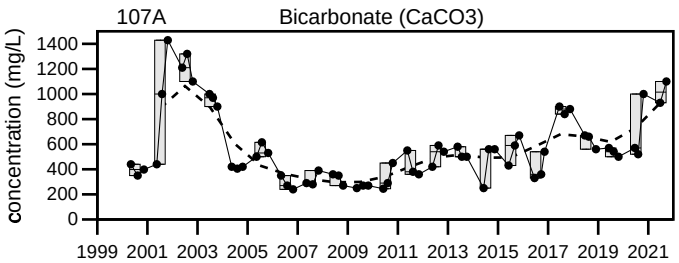



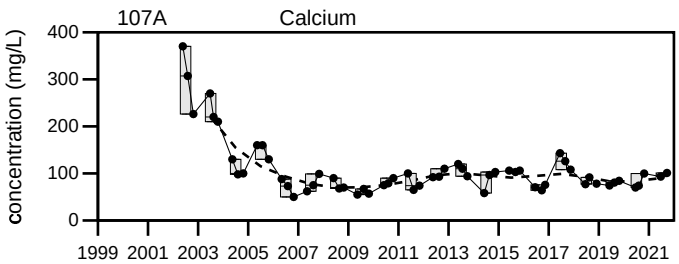



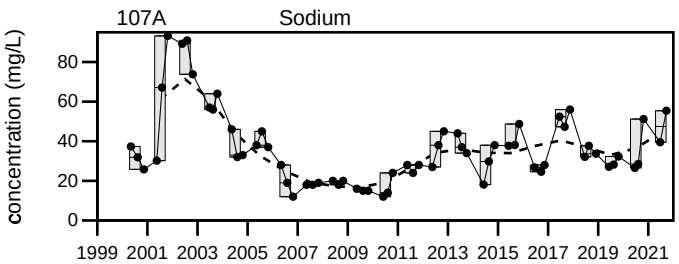



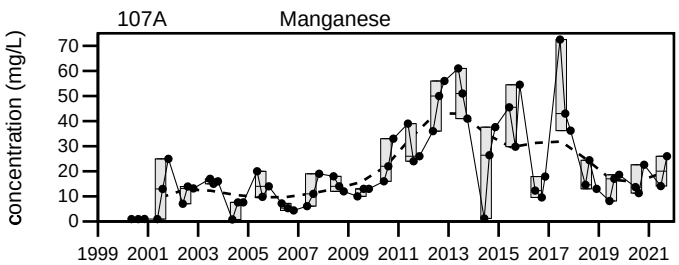



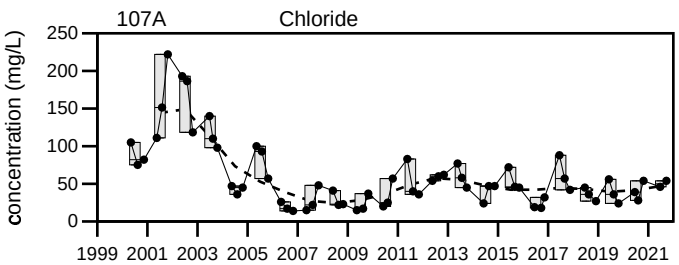



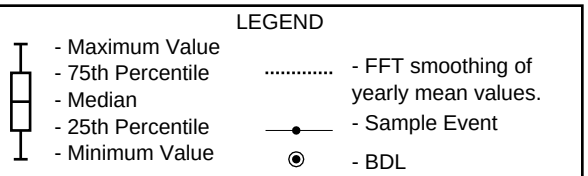



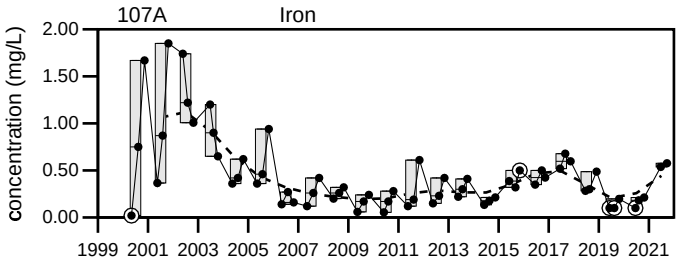



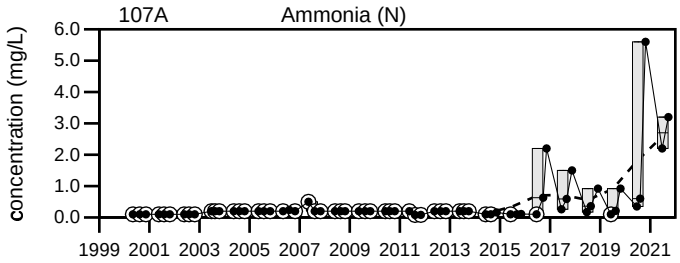



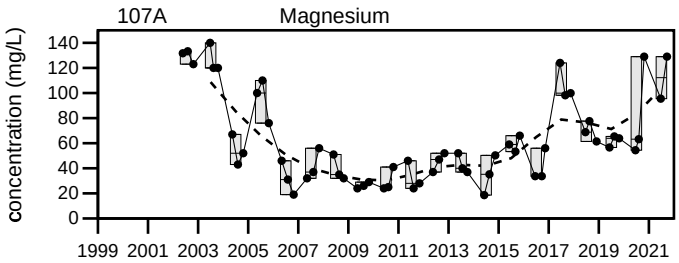

Dolby Landfill

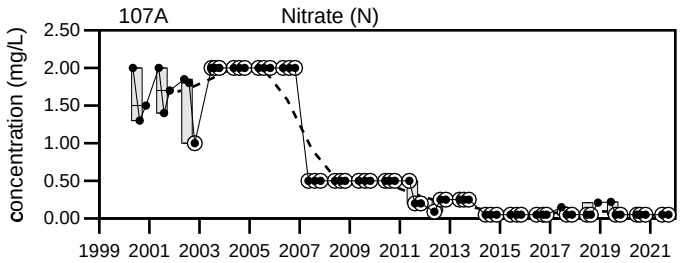
107A

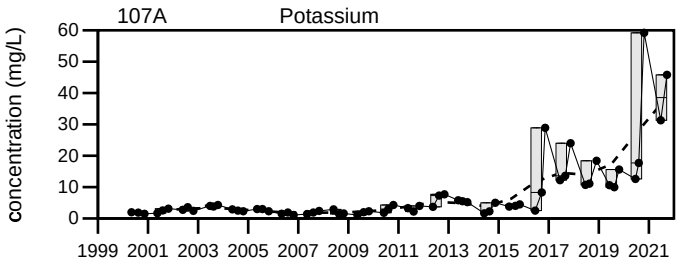
Sevee & Maher Engineers, Inc.

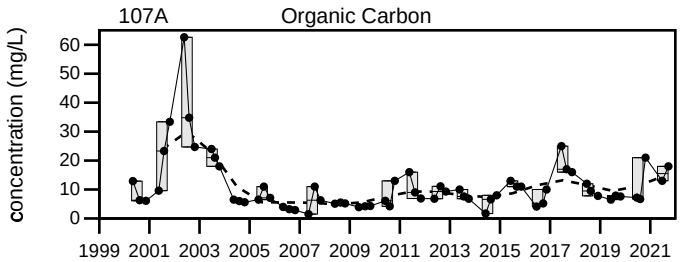


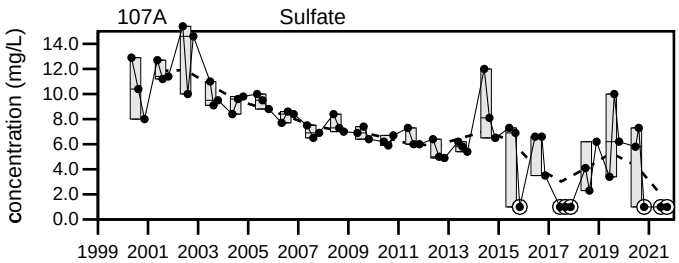



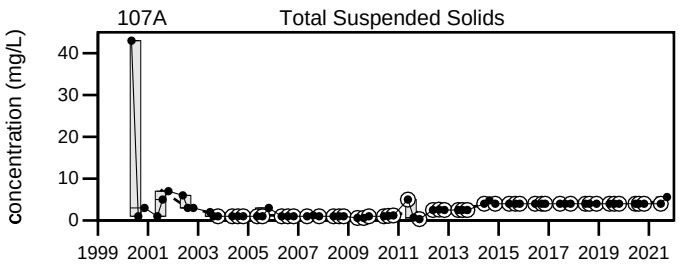



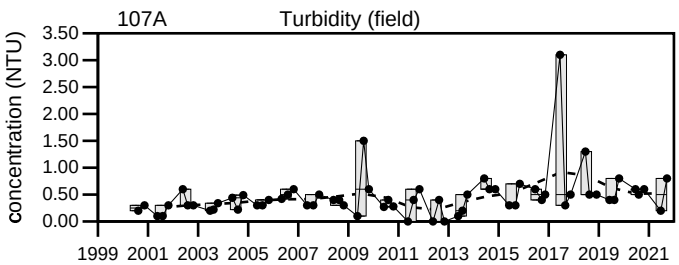



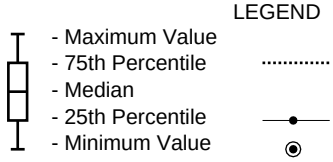




Dolby Landfill

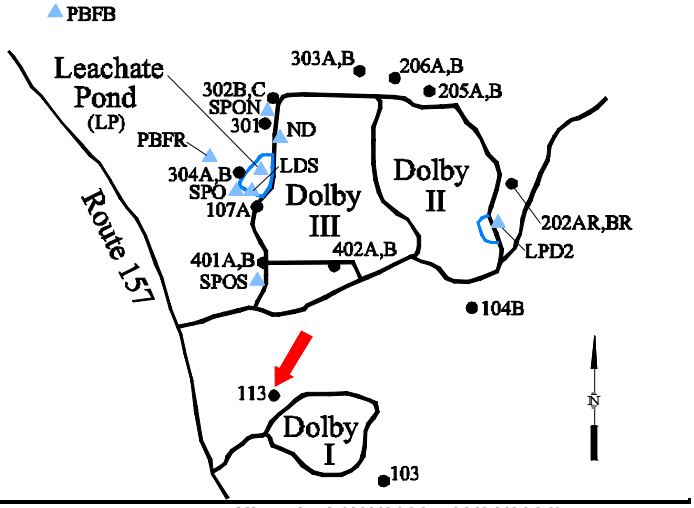
107A

Sevee & Maher Engineers, Inc.

## Well Description

Well located downgradient to northwest of Dolby I Landfill.

Screen Interval: **Unknown TOS to 21.6 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Nov-83**
Material Screened: **Bedrock**
Well Condition: **Good**
Sampling Method: **Low Flow (Initiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 932 | 961 | | 683 | to 1504 | 1100 | ± 25 | 60 |
| Dissolved Oxygen (mg/L) | | 4.3 | 4.7 | | 0.1 | to 9.9 | 1.3 | ± 0.25 | 59 |
| pH (STU) | | 6.7 | 6.8 | | 6 | to 7.3 | 6.4 | ± 0.032 | 60 |
| Turbidity (field) (NTU) | | 1.2 | 1.2 | | 0 | to 4.2 | 0.77 | ± 0.092 | 59 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

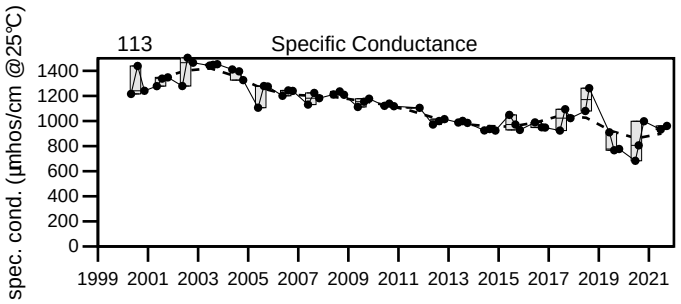
**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

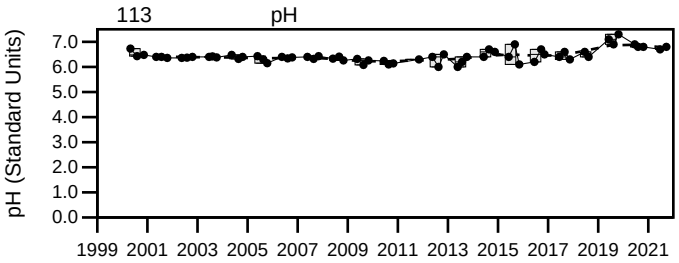
↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

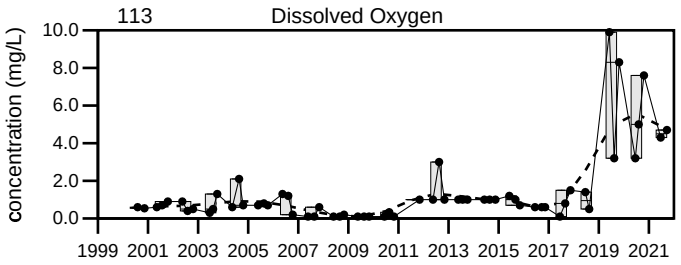
## Comments

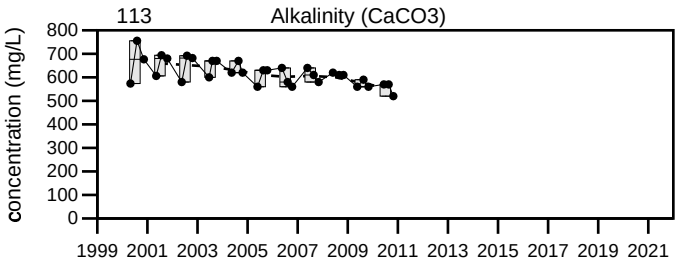
Q2= 6 - 2021

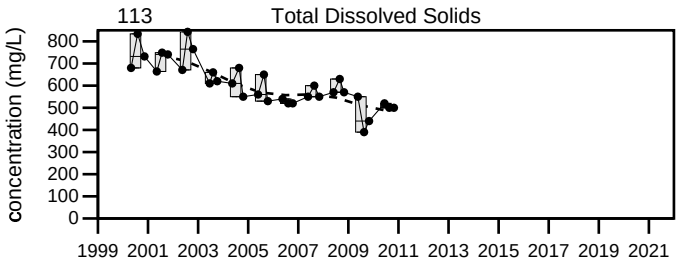
Q3= 9 - 2021

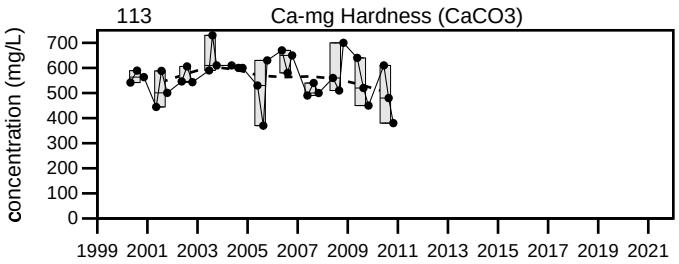


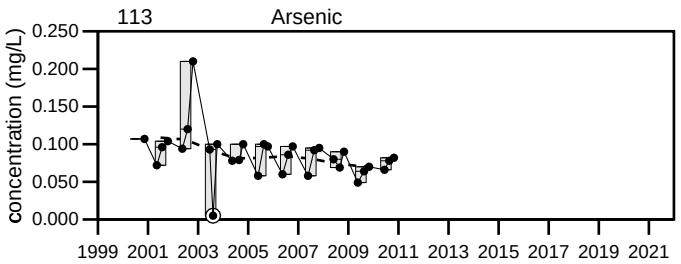



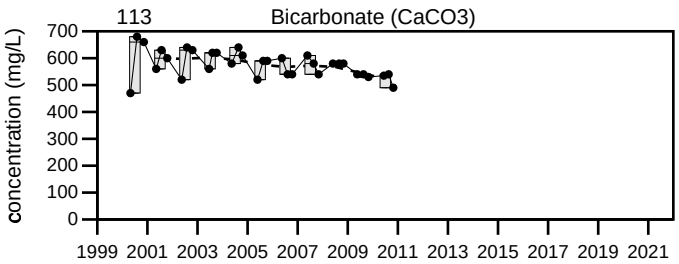



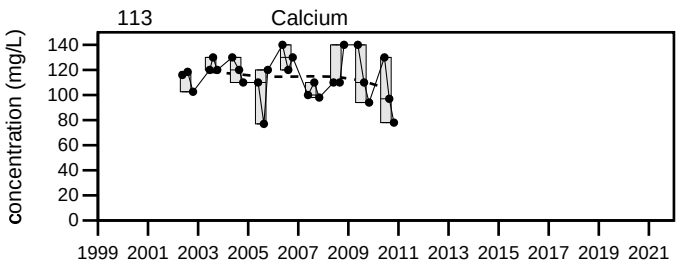



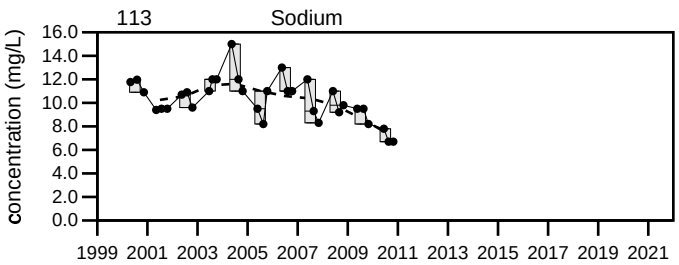



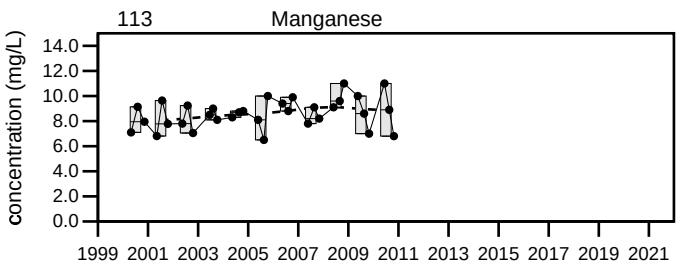



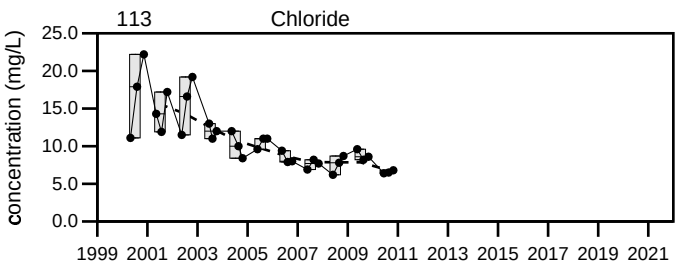



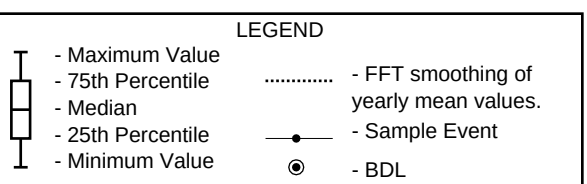



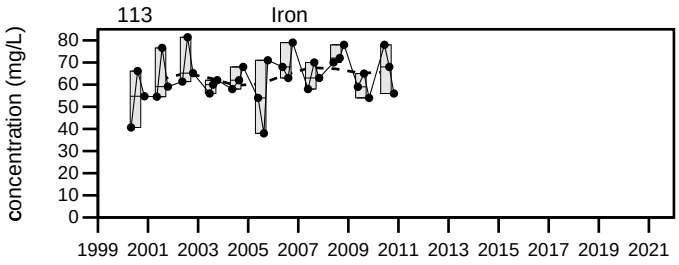



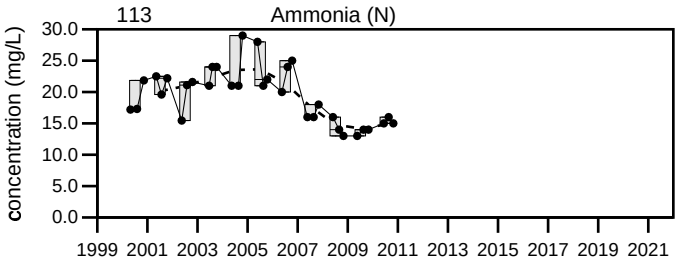



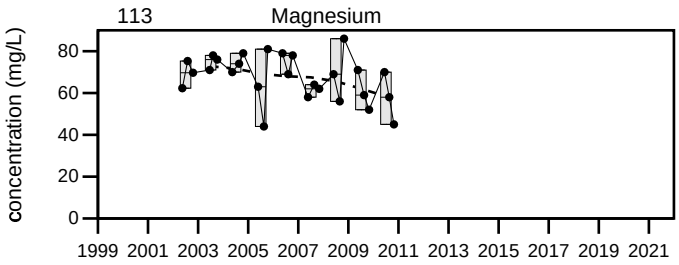

# Dolby Landfill

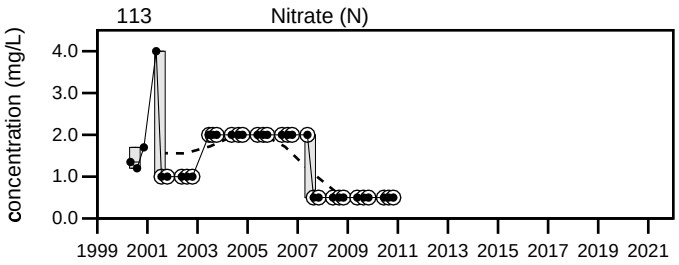
# 113

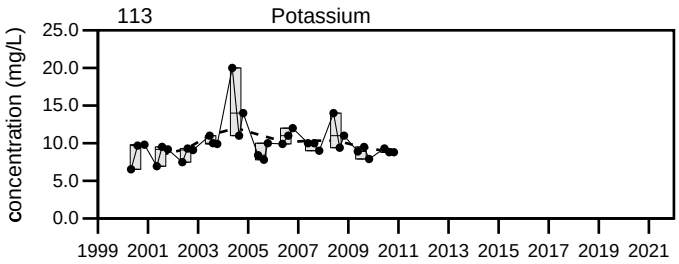
Sevee & Maher Engineers, Inc.

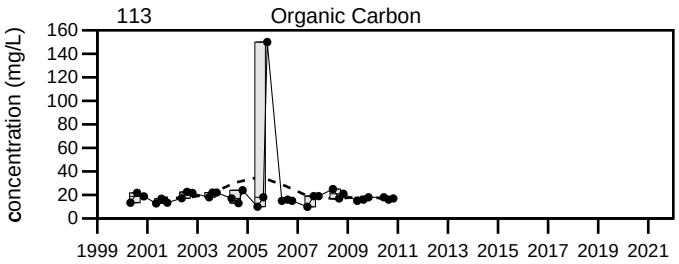


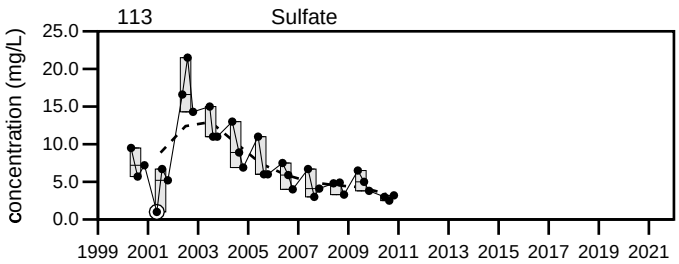



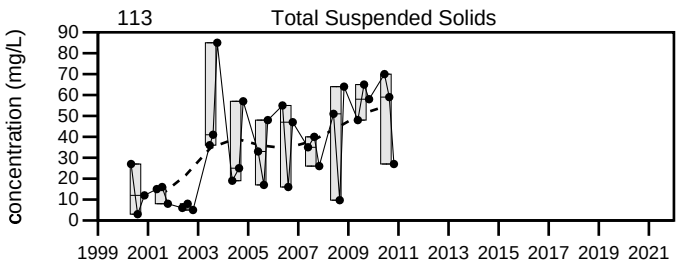



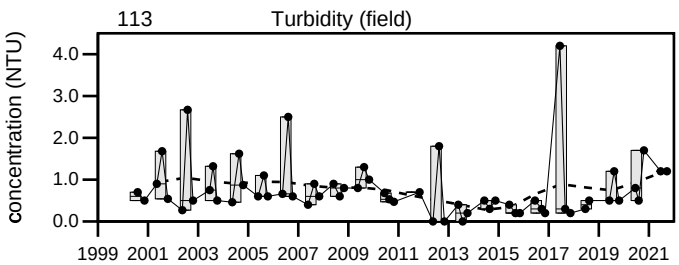




LEGEND

- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value

..... - FFT smoothing of yearly mean values.

- Sample Event

- BDL

# Dolby Landfill

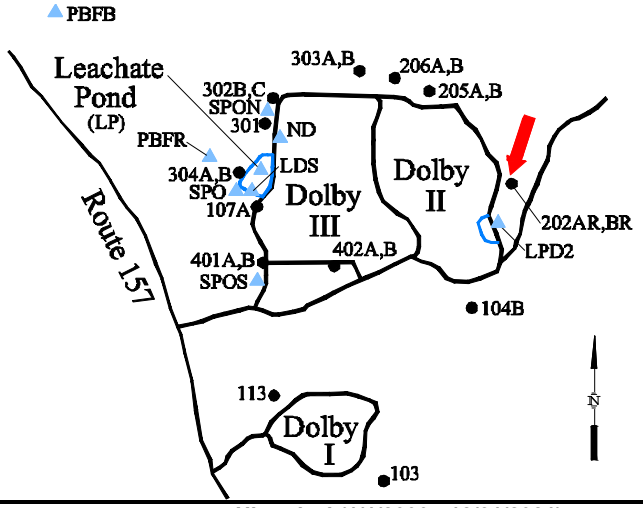
# 113

Sevee & Maher Engineers, Inc.

## Well Description

Well located downgradient to the east of the Dolby II Landfill.

| | |
|---|---|
| Screen Interval: | **71.5 ft. to 81.5 ft.** |
| Sampled: | **2 Times Annually** |
| Sampled Since: | **Oct-94** |
| Material Screened: | **Bedrock** |
| Well Condition: | **Good** |
| Sampling Method: | **Low Flow (Initiated Aug. 2000)** |




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 1276 | 1298 | | 1272 | to 1995 | 1600 | ± 23 | 62 |
| Dissolved Oxygen (mg/L) | | 1.1 | 0.3 | | 0.1 | to 5.56 | 0.99 | ± 0.14 | 61 |
| Total Dissolved Solids (mg/L) | | 900 | ↓820 | | 840 | to 1176 | 980 | ± 10 | 62 |
| Arsenic (mg/L) | | 0.008 U | **0.012** | | 0.005 U | to 0.071 | 0.014 | ± 0.001 | 60 |
| Calcium (mg/L) | | 219 | 200 | | 122.8 | to 500 | 240 | ± 7.7 | 56 |
| Manganese (mg/L) | | **14.1** | **14.7** | | 13.7 | to 26 | 18 | ± 0.33 | 62 |
| pH (STU) | | 6.6 | 6.5 | | 6.06 | to 6.9 | 6.6 | ± 0.016 | 62 |
| Alkalinity (CaCO3) (mg/L) | | 900 | 910 | | 100 | to 1110 | 940 | ± 17 | 62 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 846 | 794 | | 469.3 | to 1700 | 940 | ± 24 | 62 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 900 | 910 | | 98 | to 1105 | 910 | ± 15 | 62 |
| Sodium (mg/L) | | **23** | ↓**20.7** | | 21.2 | to 39 | 26 | ± 0.48 | 62 |
| Chloride (mg/L) | | 16 | 15 | | 14 | to 41.2 | 23 | ± 0.89 | 62 |
| Iron (mg/L) | | 0.666 | 2.01 | | 0.35 | to 2.04 | 1.3 | ± 0.047 | 62 |
| Magnesium (mg/L) | | 72.8 | 71.3 | | 39.5 | to 130 | 82 | ± 1.9 | 56 |
| Potassium (mg/L) | | 13.8 | 12.8 | | 8.32 | to 17 | 13 | ± 0.22 | 62 |
| Sulfate (mg/L) | | 1 U | 1 U | | 1 U | to 12.5 | 4.5 | ± 0.38 | 62 |
| Total Suspended Solids (mg/L) | | 4 U | 4 U | | 0.6 U | to 17 | 3.3 | ± 0.3 | 62 |
| Turbidity (field) (NTU) | | 0.2 | 0.3 | | 0 | to 1.7 | 0.41 | ± 0.042 | 61 |
| Ammonia (N) (mg/L) | | 3 | 3.5 | | 0.784 | to 4.8 | 2.9 | ± 0.11 | 62 |
| Nitrate (N) (mg/L) | | 0.82 | 0.05 U | | 0.05 U | to 2.7 | 0.77 | ± 0.11 | 62 |
| Organic Carbon (mg/L) | | 10 | 9.8 | | 7.5 | to 47 | 13 | ± 0.7 | 62 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

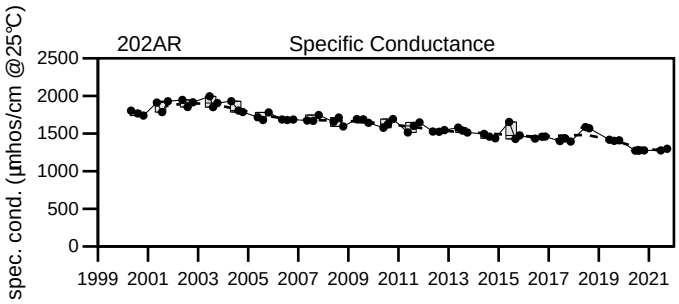
## Comments

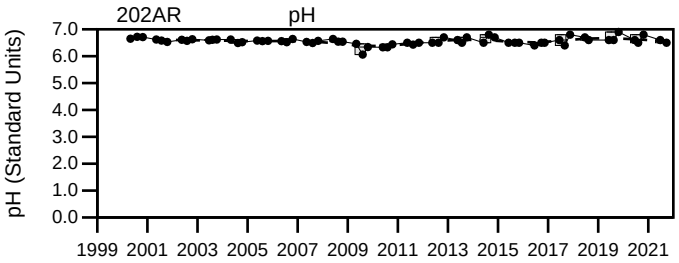
Q2= 6 - 2021

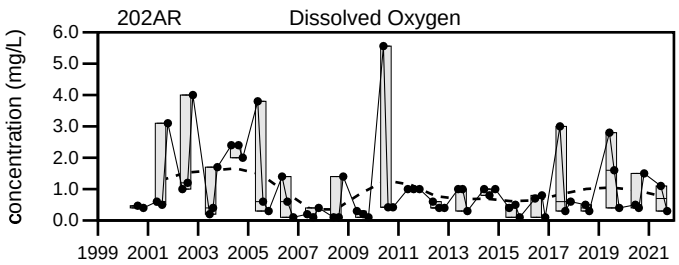
Q3= 9 - 2021

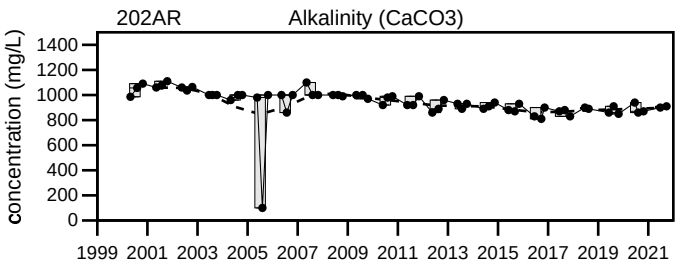
U = Not Detected above the laboratory reporting limit.

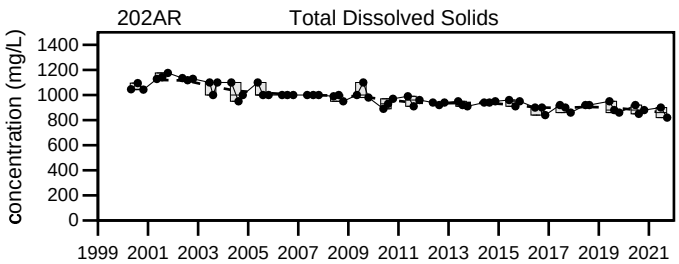
Data Group: 179
Printed: 4/11/2022 09:32

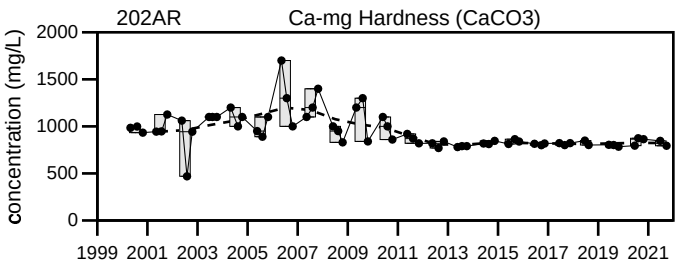


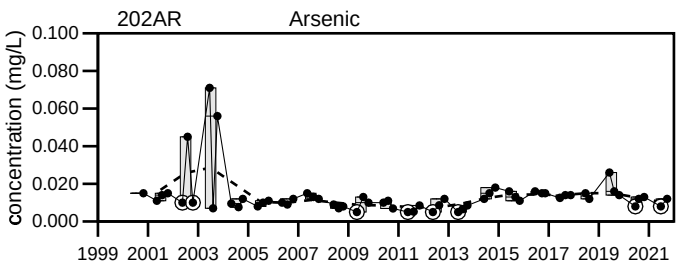



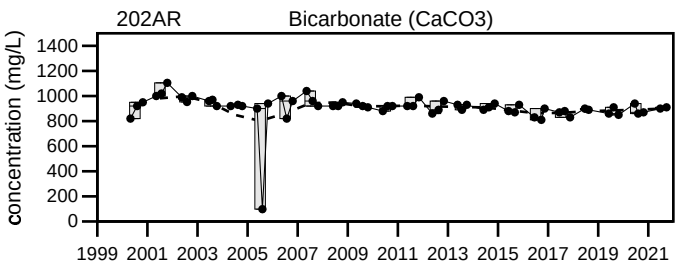



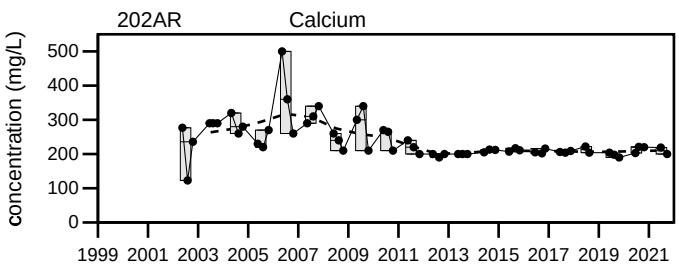



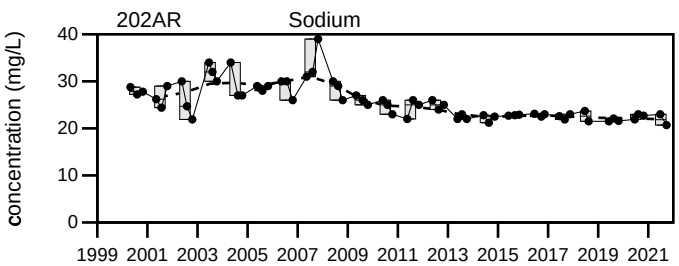



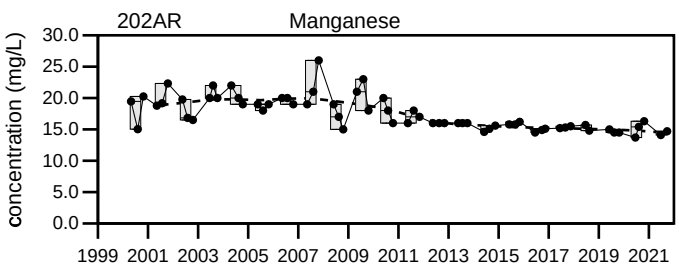



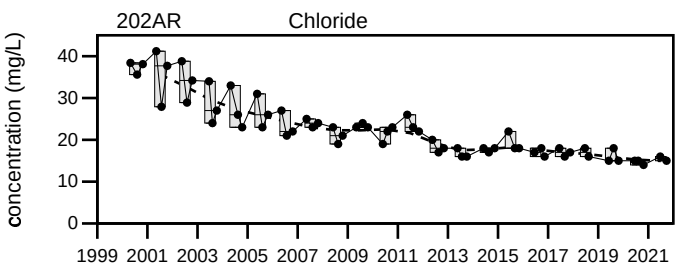



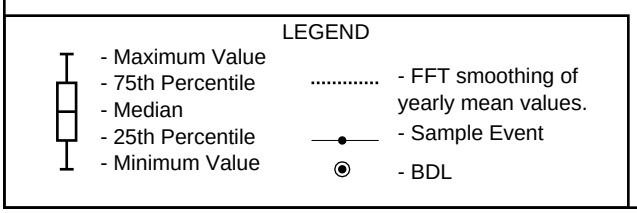



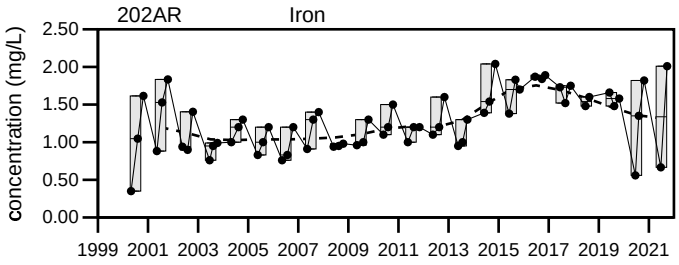



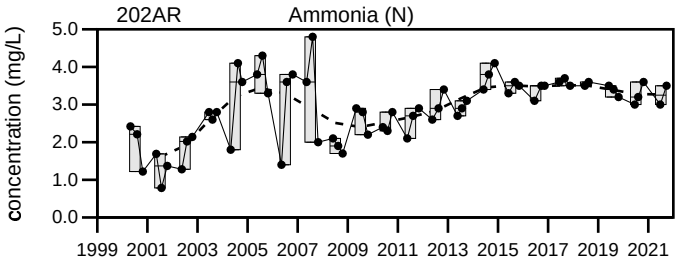



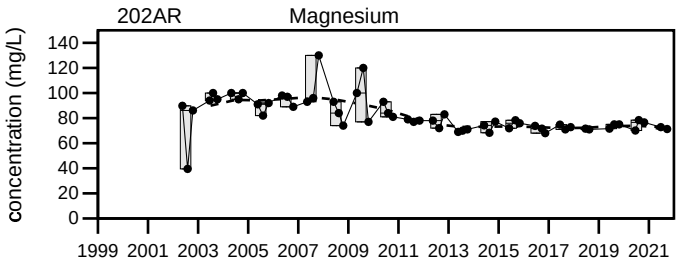

# Dolby Landfill

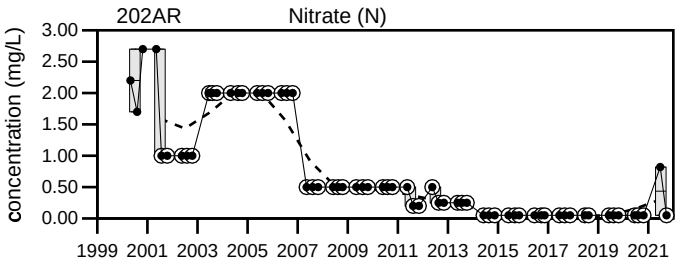
## 202AR

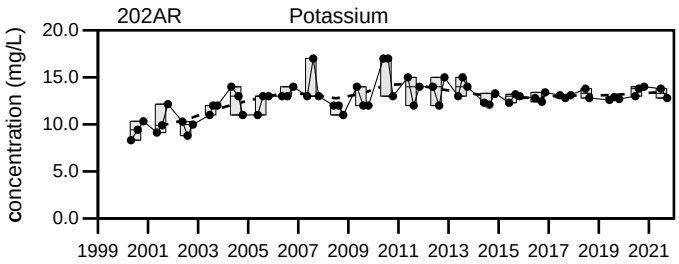
Sevee & Maher Engineers, Inc.

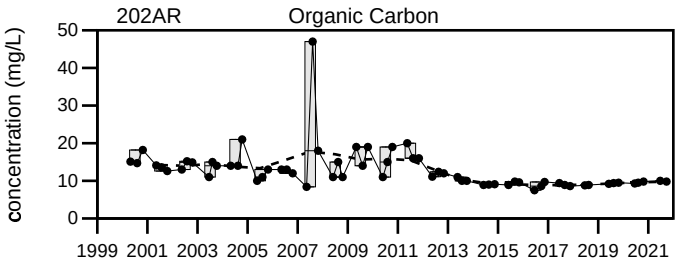


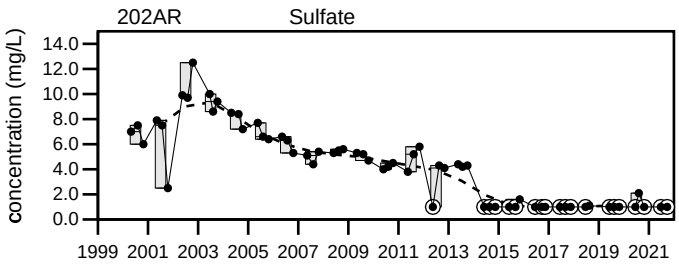



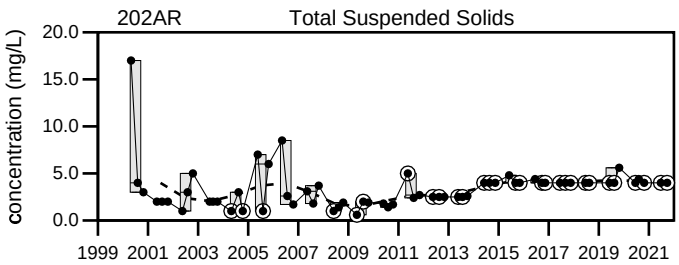



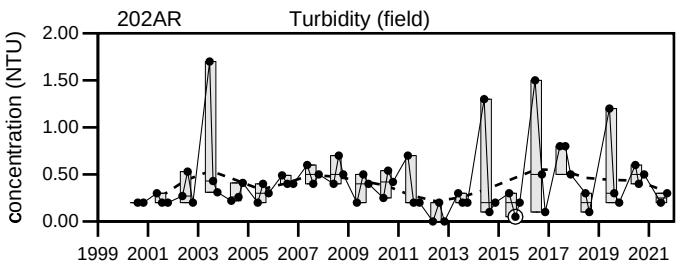



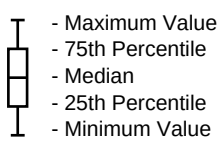




Dolby Landfill

202AR

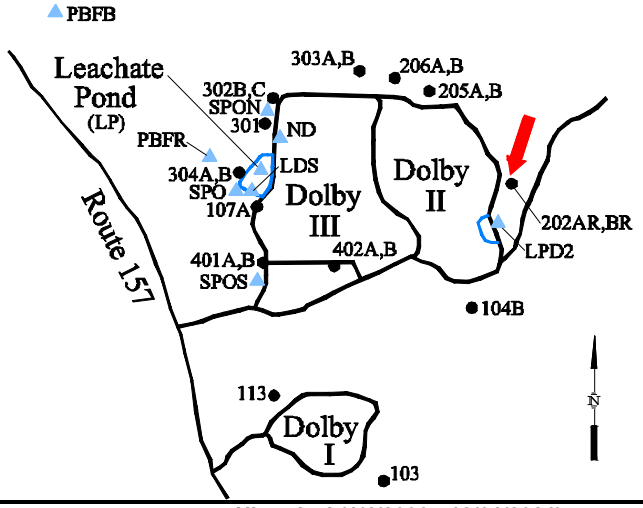
Sevee & Maher Engineers, Inc.

202B & 202BR
2021 Groundwater Stats

## Well Description

Well located downgradient to the east of the Dolby II Landfill.

Screen Interval:
Sampled: **2 Times Annually**
Sampled Since: **Sep-21**
Material Screened: **Glacial Till/Bedrock**
Well Condition: **Good**
Sampling Method: **Low Flow**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | Q2 | Q3 | Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | ! | 1431 | | 604 | to 1910 | 1100 | ± 44 | 57 |
| Dissolved Oxygen (mg/L) | | ! | 0.7 | | 0.1 | to 6.29 | 0.99 | ± 0.14 | 56 |
| Total Dissolved Solids (mg/L) | | ! | 950 | | 380 | to 1241 | 660 | ± 27 | 57 |
| Arsenic (mg/L) | | ! | 0.008 U | | 0.0016 U | to 0.031 | 0.0073 | ± 0.000 | 55 |
| Calcium (mg/L) | | ! | 186 | | 25 | to 230 | 120 | ± 5.9 | 51 |
| Manganese (mg/L) | | ! | **14.2** | | 3.1 | to 15.96 | 8.7 | ± 0.35 | 57 |
| pH (STU) | | ! | 6.4 | | 5.96 | to 7 | 6.5 | ± 0.021 | 57 |
| Alkalinity (CaCO3) (mg/L) | | ! | 1000 | | 360 | to 1196.9 | 640 | ± 25 | 57 |
| Ca-mg Hardness (CaCO3) (mg/L) | | ! | 922 | | 170 | to 1100 | 590 | ± 27 | 57 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | ! | 1000 | | 360 | to 1130 | 610 | ± 24 | 57 |
| Sodium (mg/L) | | ! | **27.8** | | 6 | to 38.3 | 21 | ± 0.91 | 57 |
| Chloride (mg/L) | | ! | 21 | | 6.5 | to 55.3 | 19 | ± 1.4 | 57 |
| Iron (mg/L) | | ! | 0.147 | | 0.02 U | to 10.6 | 1.4 | ± 0.24 | 57 |
| Magnesium (mg/L) | | ! | 111 | | 22 | to 130 | 67 | ± 3.2 | 51 |
| Potassium (mg/L) | | ! | ↑24.5 | | 4 | to 15.8 | 10 | ± 0.35 | 57 |
| Sulfate (mg/L) | | ! | 1 U | | 1 U | to 33 | 8.5 | ± 0.83 | 57 |
| Total Suspended Solids (mg/L) | | ! | 5.6 | | 1 U | to 540 | 28 | ± 10 | 57 |
| Turbidity (field) (NTU) | | ! | 1.2 | | 0 | to 64.7 | 10 | ± 2 | 56 |
| Ammonia (N) (mg/L) | | ! | 4.5 | | 0.2 U | to 5.4 | 2.2 | ± 0.13 | 57 |
| Nitrate (N) (mg/L) | | ! | 0.074 | | 0.05 U | to 10 | 1.2 | ± 0.2 | 57 |
| Organic Carbon (mg/L) | | ! | 14 | | 3.7 | to 47 | 12 | ± 0.94 | 57 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

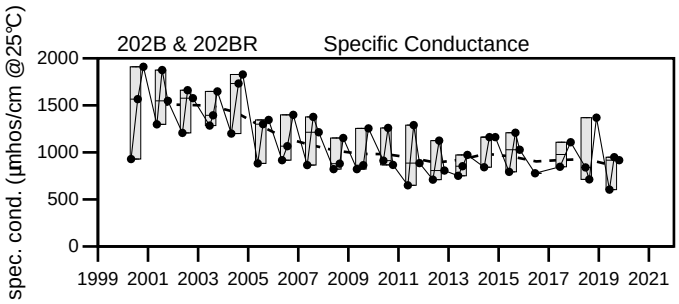
↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

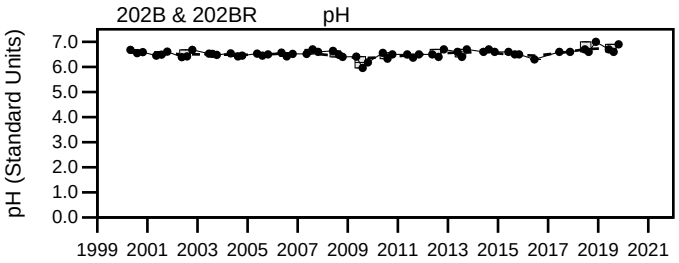
## Comments

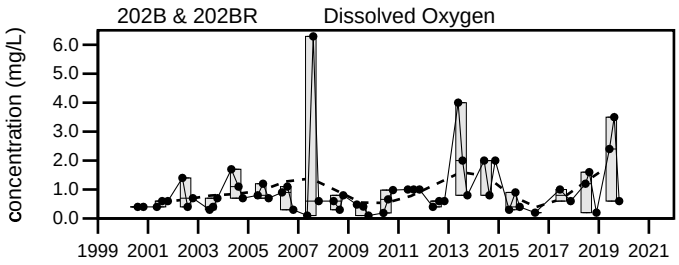
Q2= 6 - 2021
Q3= 9 - 2021

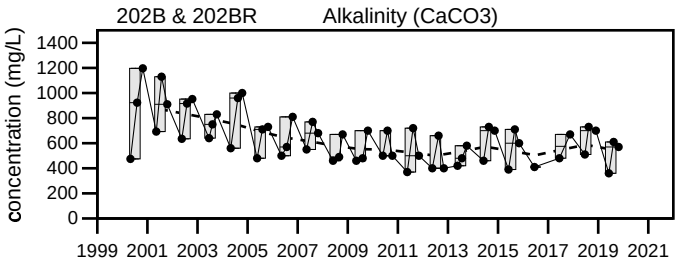
U = Not Detected above the laboratory reporting limit.
! = The sampling location was damaged or destroyed.

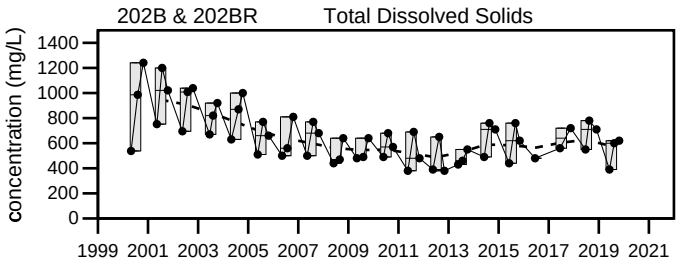
Data Group: 179
Printed: 4/11/2022 10:00

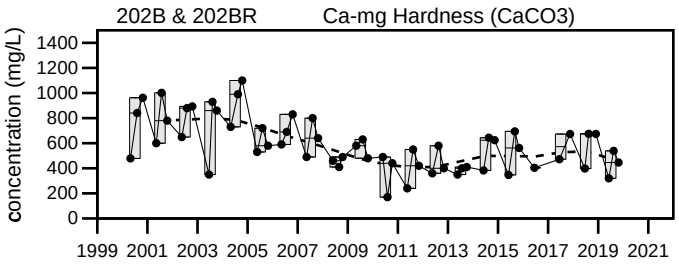


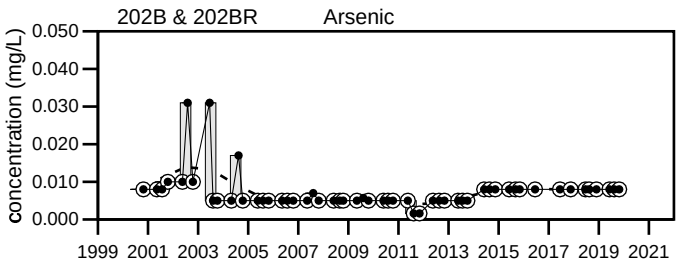



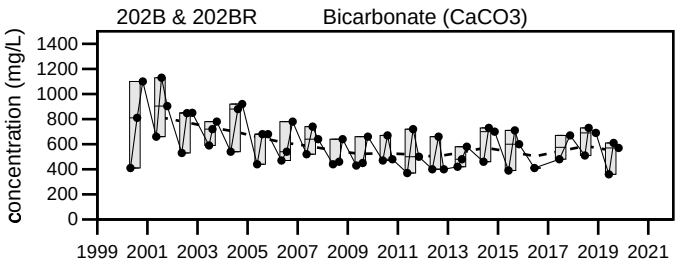



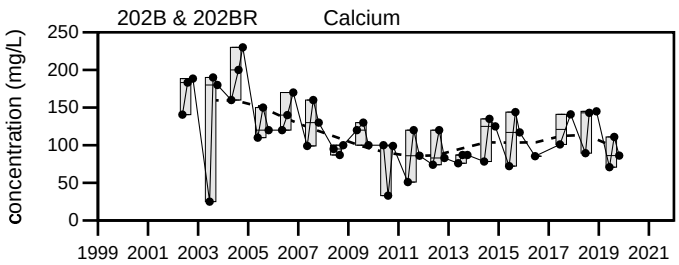



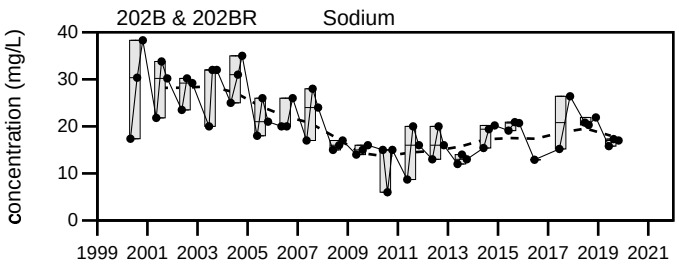



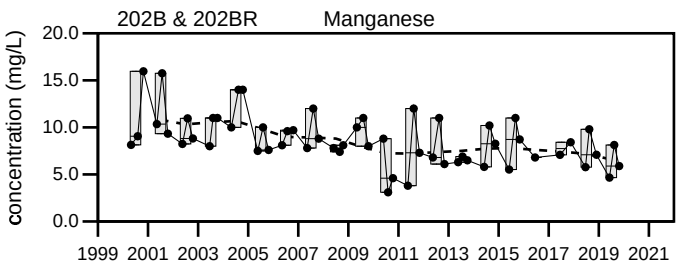



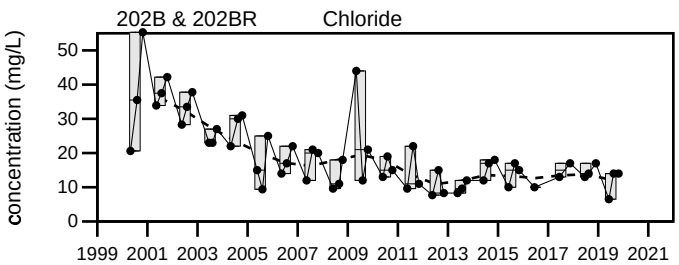



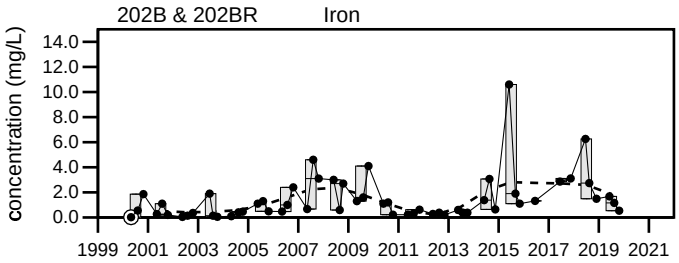

LEGEND

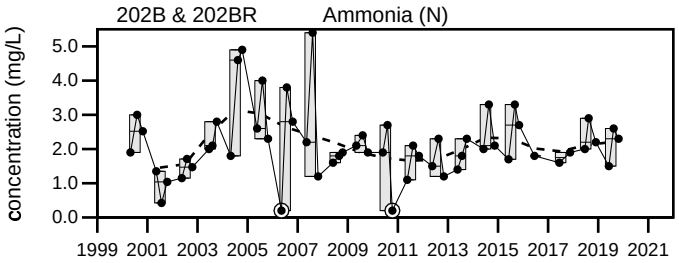
- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value
- FFT smoothing of yearly mean values.
- Sample Event
- BDL

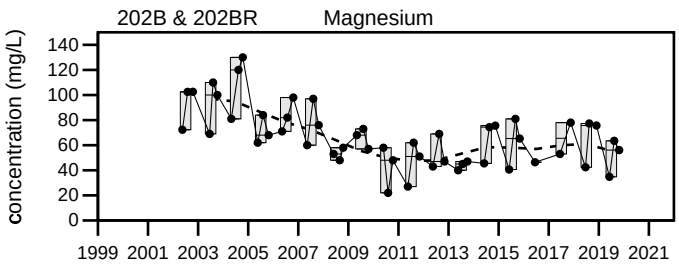
# Dolby Landfill

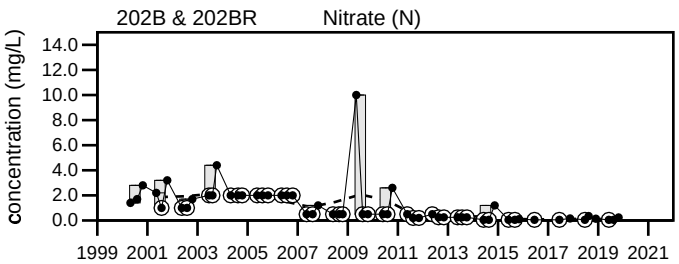
## 202B & 202BR

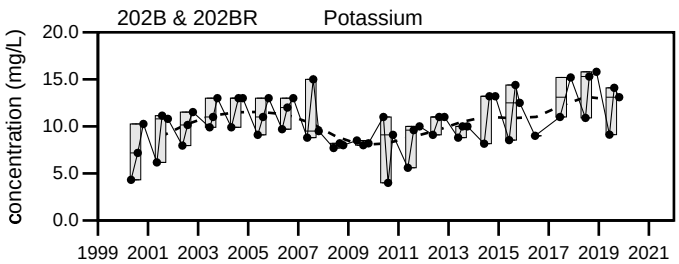
Sevee & Maher Engineers, Inc.

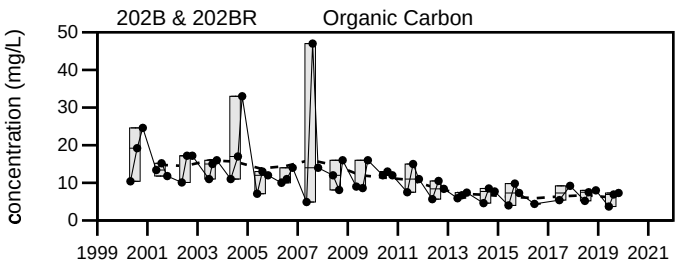


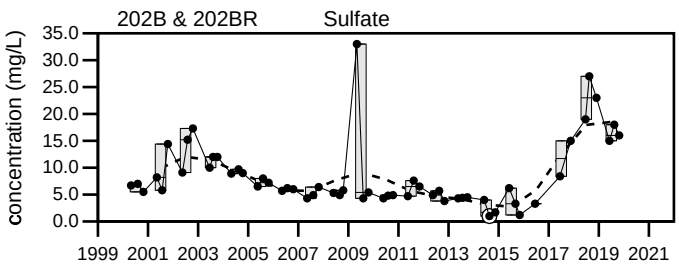



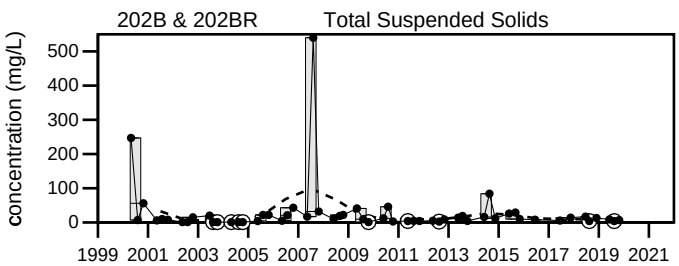



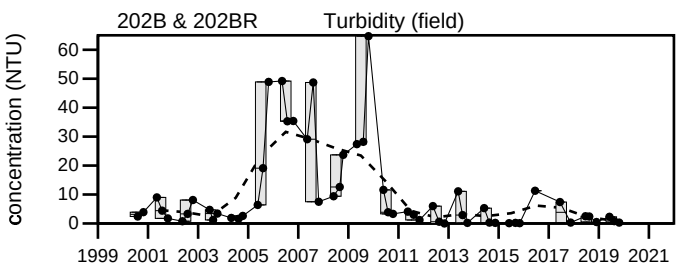




LEGEND

- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value

- FFT smoothing of yearly mean values.
- Sample Event
- BDL

# Dolby Landfill

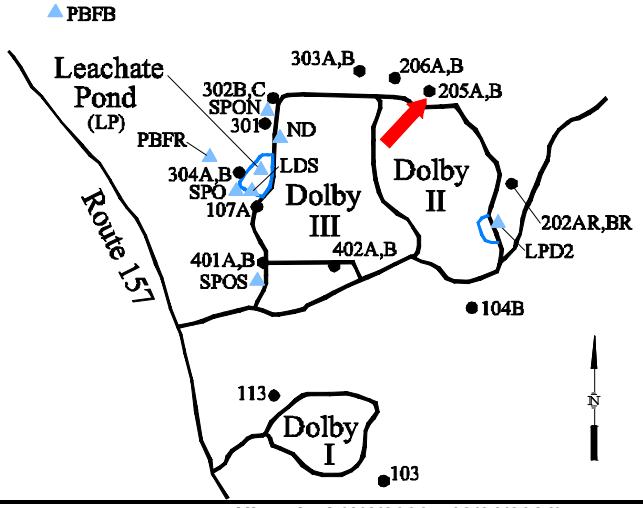
## 202B & 202BR

Sevee & Maher Engineers, Inc.

## Well Description

Well located downgradient to the north of the Dolby II Landfill.

Screen Interval: **26 ft. to 31 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Jun-86**
Material Screened: **Bedrock**
Well Condition: **Good**
Sampling Method: **Low Flow (Initiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | ↓409 | ↓403 | | 411 | to 1013 | 670 | ± 22 | 63 |
| Dissolved Oxygen (mg/L) | | 1.2 | 0.6 | | 0.1 | to 8.6 | 1.1 | ± 0.16 | 62 |
| Total Dissolved Solids (mg/L) | | 290 | 230 | | 95 | to 550 | 360 | ± 12 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.016 | 0.0068 | ± 0.000 | 61 |
| Calcium (mg/L) | | 65.1 | ↓55.7 | | 55.8 | to 180 | 94 | ± 4.6 | 57 |
| Manganese (mg/L) | | 0.197 | **0.785** | | 0.16 | to 1.7 | 0.93 | ± 0.035 | 63 |
| pH (STU) | | 7 | 7.1 | | 6.56 | to 7.8 | 7.1 | ± 0.032 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 200 | 180 | | 40 | to 500 | 280 | ± 13 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 217 | 189 | | 188 | to 610 | 310 | ± 14 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 200 | 180 | | 160 | to 480 | 270 | ± 11 | 63 |
| Sodium (mg/L) | | **21.9** | **20.3** | | 14.13 | to 42 | 24 | ± 0.62 | 63 |
| Chloride (mg/L) | | 38 | 39 | | 29 | to 74.5 | 42 | ± 1 | 63 |
| Iron (mg/L) | | 0.202 | 0.217 | | 0.1 U | to 3.326 | 1.1 | ± 0.11 | 63 |
| Magnesium (mg/L) | | 13.4 | 12.2 | | 11.7 | to 39 | 21 | ± 0.99 | 57 |
| Potassium (mg/L) | | 1.9 | 1.85 | | 1.44 | to 4.5 | 2.5 | ± 0.095 | 63 |
| Sulfate (mg/L) | | 8.8 | 7 | | 3.1 | to 33 | 9.4 | ± 0.45 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 4 U | | 1 U | to 6 | 2.8 | ± 0.16 | 63 |
| Turbidity (field) (NTU) | | 0.6 | 0.3 | | 0 | to 2.9 | 0.59 | ± 0.062 | 62 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.3 | | 0.08 U | to 0.55 | 0.23 | ± 0.013 | 63 |
| Nitrate (N) (mg/L) | | 0.13 | 0.05 U | | 0.05 U | to 10 | 0.92 | ± 0.18 | 63 |
| Organic Carbon (mg/L) | | 2.2 | 1.3 | | 1.1 | to 63.7 | 4.4 | ± 1 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

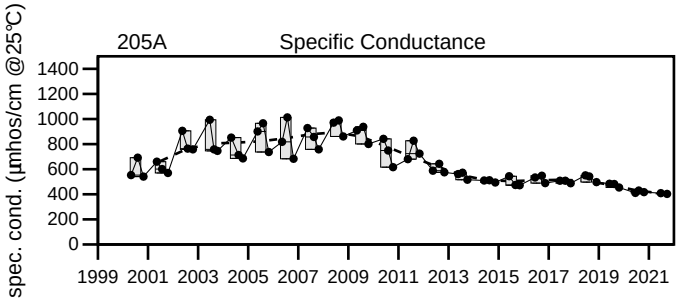
## Comments

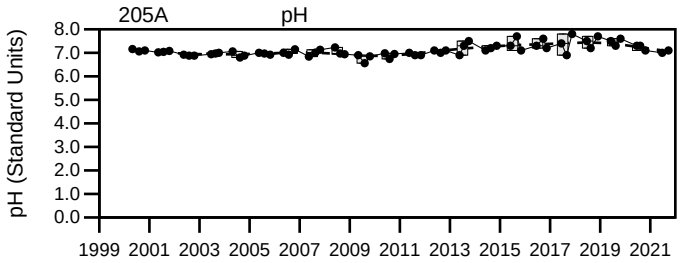
Q2= 6 - 2021
Q3= 9 - 2021

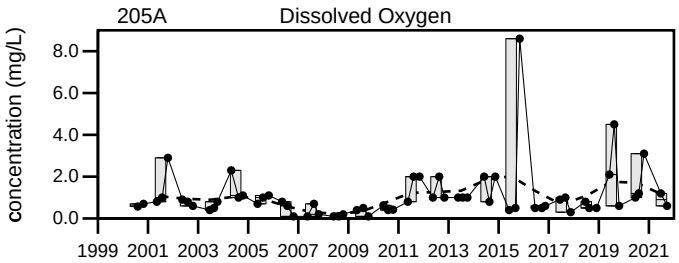
U = Not Detected above the laboratory reporting limit.

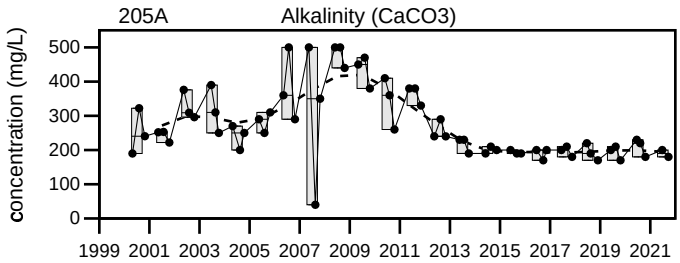
Data Group: 179
Printed: 4/11/2022 10:00

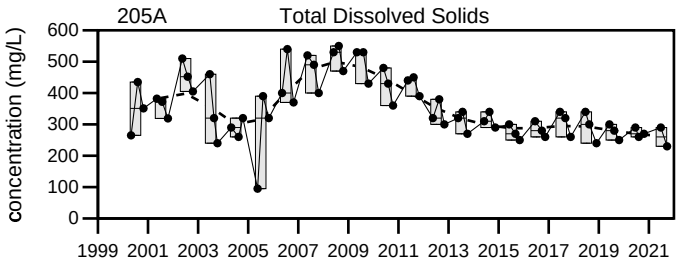
SME SEVEE & MAHER ENGINEERS

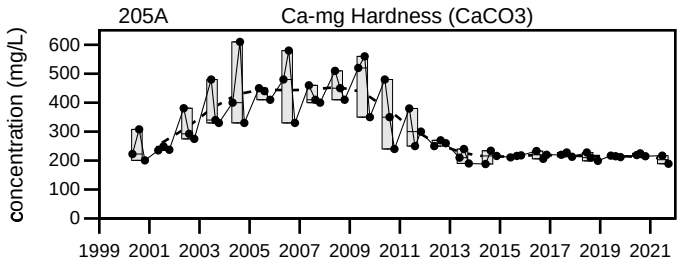


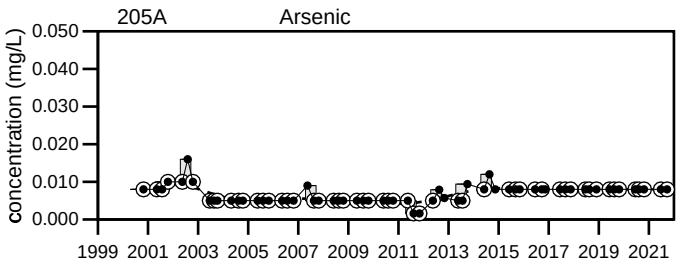



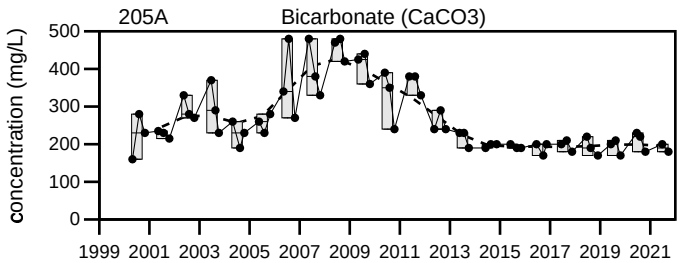



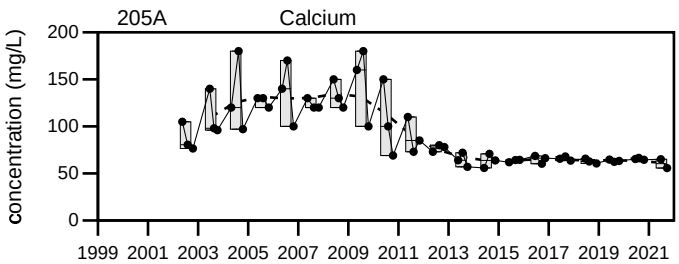



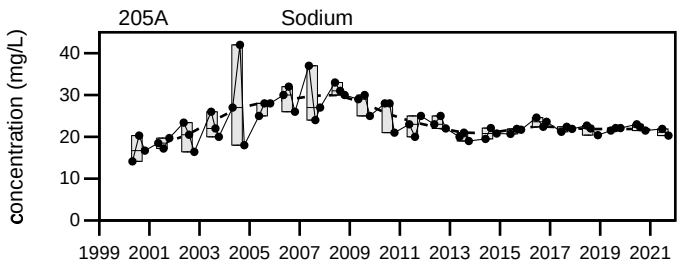



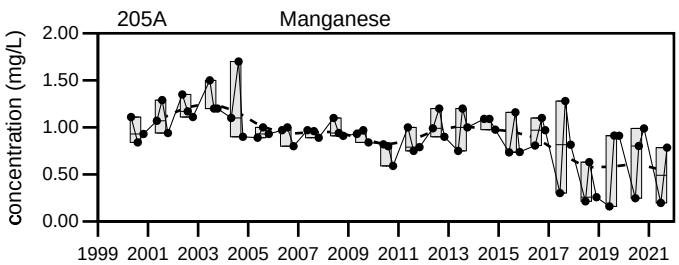



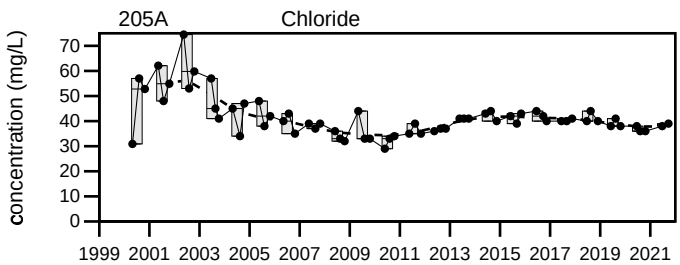



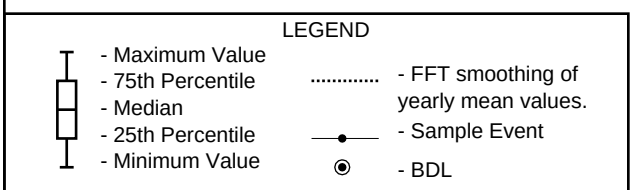



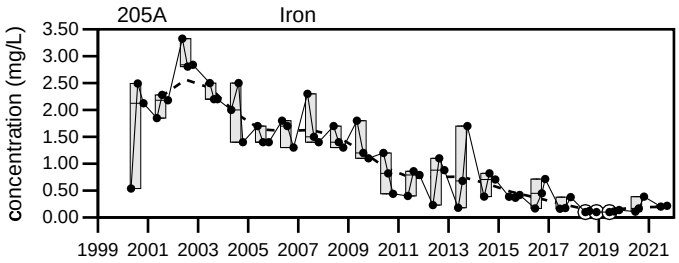



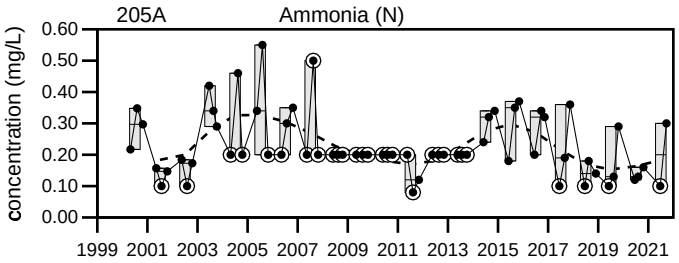



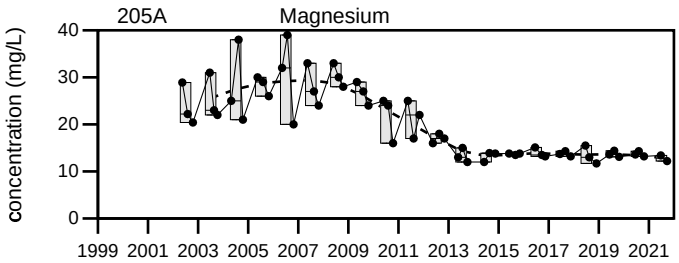

# Dolby Landfill

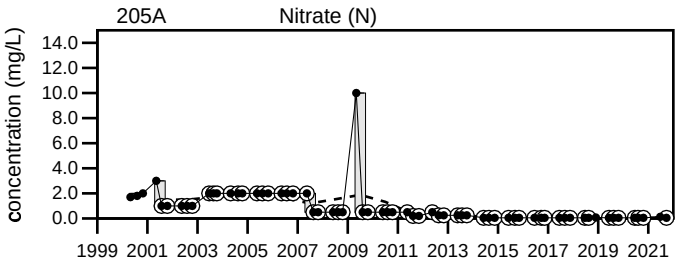
## 205A

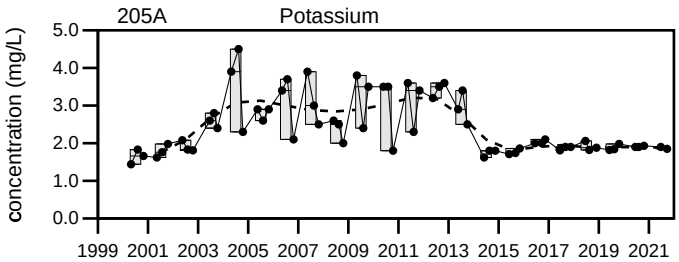
Sevee & Maher Engineers, Inc.

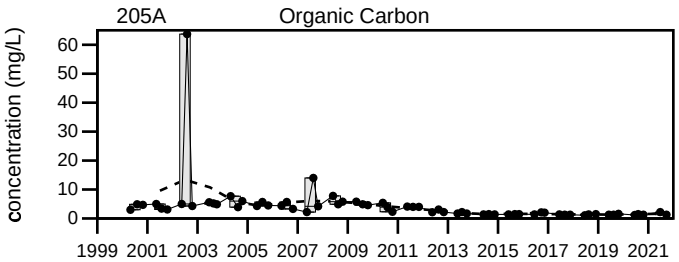


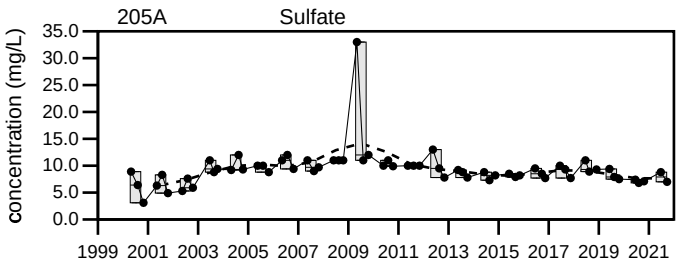



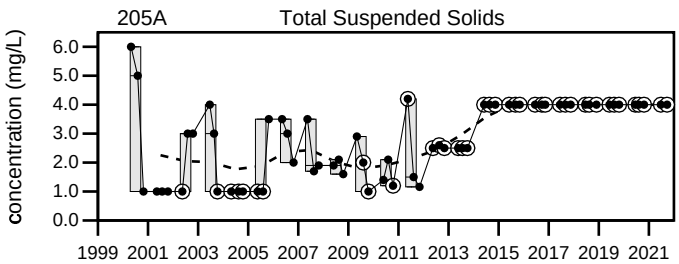



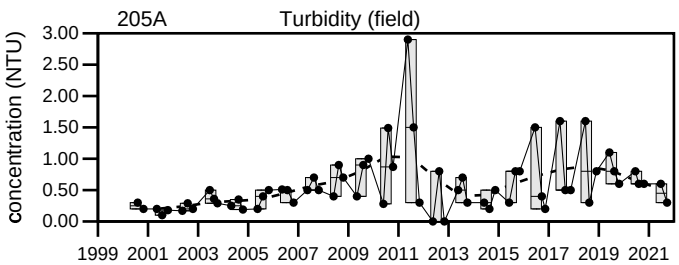



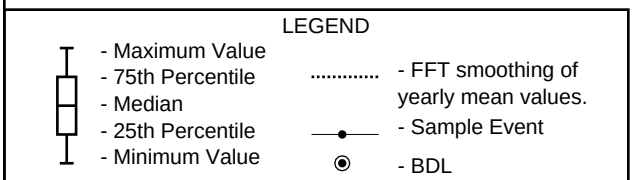




# Dolby Landfill

## 205A

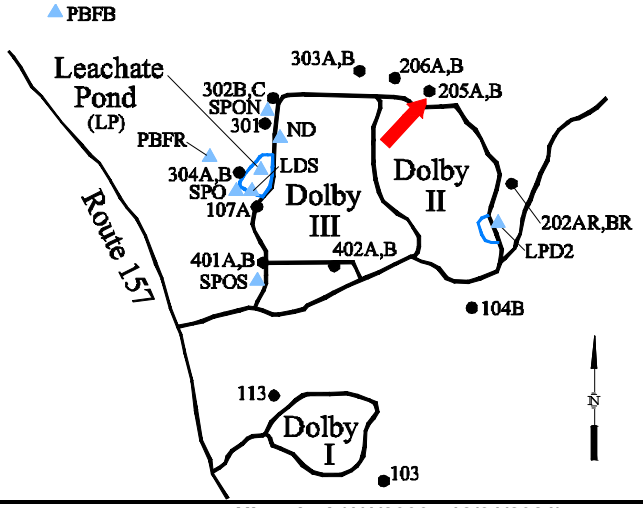
Sevee & Maher Engineers, Inc.

205B


## Well Description

Well located downgradient to the north of the Dolby II Landfill.

Screen Interval: **10 ft. to 15 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Jun-86**
Material Screened: **Glacial Till**
Well Condition: **Good**
Sampling Method: **Low Flow (Initiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 228 | 247 | | 178 | to 1274 | 450 | ± 32 | 63 |
| Dissolved Oxygen (mg/L) | | 0.8 | 0.3 | | 0.1 | to 4.4 | 0.93 | ± 0.099 | 62 |
| Total Dissolved Solids (mg/L) | | 140 | 150 | | 91 | to 664 | 220 | ± 14 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.021 | 0.0066 | ± 0.000 | 61 |
| Calcium (mg/L) | | 37.1 | 37.4 | | 23.8 | to 140 | 55 | ± 3.8 | 57 |
| Manganese (mg/L) | | **0.443** | 0.21 | | 0.065 | to 9.33 | 1.1 | ± 0.23 | 63 |
| pH (STU) | | 7.2 | 6.9 | | 6.44 | to 8 | 7.1 | ± 0.037 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 120 | 140 | | 87 | to 586 | 190 | ± 13 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 125 | 134 | | 87.7 | to 540.7 | 210 | ± 14 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 120 | 140 | | 87 | to 540 | 180 | ± 11 | 63 |
| Sodium (mg/L) | | 4.14 | 4.21 | | 3.64 | to 27 | 8.6 | ± 0.59 | 63 |
| Chloride (mg/L) | | 2 U | 2 U | | 0.5 U | to 34.4 | 4.7 | ± 0.85 | 63 |
| Iron (mg/L) | | 0.174 | 0.1 U | | 0.01 U | to 0.63 | 0.18 | ± 0.02 | 63 |
| Magnesium (mg/L) | | 7.89 | 9.91 | | 6.8 | to 60.9 | 16 | ± 1.5 | 57 |
| Potassium (mg/L) | | 1.04 | 1.15 | | 0.96 | to 2.4 | 1.4 | ± 0.046 | 63 |
| Sulfate (mg/L) | | 3.5 | 2.8 | | 2.7 | to 14.6 | 8 | ± 0.41 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 4 U | | 0.32 U | to 36 | 2.9 | ± 0.56 | 63 |
| Turbidity (field) (NTU) | | 0.2 | 0.1 | | 0 | to 4.24 | 0.58 | ± 0.077 | 62 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.1 U | | 0.08 U | to 0.5 | 0.16 | ± 0.01 | 63 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 2.3 | 0.74 | ± 0.097 | 63 |
| Organic Carbon (mg/L) | | 1.6 | 1 | | 0.98 | to 90.6 | 3.4 | ± 1.4 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

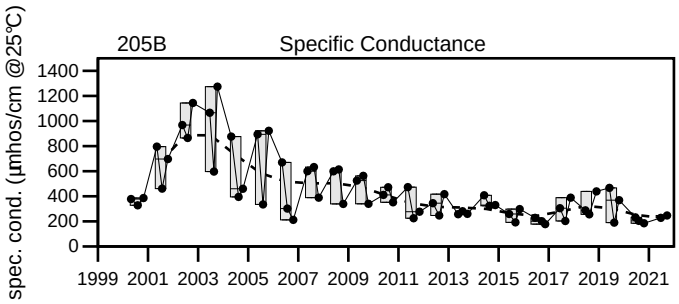
## Comments

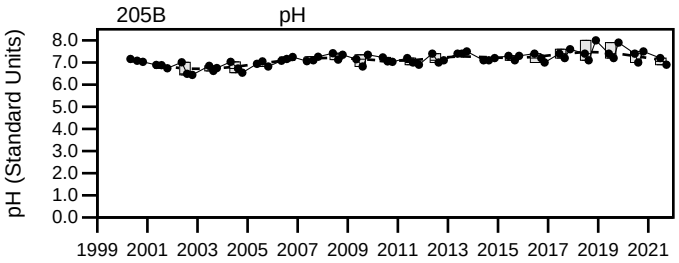
Q2= 6 - 2021
Q3= 9 - 2021

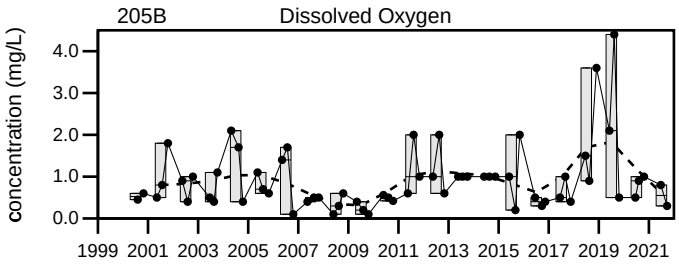
U = Not Detected above the laboratory reporting limit.

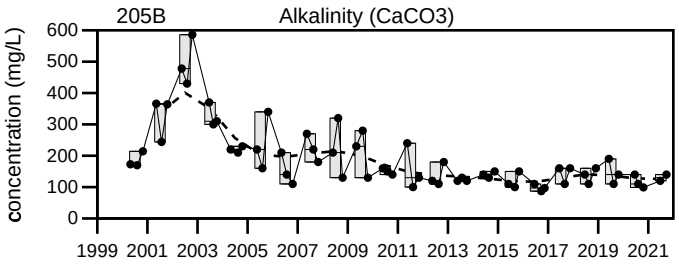
Data Group: 179
Printed: 4/11/2022 10:00

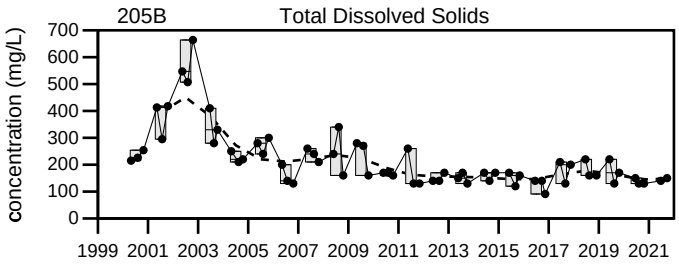
SME SEVEE & MAHER ENGINEERS

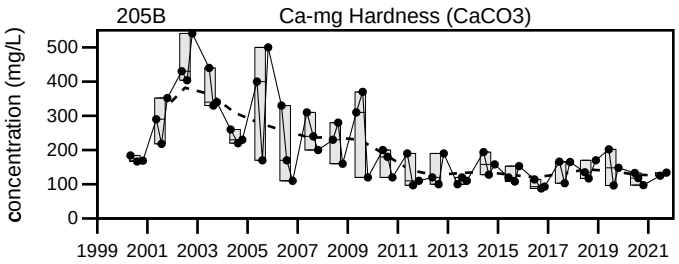


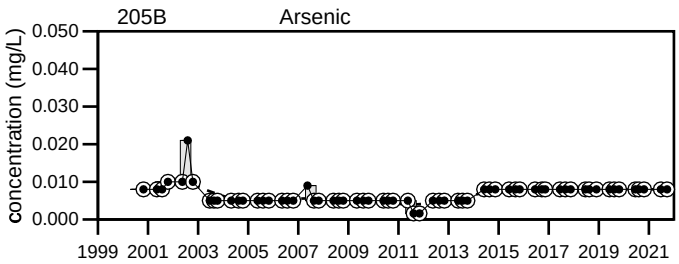



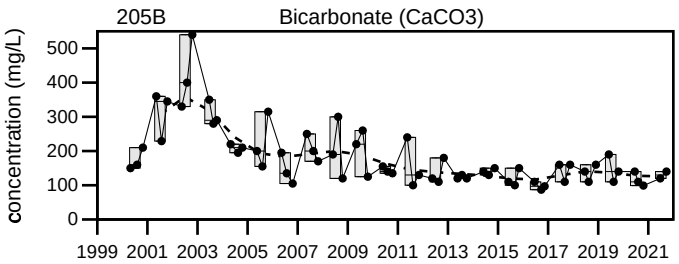



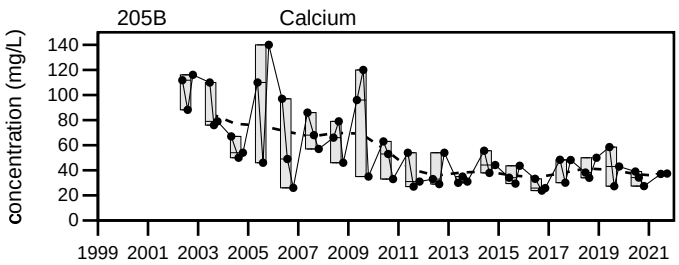



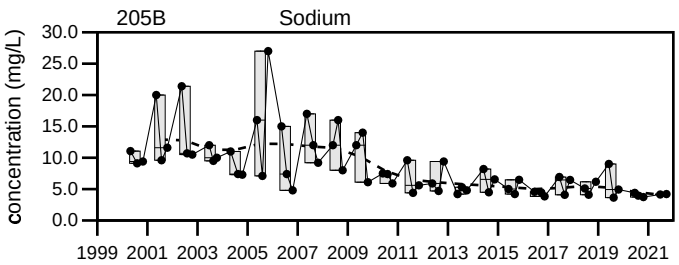



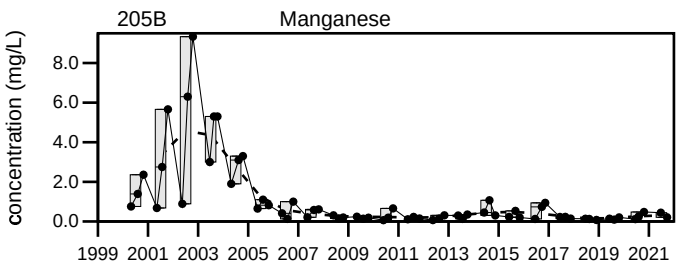



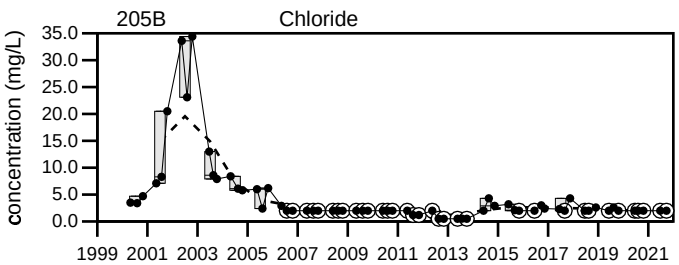



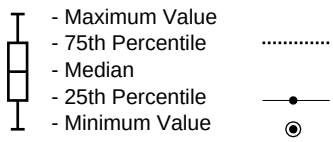



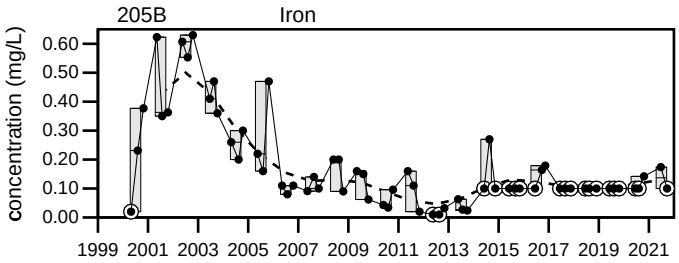



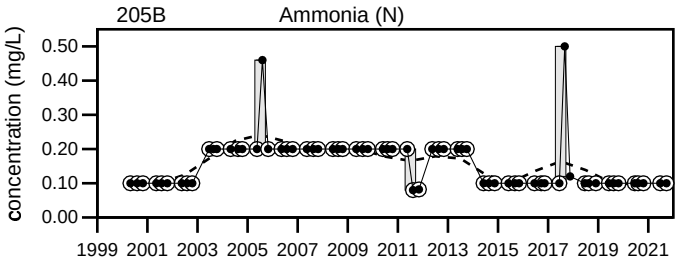



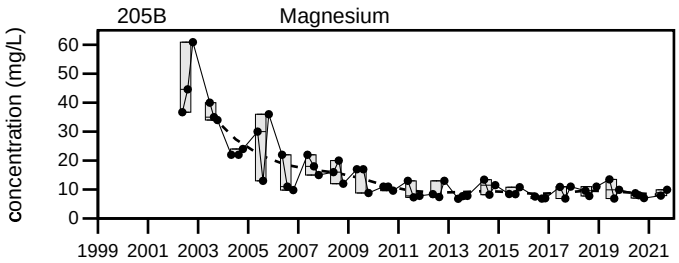

Dolby Landfill

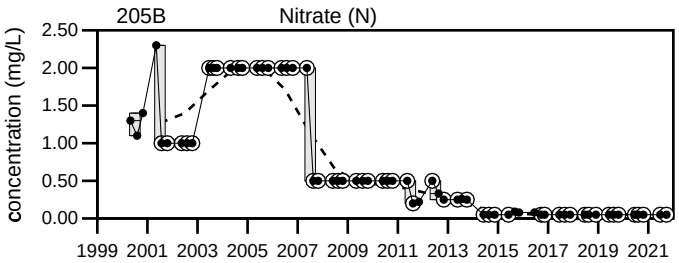
205B

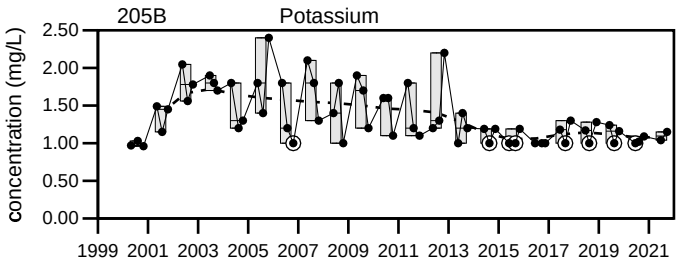
Sevee & Maher Engineers, Inc.

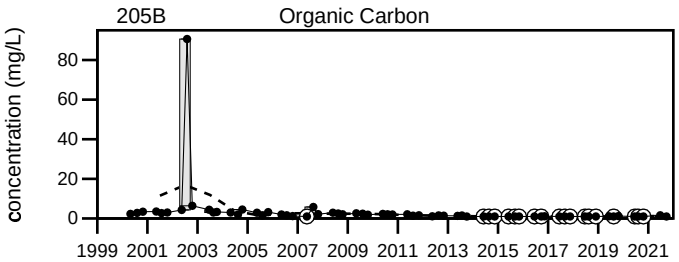


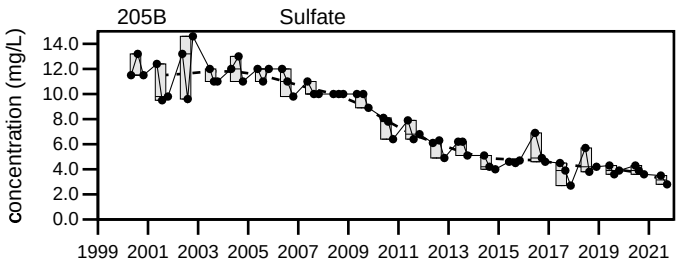



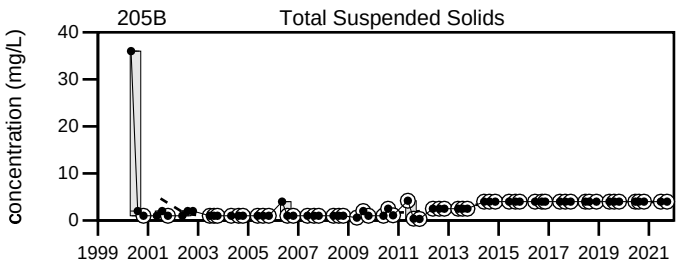



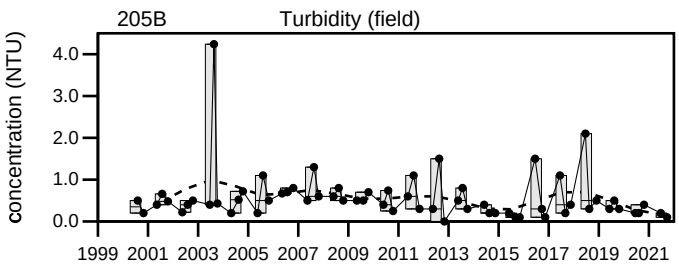



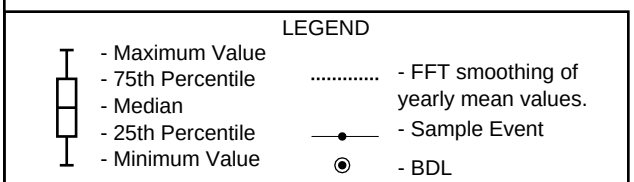




Dolby Landfill

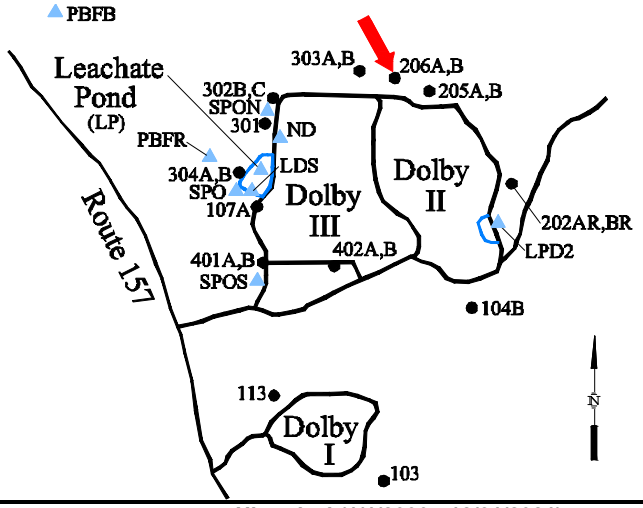
205B

Sevee & Maher Engineers, Inc.

206A


## Well Description

Well located downgradient to the northwest of the Dolby II Landfill.




| | |
|---|---|
| Screen Interval: | **23.3 ft. to 28.3 ft.** |
| Sampled: | **2 Times Annually** |
| Sampled Since: | **Jun-86** |
| Material Screened: | **Bedrock** |
| Well Condition: | **Good** |
| Sampling Method: | **Low Flow (Initiated Aug. 2000)** |

## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 1881 | 2272 | | 210 | to 3480 | 2000 | ± 84 | 63 |
| Dissolved Oxygen (mg/L) | | 3.2 | 0.6 | | 0.1 | to 5.1 | 1 | ± 0.13 | 62 |
| Total Dissolved Solids (mg/L) | | 1000 | 1400 | | 440 | to 2088 | 1100 | ± 41 | 63 |
| Arsenic (mg/L) | | **0.27** | **0.307** | | 0.039 | to 0.45 | 0.22 | ± 0.009 | 61 |
| Calcium (mg/L) | | 119 | 135 | | 17.2 | to 147 | 98 | ± 3.4 | 57 |
| Manganese (mg/L) | | **3.85** | **4.37** | | 0.52 | to 9 | 5.3 | ± 0.24 | 63 |
| pH (STU) | | 6.8 | 6.6 | | 6.04 | to 6.9 | 6.6 | ± 0.021 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 1100 | 1400 | | 36 | to 2010 | 1200 | ± 45 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 960 | 1210 | | 107 | to 1500 | 960 | ± 37 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 1100 | 1400 | | 36 | to 1997 | 1100 | ± 46 | 63 |
| Sodium (mg/L) | | **33.6** | **41.8** | | 4.28 | to 58.7 | 36 | ± 1.5 | 63 |
| Chloride (mg/L) | | 25 | 32 | | 15 | to 102 | 35 | ± 2.4 | 63 |
| Iron (mg/L) | | **42.8** | **46.6** | | 2.84 | to 52.3 | 33 | ± 1.3 | 63 |
| Magnesium (mg/L) | | 161 | 212 | | 15.6 | to 290 | 170 | ± 7.2 | 57 |
| Potassium (mg/L) | | 104 | 119 | | 14 | to 170 | 91 | ± 3 | 63 |
| Sulfate (mg/L) | | 1 U | 1 U | | 1 U | to 15 | 5.4 | ± 0.49 | 63 |
| Total Suspended Solids (mg/L) | | 72 | 53 | | 2 | to 96 | 52 | ± 3 | 63 |
| Turbidity (field) (NTU) | | 0.2 | 0.1 | | 0 | to 2.1 | 0.71 | ± 0.055 | 62 |
| Ammonia (N) (mg/L) | | **35** | **41** | | 3.1 | to 54 | 33 | ± 1.1 | 63 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 5.1 | 0.89 | ± 0.13 | 63 |
| Organic Carbon (mg/L) | | 25 | 31 | | 1.2 | to 334.4 | 32 | ± 5.1 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

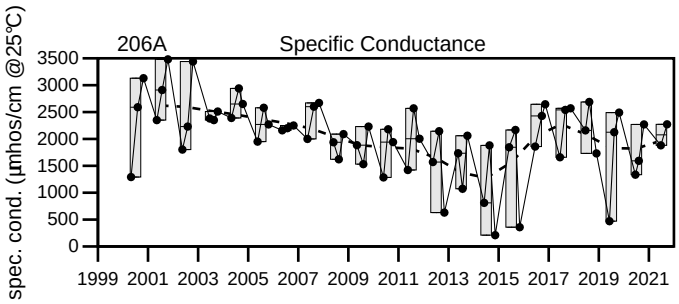
## Comments

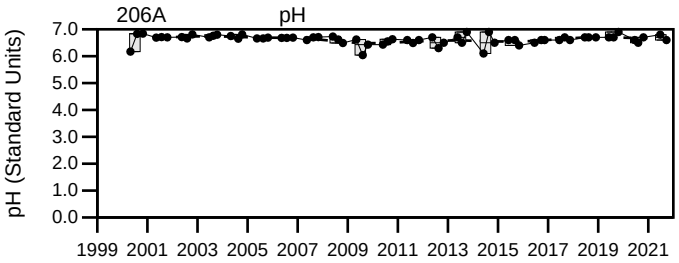
Q2= 6 - 2021
Q3= 9 - 2021

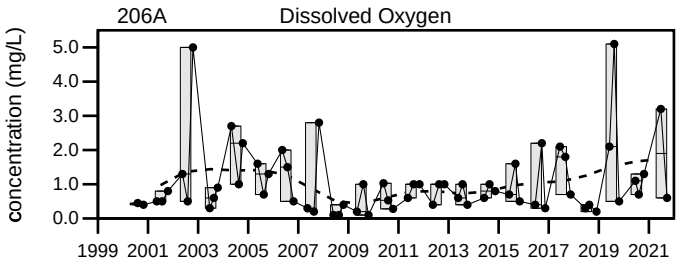
U = Not Detected above the laboratory reporting limit.

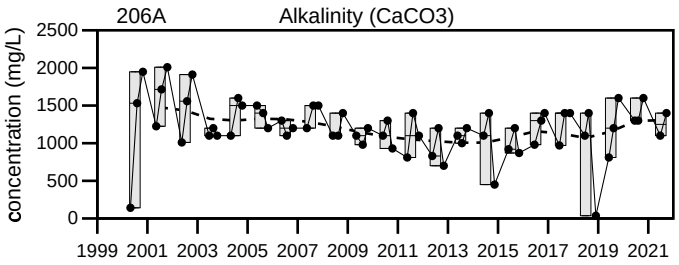
Data Group: 179
Printed: 4/11/2022 10:00

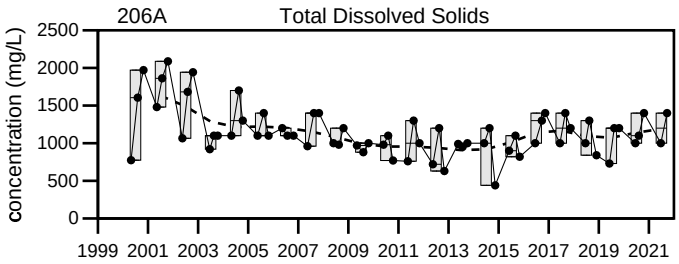
SME SEVEE & MAHER ENGINEERS

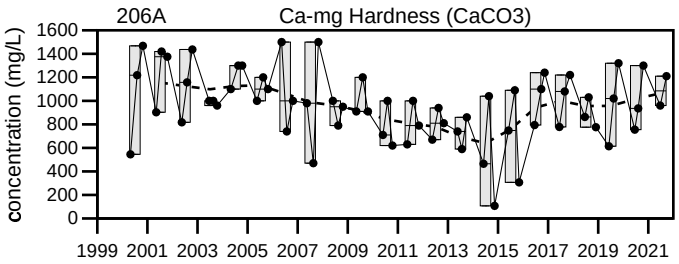


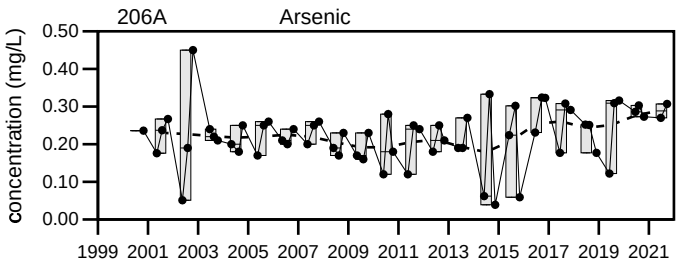



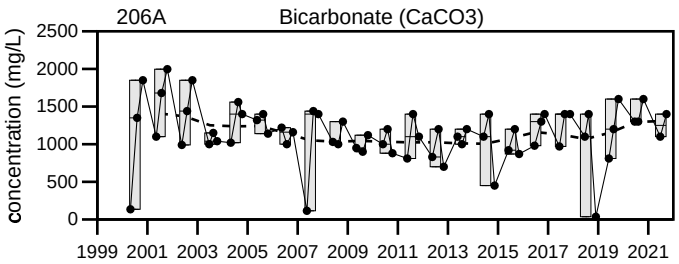



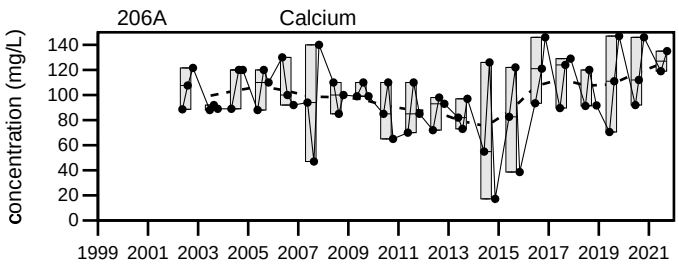



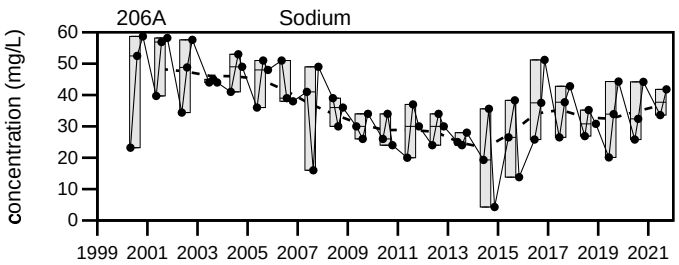



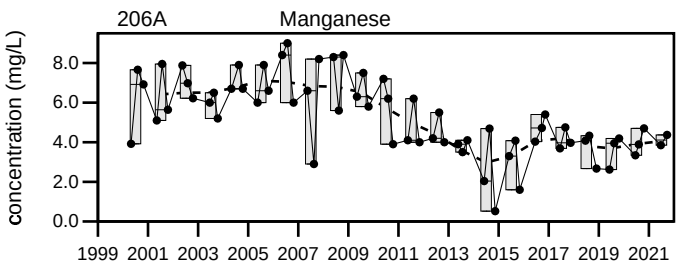



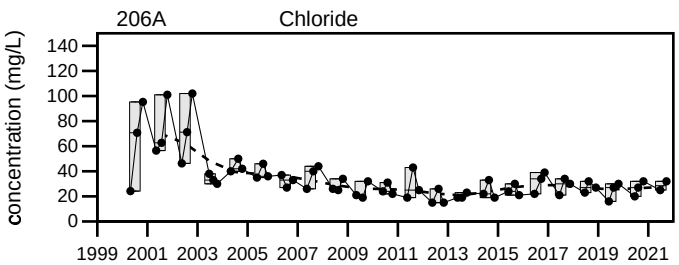



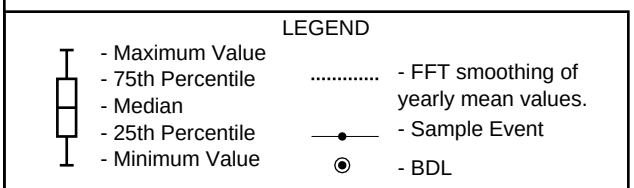



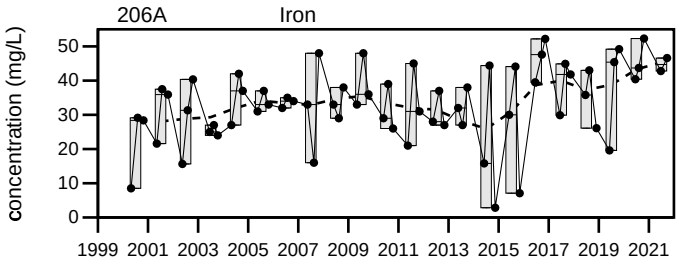



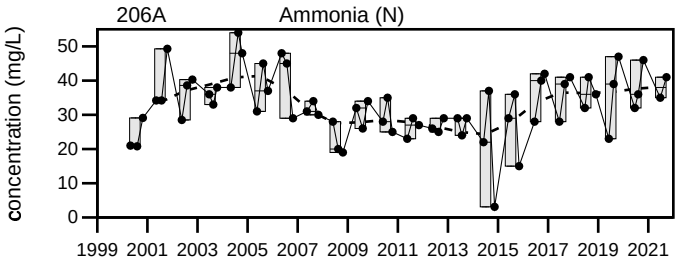



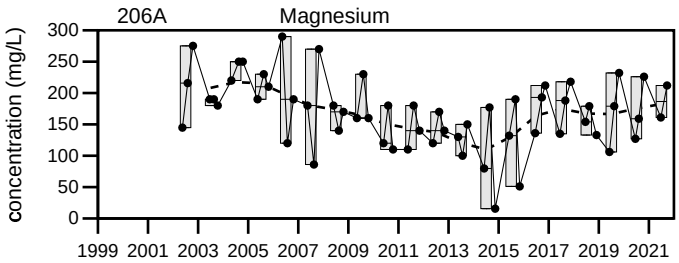

# Dolby Landfill

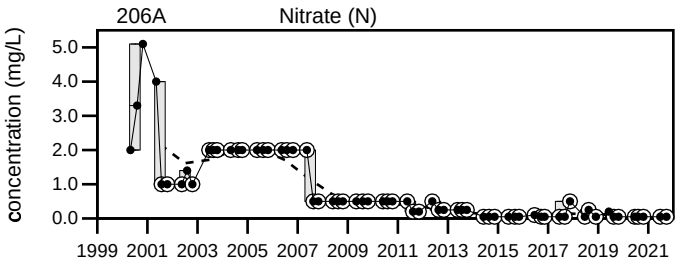
## 206A

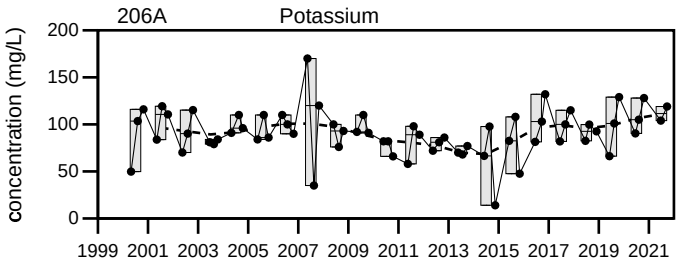
Sevee & Maher Engineers, Inc.

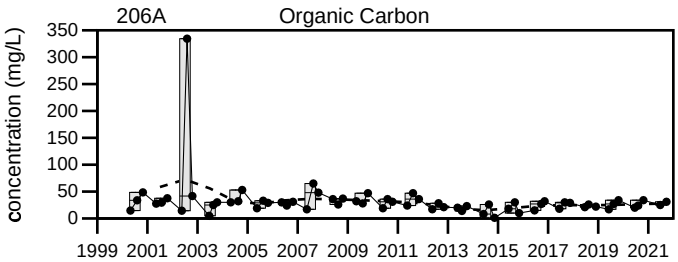


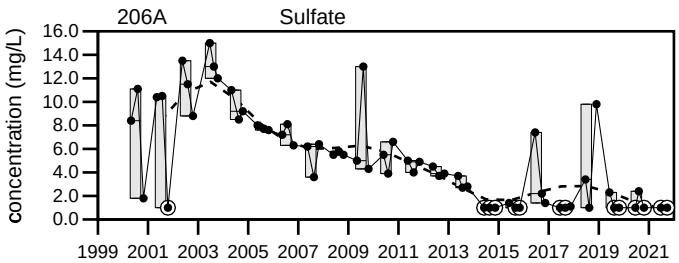



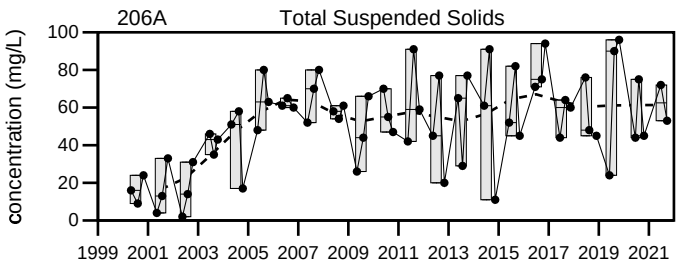



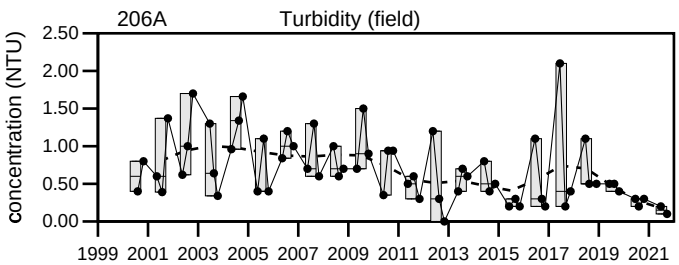



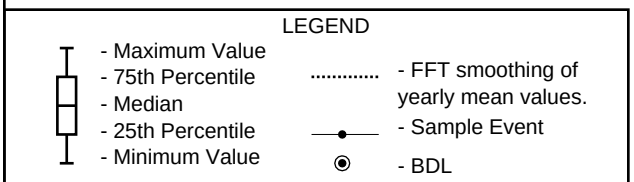




Dolby Landfill

206A

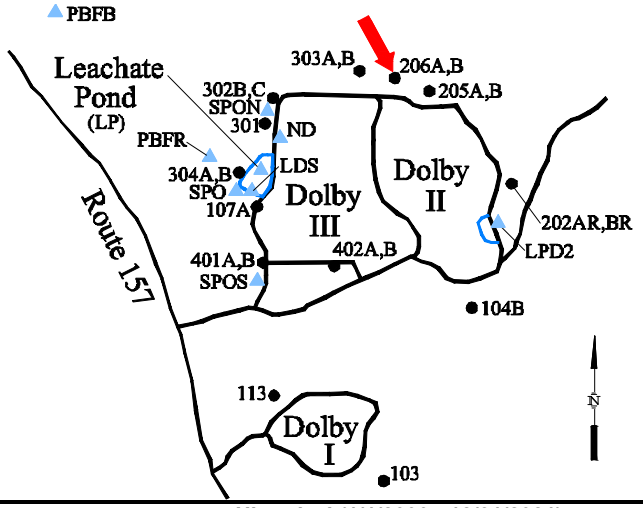
Sevee & Maher Engineers, Inc.

206B


## Well Description

Well located downgradient to the northwest of the Dolby II Landfill.

Screen Interval: **12 ft. to 17 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Jun-86**
Material Screened: **Glacial Till**
Well Condition: **Good**
Sampling Method: **Low Flow (Initiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 215 | D | | 61 | to 260 | 150 | ± 8 | 37 |
| Dissolved Oxygen (mg/L) | | 6.8 | D | | 2 | to 10.7 | 5.9 | ± 0.38 | 36 |
| Total Dissolved Solids (mg/L) | | 140 | D | | 28 | to 200 | 78 | ± 5.2 | 37 |
| Arsenic (mg/L) | | 0.008 U | D | | 0.0016 U | to 0.01 U | 0.0061 | ± 0.000 | 36 |
| Calcium (mg/L) | | ↑20 | D | | 6.1 | to 19 | 14 | ± 0.6 | 35 |
| Manganese (mg/L) | | 0.135 | D | | 0.009 | to 0.194 | 0.036 | ± 0.006 | 37 |
| pH (STU) | | 7 | D | | 5.26 | to 7.7 | 6.5 | ± 0.083 | 37 |
| Alkalinity (CaCO3) (mg/L) | | 76 | D | | 8 | to 85 | 53 | ± 3.2 | 37 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 79.6 | D | | 22.1 | to 89 | 57 | ± 3.3 | 37 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 76 | D | | 8 | to 81 | 52 | ± 3.2 | 37 |
| Sodium (mg/L) | | 2.21 | D | | 1 U | to 4.4 | 2.3 | ± 0.15 | 37 |
| Chloride (mg/L) | | 2 U | D | | 0.63 | to 3.8 | 2.2 | ± 0.12 | 37 |
| Iron (mg/L) | | 1.18 | D | | 0.014 | to 2.43 | 0.32 | ± 0.082 | 37 |
| Magnesium (mg/L) | | 7.18 | D | | 1.4 | to 12 | 6 | ± 0.48 | 35 |
| Potassium (mg/L) | | 6.22 | D | | 3 | to 7.5 | 4.8 | ± 0.2 | 37 |
| Sulfate (mg/L) | | 8 | D | | 1 U | to 23 | 9.5 | ± 0.83 | 37 |
| Total Suspended Solids (mg/L) | | 7.6 | D | | 0.32 U | to 22 | 3.8 | ± 0.78 | 37 |
| Turbidity (field) (NTU) | | 0.6 | D | | 0 | to 12.2 | 2.3 | ± 0.42 | 36 |
| Ammonia (N) (mg/L) | | 0.1 U | D | | 0.082 U | to 0.45 | 0.17 | ± 0.013 | 37 |
| Nitrate (N) (mg/L) | | 0.66 | D | | 0.17 | to 2 U | 0.95 | ± 0.11 | 37 |
| Organic Carbon (mg/L) | | 2 | D | | 1 U | to 5.1 | 2.1 | ± 0.15 | 37 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

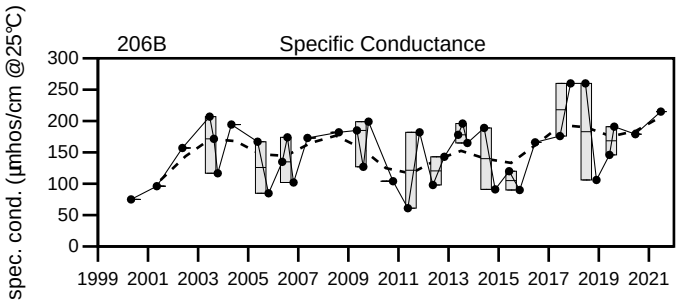
## Comments

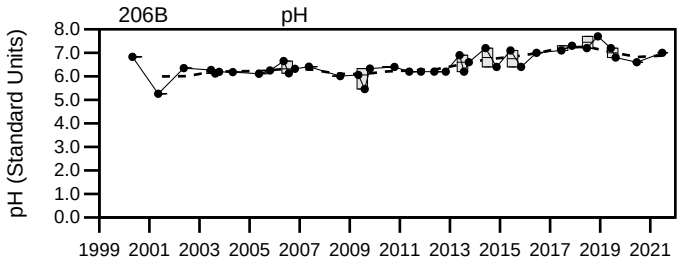
Q2= 6 - 2021
Q3= 9 - 2021

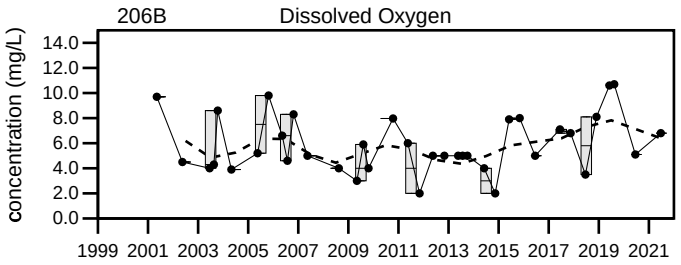
U = Not Detected above the laboratory reporting limit.
D = The sampling location was dry.

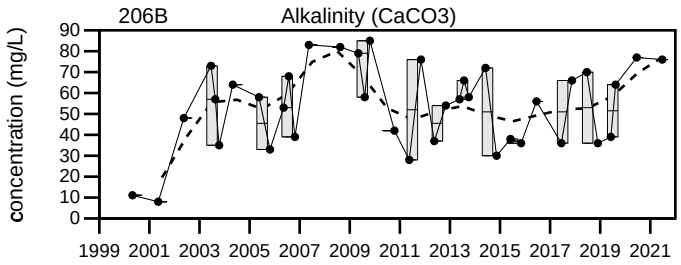
Data Group: 179
Printed: 4/11/2022 10:00

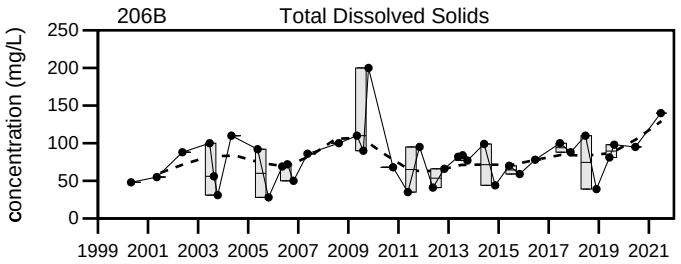
SME SEVEE & MAHER ENGINEERS

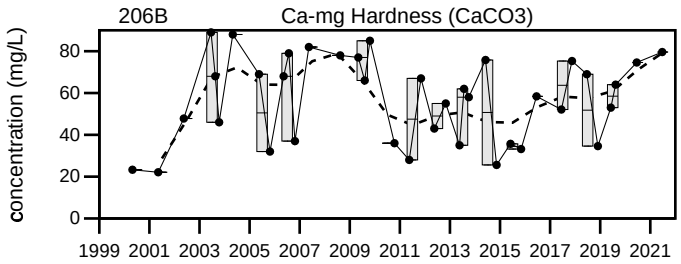


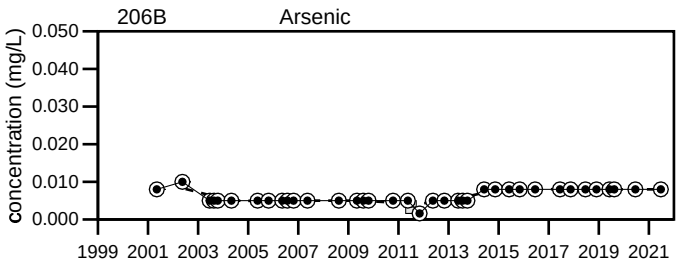



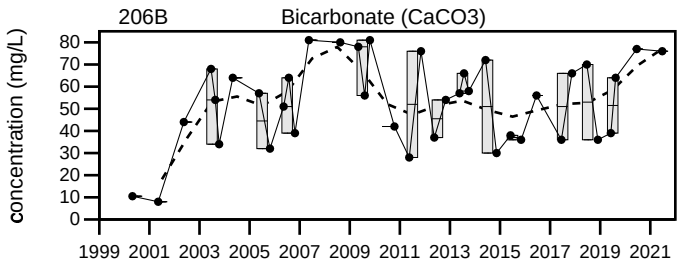



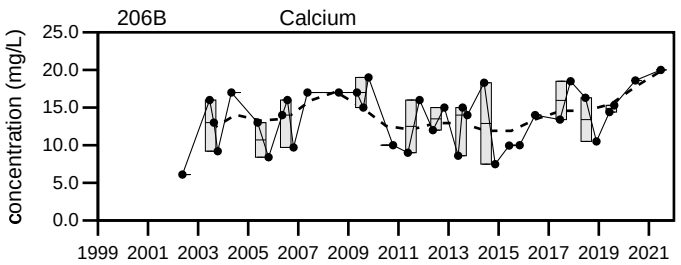



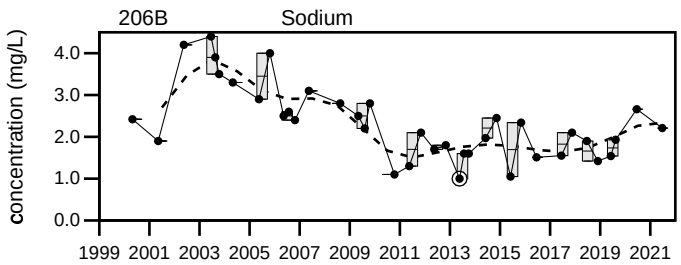



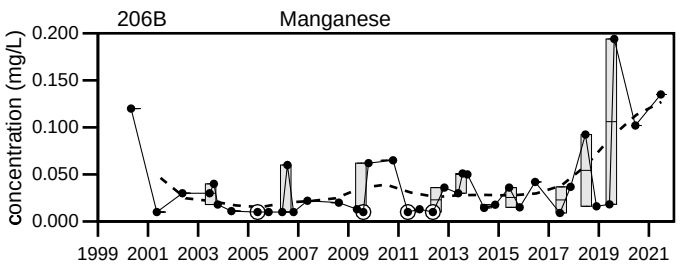



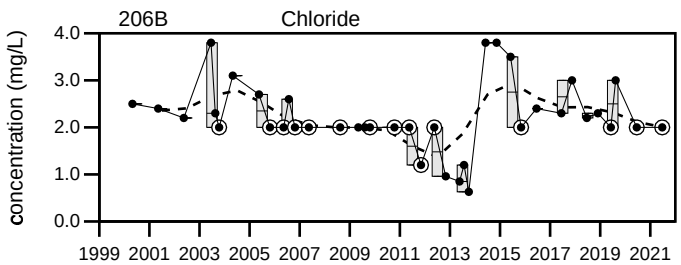



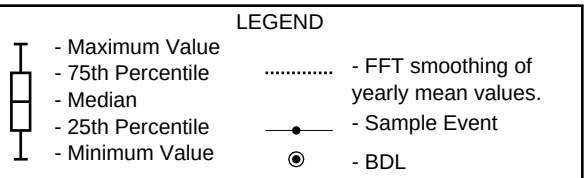



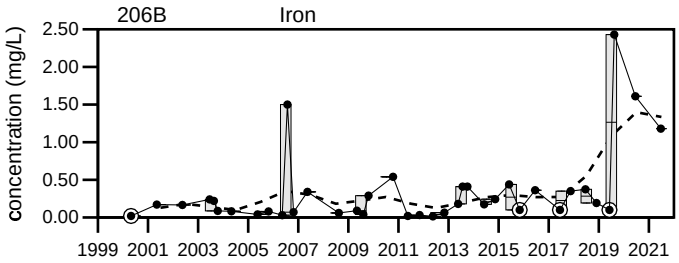



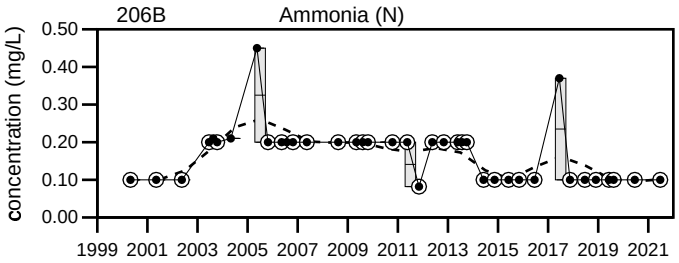



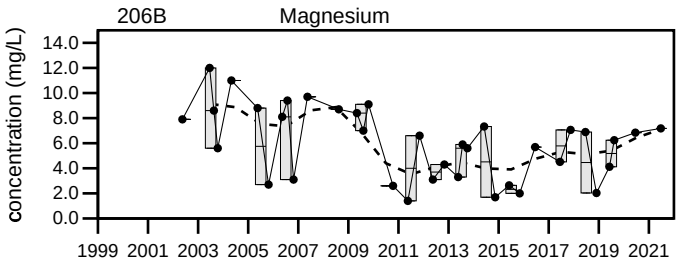

# Dolby Landfill

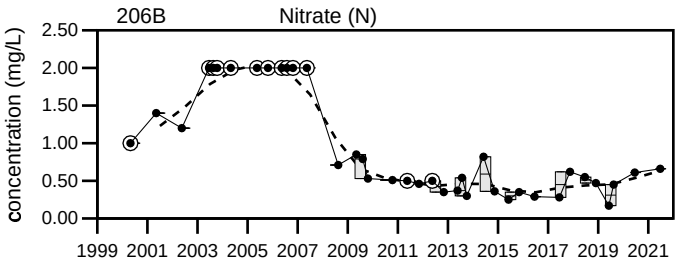
## 206B

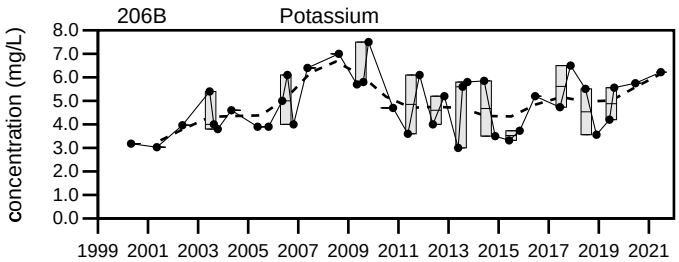
Sevee & Maher Engineers, Inc.

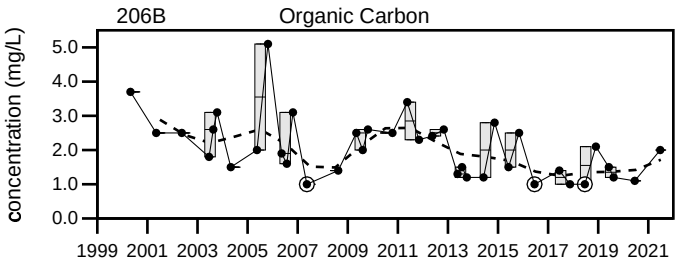


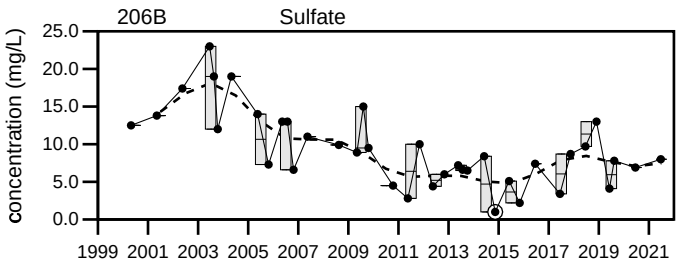



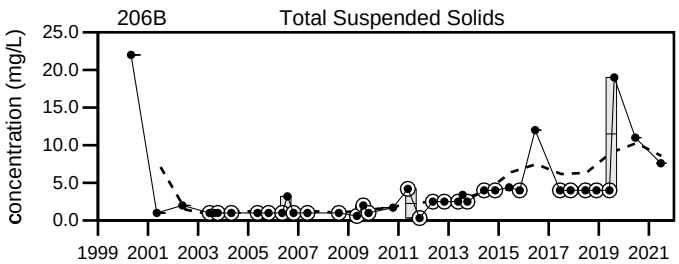



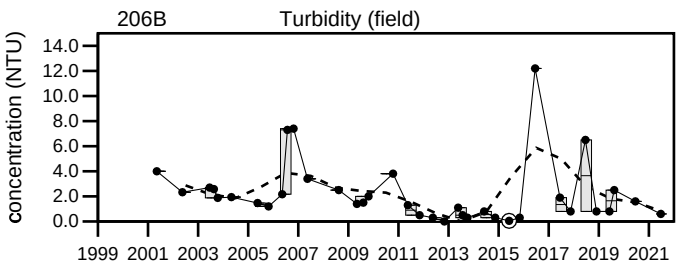



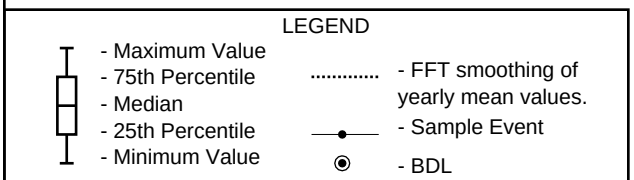




# Dolby Landfill

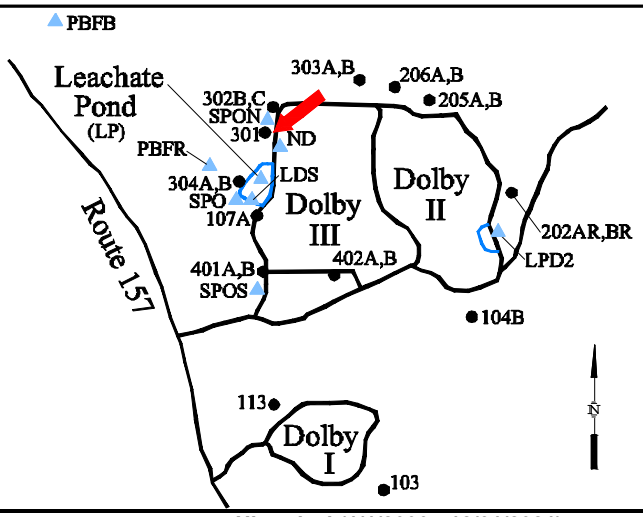
## 206B

Sevee & Maher Engineers, Inc.

## Well Description

Well located downgradient to the west of Dolby III Landfill.

Screen Interval: **10 ft. to 15 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Sep-83**
Material Screened: **Glacial Till**
Well Condition: **Good**
Sampling Method: **Low Flow (Initiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 1501 | 1581 | | 338 | to 2156 | 1200 | ± 68 | 63 |
| Dissolved Oxygen (mg/L) | | 0.6 | 0.3 | | 0.1 | to 3.02 | 0.83 | ± 0.094 | 62 |
| Total Dissolved Solids (mg/L) | | 1100 | 1000 | | 212 | to 1300 | 760 | ± 44 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.01 U | 0.0064 | ± 0.000 | 61 |
| Calcium (mg/L) | | 259 | 255 | | 41.9 | to 328 | 220 | ± 10 | 57 |
| Manganese (mg/L) | | **0.685** | **0.55** | | 0.034 | to 1.2 | 0.61 | ± 0.03 | 63 |
| pH (STU) | | 6.5 | 6.6 | | 5.9 | to 7.07 | 6.5 | ± 0.026 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 1000 | 1000 | | 125.2 | to 1100 | 600 | ± 38 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 977 | 946 | | 125.8 | to 1080 | 660 | ± 39 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 1000 | 1000 | | 110 | to 1100 | 590 | ± 39 | 63 |
| Sodium (mg/L) | | **77.6** | **77.8** | | 5.93 | to 82.3 | 35 | ± 2.8 | 63 |
| Chloride (mg/L) | | 53 | 58 | | 28.7 | to 110 | 67 | ± 3.5 | 63 |
| Iron (mg/L) | | 0.143 | 0.17 | | 0.02 U | to 0.83 | 0.16 | ± 0.019 | 63 |
| Magnesium (mg/L) | | 79.9 | 75 | | 9 | to 79.9 | 37 | ± 2.9 | 57 |
| Potassium (mg/L) | | 2.92 | 3.12 | | 0.98 | to 5.8 | 2.9 | ± 0.14 | 63 |
| Sulfate (mg/L) | | 27 | 30 | | 9.3 | to 49 | 26 | ± 0.98 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 4 U | | 0.38 U | to 41 | 3.1 | ± 0.65 | 63 |
| Turbidity (field) (NTU) | | 0.2 | 0.2 | | 0 | to 1.5 | 0.37 | ± 0.033 | 62 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.1 U | | 0.08 U | to 0.5 U | 0.15 | ± 0.009 | 63 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 2 U | 0.67 | ± 0.091 | 63 |
| Organic Carbon (mg/L) | | 15 | 16 | | 1.1 | to 24 | 9.4 | ± 0.7 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

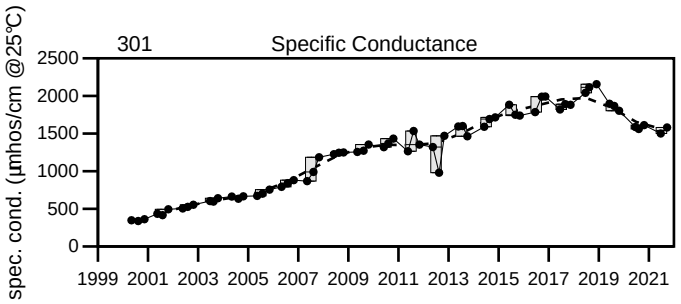
## Comments

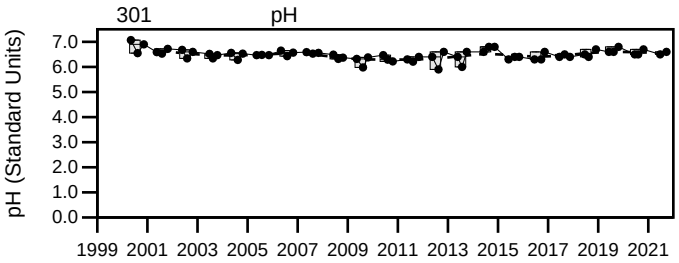
Q2= 6 - 2021
Q3= 9 - 2021

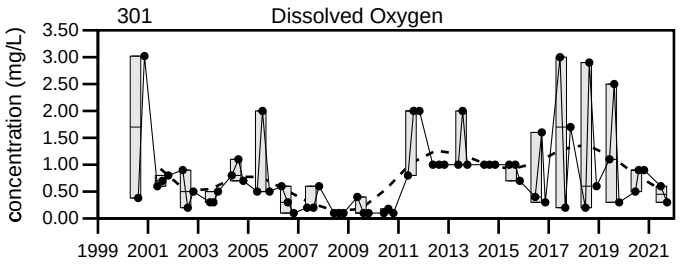
U = Not Detected above the laboratory reporting limit.

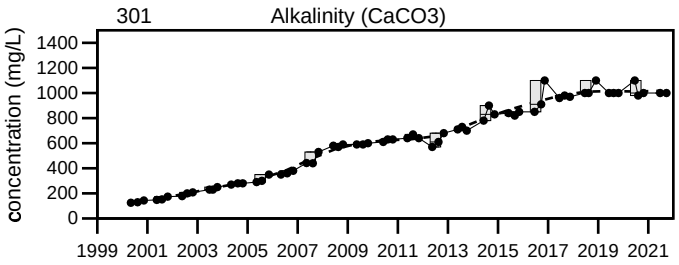
Data Group: 180
Printed: 4/11/2022 10:32

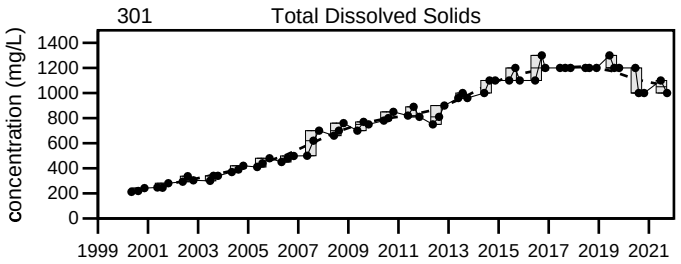
SME SEVEE & MAHER ENGINEERS

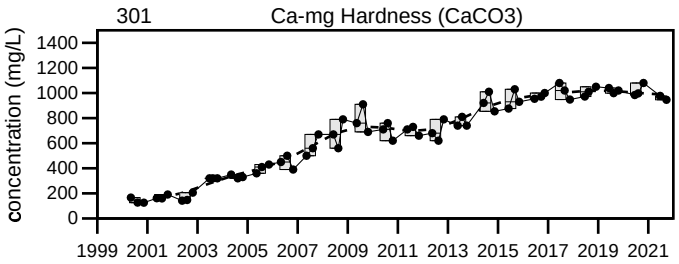


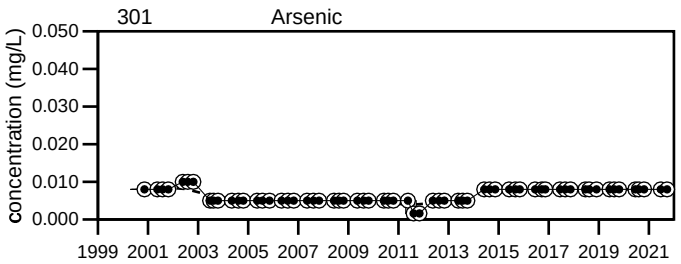



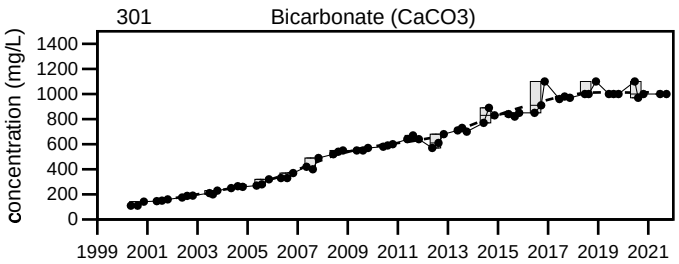



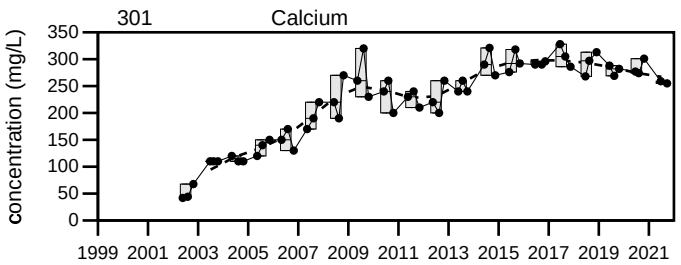



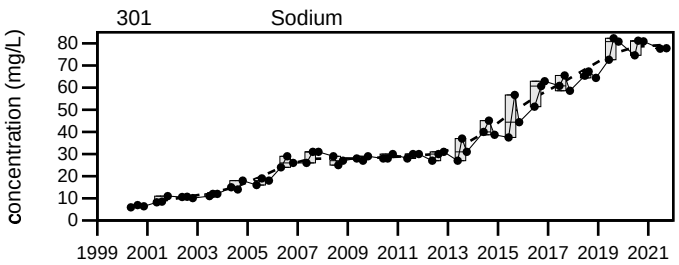



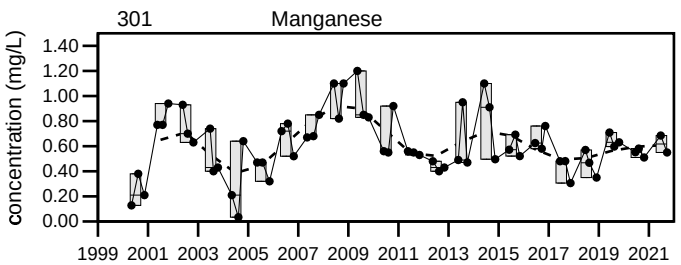



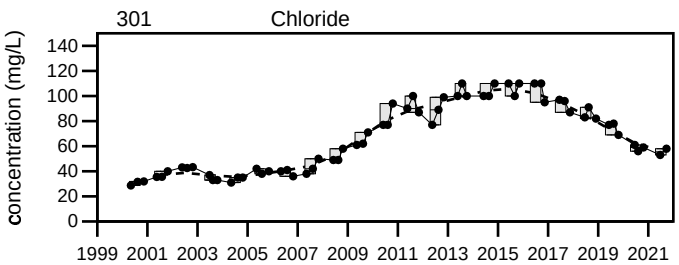



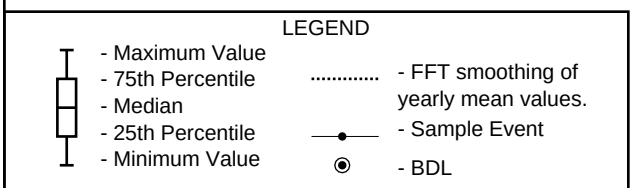



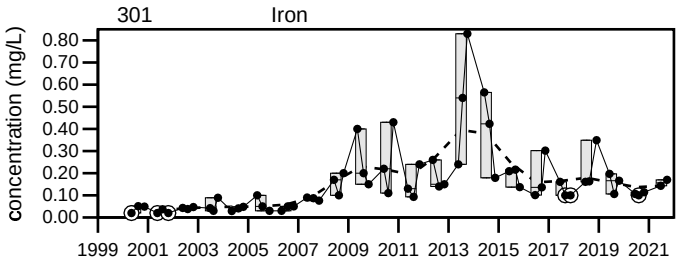



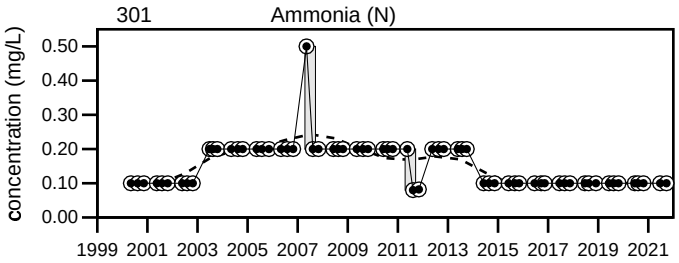



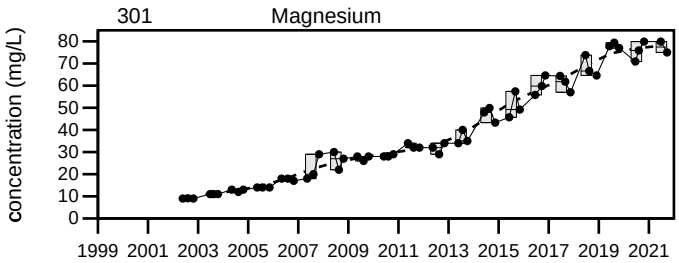

Dolby Landfill

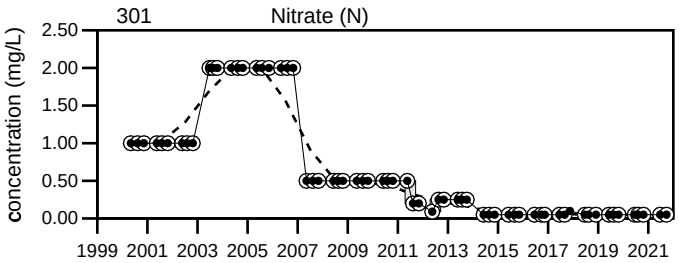
301

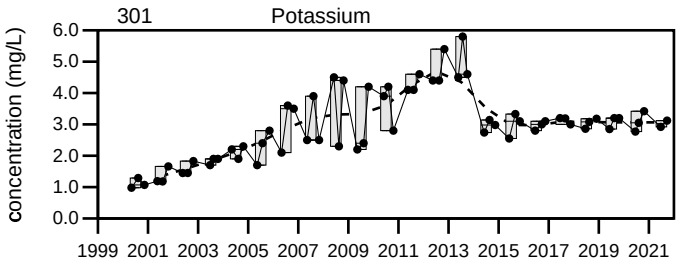
Sevee & Maher Engineers, Inc.

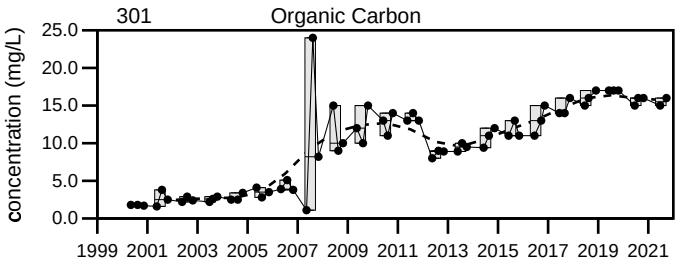


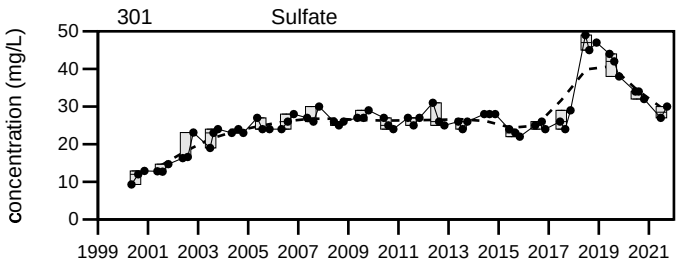



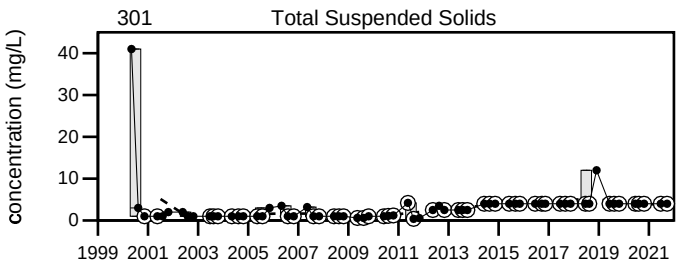



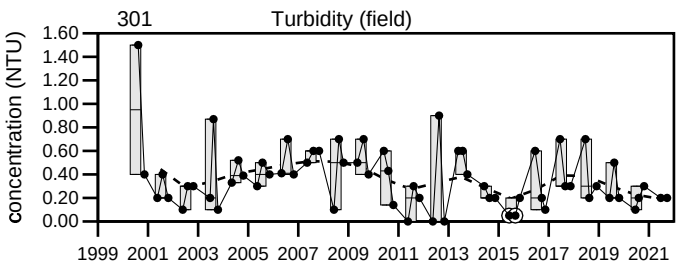



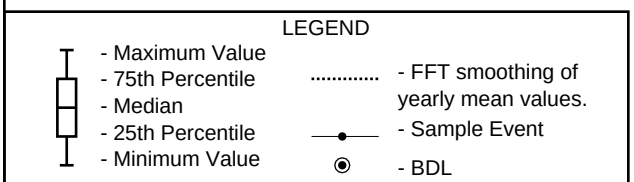




# Dolby Landfill

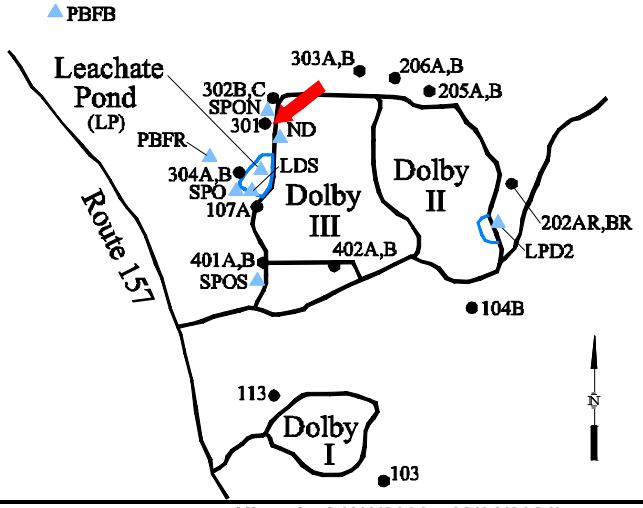
## 301

Sevee & Maher Engineers, Inc.

301


## Well Description

Well located downgradient to the west of Dolby III Landfill.




| | |
|---|---|
| Screen Interval: | **10 ft. to 15 ft.** |
| Sampled: | **2 Times Annually** |
| Sampled Since: | **Sep-83** |
| Material Screened: | **Glacial Till** |
| Well Condition: | **Good** |
| Sampling Method: | **Low Flow (Initiated Aug. 2000)** |

## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Benzene (ug/L) | | | 3 U | | 3 U | 5 U | 3.8 | 0.3 | 12 |
| Toluene (ug/L) | | | 5 U | | 5 U | 5 U | 5 | 0 | 12 |
| Ethylbenzene (ug/L) | | | 5 U | | 5 U | 5 U | 5 | 0 | 12 |
| o-Xylene (ug/L) | | | 5 U | | 5 U | 5 U | 5 | 0 | 12 |
| m,p-Xylene (ug/L) | | | 10 U | | 5 U | 10 U | 8.8 | 0.65 | 12 |
| C11-C22 AROMATICS (ADJUSTED) (ug/L | | | 93 U | | 93 U | 380 | 120 | 29 | 10 |
| C19-C36 ALIPHATICS (ADJUSTED) (ug/L) | | | 93 U | | 93 U | 102 U | 95 | 0.84 | 10 |
| C5-C8 ALIPHATICS (ADJUSTED) (ug/L) | | | 100 U | | 75 U | 100 U | 94 | 3.6 | 9 |
| C9-C10 AROMATICS (ADJUSTED) (ug/L) | | | 100 U | | 25 U | 100 U | 83 | 11 | 9 |
| C9-C12 ALIPHATICS (ADJUSTED) (ug/L) | | | 100 U | | 25 U | 100 U | 83 | 11 | 9 |
| C9-C18 ALIPHATICS (ADJUSTED) (ug/L) | | | 93 U | | 93 U | 102 U | 95 | 0.84 | 10 |
| Methyltertiarybutylether (ug/L) | | | 5 U | | 5 U | 5 U | 5 | 0 | 9 |
| Naphthalene (ug/L) | | | 5 U | | 4.81 U | 10 U | 5.5 | 0.5 | 10 |
| Naphthalene (EPH) (ug/L) | | | 1.9 U | | 1.9 U | 1.9 U | 1.9 | 1E-08 | 7 |
| 2-Methylnaphthalene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Acenaphthylene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Acenaphthene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Fluorene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Phenanthrene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Anthracene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Fluoranthene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Pyrene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(a)Anthracene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Chrysene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(b)Fluoranthene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(k)Fluoranthene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(a)Pyrene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Indeno(1,2,3-c,d)Pyrene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Dibenz(a,h)Anthracene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(g,h,i)perylene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Acenaphthene RAGGwRs=540 ug/L, MEG16=400 ug/L, Toluene RAGGwRs=1100 ug/L, MEG16=600 ug/L, MCL=1000 ug/L, Ethylbenzene RAGGwRs=15 ug/L, MEG16=30 ug/L, MCL=700 ug/L, C11-C22 AROMATICS (ADJUSTED) RAGGwRs=600 ug/L, MEG16=200 ug/L, C19-C36 ALIPHATICS (ADJUSTED) RAGGwRs=40000 ug/L, MEG16=10000 ug/L, C5-C8 ALIPHATICS (ADJUSTED) RAGGwRs=180 ug/L, MEG16=300 ug/L, C9-C10 AROMATICS (ADJUSTED) RAGGwRs=71 ug/L, MEG16=200 ug/L, C9-C12 ALIPHATICS (ADJUSTED) RAGGwRs=350 ug/L, MEG16=700 ug/L, C9-C18 ALIPHATICS (ADJUSTED) RAGGwRs=350 ug/L, MEG16=700 ug/L, Methyltertiarybutylether RAGGwRs=140 ug/L, MEG16=35 ug/L, Naphthalene RAGGwRs=1.2 ug/L, MEG16=10 ug/L, Naphthalene (EPH)

Data Group: 183
Printed: 4/11/2022 10:44

SME SEVEE & MAHER ENGINEERS

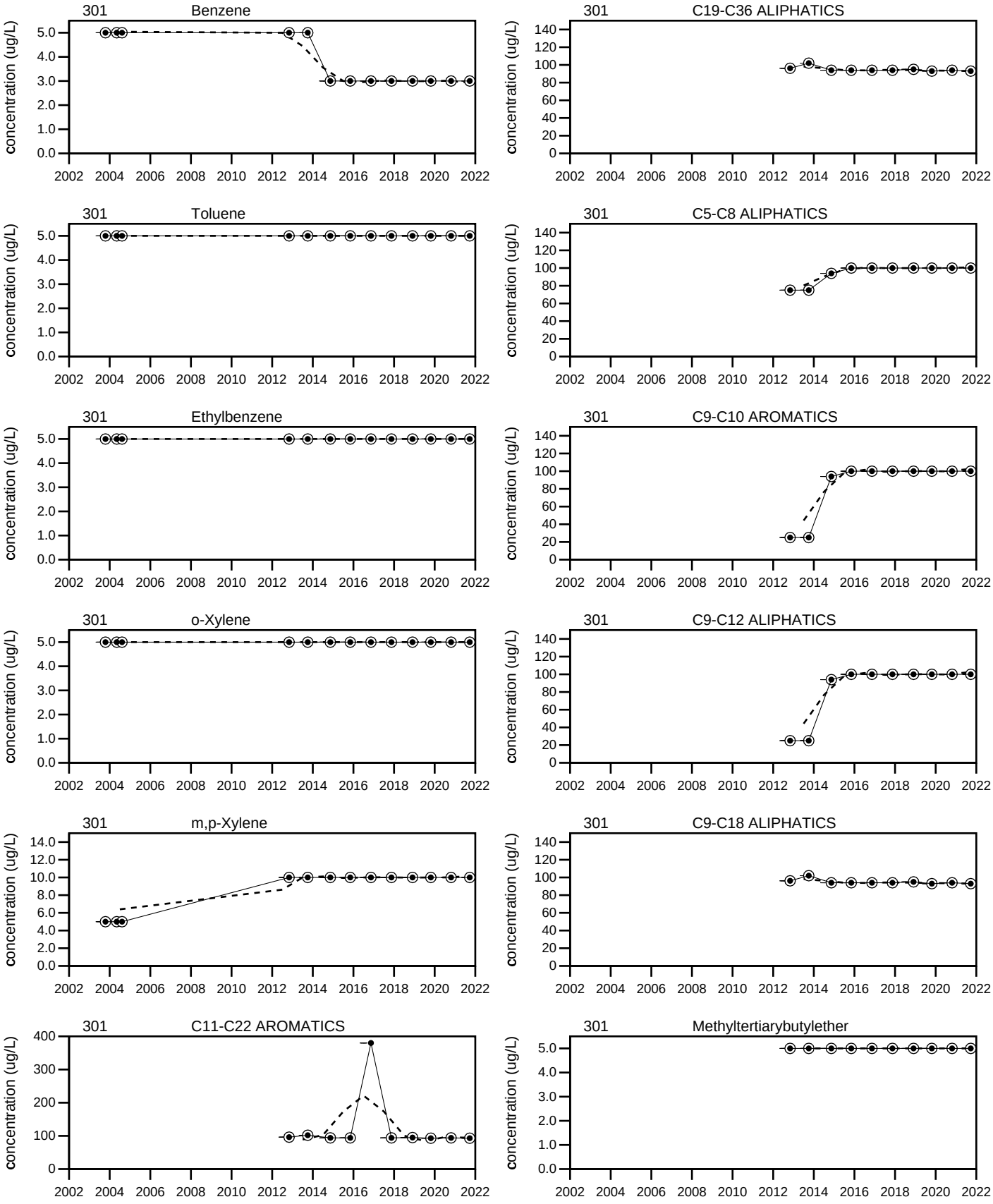
RAGGwRs=1.2 ug/L, MEG16=10 ug/L, Benzene RAGGwRs=4.6 ug/L, MEG16=4 ug/L, MCL=5 ug/L, Acenaphthylene RAGGwRs=520 ug/L, Benzo(g,h,i)perylene RAGGwRs=600 ug/L, Fluorene RAGGwRs=290 ug/L, MEG16=300 ug/L, Phenanthrene RAGGwRs=180 ug/L, Anthracene RAGGwRs=1800 ug/L, MEG16=2000 ug/L, Fluoranthene RAGGwRs=800 ug/L, MEG16=300 ug/L, Pyrene RAGGwRs=120 ug/L, MEG16=200 ug/L, Benzo(a)Anthracene RAGGwRs=0.3 ug/L, MEG16=0.5 ug/L, Chrysene RAGGwRs=250 ug/L, MEG16=50 ug/L, Benzo(b)Fluoranthene RAGGwRs=2.5 ug/L, MEG16=0.5 ug/L, Benzo(k)Fluoranthene RAGGwRs=25 ug/L, MEG16=5 ug/L, Benzo(a)Pyrene RAGGwRs=0.25 ug/L, MEG16=0.05 ug/L, MCL=0.2 ug/L, Indeno(1,2,3-c,d)Pyrene RAGGwRs=2.5 ug/L, MEG16=0.5 ug/L, Dibenz(a,h)Anthracene RAGGwRs=0.25 ug/L, MEG16=0.05 ug/L, 2-Methylnaphthalene RAGGwRs=36 ug/L, MEG16=30 ug/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

## Comments

Q2= 6 - 2021 U = Not Detected above the laboratory reporting limit.

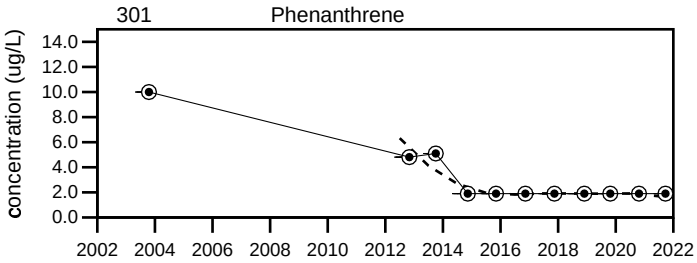
Q3= 9 - 2021

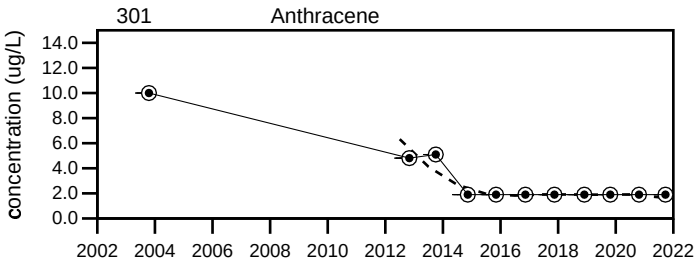


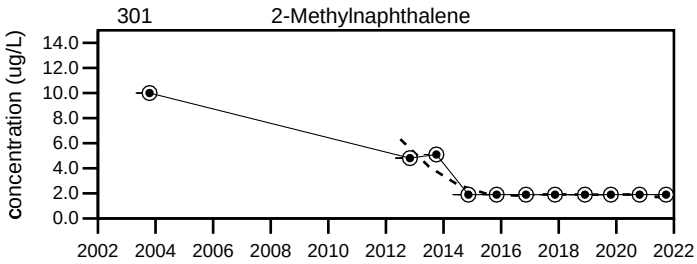

# Dolby Landfill

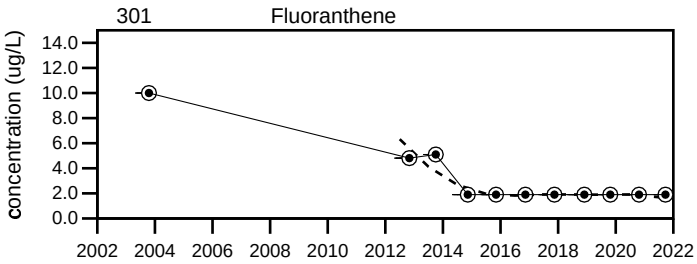
## 301

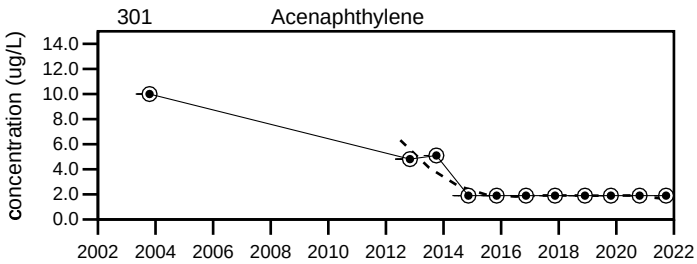
Sevee & Maher Engineers, Inc.

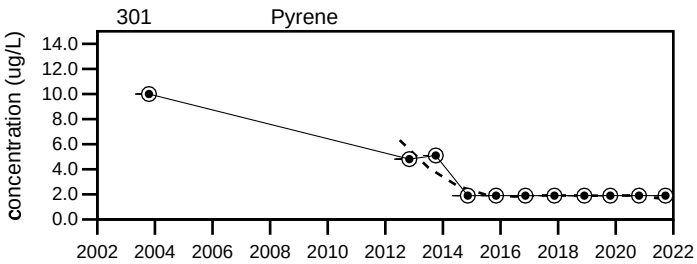


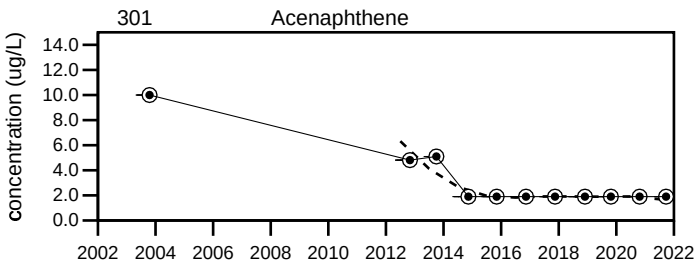



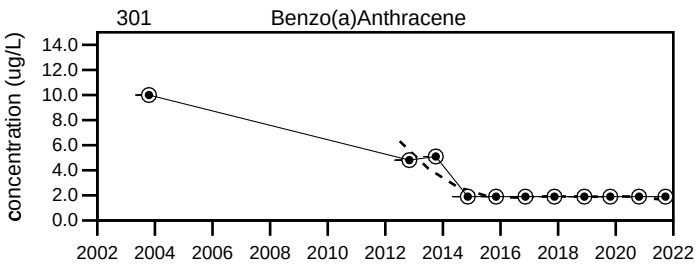



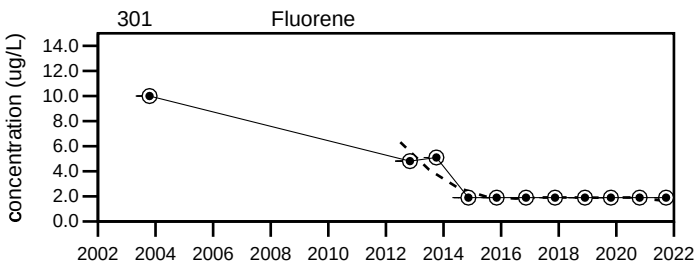



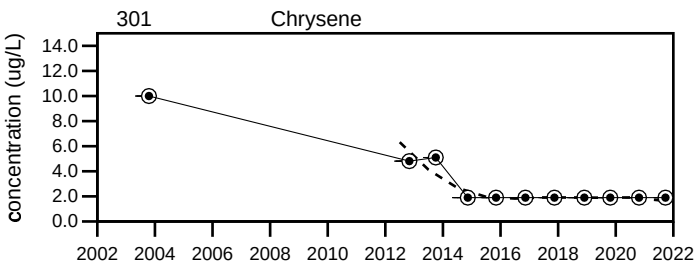



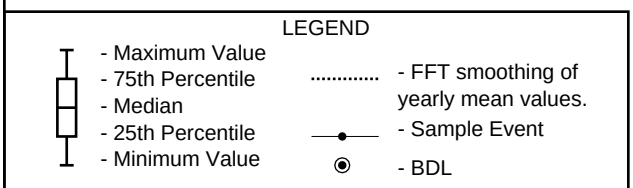



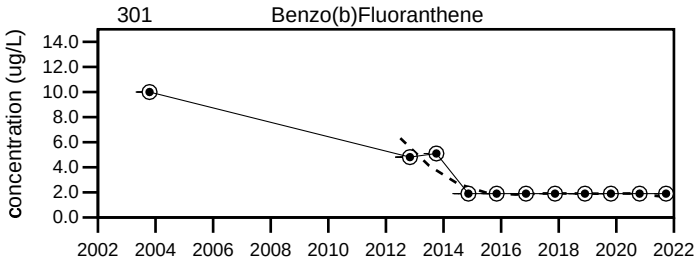



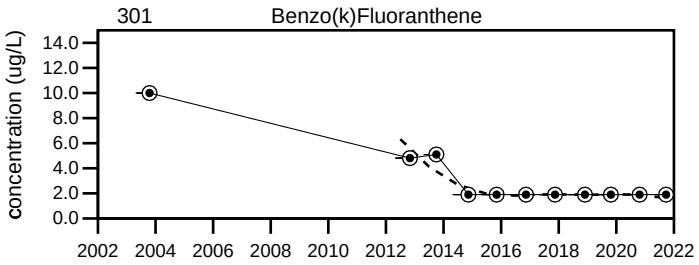



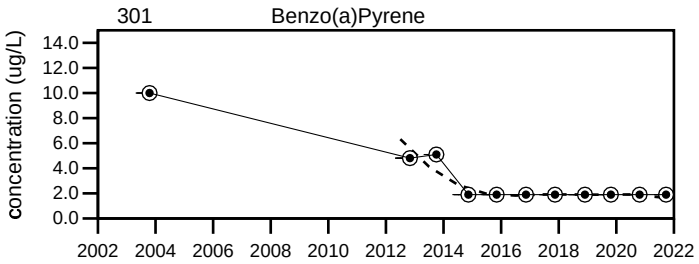

# Dolby Landfill

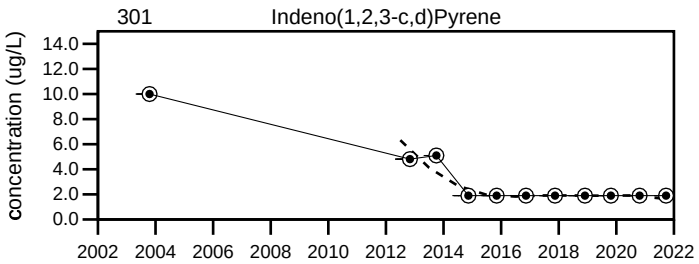
## 301

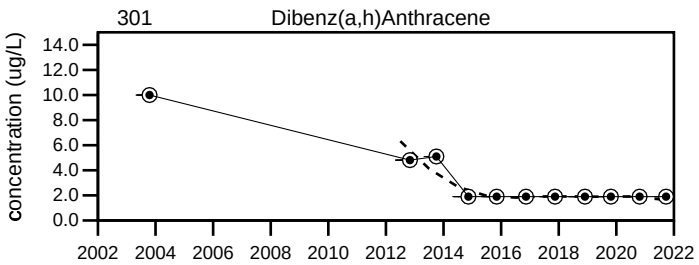
Sevee & Maher Engineers, Inc.

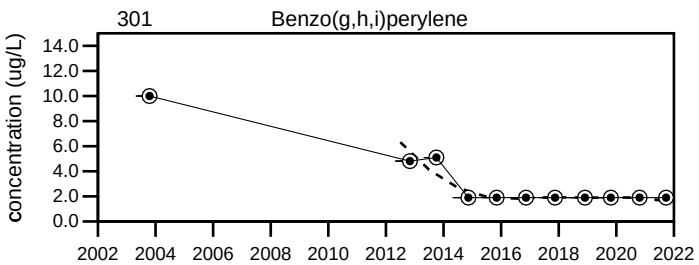


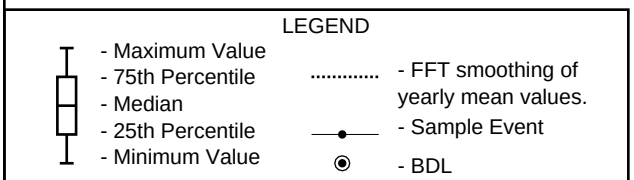




Dolby Landfill

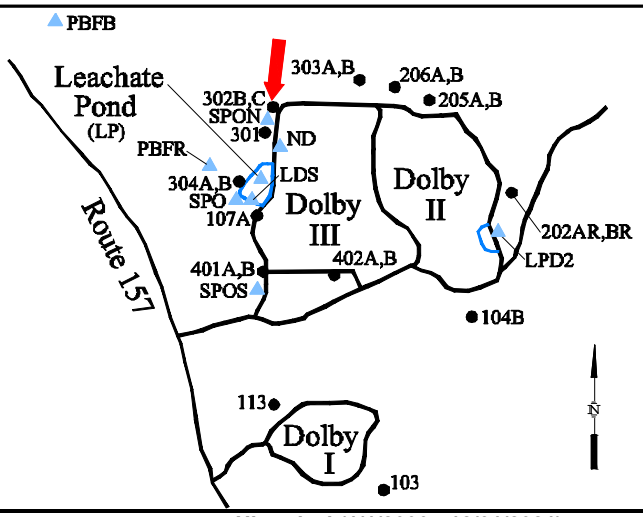
301

Sevee & Maher Engineers, Inc.

## Well Description

Well located downgradient to the northwest of Dolby III Landfill.

| | |
|---|---|
| Screen Interval: | **18.8 ft. to 23.8 ft.** |
| Sampled: | **2 Times Annually** |
| Sampled Since: | **Sep-83** |
| Material Screened: | **Bedrock** |
| Well Condition: | **Good** |
| Sampling Method: | **Low Flow (Initiated Aug. 2000)** |




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 1574 | 1582 | | 121 | to 1709 | 1100 | ± 46 | 63 |
| Dissolved Oxygen (mg/L) | | 0.7 | 0.9 | | 0.1 | to 12.5 | 1.2 | ± 0.22 | 62 |
| Total Dissolved Solids (mg/L) | | 1100 | 1100 | | 224 | to 1100 | 720 | ± 28 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.04 U | 0.0071 | ± 0.000 | 61 |
| Calcium (mg/L) | | 244 | 254 | | 82.2 | to 610 | 200 | ± 9 | 57 |
| Manganese (mg/L) | | **38.4** | **38.4** | | 1.118 | to 89.5 | 17 | ± 1.8 | 63 |
| pH (STU) | | 6.5 | 6.5 | | 5.77 | to 8.9 | 6.4 | ± 0.052 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 940 | ↑980 | | 88.9 | to 940 | 560 | ± 27 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 891 | 908 | | 143.9 | to 2160 | 590 | ± 35 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 940 | ↑980 | | 81 | to 940 | 540 | ± 28 | 63 |
| Sodium (mg/L) | | **64.3** | **69.7** | | 6.5 | to 152 | 36 | ± 2.7 | 63 |
| Chloride (mg/L) | | 67 | 73 | | 38 | to 82 | 58 | ± 1.6 | 63 |
| Iron (mg/L) | | 0.1 U | 0.1 U | | 0.01 U | to 0.5 U | 0.07 | ± 0.01 | 63 |
| Magnesium (mg/L) | | 68.7 | 66.6 | | 7.3 | to 156 | 34 | ± 3 | 57 |
| Potassium (mg/L) | | 5.8 | 7 | | 1.16 | to 12.4 | 2.9 | ± 0.2 | 63 |
| Sulfate (mg/L) | | 1 U | 1 U | | 1 U | to 78 | 26 | ± 2.3 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 4 U | | 0.32 U | to 9 | 2.4 | ± 0.22 | 63 |
| Turbidity (field) (NTU) | | 0.4 | 0.8 | | 0 | to 1.8 | 0.4 | ± 0.034 | 62 |
| Ammonia (N) (mg/L) | | 0.96 | 1.1 | | 0.08 U | to 1.1 | 0.29 | ± 0.031 | 63 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 2 U | 0.69 | ± 0.09 | 63 |
| Organic Carbon (mg/L) | | 28 | 28 | | 3.1 | to 34 | 18 | ± 0.9 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

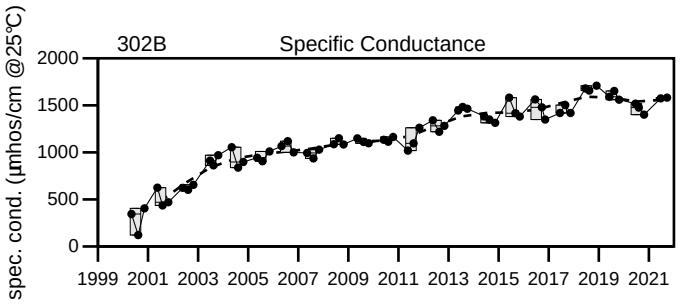
## Comments

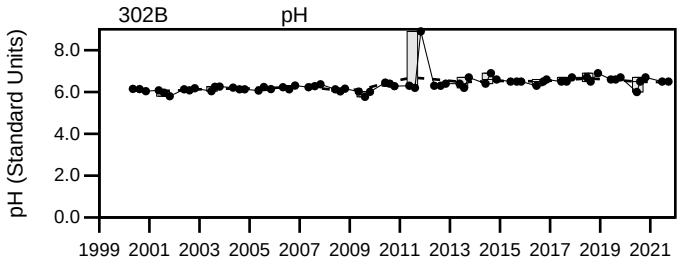
Q2= 6 - 2021 U = Not Detected above the laboratory reporting limit.

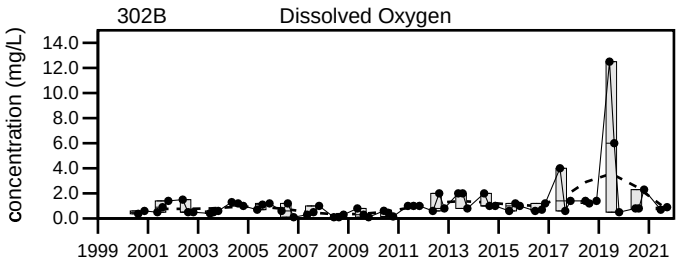
Q3= 9 - 2021

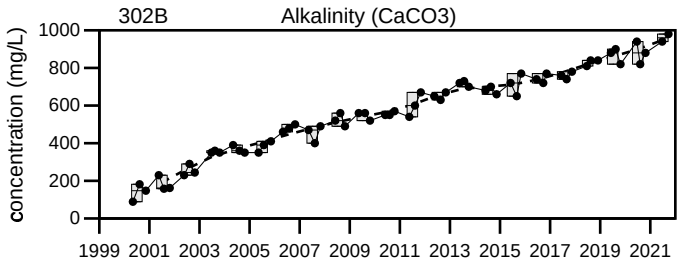
Data Group: 180
Printed: 4/11/2022 09:39

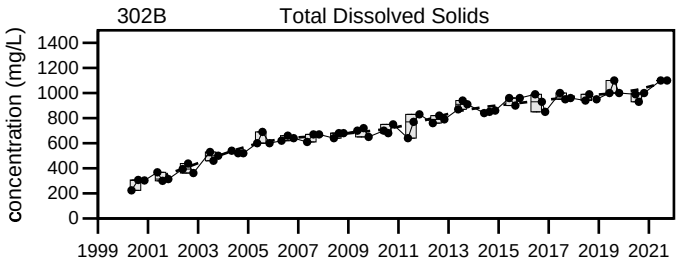
SME SEVEE & MAHER ENGINEERS

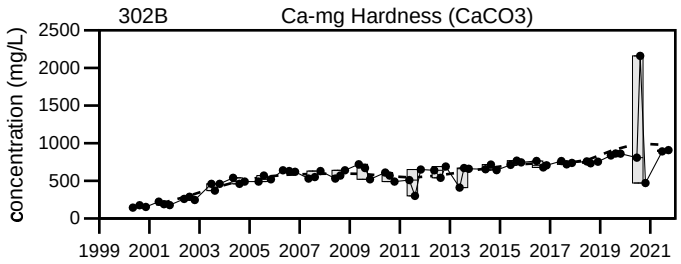


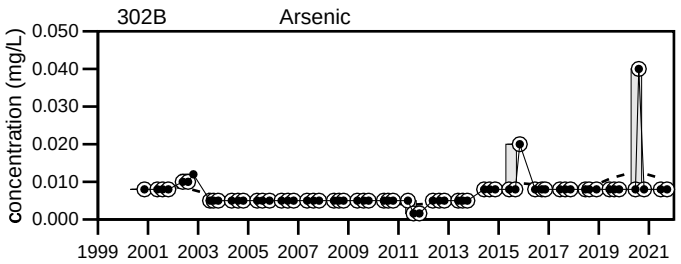



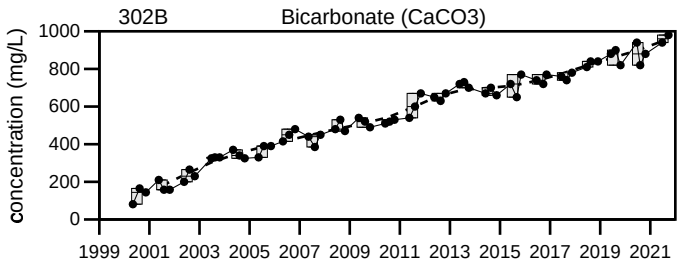



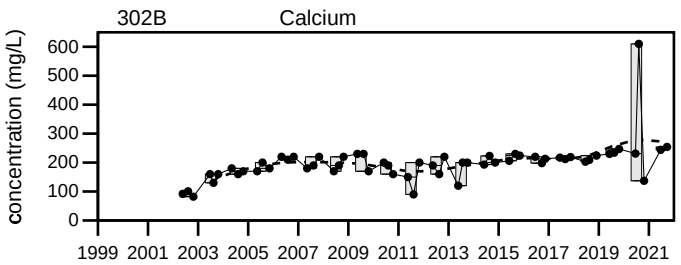



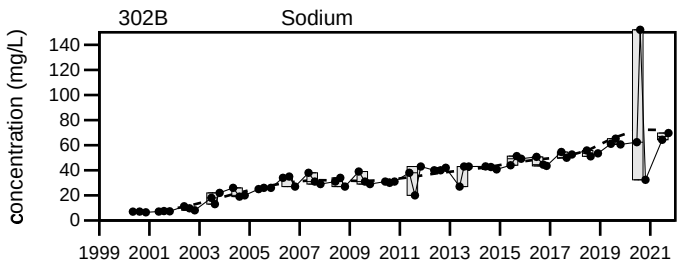



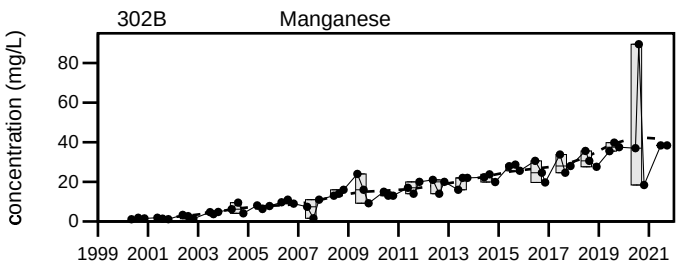



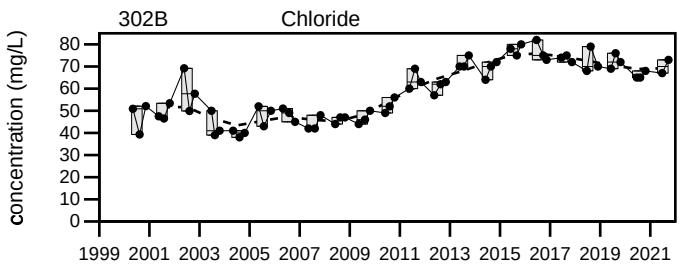



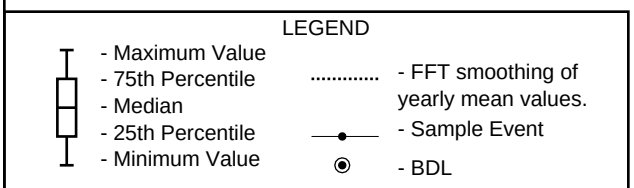



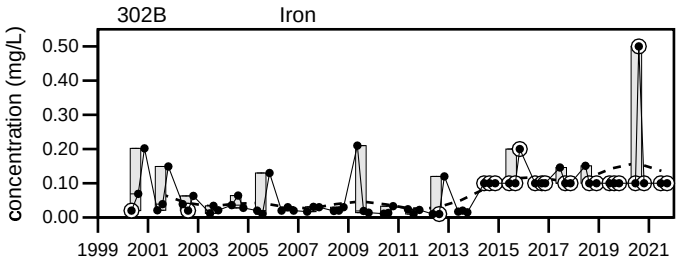



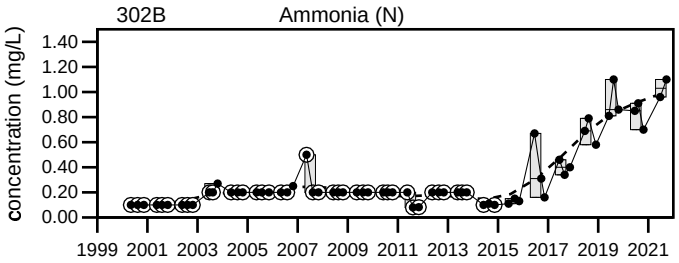



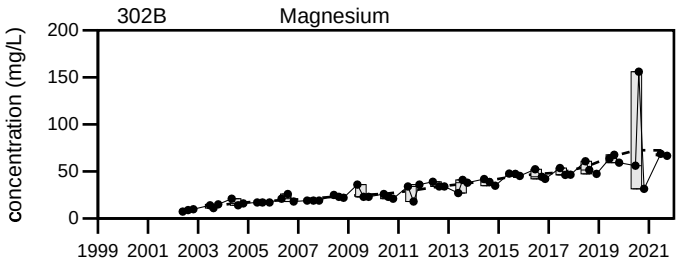

# Dolby Landfill

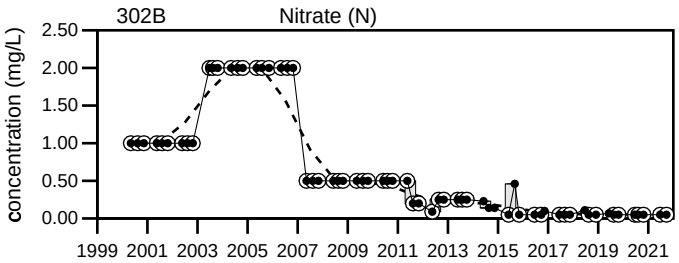
## 302B

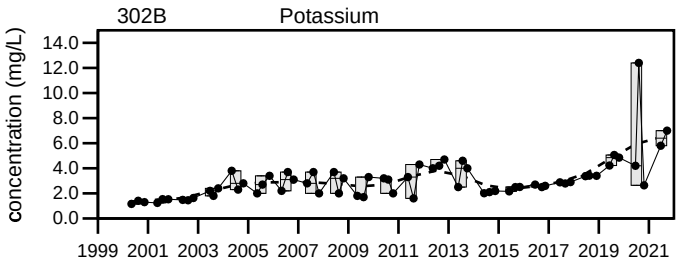
Sevee & Maher Engineers, Inc.

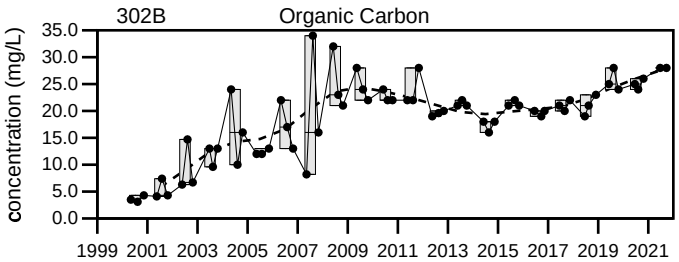


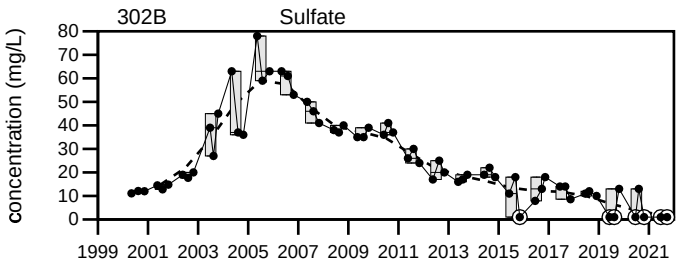



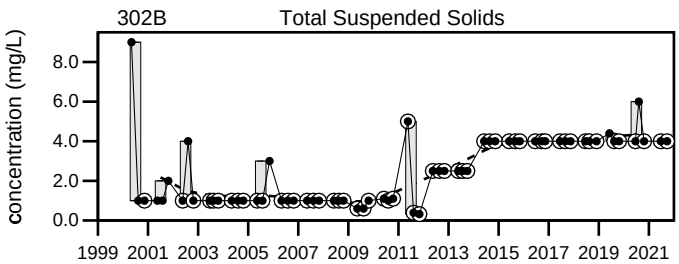



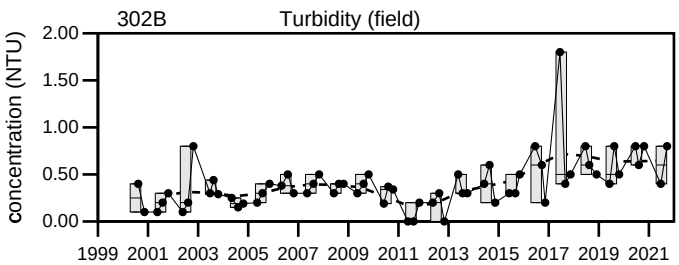



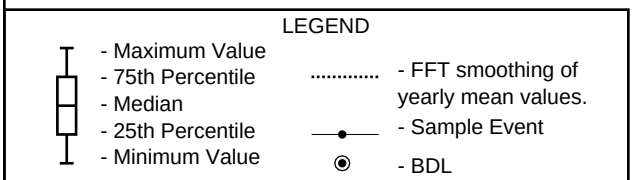




Dolby Landfill

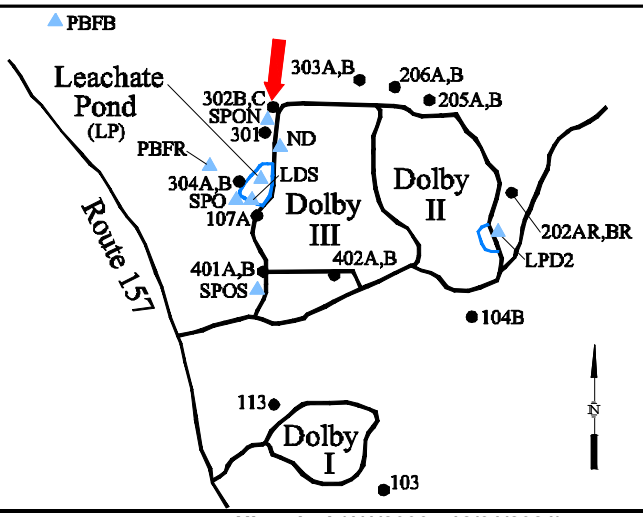
302B

Sevee & Maher Engineers, Inc.

## Well Description

Well located downgradient to the northwest of Dolby III Landfill.

| | |
|---|---|
| Screen Interval: | **18.8 ft. to 23.8 ft.** |
| Sampled: | **2 Times Annually** |
| Sampled Since: | **Sep-83** |
| Material Screened: | **Bedrock** |
| Well Condition: | **Good** |
| Sampling Method: | **Low Flow (Initiated Aug. 2000)** |




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Benzene (ug/L) | | | 3 U | | 3 U | 5 U | 3.8 | 0.3 | 12 |
| Toluene (ug/L) | | | 5 U | | 5 U | 5 U | 5 | 0 | 12 |
| Ethylbenzene (ug/L) | | | 5 U | | 5 U | 5 U | 5 | 0 | 12 |
| o-Xylene (ug/L) | | | 5 U | | 5 U | 5 U | 5 | 0 | 12 |
| m,p-Xylene (ug/L) | | | 10 U | | 5 U | 10 U | 8.8 | 0.65 | 12 |
| C11-C22 AROMATICS (ADJUSTED) (ug/L | | | 94 U | | 94 U | 101 U | 95 | 0.7 | 10 |
| C19-C36 ALIPHATICS (ADJUSTED) (ug/L) | | | 94 U | | 94 U | 101 U | 95 | 0.7 | 10 |
| C5-C8 ALIPHATICS (ADJUSTED) (ug/L) | | | 100 U | | 75 U | 100 U | 94 | 3.6 | 9 |
| C9-C10 AROMATICS (ADJUSTED) (ug/L) | | | 100 U | | 25 U | 100 U | 83 | 11 | 9 |
| C9-C12 ALIPHATICS (ADJUSTED) (ug/L) | | | 100 U | | 25 U | 100 U | 83 | 11 | 9 |
| C9-C18 ALIPHATICS (ADJUSTED) (ug/L) | | | 94 U | | 94 U | 101 U | 95 | 0.7 | 10 |
| Methyltertiarybutylether (ug/L) | | | 5 U | | 5 U | 5 U | 5 | 0 | 9 |
| Naphthalene (ug/L) | | | 5 U | | 4.81 U | 10 U | 5.5 | 0.5 | 10 |
| Naphthalene (EPH) (ug/L) | | | 1.9 U | | 1.9 U | 1.9 U | 1.9 | 1E-08 | 7 |
| 2-Methylnaphthalene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Acenaphthylene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Acenaphthene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Fluorene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Phenanthrene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Anthracene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Fluoranthene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Pyrene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(a)Anthracene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Chrysene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(b)Fluoranthene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(k)Fluoranthene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(a)Pyrene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Indeno(1,2,3-c,d)Pyrene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Dibenz(a,h)Anthracene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(g,h,i)perylene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Acenaphthene RAGGwRs=540 ug/L, MEG16=400 ug/L, Toluene RAGGwRs=1100 ug/L, MEG16=600 ug/L, MCL=1000 ug/L, Ethylbenzene RAGGwRs=15 ug/L, MEG16=30 ug/L, MCL=700 ug/L, C11-C22 AROMATICS (ADJUSTED) RAGGwRs=600 ug/L, MEG16=200 ug/L, C19-C36 ALIPHATICS (ADJUSTED) RAGGwRs=40000 ug/L, MEG16=10000 ug/L, C5-C8 ALIPHATICS (ADJUSTED) RAGGwRs=180 ug/L, MEG16=300 ug/L, C9-C10 AROMATICS (ADJUSTED) RAGGwRs=71 ug/L, MEG16=200 ug/L, C9-C12 ALIPHATICS (ADJUSTED) RAGGwRs=350 ug/L, MEG16=700 ug/L, C9-C18 ALIPHATICS (ADJUSTED) RAGGwRs=350 ug/L, MEG16=700 ug/L, Methyltertiarybutylether RAGGwRs=140 ug/L, MEG16=35 ug/L, Naphthalene RAGGwRs=1.2 ug/L, MEG16=10 ug/L, Naphthalene (EPH)

Data Group: 183
Printed: 4/11/2022 10:44

SME SEVEE & MAHER ENGINEERS

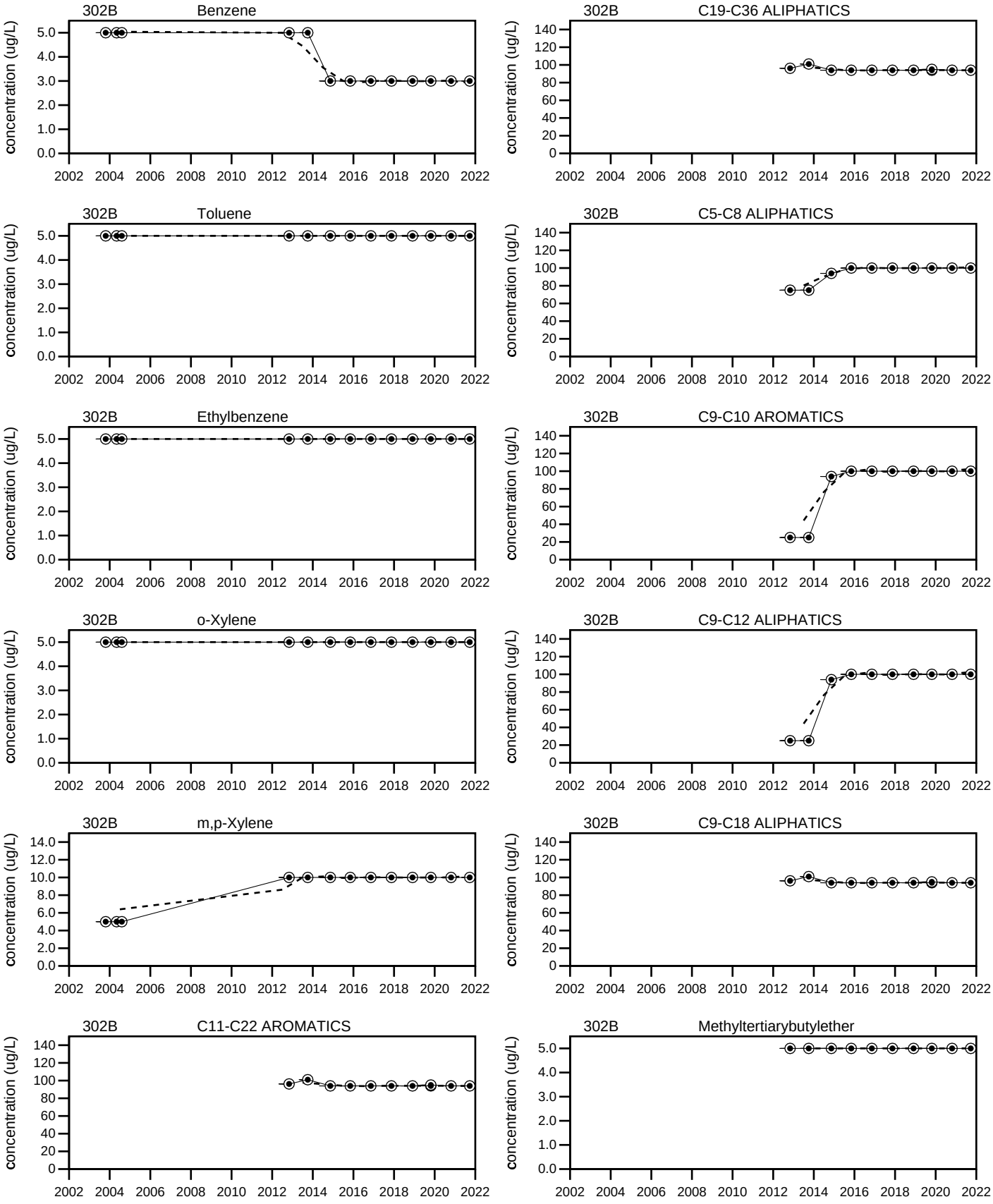
RAGGwRs=1.2 ug/L, MEG16=10 ug/L, Benzene RAGGwRs=4.6 ug/L, MEG16=4 ug/L, MCL=5 ug/L, Acenaphthylene RAGGwRs=520 ug/L, Benzo(g,h,i)perylene RAGGwRs=600 ug/L, Fluorene RAGGwRs=290 ug/L, MEG16=300 ug/L, Phenanthrene RAGGwRs=180 ug/L, Anthracene RAGGwRs=1800 ug/L, MEG16=2000 ug/L, Fluoranthene RAGGwRs=800 ug/L, MEG16=300 ug/L, Pyrene RAGGwRs=120 ug/L, MEG16=200 ug/L, Benzo(a)Anthracene RAGGwRs=0.3 ug/L, MEG16=0.5 ug/L, Chrysene RAGGwRs=250 ug/L, MEG16=50 ug/L, Benzo(b)Fluoranthene RAGGwRs=2.5 ug/L, MEG16=0.5 ug/L, Benzo(k)Fluoranthene RAGGwRs=25 ug/L, MEG16=5 ug/L, Benzo(a)Pyrene RAGGwRs=0.25 ug/L, MEG16=0.05 ug/L, MCL=0.2 ug/L, Indeno(1,2,3-c,d)Pyrene RAGGwRs=2.5 ug/L, MEG16=0.5 ug/L, Dibenz(a,h)Anthracene RAGGwRs=0.25 ug/L, MEG16=0.05 ug/L, 2-Methylnaphthalene RAGGwRs=36 ug/L, MEG16=30 ug/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

## Comments

Q2= 6 - 2021 U = Not Detected above the laboratory reporting limit.

Q3= 9 - 2021



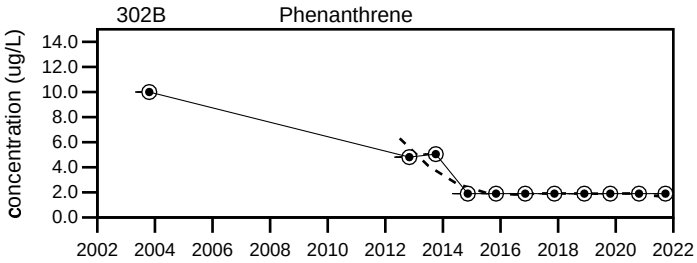

LEGEND

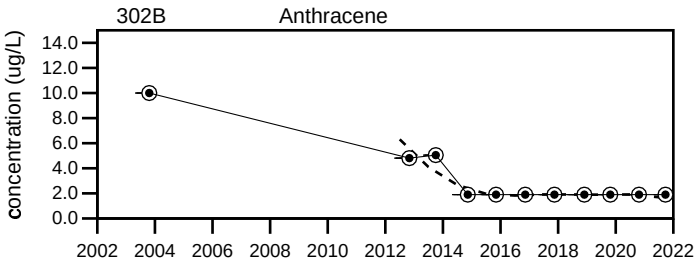
- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value
- FFT smoothing of yearly mean values.
- Sample Event
- BDL

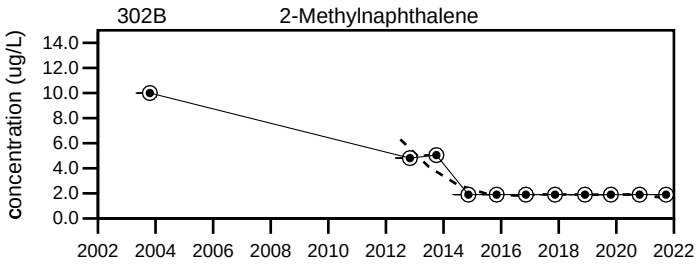
# Dolby Landfill

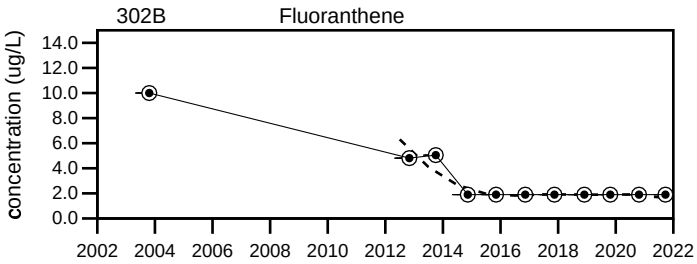
## 302B

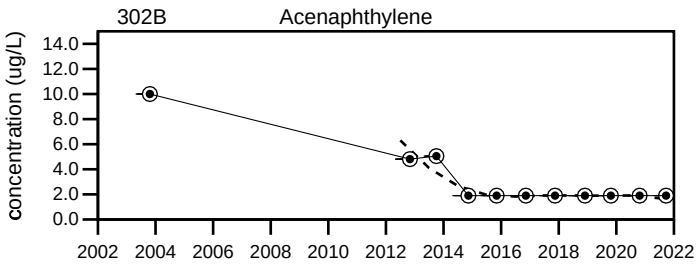
Sevee & Maher Engineers, Inc.

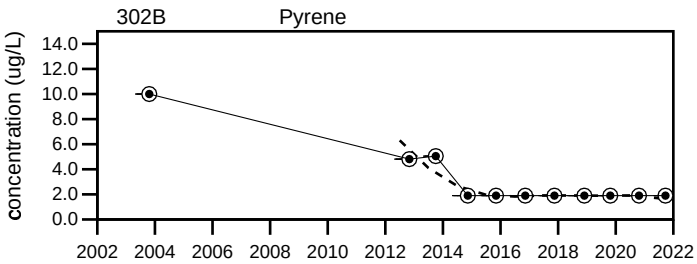


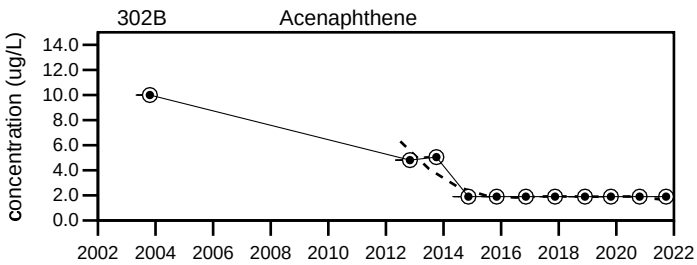



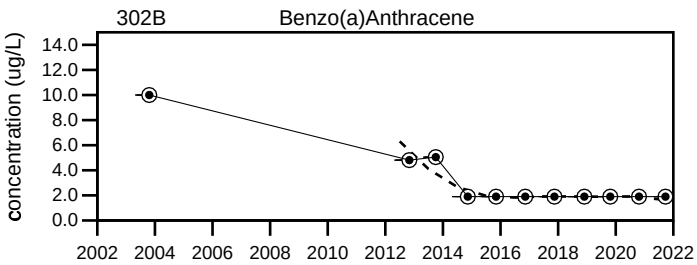



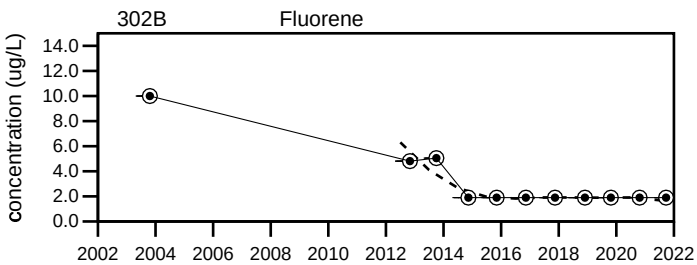



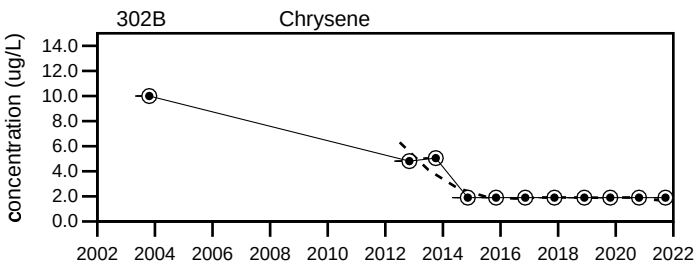



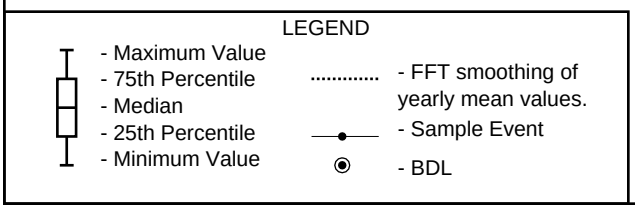



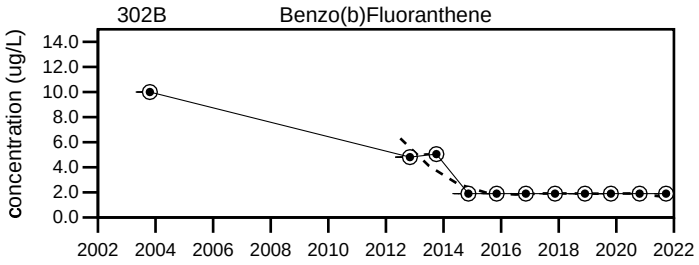



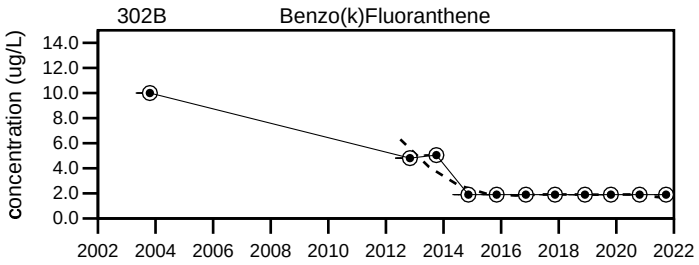



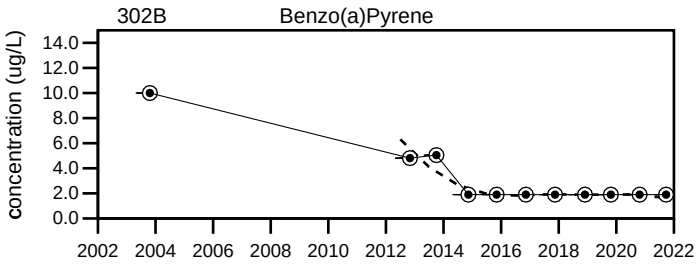

# Dolby Landfill

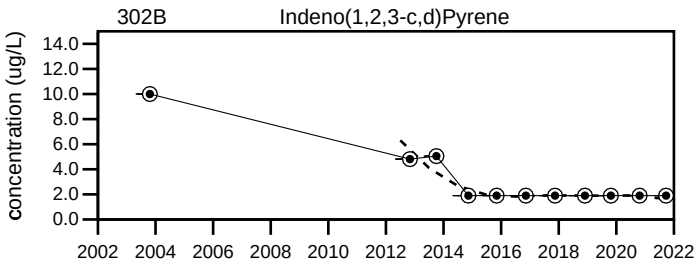
## 302B

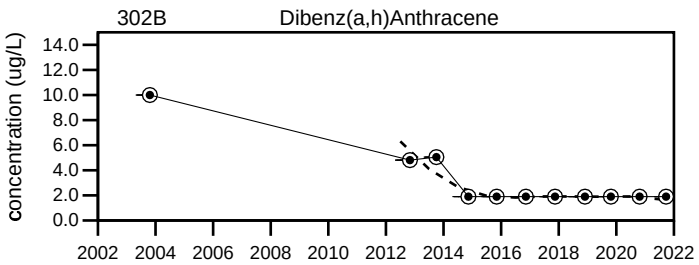
Sevee & Maher Engineers, Inc.

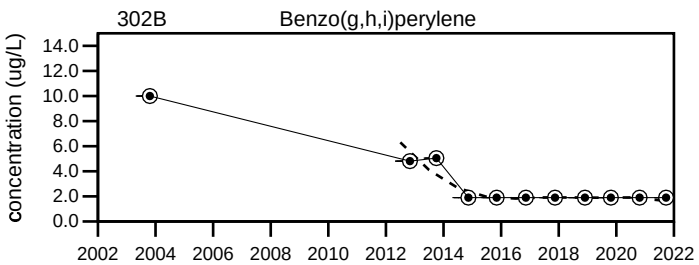


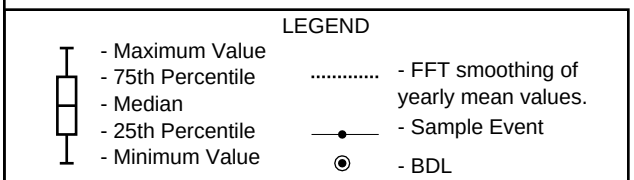




Dolby Landfill

302B

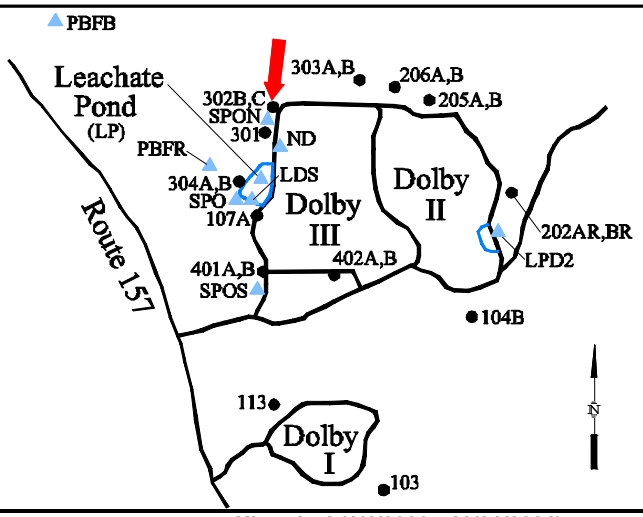
Sevee & Maher Engineers, Inc.

302C


## Well Description

Well located downgradient to the northwest of Dolby III Landfill.

Screen Interval: **6 ft. to 11 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Sep-83**
Material Screened: **Glacial Till**
Well Condition: **Good**
Sampling Method: **Low Flow (Initiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 1675 | 1491 | | 292 | to 1793 | 1100 | ± 44 | 63 |
| Dissolved Oxygen (mg/L) | | 0.2 | 0.4 | | 0.1 | to 6.6 | 0.9 | ± 0.13 | 62 |
| Total Dissolved Solids (mg/L) | | ↑1200 | 1000 | | 189 | to 1100 | 670 | ± 29 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.04 U | 0.0071 | ± 0.000 | 61 |
| Calcium (mg/L) | | ↑243 | 200 | | 72 | to 240 | 160 | ± 4.4 | 57 |
| Manganese (mg/L) | | **60** | **52** | | 0.171 | to 60.5 | 23 | ± 2.1 | 63 |
| pH (STU) | | 6.4 | 6.8 | | 5.71 | to 7.4 | 6.3 | ± 0.036 | 63 |
| Alkalinity (CaCO3) (mg/L) | | ↑1100 | 990 | | 47.3 | to 1000 | 530 | ± 30 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | ↑977 | ↑812 | | 105.5 | to 801 | 520 | ± 23 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | ↑1100 | 990 | | 39 | to 1000 | 520 | ± 31 | 63 |
| Sodium (mg/L) | | ↑**77.6** | ↑**69.4** | | 6.98 | to 65.4 | 37 | ± 1.9 | 63 |
| Chloride (mg/L) | | 60 | 55 | | 26 | to 140 | 55 | ± 2 | 63 |
| Iron (mg/L) | | 0.832 | 0.763 | | 0.02 U | to 2.442 | 0.66 | ± 0.069 | 63 |
| Magnesium (mg/L) | | ↑89.7 | ↑76 | | 9.2 | to 74 | 40 | ± 2.2 | 57 |
| Potassium (mg/L) | | 10.8 | 16.2 | | 1.19 | to 18.5 | 3.7 | ± 0.34 | 63 |
| Sulfate (mg/L) | | 1 U | 1 U | | 1 U | to 79 | 23 | ± 2.8 | 63 |
| Total Suspended Solids (mg/L) | | 5.2 | 4 U | | 0.32 U | to 23 | 2.6 | ± 0.37 | 63 |
| Turbidity (field) (NTU) | | 0.4 | 0.3 | | 0 | to 1.2 | 0.33 | ± 0.029 | 62 |
| Ammonia (N) (mg/L) | | 1.9 | 3.3 | | 0.08 U | to 5.3 | 0.6 | ± 0.12 | 63 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 2 U | 0.67 | ± 0.091 | 63 |
| Organic Carbon (mg/L) | | 33 | 29 | | 2.6 | to 48 | 19 | ± 0.98 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

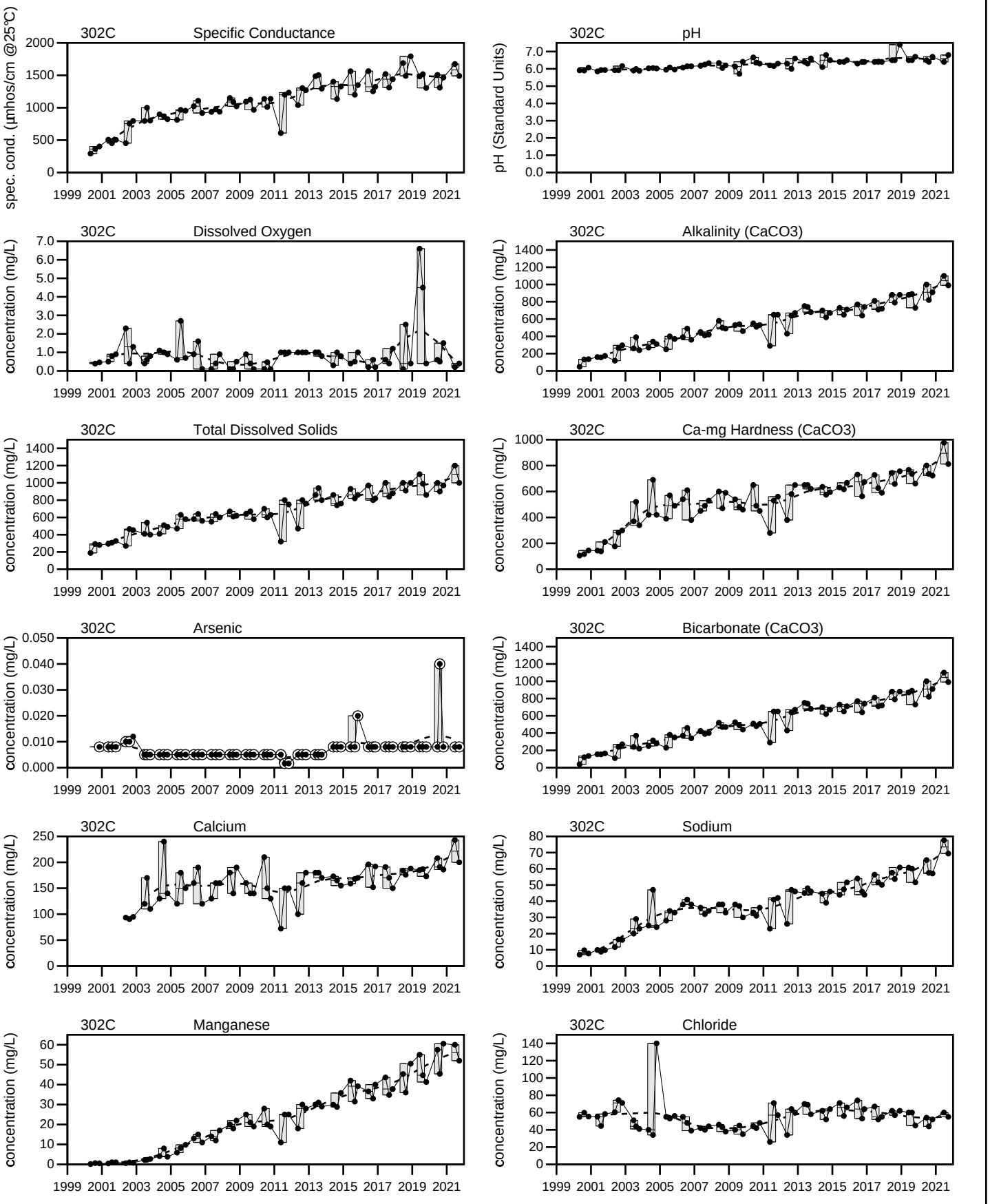
## Comments

Q2= 6 - 2021
Q3= 9 - 2021
Q4= 10 - 2021

U = Not Detected above the laboratory reporting limit.

Data Group: 180
Printed: 4/11/2022 09:39

SME SEVEE & MAHER ENGINEERS



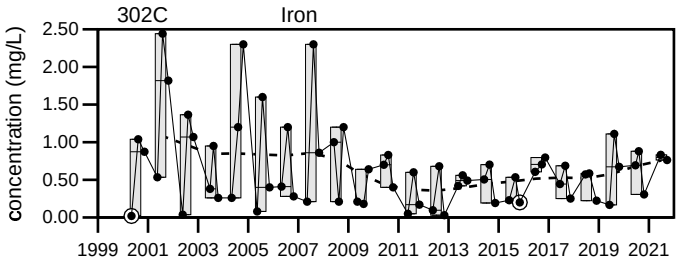

LEGEND

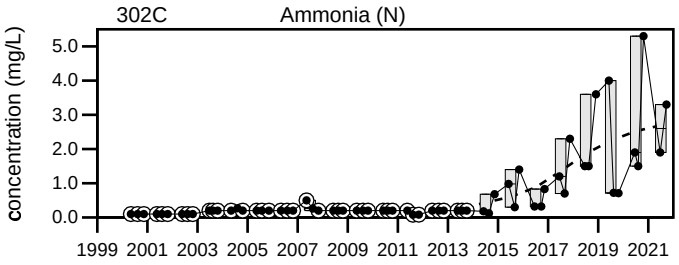
- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value
- FFT smoothing of yearly mean values.
- Sample Event
- BDL

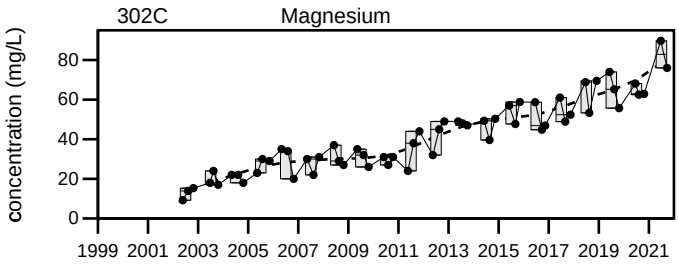
# Dolby Landfill

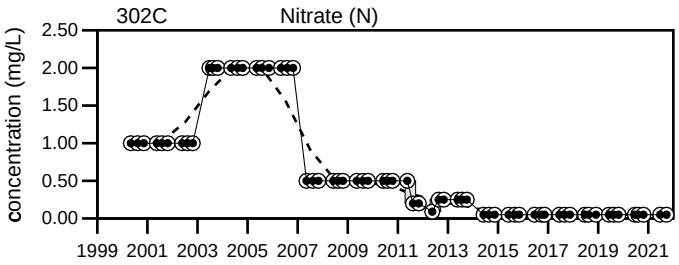
## 302C

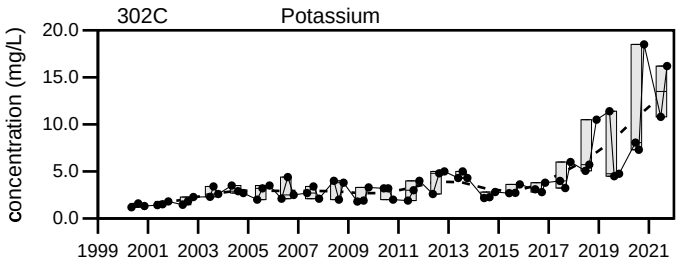
Sevee & Maher Engineers, Inc.

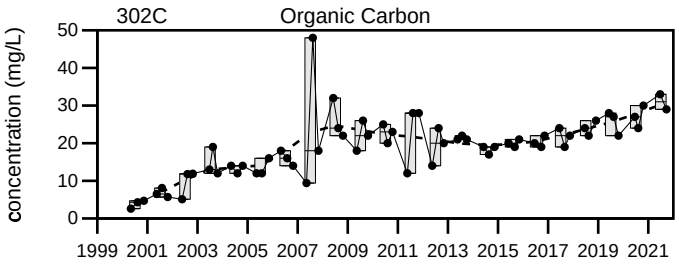


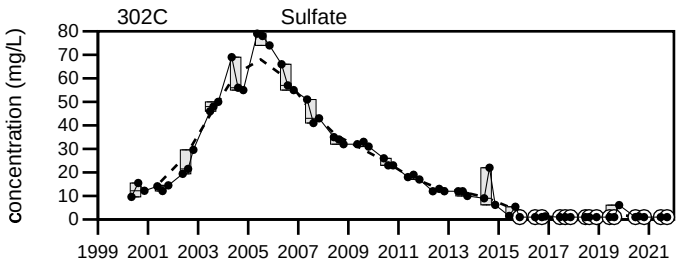



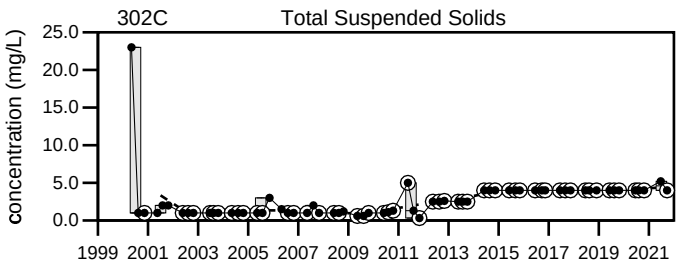



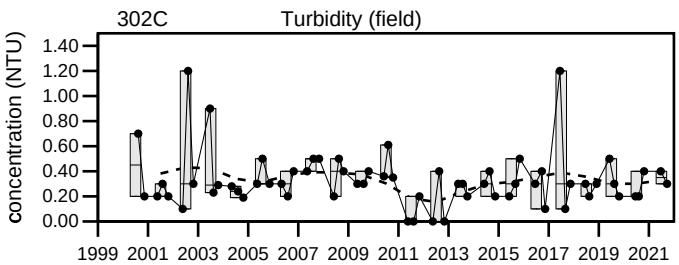



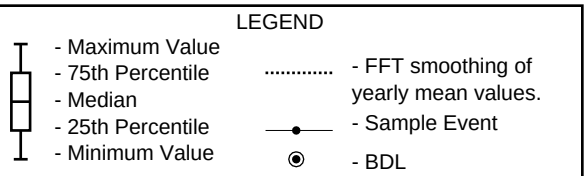




# Dolby Landfill

## 302C

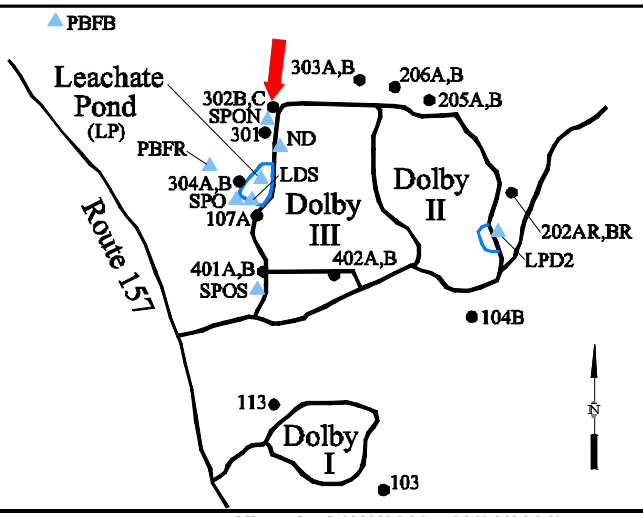
Sevee & Maher Engineers, Inc.

302C


## Well Description

Well located downgradient to the northwest of Dolby III Landfill.

| | |
|---|---|
| Screen Interval: | **6 ft. to 11 ft.** |
| Sampled: | **2 Times Annually** |
| Sampled Since: | **Sep-83** |
| Material Screened: | **Glacial Till** |
| Well Condition: | **Good** |
| Sampling Method: | **Low Flow (Initiated Aug. 2000)** |




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Benzene (ug/L) | | | 3 U | | 3 U | 5 U | 3.8 | 0.3 | 12 |
| Toluene (ug/L) | | | 5 U | | 5 U | 5 U | 5 | 0 | 12 |
| Ethylbenzene (ug/L) | | | 5 U | | 5 U | 5 U | 5 | 0 | 12 |
| o-Xylene (ug/L) | | | 5 U | | 5 U | 5 U | 5 | 0 | 12 |
| m,p-Xylene (ug/L) | | | 10 U | | 5 U | 10 U | 8.8 | 0.65 | 12 |
| C11-C22 AROMATICS (ADJUSTED) (ug/L | | | ↓93 U | | 94 U | 630 | 150 | 53 | 10 |
| C19-C36 ALIPHATICS (ADJUSTED) (ug/L) | | | ↓93 U | | 94 U | 1900 | 280 | 180 | 10 |
| C5-C8 ALIPHATICS (ADJUSTED) (ug/L) | | | 100 U | | 75 U | 100 U | 94 | 3.6 | 9 |
| C9-C10 AROMATICS (ADJUSTED) (ug/L) | | | 100 U | | 25 U | 100 U | 83 | 11 | 9 |
| C9-C12 ALIPHATICS (ADJUSTED) (ug/L) | | | 100 U | | 25 U | 100 U | 83 | 11 | 9 |
| C9-C18 ALIPHATICS (ADJUSTED) (ug/L) | | | ↓93 U | | 94 U | 150 | 100 | 5.5 | 10 |
| Methyltertiarybutylether (ug/L) | | | 5 U | | 5 U | 5 U | 5 | 0 | 9 |
| Naphthalene (ug/L) | | | 5 U | | 4.81 U | 10 U | 5.5 | 0.5 | 10 |
| Naphthalene (EPH) (ug/L) | | | 1.9 U | | 1.9 U | 1.9 U | 1.9 | 1E-08 | 7 |
| 2-Methylnaphthalene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Acenaphthylene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Acenaphthene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Fluorene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Phenanthrene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Anthracene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Fluoranthene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Pyrene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(a)Anthracene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Chrysene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(b)Fluoranthene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(k)Fluoranthene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(a)Pyrene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Indeno(1,2,3-c,d)Pyrene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Dibenz(a,h)Anthracene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |
| Benzo(g,h,i)perylene (ug/L) | | | 1.9 U | | 1.9 U | 10 U | 3.2 | 0.77 | 11 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Acenaphthene RAGGwRs=540 ug/L, MEG16=400 ug/L, Toluene RAGGwRs=1100 ug/L, MEG16=600 ug/L, MCL=1000 ug/L, Ethylbenzene RAGGwRs=15 ug/L, MEG16=30 ug/L, MCL=700 ug/L, C11-C22 AROMATICS (ADJUSTED) RAGGwRs=600 ug/L, MEG16=200 ug/L, C19-C36 ALIPHATICS (ADJUSTED) RAGGwRs=40000 ug/L, MEG16=10000 ug/L, C5-C8 ALIPHATICS (ADJUSTED) RAGGwRs=180 ug/L, MEG16=300 ug/L, C9-C10 AROMATICS (ADJUSTED) RAGGwRs=71 ug/L, MEG16=200 ug/L, C9-C12 ALIPHATICS (ADJUSTED) RAGGwRs=350 ug/L, MEG16=700 ug/L, C9-C18 ALIPHATICS (ADJUSTED) RAGGwRs=350 ug/L, MEG16=700 ug/L, Methyltertiarybutylether RAGGwRs=140 ug/L, MEG16=35 ug/L, Naphthalene RAGGwRs=1.2 ug/L, MEG16=10 ug/L, Naphthalene (EPH)

Data Group: 183
Printed: 4/11/2022 10:44

SME SEVEE & MAHER ENGINEERS

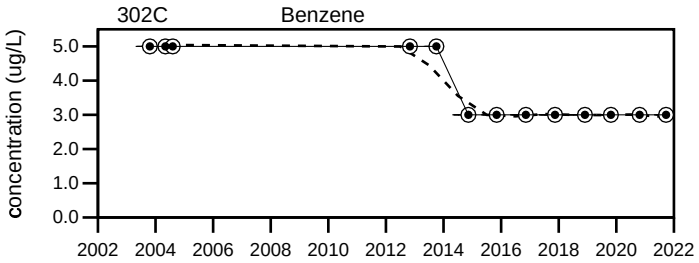
RAGGwRs=1.2 ug/L, MEG16=10 ug/L, Benzene RAGGwRs=4.6 ug/L, MEG16=4 ug/L, MCL=5 ug/L, Acenaphthylene RAGGwRs=520 ug/L, Benzo(g,h,i)perylene RAGGwRs=600 ug/L, Fluorene RAGGwRs=290 ug/L, MEG16=300 ug/L, Phenanthrene RAGGwRs=180 ug/L, Anthracene RAGGwRs=1800 ug/L, MEG16=2000 ug/L, Fluoranthene RAGGwRs=800 ug/L, MEG16=300 ug/L, Pyrene RAGGwRs=120 ug/L, MEG16=200 ug/L, Benzo(a)Anthracene RAGGwRs=0.3 ug/L, MEG16=0.5 ug/L, Chrysene RAGGwRs=250 ug/L, MEG16=50 ug/L, Benzo(b)Fluoranthene RAGGwRs=2.5 ug/L, MEG16=0.5 ug/L, Benzo(k)Fluoranthene RAGGwRs=25 ug/L, MEG16=5 ug/L, Benzo(a)Pyrene RAGGwRs=0.25 ug/L, MEG16=0.05 ug/L, MCL=0.2 ug/L, Indeno(1,2,3-c,d)Pyrene RAGGwRs=2.5 ug/L, MEG16=0.5 ug/L, Dibenz(a,h)Anthracene RAGGwRs=0.25 ug/L, MEG16=0.05 ug/L, 2-Methylnaphthalene RAGGwRs=36 ug/L, MEG16=30 ug/L

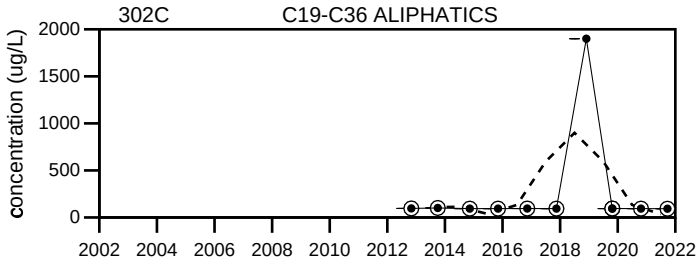
↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

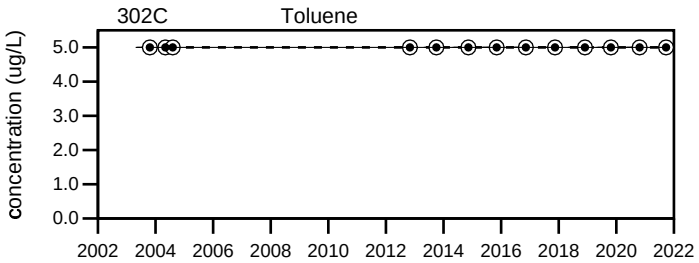
## Comments

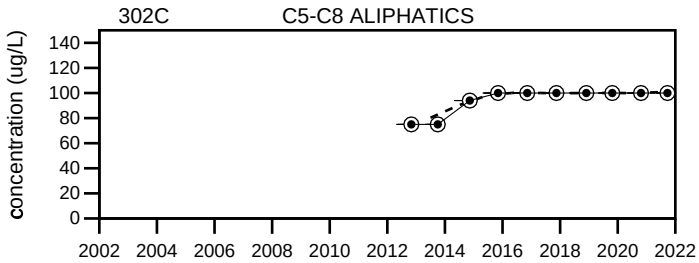
Q2= 6 - 2021 U = Not Detected above the laboratory reporting limit.

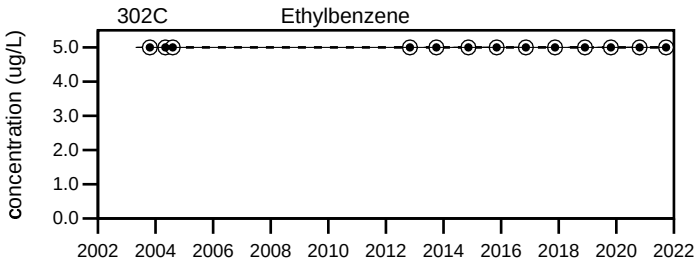
Q3= 9 - 2021

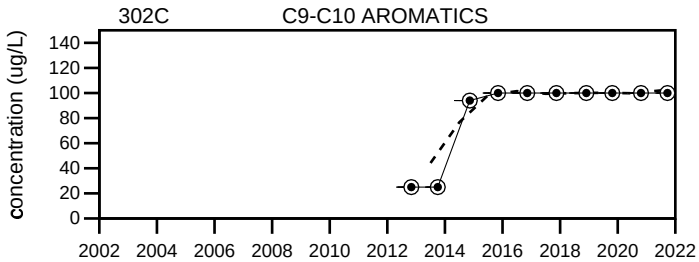


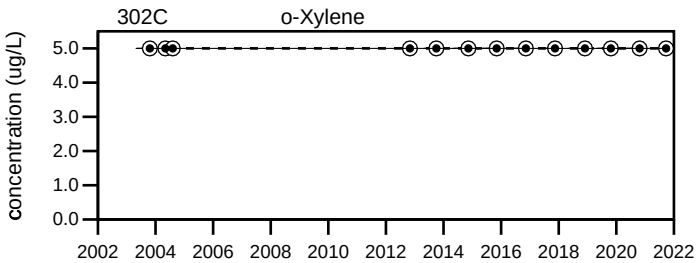



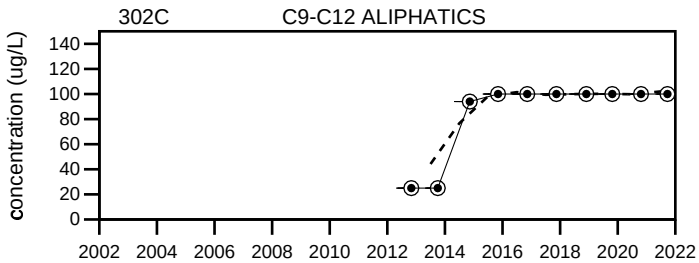



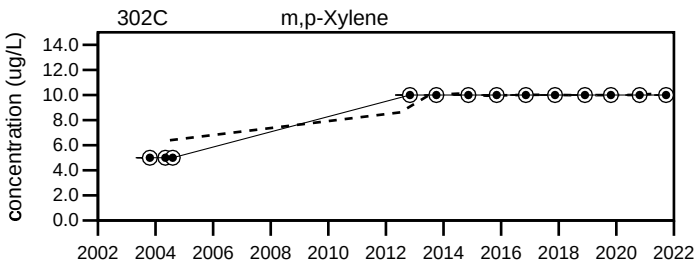



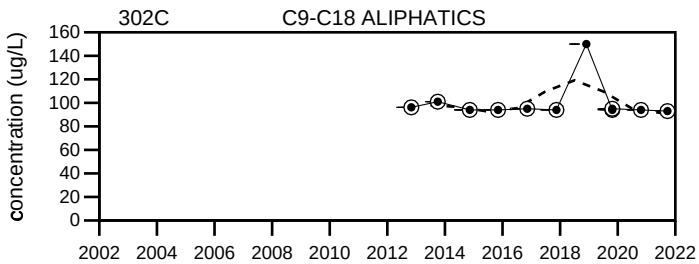



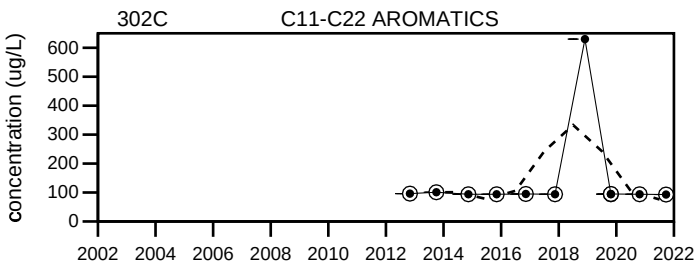



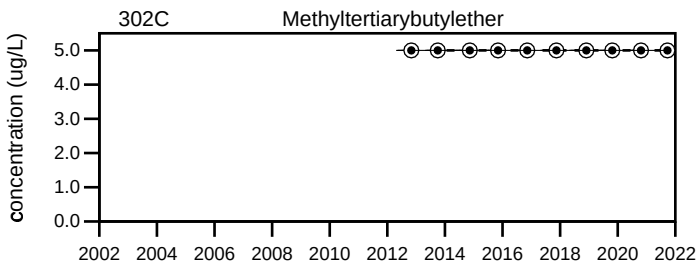



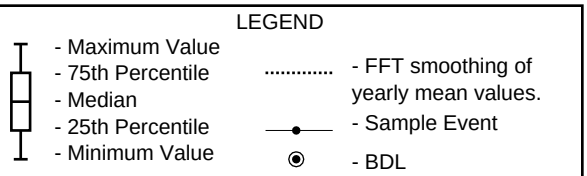



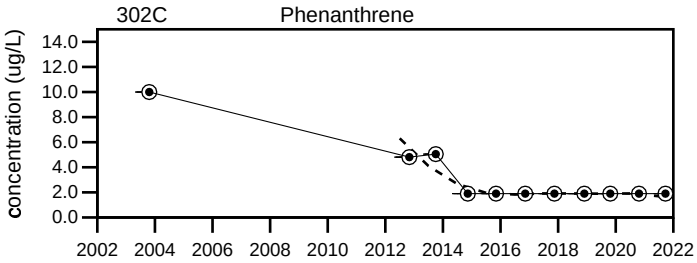



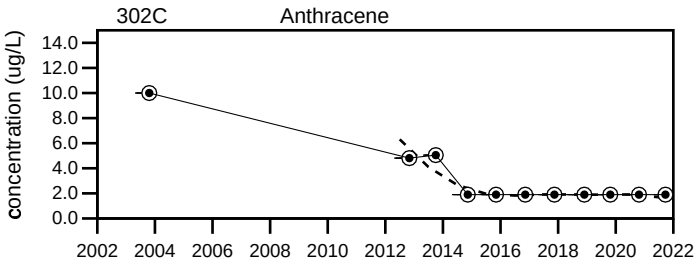



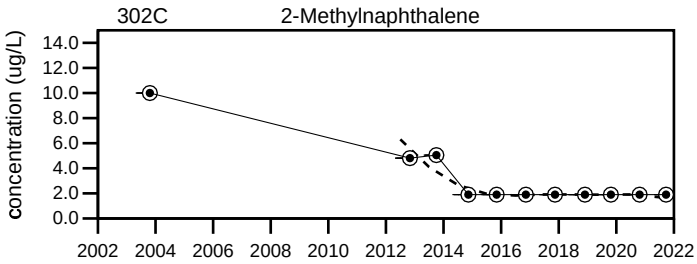

Dolby Landfill

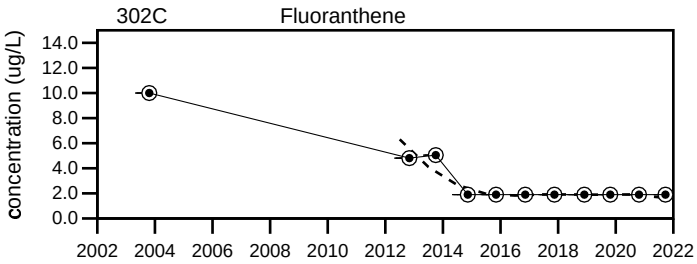
302C

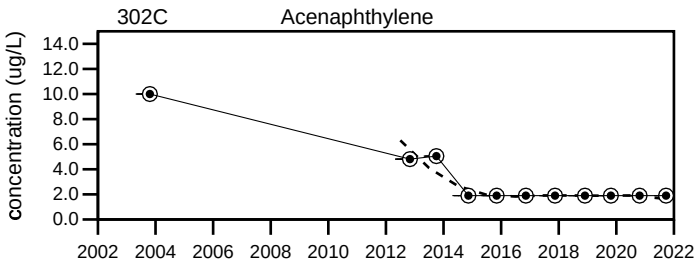
Sevee & Maher Engineers, Inc.

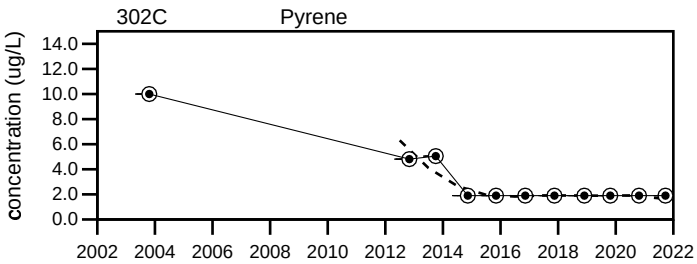


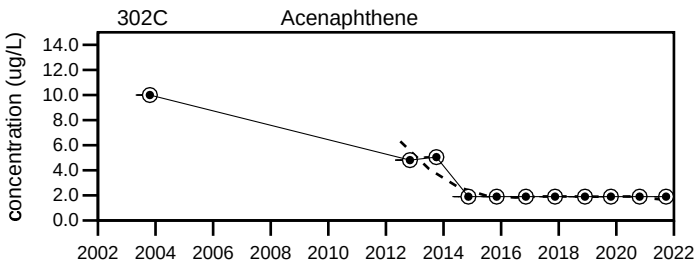



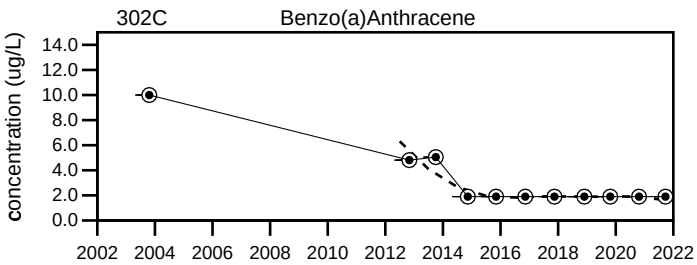



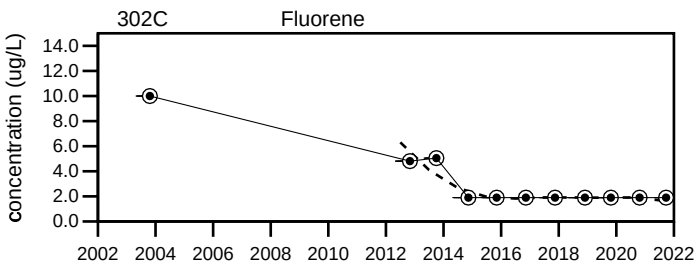



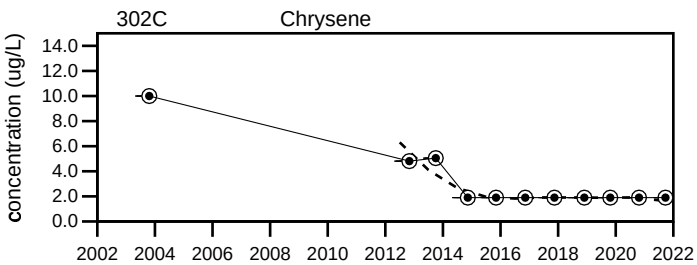



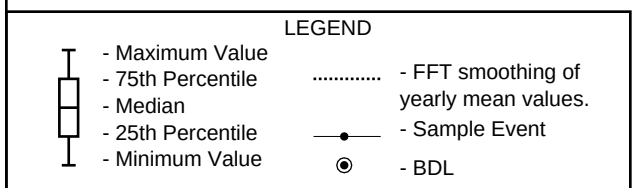



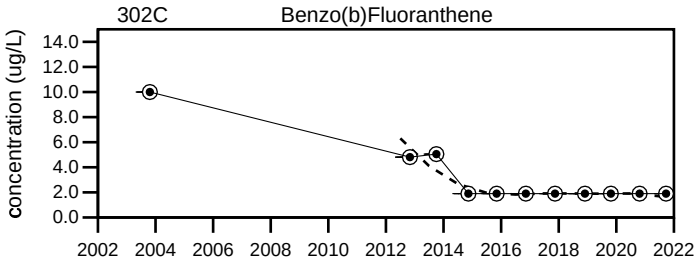



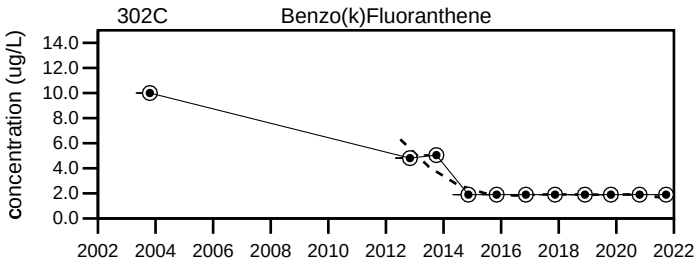



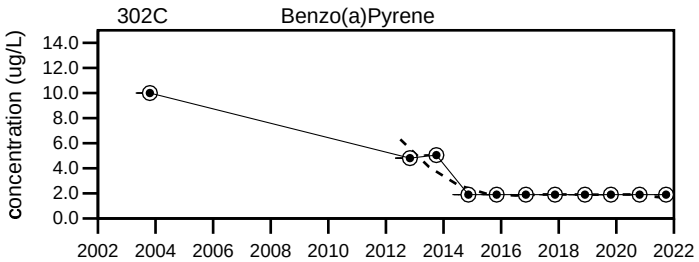

# Dolby Landfill

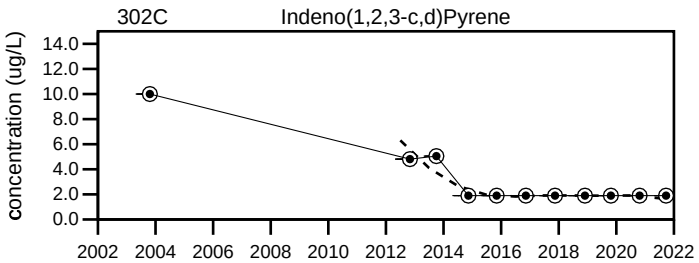
## 302C

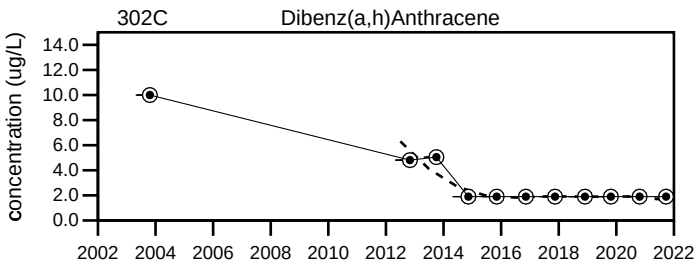
Sevee & Maher Engineers, Inc.

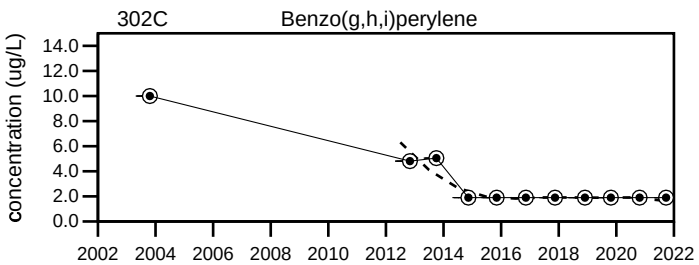


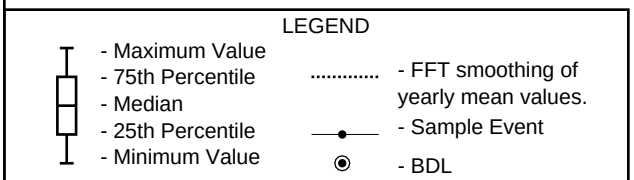



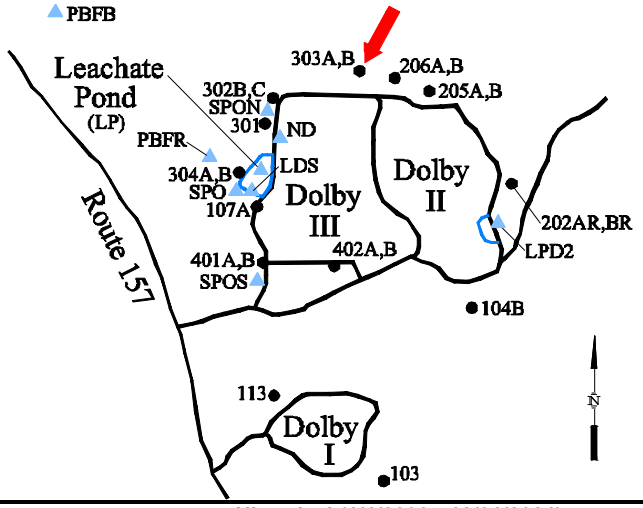

Dolby Landfill

302C

Sevee & Maher Engineers, Inc.

## Well Description

Well located downgradient to the northwest of the Dolby II Landfill.




| | |
|---|---|
| Screen Interval: | **32.6 ft. to 42.6 ft.** |
| Sampled: | **2 Times Annually** |
| Sampled Since: | **Jun-85** |
| Material Screened: | **Bedrock** |
| Well Condition: | **Good** |
| Sampling Method: | **Low Flow (Initiated Aug. 2000)** |

## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 596 | ↓90 | | 556 | to 2650 | 1200 | ± 62 | 63 |
| Dissolved Oxygen (mg/L) | | 0.5 | 0.4 | | 0.1 | to 4.9 | 0.78 | ± 0.11 | 62 |
| Total Dissolved Solids (mg/L) | | 380 | 440 | | 300 | to 1537 | 660 | ± 36 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.022 | 0.0066 | ± 0.000 | 61 |
| Calcium (mg/L) | | 52.3 | 60.6 | | 37.2 | to 180 | 88 | ± 4.9 | 57 |
| Manganese (mg/L) | | **7.27** | **8.56** | | 5.11 | to 21 | 11 | ± 0.41 | 63 |
| pH (STU) | | 6.3 | 7 | | 6 | to 7 | 6.5 | ± 0.024 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 370 | 500 | | 200 | to 1470 | 630 | ± 35 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 331 | 386 | | 221 | to 1274.3 | 580 | ± 35 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 370 | 500 | | 180 | to 1470 | 610 | ± 33 | 63 |
| Sodium (mg/L) | | 10.5 | 11.7 | | 7.6 | to 54.3 | 23 | ± 1.5 | 63 |
| Chloride (mg/L) | | 5.8 | 12 | | 4.2 | to 83.9 | 23 | ± 2.3 | 63 |
| Iron (mg/L) | | 0.109 | 0.376 | | 0.013 | to 2.3 | 0.33 | ± 0.045 | 63 |
| Magnesium (mg/L) | | 48.6 | 57 | | 31.2 | to 190 | 79 | ± 4.9 | 57 |
| Potassium (mg/L) | | 30.5 | 31.6 | | 23 | to 71 | 40 | ± 1.5 | 63 |
| Sulfate (mg/L) | | 13 | 11 | | 9 | to 41 | 15 | ± 0.55 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 4 U | | 0.32 U | to 7 | 2.7 | ± 0.21 | 63 |
| Turbidity (field) (NTU) | | 0.2 | 0.1 | | 0 | to 2 | 0.51 | ± 0.048 | 62 |
| Ammonia (N) (mg/L) | | 5.7 | 6.2 | | 4.4 | to 24 | 8.4 | ± 0.47 | 63 |
| Nitrate (N) (mg/L) | | 2.1 | 0.064 | | 0.05 U | to 8 | 1.9 | ± 0.22 | 63 |
| Organic Carbon (mg/L) | | 5.3 | 6.3 | | 2.9 | to 158.5 | 12 | ± 2.5 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

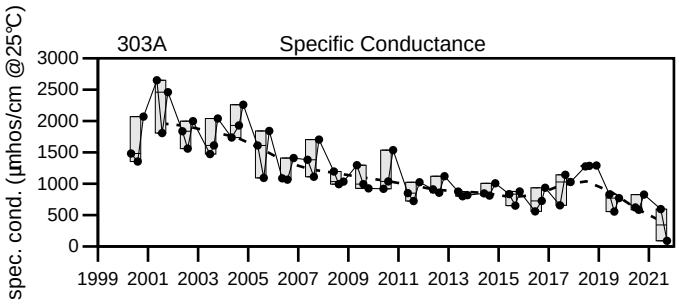
## Comments

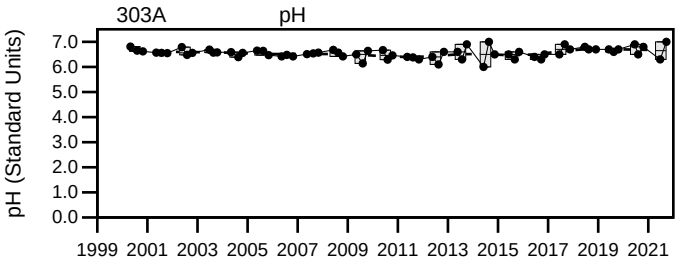
Q2= 6 - 2021 U = Not Detected above the laboratory reporting limit.

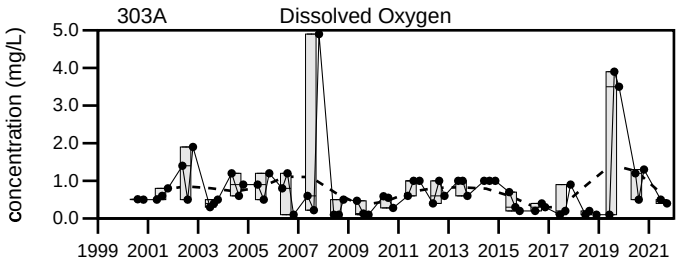
Q3= 9 - 2021

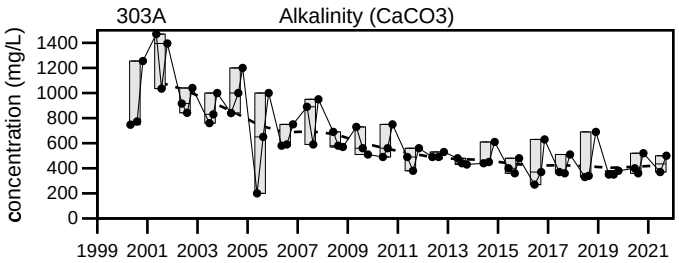
Data Group: 179
Printed: 4/11/2022 10:00

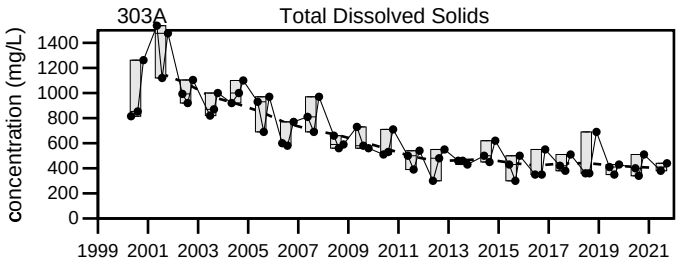
SME SEVEE & MAHER ENGINEERS

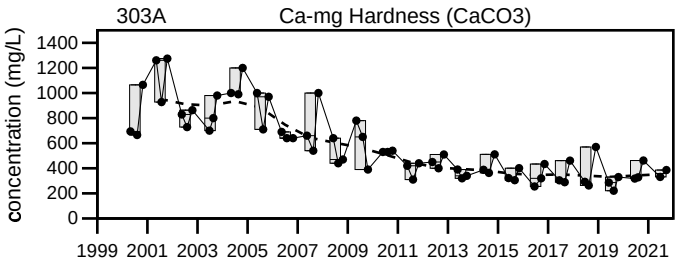


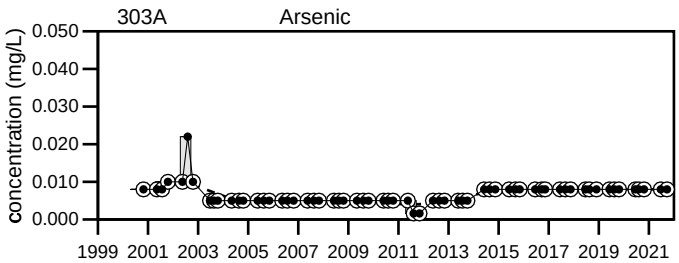



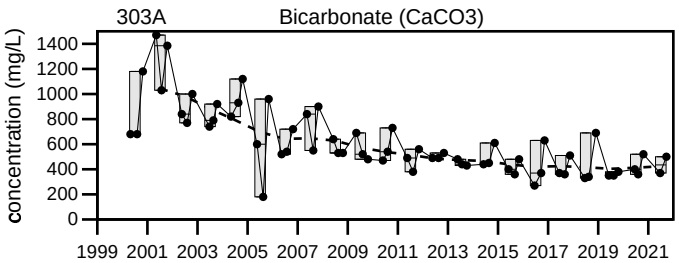



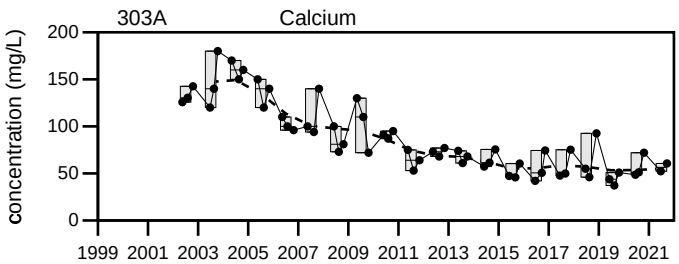



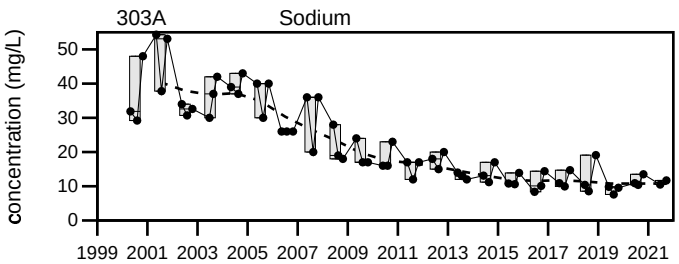



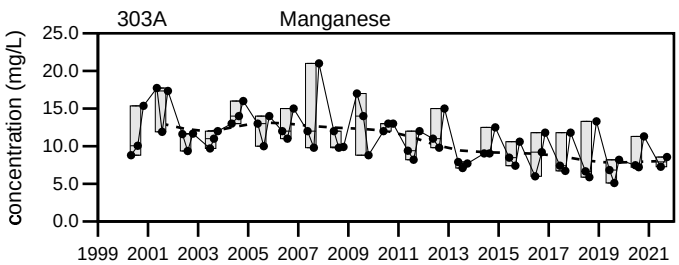



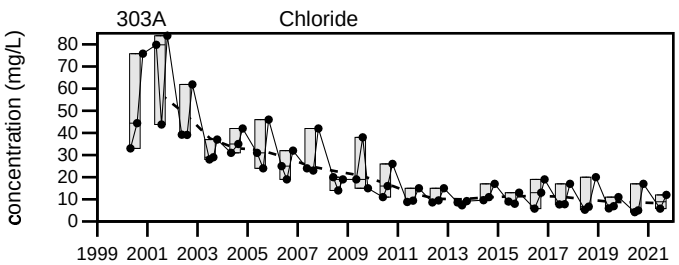



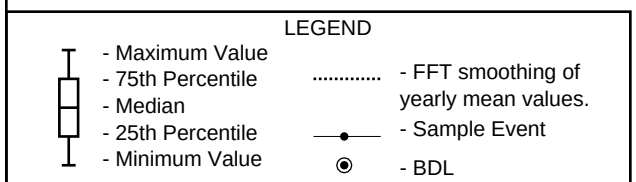



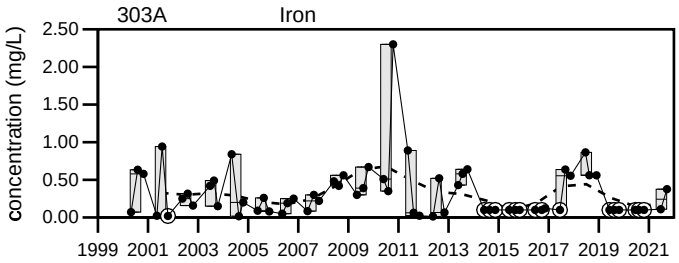



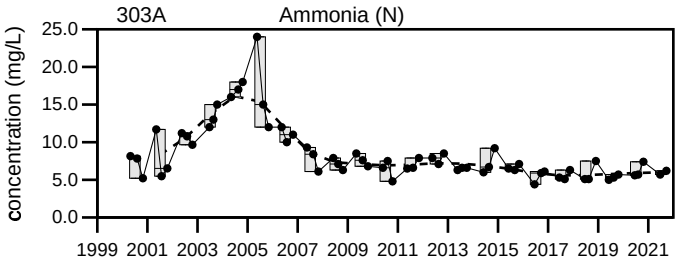



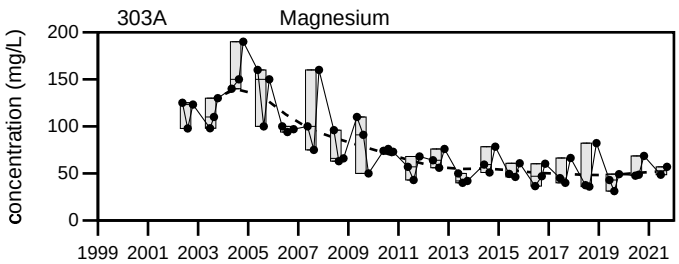

Dolby Landfill

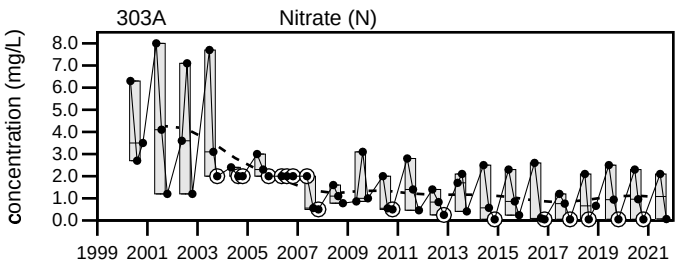
303A

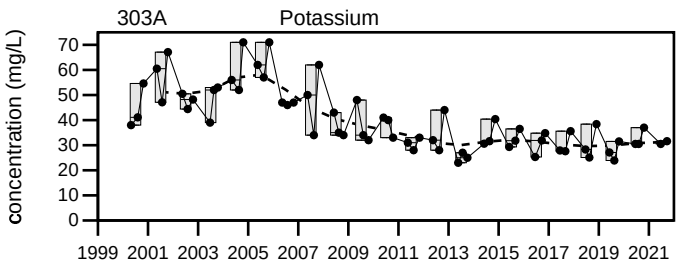
Sevee & Maher Engineers, Inc.

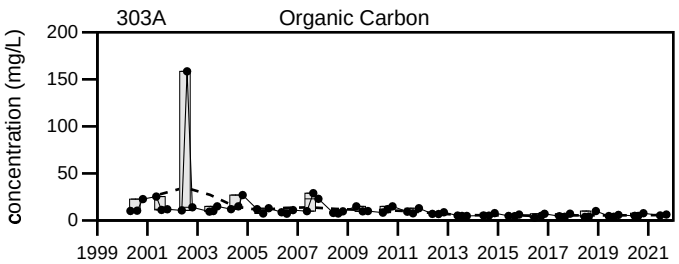


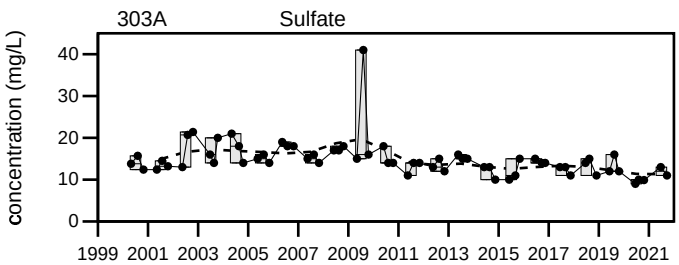



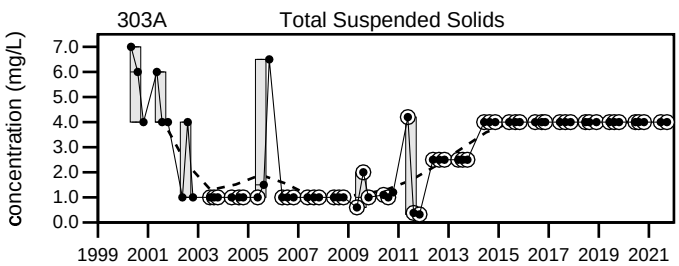



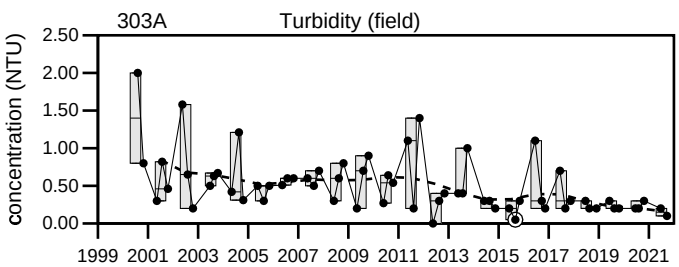




LEGEND

- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value

..... - FFT smoothing of yearly mean values.

—●— - Sample Event

◉ - BDL

# Dolby Landfill

## 303A

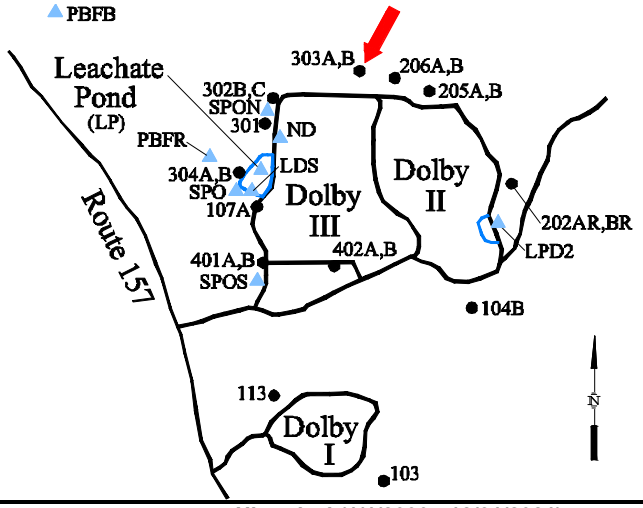
Sevee & Maher Engineers, Inc.

303B


## Well Description

Well located downgradient to the northwest of the Dolby II Landfill.

Screen Interval: **13.3 ft. to 23.3 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Jun-85**
Material Screened: **Glacial Till**
Well Condition: **Good**
Sampling Method: **Low Flow (Initiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 445 | 848 | | 383 | to 2630 | 1000 | ± 69 | 63 |
| Dissolved Oxygen (mg/L) | | 0.6 | 0.4 | | 0.1 | to 4.2 | 0.91 | ± 0.097 | 62 |
| Total Dissolved Solids (mg/L) | | 270 | 500 | | 100 | to 1605 | 570 | ± 42 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.021 | 0.0066 | ± 0.000 | 61 |
| Calcium (mg/L) | | 36.5 | 71.1 | | 24.6 | to 150 | 65 | ± 4.3 | 57 |
| Manganese (mg/L) | | **5.06** | **9.45** | | 4.07 | to 28.06 | 9.5 | ± 0.56 | 63 |
| pH (STU) | | 6.2 | 6.3 | | 5.9 | to 6.8 | 6.5 | ± 0.023 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 250 | 560 | | 170 | to 1545.3 | 540 | ± 40 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 229 | 464 | | 157 | to 1392.2 | 490 | ± 38 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 250 | 560 | | 170 | to 1514 | 520 | ± 38 | 63 |
| Sodium (mg/L) | | 7.02 | 15.5 | | 4.96 | to 59.8 | 19 | ± 1.6 | 63 |
| Chloride (mg/L) | | 4.8 | 15 | | 2.8 | to 86.1 | 20 | ± 2.4 | 63 |
| Iron (mg/L) | | 0.1 U | ↑0.187 | | 0.0039 | to 0.182 | 0.05 | ± 0.006 | 63 |
| Magnesium (mg/L) | | 33.5 | 69.7 | | 10 U | to 190 | 69 | ± 5.9 | 57 |
| Potassium (mg/L) | | 21.8 | 33.2 | | 17.5 | to 69.3 | 34 | ± 1.6 | 63 |
| Sulfate (mg/L) | | 12 | 8.2 | | 6.2 | to 35 | 12 | ± 0.51 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 4 U | | 0.32 U | to 35 | 3 | ± 0.55 | 63 |
| Turbidity (field) (NTU) | | 0.2 | 0.2 | | 0 | to 1.1 | 0.35 | ± 0.025 | 62 |
| Ammonia (N) (mg/L) | | 3.4 | 4.9 | | 0.21 | to 20 U | 6.2 | ± 0.43 | 63 |
| Nitrate (N) (mg/L) | | 2.3 | 0.61 | | 0.16 | to 13 | 3.3 | ± 0.33 | 63 |
| Organic Carbon (mg/L) | | 4.2 | 8.7 | | 1 U | to 37 | 9.5 | ± 0.9 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

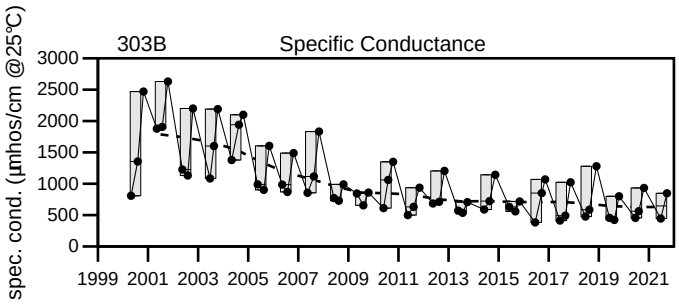
↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

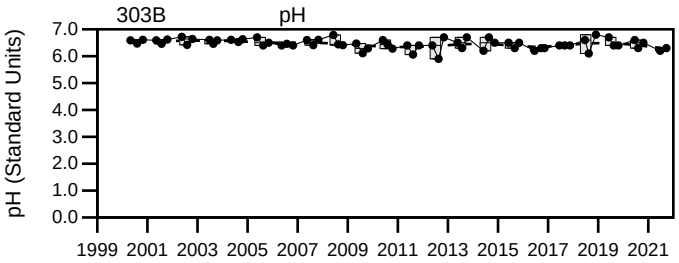
## Comments

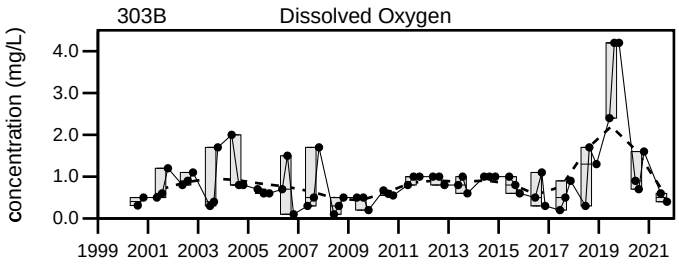
Q2= 6 - 2021
Q3= 9 - 2021

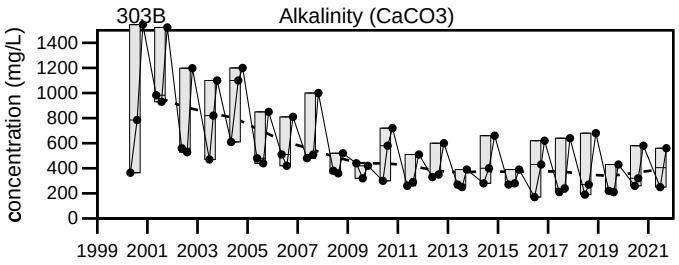
U = Not Detected above the laboratory reporting limit.

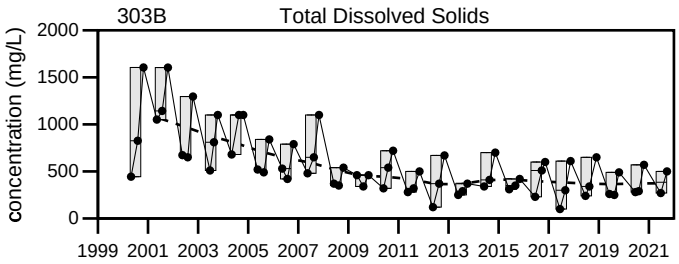
Data Group: 179
Printed: 4/11/2022 10:00

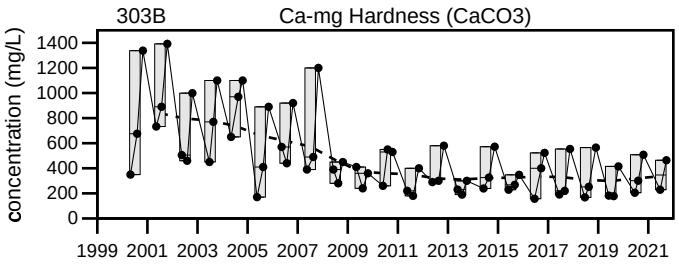


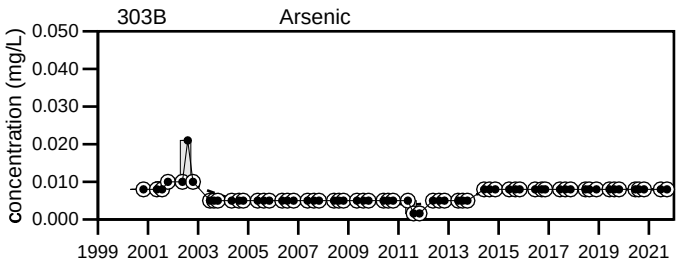



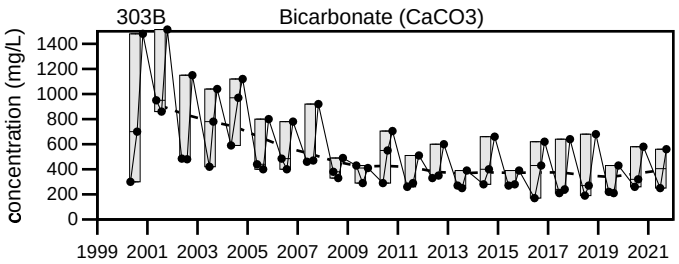



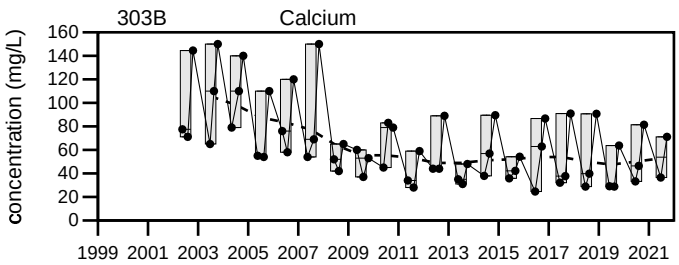



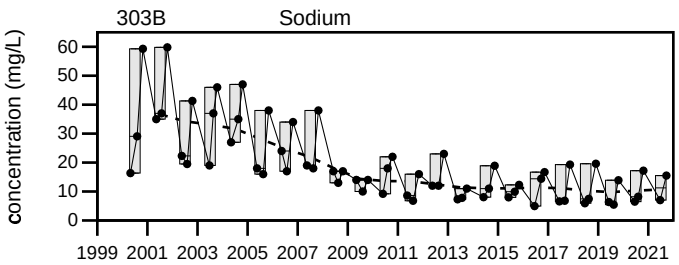



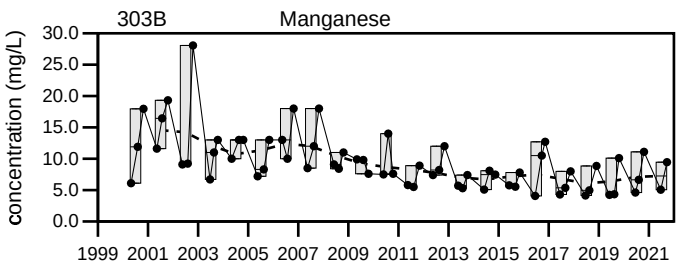



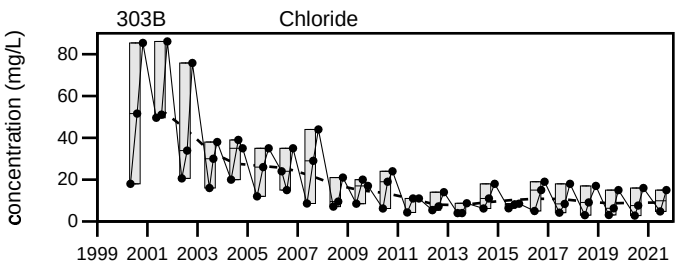



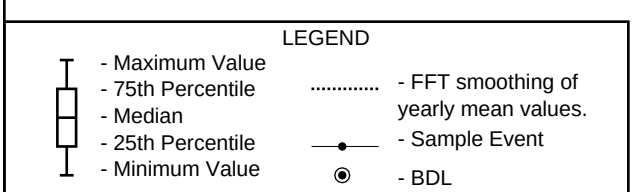



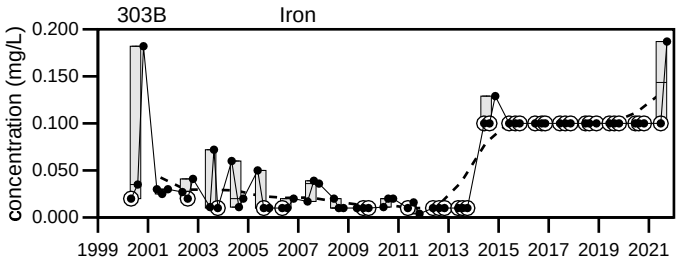



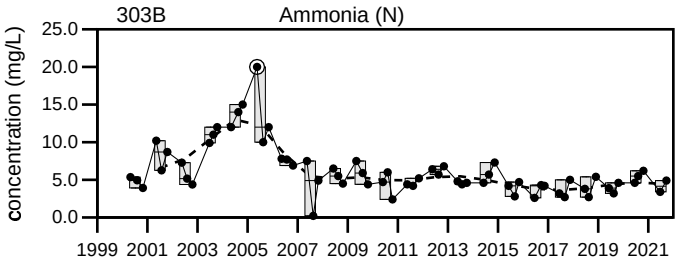



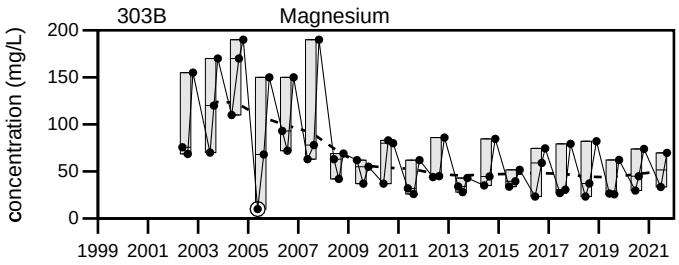

# Dolby Landfill

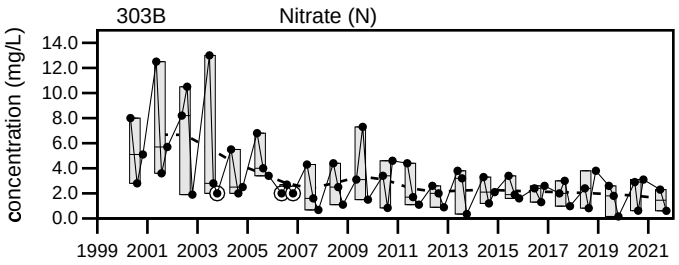
## 303B

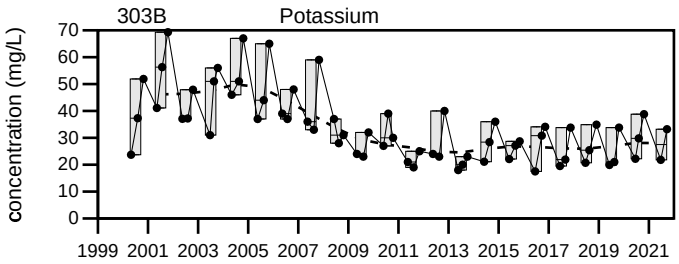
Sevee & Maher Engineers, Inc.

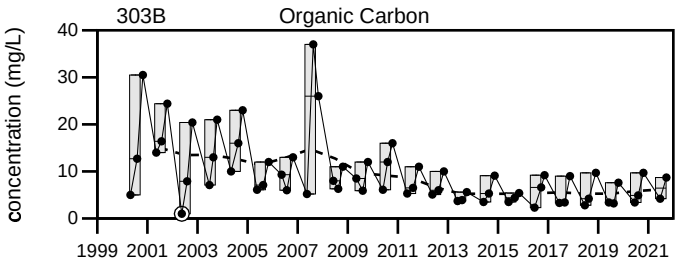


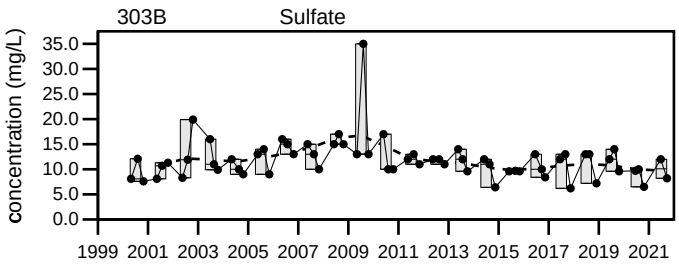



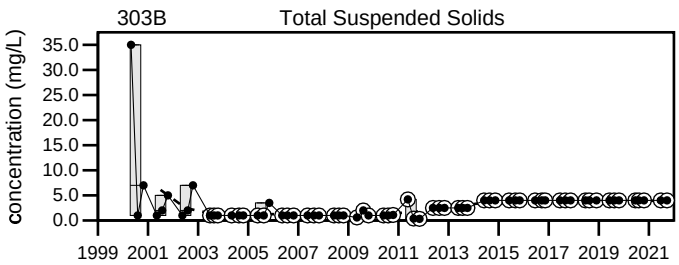



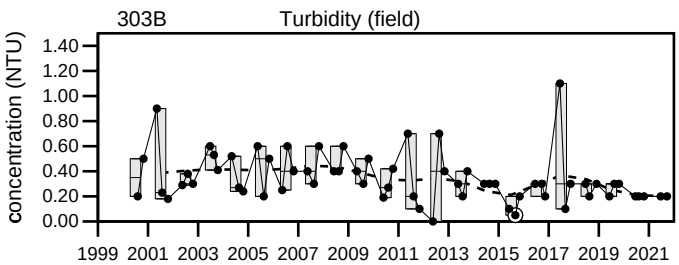



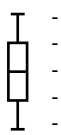



LEGEND

- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value

- FFT smoothing of yearly mean values.
- Sample Event
- BDL

# Dolby Landfill

## 303B

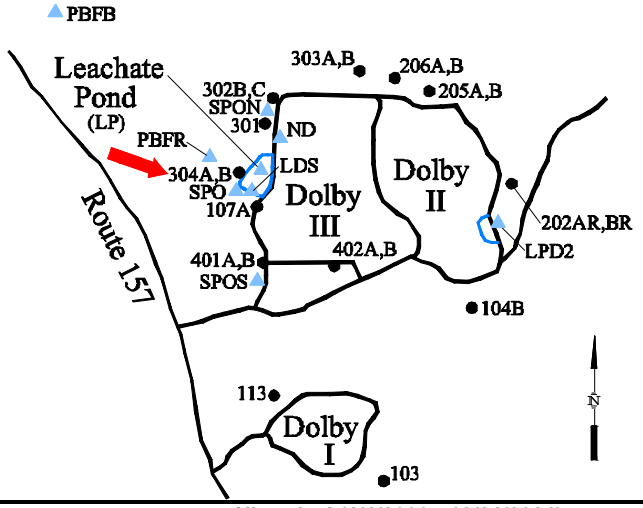
Sevee & Maher Engineers, Inc.

304A


## Well Description

Well located downgradient to the west of the landfill.

Screen Interval: **Unknown TOS to 21.5 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Sep-85**
Material Screened: **Bedrock**
Well Condition: **Good**
Sampling Method: **Low Flow (Initiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 255 | 267 | | 211 | to 473 | 320 ± | 8.7 | 63 |
| Dissolved Oxygen (mg/L) | | 1.4 | 1.3 | | 0.2 | to 8.5 | 1.6 ± | 0.18 | 62 |
| Total Dissolved Solids (mg/L) | | ↓99 | 150 | | 110 | to 320 | 190 ± | 5.9 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.01 U | 0.0064 ± | 0.000 | 61 |
| Calcium (mg/L) | | 33.5 | 38.4 | | 28 | to 93 | 47 ± | 2.2 | 57 |
| Manganese (mg/L) | | 0.0465 | 0.0491 | | 0.005 U | to 0.24 | 0.031 ± | 0.006 | 63 |
| pH (STU) | | 7.2 | 7 | | 6.6 | to 8.8 | 7.6 ± | 0.051 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 130 | 140 | | 110 | to 220 | 160 ± | 4.2 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 114 | 127 | | 70.3 | to 270 | 150 ± | 5.8 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 130 | 140 | | 110 | to 205 | 150 ± | 3.5 | 63 |
| Sodium (mg/L) | | 11.2 | 12.2 | | 7 | to 18 | 12 ± | 0.3 | 63 |
| Chloride (mg/L) | | 2.8 | 4.6 | | 2 U | to 18 | 7.4 ± | 0.49 | 63 |
| Iron (mg/L) | | 0.349 | 0.377 | | 0.0054 | to 2.1 | 0.11 ± | 0.036 | 63 |
| Magnesium (mg/L) | | 7.26 | 7.56 | | 5 | to 13 | 8.1 ± | 0.22 | 57 |
| Potassium (mg/L) | | 1.02 | 1.24 | | 0.89 | to 2.4 | 1.4 ± | 0.045 | 63 |
| Sulfate (mg/L) | | 13 | 11 | | 5.6 | to 19.5 | 13 ± | 0.31 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 4 U | | 0.32 U | to 23 | 3.1 ± | 0.42 | 63 |
| Turbidity (field) (NTU) | | 0.6 | 0.3 | | 0 | to 38 | 1.3 ± | 0.61 | 62 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.1 U | | 0.08 U | to 0.5 U | 0.15 ± | 0.009 | 63 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 2 U | 0.69 ± | 0.093 | 63 |
| Organic Carbon (mg/L) | | 1 U | 1 U | | 0.58 | to 7.6 | 1.3 ± | 0.12 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

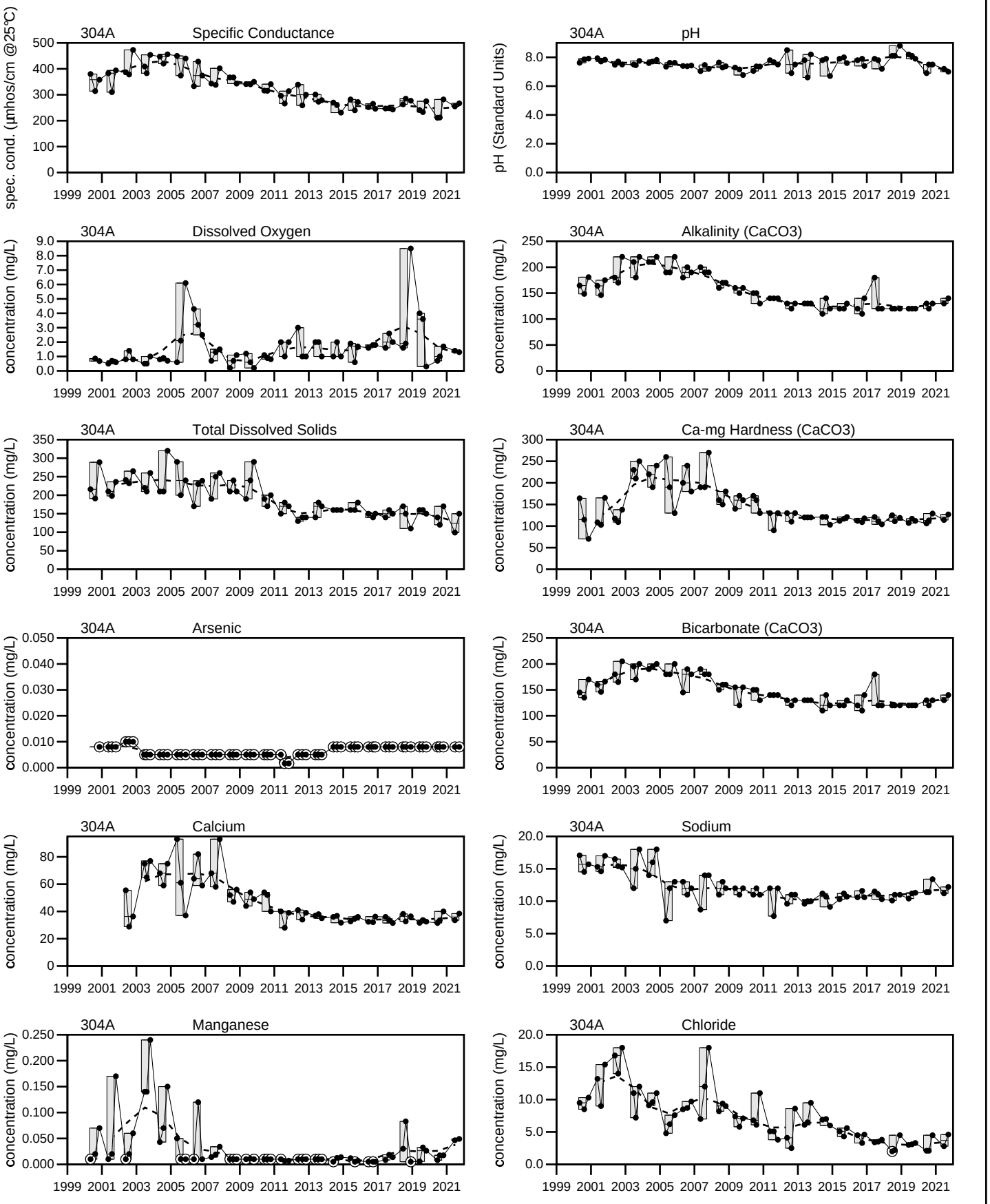
↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

## Comments

Q2= 6 - 2021
Q3= 9 - 2021

U = Not Detected above the laboratory reporting limit.

Data Group: 179
Printed: 4/11/2022 10:00



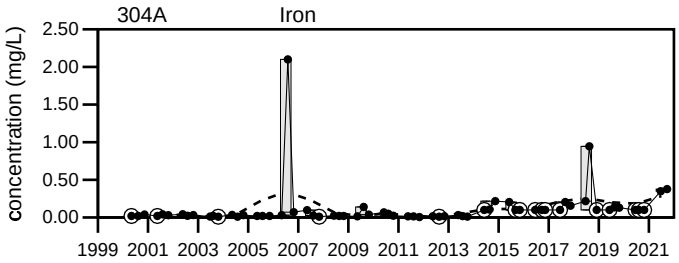

LEGEND

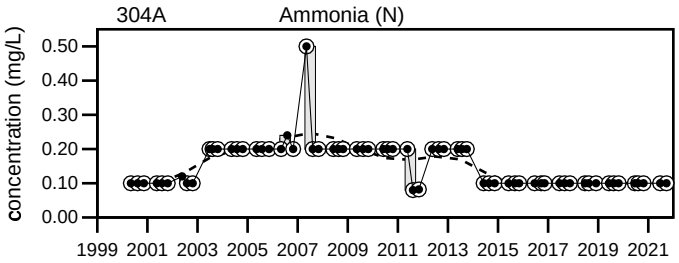
- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value
- FFT smoothing of yearly mean values.
- Sample Event
- BDL

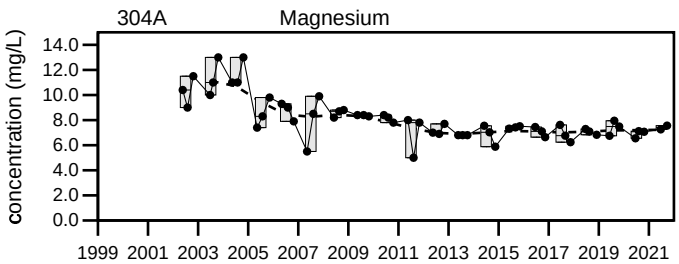
# Dolby Landfill

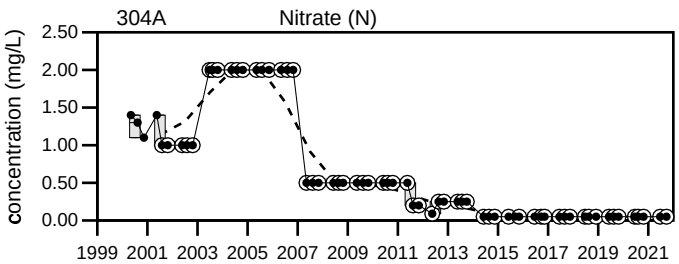
## 304A

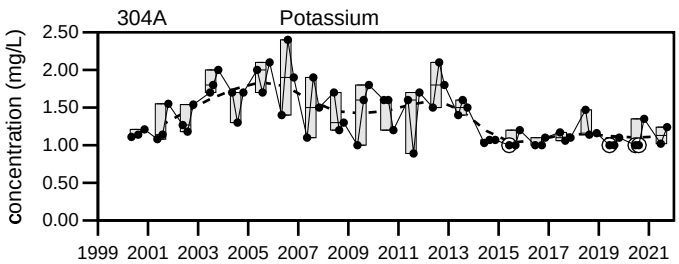
Sevee & Maher Engineers, Inc.

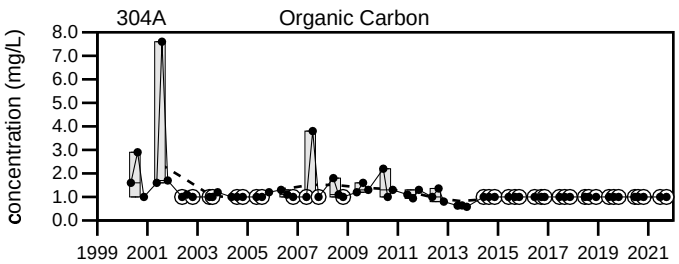


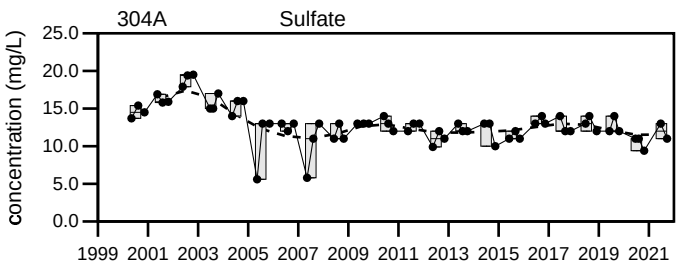



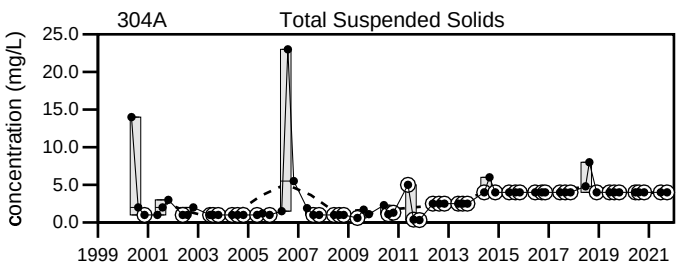



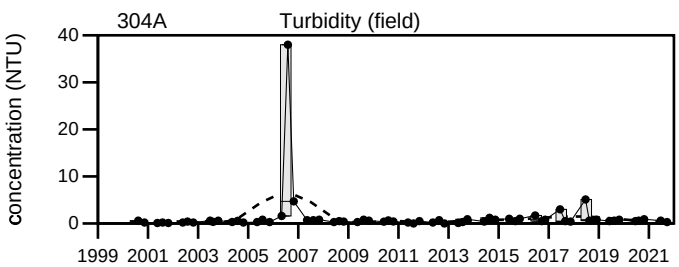



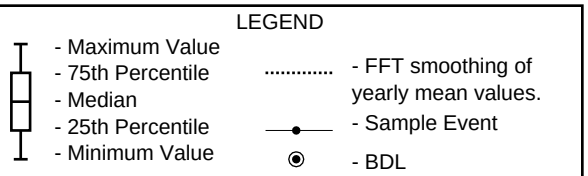




Dolby Landfill

304A

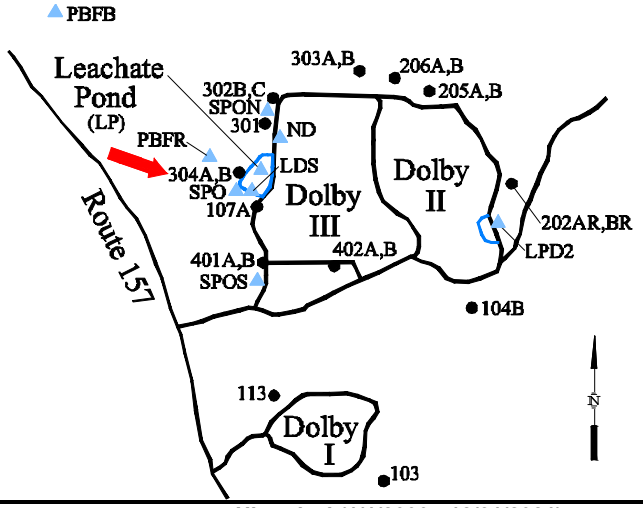
Sevee & Maher Engineers, Inc.

304B


## Well Description

Well located downgradient to the west of the landfill.

Screen Interval: **Unknown TOS to 8.6 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Sep-85**
Material Screened: **Glacial Till**
Well Condition: **Good**
Sampling Method: **Low Flow (Intiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 146 | 211 | | 41 | to 341 | 160 | ± 9.9 | 62 |
| Dissolved Oxygen (mg/L) | | 5.2 | ↓0.9 | | 1.3 | to 13.5 | 5 | ± 0.26 | 61 |
| Total Dissolved Solids (mg/L) | | 100 | ↑220 | | 13 | to 204 | 98 | ± 5.6 | 62 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.01 U | 0.0063 | ± 0.000 | 60 |
| Calcium (mg/L) | | 20.4 | 32.1 | | 6.34 | to 43 | 18 | ± 1.2 | 57 |
| Manganese (mg/L) | | 0.0574 | 0.154 | | 0.005 U | to 0.315 | 0.034 | ± 0.006 | 62 |
| pH (STU) | | 6.4 | 6.6 | | 5.46 | to 8 | 6.6 | ± 0.057 | 62 |
| Alkalinity (CaCO3) (mg/L) | | 72 | 110 | | 24 | to 122 | 54 | ± 3 | 62 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 60.7 | 95.3 | | 18.2 | to 130 | 53 | ± 3.5 | 62 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 72 | 110 | | 22 | to 120 | 53 | ± 2.8 | 62 |
| Sodium (mg/L) | | 10.8 | 14 | | 1.89 | to 21 | 9.6 | ± 0.47 | 62 |
| Chloride (mg/L) | | 6.2 | 15 | | 1.4 | to 63.7 | 13 | ± 1.5 | 62 |
| Iron (mg/L) | | 0.334 | 1.22 | | 0.01 U | to 2.48 | 0.19 | ± 0.044 | 62 |
| Magnesium (mg/L) | | 2.39 | 3.68 | | 0.584 | to 5 | 2.1 | ± 0.14 | 57 |
| Potassium (mg/L) | | 1 U | 1.2 | | 0.44 | to 1.9 | 1 | ± 0.022 | 62 |
| Sulfate (mg/L) | | 3.8 | 3.8 | | 1 U | to 20.7 | 6 | ± 0.46 | 61 |
| Total Suspended Solids (mg/L) | | 10 | 4 U | | 0.32 U | to 86 | 7.3 | ± 2 | 62 |
| Turbidity (field) (NTU) | | 0.3 | 0.2 | | 0 | to 17.5 | 1.3 | ± 0.32 | 61 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.1 U | | 0.08 U | to 0.67 | 0.16 | ± 0.012 | 62 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 2 U | 0.67 | ± 0.092 | 62 |
| Organic Carbon (mg/L) | | 1.1 | 1 U | | 0.69 | to 5 | 1.2 | ± 0.077 | 62 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

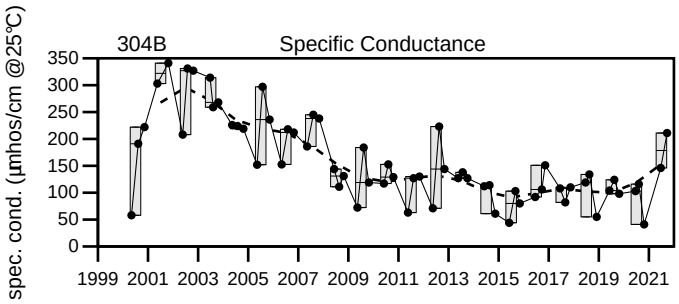
## Comments

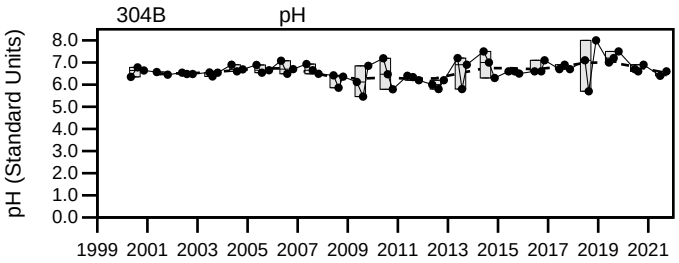
Q2= 6 - 2021
Q3= 9 - 2021

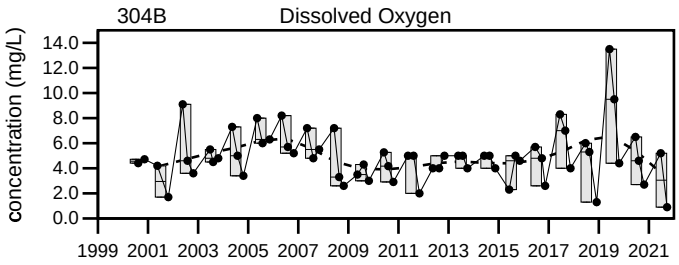
U = Not Detected above the laboratory reporting limit.

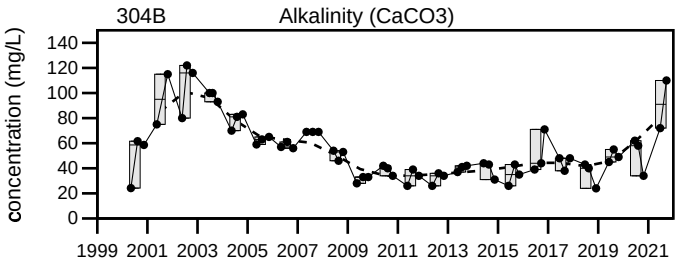
Data Group: 179
Printed: 4/11/2022 10:00

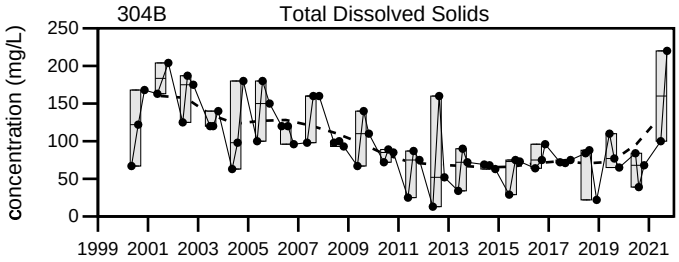
SME SEVEE & MAHER ENGINEERS

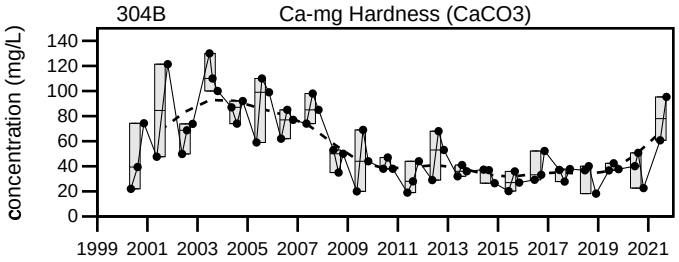


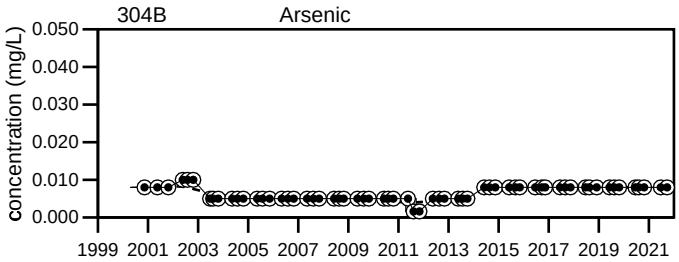



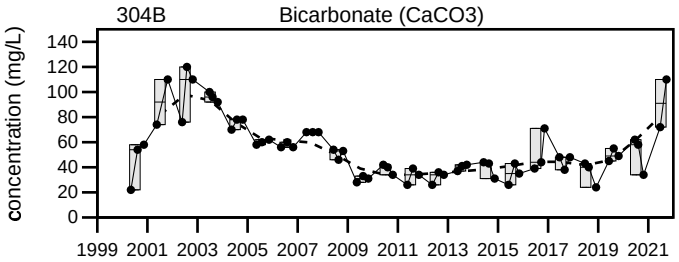



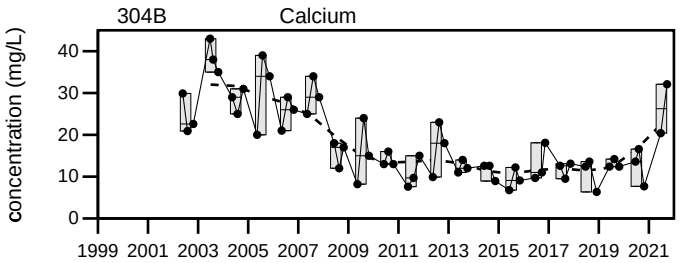



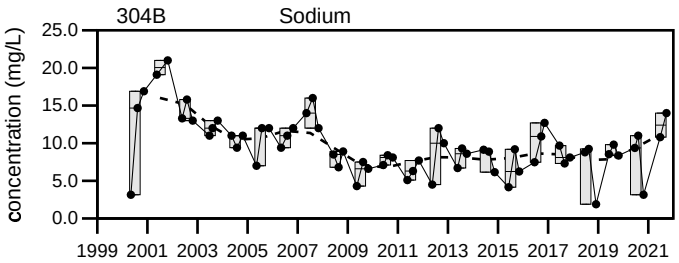



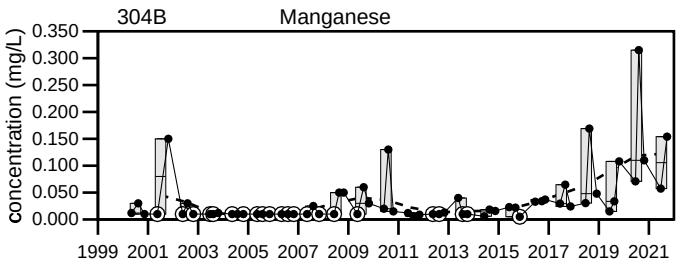



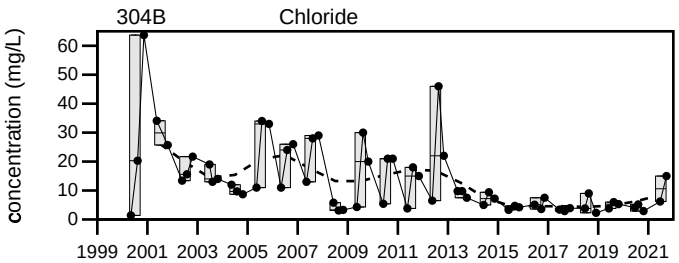



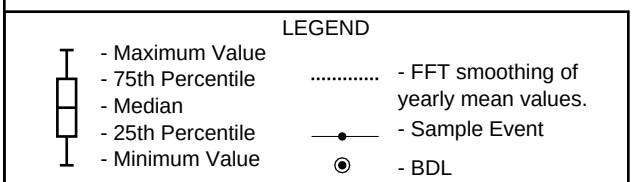



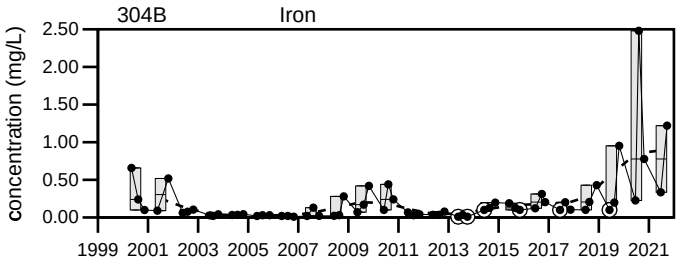



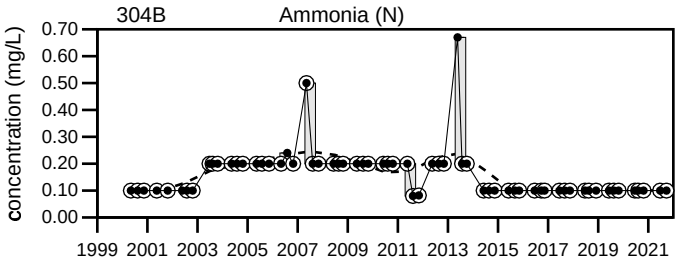



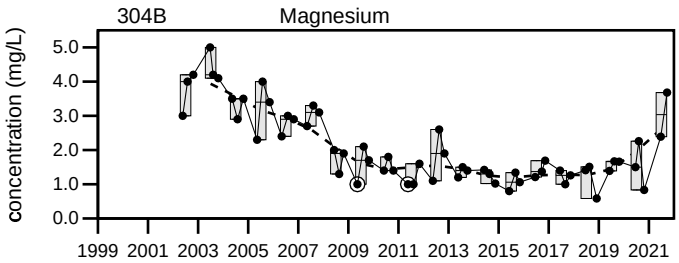

# Dolby Landfill

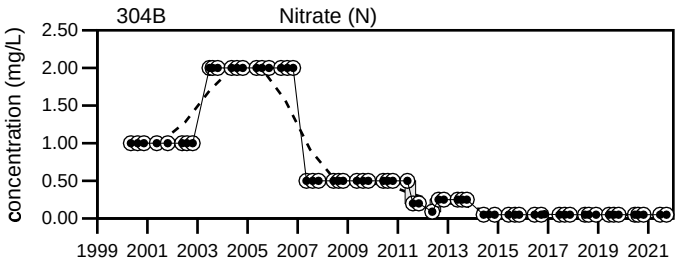
## 304B

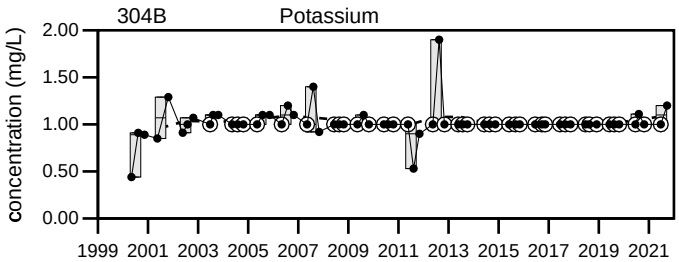
Sevee & Maher Engineers, Inc.

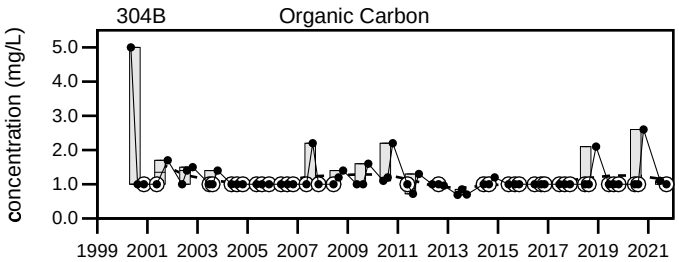


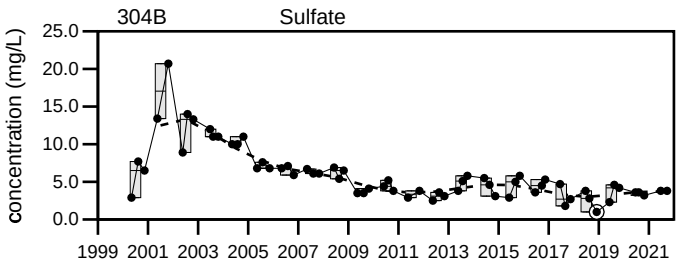



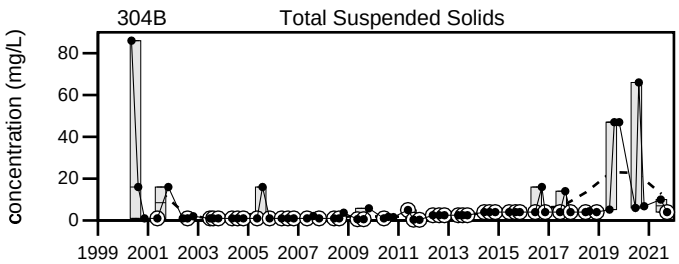



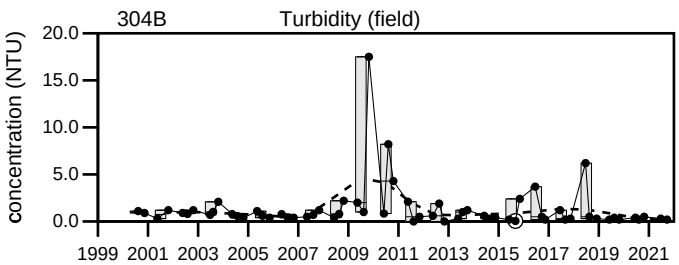



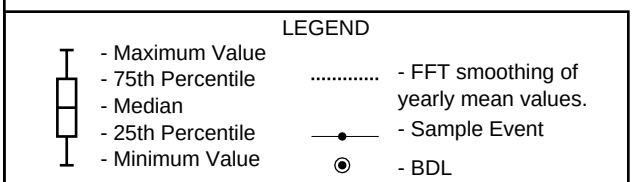




Dolby Landfill

304B

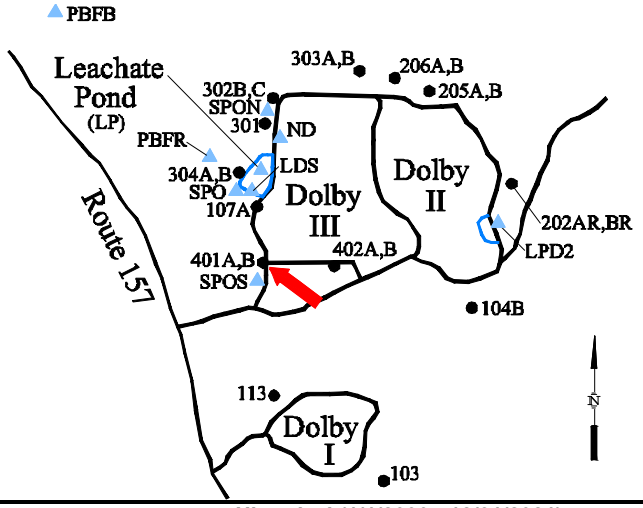
Sevee & Maher Engineers, Inc.

401A


## Well Description

Well located downgradient to the southwest of the landfill.

Screen Interval: **30.5 ft. to 40.5 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Jun-90**
Material Screened: **Bedrock**
Well Condition: **Good**
Sampling Method: **Low Flow (Initiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 250 | 256 | | 182 | to 370 | 250 | ± 4.3 | 63 |
| Dissolved Oxygen (mg/L) | | 5.2 | 3.6 | | 0.67 | to 10.9 | 4.2 | ± 0.26 | 62 |
| Total Dissolved Solids (mg/L) | | 190 | 140 | | 2 | to 200 | 140 | ± 3.9 | 63 |
| Arsenic (mg/L) | | **0.138** | **0.142** | | 0.08 | to 0.29 | 0.17 | ± 0.004 | 61 |
| Calcium (mg/L) | | 38 | 35.8 | | 14.9 | to 42 | 33 | ± 0.75 | 57 |
| Manganese (mg/L) | | 0.0053 | 0.0246 | | 0.0002 | to 0.08 | 0.0098 | ± 0.001 | 63 |
| pH (STU) | | 7.5 | 7.6 | | 6.4 | to 8.2 | 7.7 | ± 0.039 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 110 | 120 | | 12 | to 120 | 96 | ± 1.7 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 125 | 121 | | 49.8 | to 135 | 100 | ± 2.7 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 110 | 120 | | 12 | to 120 | 95 | ± 1.7 | 63 |
| Sodium (mg/L) | | 10.4 | 10.6 | | 6.6 | to 12 | 9.7 | ± 0.14 | 63 |
| Chloride (mg/L) | | 10 | 9.7 | | 2.8 | to 14 | 7.8 | ± 0.35 | 63 |
| Iron (mg/L) | | 0.1 U | 0.1 U | | 0.01 U | to 0.359 | 0.064 | ± 0.01 | 63 |
| Magnesium (mg/L) | | 7.28 | 7.75 | | 4.2 | to 8.18 | 6.4 | ± 0.11 | 57 |
| Potassium (mg/L) | | 1.71 | 1.74 | | 1.1 | to 2.4 | 1.7 | ± 0.035 | 63 |
| Sulfate (mg/L) | | 23 | 24 | | 5.4 | to 41 | 18 | ± 0.83 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 4.4 | | 0.32 U | to 15 | 2.7 | ± 0.3 | 63 |
| Turbidity (field) (NTU) | | 0.3 | 0.4 | | 0.2 | to 5 | 0.78 | ± 0.095 | 62 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.1 U | | 0.08 U | to 0.5 U | 0.15 | ± 0.009 | 63 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 2 U | 0.68 | ± 0.09 | 63 |
| Organic Carbon (mg/L) | | 1 U | 1 U | | 0.53 | to 12 | 1.3 | ± 0.18 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

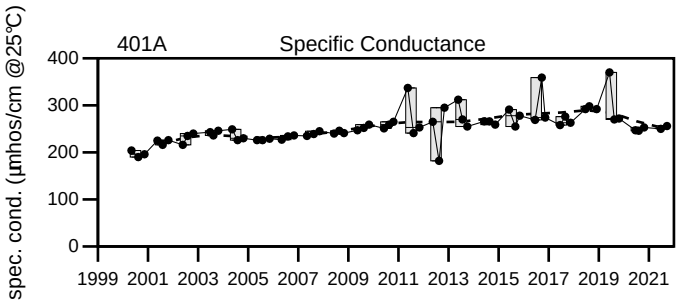
**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

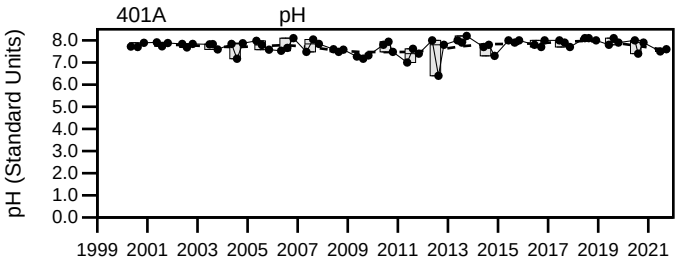
↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

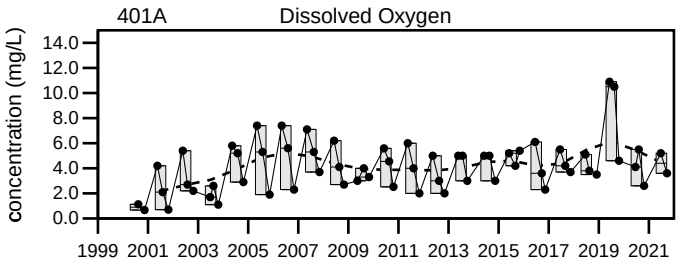
## Comments

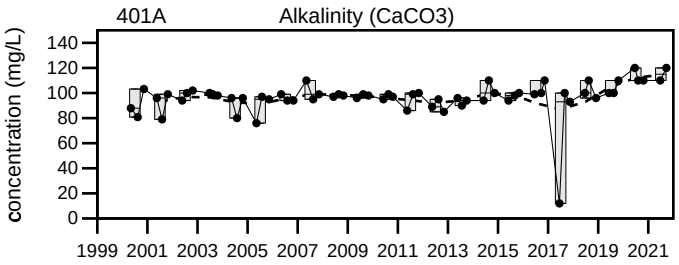
Q2= 6 - 2021
Q3= 9 - 2021

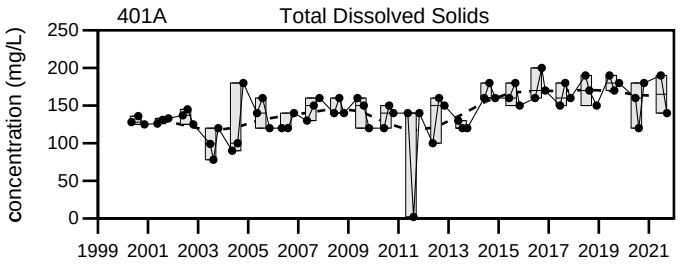
U = Not Detected above the laboratory reporting limit.

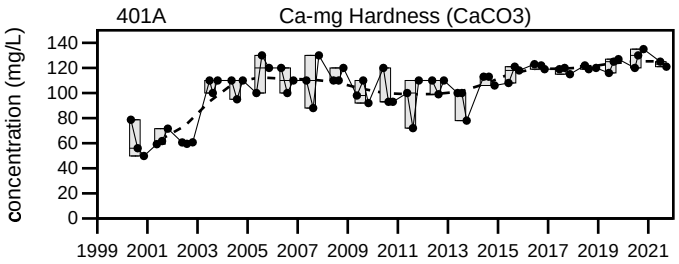


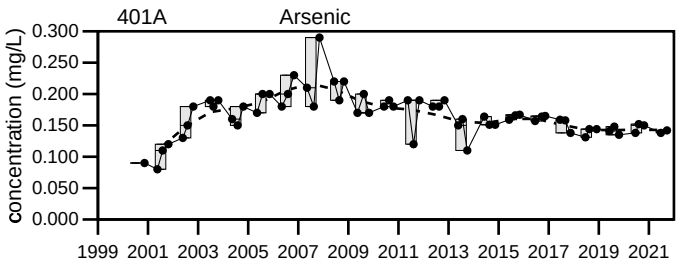



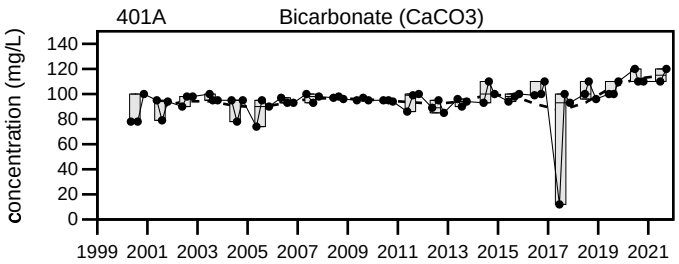



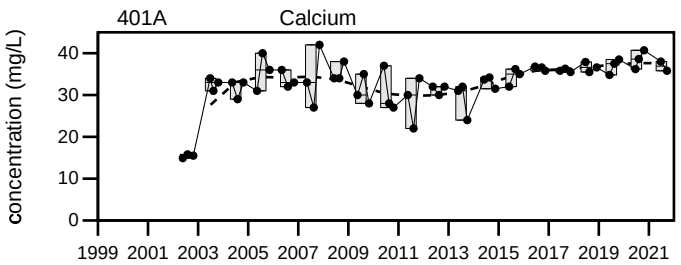



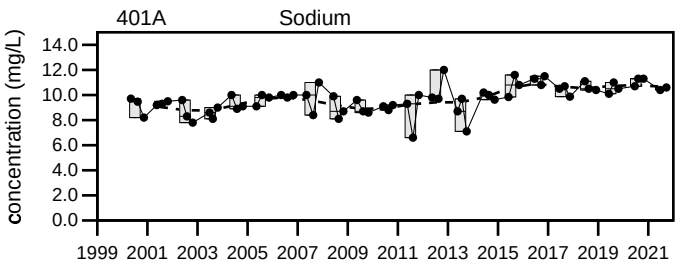



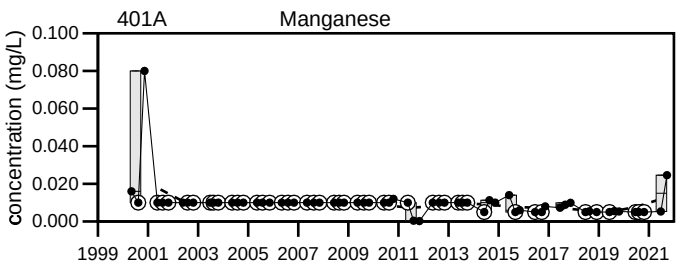



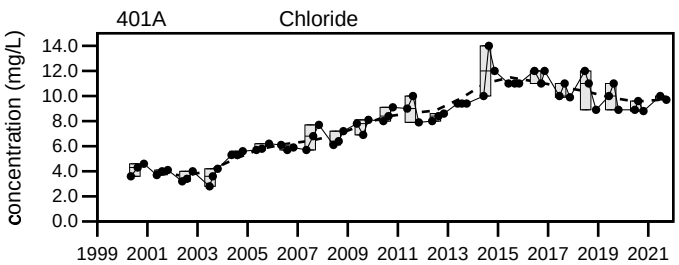



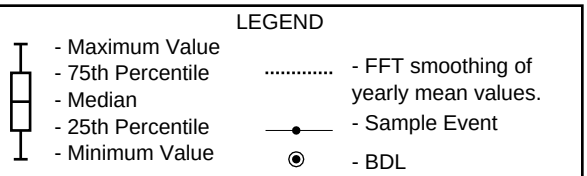



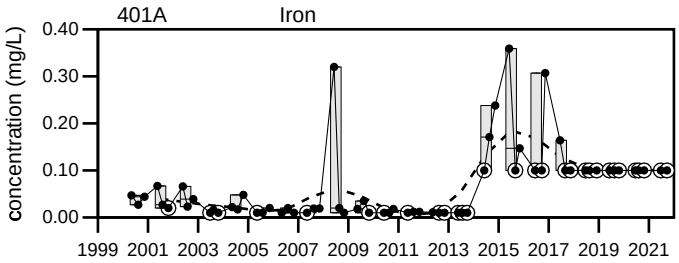



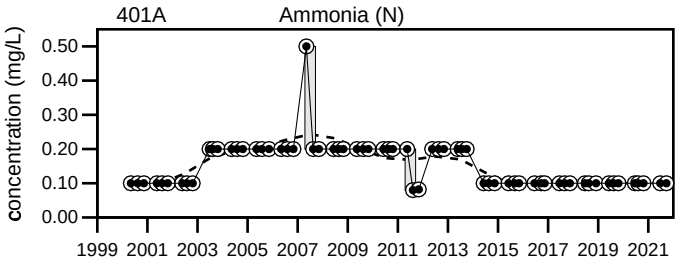



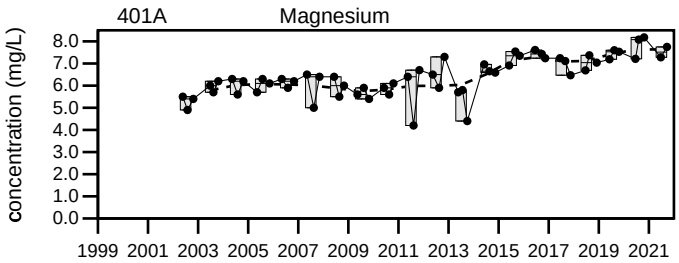

# Dolby Landfill

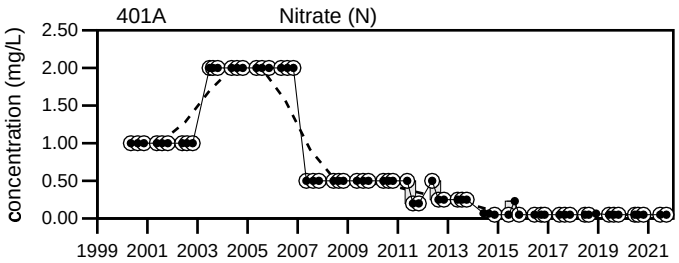
## 401A

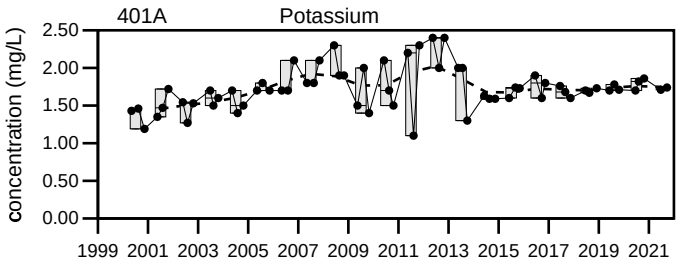
Sevee & Maher Engineers, Inc.

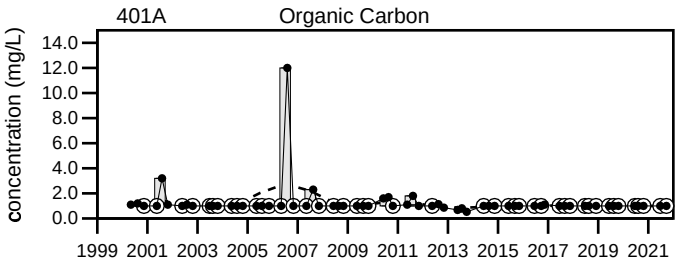


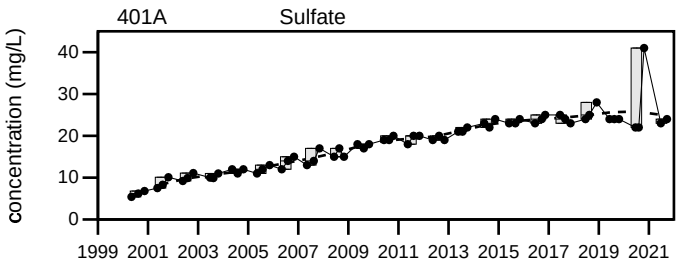



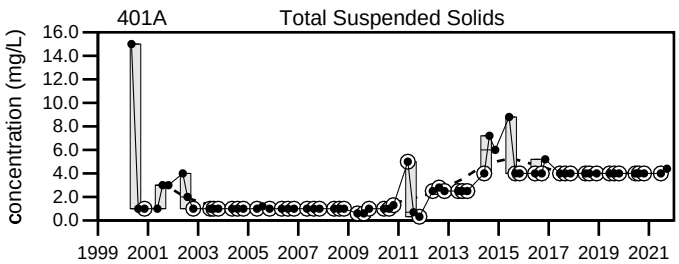



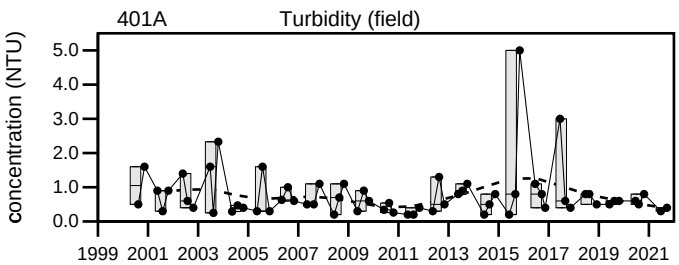




LEGEND

- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value

- FFT smoothing of yearly mean values.
- Sample Event
- BDL

# Dolby Landfill

## 401A

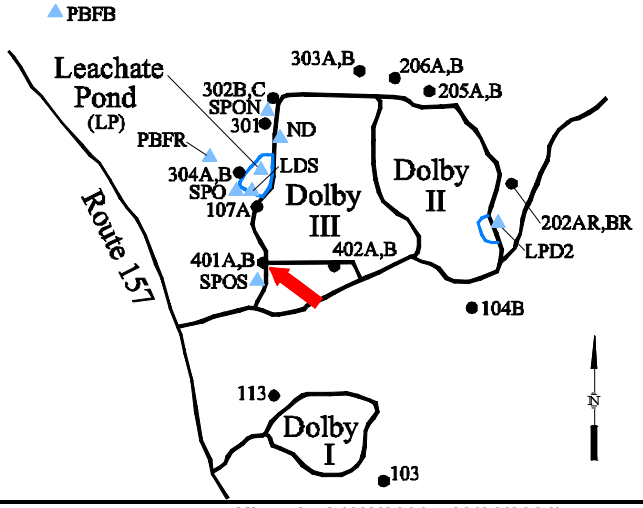
Sevee & Maher Engineers, Inc.

401B


## Well Description

Well located downgradient to the southwest of the landfill.

Screen Interval: **12.5 ft. to 22.5 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Jun-90**
Material Screened: **Glacial Till**
Well Condition: **Good**
Sampling Method: **Low Flow (Initiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 358 | 362 | | 291 | to 438 | 370 | ± 3.3 | 63 |
| Dissolved Oxygen (mg/L) | | 0.7 | 0.2 | | 0.1 | to 5.6 | 0.86 | ± 0.12 | 62 |
| Total Dissolved Solids (mg/L) | | 240 | 220 | | 150 | to 352 | 220 | ± 3.9 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.015 | 0.0064 | ± 0.000 | 61 |
| Calcium (mg/L) | | 66 | 62 | | 23.6 | to 70 | 54 | ± 1.3 | 57 |
| Manganese (mg/L) | | 0.27 | **0.416** | | 0.01 U | to 0.873 | 0.3 | ± 0.02 | 63 |
| pH (STU) | | 7.5 | 7.6 | | 7 | to 8.26 | 7.9 | ± 0.029 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 220 | 220 | | 92.9 | to 300 | 150 | ± 5.2 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 204 | 197 | | 77.8 | to 217 | 160 | ± 3.9 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 220 | 220 | | 83 | to 240 | 150 | ± 5.2 | 63 |
| Sodium (mg/L) | | 13.9 | 14.1 | | 10.8 | to 17 | 14 | ± 0.17 | 63 |
| Chloride (mg/L) | | 3.4 | 3.2 | | 2.2 | to 30.1 | 13 | ± 0.98 | 63 |
| Iron (mg/L) | | 0.1 U | 0.1 U | | 0.005 | to 0.731 | 0.076 | ± 0.016 | 63 |
| Magnesium (mg/L) | | 9.65 | 10.3 | | 6.2 | to 10.8 | 7.9 | ± 0.15 | 57 |
| Potassium (mg/L) | | 1.96 | 2.03 | | 1.34 | to 3.8 | 2 | ± 0.053 | 63 |
| Sulfate (mg/L) | | 12 | 11 | | 11 | to 35 | 26 | ± 0.83 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 4 U | | 0.32 U | to 30 | 3.5 | ± 0.65 | 63 |
| Turbidity (field) (NTU) | | 0.3 | 0.6 | | 0 | to 20.3 | 1.5 | ± 0.41 | 62 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.1 U | | 0.08 U | to 0.5 U | 0.16 | ± 0.009 | 63 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 2 U | 0.69 | ± 0.092 | 63 |
| Organic Carbon (mg/L) | | 1 U | 1 U | | 0.99 | to 3.7 | 1.3 | ± 0.074 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

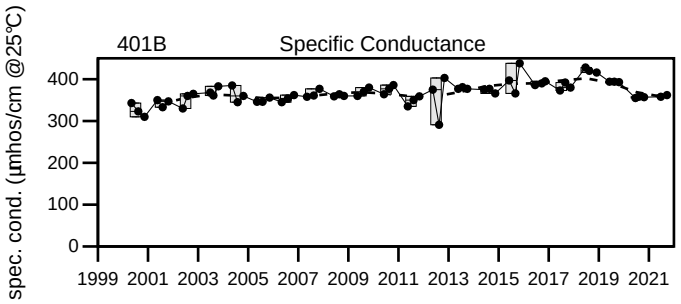
## Comments

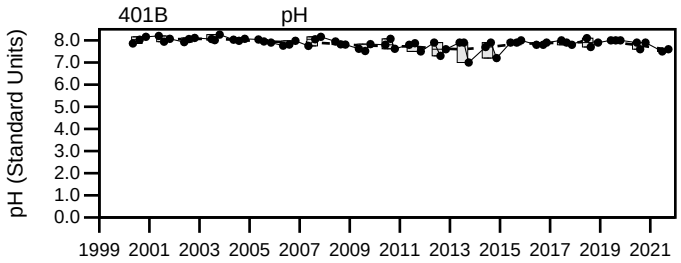
Q2= 6 - 2021
Q3= 9 - 2021

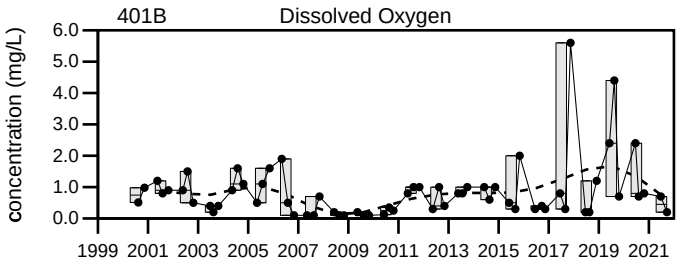
U = Not Detected above the laboratory reporting limit.

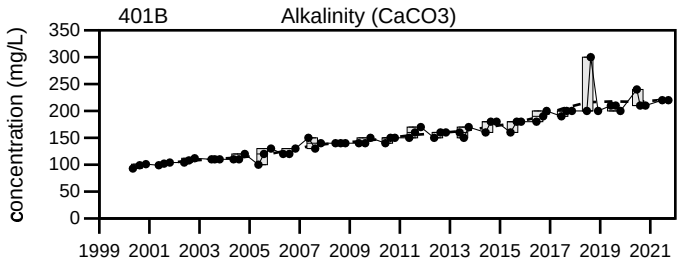
Data Group: 179
Printed: 4/11/2022 10:00

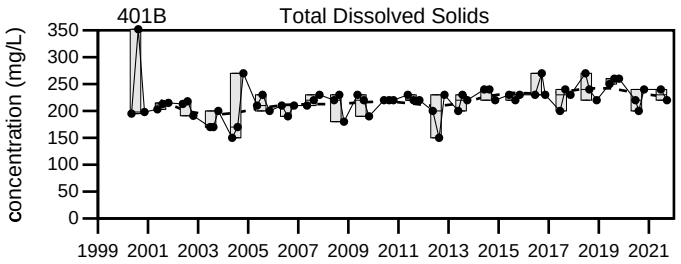
SME SEVEE & MAHER ENGINEERS

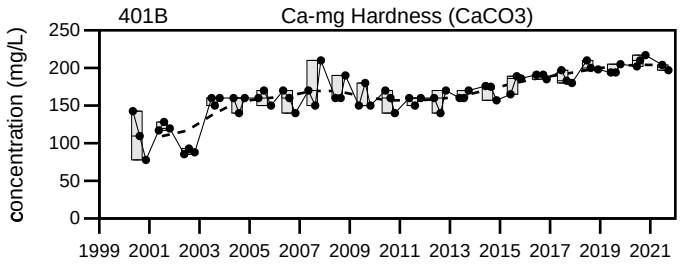


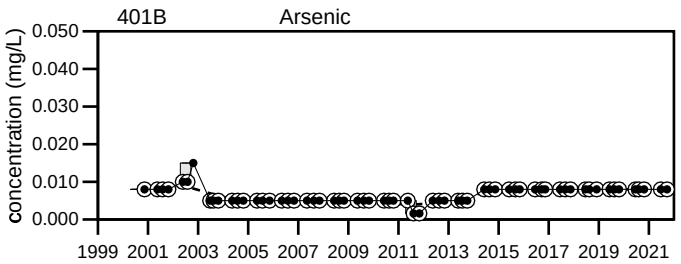



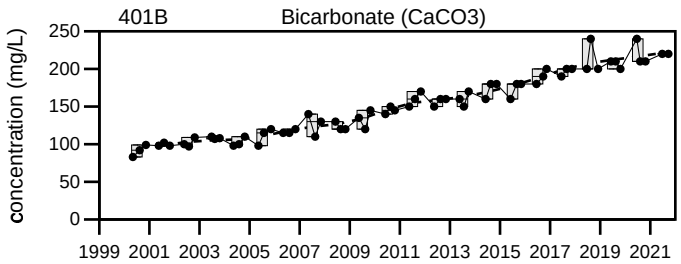



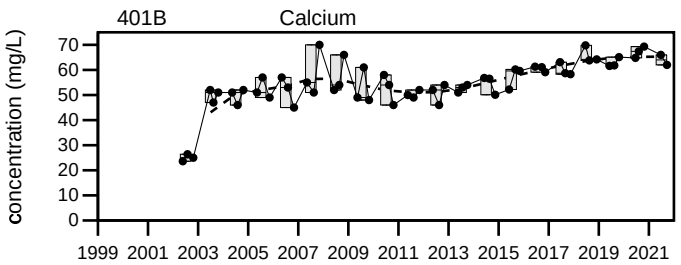



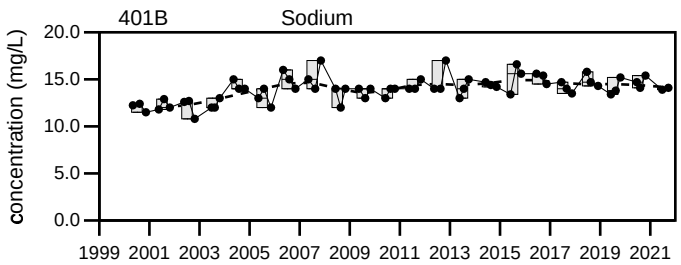



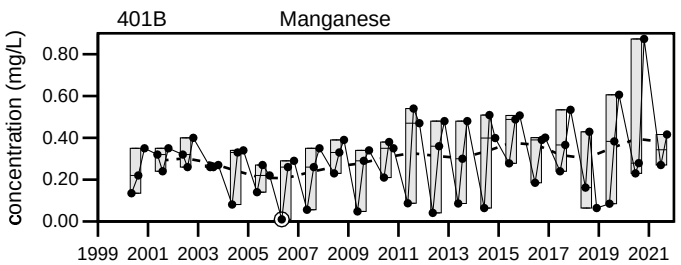



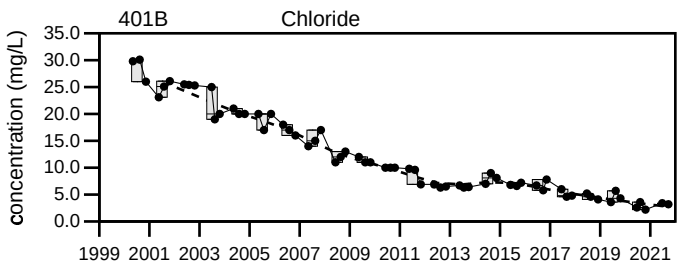



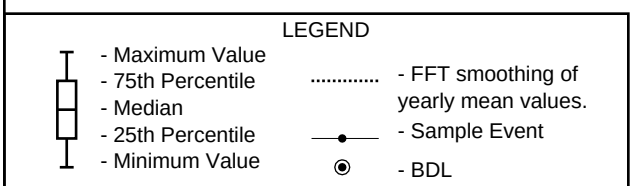



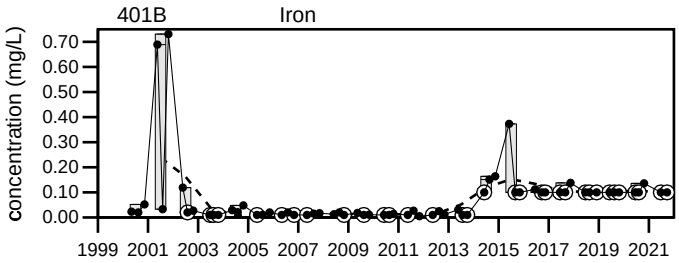



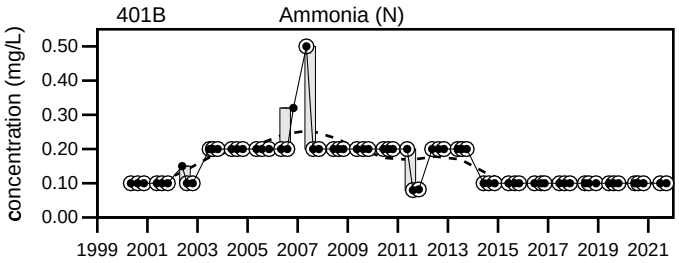



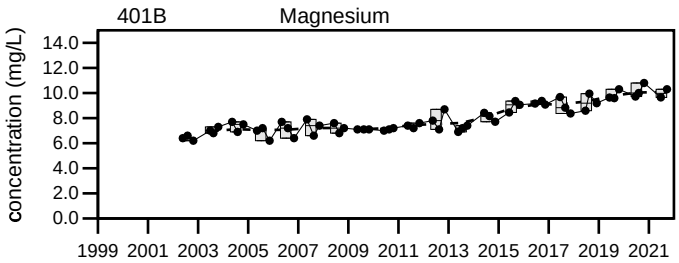

# Dolby Landfill

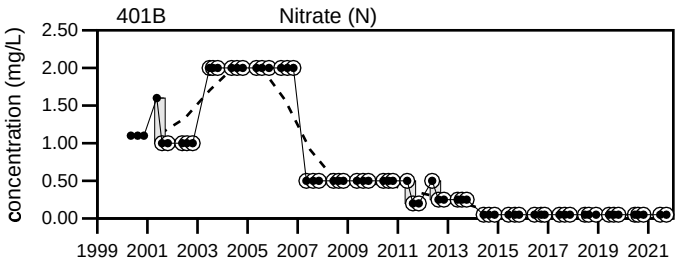
## 401B

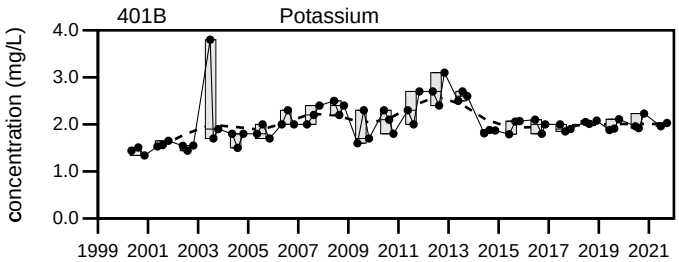
Sevee & Maher Engineers, Inc.

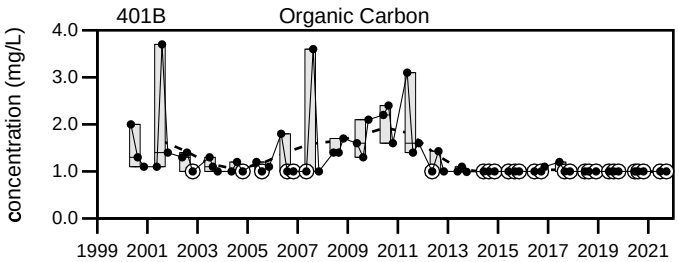


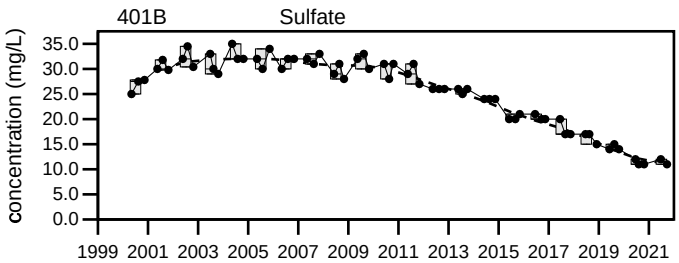



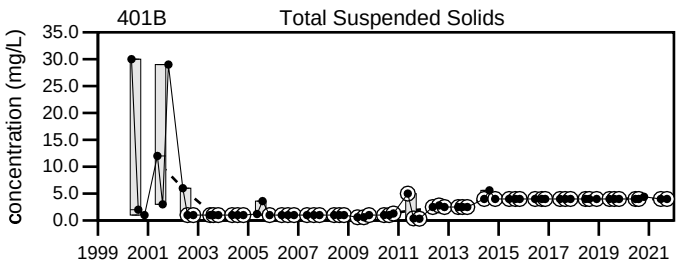



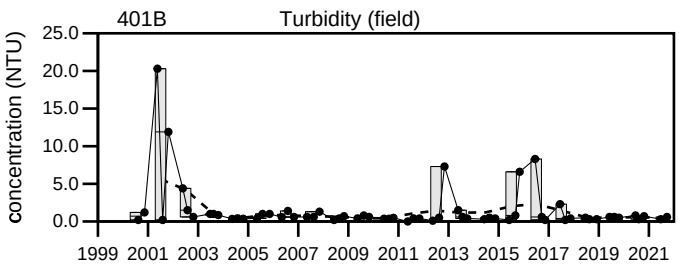



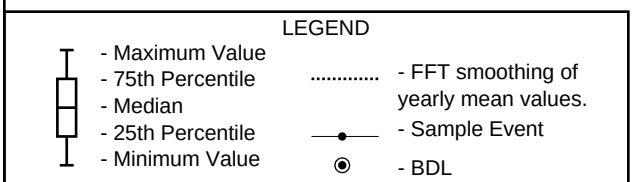




# Dolby Landfill

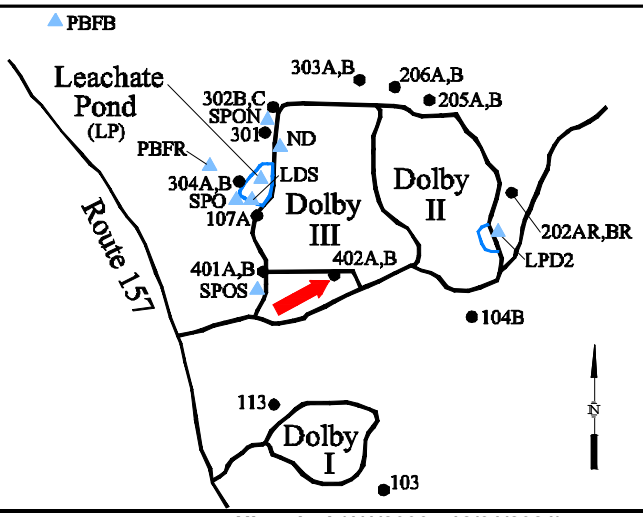
## 401B

Sevee & Maher Engineers, Inc.

## Well Description

Well located cross-gradient to south of the Dolby III Landfill.

Screen Interval: **50.2 ft. to 60.2 ft.**
Sampled: **2 Times Annually**
Sampled Since: **Jun-90**
Material Screened: **Bedrock**
Well Condition: **Good**
Sampling Method: **Low Flow (Intiated Aug. 2000)**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 388 | 378 | | 194 | to 439 | 290 | ± 8.1 | 63 |
| Dissolved Oxygen (mg/L) | | 1.3 | 1.5 | | 0.1 | to 6.8 | 1.6 | ± 0.17 | 62 |
| Total Dissolved Solids (mg/L) | | 230 | 220 | | 81 | to 650 | 170 | ± 9.2 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0035 | to 0.019 | 0.0067 | ± 0.000 | 61 |
| Calcium (mg/L) | | ↑58.9 | 54.8 | | 14.3 | to 57.7 | 37 | ± 1.2 | 57 |
| Manganese (mg/L) | | 0.201 | 0.179 | | 0.04 | to 0.32 | 0.13 | ± 0.006 | 63 |
| pH (STU) | | 7.5 | 7.3 | | 7.1 | to 8.3 | 7.8 | ± 0.029 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 160 | 170 | | 81 | to 650 | 110 | ± 8.9 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | ↑211 | 203 | | 57.4 | to 206 | 130 | ± 4.7 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 160 | 170 | | 76 | to 650 | 110 | ± 9 | 63 |
| Sodium (mg/L) | | ↑10 | ↑9.94 | | 5.6 | to 9.86 | 7.6 | ± 0.15 | 63 |
| Chloride (mg/L) | | 39 | 37 | | 4.4 | to 40 | 23 | ± 1.4 | 63 |
| Iron (mg/L) | | ↑0.322 | 0.175 | | 0.02 U | to 0.228 | 0.1 | ± 0.005 | 63 |
| Magnesium (mg/L) | | 15.6 | ↑16.1 | | 5.6 | to 15.8 | 9.8 | ± 0.33 | 57 |
| Potassium (mg/L) | | 1 U | 1 U | | 0.53 | to 1 | 0.93 | ± 0.019 | 63 |
| Sulfate (mg/L) | | 7.2 | 6.4 | | 4.5 | to 13 | 8.1 | ± 0.18 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 4 U | | 0.32 U | to 5 U | 2.3 | ± 0.18 | 63 |
| Turbidity (field) (NTU) | | 0.3 | 0.4 | | 0 | to 3.6 | 0.55 | ± 0.068 | 62 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.1 U | | 0.08 U | to 0.5 U | 0.16 | ± 0.01 | 63 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 2 U | 0.7 | ± 0.089 | 63 |
| Organic Carbon (mg/L) | | 2.3 | 1.9 | | 1 U | to 3.2 | 1.4 | ± 0.052 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

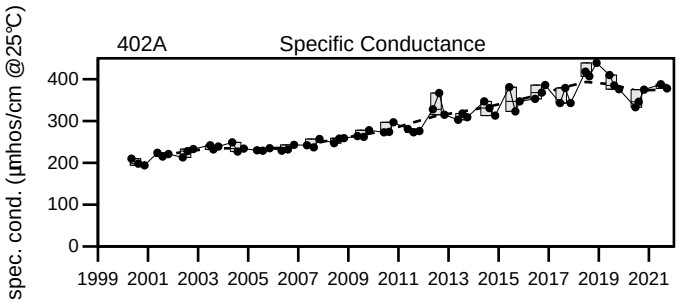
## Comments

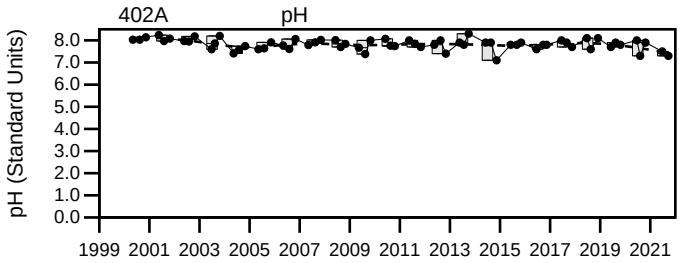
Q2= 6 - 2021
Q3= 9 - 2021

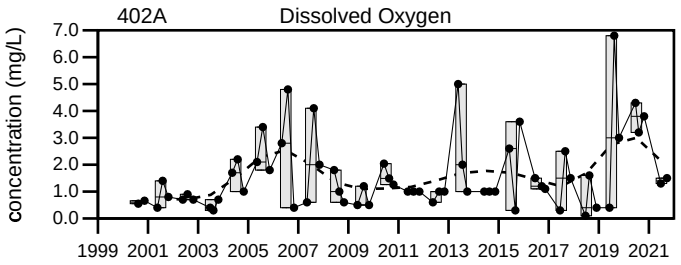
U = Not Detected above the laboratory reporting limit.

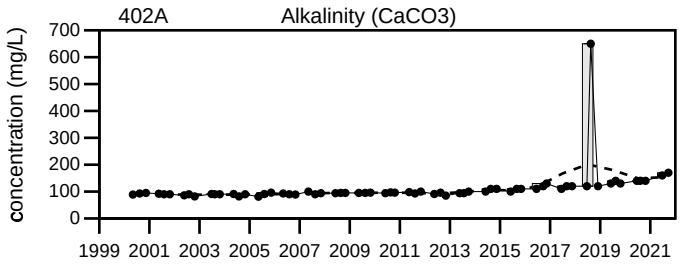
Data Group: 179
Printed: 4/11/2022 10:00

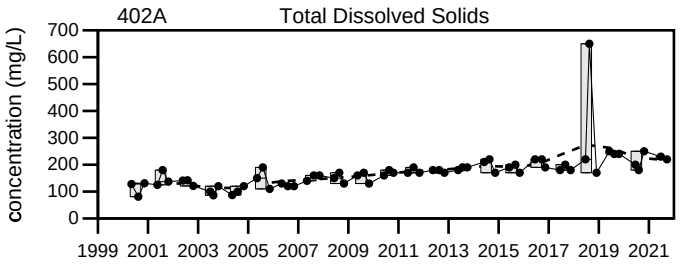
SME SEVEE & MAHER ENGINEERS

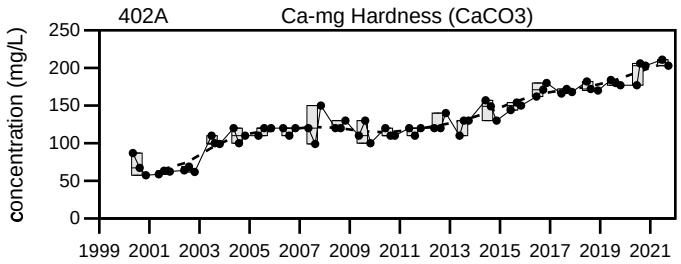


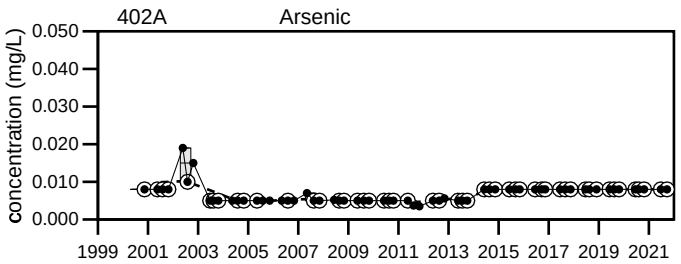



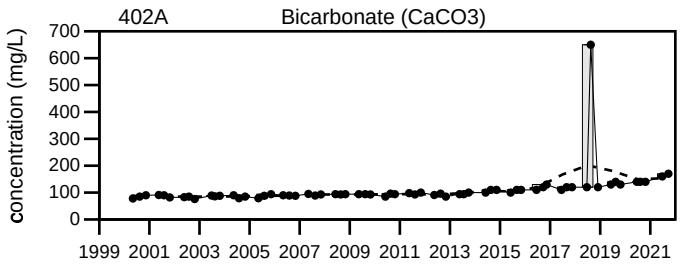



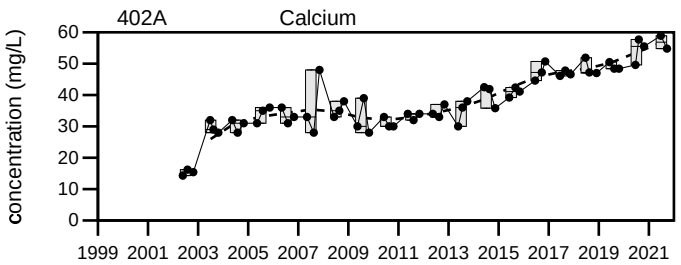



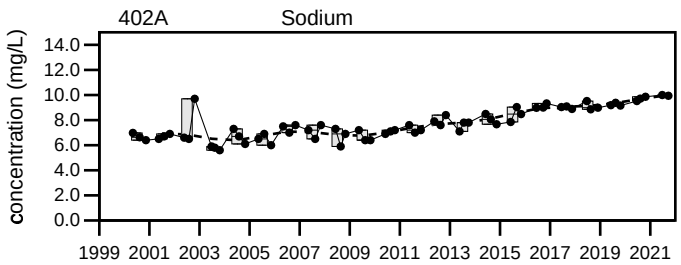



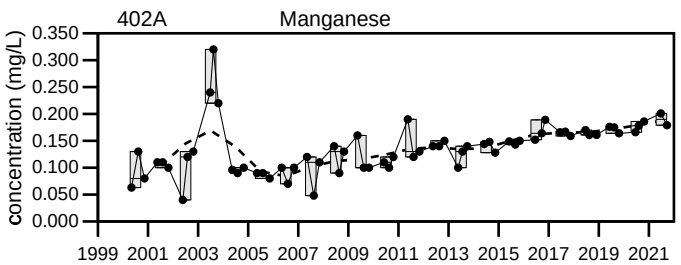



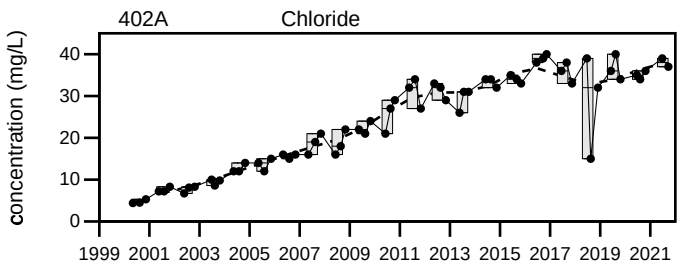



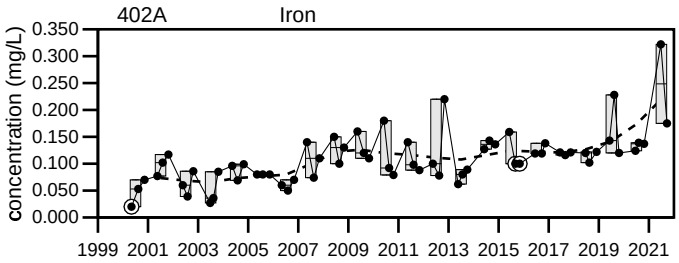

LEGEND

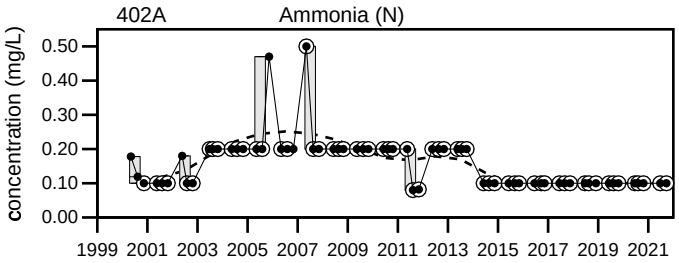
- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value
- FFT smoothing of yearly mean values.
- Sample Event
- BDL

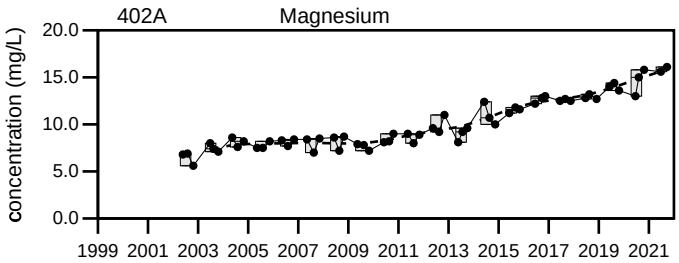
# Dolby Landfill

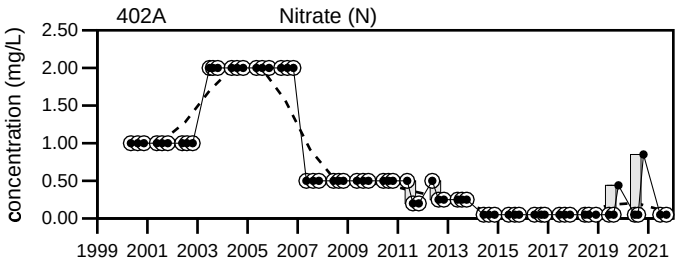
## 402A

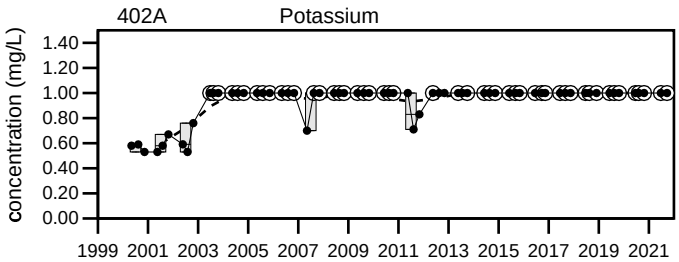
Sevee & Maher Engineers, Inc.

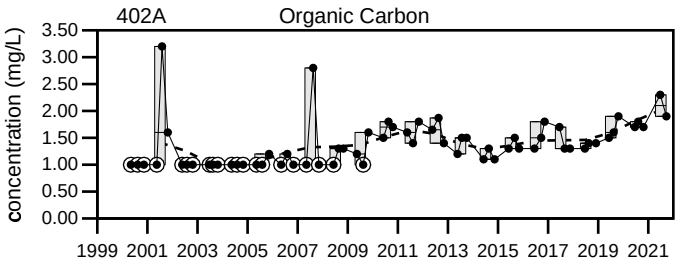


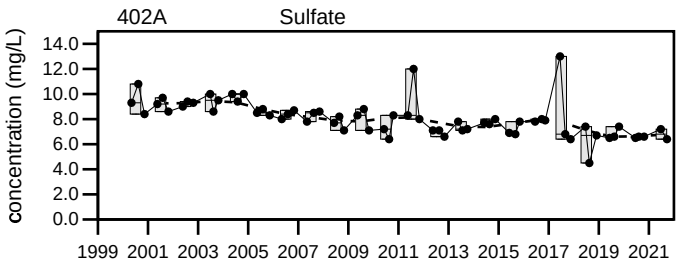



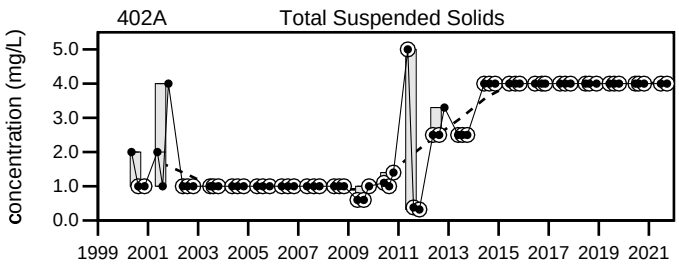



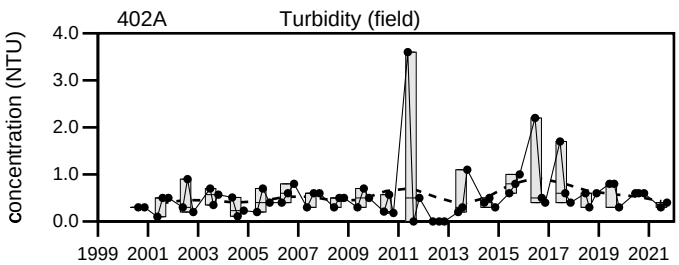



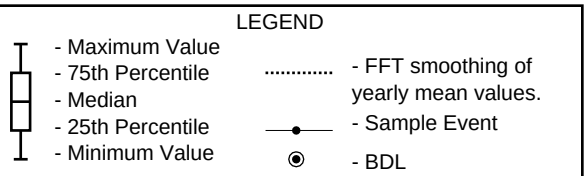




Dolby Landfill

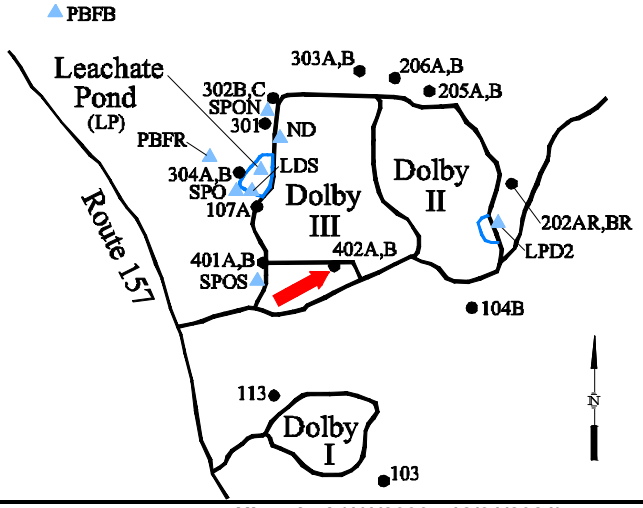
402A

Sevee & Maher Engineers, Inc.

## Well Description

Well located cross-gradient of Cells 3A and 3B to south of the Dolby III Landfill.

| | |
|---|---|
| Screen Interval: | **10 ft. to 20 ft.** |
| Sampled: | **2 Times Annually** |
| Sampled Since: | **Jun-90** |
| Material Screened: | **Glacial Till** |
| Well Condition: | **Good** |
| Sampling Method: | **Low Flow (Initiated Aug. 2000)** |




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | ↓878 | 894 | | 880 | to 2180 | 1300 | ± 44 | 63 |
| Dissolved Oxygen (mg/L) | | 0.9 | 0.5 | | 0.1 | to 6.1 | 0.71 | ± 0.11 | 62 |
| Total Dissolved Solids (mg/L) | | 590 | 570 | | 170 | to 1308 | 740 | ± 27 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.044 | 0.0069 | ± 0.000 | 61 |
| Calcium (mg/L) | | 123 | 115 | | 110 | to 266.8 | 150 | ± 4.8 | 57 |
| Manganese (mg/L) | | **2.31** | **1.83** | | 0.07 | to 5.04 | 0.96 | ± 0.11 | 63 |
| pH (STU) | | 6.9 | 6.8 | | 6.5 | to 7.3 | 6.9 | ± 0.018 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 600 | 600 | | 140 | to 1148 | 700 | ± 23 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 563 | 554 | | 460 | to 1137.5 | 710 | ± 20 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 600 | 600 | | 140 | to 1100 | 680 | ± 21 | 63 |
| Sodium (mg/L) | | **24.3** | **24.8** | | 24.3 | to 84.14 | 40 | ± 1.9 | 63 |
| Chloride (mg/L) | | 11 | 11 | | 4.6 | to 122 | 32 | ± 2.9 | 63 |
| Iron (mg/L) | | ↑0.274 | 0.133 | | 0.01 U | to 0.27 | 0.059 | ± 0.006 | 63 |
| Magnesium (mg/L) | | 62 | 64.7 | | 38 | to 100 | 72 | ± 1.5 | 57 |
| Potassium (mg/L) | | 12.2 | 14.3 | | 3.43 | to 35 | 11 | ± 0.84 | 63 |
| Sulfate (mg/L) | | 7.3 | 6.5 | | 1.5 | to 30.9 | 7.7 | ± 0.47 | 63 |
| Total Suspended Solids (mg/L) | | 4 U | 6 | | 0.32 U | to 91 | 4 | ± 1.4 | 63 |
| Turbidity (field) (NTU) | | 0.5 | 0.8 | | 0 | to 2.8 | 0.41 | ± 0.05 | 62 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.16 | | 0.08 U | to 4.6 | 0.23 | ± 0.071 | 63 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 3.8 | 0.83 | ± 0.12 | 63 |
| Organic Carbon (mg/L) | | 4.9 | 4.6 | | 4.3 | to 211.2 | 13 | ± 3.3 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Nitrate (N) RAGGwRs=32 mg/L, MEG16=10 mg/L, MCL=10 mg/L, Ammonia (N) MEG16=30 mg/L, Sodium MEG16=20 mg/L, Manganese RAGGwRs=0.43 mg/L, MEG16=0.3 mg/L, Iron RAGGwRs=14 mg/L, MEG16=5 mg/L, Arsenic RAGGwRs=0.00052 mg/L, MEG16=0.01 mg/L, MCL=0.01 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

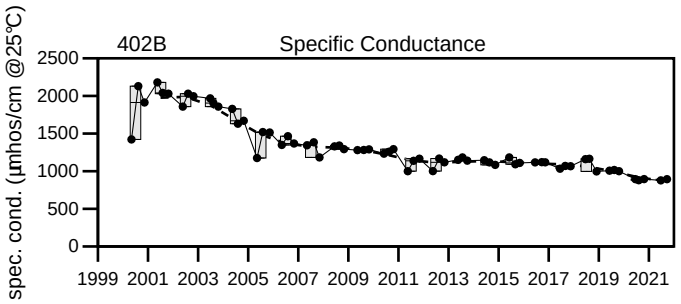
## Comments

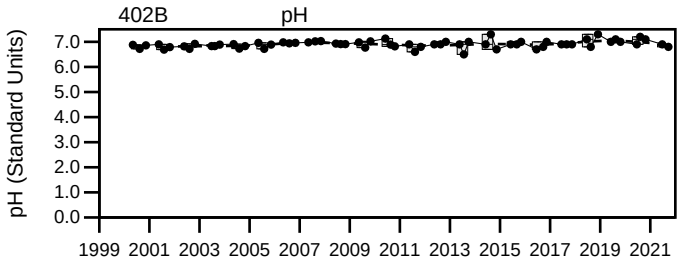
Q2= 6 - 2021 U = Not Detected above the laboratory reporting limit.

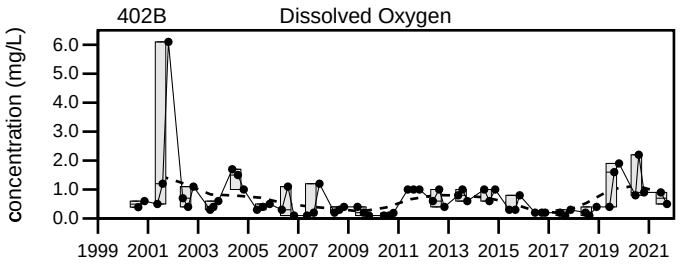
Q3= 9 - 2021

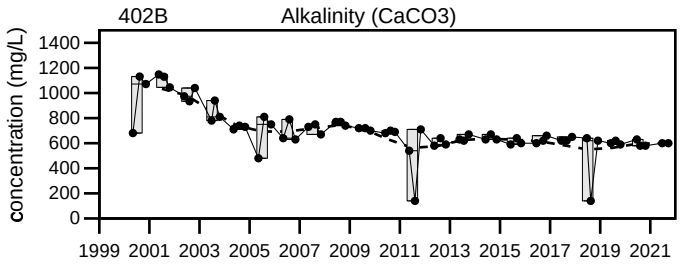
Data Group: 179
Printed: 4/11/2022 10:00

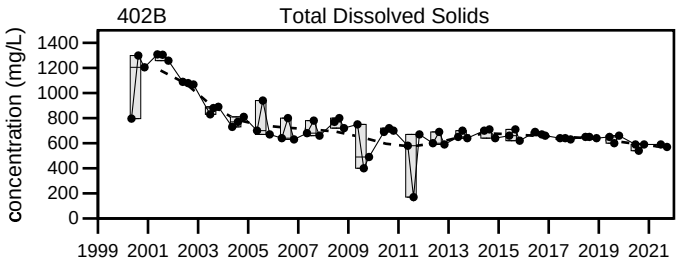
SME SEVEE & MAHER ENGINEERS

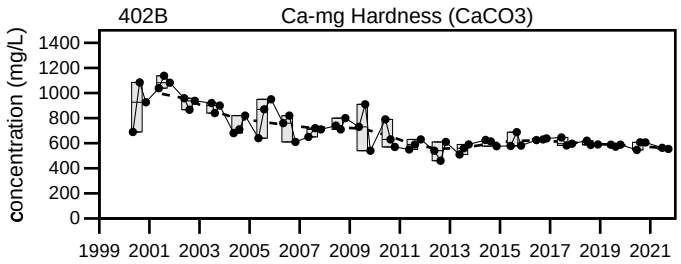


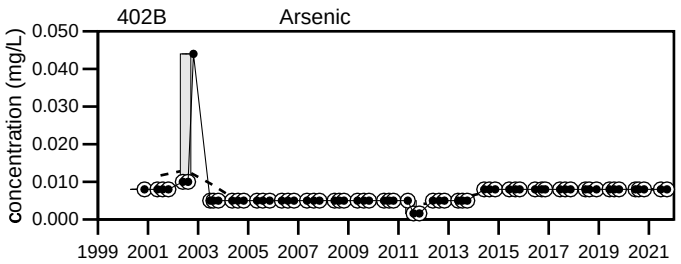



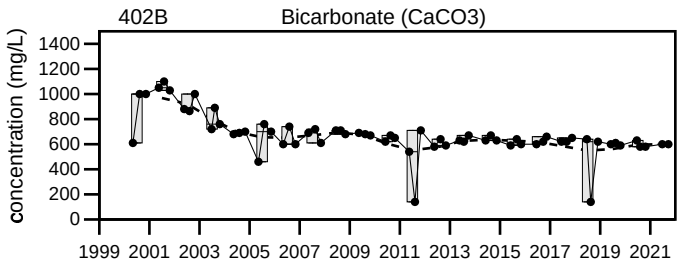



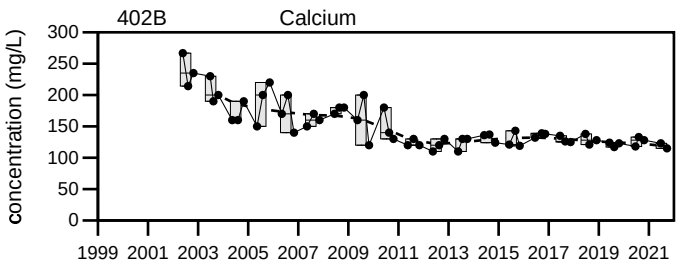



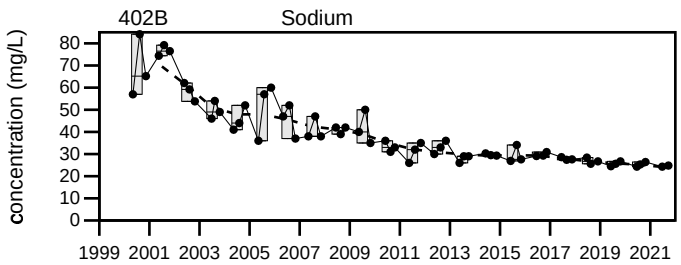



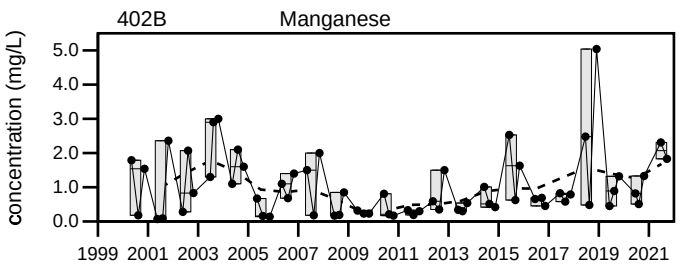



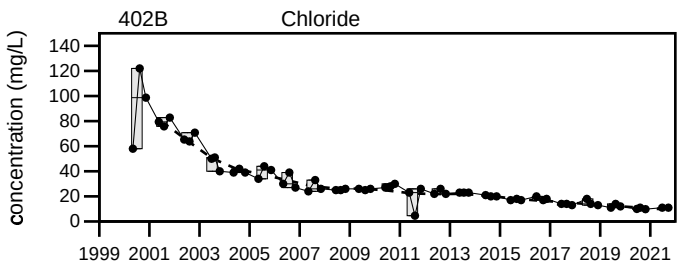



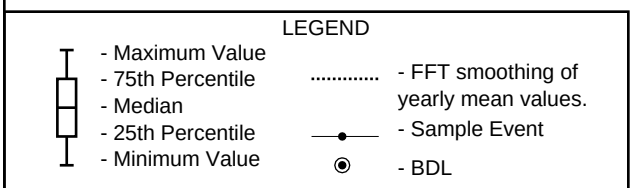



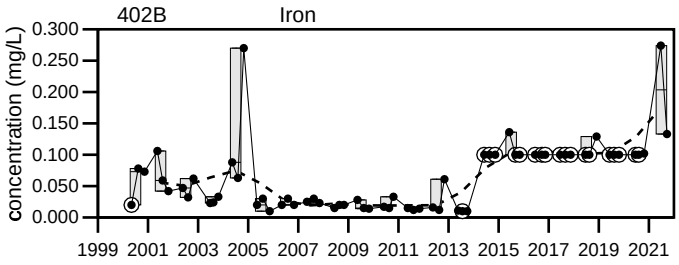



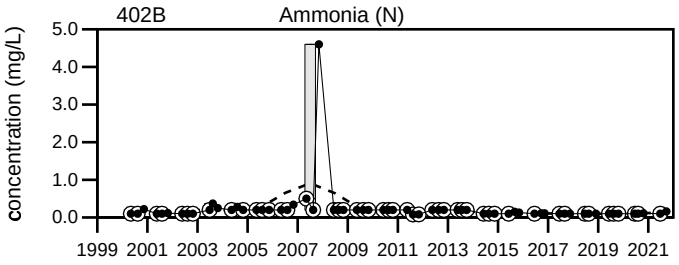



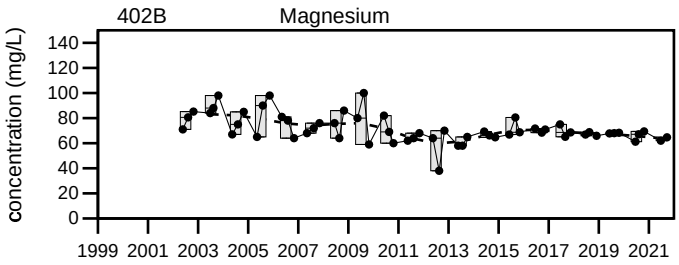

# Dolby Landfill

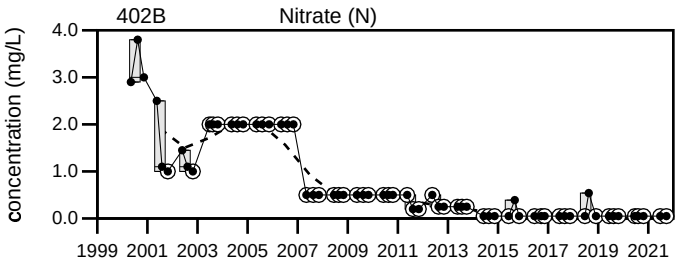
## 402B

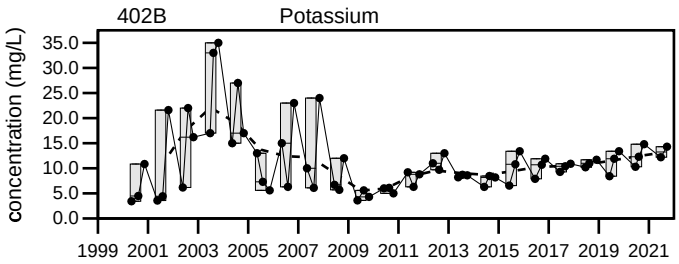
Sevee & Maher Engineers, Inc.

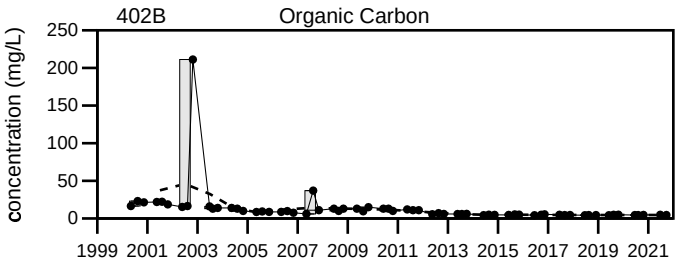


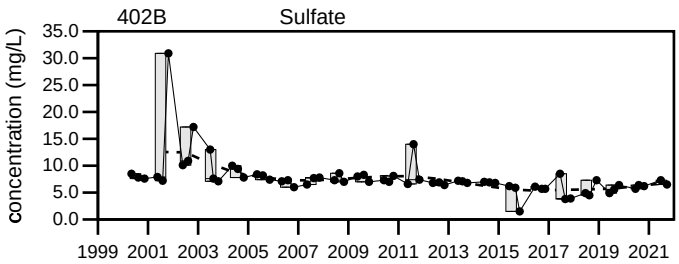



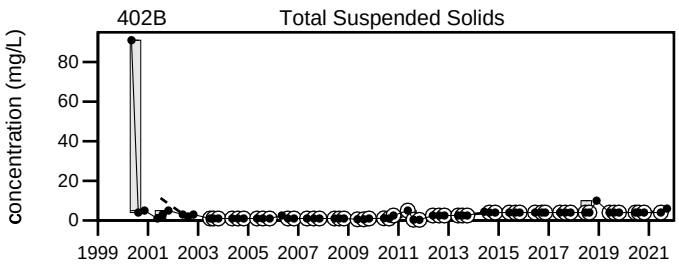



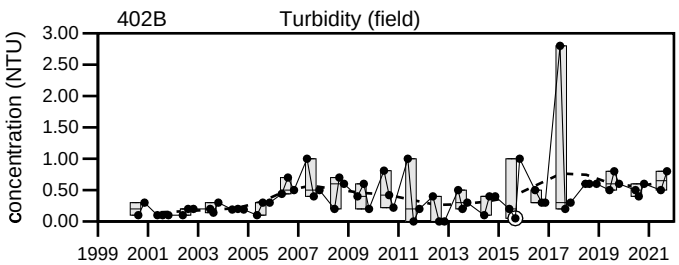



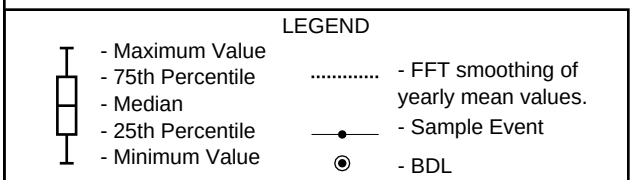




Dolby Landfill

402B

Sevee & Maher Engineers, Inc.

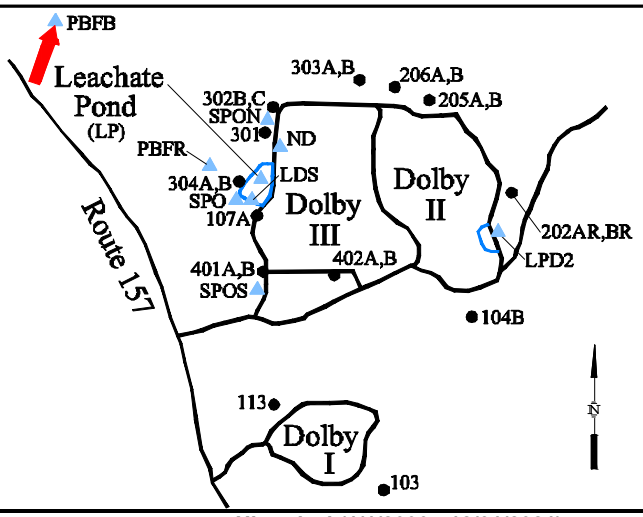
## Well Description

Backgound surface water sample from Partridge Brook Flowage.

Sampled: **2 Times Annually**

Sampled Since: **May-00**

Sampling Method: **Grab**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 51 | ↓5.7 | | 27 | to 322 | 56 | ± 4.9 | 62 |
| Dissolved Oxygen (mg/L) | | 5.1 | 3.5 | | 2.3 | to 11.4 | 6.2 | ± 0.26 | 59 |
| Total Dissolved Solids (mg/L) | | 45 | 46 | | 8 | to 114 | 50 | ± 2.6 | 63 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | to 0.01 U | 0.0064 | ± 0.000 | 61 |
| Calcium (mg/L) | | 5.34 | 5.84 | | 2.5 | to 8.1 | 5 | ± 0.16 | 57 |
| Manganese (mg/L) | | 0.0734 | 0.0864 | | 0.016 | to 1.58 | 0.24 | ± 0.042 | 63 |
| pH (STU) | | 7.4 | 6.2 | | 5.8 | to 9.02 | 7.4 | ± 0.086 | 63 |
| Alkalinity (CaCO3) (mg/L) | | 18 | 18 | | 1 U | to 200 | 17 | ± 3.1 | 63 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 20.5 | 21.6 | | 10 U | to 30.1 | 18 | ± 0.63 | 63 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 18 | 18 | | 1 U | to 190 | 17 | ± 2.9 | 63 |
| Sodium (mg/L) | | 1.98 | 1.65 | | 1 U | to 2.2 | 1.6 | ± 0.04 | 63 |
| Chloride (mg/L) | | 2.3 | 2 U | | 0.86 | to 4.1 | 2.3 | ± 0.096 | 63 |
| Iron (mg/L) | | 0.497 | 0.904 | | 0.16 | to 4 | 0.78 | ± 0.093 | 63 |
| Magnesium (mg/L) | | 1.74 | 1.7 | | 1 U | to 2.09 | 1.4 | ± 0.045 | 57 |
| Potassium (mg/L) | | 1 U | 1 U | | 0.146 | to 1.4 | 0.9 | ± 0.036 | 63 |
| Sulfate (mg/L) | | 1 U | 1 U | | 0.67 | to 28 | 3.2 | ± 0.54 | 63 |
| Total Suspended Solids (mg/L) | | 6.8 | 16 | | 1 U | to 140 | 8.4 | ± 2.4 | 63 |
| Turbidity (field) (NTU) | | 1.2 | 0.6 | | 0.4 | to 19.8 | 2.3 | ± 0.34 | 60 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.1 U | | 0.08 U | to 0.98 | 0.16 | ± 0.015 | 63 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | to 2 U | 0.72 | ± 0.092 | 63 |
| Organic Carbon (mg/L) | | 10 | 15 | | 6.3 | to 38 | 12 | ± 0.67 | 63 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Chloride MFCCC=230 mg/L, Ammonia (N) MFCCC=1.4 mg/L, Iron MFCCC=1 mg/L, Arsenic MFCCC=0.15 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

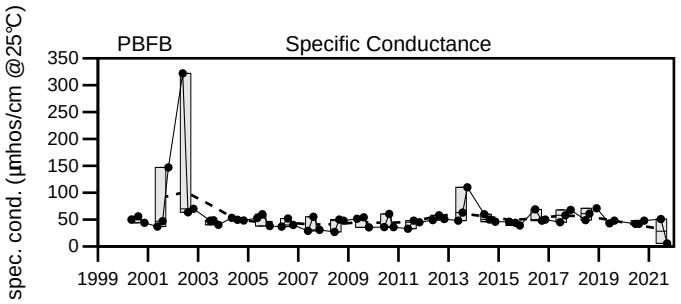
## Comments

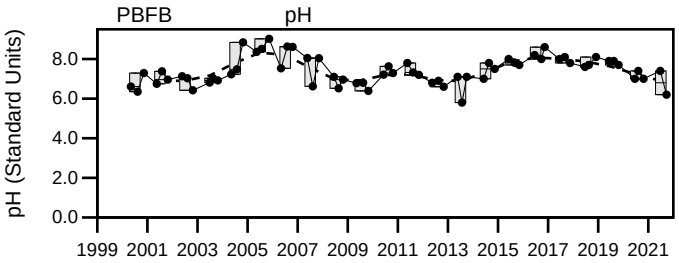
Q2= 6 - 2021

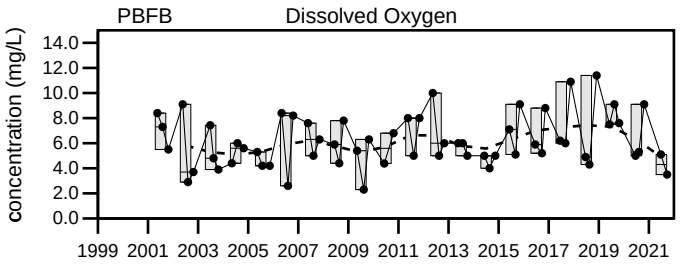
Q3= 9 - 2021

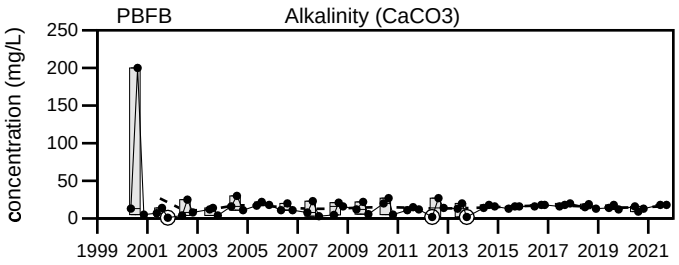
U = Not Detected above the laboratory reporting limit.

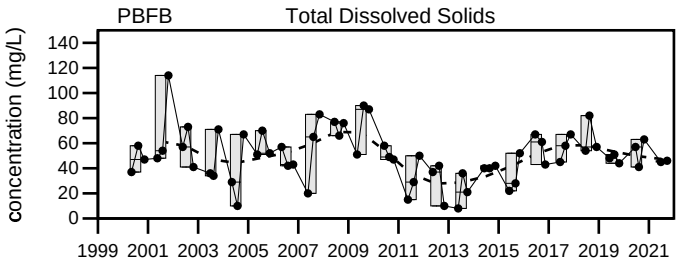
Data Group: 227
Printed: 4/11/2022 10:22

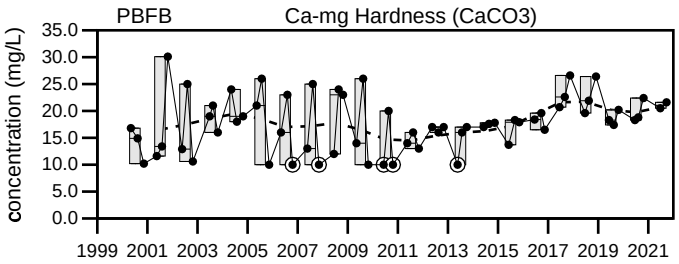


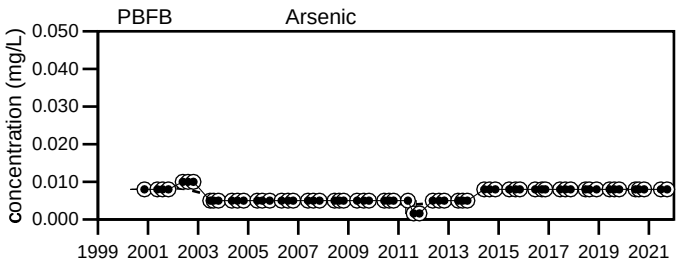



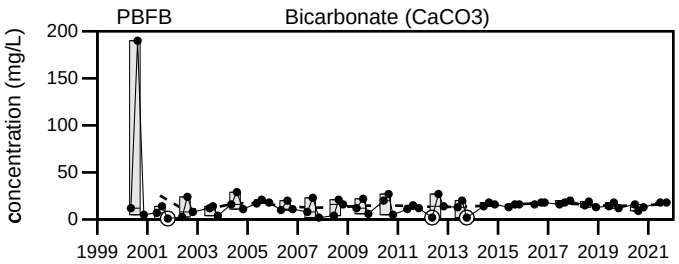



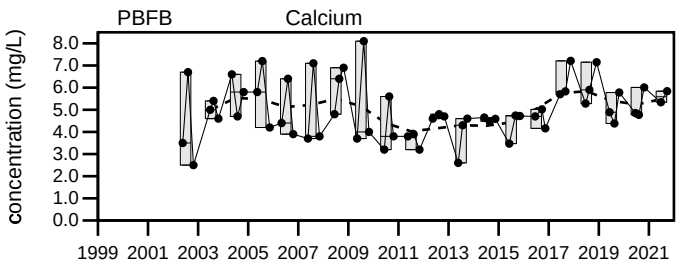



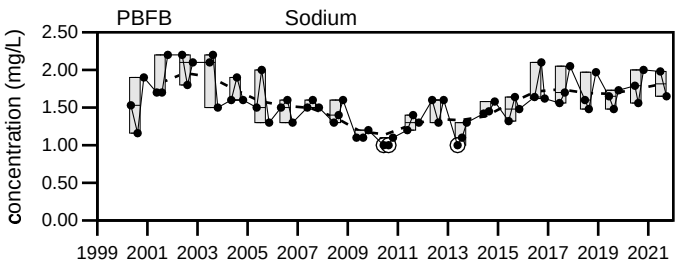



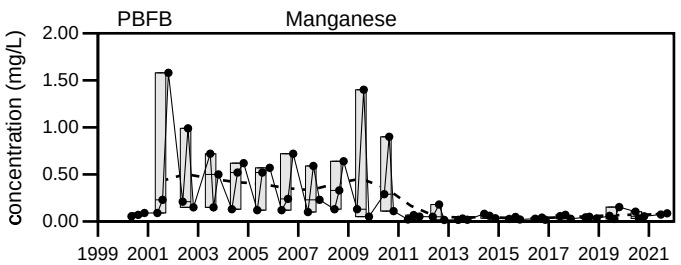



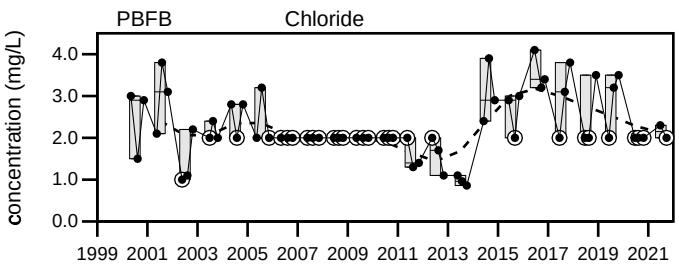



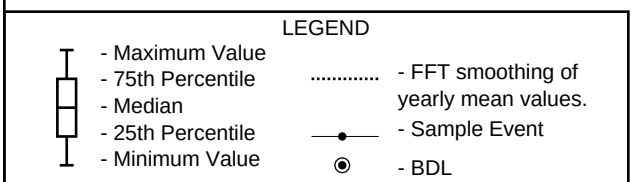



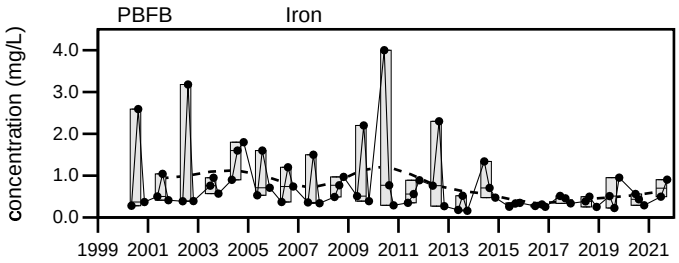



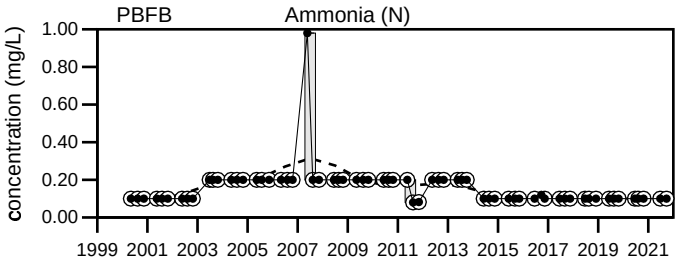



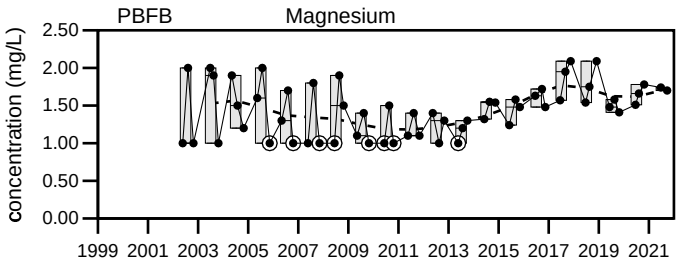

# Dolby Landfill

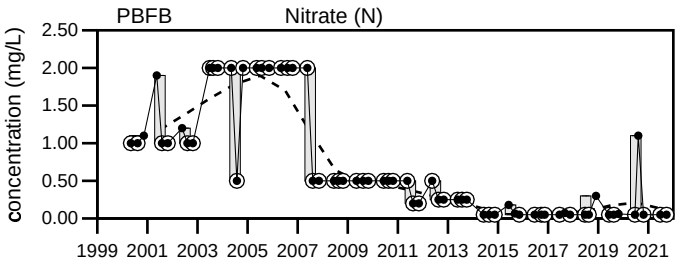
# PBFB

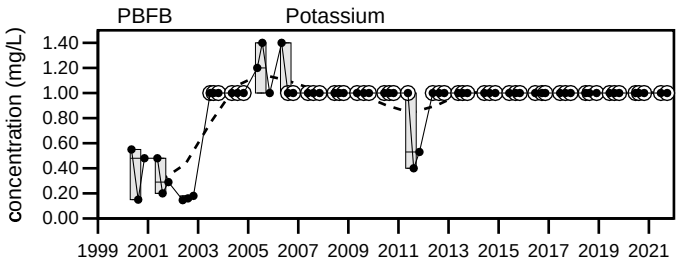
Sevee & Maher Engineers, Inc.

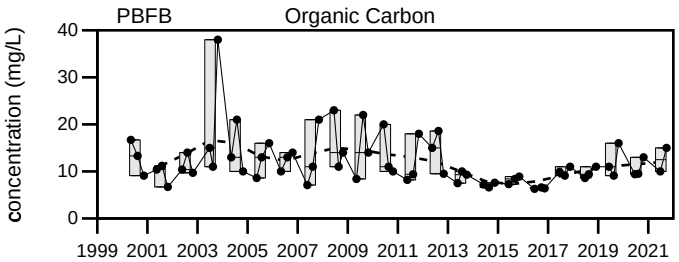


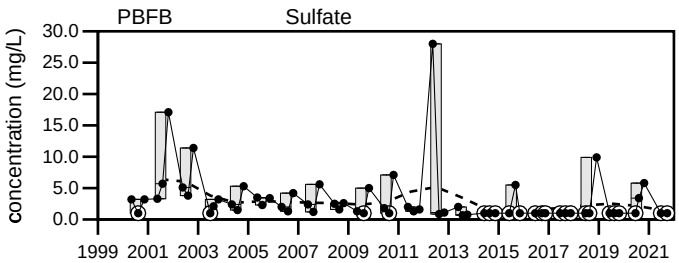



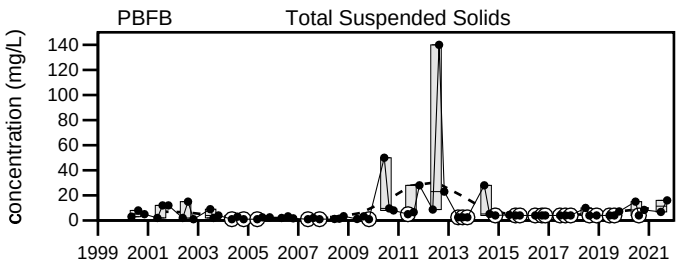



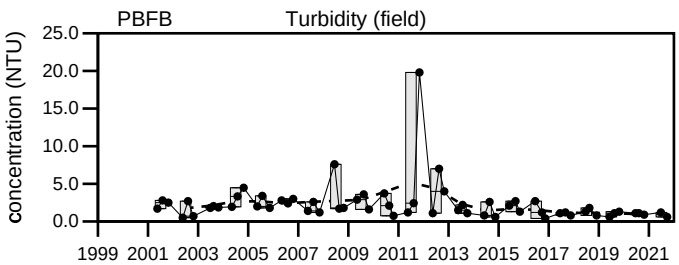




LEGEND

- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value

- FFT smoothing of yearly mean values.
- Sample Event
- BDL

# Dolby Landfill

## PBFB

Sevee & Maher Engineers, Inc.

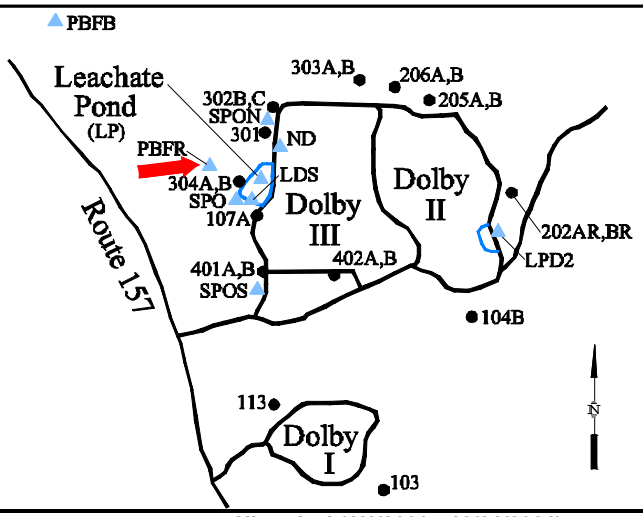
## Well Description

Sample from the Partridge Bridge Flowage downgradient of the level spreader and the Dolby II and III Landfills.

Sampled: **2 Times Annually**

Sampled Since: **May 2012**

Sampling Method: **Grab**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 53 | 54 | | 45 | 332 | 88 | 11 | 26 |
| Dissolved Oxygen (mg/L) | | 7.3 | 4.7 | | 3.7 | 11.3 | 6.3 | 0.38 | 26 |
| Total Dissolved Solids (mg/L) | | 36 | 31 | | 30 | 200 | 62 | 6.4 | 27 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.005 U | 0.008 U | 0.0073 | 0.000 | 27 |
| Calcium (mg/L) | | 6.18 | 6.91 | | 4.4 | 50.3 | 9.8 | 1.7 | 27 |
| Manganese (mg/L) | | 0.0911 | 0.0982 | | 0.019 | 1.62 | 0.27 | 0.074 | 27 |
| pH (STU) | | 7.6 | 6.4 | | 6.3 | 8.6 | 7.6 | 0.12 | 26 |
| Alkalinity (CaCO3) (mg/L) | | 20 | 28 | | 5.1 | 45 | 23 | 1.7 | 27 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 23.3 | 26 | | 16 | 144 | 33 | 4.7 | 27 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 20 | 28 | | 5.1 | 45 | 23 | 1.7 | 27 |
| Sodium (mg/L) | | 2.01 | 2.12 | | 1.2 | 4.83 | 2.4 | 0.19 | 27 |
| Chloride (mg/L) | | 2 U | 2 U | | 1 | 6.3 | 3.2 | 0.27 | 27 |
| Iron (mg/L) | | 0.264 | 0.155 | | 0.088 | 3.15 | 0.52 | 0.13 | 27 |
| Magnesium (mg/L) | | 1.91 | 2.13 | | 1.2 | 4.54 | 2 | 0.12 | 27 |
| Potassium (mg/L) | | 1 U | 1 U | | 1 U | 2 | 1.2 | 0.054 | 27 |
| Sulfate (mg/L) | | 1 U | 1 U | | 0.82 | 89 | 7.9 | 3.3 | 27 |
| Total Suspended Solids (mg/L) | | 4 U | 4 U | | 2.5 U | 190 | 13 | 6.9 | 27 |
| Turbidity (field) (NTU) | | 0.8 | 0.7 | | 0.1 | 11.6 | 2 | 0.46 | 26 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.1 U | | 0.1 U | 0.2 U | 0.12 | 0.008 | 27 |
| Nitrate (N) (mg/L) | | 0.09 | 0.05 U | | 0.05 U | 1.9 | 0.27 | 0.074 | 27 |
| Organic Carbon (mg/L) | | 11 | 8.7 | | 3.9 | 16.9 | 8.3 | 0.5 | 27 |
| Copper (mg/L) | | 0.025 U | 0.025 U | | 0.003 U | 0.025 U | 0.02 | 0.002 | 27 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Chloride MFCCC=230 mg/L, Ammonia (N) MFCCC=1.4 mg/L, Iron MFCCC=1 mg/L, Copper MFCCC=0.00236 mg/L, Arsenic MFCCC=0.15 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

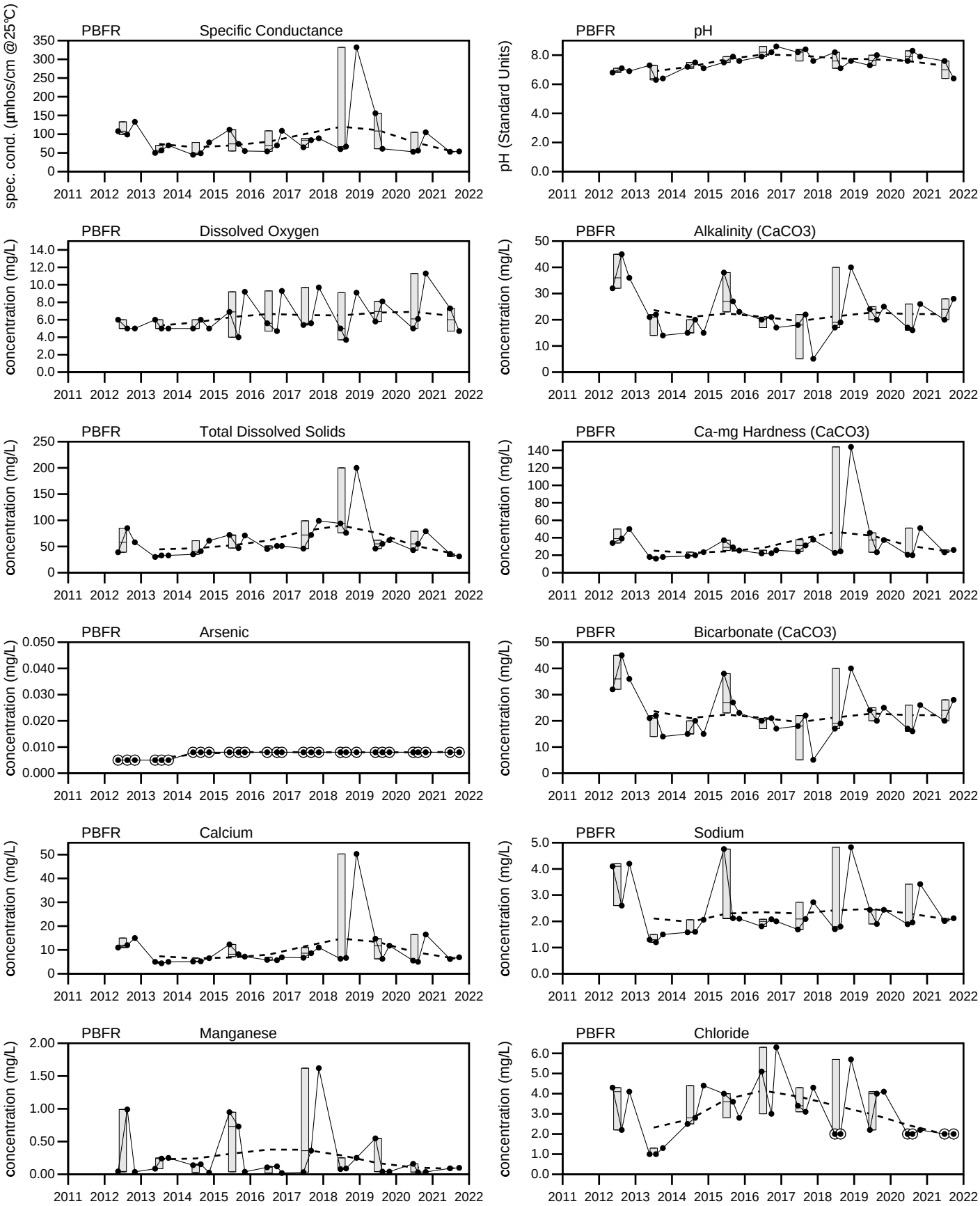
## Comments

Q2= 6 - 2021

Q3= 9 - 2021

U = Not Detected above the laboratory reporting limit.

Data Group: 228
Printed: 4/11/2022 10:24



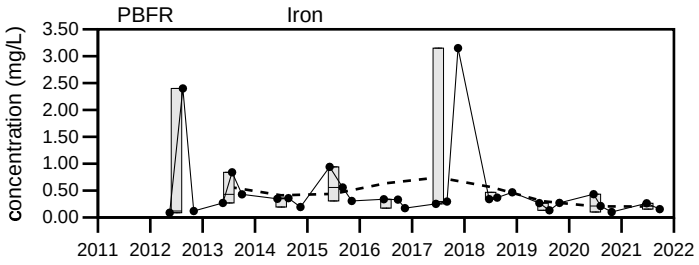

LEGEND

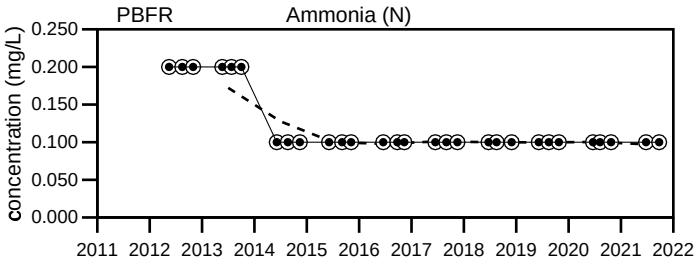
- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value
- FFT smoothing of yearly mean values.
- Sample Event
- BDL

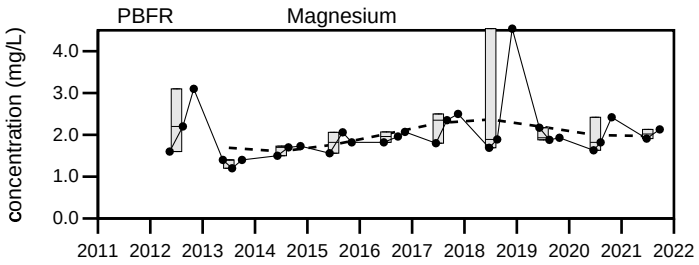
# Dolby Landfill

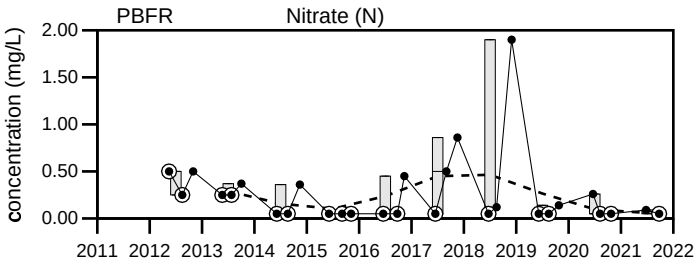
## PBFR

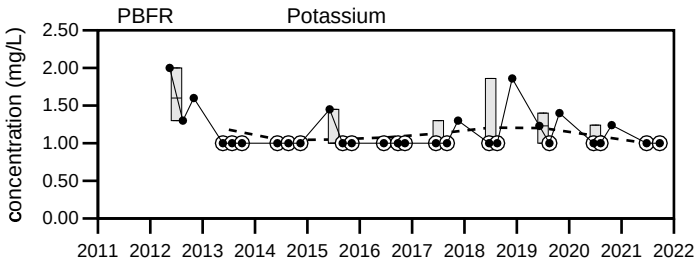
Sevee & Maher Engineers, Inc.

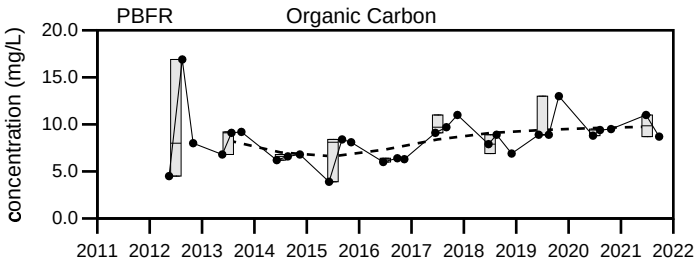


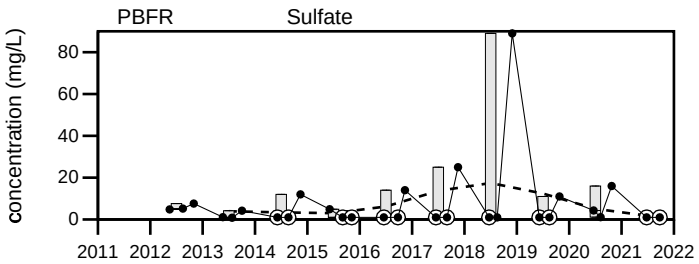



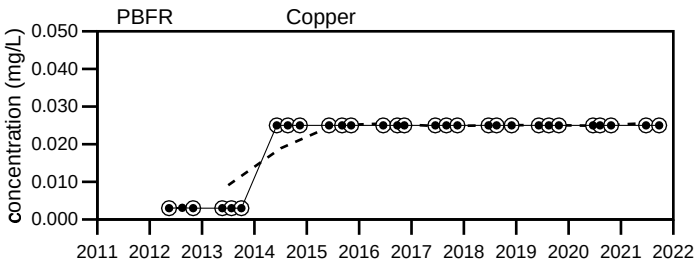



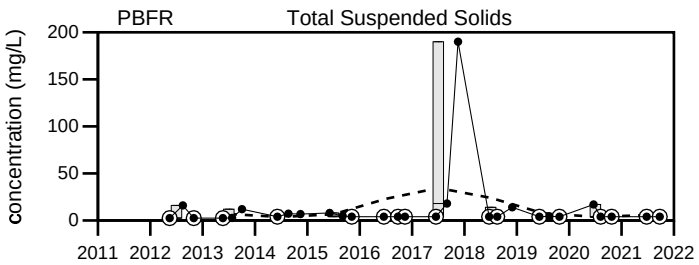



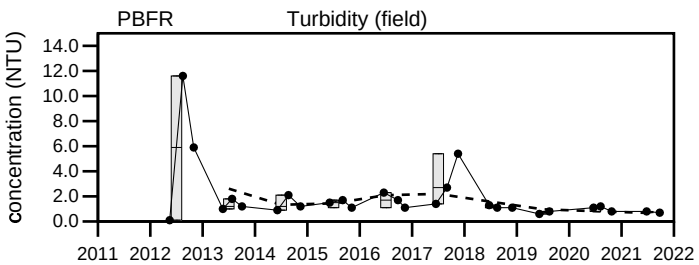



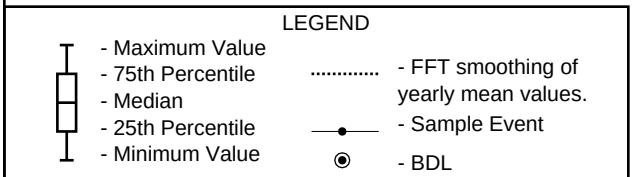




# Dolby Landfill

## PBFR

Sevee & Maher Engineers, Inc.

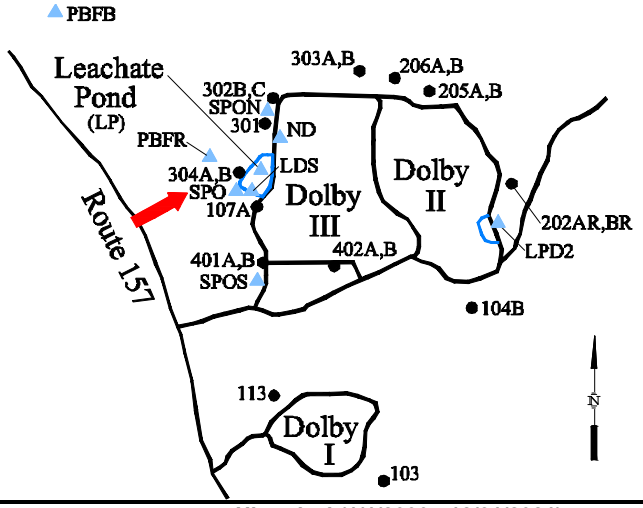
## Well Description

Surface water from the detention pond outlet to the west of Dolby III.

Sampled: **2 Times Annually**

Sampled Since: **Mar-91**

Sampling Method: **Grab**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | Q2 | Q3 | Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | D | D | | 72 | 196 | 130 | 8.1 | 21 |
| Dissolved Oxygen (mg/L) | | D | D | | 2.3 | 10 | 6.2 | 0.49 | 21 |
| Total Dissolved Solids (mg/L) | | D | D | | 43 | 140 | 85 | 5 | 21 |
| Arsenic (mg/L) | | D | D | | 0.005 U | 0.008 U | 0.0057 | 0.000 | 21 |
| Calcium (mg/L) | | D | D | | 8.4 | 36 | 16 | 1.7 | 21 |
| Manganese (mg/L) | | D | D | | 0.036 | 3.6 | 0.43 | 0.17 | 21 |
| pH (STU) | | D | D | | 5.83 | 8.71 | 7.3 | 0.16 | 21 |
| Alkalinity (CaCO3) (mg/L) | | D | D | | 21 | 77 | 42 | 3.9 | 21 |
| Ca-mg Hardness (CaCO3) (mg/L) | | D | D | | 21 | 110 | 49 | 5 | 21 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | D | D | | 21 | 75 | 42 | 3.7 | 21 |
| Sodium (mg/L) | | D | D | | 1.2 | 8.7 | 3.8 | 0.43 | 21 |
| Chloride (mg/L) | | D | D | | 2 U | 19 | 5.9 | 0.88 | 21 |
| Iron (mg/L) | | D | D | | 0.3 | 5.7 | 1.4 | 0.3 | 21 |
| Magnesium (mg/L) | | D | D | | 1 U | 4.7 | 2 | 0.2 | 21 |
| Potassium (mg/L) | | D | D | | 1 U | 7 | 2.7 | 0.35 | 21 |
| Sulfate (mg/L) | | D | D | | 1 U | 15 | 5.5 | 0.86 | 21 |
| Total Suspended Solids (mg/L) | | D | D | | 0.6 U | 37 | 8.7 | 2.2 | 21 |
| Turbidity (field) (NTU) | | D | D | | 0.6 | 12 | 3.3 | 0.62 | 21 |
| Ammonia (N) (mg/L) | | D | D | | 0.1 U | 0.21 | 0.18 | 0.01 | 21 |
| Nitrate (N) (mg/L) | | D | D | | 0.05 U | 2 U | 0.81 | 0.17 | 21 |
| Organic Carbon (mg/L) | | D | D | | 9.3 | 18 | 13 | 0.58 | 21 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Chloride MFCCC=230 mg/L, Ammonia (N) MFCCC=1.4 mg/L, Iron MFCCC=1 mg/L, Arsenic MFCCC=0.15 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

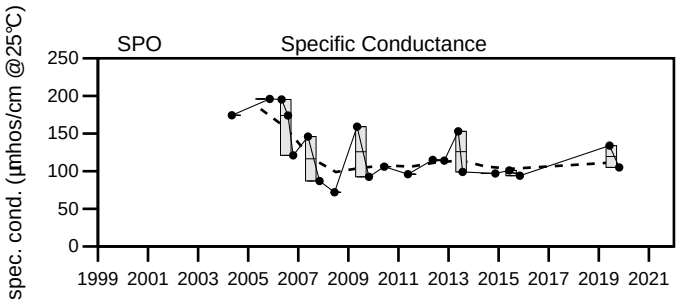
## Comments

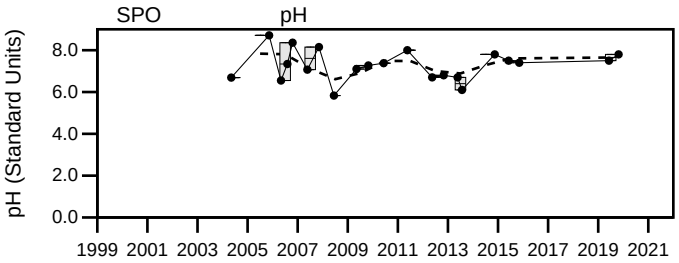
Q2= 6 - 2021 D = The sampling location was dry.

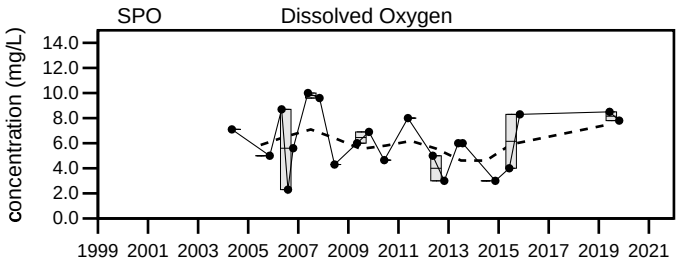
Q3= 9 - 2021

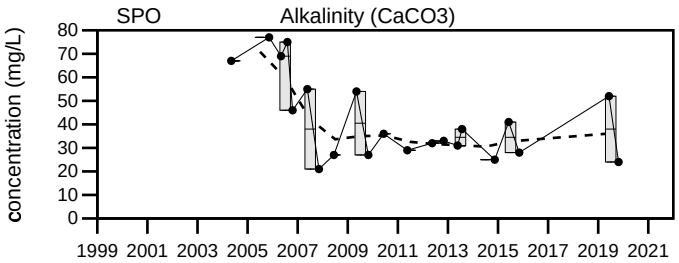
Data Group: 181
Printed: 4/11/2022 10:21

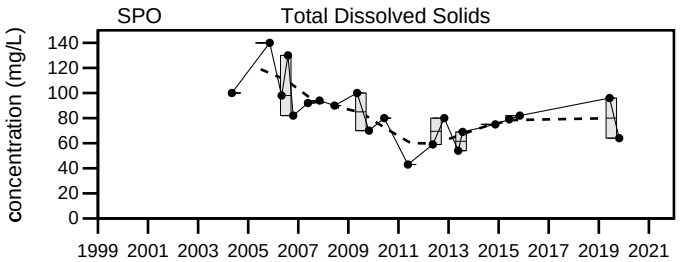
SME SEVEE & MAHER ENGINEERS

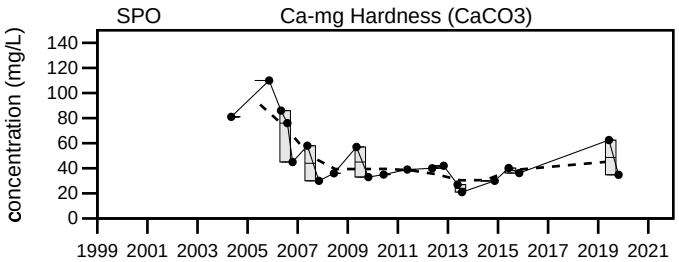


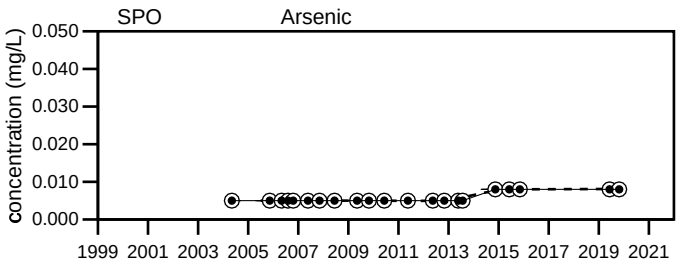



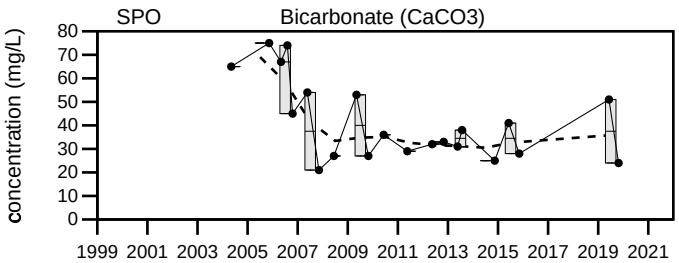



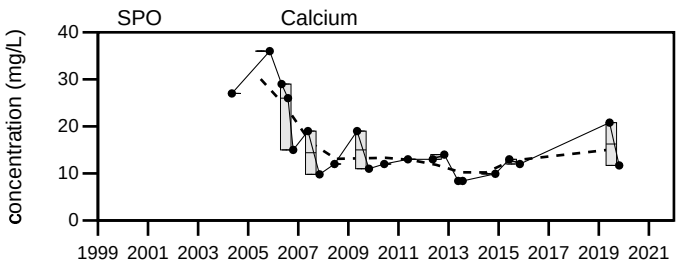



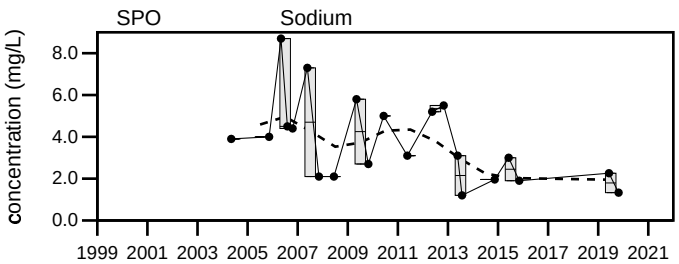



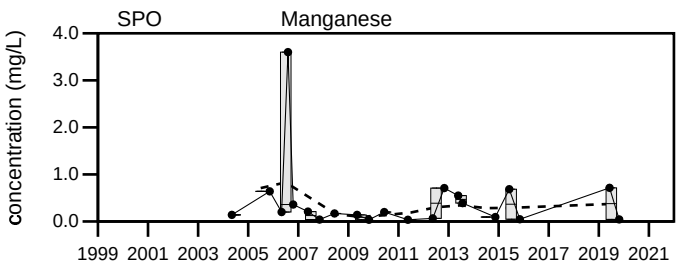



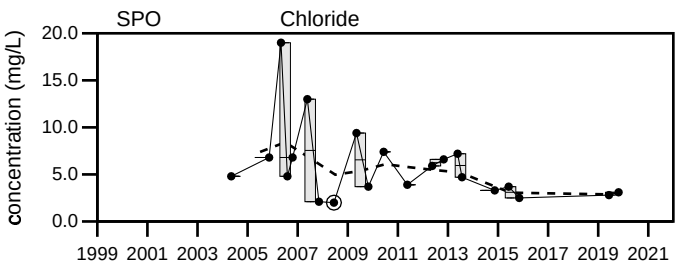



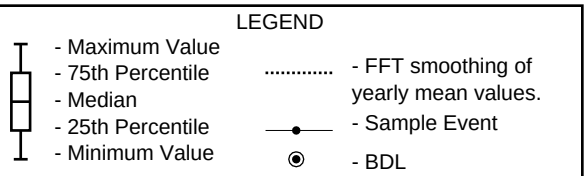



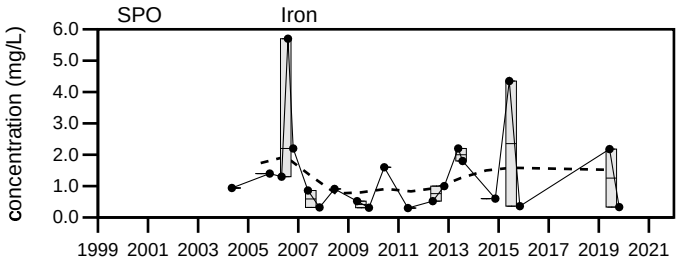



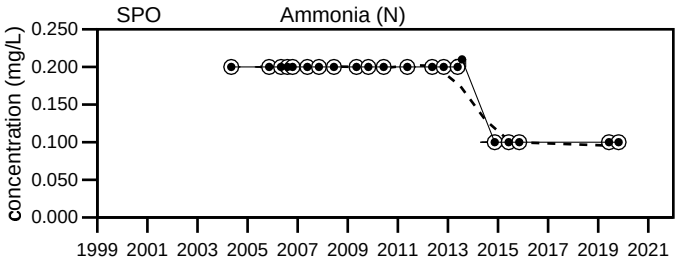



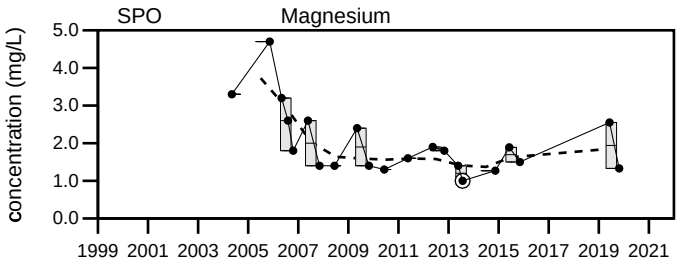

# Dolby Landfill

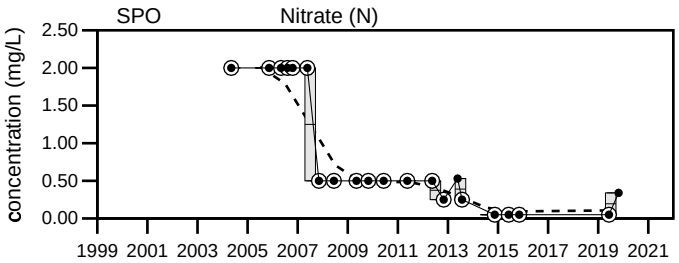
## SPO

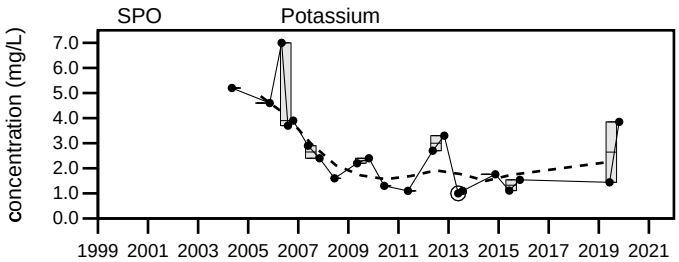
Sevee & Maher Engineers, Inc.

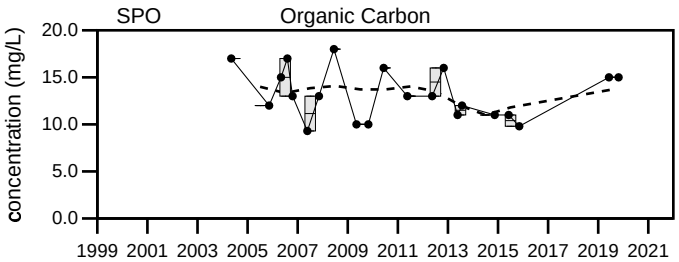


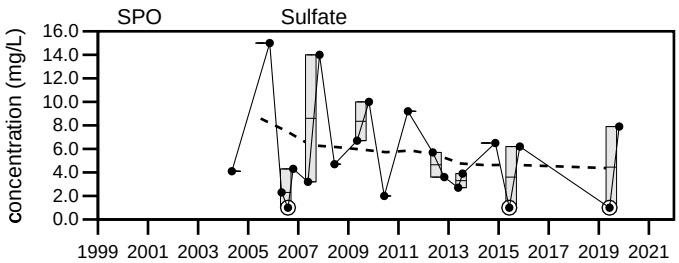



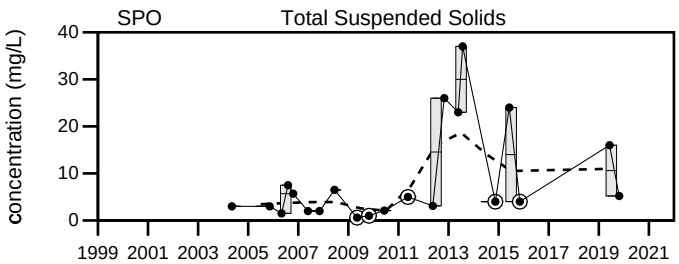



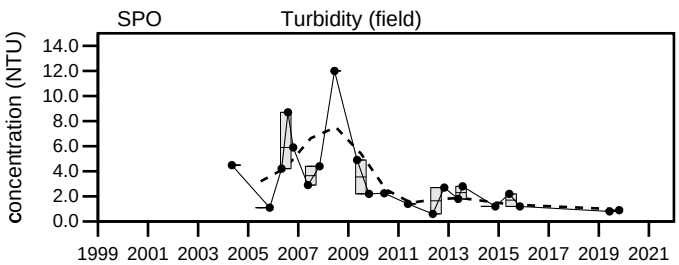



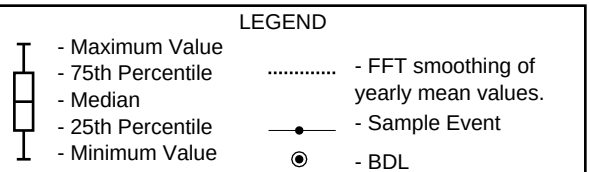




Dolby Landfill

SPO

Sevee & Maher Engineers, Inc.

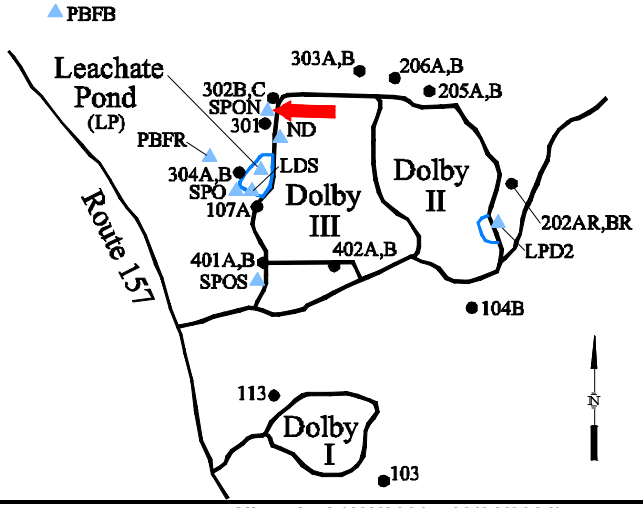
## Well Description

Siltation Pond North

Sampled: **2 Times Annually**

Sampled Since: **May-05**

Sampling Method: **Grab**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | Q2 | Q3 | Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | D | 383 | | 227 | 1483 | 620 | 42 | 37 |
| Dissolved Oxygen (mg/L) | | D | 4.4 | | 2 | 11.5 | 6 | 0.39 | 36 |
| Total Dissolved Solids (mg/L) | | D | 270 | | 140 | 960 | 400 | 28 | 37 |
| Arsenic (mg/L) | | D | 0.008 U | | 0.0016 U | 0.008 U | 0.0061 | 0.000 | 37 |
| Calcium (mg/L) | | D | 66.1 | | 37 | 200 | 87 | 6.3 | 37 |
| Manganese (mg/L) | | D | 2.65 | | 0.0753 | 17 | 4.9 | 0.74 | 37 |
| pH (STU) | | D | 7 | | 6.2 | 8.03 | 7.3 | 0.068 | 37 |
| Alkalinity (CaCO3) (mg/L) | | D | 220 | | 110 | 670 | 280 | 18 | 37 |
| Ca-mg Hardness (CaCO3) (mg/L) | | D | 224 | | 130 | 750 | 310 | 22 | 37 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | D | 220 | | 105 | 640 | 270 | 17 | 37 |
| Sodium (mg/L) | | D | 7.83 | | 2.7 | 36 | 14 | 1.3 | 37 |
| Chloride (mg/L) | | D | 4 | | 2.9 | 49 | 21 | 2 | 37 |
| Iron (mg/L) | | D | **3.59** | | 0.15 | 8.66 | 1.6 | 0.33 | 37 |
| Magnesium (mg/L) | | D | 14.4 | | 5.6 | 61 | 22 | 1.8 | 37 |
| Potassium (mg/L) | | D | ↓3.73 | | 3.8 | 82 | 15 | 2.1 | 37 |
| Sulfate (mg/L) | | D | 28 | | 1 U | 380 | 45 | 12 | 37 |
| Total Suspended Solids (mg/L) | | D | 15 | | 1 U | 30 | 8 | 1.2 | 37 |
| Turbidity (field) (NTU) | | D | 1.3 | | 0.6 | 29.6 | 5 | 1 | 37 |
| Ammonia (N) (mg/L) | | D | 0.1 U | | 0.1 U | 2.3 | 0.52 | 0.097 | 37 |
| Nitrate (N) (mg/L) | | D | 0.05 U | | 0.05 U | 18 | 1.1 | 0.48 | 37 |
| Organic Carbon (mg/L) | | D | 15 | | 9.2 | 30 | 15 | 0.71 | 37 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

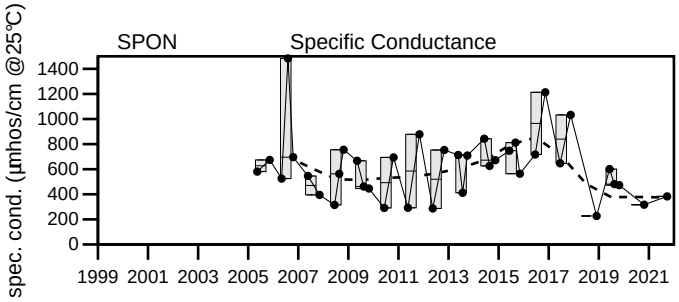
**Applicable Limits:**
Chloride MFCCC=230 mg/L, Ammonia (N) MFCCC=1.4 mg/L, Iron MFCCC=1 mg/L, Arsenic MFCCC=0.15 mg/L

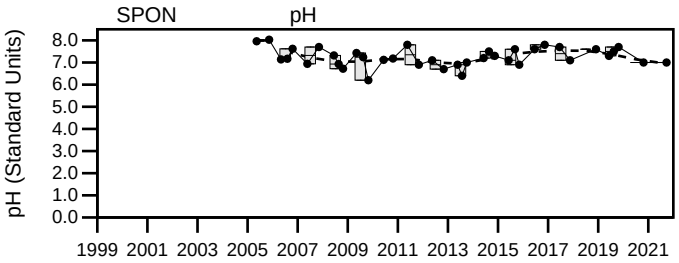
↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

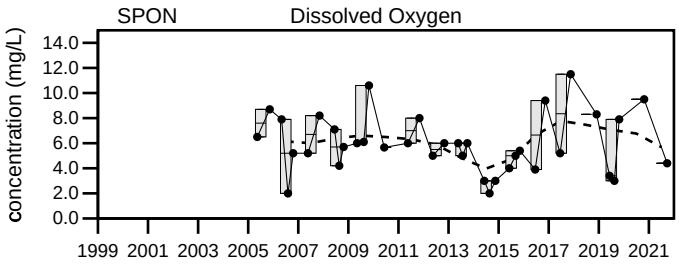
## Comments

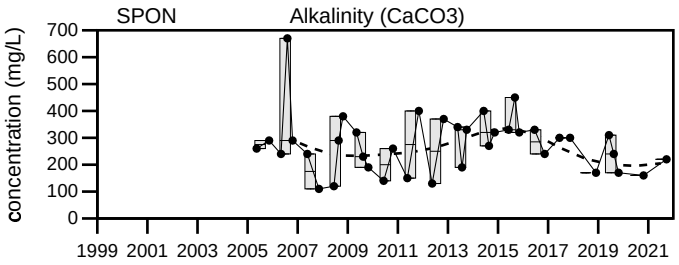
Q2= 6 - 2021
Q3= 9 - 2021

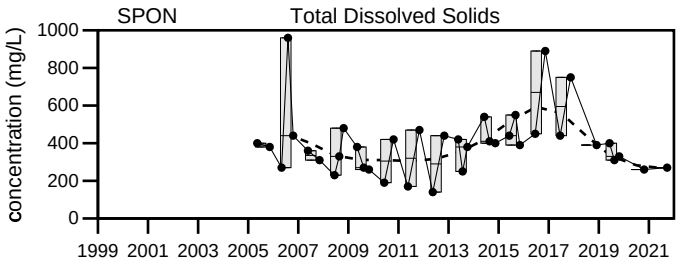
U = Not Detected above the laboratory reporting limit.
D = The sampling location was dry.

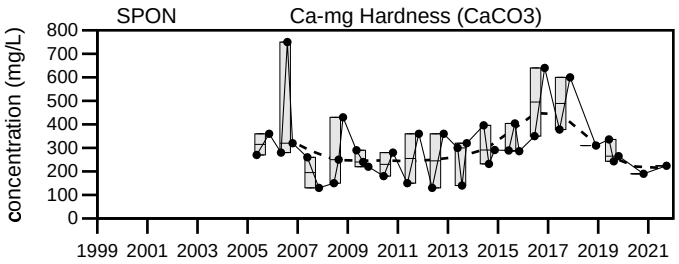


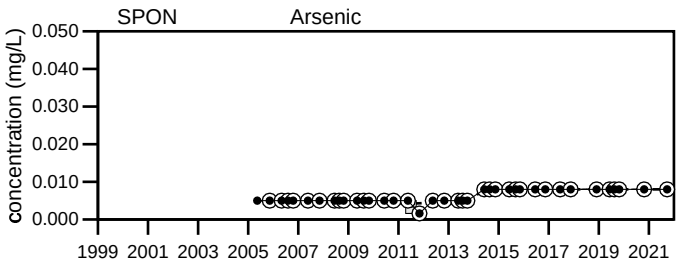



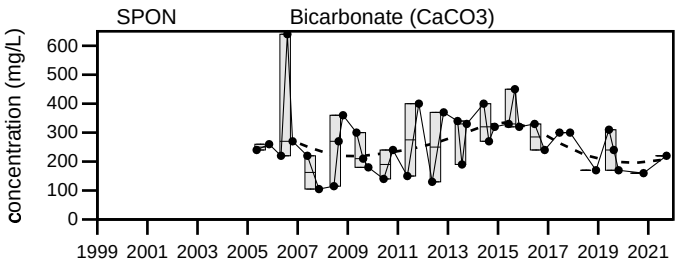



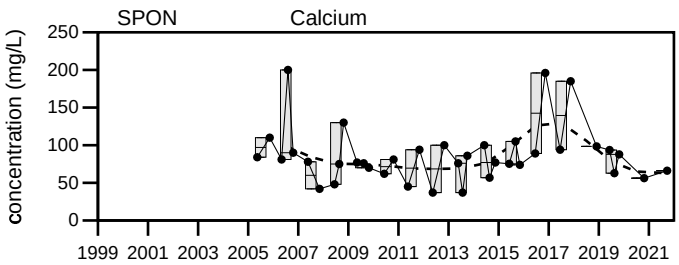



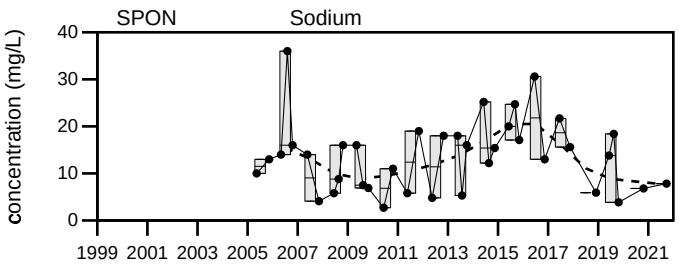



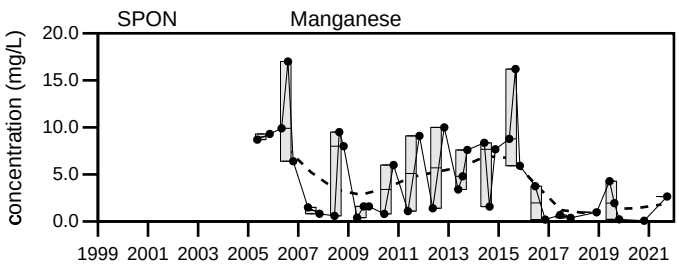



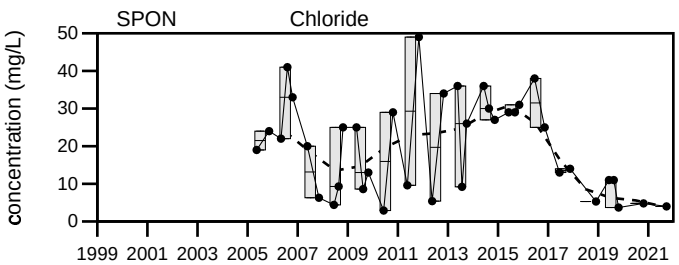



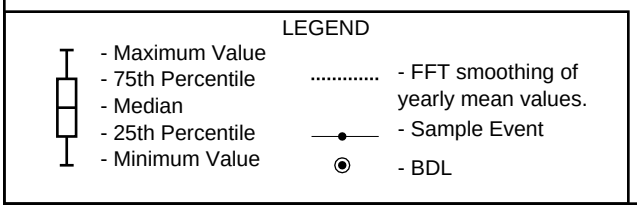



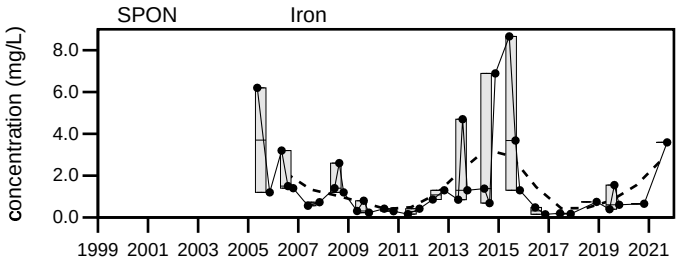



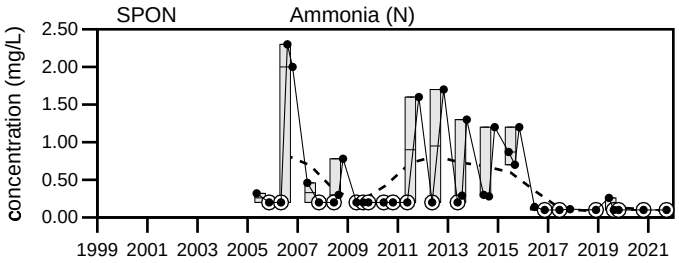



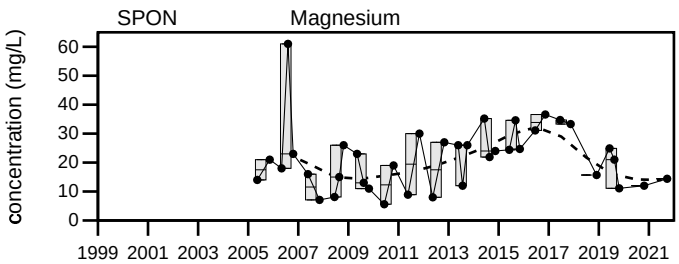

# Dolby Landfill

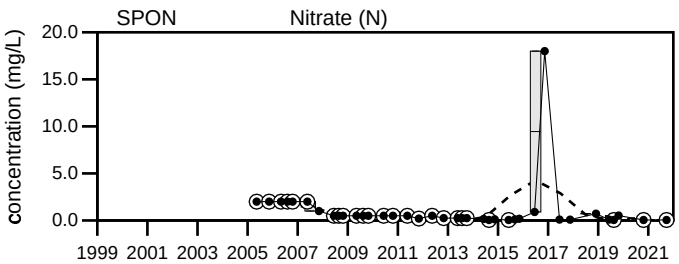
# SPON

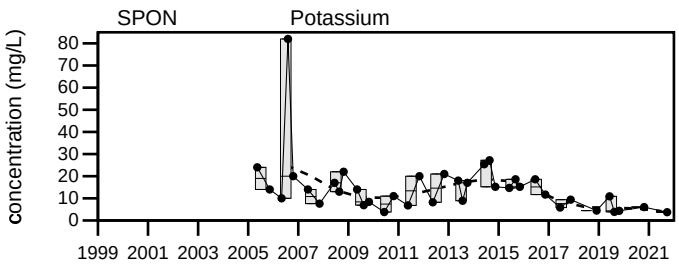
Sevee & Maher Engineers, Inc.

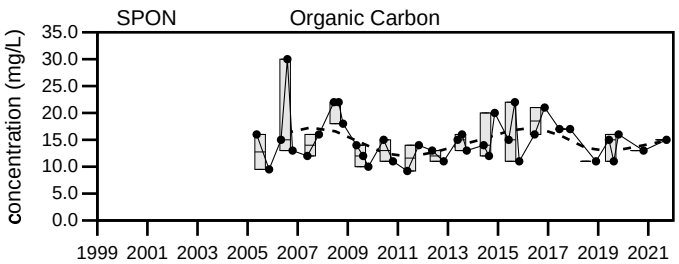


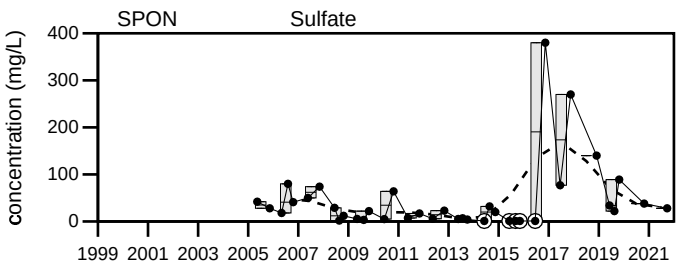



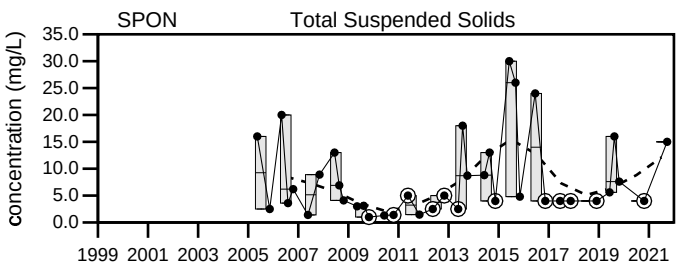



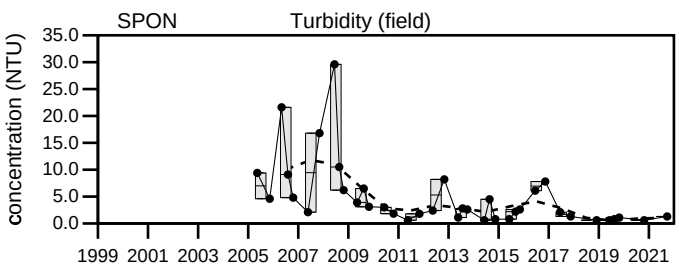



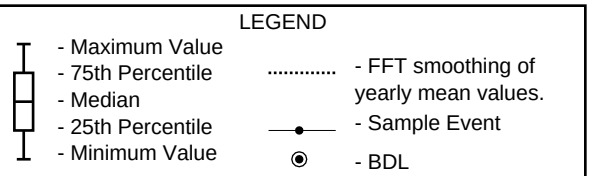




# Dolby Landfill

## SPON

Sevee & Maher Engineers, Inc.

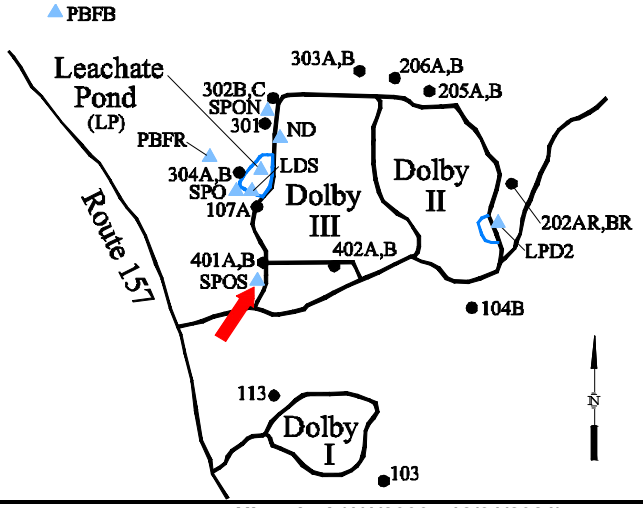
## Well Description

Siltation Pond South

Sampled: **2 Times Annually**

Sampled Since: **May-05**

Sampling Method: **Grab**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 122 | 113 | | 88 | 261 | 150 | 6.3 | 42 |
| Dissolved Oxygen (mg/L) | | 6.6 | 5.1 | | 2 | 12.1 | 6.9 | 0.36 | 42 |
| Total Dissolved Solids (mg/L) | | 98 | 84 | | 16 | 160 | 96 | 5.1 | 42 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0016 U | 0.008 U | 0.0062 | 0.000 | 42 |
| Calcium (mg/L) | | 19.9 | 17.1 | | 10 | 58 | 19 | 1.3 | 42 |
| Manganese (mg/L) | | 2.2 | 0.276 | | 0.01 U | 5.34 | 0.7 | 0.21 | 42 |
| pH (STU) | | 6.9 | 7.2 | | 6.4 | 8.8 | 7.5 | 0.087 | 42 |
| Alkalinity (CaCO3) (mg/L) | | 75 | 60 | | 34 | 100 | 62 | 3.4 | 42 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 69 | 61.7 | | 38 | 190 | 68 | 4.2 | 42 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 75 | 60 | | 34 | 100 | 62 | 3.4 | 42 |
| Sodium (mg/L) | | 2.7 | 3.11 | | 1.5 | 36 | 4.1 | 0.79 | 42 |
| Chloride (mg/L) | | 2 U | 2 U | | 1.1 | 11 | 3.2 | 0.27 | 42 |
| Iron (mg/L) | | **2.84** | **1.25** | | 0.045 | 25 | 1.4 | 0.63 | 42 |
| Magnesium (mg/L) | | 4.66 | 4.6 | | 3.1 | 12 | 5.2 | 0.25 | 42 |
| Potassium (mg/L) | | 1 U | 1 U | | 0.84 | 4.9 | 1.4 | 0.11 | 42 |
| Sulfate (mg/L) | | 1 U | 1 U | | 0.58 | 39 | 4.6 | 1.1 | 42 |
| Total Suspended Solids (mg/L) | | 4 U | ↑8.8 | | 0.32 U | 8.3 U | 3.2 | 0.33 | 42 |
| Turbidity (field) (NTU) | | 0.9 | 0.9 | | 0.3 | 14.9 | 1.7 | 0.39 | 42 |
| Ammonia (N) (mg/L) | | 0.1 U | 0.1 U | | 0.082 U | 0.2 U | 0.15 | 0.008 | 42 |
| Nitrate (N) (mg/L) | | 0.05 U | 0.05 U | | 0.05 U | 2 U | 0.54 | 0.11 | 42 |
| Organic Carbon (mg/L) | | 9 | 11 | | 7.2 | 18 | 10 | 0.39 | 42 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Chloride MFCCC=230 mg/L, Ammonia (N) MFCCC=1.4 mg/L, Iron MFCCC=1 mg/L, Arsenic MFCCC=0.15 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

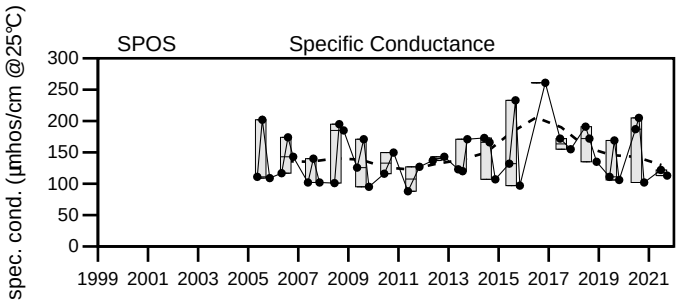
## Comments

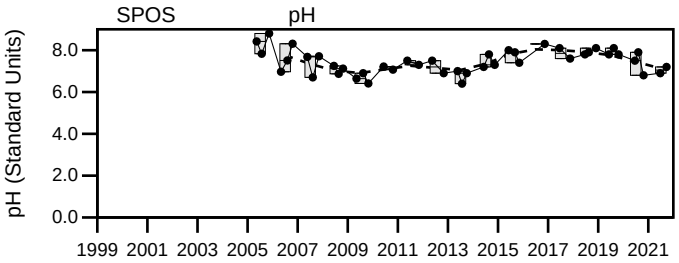
Q2= 6 - 2021

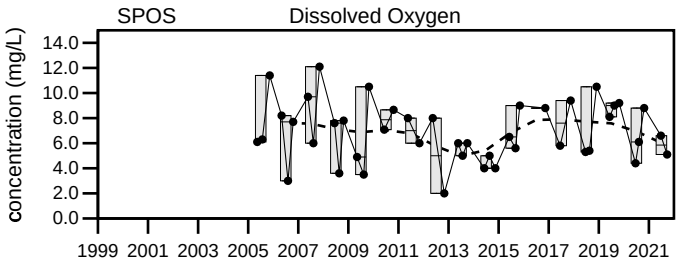
Q3= 9 - 2021

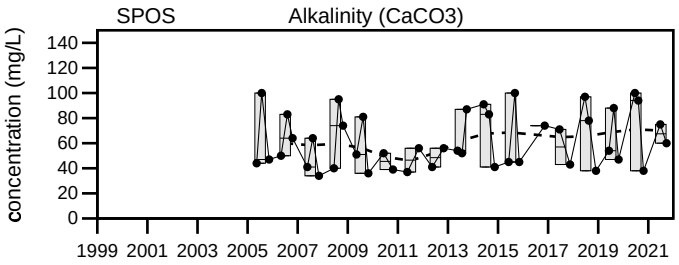
U = Not Detected above the laboratory reporting limit.

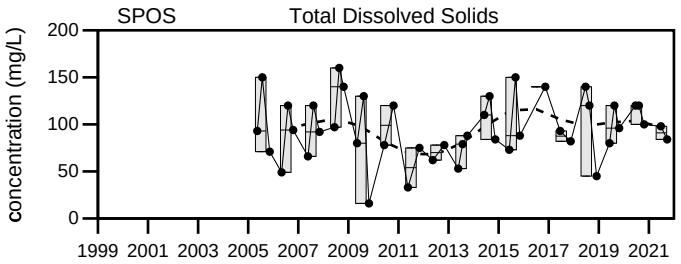
Data Group: 181
Printed: 4/11/2022 10:21

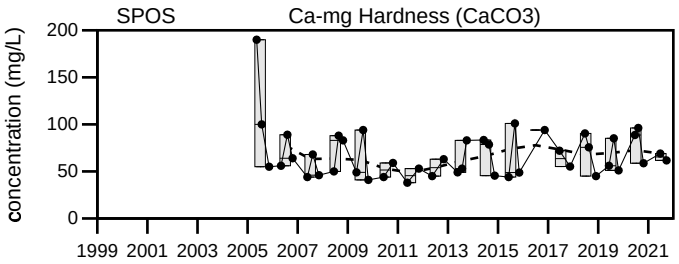


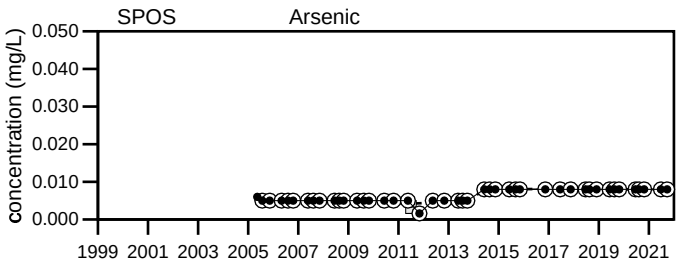



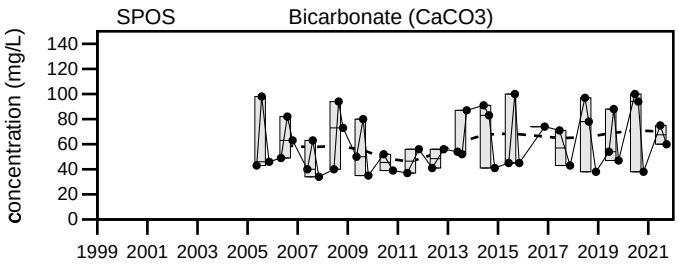



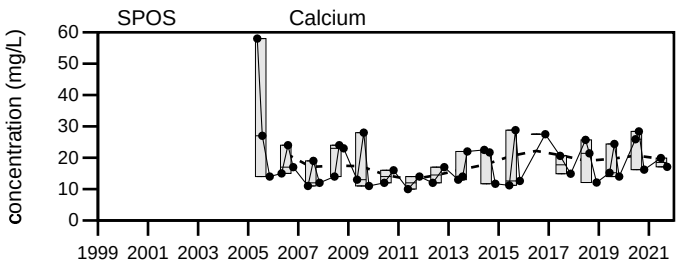



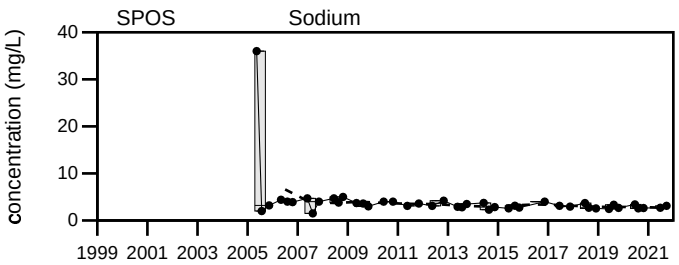



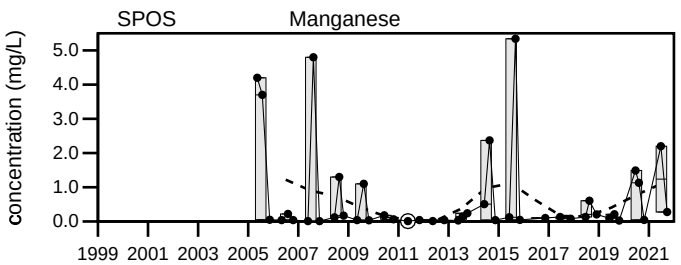



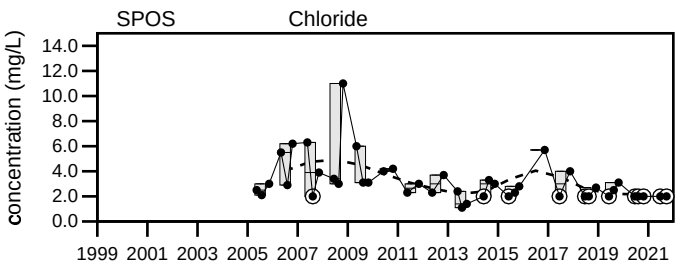



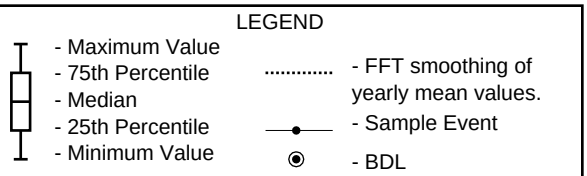



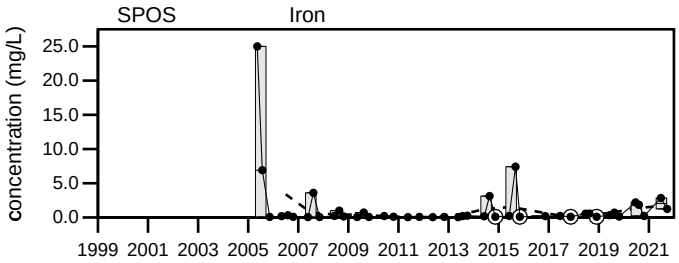



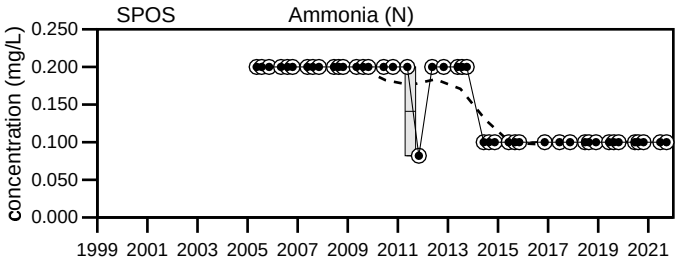



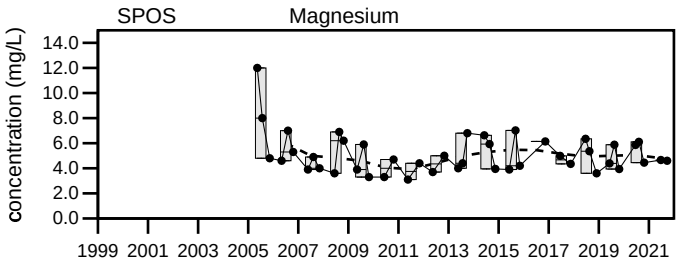

# Dolby Landfill

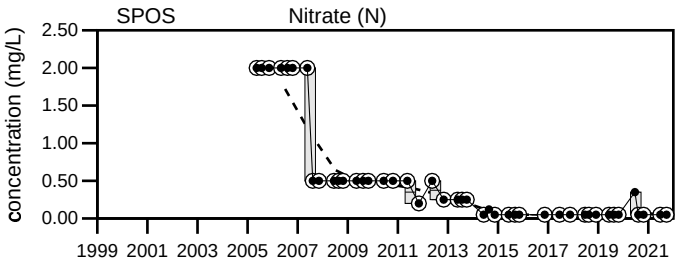
## SPOS

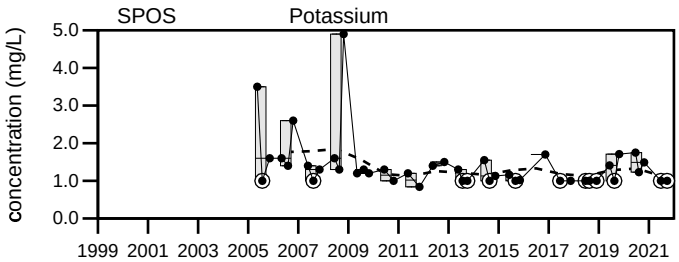
Sevee & Maher Engineers, Inc.

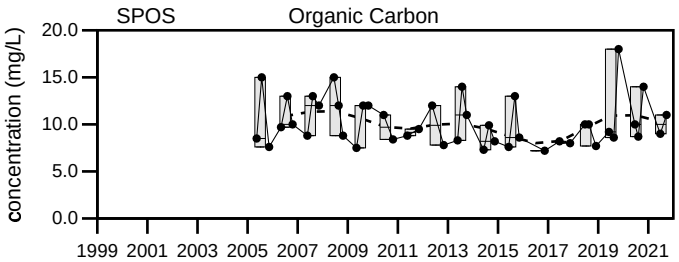


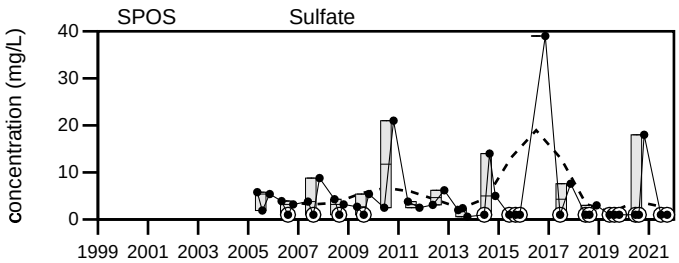



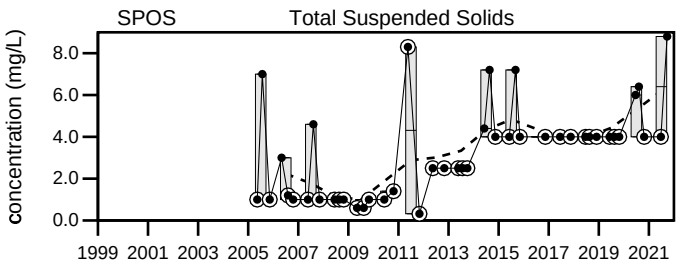



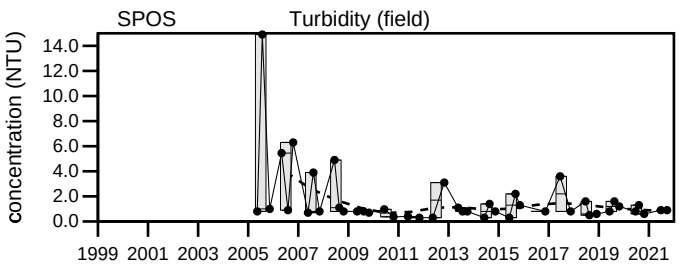



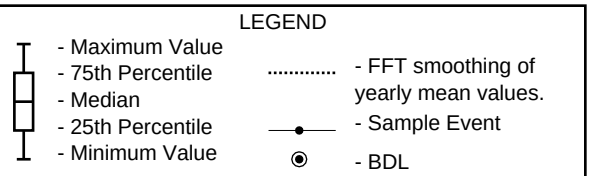




# Dolby Landfill

## SPOS

Sevee & Maher Engineers, Inc.

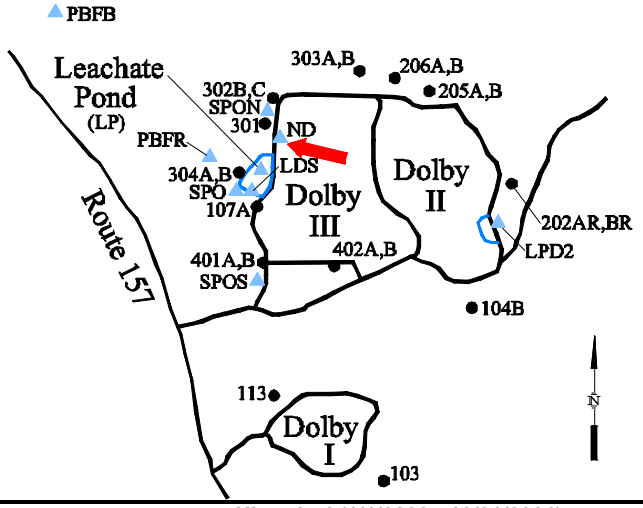
## Well Description

Surface water sample from the ditch to the northwest of Dolby III.

Sampled: **2 Times Annually**

Sampled Since: **Jul-04**

Sampling Method: **Grab**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | Q2 | Q3 | Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | D | D | | 138.5 | 264 | 200 | 25 | 5 |
| Dissolved Oxygen (mg/L) | | D | D | | 6 | 14.5 | 9.6 | 1.7 | 5 |
| Total Dissolved Solids (mg/L) | | D | D | | 73 | 200 | 120 | 24 | 5 |
| Arsenic (mg/L) | | D | D | | 0.005 U | 0.005 U | 0.005 | 3E-11 | 5 |
| Calcium (mg/L) | | D | D | | 26 | 59 | 39 | 7 | 5 |
| Manganese (mg/L) | | D | D | | 0.021 | 0.53 | 0.18 | 0.098 | 5 |
| pH (STU) | | D | D | | 6.86 | 8.58 | 7.8 | 0.3 | 5 |
| Alkalinity (CaCO3) (mg/L) | | D | D | | 56 | 120 | 88 | 13 | 5 |
| Ca-mg Hardness (CaCO3) (mg/L) | | D | D | | 77 | 160 | 110 | 18 | 5 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | D | D | | 53 | 120 | 86 | 13 | 5 |
| Sodium (mg/L) | | D | D | | 1 | 2.4 | 1.6 | 0.28 | 5 |
| Chloride (mg/L) | | D | D | | 2 U | 2 U | 2 | 0 | 5 |
| Iron (mg/L) | | D | D | | 0.053 | 3.5 | 0.91 | 0.66 | 5 |
| Magnesium (mg/L) | | D | D | | 2.6 | 4.9 | 3.3 | 0.43 | 5 |
| Potassium (mg/L) | | D | D | | 2.6 | 7.1 | 4.8 | 0.81 | 5 |
| Sulfate (mg/L) | | D | D | | 4.2 | 21 | 9.9 | 3 | 5 |
| Total Suspended Solids (mg/L) | | D | D | | 1.5 | 160 | 38 | 31 | 5 |
| Turbidity (field) (NTU) | | D | D | | 0.4 | 158 | 37 | 30 | 5 |
| Ammonia (N) (mg/L) | | D | D | | 0.2 U | 0.21 | 0.2 | 0.002 | 5 |
| Nitrate (N) (mg/L) | | D | D | | 0.5 U | 2 U | 1.1 | 0.37 | 5 |
| Organic Carbon (mg/L) | | D | D | | 5 | 21 | 13 | 2.9 | 5 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

**Applicable Limits:**
Chloride MFCCC=230 mg/L, Ammonia (N) MFCCC=1.4 mg/L, Iron MFCCC=1 mg/L, Arsenic MFCCC=0.15 mg/L

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

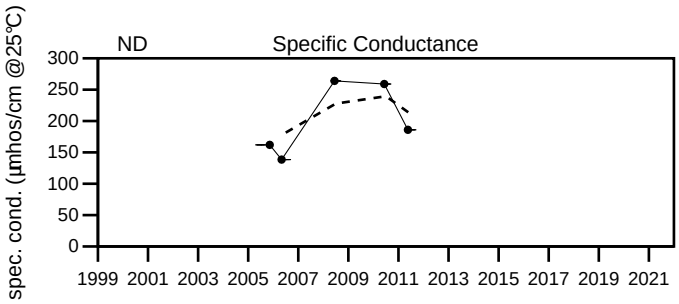
## Comments

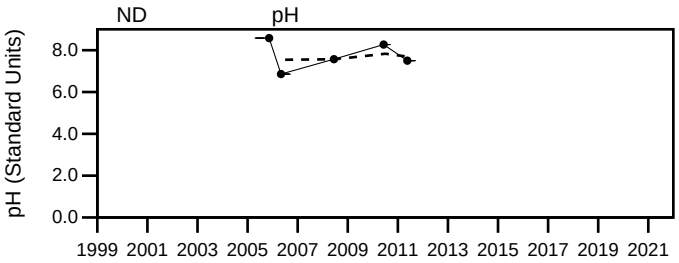
Q2= 6 - 2021 D = The sampling location was dry.

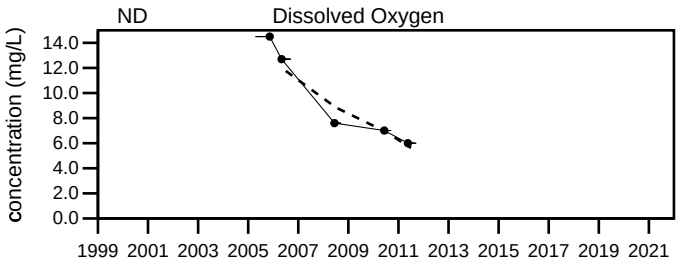
Q3= 9 - 2021

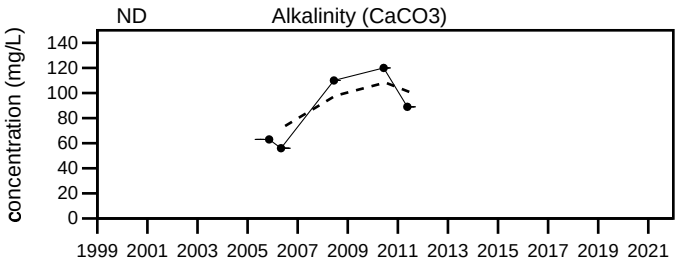
Data Group: 227
Printed: 4/11/2022 10:22

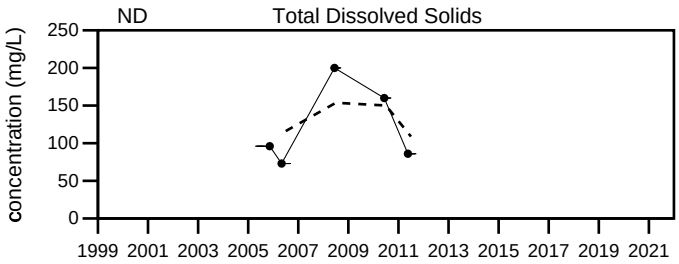
SME SEVEE & MAHER ENGINEERS

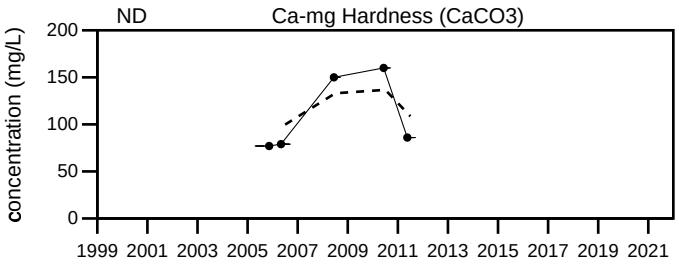


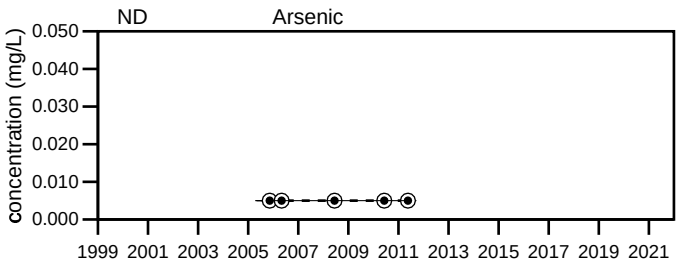



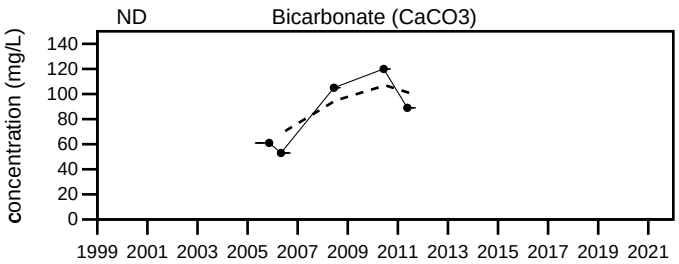



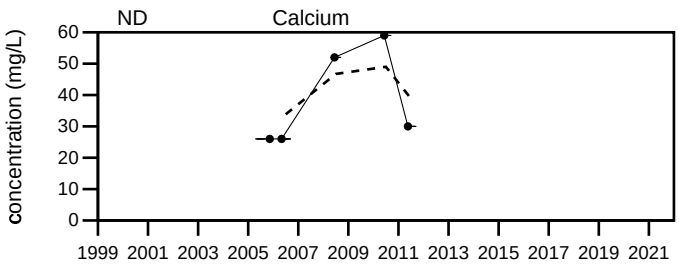



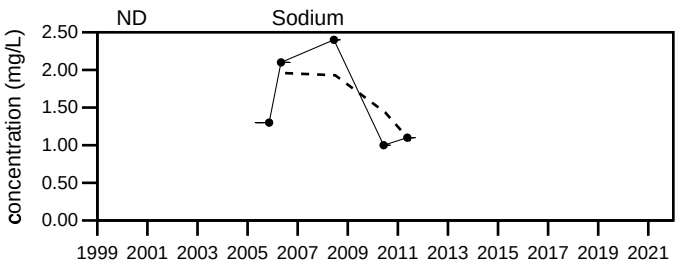



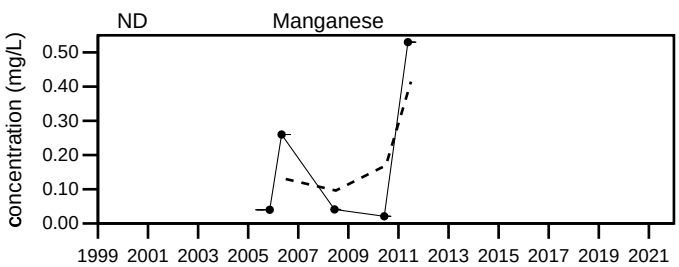



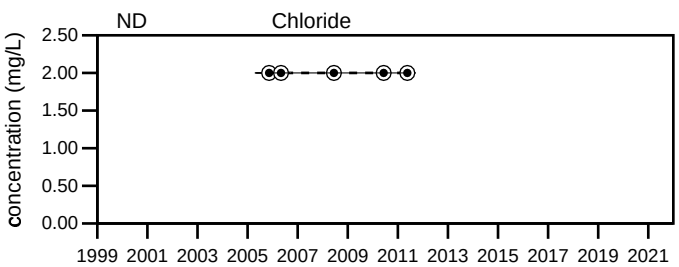



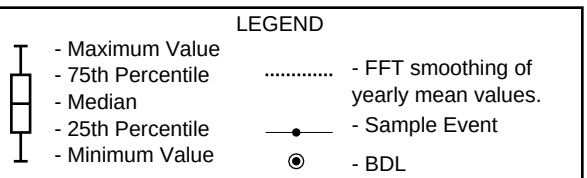



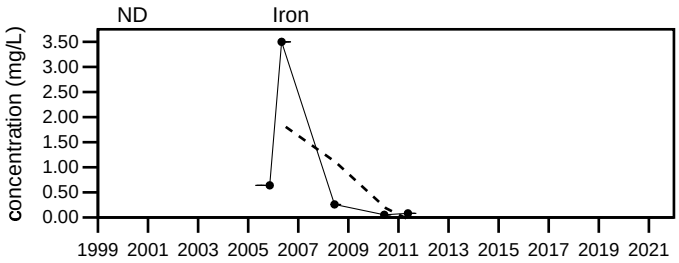



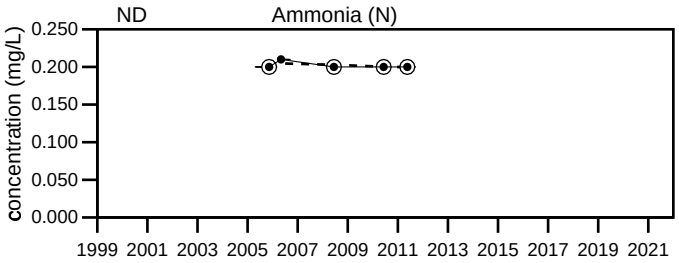



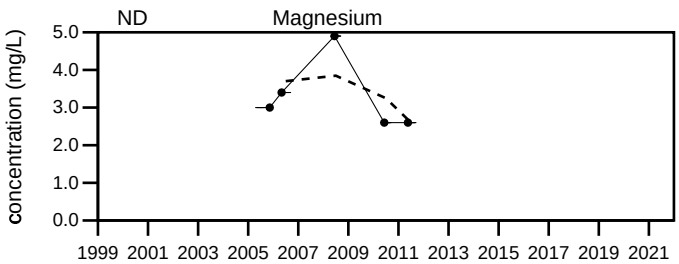

# Dolby Landfill

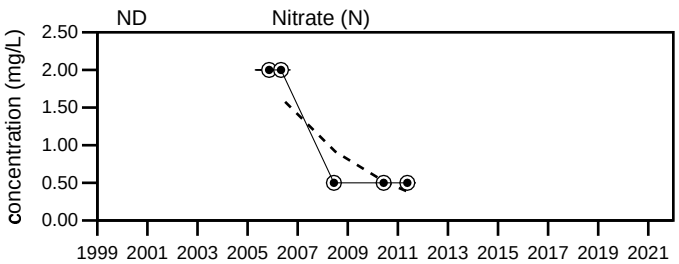
## ND

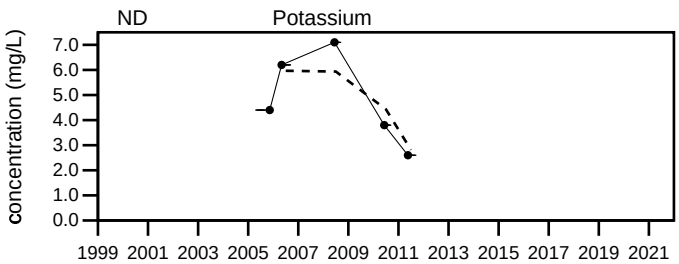
Sevee & Maher Engineers, Inc.

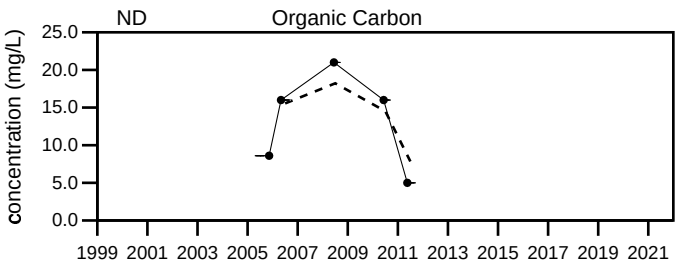


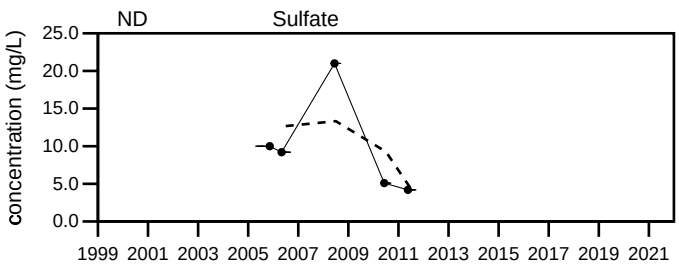



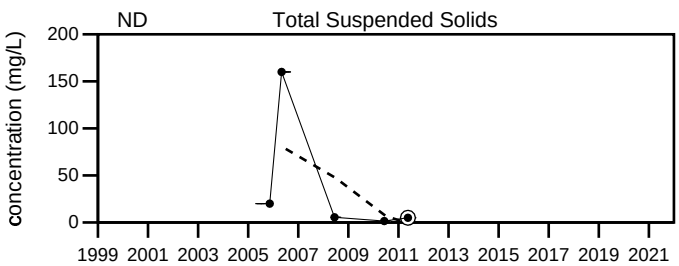



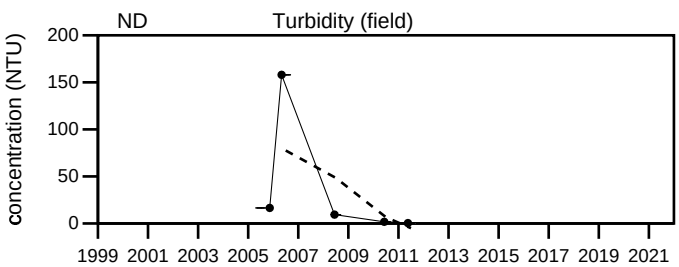



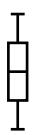



LEGEND

- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value

..... - FFT smoothing of yearly mean values.

—●— - Sample Event

◉ - BDL

# Dolby Landfill

## ND

Sevee & Maher Engineers, Inc.

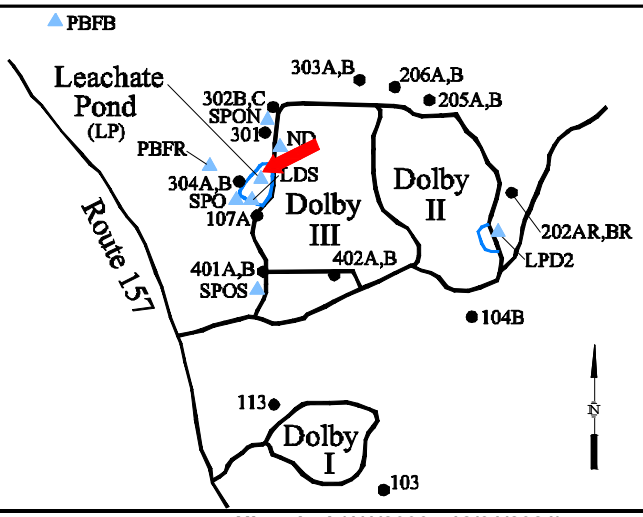
## Well Description

Sample from the leachate pond to the west of landfill.

Sampled: **2 Times Annually**

Sampled Since: **Apr-86**

Sampling Method: **Grab**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 1625 | | 1110 | 630 | to 4760 | 2100 | ± 100 | 62 |
| Dissolved Oxygen (mg/L) | | ↓1.8 | | 9.1 | 2.4 | to 13.9 | 6.9 | ± 0.46 | 30 |
| Total Dissolved Solids (mg/L) | | 1200 | | 710 | 270 | to 3903 | 1400 | ± 84 | 62 |
| Arsenic (mg/L) | | 0.008 U | | 0.008 U | 0.0036 | to 0.068 | 0.02 | ± 0.002 | 60 |
| Calcium (mg/L) | | 112 | | 113 | 30 | to 340 | 150 | ± 9 | 56 |
| Manganese (mg/L) | | 0.761 | | 2.03 | 0.452 | to 20.95 | 6.1 | ± 0.62 | 62 |
| pH (STU) | | 7.7 | | 7.6 | 6.46 | to 8.46 | 7.5 | ± 0.052 | 62 |
| Alkalinity (CaCO3) (mg/L) | | 1000 | | 580 | 260 | to 2700 | 1100 | ± 60 | 62 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 822 | | 523 | 259 | to 2300 | 900 | ± 46 | 62 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 1000 | | 580 | 260 | to 2550 | 1000 | ± 55 | 62 |
| Sodium (mg/L) | | 55.7 | | 23.9 | 9.39 | to 140 | 52 | ± 3.4 | 61 |
| Chloride (mg/L) | | 50 | | 21 | 11 | to 248 | 67 | ± 5.9 | 62 |
| Iron (mg/L) | | 2.15 | | 4.18 | 1.18 | to 76.7 | 12 | ± 1.7 | 62 |
| Magnesium (mg/L) | | 132 | | 58.5 | 24 | to 350 | 120 | ± 8 | 56 |
| Potassium (mg/L) | | 149 | | 63.6 | 26 | to 410 | 150 | ± 10 | 62 |
| Sulfate (mg/L) | | 1 U | | 55 | 1 U | to 320 | 46 | ± 6.7 | 62 |
| Total Suspended Solids (mg/L) | | 4.8 | | 7.2 | 4 U | to 133 | 48 | ± 4.5 | 62 |
| Turbidity (field) (NTU) | | 5.6 | | 17 | 0.8 | to 74.3 | 18 | ± 3.7 | 30 |
| Ammonia (N) (mg/L) | | 8.5 | | 5.6 | 1.1 | to 27 | 11 | ± 0.84 | 62 |
| Nitrate (N) (mg/L) | | 0.084 | | 0.52 | 0.05 U | to 15.5 | 1.7 | ± 0.36 | 62 |
| Organic Carbon (mg/L) | | 40 | | 23 | 9.9 | to 383.4 | 83 | ± 10 | 62 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

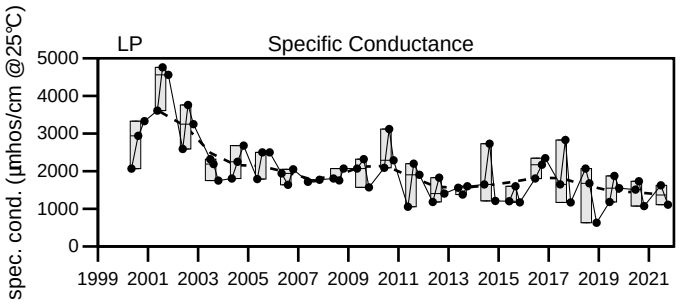
## Comments

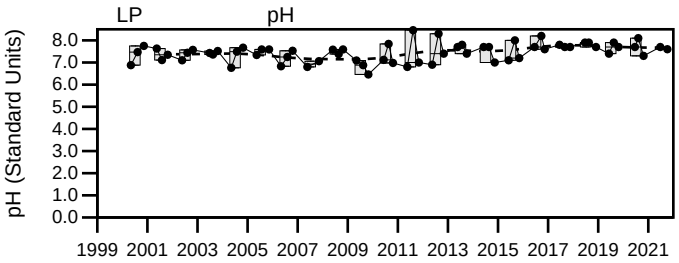
Q2= 6 - 2021
Q4= 10 - 2021

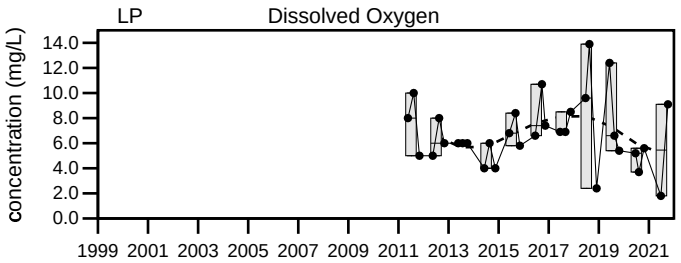
U = Not Detected above the laboratory reporting limit.

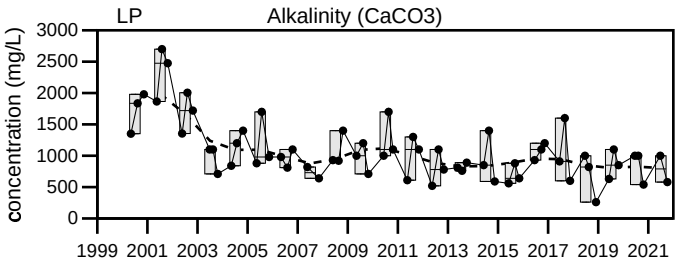
Data Group: 180
Printed: 4/11/2022 09:39

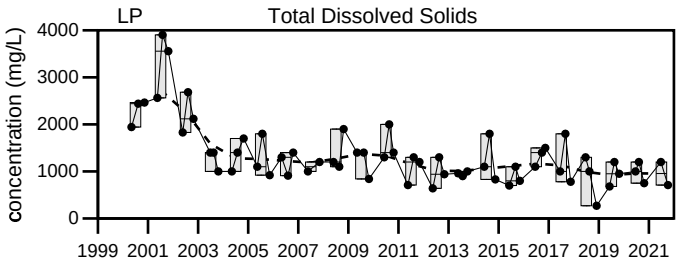
SME SEVEE & MAHER ENGINEERS

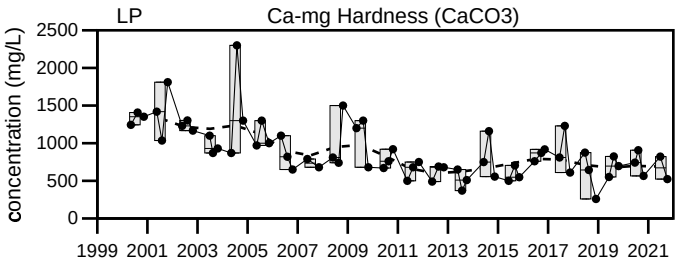


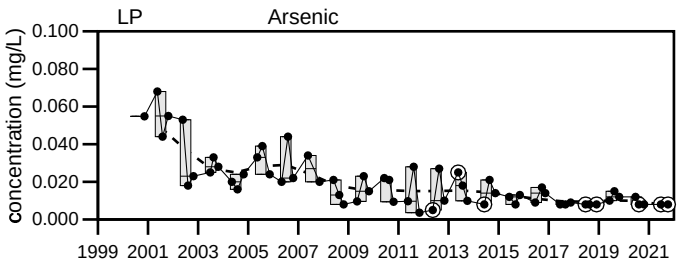



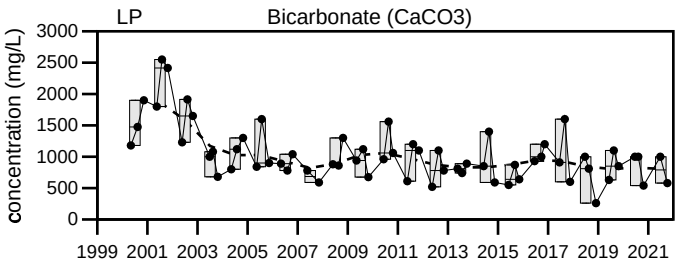



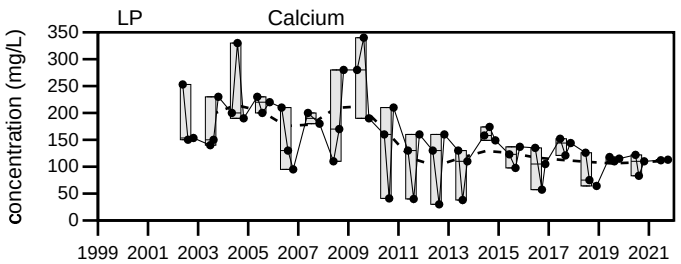



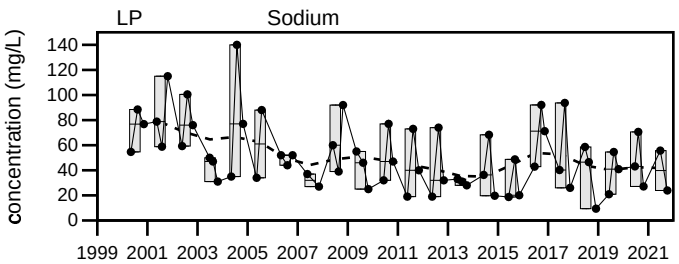



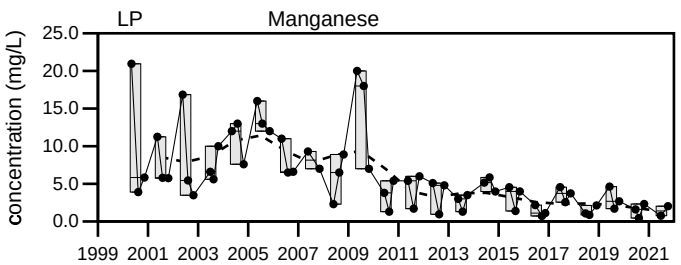



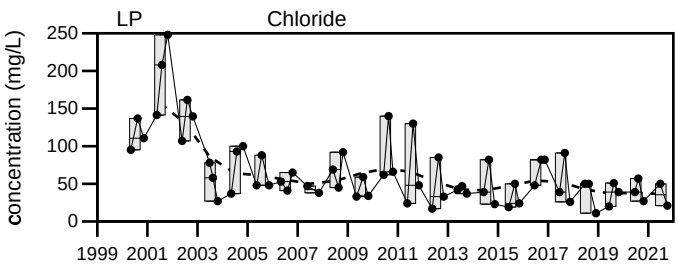



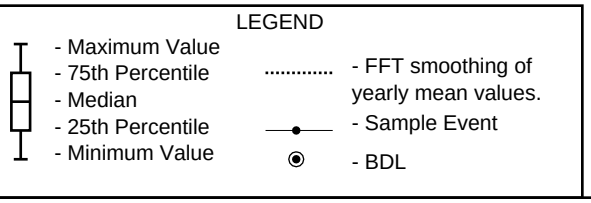



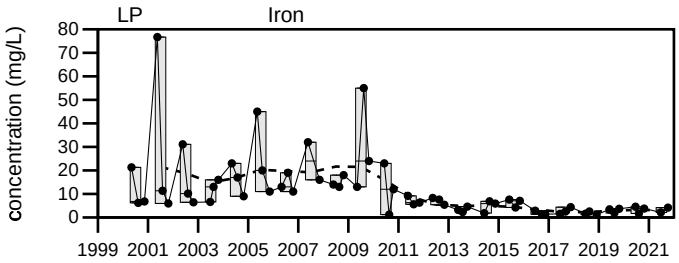



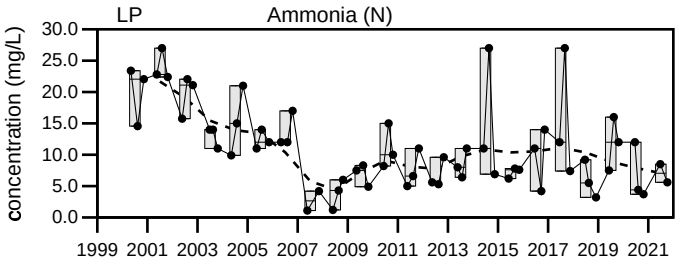



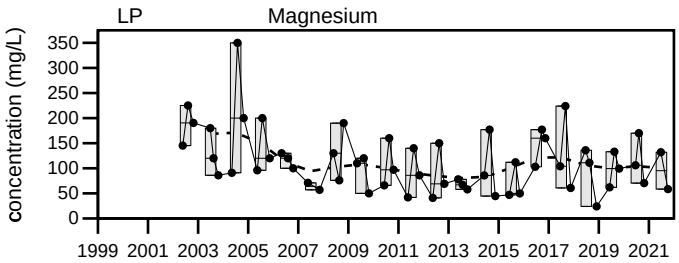

Dolby Landfill

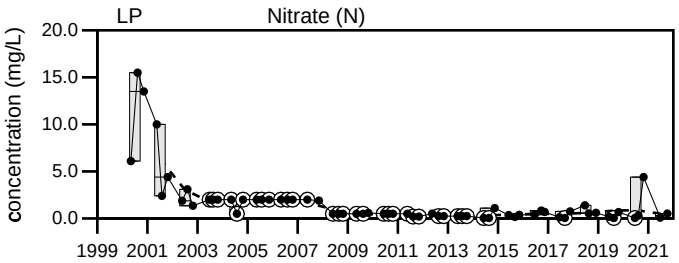
LP

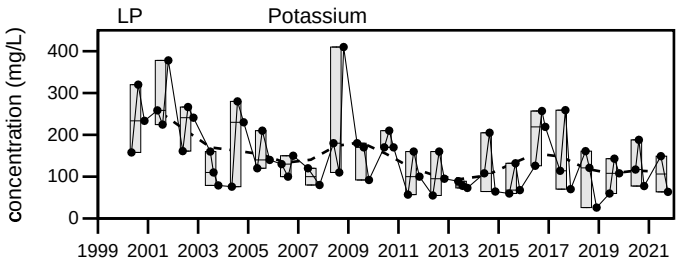
Sevee & Maher Engineers, Inc.

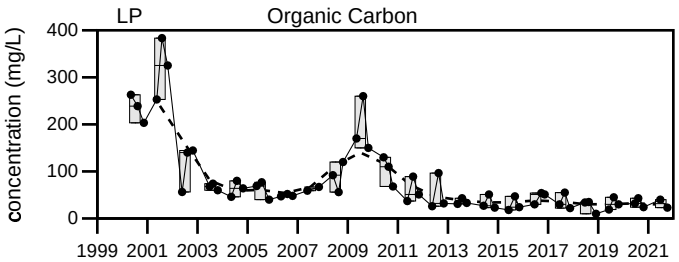


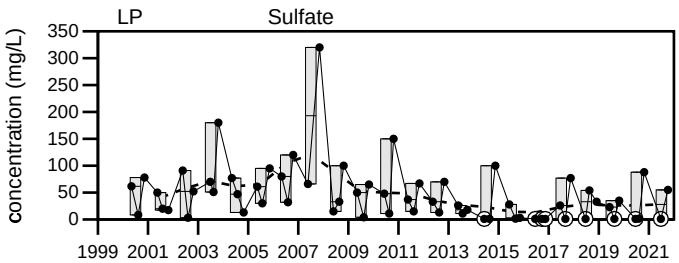



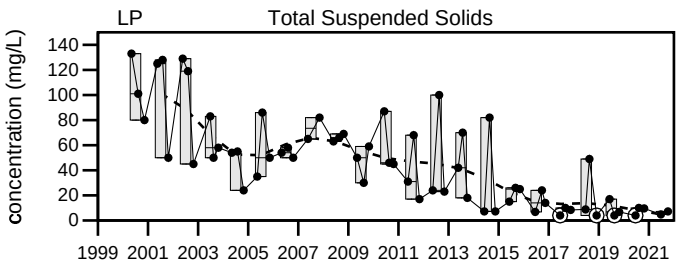



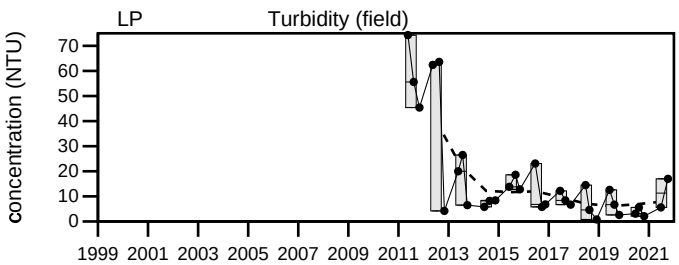



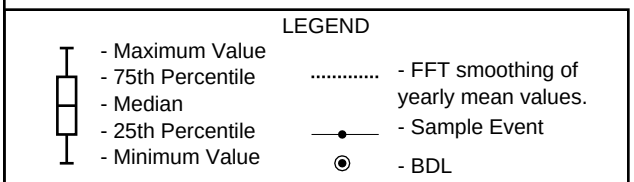




Dolby Landfill

LP

Sevee & Maher Engineers, Inc.

LP

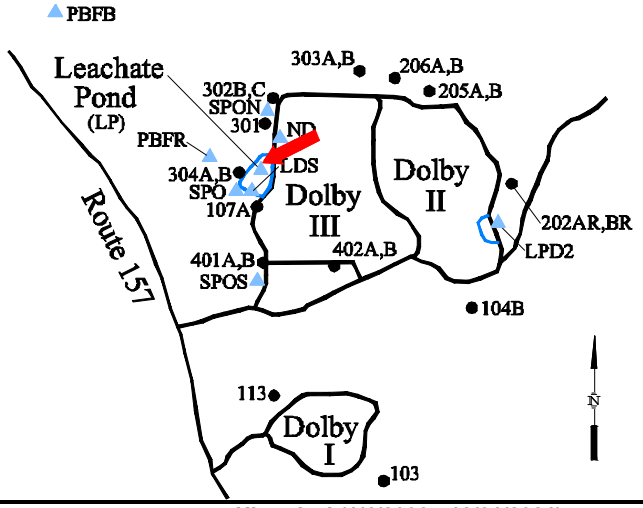

## Well Description

Sample from the leachate pond to the west of landfill.

Sampled: **2 Times Annually**

Sampled Since: **Apr-86**

Sampling Method: **Grab**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 1625 | | 1110 | 630 | 4760 | 2100 | 100 | 62 |
| pH (STU) | | 7.7 | | 7.6 | 6.46 | 8.46 | 7.5 | 0.052 | 62 |
| Temperature (Deg C) | | 21.3 | | 22.4 | 1.7 | 28.7 | 16 | 0.85 | 62 |
| Dissolved Oxygen (mg/L) | | ↓1.8 | | 9.1 | 2.4 | 13.9 | 6.9 | 0.46 | 30 |
| Benzene (ug/L) | | 3 U | | 3 U | 3 U | 30 U | 4.5 | 0.75 | 36 |
| Toluene (ug/L) | | 5 U | | 5 U | 2.8 | 50 U | 6.2 | 1.3 | 36 |
| Ethylbenzene (ug/L) | | 5 U | | 5 U | 3.7 U | 50 U | 6.2 | 1.3 | 36 |
| o-Xylene (ug/L) | | 5 U | | 5 U | 4.4 U | 50 U | 6.2 | 1.3 | 36 |
| m,p-Xylene (ug/L) | | 10 U | | 10 U | 0.96 | 100 U | 11 | 2.6 | 36 |
| C11-C22 AROMATICS (ADJUSTED) (ug/L | | 94 U | | 95 U | 93 U | 280 | 100 | 6.4 | 29 |
| C19-C36 ALIPHATICS (ADJUSTED) (ug/L) | | 94 U | | 95 U | 93 U | 360 | 100 | 9.1 | 29 |
| C5-C8 ALIPHATICS (ADJUSTED) (ug/L) | | 100 U | | 100 U | 75 U | 1000 U | 130 | 35 | 26 |
| C9-C10 AROMATICS (ADJUSTED) (ug/L) | | 100 U | | 100 U | 25 U | 1000 U | 120 | 36 | 26 |
| C9-C12 ALIPHATICS (ADJUSTED) (ug/L) | | 100 U | | 100 U | 25 U | 1000 U | 120 | 36 | 26 |
| C9-C18 ALIPHATICS (ADJUSTED) (ug/L) | | 94 U | | 95 U | 93 U | 104 U | 96 | 0.55 | 29 |
| Methyltertiarybutylether (ug/L) | | 5 U | | 5 U | 2 U | 50 U | 6.3 | 1.5 | 31 |
| Naphthalene (ug/L) | | 5 U | | 5 U | 1.7 U | 50 U | 6.2 | 1.4 | 32 |
| Naphthalene (EPH) (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 2 U | 1.9 | 0.005 | 21 |
| 2-Methylnaphthalene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Acenaphthylene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Acenaphthene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Fluorene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Phenanthrene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Anthracene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Fluoranthene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Pyrene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Benzo(a)Anthracene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Chrysene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Benzo(b)Fluoranthene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Benzo(k)Fluoranthene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Benzo(a)Pyrene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Indeno(1,2,3-c,d)Pyrene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Dibenz(a,h)Anthracene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Benzo(g,h,i)perylene (ug/L) | | 1.9 U | | 1.9 U | 1.9 U | 10 U | 2.9 | 0.4 | 31 |
| Aluminum (mg/L) | | | | 0.3 U | 0.02 U | 0.3 U | 0.17 | 0.024 | 22 |
| Antimony (mg/L) | | | | 0.008 U | 0.00035 U | 0.011 | 0.0057 | 0.000 | 17 |
| Arsenic (mg/L) | | 0.008 U | | 0.008 U | 0.0036 | 0.068 | 0.02 | 0.002 | 60 |

Data Group: 182
Printed: 4/11/2022 10:19

SME SEVEE & MAHER ENGINEERS

Dolby Landfill 2021 Leachate Stats

| | | | | | |
|---|---|---|---|---|---|
| Barium (mg/L) | | 0.0973 | 0.0439 to 0.25 | 0.14 ± 0.011 | 22 |
| Beryllium (mg/L) | | 0.005 U | 0.00002 U to 0.005 U | 0.0031 ± 0.000 | 17 |
| Cadmium (mg/L) | | 0.005 U | 0.00015 to 0.005 U | 0.0026 ± 0.000 | 17 |
| Calcium (mg/L) | 112 | 113 | 30 to 340 | 150 ± 9 | 56 |
| Chromium (mg/L) | | 0.01 U | 0.0036 to 0.01 U | 0.0071 ± 0.000 | 22 |
| Cobalt (mg/L) | | 0.01 U | 0.0064 to 0.05 U | 0.035 ± 0.004 | 22 |
| Copper (mg/L) | | 0.025 U | 0.00028 U to 0.025 U | 0.01 ± 0.002 | 22 |
| Iron (mg/L) | 2.15 | 4.18 | 1.18 to 76.7 | 12 ± 1.7 | 62 |
| Lead (mg/L) | | 0.005 U | 0.00077 U to 0.005 | 0.0036 ± 0.000 | 22 |
| Magnesium (mg/L) | 132 | 58.5 | 24 to 350 | 120 ± 8 | 56 |
| Manganese (mg/L) | 0.761 | 2.03 | 0.452 to 20.95 | 6.1 ± 0.62 | 62 |
| Nickel (mg/L) | | 0.01 U | 0.005 to 0.022 | 0.012 ± 0.000 | 22 |
| Potassium (mg/L) | 149 | 63.6 | 26 to 410 | 150 ± 10 | 62 |
| Selenium (mg/L) | | 0.01 U | 0.005 U to 0.016 | 0.0095 ± 0.000 | 22 |
| Silver (mg/L) | | 0.01 U | 0.001 U to 0.01 U | 0.007 ± 0.001 | 17 |
| Sodium (mg/L) | 55.7 | 23.9 | 9.39 to 140 | 52 ± 3.4 | 61 |
| Thallium (mg/L) | | 0.015 U | 0.00125 U to 0.02 | 0.0084 ± 0.002 | 17 |
| Zinc (mg/L) | | 0.02 U | 0.005 U to 0.021 U | 0.014 ± 0.001 | 22 |
| Ammonia (N) (mg/L) | 8.5 | 5.6 | 1.1 to 27 | 11 ± 0.84 | 62 |
| Nitrate (N) (mg/L) | 0.084 | 0.52 | 0.05 U to 15.5 | 1.7 ± 0.36 | 62 |
| Total Phosphorus Mixed Forms (PO4 and | 0.1 U | 0.1 U | 0.022 to 1.364 | 0.27 ± 0.036 | 61 |
| Total Dissolved Solids (mg/L) | 1200 | 710 | 270 to 3903 | 1400 ± 84 | 62 |
| Total Suspended Solids (mg/L) | 4.8 | 7.2 | 4 U to 133 | 48 ± 4.5 | 62 |
| Sulfate (mg/L) | 1 U | 55 | 1 U to 320 | 46 ± 6.7 | 62 |
| Ca-mg Hardness (CaCO3) (mg/L) | 822 | 523 | 259 to 2300 | 900 ± 46 | 62 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | 1000 | 580 | 260 to 2550 | 1000 ± 55 | 62 |
| Alkalinity (CaCO3) (mg/L) | 1000 | 580 | 260 to 2700 | 1100 ± 60 | 62 |
| Organic Carbon (mg/L) | 40 | 23 | 9.9 to 383.4 | 83 ± 10 | 62 |
| Chloride (mg/L) | 50 | 21 | 11 to 248 | 67 ± 5.9 | 62 |
| Turbidity (field) (NTU) | 5.6 | 17 | 0.8 to 74.3 | 18 ± 3.7 | 30 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

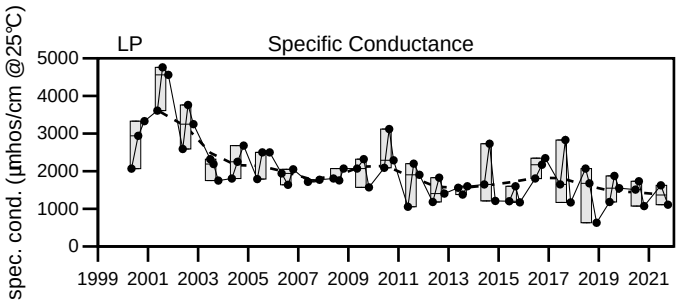
## Comments

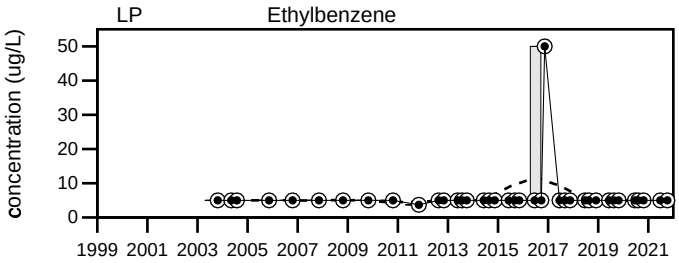
Q2= 6 - 2021 U = Not Detected above the laboratory reporting limit.

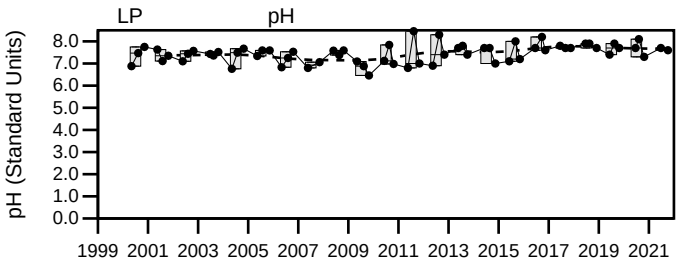
Q4= 10 - 2021

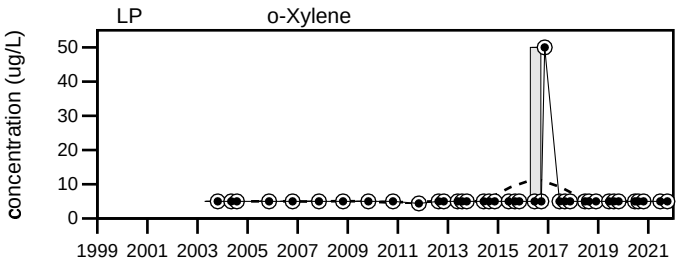
Data Group: 182
Printed: 4/11/2022 10:19

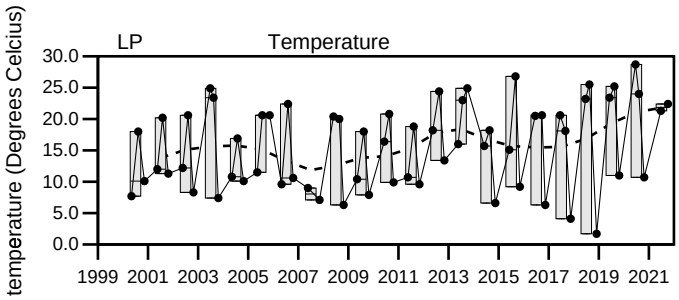
SME SEVEE & MAHER ENGINEERS

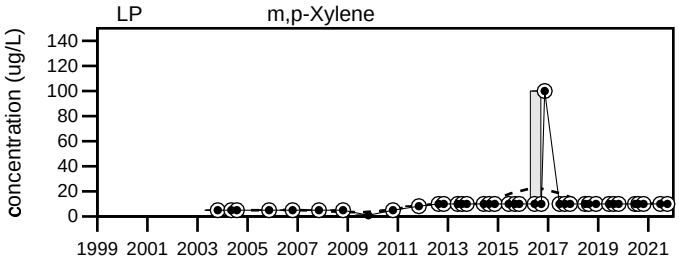


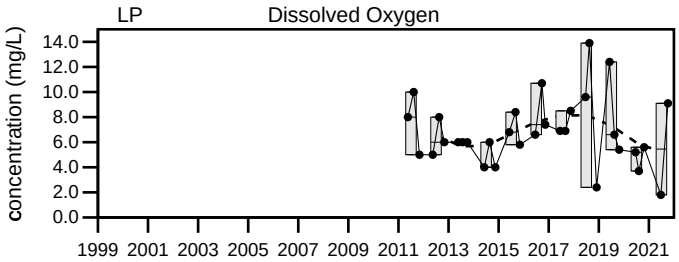



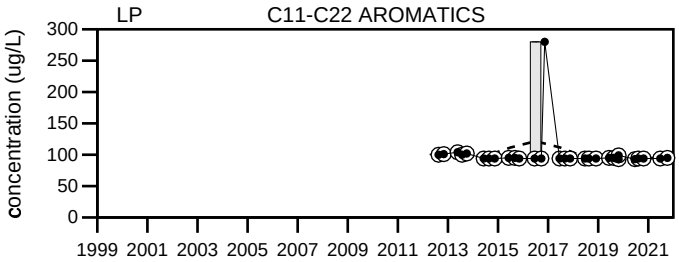



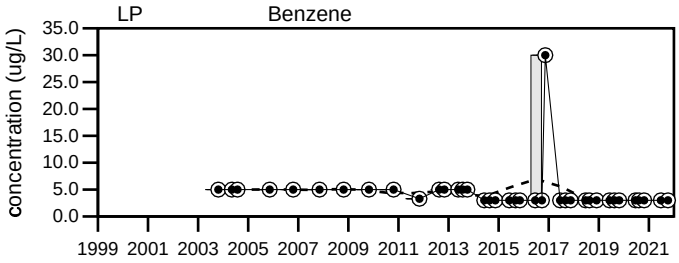



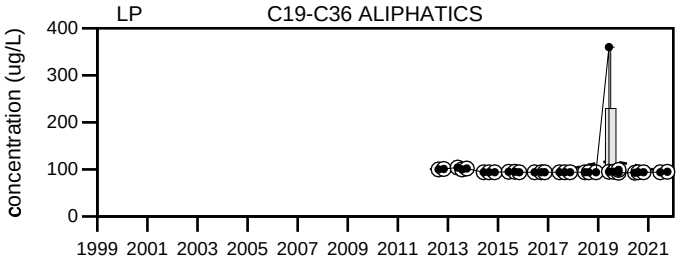



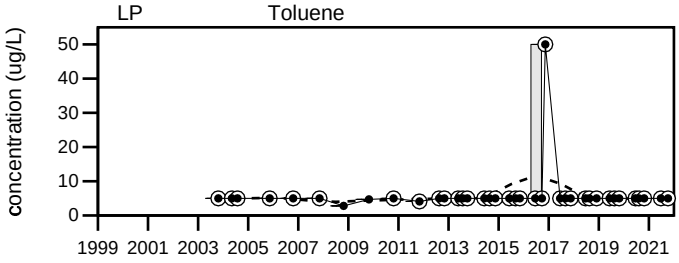



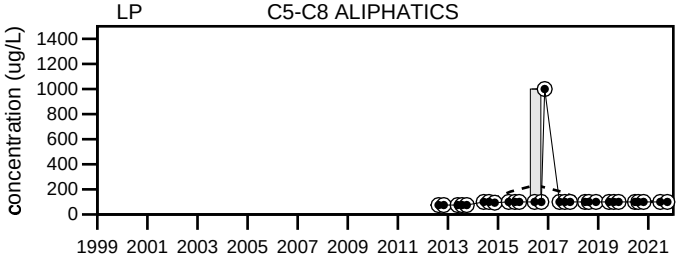



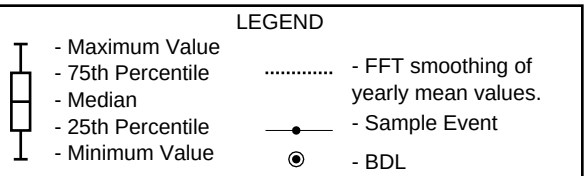



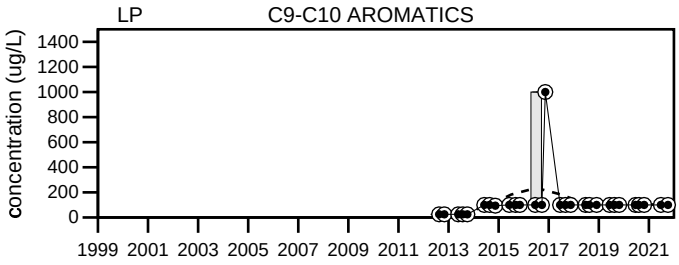



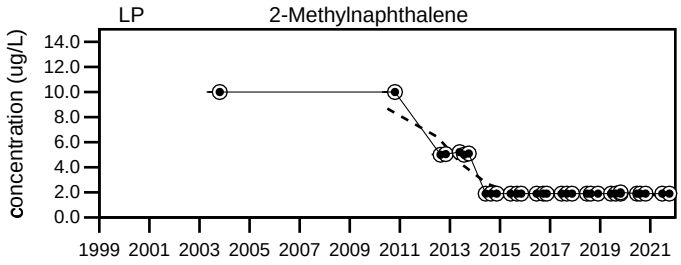



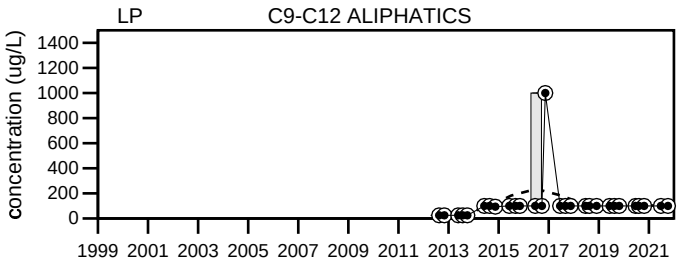

# Dolby Landfill

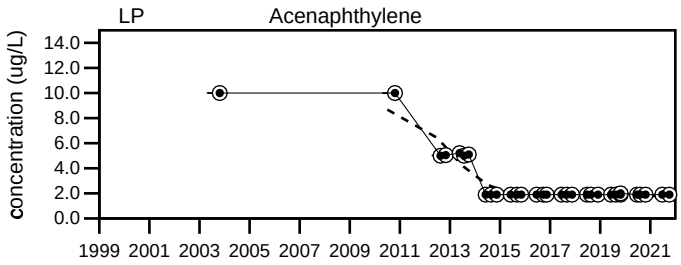
## LP

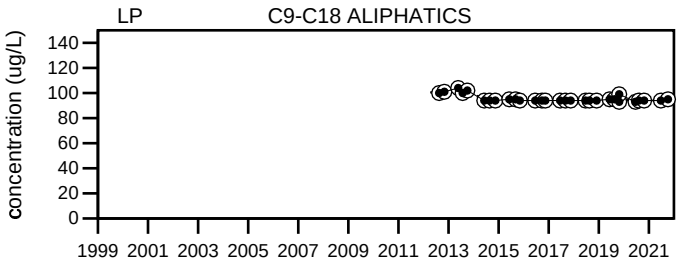
Sevee & Maher Engineers, Inc.

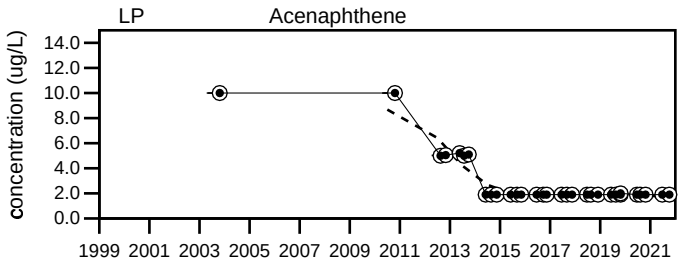


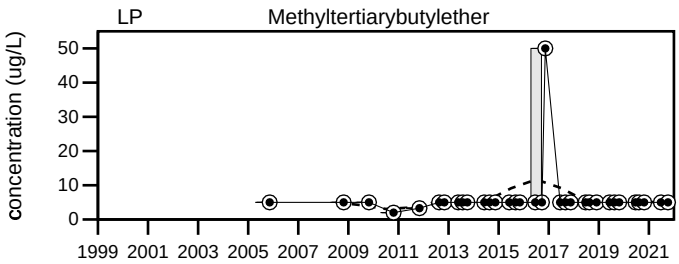



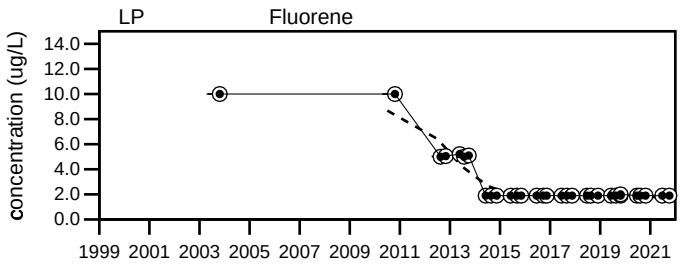



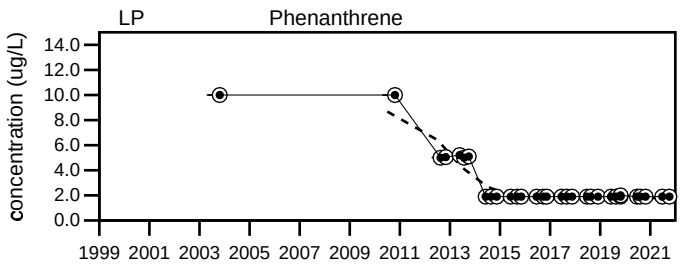



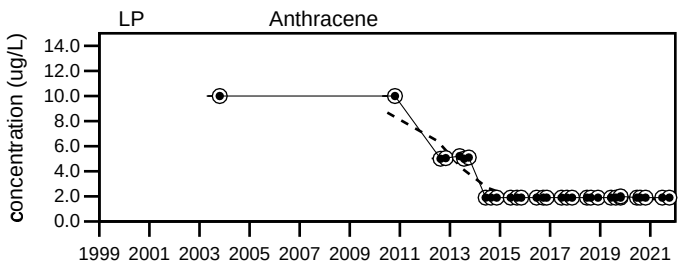



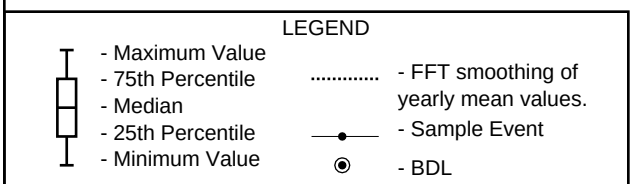



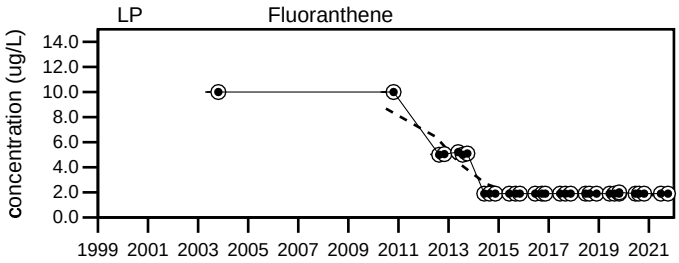



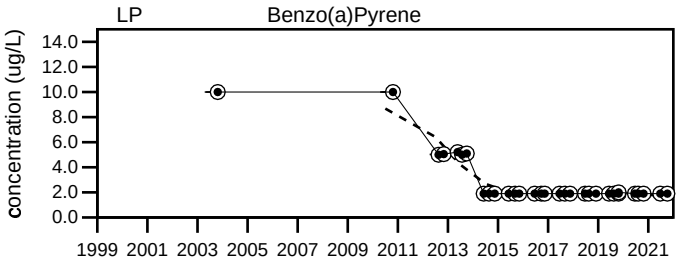



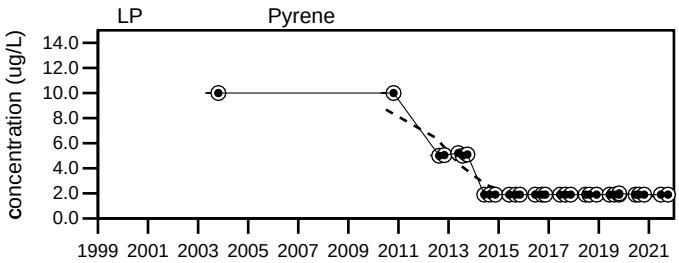

# Dolby Landfill

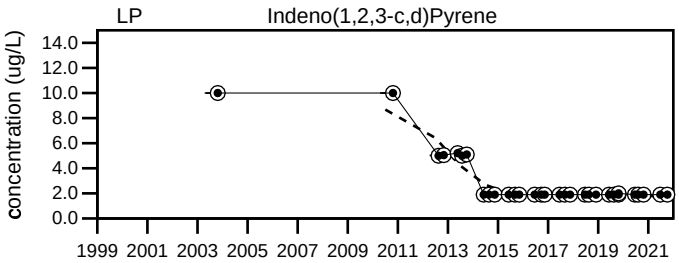
## LP

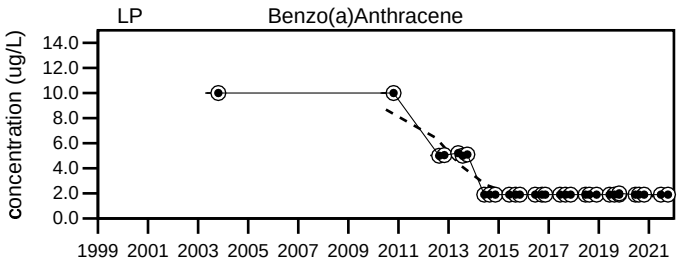
Sevee & Maher Engineers, Inc.

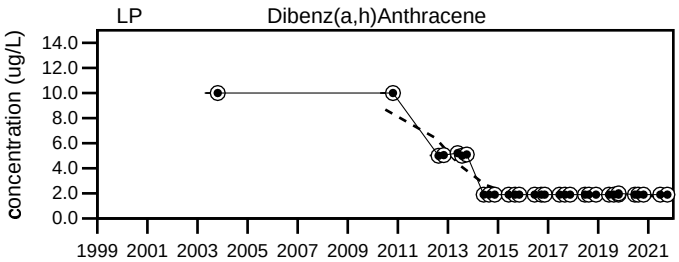


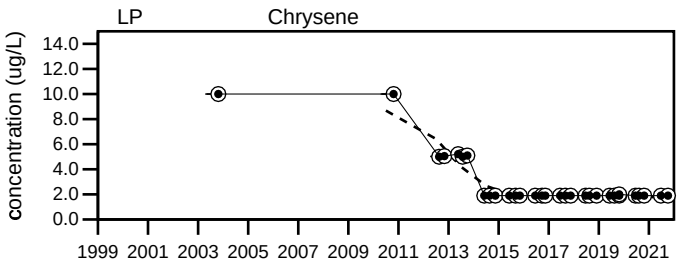



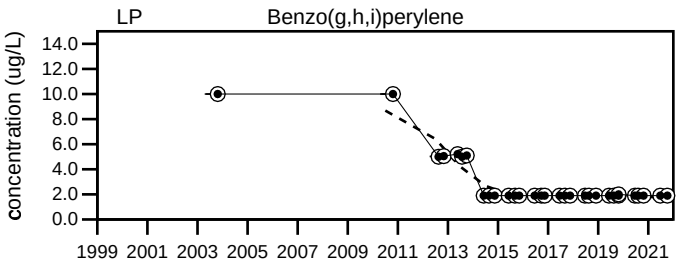



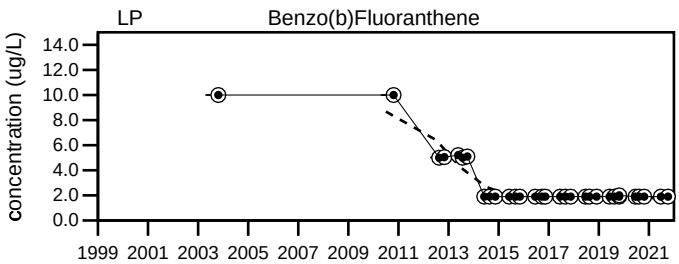



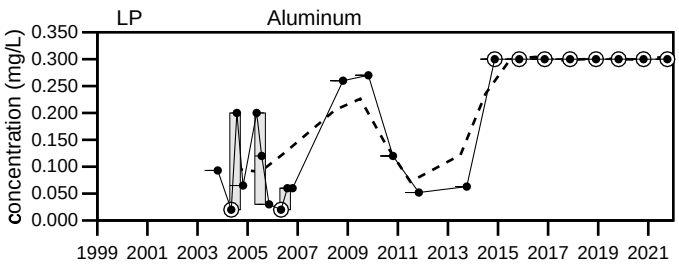



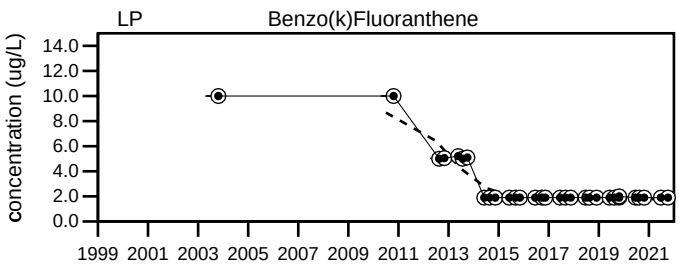



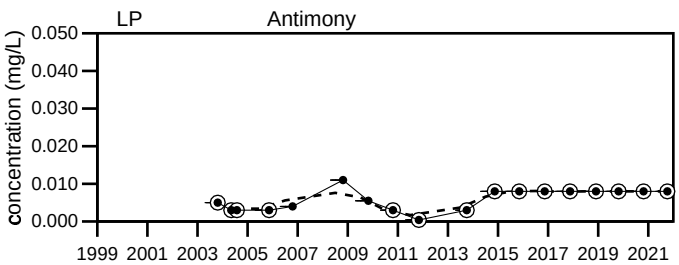



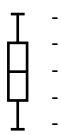



LEGEND

- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value

..... - FFT smoothing of yearly mean values.

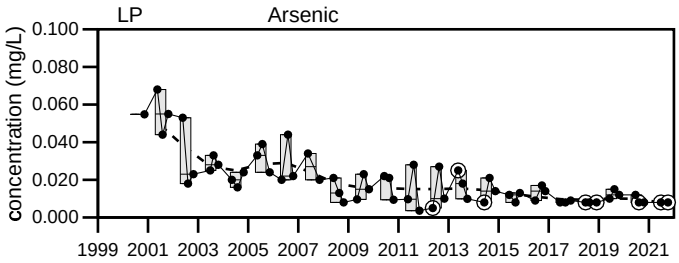
- Sample Event

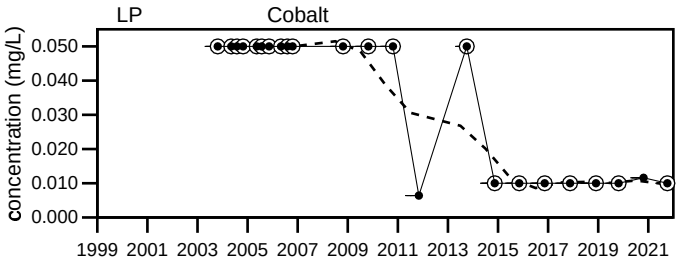
- BDL

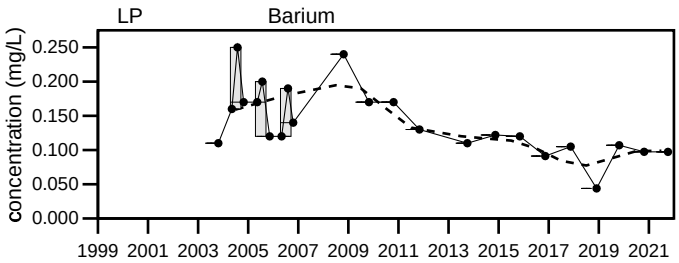
# Dolby Landfill

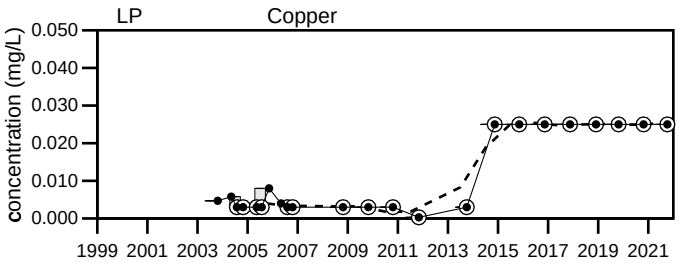
# LP

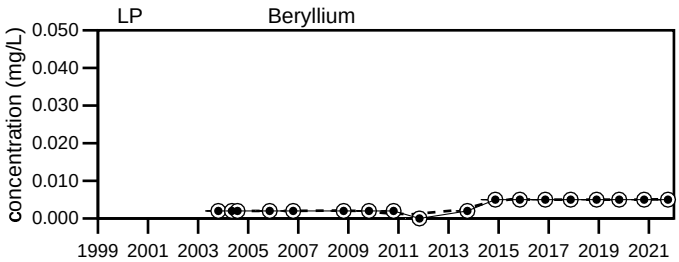
Sevee & Maher Engineers, Inc.

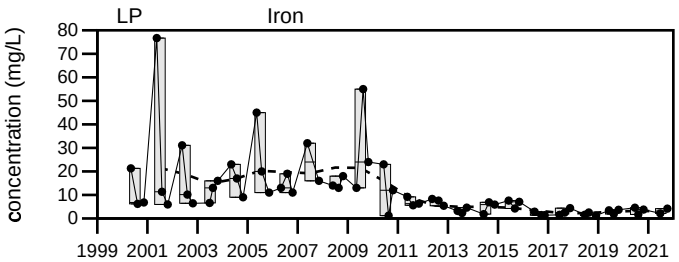


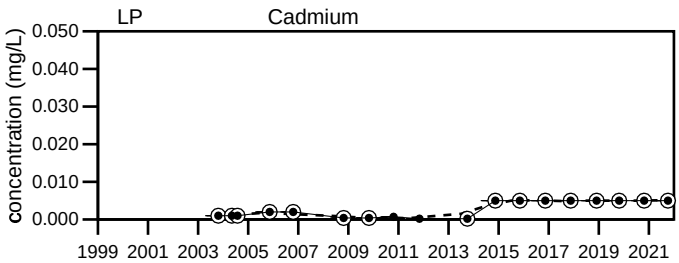



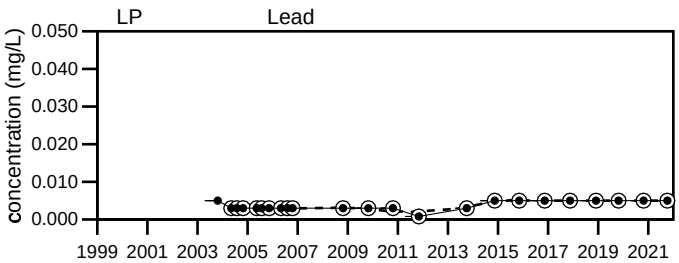



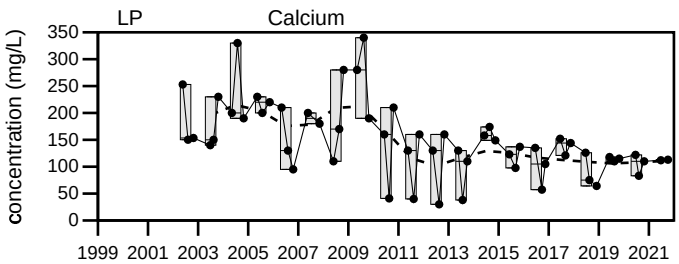



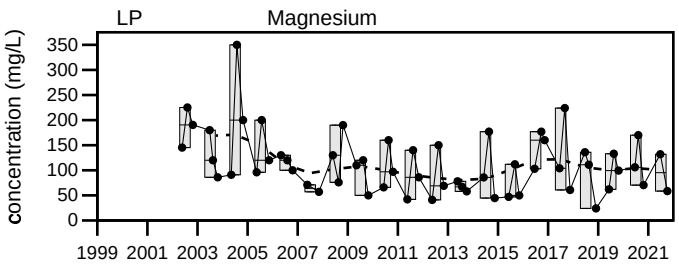



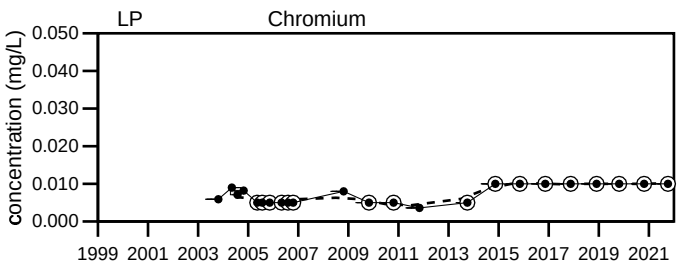



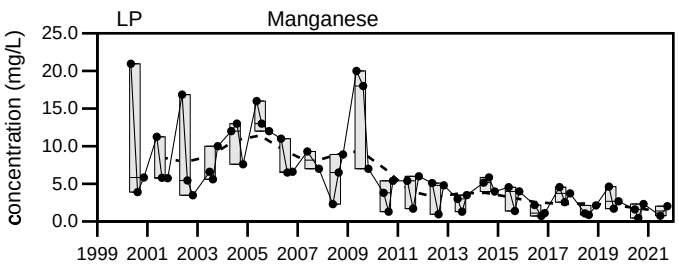



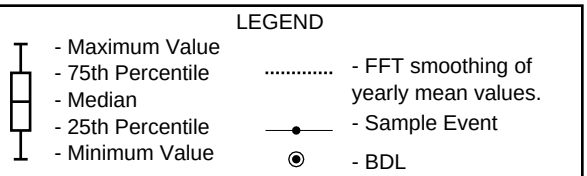



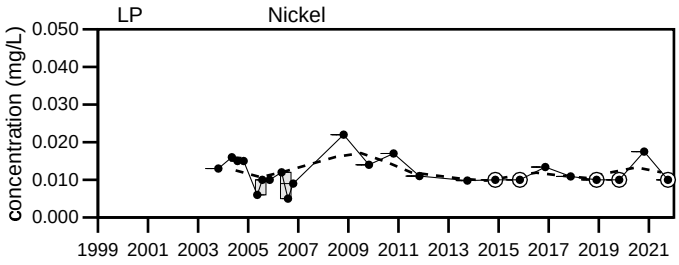



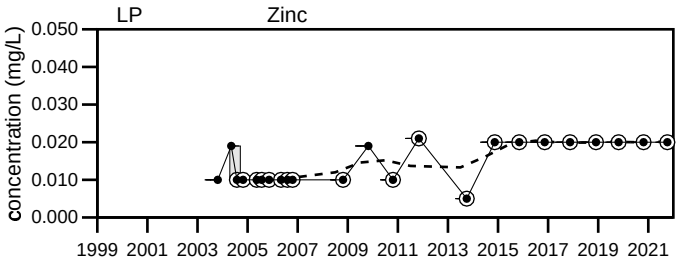



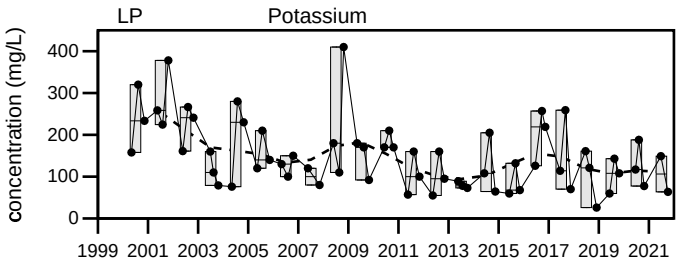

Dolby Landfill

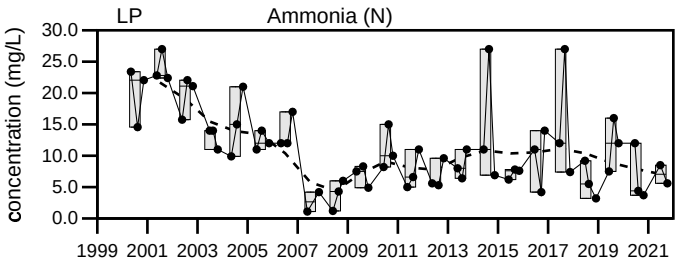
LP

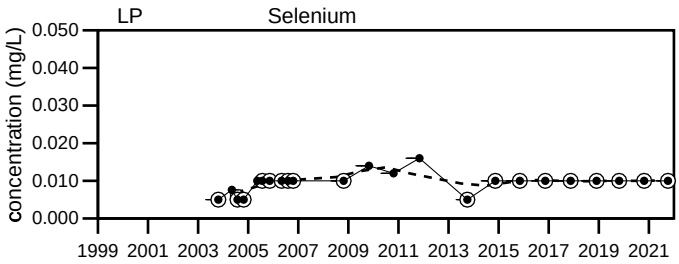
Sevee & Maher Engineers, Inc.

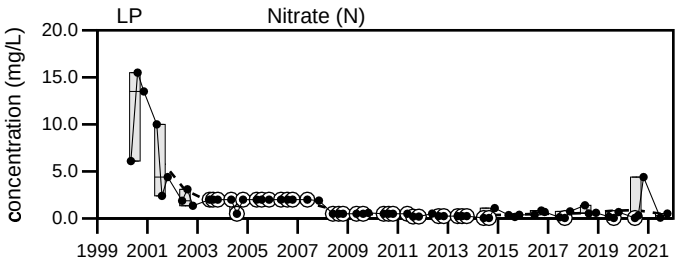


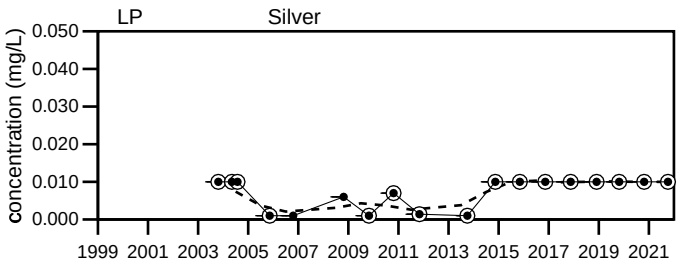



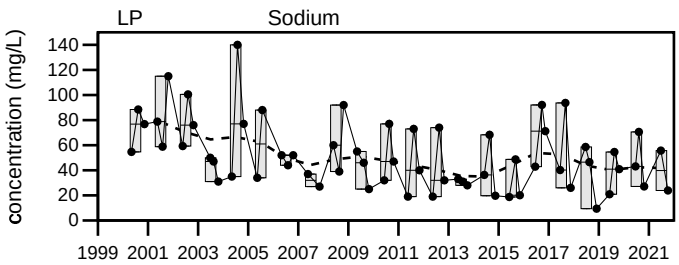



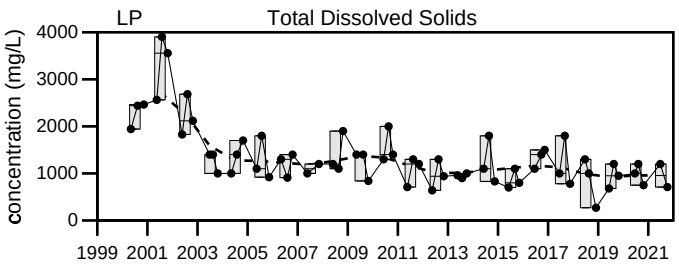



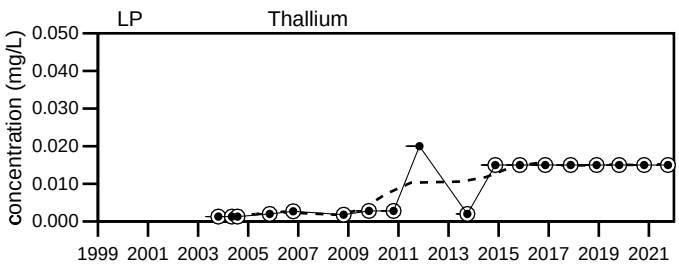



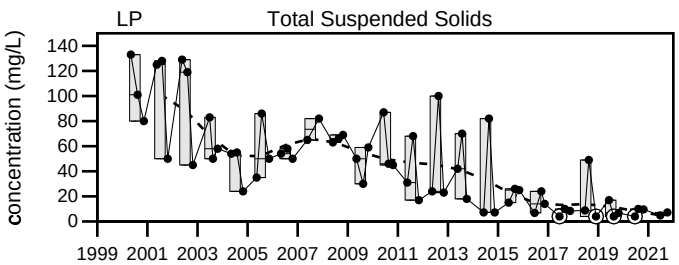



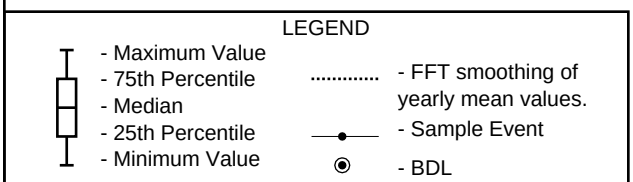



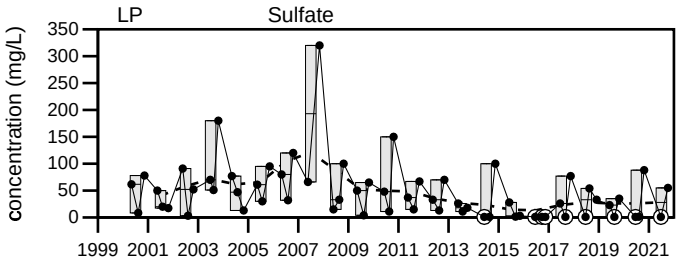



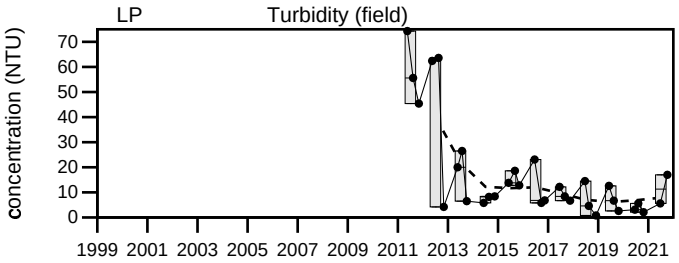



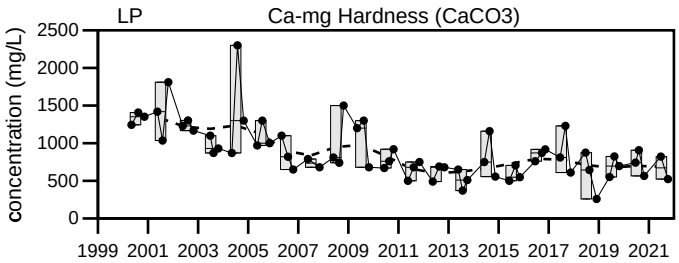

# Dolby Landfill

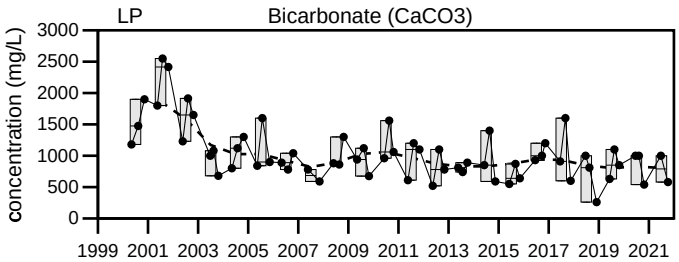
## LP

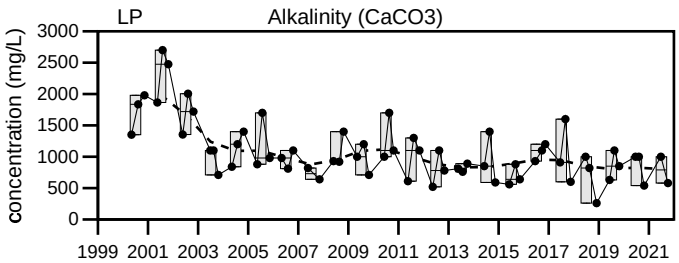
Sevee & Maher Engineers, Inc.

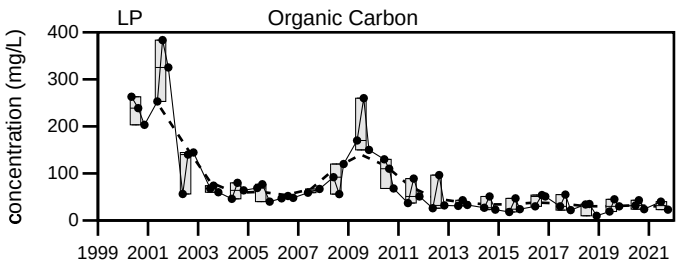


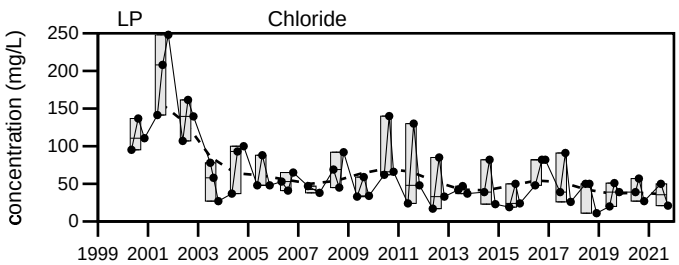



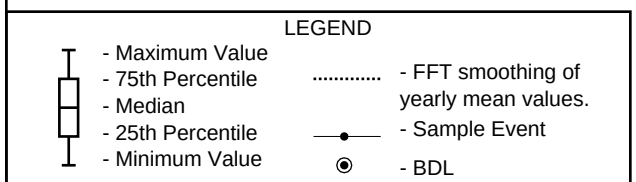




# Dolby Landfill

## LP

Sevee & Maher Engineers, Inc.

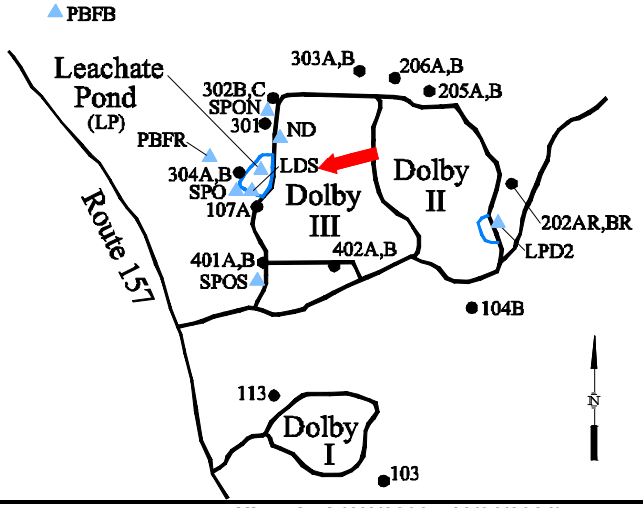
## Well Description

Sample from the leak detection system at the Dolby III leachate pond west of landfill.

Sampled: **2 Times Annually**

Sampled Since: **May-08**

Sampling Method: **Grab**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 922 | 916 | | 887 | to 1773 | 1200 | ± 42 | 39 |
| Dissolved Oxygen (mg/L) | | 0.7 | 1.4 | | 0.3 | to 6 | 1.7 | ± 0.21 | 30 |
| Total Dissolved Solids (mg/L) | | 580 | 570 | | 370 | to 1000 | 730 | ± 24 | 39 |
| Arsenic (mg/L) | | 0.016 | 0.008 | | 0.006 | to 0.034 | 0.014 | ± 0.001 | 39 |
| Calcium (mg/L) | | 102 | 132 | | 29 | to 210 | 140 | ± 4.6 | 39 |
| Manganese (mg/L) | | 3.55 | 2.25 | | 1.5 | to 14 | 5.4 | ± 0.4 | 39 |
| pH (STU) | | 6.8 | 6.6 | | 6.57 | to 7.8 | 7.1 | ± 0.04 | 39 |
| Alkalinity (CaCO3) (mg/L) | | 420 | 520 | | 320 | to 950 | 620 | ± 23 | 39 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 382 | 508 | | 180 | to 870 | 560 | ± 22 | 39 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 420 | 520 | | 320 | to 880 | 610 | ± 22 | 39 |
| Sodium (mg/L) | | 42.2 | 32.2 | | 5.1 | to 125 | 37 | ± 3.4 | 39 |
| Chloride (mg/L) | | 54 | 34 | | 4 | to 150 | 44 | ± 4.1 | 39 |
| Iron (mg/L) | | 6.16 | 4.46 | | 2.87 | to 24 | 7.5 | ± 0.78 | 39 |
| Magnesium (mg/L) | | 31.1 | 43.4 | | 26 | to 87.9 | 53 | ± 2.9 | 39 |
| Potassium (mg/L) | | 66.2 | 16.8 | | 1 U | to 110 | 45 | ± 3.9 | 39 |
| Sulfate (mg/L) | | ↑110 | 16 | | 1 U | to 51 | 17 | ± 1.9 | 39 |
| Total Suspended Solids (mg/L) | | 4 U | 11 | | 4 U | to 72 | 16 | ± 2.2 | 39 |
| Turbidity (field) (NTU) | | ↑8.5 | 0.3 | | 0 | to 5.9 | 1.8 | ± 0.23 | 31 |
| Ammonia (N) (mg/L) | | 1.5 | 0.46 | | 0.2 U | to 7.9 | 3.2 | ± 0.35 | 39 |
| Nitrate (N) (mg/L) | | 0.5 U | 0.05 U | | 0.05 U | to 0.5 U | 0.21 | ± 0.031 | 39 |
| Organic Carbon (mg/L) | | ↑85 | 7.2 | | 6.2 | to 49 | 17 | ± 1.6 | 39 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

## Comments

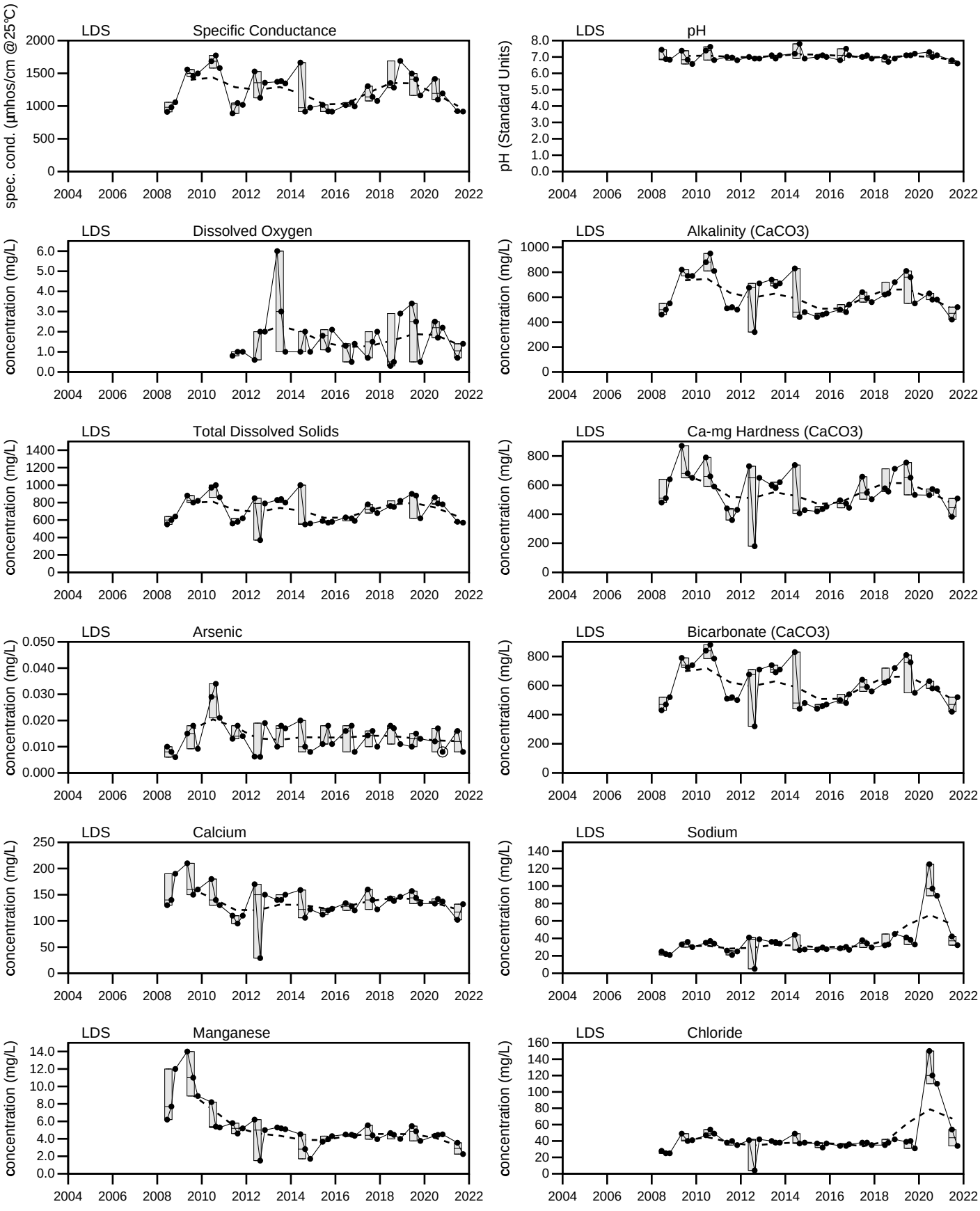
Q2= 6 - 2021

Q3= 9 - 2021

U = Not Detected above the laboratory reporting limit.

Data Group: 244

Printed: 4/11/2022 10:15



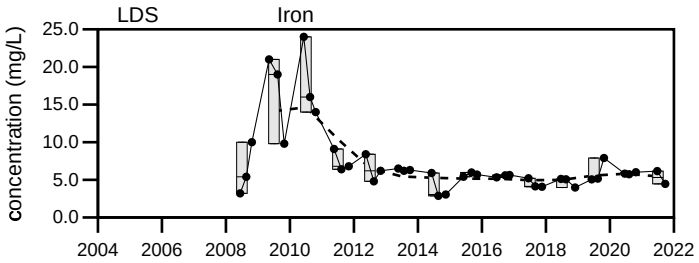

LEGEND

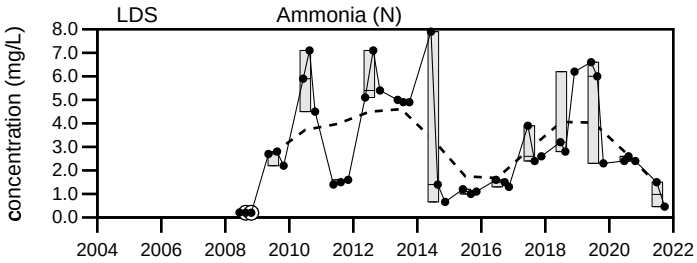
- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value
- FFT smoothing of yearly mean values.
- Sample Event
- BDL

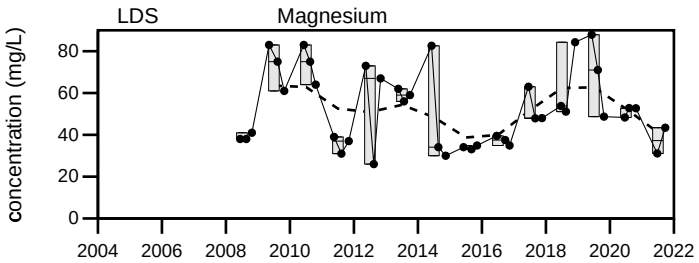
# Dolby Landfill

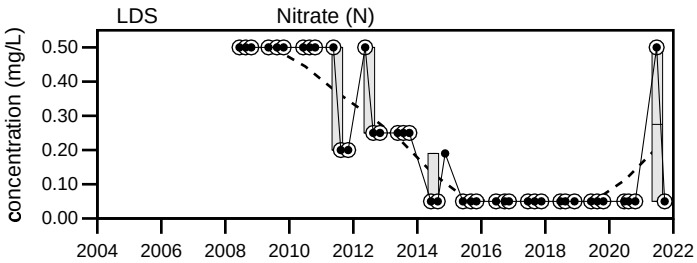
## LDS

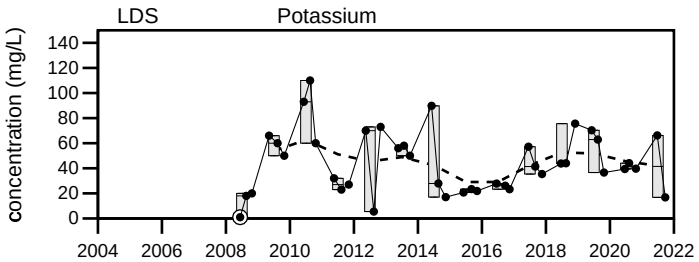
Sevee & Maher Engineers, Inc.

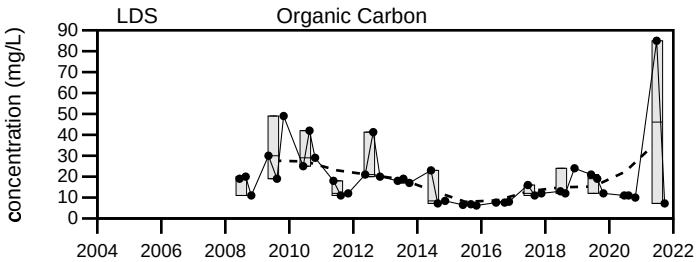


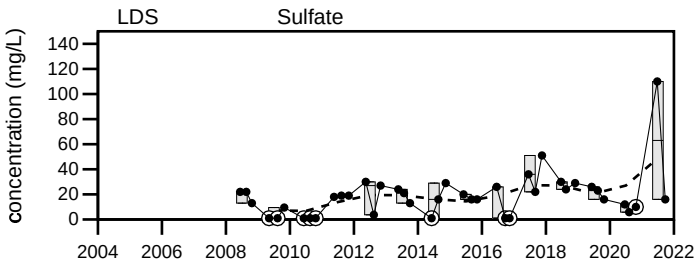



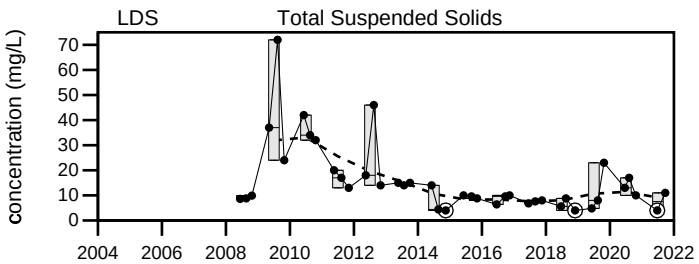



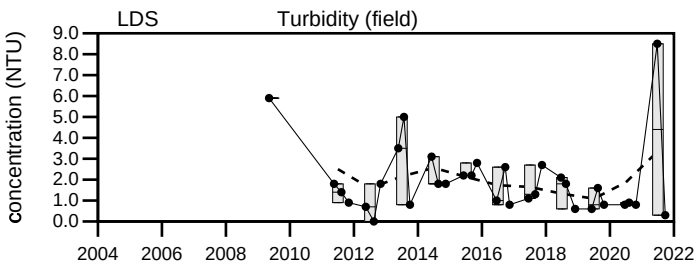



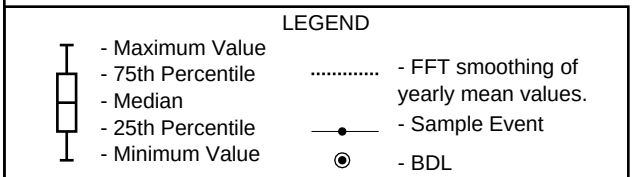




# Dolby Landfill

## LDS

Sevee & Maher Engineers, Inc.

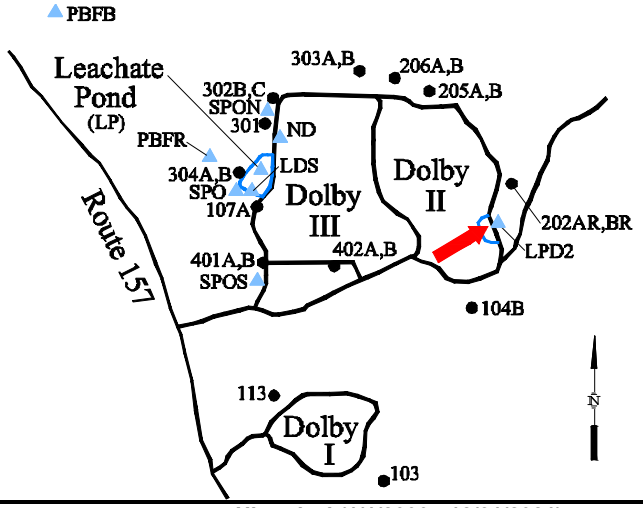
## Well Description

Leachate Pond East of Dolby II

Sampled: **2 Times Annually**

Sampled Since: **May-05**

Sampling Method: **Grab**




## Chemical Summary

| Indicator Parameters | 2021 Q1 | 2021 Q2 | 2021 Q3 | 2021 Q4 | Historical (1/1/2000 - 12/31/2021) Min | Max | Mean | SE | n |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance (µmhos/cm @25°C) | | 402 | 142 | | 94 | 729 | 320 | ± 23 | 46 |
| Dissolved Oxygen (mg/L) | | 5.8 | 6.8 | | 0.5 | 12.3 | 5.2 | ± 0.39 | 45 |
| Total Dissolved Solids (mg/L) | | 260 | 92 | | 26 | 810 | 190 | ± 19 | 46 |
| Arsenic (mg/L) | | 0.008 U | 0.008 U | | 0.0025 | 0.024 | 0.0074 | ± 0.000 | 46 |
| Calcium (mg/L) | | 53.2 | 16.5 | | 12 | 130 | 33 | ± 2.7 | 46 |
| Manganese (mg/L) | | 1.23 | 0.0865 | | 0.023 | 5.1 | 0.92 | ± 0.17 | 46 |
| pH (STU) | | 6.7 | 7 | | 6.3 | 8.29 | 7.2 | ± 0.069 | 46 |
| Alkalinity (CaCO3) (mg/L) | | 240 | 45 | | 21 | 710 | 150 | ± 18 | 46 |
| Ca-mg Hardness (CaCO3) (mg/L) | | 244 | 74.7 | | 44 | 550 | 150 | ± 15 | 46 |
| Bicarbonate Alkalinity (CaCO3) (mg/L) | | 240 | 45 | | 21 | 710 | 150 | ± 17 | 46 |
| Sodium (mg/L) | | 4.37 | 1.62 | | 1 U | 36 | 3.8 | ± 0.81 | 46 |
| Chloride (mg/L) | | 2.8 | 2 U | | 0.58 | 41 | 3.8 | ± 0.9 | 46 |
| Iron (mg/L) | | 2.94 | 0.302 | | 0.193 | 15.2 | 3.5 | ± 0.53 | 46 |
| Magnesium (mg/L) | | 27.1 | 8.14 | | 2.8 | 61 | 17 | ± 2.3 | 46 |
| Potassium (mg/L) | | 5.55 | 2.21 | | 1.15 | 52 | 4.9 | ± 1.1 | 46 |
| Sulfate (mg/L) | | 14 | 21 | | 1 U | 43 | 12 | ± 1.8 | 46 |
| Total Suspended Solids (mg/L) | | 6.4 | 4 U | | 0.6 U | 34 | 9.4 | ± 1.2 | 46 |
| Turbidity (field) (NTU) | | 1.8 | 1.8 | | 0 | 55.3 | 8.9 | ± 1.9 | 46 |
| Ammonia (N) (mg/L) | | 3.6 | 0.1 U | | 0.1 U | 6.3 | 2 | ± 0.26 | 46 |
| Nitrate (N) (mg/L) | | 0.1 | 4 | | 0.05 U | 6.2 | 0.99 | ± 0.19 | 46 |
| Organic Carbon (mg/L) | | 14 | 9.9 | | 4 | 43 | 13 | ± 1.4 | 46 |

**underlined/bold** - values exceed a regulatory standard listed below.

Note that a value associated with a "U" qualifier is a detection or reporting limit provided by the laboratory. If a detection limit is greater than a standard, the result cannot be said to exceed the standard.

↑ indicates a value greater than the historical maximum value; ↓ indicates a value less than the historical minimum value.

## Comments

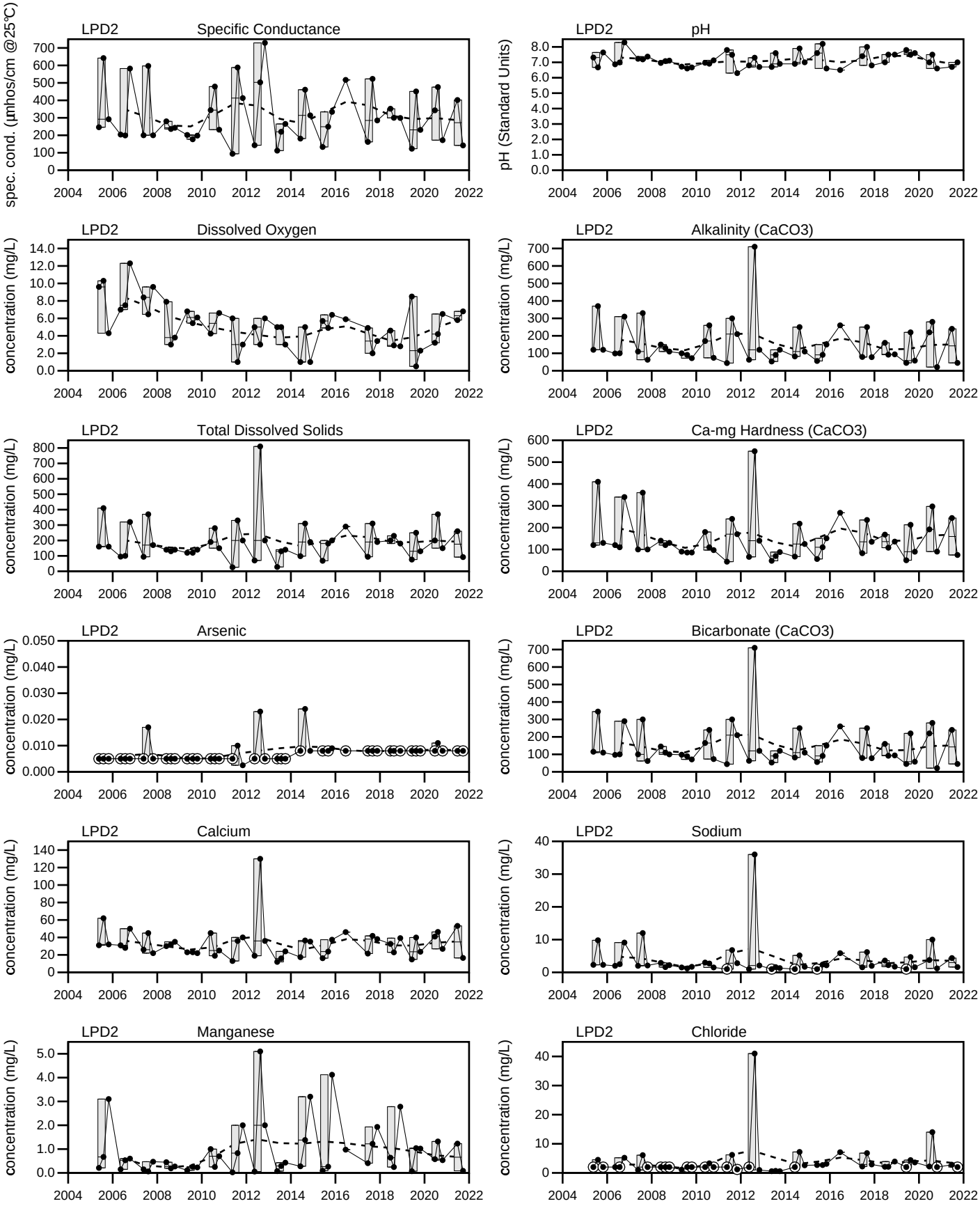
Q2= 6 - 2021

Q3= 9 - 2021

U = Not Detected above the laboratory reporting limit.

Data Group: 244

Printed: 4/11/2022 10:15



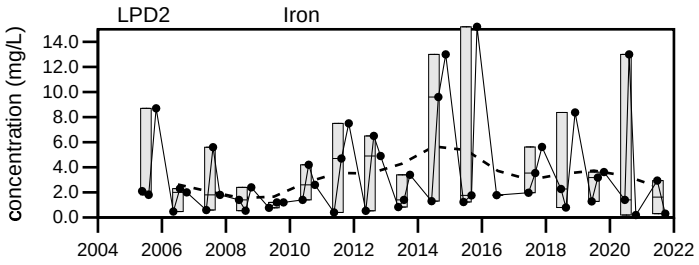

LEGEND

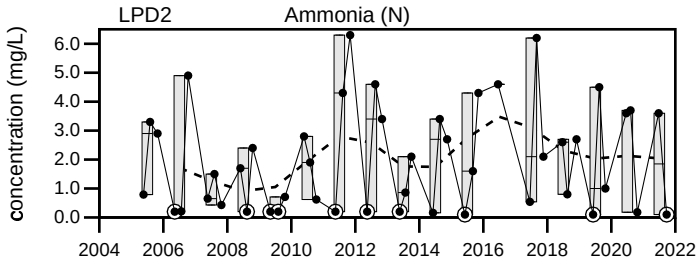
- Maximum Value
- 75th Percentile
- Median
- 25th Percentile
- Minimum Value
- FFT smoothing of yearly mean values.
- Sample Event
- BDL

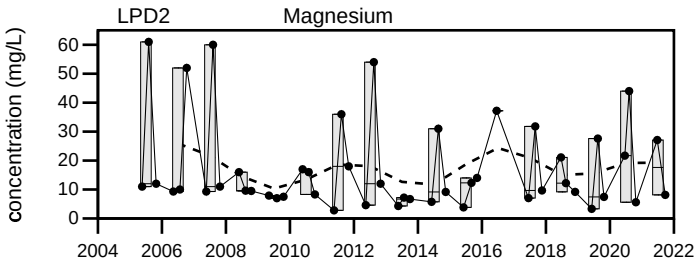
# Dolby Landfill

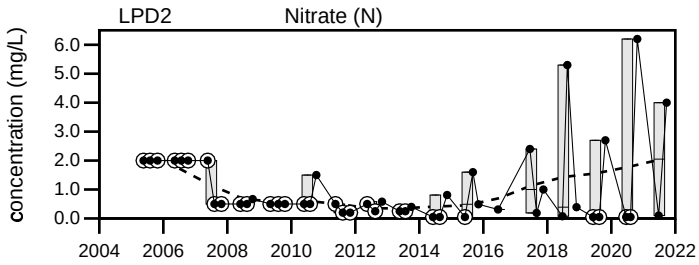
## LPD2

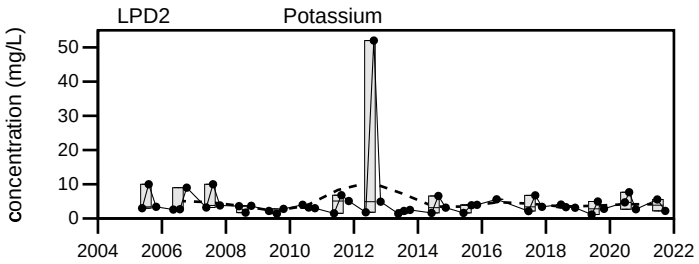
Sevee & Maher Engineers, Inc.

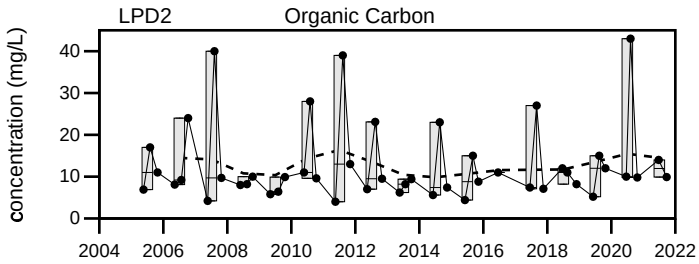


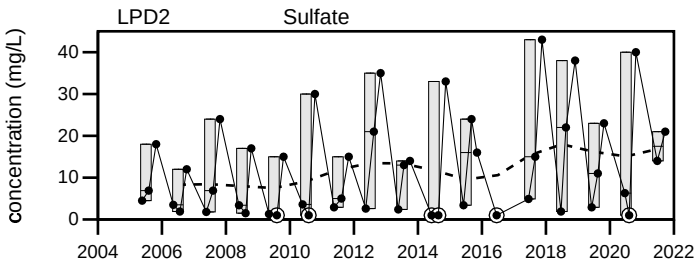



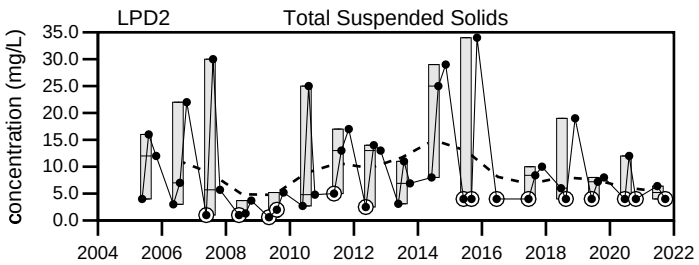



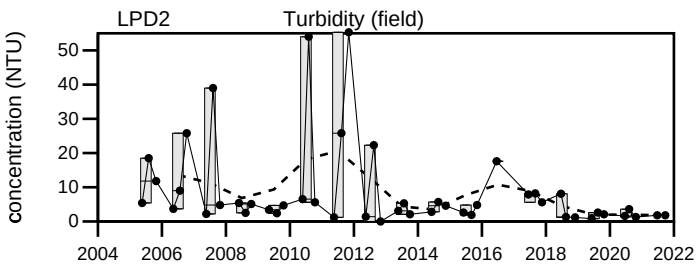



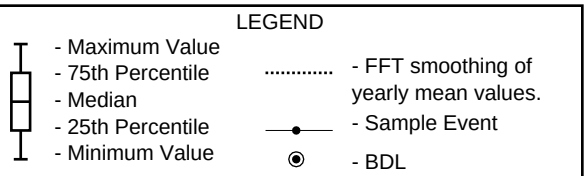




Dolby Landfill

LPD2

Sevee & Maher Engineers, Inc.

# APPENDIX L

# RESULTS OF MANN-KENDALL ANALYSES

SME
SEVEE & MAHER
ENGINEERS

# Summary of Mann-Kendall Trend Analysis
# 95% Confidence (alpha=0.05)
# Dolby Landfill 2021

3-yr trend: 1/1/2019 to 12/31/2021 5-yr trend: 1/1/2017 to 12/31/2021

| | Increasing Trends | | Decreasing Trends | | NoTrends | |
|---|---|---|---|---|---|---|
| LOCATION | 3 Year | 5 Year | 3 Year | 5 Year | 3 Year | 5 Year |
| 104B | Mn | HCO3, ALK | DO, NO3 - N | Spec Cond, pH, NO3 - N | Spec Cond, pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., As, Ca, Fe, Mg, K, Na, NH3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) | Temp, Water Depth, WLE NGVD29ft, Water Elev., DO, As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, TDS, TSS, SO4, Hard(CaMg), OC, Cl, TURB (fld) |
| 107A | Fe, K, Na, NH3 - N, Hard(CaMg) | Temp, K, NH3 - N | | | Spec Cond, pH, Temp, Water Elev., WLE NGVD29ft, Water Depth, DO, As, Ca, Mg, Mn, NO3 - N, TDS, TSS, SO4, HCO3, ALK, OC, Cl, TURB (fld) | Spec Cond, pH, Water Depth, WLE NGVD29ft, Water Elev., DO, As, Ca, Fe, Mg, Mn, Na, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) |
| 113 | | Temp, Water Depth, DO, TURB (fld) | pH | Water Elev., WLE NGVD29ft | Spec Cond, Temp, Water Depth, Water Elev., WLE NGVD29ft, DO, TURB (fld) | Spec Cond, pH |
| 202AR | OC | OC | As | Spec Cond, NH3 - N, Cl | Spec Cond, pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., DO, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, Cl, TURB (fld) | pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., DO, As, Ca, Fe, Mg, Mn, K, Na, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, TURB (fld) |
| 205A | Fe | | Spec Cond, pH, TURB (fld) | Spec Cond, TDS, SO4, Cl | Temp, Water Depth, WLE NGVD29ft, Water Elev., DO, As, Ca, Mg, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl | pH, Temp, Water Elev., Water Depth, WLE NGVD29ft, DO, As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TSS, Hard(CaMg), HCO3, ALK, OC, TURB (fld) |
| 205B | | | SO4 | SO4, TURB (fld) | Spec Cond, pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., DO, As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) | Spec Cond, pH, Temp, Water Elev., Water Depth, WLE NGVD29ft, DO, As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, Hard(CaMg), HCO3, ALK, OC, Cl |
| 206A | Water Depth | K | Water Elev., WLE NGVD29ft, TURB (fld) | TURB (fld) | Spec Cond, pH, Temp, DO, As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl | Spec Cond, pH, Temp, WLE NGVD29ft, Water Elev., Water Depth, DO, As, Ca, Fe, Mg, Mn, Na, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl |
| 301 | | Mg, Na | Spec Cond, TDS, SO4, Cl | Spec Cond, Ca, TDS, Cl, TURB (fld) | pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., DO, As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TSS, Hard(CaMg), HCO3, ALK, OC, TURB (fld) | pH, Temp, Water Elev., WLE NGVD29ft, Water Depth, DO, As, Fe, Mn, K, NH3 - N, NO3 - N, TSS, SO4, Hard(CaMg), HCO3, ALK, OC |
| 302B | | Ca, Mg, Mn, K, Na, NH3 - N, Hard(CaMg), HCO3, ALK, OC | | SO4 | Spec Cond, pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., DO, As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) | Spec Cond, pH, Temp, Water Elev., Water Depth, WLE NGVD29ft, DO, As, Fe, NO3 - N, TDS, TSS, Cl, TURB (fld) |
| 302C | | Ca, Mg, Mn, K, Na, Hard(CaMg), HCO3, ALK, OC | DO | | Spec Cond, pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) | Spec Cond, pH, Temp, WLE NGVD29ft, Water Elev., Water Depth, DO, As, Fe, NH3 - N, NO3 - N, TDS, TSS, SO4, Cl, TURB (fld) |
| 303A | Ca, Mg, Na, NH3 - N, Hard(CaMg), HCO3, ALK | Water Depth | | Spec Cond, WLE NGVD29ft, Water Elev., TURB (fld) | Spec Cond, pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., DO, As, Fe, Mn, K, NO3 - N, TDS, TSS, SO4, OC, Cl, TURB (fld) | pH, Temp, DO, As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl |

| | | | | | | |
|---|---|---|---|---|---|---|
| 303B | | Water Depth, Mn, NH3 - N | DO | WLE NGVD29ft, Water Elev. | Spec Cond, pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) | Spec Cond, pH, Temp, DO, As, Ca, Fe, Mg, K, Na, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) |
| 304A | Temp, Na, HCO3, ALK | Temp, Na | pH | pH, SO4 | Spec Cond, Water Depth, WLE NGVD29ft, Water Elev., DO, As, Ca, Fe, Mg, Mn, K, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), OC, Cl, TURB (fld) | Spec Cond, Water Depth, WLE NGVD29ft, Water Elev., DO, As, Ca, Fe, Mg, Mn, K, NH3 - N, NO3 - N, TDS, TSS, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) |
| 304B | | Temp, Ca, Fe, Mg, Mn, Na, Hard(CaMg), HCO3, ALK, Cl | pH, DO | DO | Spec Cond, Temp, Water Elev., Water Depth, WLE NGVD29ft, As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) | Spec Cond, pH, Water Elev., Water Depth, WLE NGVD29ft, As, K, NH3 - N, NO3 - N, TDS, TSS, SO4, OC, TURB (fld) |
| 401A | | Temp, Mg, K, Hard(CaMg), HCO3, ALK | DO | | Spec Cond, pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) | Spec Cond, pH, Water Depth, WLE NGVD29ft, Water Elev., DO, As, Ca, Fe, Mn, Na, NH3 - N, NO3 - N, TDS, TSS, SO4, OC, Cl, TURB (fld) |
| 401B | Temp | Temp, Ca, Mg, HCO3, ALK | pH, DO, SO4 | Spec Cond, pH, SO4, Cl | Spec Cond, Water Elev., WLE NGVD29ft, Water Depth, As, Ca, Fe, Mg, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) | Water Elev., Water Depth, WLE NGVD29ft, DO, As, Fe, Mn, K, Na, NH3 - N, NO3 - N, TDS, TSS, Hard(CaMg), OC, TURB (fld) |
| 402A | Mg, Na, HCO3, ALK, OC | Ca, Fe, Mg, Mn, Na, Hard(CaMg), HCO3, ALK, OC | | pH | Spec Cond, pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., DO, As, Ca, Fe, Mn, K, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), Cl, TURB (fld) | Spec Cond, Temp, Water Elev., WLE NGVD29ft, Water Depth, DO, As, K, NH3 - N, NO3 - N, TDS, TSS, SO4, Cl, TURB (fld) |
| 402B | Fe, Mn, SO4 | DO, Fe, K, SO4 | Spec Cond, TDS | Spec Cond, Ca, Na, TDS, Hard(CaMg), HCO3, Cl | pH, Temp, Water Elev., WLE NGVD29ft, Water Depth, DO, As, Ca, Mg, K, Na, NH3 - N, NO3 - N, TSS, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) | pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., As, Mg, Mn, NH3 - N, NO3 - N, TSS, ALK, OC, TURB (fld) |
| 103 | | Spec Cond | | | | pH, Temp, Water Depth, WLE NGVD29ft, Water Elev., DO, TURB (fld) |
| 206B | | Mn | | | | Spec Cond, pH, Temp, WLE NGVD29ft, Water Elev., Water Depth, DO, As, Ca, Fe, Mg, K, Na, NH3 - N, NO3 - N, TDS, TSS, SO4, Hard(CaMg), HCO3, ALK, OC, Cl, TURB (fld) |

## Key

Ag = Silver
Al = Aluminum
ALK = Alkalinity (CaCO3)
As = Arsenic
Ba = Barium
Be = Beryllium
Ca = Calcium
Cd = Cadmium
Cl = Chloride
Co = Cobalt
Cr = Chromium
Cu = Copper
DO = Dissolved Oxygen
Fe = Iron
Hard(CaMg) = Ca-mg Hardness (CaCO3)
HCO3 = Bicarbonate Alkalinity (CaCO3)
K = Potassium
Mg = Magnesium
Mn = Manganese
Na = Sodium
NH3 - N = Ammonia (N)
Ni = Nickel
NO3 - N = Nitrate (N)
OC = Organic Carbon
P = Total Phosphorus Mixed Forms (PO4 and Organic)
Pb = Lead
pH = pH
Sb = Antimony
Se = Selenium
SO4 = Sulfate
Spec Cond = Specific Conductance
TDS = Total Dissolved Solids
Temp = Temperature
Tl = Thallium
TSS = Total Suspended Solids
TURB (fld) = Turbidity (field)
Water Depth = Water Level Depth
Water Elev. = Water Level Elevation
Well Depth = Well Depth
Zn = Zinc

- Values below the laboratory PQL (non-detects) are divided by 2. All other data qualifiers are ignored but any associated value is used.

- Samples collected for data quality control are not analyzed.

- Data sets with less than 5 data points are not analyzed.

- Data sets with a period shorter than the intended period of analysis (e.g. 3-yr analysis or 5-yr analysis) are not analyzed.

- Significant events in historical data can affect the distribution in a way that compromises the assumption of a monotonic data set. Events could include the cessation of filtering, a spill, changing sampling protocols or analytical method changes that alter the detection limit.

REFERENCES:

State of Wisconsin, Department of Natural Resources, Remediation and Redevelopment Program Mann-Kendall Statistical Test, Form 4400-215 (2/2001)

Gilbert, R.O., Statistical Methods for Environmental Pollution Monitoring, Van Nostrand Reinhold, 1987, pp. 204 – 240 and 272.

Hollander, M. and Wolfe, A.M Nonparameteric Statistical Methods, John Wiley Sons, 1999

**APPENDIX M**

**LANDFILL GAS MONITORING RESULTS**

SME
SEVEE & MAHER
ENGINEERS

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (107B) Date | Methane Equivalent % Vol. | Methane Equivalent (Ambient) % Vol. | Hydrogen Sulfide ppm | Hydrogen Sulfide (Ambient) ppm | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **107B** | | | | | | | | | | | | | | | |
| 5/17/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/10/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/3/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 1/10/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/31/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/20/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 7/24/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/1/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/2/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/18/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/10/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/1/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 12/17/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/13/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/7/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/12/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/28/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/13/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/18/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/13/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/26/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/3/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/12/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/21/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/15/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/3/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/19/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/21/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/20/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| **CB-13** | | | | | | | | | | | | | | | |
| 5/17/2011 | 0.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/10/2011 | 3.8 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/3/2011 | 1.2 | 0.1 US | 1 | 0 | | | | | | | | | | | |
| 1/10/2012 | 1.3 | 0.1 US | 6 | 0 | | | | | | | | | | | |
| 5/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/31/2012 | 0.5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/20/2013 | 0.1 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 7/24/2013 | 0.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/1/2013 | 0.1 US | 0.1 US | 2 | 0 | | | | | | | | | | | |
| 6/2/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/18/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/10/2014 | 1 | 0.1 US | 0 | 0 | | | | | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (CB-13) Date | Methane Equivalent % Vol. | Methane Equivalent (Ambient) % Vol. | Hydrogen Sulfide ppm | Hydrogen Sulfide (Ambient) ppm | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/1/2015 | 0.5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 12/17/2015 | 2.2 | 0.1 US | 2 | 0 | | | | | | | | | | | |
| 6/13/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/7/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/12/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/28/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/13/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/18/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/13/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/26/2018 | 0.5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/3/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/12/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/21/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/15/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/3/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/19/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/21/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/20/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| **CB-21** | | | | | | | | | | | | | | | |
| 5/17/2011 | 2.2 | 0.1 | 11 | 0 | | | | | | | | | | | |
| 8/10/2011 | 1.5 | 0.1 US | 2 | 0 | | | | | | | | | | | |
| 11/3/2011 | 7.5 | 0.1 US | 36 | 0 | | | | | | | | | | | |
| 1/10/2012 | 1.5 | 0.1 US | 8 | 0 | | | | | | | | | | | |
| 5/14/2012 | 0.2 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/14/2012 | 0.8 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/31/2012 | 2.2 | 0.1 US | 7 | 0 | | | | | | | | | | | |
| 5/20/2013 | 0.2 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 7/24/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/1/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/2/2014 | 0.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/18/2014 | 1.4 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/10/2014 | 0.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/1/2015 | 1.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 12/17/2015 | 1.7 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/13/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/7/2016 | 0.7 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/12/2017 | 1.8 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/28/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/13/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/18/2018 | 2.4 | 0.1 US | 3 | 0 | | | | | | | | | | | |
| 8/13/2018 | 0.1 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/26/2018 | 0.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/3/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/12/2019 | 1.7 | 0.1 US | 1.1 | 0 | | | | | | | | | | | |
| 10/21/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (CB-21) Date | Methane Equivalent % Vol. | Methane Equivalent (Ambient) % Vol. | Hydrogen Sulfide ppm | Hydrogen Sulfide (Ambient) ppm | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/15/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/3/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/19/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/21/2021 | 5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/20/2021 | 0.15 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| **CB-22** | | | | | | | | | | | | | | | |
| 5/17/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/10/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/3/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 1/10/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/14/2012 | 1.3 | 0.1 US | 1 | 0 | | | | | | | | | | | |
| 8/14/2012 | 2.6 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/31/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/20/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 7/24/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/1/2013 | 0.5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/2/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/18/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/10/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/1/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 12/17/2015 | 0.2 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/13/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/7/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/12/2017 | 1.1 | 0.1 US | 1 | 0 | | | | | | | | | | | |
| 8/28/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/13/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/18/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/13/2018 | 0.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/26/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/3/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/12/2019 | 2.6 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/21/2019 | 0.1 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/15/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/3/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/19/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/21/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/20/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| **CB-30** | | | | | | | | | | | | | | | |
| 5/17/2011 | 0.6 | 0.1 US | 3 | 0 | | | | | | | | | | | |
| 8/10/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/3/2011 | 3.5 | 0.1 US | 2 | 0 | | | | | | | | | | | |
| 1/10/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/14/2012 | 4.3 | 0.1 US | 12 | 0 | | | | | | | | | | | |
| 8/14/2012 | 2.2 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/31/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/20/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (CB-30) Date | Methane Equivalent % Vol. | Methane Equivalent (Ambient) % Vol. | Hydrogen Sulfide ppm | Hydrogen Sulfide (Ambient) ppm | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/24/2013 | 3 | 0.1 US | 2 | 0 | | | | | | | | | | | |
| 10/1/2013 | 0.5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/2/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/18/2014 | 3.2 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/10/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/1/2015 | 2.5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 15 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 12/17/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/13/2016 | 1.2 | 0.1 US | 1 | 0 | | | | | | | | | | | |
| 9/19/2016 | ! | ! | ! | ! | | | | | | | | | | | |
| 11/7/2016 | ! | ! | ! | ! | | | | | | | | | | | |
| 6/12/2017 | ! | ! | ! | ! | | | | | | | | | | | |
| 8/28/2017 | ! | ! | ! | ! | | | | | | | | | | | |
| 11/13/2017 | ! | ! | ! | ! | | | | | | | | | | | |
| 6/18/2018 | ! | ! | ! | ! | | | | | | | | | | | |
| 8/13/2018 | ! | ! | ! | ! | | | | | | | | | | | |
| 11/26/2018 | ! | ! | ! | ! | | | | | | | | | | | |
| **CB-35** | | | | | | | | | | | | | | | |
| 5/17/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/10/2011 | 6.3 | 0.1 US | 55 | 0 | | | | | | | | | | | |
| 11/3/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 1/10/2012 | 1.2 | 0.1 US | 5 | 0 | | | | | | | | | | | |
| 5/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/31/2012 | 0.5 | 0.1 US | 1 | 0 | | | | | | | | | | | |
| 5/20/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 7/24/2013 | 23.7 | 0.1 US | 17 | 0 | | | | | | | | | | | |
| 10/1/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/2/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/18/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/10/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/1/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 12/17/2015 | 2.8 | 0.1 US | 12 | 0 | | | | | | | | | | | |
| 6/13/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/7/2016 | 0.8 | 0.1 US | 1 | 0 | | | | | | | | | | | |
| 6/12/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/28/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/13/2017 | 15 | 0.1 US | 5 | 0 | | | | | | | | | | | |
| 6/18/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/13/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/26/2018 | 1.2 | 0.1 US | 30 | 0 | | | | | | | | | | | |
| 6/3/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/12/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/21/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/15/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/3/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/19/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (CB-35) Date | Methane Equivalent % Vol. | Methane Equivalent (Ambient) % Vol. | Hydrogen Sulfide ppm | Hydrogen Sulfide (Ambient) ppm | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/21/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/20/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| **CB-39** | | | | | | | | | | | | | | | |
| 5/17/2011 | 0.1 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/10/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/3/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 1/10/2012 | 0.1 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/14/2012 | 0.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/14/2012 | 5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/31/2012 | 3.9 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/20/2013 | 0.6 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 7/24/2013 | 7.2 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/1/2013 | 1.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/2/2014 | 0.2 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/18/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/10/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/1/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 12/17/2015 | 0.7 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/13/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/7/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/12/2017 | 0.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/28/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/13/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/18/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/13/2018 | 0.1 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/26/2018 | 1 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/3/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/12/2019 | 0.8 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/21/2019 | 0.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/15/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/3/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/19/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/21/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/20/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| **CB-4** | | | | | | | | | | | | | | | |
| 5/17/2011 | 3.2 | 0.1 US | 3 | 0 | | | | | | | | | | | |
| 8/10/2011 | 10.8 | 0.1 US | 10 | 0 | | | | | | | | | | | |
| 11/3/2011 | 8.6 | 0.1 US | 16 | 0 | | | | | | | | | | | |
| 1/10/2012 | 8.1 | 0.1 US | 31 | 0 | | | | | | | | | | | |
| 5/14/2012 | 1.6 | 0.1 US | 1 | 0 | | | | | | | | | | | |
| 8/14/2012 | 7.3 | 0.1 US | 10 | 0 | | | | | | | | | | | |
| 10/31/2012 | 0.1 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/20/2013 | 7.79 | 0.1 US | 1 | 0 | | | | | | | | | | | |
| 7/24/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/1/2013 | 11.6 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/2/2014 | 12.5 | 0.1 US | 6 | 0 | | | | | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (CB-4) Date | Methane Equivalent % Vol. | Methane Equivalent (Ambient) % Vol. | Hydrogen Sulfide ppm | Hydrogen Sulfide (Ambient) ppm | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/18/2014 | 8.9 | 0.1 US | 7 | 0 | | | | | | | | | | | |
| 11/10/2014 | 1.9 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/1/2015 | 6.2 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 26 | 0.1 US | 1 | 0 | | | | | | | | | | | |
| 12/17/2015 | 3.7 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/13/2016 | 7.8 | 0.1 US | 4 | 0 | | | | | | | | | | | |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/7/2016 | 8.4 | 0.1 US | 3 | 0 | | | | | | | | | | | |
| 6/12/2017 | 7.7 | 0.1 US | 1 | 0 | | | | | | | | | | | |
| 8/28/2017 | 5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/13/2017 | 23 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/18/2018 | 0.8 | 0.1 US | 5.5 | 0 | | | | | | | | | | | |
| 8/13/2018 | 12 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/26/2018 | 0.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/3/2019 | 14 | 0 | 0 | 0 | | | | | | | | | | | |
| 8/12/2019 | 5 | 0.1 US | 4 | 0 | | | | | | | | | | | |
| 10/21/2019 | 37 | 0.1 US | 1 | 0 | | | | | | | | | | | |
| 6/15/2020 | 15 | 0.1 US | 1 | 0 | | | | | | | | | | | |
| 8/3/2020 | 0.5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/19/2020 | 17 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/21/2021 | 13 | 0.1 US | 3.5 | 0 | | | | | | | | | | | |
| 9/20/2021 | 12 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| **CB-43** | | | | | | | | | | | | | | | |
| 5/17/2011 | 0.3 | 0.1 US | 2 | 0 | | | | | | | | | | | |
| 8/10/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/3/2011 | 3.1 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 1/10/2012 | 1.1 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/14/2012 | 0.1 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/31/2012 | 0.6 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/20/2013 | 0.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 7/24/2013 | 3.5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/1/2013 | 0.5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/2/2014 | 0.2 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/18/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/10/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/1/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 12/17/2015 | 0.7 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/13/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/7/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/12/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/28/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/13/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/18/2018 | 1.5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/13/2018 | 0.7 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/26/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/3/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (CB-43) Date | Methane Equivalent % Vol. | Methane Equivalent (Ambient) % Vol. | Hydrogen Sulfide ppm | Hydrogen Sulfide (Ambient) ppm |
|---|---|---|---|---|
| 8/12/2019 | 0.1 US | 0.1 US | 0 | 0 |
| 10/21/2019 | 0.1 US | 0.1 US | 0 | 0 |
| 6/15/2020 | 0.1 US | 0.1 US | 0 | 0 |
| 8/3/2020 | 0.1 US | 0.1 US | 0 | 0 |
| 10/19/2020 | 0.1 US | 0.1 US | 0 | 0 |
| 6/21/2021 | 0.1 US | 0.1 US | 0 | 0 |
| 9/20/2021 | 9 | 0.1 US | 0 | 0 |
| **CB-45** | | | | |
| 5/17/2011 | 0.1 US | 0.1 US | 0 | 0 |
| 8/10/2011 | 0.3 | 0.1 US | 0 | 0 |
| 11/3/2011 | 1.6 | 0.1 US | 0 | 0 |
| 1/10/2012 | 0.5 | 0.1 US | 0 | 0 |
| 5/14/2012 | 0.1 US | 0.1 US | 0 | 0 |
| 8/14/2012 | 0.1 US | 0.1 US | 0 | 0 |
| 10/31/2012 | 0.2 | 0.1 US | 0 | 0 |
| 5/20/2013 | 0.1 | 0.1 US | 0 | 0 |
| 7/24/2013 | 0.1 US | 0.1 US | 0 | 0 |
| 10/1/2013 | 0.1 US | 0.1 US | 0 | 0 |
| 6/2/2014 | 0.2 | 0.1 US | 0 | 0 |
| 8/18/2014 | 0.1 US | 0.1 US | 0 | 0 |
| 11/10/2014 | 0.2 | 0.1 US | 0 | 0 |
| 6/1/2015 | 0.1 US | 0.1 US | 0 | 0 |
| 9/3/2015 | 0.1 US | 0.1 US | 0 | 0 |
| 12/17/2015 | 0.1 US | 0.1 US | 0 | 0 |
| 6/13/2016 | 0.1 US | 0.1 US | 0 | 0 |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 |
| 11/7/2016 | 0.1 US | 0.1 US | 0 | 0 |
| 6/12/2017 | 0.3 | 0.1 US | 0 | 0 |
| 8/28/2017 | 0.1 US | 0.1 US | 0 | 0 |
| 11/13/2017 | 0.1 US | 0.1 US | 0 | 0 |
| 6/18/2018 | 0.1 US | 0.1 US | 0 | 0 |
| 8/13/2018 | 0.1 US | 0.1 US | 0 | 0 |
| 11/26/2018 | 0.1 US | 0.1 US | 0 | 0 |
| 6/3/2019 | 0.1 US | 0.1 US | 0 | 0 |
| 8/12/2019 | 0.1 US | 0.1 US | 0 | 0 |
| 10/21/2019 | 0.1 US | 0.1 US | 0 | 0 |
| 6/15/2020 | 0.1 US | 0.1 US | 0 | 0 |
| 8/3/2020 | 0.1 US | 0.1 US | 0 | 0 |
| 10/19/2020 | 0.1 US | 0.1 US | 0 | 0 |
| 6/21/2021 | 0.1 US | 0.1 US | 0 | 0 |
| 9/20/2021 | 0.1 US | 0.1 US | 0 | 0 |
| **CB-6A** | | | | |
| 5/17/2011 | 2.9 | 0.1 US | 0 | 0 |
| 8/10/2011 | 2.3 | 0.1 US | 0 | 0 |
| 11/3/2011 | 4.2 | 0.1 US | 0 | 0 |
| 1/10/2012 | 6.2 | 0.1 US | 0 | 0 |
| 5/14/2012 | 0.1 US | 0.1 US | 0 | 0 |
| 8/14/2012 | 1.4 | 0.1 US | 0 | 0 |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (CB-6A) Date | Methane Equivalent % Vol. | Methane Equivalent (Ambient) % Vol. | Hydrogen Sulfide ppm | Hydrogen Sulfide (Ambient) ppm | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/31/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/20/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 7/24/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/1/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/2/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/18/2014 | 3.3 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/10/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/1/2015 | 0.9 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 12/17/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/13/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/7/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/12/2017 | 4.2 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/28/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/13/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/18/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/13/2018 | 0.5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/26/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/3/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/12/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/21/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/15/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/3/2020 | 0.5 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/19/2020 | 11 | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/21/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/20/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| **LEACHATE PUMP STATION** | | | | | | | | | | | | | | | |
| 5/17/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/10/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/3/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 1/10/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/31/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/20/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 7/24/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/1/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/2/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/18/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/10/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/1/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 12/17/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/13/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/7/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/12/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/28/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (LEACHATE PUMP STATION) Date | Methane Equivalent % Vol. | Methane Equivalent (Ambient) % Vol. | Hydrogen Sulfide ppm | Hydrogen Sulfide (Ambient) ppm | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/13/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/18/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/13/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/26/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/3/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/12/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/21/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/15/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/3/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/19/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/21/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/20/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| **LEACHATE SUMP** | | | | | | | | | | | | | | | |
| 5/17/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/10/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/3/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 1/10/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/31/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/20/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 7/24/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/1/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/2/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/18/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/10/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/1/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 12/17/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/13/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/7/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/12/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/28/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/13/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/18/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/13/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/26/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/3/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/12/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/21/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/15/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/3/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/19/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/21/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/20/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| **OPERATORS SHACK** | | | | | | | | | | | | | | | |
| 5/18/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |

SEVEE & MAHER ENGINEERS, INC.
4 BLANCHARD ROAD
CUMBERLAND CENTER, ME 04021

| (OPERATORS SHACK) Date | Methane Equivalent % Vol. | Methane Equivalent (Ambient) % Vol. | Hydrogen Sulfide ppm | Hydrogen Sulfide (Ambient) ppm | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/10/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/3/2011 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 1/10/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/14/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/31/2012 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 5/20/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 7/24/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/1/2013 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/2/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/18/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/10/2014 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/1/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/3/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 12/17/2015 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/13/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/19/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/7/2016 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/12/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/28/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/13/2017 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/18/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/13/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 11/26/2018 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/3/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/12/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/21/2019 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/15/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 8/3/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 10/19/2020 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 6/21/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |
| 9/20/2021 | 0.1 US | 0.1 US | 0 | 0 | | | | | | | | | | | |

**Notes:** TYPE - Sample Type Qualifier where D = Duplicate Sample.

**Concentration Qualifier Notes:**

! - The sampling location was damaged or destroyed.

US - Not Detected above the reported reporting limit determined by interpreted instrument specification.