APPENDIX 5

ACTIVITY-SPECIFIC STANDARDS

The documents referenced within this section may be obtained from the Commission's office in Augusta, or any of its regional offices.

A. VEGETATION CLEARING

Vegetation clearing activities not in conformance with the standards of this section may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the subdistrict involved. An applicant for such permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with the standards of this section, shall be conducted in a manner which produces no undue adverse impact upon the resources and uses in the area.

The following requirements shall apply to vegetation clearing activities for any purpose other than road construction, road reconstruction and maintenance, wildlife or fishery management, forest management, agricultural management, public trailered ramps or hand-carry launches:

1. A vegetative buffer strip shall be retained within:

    a. 50 feet of the right-of-way or similar boundary of any public roadway,

    b. 75 feet of the normal high water mark of any body of standing water less than 10 acres in size, or any tidal water or flowing water draining less than 50 square miles, and

    c. 100 feet of the normal high water mark of a body of standing water 10 acres or greater in size or flowing water draining 50 square miles or more.

2. Within this buffer strip, vegetation shall be maintained as follows:

    a. There shall be no cleared opening greater than 250 square feet in the forest canopy as measured from the outer limits of the tree crown. However, a footpath is permitted, provided it does not exceed six (6) feet in width as measured between tree trunks, and, has at least one bend in its path to divert channelized runoff.

    b. Selective cutting of trees within the buffer strip is permitted provided that a well- distributed stand of trees and other vegetation is maintained.

        For the purposes of this section a "well-distributed stand of trees and other vegetation" adjacent to a body of standing water 10 acres or greater in size shall be defined as maintaining a rating score of 24 or more in a 25-foot by 50-foot square (1250 square feet) area as determined by the following rating system.

        Near other water bodies, tributary streams and public roadways a "well-distributed stand of trees and other vegetation" shall be defined as maintaining a rating score of 16 or more per 25-foot by 50-foot square (1250 square feet) area as determined by the following rating system.

Diameter of Tree at 4-1/2 feet Above Ground Level (inches)	Points
2.0 to < 4.0	1
4.0 to 8.0	2
8.0 to < 12.0	4
12.0 +	8

Table Appendix 5, B -1. Rating system for a well-distributed stand of trees and other vegetation.

The following shall govern in applying this rating system:

(1) The 25-foot x 50-foot rectangular plots shall be established where the landowner or lessee proposes clearing within the required buffer;
(2) Each successive plot shall be adjacent to but not overlap a previous plot;
(3) Any plot not containing the required points shall have no vegetation removed except as otherwise allowed by these rules;
(4) Any plot containing the required points may have vegetation removed down to the minimum points required or as otherwise allowed by these rules; and
(5) Where conditions permit, no more than 50% of the points on any 25-foot by 50-foot rectangular area may consist of trees grater than 12 inches in diameter.

For the purposes of this section, "other natural vegetation" is defined as retaining existing vegetation under 3 feet in height and other ground cover and retaining at least 5 saplings less than 2 inches in diameter at 4 ½ feet above ground level for each 25-foot by 50-foot rectangular area. If 5 saplings do not exist, the landowner or lessee may not remove any woody stems les than 32 inches in diameter until 5 saplings have been recruited inot the plot. In addition, the soil shall not be disturbed , except to provide for a footpath or other permitted use.

c. In addition to Appendix 5,B,2,b above, no more than 40% of the total basal area of trees 4.0 inches or more in diameter, measured at 4 ½ feet above ground level, may be removed in any ten (10) year period.

d. Pruning of tree branches is prohibited, except on the bottom 1/3 of the tree provided that tree vitality will not be adversely affected.

e. In order to maintain a buffer strip of vegetation, when the removal of storm-damaged, diseased, unsafe, or dead trees results in the creation of cleared openings in excess of 250 square feet, these openings shall be established with native tree species.

3. At distances greater than one hundred (100) feet, horizontal distance, from the normal high water mark of a body of standing water greater than 10 acres, no more than 40% of the total volume of trees four inches or more in diameter, measured at 4 1/2 feet above ground level, may be removed in any ten (10) year period. In no instance shall cleared openings exceed, in the aggregate, 10,000 square feet, including land previously cleared. These provisions apply to areas within 250 feet of all bodies of standing water greater than ten (10) acres, and to the full depth of the P-AL zone. This requirement does not apply to the development of uses allowed by permit.

4. Cleared openings legally in existence as the date of this Concept Plan may be maintained, but shall not be enlarged except as permitted by these regulations.

In all subdistricts, where natural vegetation is removed within the required vegetative buffer strip of a flowing water, body of standing water, tidal water, or public roadway, it shall be replaced by other vegetation (except where the area cleared is built upon) that is effective in preventing erosion and retaining natural beauty.

B. MINERAL EXPLORATION AND EXTRACTION

Mineral exploration and extraction activities not in conformance with the standards of this section may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the subdistrict involved. An applicant for such permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with the standards of this section, shall be conducted in a manner which produces no undue adverse impact upon the resources and uses in the area.

The following requirements for mineral exploration and extraction activities shall apply in all subdistricts except as otherwise hereinafter provided:

1. Mineral Exploration: The following requirements shall apply to mineral exploration activities:

   a. All excavations, including test pits and holes, shall be promptly capped, refilled or secured by other equally effective measures so as to reasonably restore disturbed areas and to protect the public health and safety.

   b. Mineral exploration activities or associated access ways where the operation of machinery used in such activities results in the exposure of mineral soil, shall be located such that an unscarified filter strip of at least the width indicated below is retained between the exposed mineral soil and the normal high water mark of a flowing water, body of standing water, tidal water, or wetland identified as a P-WL1 subdistrict:

Average Slope of Land Between Exposed Mineral Soil and Normal High Water Mark (Percent)	Width of Strip Between Exposed Mineral Soil and Normal High Water Mark (Feet Along Surface of the Ground)
0	25
10	45
20	65
30	85
40	105
50	125
60	145
70	165

Table Appendix 5,C-1. Unscarified filter strip width requirements for exposed mineral soil created by mineral exploration activities or associated access ways.

   The provisions of B,1,b apply only on a face sloping toward the water, provided, however, no portion of such exposed mineral soil on a back face shall be closer than 25 feet; the provisions of B,1,b do not apply where access ways cross such waters.

   c. Except when surface waters are frozen, access ways for mineral exploration activities shall not utilize stream channels bordered by P-SL2 subdistricts except to cross the same by the shortest possible route; unless culverts or bridges are installed in accordance with Appendix 5, C,2 and 5, such crossings shall only use channel beds which are composed of gravel, rock or similar hard surface which would not be eroded or otherwise damaged.

d. Access way approaches to stream channels shall be located and designed so as to divert water runoff from the way in order to prevent such runoff from directly entering the stream.

e. In addition to the foregoing minimum requirements, when conducting mineral exploration activities and creating and maintaining associated access ways, provision shall be made to effectively stabilize all area of disturbed soil so as to reasonably avoid soil erosion and sedimentation of surface waters. These measures shall include seeding and mulching if necessary to insure effective stabilization.

2. Mineral Extraction: The following requirements shall apply to mineral extraction activities in all subdistricts:

a. A vegetative buffer strip shall be retained between the ground area disturbed by the extraction activity and:

(1) 75 feet of the normal high water mark of any body of standing water less than 10 acres in size, any flowing water draining less than 50 square miles, tidal water, or wetland identified as a P-WL1 subdistrict; and

(2) 100 feet of the normal high water mark of any body of standing water 10 acres or greater in size or flowing water draining 50 square miles or more.

b. No portion of any ground area disturbed by the extraction activity shall be closer than 250 feet from any public roadway, or 250 feet from any property line in the absence of the prior written agreement of the owner of such adjoining property.

c. Within 250 feet of any water body the extraction area shall be protected from soil erosion by ditches, sedimentation basins, dikes, dams, or such other control devices which are effective in preventing sediments from being eroded or deposited into such water body.

Any such control device shall be deemed part of the extraction area for the purposes of Appendix 5, B,2,a, above;

d. A natural vegetative screen of not less than 50 feet in width shall be retained from any facility intended primarily for public use, excluding privately owned roads; and

e. If any mineral extraction operation located within 250 feet of any property line or public roadway or facility intended primarily for public use, excluding privately owned roads, is to be terminated or suspended for a period of one year or more, the site shall be rehabilitated by grading the soil to a slope of 2 horizontal to 1 vertical, or flatter.

C. ROADS AND WATER CROSSINGS

Roads and water crossings not in conformance with the standards of this section may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the subdistrict involved. An applicant for such permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with the standards of this section, shall be conducted in a manner which produces no undue adverse impact upon the resources and uses in the area.

The following road and water crossing requirements shall apply in P-WL1, P-WL2, P-SL, and P-FP subdistricts, and within 250 feet of a Great Pond P-GP, and all development subdistricts:

1. The following requirements shall apply to construction and maintenance of roads:

   a. All cut or fill banks and areas of exposed mineral soil outside the roadbed within 75 feet of a flowing water, body of standing water, tidal water, or a wetland shall be revegetated or otherwise stabilized so as to prevent erosion and sedimentation of water bodies or wetlands;

   b. Road banks shall have a slope no steeper than 2 horizontal to 1 vertical;

   c. Drainage ditches shall be provided so as to effectively control water entering and leaving the road area. Such drainage ditches will be properly stabilized so that the potential for unreasonable erosion does not exist;

   d. In order to prevent road surface drainage from directly entering water bodies or wetlands, roads and their associated drainage ditches shall be located, constructed, and maintained so as to provide an unscarified filter strip, of at least the width indicated below, between the exposed mineral soil of the road and the normal high water mark of a surface water body or upland edge of a wetland:

Average Slope of Land Between Exposed Mineral Soil and Normal High Water Mark (Percent)	Width of Strip Between Exposed Mineral Soil and Normal High Water Mark (Feet Along Surface of the Ground)
0	25
10	45
20	65
30	85
40	105
50	125
60	145
70	165

Table Appendix 5, C-1. Unscarified filter strip width requirements for exposed mineral soil created by roads and their associated drainage ditches.

This requirement shall not apply to road approaches to water crossings or wetlands.

   e. Drainage ditches for roads approaching a water crossing or wetland shall be designed, constructed, and maintained to empty into an unscarified filter strip, of at least the width indicated in the table set forth in Appendix 5, C,1,d above, between the outflow point of the ditch and the normal high water mark of the water or the upland edge of a wetland. Where such filter strip is impracticable, appropriate techniques shall be used to reasonably avoid sedimentation of the water body or wetland. Such techniques may include the installation of sump holes or settling basins, and/or the effective use of additional ditch relief culverts and

ditch water turnouts placed so as to reasonably avoid sedimentation of the water body or wetland;

f. Ditch relief (cross drainage) culverts, drainage dips and water turnouts will be installed in a manner effective in getting drainage onto unscarified filter strips before the flow in the road or its drainage ditches gains sufficient volume or head to erode the road or ditch.

(1) Drainage dips may be used in place of ditch relief culverts only where the road grade is 10% or less;

(2) On roads having slopes greater than 10%, ditch relief culverts shall be placed across the road at approximately a 30 degree angle downslope from a line perpendicular to the center line of the road;

(3) Ditch relief culverts, drainage dips and water turnouts shall direct drainage onto unscarified filter strips as required in Appendix 5,C,1,d and e above;

(4) Ditch relief culverts shall be sufficiently sized and properly installed in order to allow for effective functioning, and their inlet and outlet ends shall be stabilized with appropriate materials; and

(5) Ditch relief culverts, drainage dips and associated water turnouts shall be spaced along the road at intervals no greater than indicated in the following table:

Road Grade (Percent)	Spacing (Feet)
0-2	500-300
3-5	250-180
6-10	167-140
11-15	136-127
16-20	125-120
21+	100

Table Appendix 5, C-2. Spacing requirements for drainage dips and associated water turnouts.

2. The following requirements shall apply to water crossings when surface waters are unfrozen:

a. Bridges and culverts shall be installed and maintained to provide an opening sufficient in size and structure to accommodate 10 year frequency water flows or with a cross-sectional area at least equal to 2 ½ times the cross-sectional area of the stream channel.

b. Culvert and bridge sizes may be smaller than provided in Appendix 5,C,2,a if techniques are employed such that in the event of culvert or bridge failure, the natural course of water flow is reasonably maintained and sedimentation of the water body is reasonably avoided; such techniques may include, but are not limited to, the effective use of any or all of the following:

(1) removing culverts prior to the onset of frozen ground conditions;
(2) using water bars in conjunction with culverts; or
(3) using road dips in conjunction with culverts.

c. Culverts utilized in water crossings shall:

(1) be installed at or below stream bed elevation;
(2) be seated on firm ground;
(3) have soil compacted at least halfway up the side of the culvert;
(4) be covered by soil to a minimum depth of 1 foot or according to the culvert manufacturer's specifications, whichever is greater; and

(5) have a headwall at the inlet end which is adequately stabilized by rip-rap or other suitable means to reasonably avoid erosion of material around the culvert.

3. The design and construction of land management road systems through wetlands, other than those areas below the normal high water mark of standing or flowing waters, must avoid wetlands unless there are no reasonable alternatives, and must maintain the existing hydrology of wetlands.

To maintain the existing hydrology of wetlands, road drainage designs shall provide cross drainage of the water on the surface and in the top 12 inches of soil in wetlands during both flooded and low water conditions so as to neither create permanent changes in wetland water levels nor alter wetland drainage patterns. This shall be accomplished through the incorporation of culverts or porous layers at appropriate levels in the road fill to pass water at its normal level through the road corridor. Where culverts or other cross-drainage structures are not used, all fills shall consist of free draining granular material.

To accomplish the above, the following requirements apply:

a. Road construction on mineral soils or those with surface organic layers up to 4 feet in thickness:

(1) Fill may be placed directly on the organic surface compressing or displacing the organic material until equilibrium is reached. With this method, culverts or other cross-drainage structures are used instead of porous layers to move surface and subsurface flows through the road fill material.

(a) For road construction on mineral soils or those with surface organic layers less than 16 inches in thickness, culverts or other cross-drainage structures shall be appropriately sized and placed at each end of each wetland crossing and at the lowest elevation on the road centerline with additional culverts at intermediate low points as necessary to provide adequate cross drainage. Culverts or other cross-drainage structures shall be placed at maximum intervals of 300 feet.

(b) For road construction on surface organic layers in excess of 16 inches but less than 4 feet in thickness, cross drainage must be provided by placing culverts at each end of each wetland crossing and at the lowest elevation on the road centerline with additional culverts at intermediate low points as necessary to provide adequate cross drainage. Culverts or other cross-drainage structures shall be placed at maximum 300-foot intervals. Culverts shall be a minimum of 24 inches in diameter, or the functional equivalent, and buried halfway below the soil surface.

(c) Where necessary to maintain existing water flows and levels in wetlands, ditches parallel to the road centerline shall be constructed along the toe of the fill to collect surface and subsurface water, carry it through the culvert(s) and redistribute it on the other side. Unditched breaks shall be left midway between culverts to prevent channelization.

(2) Alternatively, a porous layer may be created to move surface and subsurface flows through the road fill materials. If a porous layer is used, geotextile fabric must be placed above and below fill material to increase the bearing strength of the road and to preserve the bearing strength of fill material by preventing contamination with fine soil particles.

b. Road construction on soils with organic layers in excess of 4 feet in thickness:

(1) Such construction shall only take place under frozen ground conditions.

(2) Geotextile fabric shall be placed directly on the soil surface. Road fill or log corduroy shall then be placed on the geotextile fabric.

(3) Cross drainage shall be provided by either a continuous porous layer or appropriate placement of culverts or other cross-drainage structures and ditching as specified below:

(a) A continuous porous layer or layers shall be constructed by placement of one or more layers of wood corduroy and/or large stone or chunkwood separated from adjacent fill layers by geotextile fabric placed above and below the porous layer(s) such that continuous cross drainage is provided in the top 12 inches of the organic layer; or

(b) Cross drainage culverts or other cross-drainage structures shall be placed at points where they will receive the greatest support. Culverts or other cross-drainage structures shall be a minimum of 24 inches in diameter, or the functional equivalent, and buried halfway below the soil surface. Where necessary to maintain existing water flows and levels in wetlands, ditches parallel to the roadbed on both sides shall be used to collect surface and subsurface water, carry it through the culvert(s) and redistribute it on the other side. Such ditches shall be located three times the depth of the organic layer from the edge of the road fill. Unditched breaks shall be left midway between culverts to prevent channelization.

4. Ditches, culverts, bridges, dips, water turnouts and other water control installations associated with roads shall be maintained on a regular basis to assure effective functioning.

5. Maintenance of the above required water control installations shall continue until the road is discontinued and put to bed by taking the following actions:

a. Water bars shall

(1) be constructed and maintained across the road at intervals established below:

Road Grade (Percent)	Distance Between Water Bars (Feet)
0-2	250
3-5	200-135
6-10	100-80
11-15	80-60
16-20	60-45
21+	4-

Table Appendix 5, C-3. Spacing requirements for water bars.

(2) be constructed at approximately 30 degrees down slope from the line perpendicular to the center line of the road;

(3) be constructed so as to reasonably avoid surface water flowing over or under the water bar; and

(4) extend sufficient distance beyond the traveled way so that water does not reenter the road surface.

b. Any bridge or water crossing culvert in such road shall satisfy one of the following requirements:

(1) it shall be designed to provide an opening sufficient in size and structure to accommodate 25 year frequency water flows;

(2) it shall be designed to provide an opening with a cross- sectional area at least 3 ½ times the cross- sectional area of the stream channel; or

(3) it shall be dismantled and removed in a fashion so as to reasonably avoid sedimentation of the water body.

6. Provided they are properly applied and used for circumstances for which they are designed, methods including but not limited to the following are acceptable to the Commission as means of calculating the 10 and 25 year frequency water flows and thereby determining crossing sizes as required in Appendix 5,C,2 and 5:

   a. The USDA Soil Conservation Service (SCS) Methods; specifically: "Urban Hydrology for Small Watersheds," June 1986 Soil Conservation Service Technical Release #55.

   b. The United States Geological Survey (USGS) Methods; specifically: U.S. Geological Survey. 1975. "A Technique for Estimating the Magnitude and Frequency of Floods in Maine." Open- file Report 75-292.

7. Extension, enlargement or resumption of use of presently existing roads, which are not in conformity with the provisions of Appendix 5,C, are subject to the provisions of Appendix 6.

8. Publicly owned roads may be constructed in a fashion that is not in strict conformity with the provisions of this section, provided that other measures are applied that are effective in reasonably avoiding sedimentation of surface waters.

9. Except that Appendix 5,C,10, below, always applies, trail crossings of minor flowing waters shall be exempt from the standards of Appendix 5,C, provided such crossings are constructed in a manner that causes no disturbance to the stream bed, and no substantial disturbance to the banks or shoreland areas in the vicinity of the crossing, and provided such crossings do not impede the flow of water or the passage of fish. If properly undertaken, acceptable methods may include but not be limited to the laying of logs from bank to bank, or placement of bed logs and stringers with decking. This exemption shall not extend to the construction of abutments or piers.

   Trail crossings not so exempted shall be subject to the water crossing standards of Appendix 5,C, including specifically Appendix 5,C,2, 4, 5, 6, 10 and 11.

10. In addition to the foregoing minimum requirements, provision shall otherwise be made in the construction and maintenance of roads and water crossings in order to reasonably avoid sedimentation of surface waters.

11. Written notice of all road and water crossing construction activities, except level A road projects and exempt trail crossings as provided in Appendix 5,C,9 above, shall be given to the Commission prior to the commencement of such activities. Such notice shall conform to the requirements of Appendix 7 and shall state the manner in which the water crossing size requirements of this section will be satisfied.

D. TIMBER HARVESTING

Timber harvesting activities not in conformance with the standards of this section may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the subdistrict involved. An applicant for such permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with the standards of this section, shall be conducted in a manner which produces no undue adverse impact upon the resources and uses in the area.

The following requirements apply to timber harvesting within all development and protection subdistricts except as otherwise hereinafter provided:

1. Except when surface waters are frozen, skid trails and skid roads shall not utilize stream channels bordered by a P-SL1 subdistrict except to cross such channels with a culvert or bridge according to the water crossing requirements of Appendix 5,C,2 and 5;

2. Timber harvesting operations in P-SL1 and within 250 feet of a Great Pond shall be conducted in the following manner:

    a. Within 50 feet of the normal high water mark, no clearcutting shall be allowed and harvesting operations shall be conducted in such a manner that a well-distributed stand of trees is retained so as to maintain the aesthetic and recreational value and water quality of the area and to reasonably avoid sedimentation of surface waters.

    b. At distances greater than 50 feet from the normal high water mark, harvesting activities may not create single openings greater than 14,000 square feet in the forest canopy. In such areas single canopy openings of over 10,000 square feet shall be no closer than 100 feet apart.

    c. Harvesting shall not remove, in any ten year period, more than 40 percent of the volume on each acre involved of trees 6 inches in diameter and larger measured at 4½ feet above ground level. Removal of trees less than 6 inches in diameter, measured as above is permitted if otherwise in conformance with these regulations. For the purpose of these standards, volume may be determined as being equivalent to basal area.

    d. No accumulation of slash shall be left within 50 feet of the normal high water mark of surface water protected by the P-SL1 and a Great Pond. In such subdistricts, at distances greater than 50 feet from the normal high water mark of such waters, all slash larger than 3 inches in diameter shall be disposed of in such a manner that no part thereof extends more than 4 feet above the ground.

3. Except as provided in Appendix 5,D,7, skid trails and other sites, where the operation of machinery used in timber harvesting results in the exposure of mineral soil, shall be located such that an unscarified filter strip of at least the width indicated below is retained between the exposed mineral soil and the normal high water mark of surface water areas:

Average Slope of Land Between Exposed Mineral Soil and Normal High Water Mark (Percent)	Width of Strip Between Exposed Mineral Soil and Normal High Water Mark (Feet Along Surface of the Ground)
0	25
10	45
20	65
30	85
40	105
50	125
60	145
70	165

Table 1 Appendix 5, D-1. Unscarified filter strip width requirements for exposed mineral soil created by the operation of machinery used in timber harvesting.

The provisions of Appendix 5,D,3 apply only on a face sloping toward the water, provided, however, no portion of such exposed mineral soil on a back face shall be closer than 25 feet; the provisions of Appendix 5,D,3 do not apply where skid roads cross such waters;

4. Timber harvesting operations shall be conducted in such a manner that slash is not left below the normal high water mark of a body of standing water or tidal waters, or below the normal high water mark of stream channels downstream from the point where such channels drain 300 acres or more;

5. Except when surface waters are frozen, skid trails and skid roads shall not utilize stream channels bordered by P-SL2 subdistricts except to cross the same by the shortest possible route; unless culverts or bridges are installed in accordance with Appendix 5,C,2 and 5, such crossings shall only use channel beds which are composed of gravel, rock or similar hard surface which would not be eroded or otherwise damaged. The requirements of Appendix 5,D,5 may be modified according to the provisions of Appendix 5,D,7;

6. Except as provided in Appendix 5,D,7, skid trail and skid road approaches to stream channels shall be located and designed so as to divert water runoff from the trail or road in order to prevent such runoff from directly entering the stream;

7. Timber harvesting operations in P-SL2 subdistricts along stream channels upstream from the point where they drain 300 acres or less, and in P-WL subdistricts adjacent to such P-SL2 subdistricts, may be conducted in a manner not in conformity with the requirements of the foregoing Sections Appendix 5,D,3, 5, and 6 provided that such operations are conducted so as to avoid the occurrence of sedimentation of water in excess of 25 Jackson Turbidity Units as measurable at the point where such stream channel drains 1 square mile or more. Jackson Turbidity Units are a standard measurement of the relative amount of light that will pass through a sample of water compared with the amount of light that will pass through a reference suspension; the Jackson Turbidity Unit measurement for water without turbidity is 0;

8. Harvesting operations in P-SL2 subdistricts along stream channels downstream from the point where they drain 300 acres or more and along bodies of standing water shall be conducted in such a manner that sufficient vegetation is retained to maintain shading of the surface waters;

9. Written notice of all timber harvesting operations shall be given to the Commission prior to the commencement of such activity. Such notice shall conform to the requirements of section 10.16 (Appendix 7) and shall state whether or not such operations will be conducted according to the provisions of Appendix 5,D,7; and

10. In addition to the foregoing minimum requirements, except as provided for in Appendix 5, D,7, provision shall otherwise be made in conducting timber harvesting operations in order to reasonably avoid sedimentation of surface waters.

E. FILLING AND GRADING

The following requirements for filling and grading shall apply in all subdistricts except as otherwise provided herein.

Filling and grading activities not in conformance with the standards of this section may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the subdistrict involved. An applicant for such permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with the standards of this section, shall be conducted in a manner which produces no undue adverse impact upon the resources and uses in the area.

These standards do not apply to filling or grading activities which constitute forest or agricultural management activities, the construction, reconstruction and maintenance of roads, or the construction of public trailered ramps, hand-carry launches, or driveways. Such activities are separately regulated.

1. Within 250 feet of water bodies and wetlands, the maximum size of a filled or graded area, on any single lot or parcel, shall be 5,000 square feet. This shall include all areas of mineral soil disturbed by the filling or grading activity; and

2. Beyond 250 feet from water bodies, the maximum size of filled or graded areas, as described above, shall be 20,000 square feet, except that there shall be no limit to the size of filled or graded areas in M-GN subdistricts which are greater than 250 feet from water bodies and wetlands. In such M-GN subdistrict areas, the provisions of Appendix 5,E,4 and 6 shall apply; and

3. Clearing of areas to be filled or graded is subject to the Clearing Standards of Appendix 5,A; and

4. Imported fill material to be placed within 250 feet of water bodies shall not contain debris, trash, rubbish or hazardous or toxic materials. All fill, regardless of where placed, shall be free of hazardous or toxic materials; and

5. Where filled or graded areas are in the vicinity of water bodies or wetlands such filled or graded areas shall not extend closer to the normal high water mark of a flowing water, a body of standing water, tidal water, or upland edge of wetlands identified as P-WL1 subdistrict than the distance indicated in the following table:

Average Slope of Land Between Exposed Mineral Soil and Normal High Water Mark or Upland Edge (Percent)	Width of Strip Between Exposed Mineral Soil and Normal High Water Mark or Upland Edge (Feet Along Surface of the Ground)
10 or less	100
20	130
30	170
40	210
50	250
60	290
70	330

Table Appendix 5, E-1. Unscarified filter strip width requirements for exposed mineral soil created by filling and grading.

6. All filled or graded areas shall be promptly stabilized to prevent erosion and sedimentation.

   Filled or graded areas, including all areas of disturbed soil, within 250 feet of water bodies and wetlands, shall be stabilized according to the Guidelines for Vegetative Stabilization contained in Appendix B of this chapter.

F. DRIVEWAYS ASSOCIATED WITH RESIDENTIAL STRUCTURES AND USES

Driveways not in conformance with the standards of this section may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the subdistrict involved. An applicant for such permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with the standards of this section, shall be conducted in a manner which produces no undue adverse impact upon the resources and uses in the area.

1. Applicability:

   The following requirements apply to the construction of driveways for single family and two family dwelling units in all subdistricts where driveways associated with residential uses are allowed without a permit. These standards, along with the standards of Appendix 3,C,4, may be used as guidance in processing an application for driveways to be located in those subdistricts where driveways require a permit from the Commission.

   a. Other Permits: If a permit has been issued for the development of the lot to be served by the driveway or if the lot is part of a subdivision for which a permit has been issued, conditions of the building permit or subdivision permit regarding construction of driveways supersede provisions of this subsection.

   b. Length: If the length of a proposed driveway is greater than 1000 feet, it is regulated as a road and requires a permit from the Commission unless it qualifies as a land management road.

2. Water Body Setback:

   a. Minimum Setback: The minimum water body setback for a driveway which accesses an undeveloped lot or a lot having residential structures is:
      (1) 100 feet from the nearest shoreline of a flowing water draining 50 square miles, and a body of standing water greater than 10 acres in size;
      (2) 75 feet from the nearest shoreline of a tidal water; and
      (3) 50 feet from the upland edge of minor flowing waters and mapped P-WL1 wetlands.

   b. Exceptions to Water Body and Wetland Setback Requirements:
      (1) The water body and wetland setback requirements do not apply to approaches to water body or wetland crossings.
      (2) A lesser setback may be allowed with a permit in the following instances provided no other reasonable alternative exists and appropriate techniques are used as needed to prevent sedimentation of the water body:
         (a) In the case of legally existing nonconforming structures located in the shoreland area, the driveway may extend to the portion of the principal structure farthest from the normal high water mark of the water body, but in no case closer than 50 feet from the normal high water mark of the water body; or
         (b) To allow access to permitted facilities located nearer to the shoreline due to an operational necessity as described in Appendix 4,G,5.

3. Property Line Setback:

   a. Minimum Setback: The minimum property line setback for a driveway is 15 feet.

   b. Exceptions to Property Line Setback:
      (1) A shared driveway need not meet the minimum setback.
      (2) The minimum setback standard does not apply to authorized approaches to and crossings of property lines or to crossings along easements or rights of way established in deed or lease.
      (3) A lesser setback may be allowed with a permit upon written permission of the abutting landowner.

4. Road Frontage: The lot to be served by the driveway must have a minimum of 100 feet of road frontage.

5. Entry onto Roadways, including State Highways: The entry must not be located on a curve and must be placed so as to allow adequate line of sight for safe entry onto the roadway. If a driveway is to enter directly onto a state or state-aid highway, the person wishing to construct the driveway must first obtain written permission from the Maine Department of Transportation.

6. Crossings of Flowing Waters: If a driveway will cross a flowing water, the crossing must be accomplished in accordance with the standards for installation of water crossings set forth in Appendix 5,D,2.

7. Wetlands Alteration: The driveway must not alter any portion of a mapped P-WL1 subdistrict or more than 4,300 square feet of a mapped P-WL2 or P-WL3 subdistrict without a permit.

8. Maximum Slope: The driveway must not have a sustained slope of more than 8%.

9. Erosion and Sedimentation Control:

   a. The driveway must be located, designed and constructed so that:

(1) It will not erode or create any undue restriction or disruption of existing surface water drainage ways;
(2) It will divert runoff to a vegetated buffer strip so as to prevent it from directly entering a water body, mapped P-WL1 wetland, or roadway.

b. Except for the travel surface of the driveway, all areas of disturbed soil must be promptly reseeded and mulched to prevent soil erosion.

10. Fill Material: Fill material used in the construction of a driveway must not contain demolition debris, trash, rubbish, or hazardous or toxic materials.

G. PESTICIDE APPLICATION

Pesticide application in any of the subdistricts will not require a permit from the Commission provided such application is in conformance with applicable State and Federal statutes and regulations.

H. SIGNS

Signs not in conformance with the standards of this section may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the subdistrict involved. An applicant for such permit shall show by a preponderance of the evidence that the proposed sign, which is not in conformance with the standards of this section, shall be erected and maintained in a manner which produces no undue adverse impact upon the resources and uses in the area.

1. Signs Not Requiring a Permit

The following signs do not require a permit from the Commission, provided such signs are in conformance with the requirements of Appendix 5,H,1 and 2, below. The following limitations may be exceeded only under the provisions of a permit from the Commission:

a. Signs erected and maintained outside the highway right-of-way, by a governmental body, showing places of interest (other than commercial establishments), the place and time of services or meetings of churches and civic organizations. Not more than two such signs may be erected and maintained which are readable by traffic proceeding in any one direction on any one highway in any one township;

b. Residential directional signs, each of which does not exceed 4 square feet in area, along roadways other than limited access highways;

c. Traffic control signs or devices;

d. Signs displayed for the direction, instruction or convenience of the public, including signs which identify posted areas, property boundaries, trails, fire precautions, campsites, or the like, with a total surface area not exceeding 6 square feet This exemption shall not apply to signs visible from any public roadway promoting or advertising commercial enterprises;

e. Signs to be maintained for not more than six weeks announcing a campaign drive or other like event of a public, civic, philanthropic or religious organization;

f. Memorial signs or tablets;

g. Directional signs visible from a public roadway with a total surface area not to exceed 4 square feet providing directions to places of business offering for sale agricultural products harvested or produced on the premises where the sale is taking place;

h. Official business directional signs as defined and authorized by 23 M.R.S.A. §21.

i. Signs containing only a symbol or design identifying gas, food or lodging services and the distance and/or direction to such services at trail inter s without a sign kiosk. Such signs are not to exceed 4 square feet in size.

j. Signs identifying a particular place of business offering gas, food, or lodging at the intersection of a local feeder trail leading directly to that place of business. Such signs are not to exceed 4 square feet in size and shall not be visible from a public roadway.

k. On-Premise Signs

Owners or occupants of real property may erect and maintain on-premise signs, except roof signs, advertising the sale or lease thereof or activities being conducted thereon. Such signs shall be subject to the following requirements and the regulations set forth in Appendix 5,H,2 below:

(1) On-premise signs shall not exceed in size the area limitations set forth below:

Subdistricts	Maximum Size for Each Individual Sign (square feet)	Maximum Aggregate Area of all Signs for Facility Being Advertised (square feet)
P-RP	4	8

Table Appendix 5, H-1. Size limitations for on-premise signs.

(2) On-premise signs shall not be located more than 500 feet from the building or other particular site at which the activity advertised is conducted;

(3) Signs advertising the sale or lease of real estate by the owner or his agent shall not have an area of more than 4 square feet, except signs advertising a subdivision which shall be limited in size as provided by Appendix 5,H,1,l,(1);

(4) On-premise signs, other than wall or projecting signs, shall not extend more than 15 feet above ground level, and shall not have a supporting structure which extends more than two feet above such sign;

(5) Projecting signs must be at least 9 feet above pedestrian level and may project no more than 2 feet from the building; and

(6) Signs attached to a wall shall not extend above the top of the wall.

On-premise signs which are not in conformance with the preceding requirements and all roof signs may be allowed only under the provisions of a permit from the Commission.

2. Regulations Applying to All Signs

Notwithstanding any other provisions of this chapter, no sign may be erected or maintained which:

a. Interferes with, imitates or resembles any official traffic control sign, signal or device, or attempts or appears to attempt, to direct the movement of traffic;

b. Prevents the driver of a motor vehicle from having a clear and unobstructed view of official traffic control signs and approaching or merging traffic;

c. Contains, includes, or is illuminated by any flashing, intermittent or moving light, moves or has any animated or moving parts, except that this restriction shall not apply to a traffic control sign;

d. Has any lighting, unless such lighting is shielded so as to effectively prevent beams or rays of light from being directed at any portion of the main traveled way of a roadway, or is of such low intensity or brilliance as not to cause glare or impair the vision of the driver of any motor vehicle or otherwise interfere with the operation thereof;

e. Is in violation of, or at variance with, any federal law or regulation, including, but not limited to, one containing or providing for conditions to, or affecting the allocation of federal highway or other funds to, or for the benefit of, the State or any political subdivision thereof;

f. Is in violation of, or at variance with, any other applicable State law or regulation;

g. Advertises activities which are illegal under any state or federal law applicable at the location of the sign or of the activities;

h. Is not clean or in good repair; or

i. Is not securely affixed to a substantial structure.

Any sign which is a combination of exempt and/or non-exempt signs shall be regulated by the most protective standards applicable.

3. Criteria for Sign Approval

In approving, conditionally approving, or denying any application for a sign permit, the Commission shall require that the applicant demonstrate that the proposed sign complies with those criteria set forth in 12 M.R.S.A. §685-B(4) as well as the following:

a. that the sign is compatible with the overall design of the building height, color, bulk, materials and other design and occupancy elements;

b. that the color, configuration, height, size, and other design elements of the sign will fit harmoniously into the surrounding natural and man-made environment;

c. that the sign will not constitute a hazard to the flow of traffic; and

d. that the applicant sufficiently demonstrates the need for any non-conformity with the size, height, and other limitations set forth in Appendix 5,H,1.

H. HAND-CARRY LAUNCHES AND WATER-ACCESS WAYS

Except as hereinafter provided, hand-carry launches and water-access ways not in conformance with the standards of this section are prohibited.

Except as provided for in Appendix 5,I,4, hand-carry launches, and water-access ways require a permit from the Commission. Where a permit is required, the proposal. must meet the general Criteria for Approval, Appendix 2, and the Criteria for Wetland Alterations, Appendix 3, in addition to any applicable requirements set forth in these rules.

1. Hand-carry Launch and Water-access Ways

Wherever private hand-carry launches or water access ways are allowed by special exception, the following apply:

For a proposed hand-carry launch or set of water-access ways, the following constitutes "an alternative site reasonably available" to the applicant:

a. an existing public or commercial trailered ramp or set of water-access ways if it has two or more associated parking spaces for motor vehicles with trailers and is located within 15 road miles or 5 miles by water of the applicant's proposed development,

b. a proposed public or commercial trailered ramp or set of water-access ways located within 15 road miles or 5 miles by water of the applicant's proposed development, provided such a facility is proposed for construction within 2 years of the date of the application.

2. Facilities Associated with Shorefront Subdivisions

Shorefront subdivisions may be permitted no more than one hand-carry launch or set of water-access ways. Any such facility must comply with Appendix 5, I, 5, and must be accessible to all lots in the subdivision. The location of the facility must be identified on the subdivision plat and right of access must be covenanted in the deeds of all lots in the subdivision.

3. Maintenance of Hand-carry Launches

Maintenance: Every application for a permit, or permit by special exception for a new or replacement hand-carry launch, or expansion thereof, must contain a description of the procedures the applicant will follow to maintain the facility on an ongoing basis in compliance with the standards of Appendix 5,I ,5, to minimize erosion, sedimentation, and transport of phosphorus into the water body.

4. Notification for Hand-carry Launches

Public hand-carry launches are allowed without a permit within the shoreland zone of all water bodies except those identified as Management Class 1, 2, and 6 Lakes.

The following notification provision applies to construction of new or replacement hand-carry launches where such projects are allowed without a permit. If a proposed project fails to meet any notification requirement or other applicable rule, the project requires a permit.

a. Every notification must be on a form provided by the Commission.

b. At least 30 days before filing the notification with the Commission, the applicant shall inform the Commission of the intent to file, mail notice to the local board of selectmen/assessors, if

applicable, and to all landowners/lessees within 1000 feet of the proposed project according to the records of Maine Revenue Services or the applicable plantation/municipality. At the time of notice, a draft notification form must be available for inspection. The notice must state how to obtain a copy of the draft notification, the anticipated date for filing of the notification with the Commission, and a statement that public comments on the notification may be submitted to the Commission. Unless this deadline is extended by the Commission, any such comments must be submitted to the Commission by the anticipated date of the filing of the notification with the Commission.

c. The applicant may proceed with the proposed project 14 days after filing the notification with the Commission unless within this time period the Commission staff informs the applicant in writing that issues have been identified by Commission staff or other persons regarding the adequacy with which Appendix 5,H,4 and 5 are met or that there may be an undue adverse impact on existing uses or resources in the project area. If these issues cannot be resolved, the Commission will determine if there is sufficient public interest in the project to warrant consideration of a public hearing on the notification. If a hearing is held, the Commission may consider compliance with the applicable requirements of sections d and e and impacts on existing uses or resources in the project area. Within 60 days after the close of any public hearing, the Commission shall inform the applicant in writing of its determination. If the Commission determines that the requirements of sections d and e are met and that the project will not have an undue adverse impact on existing uses or resources in the project area, the notification will be accepted. If the notification is not accepted, the project will require a permit to proceed.

d. Expiration: A notification expires 2 years from the date of acceptance by the Commission.

5. Design and Construction Standards for Hand-carry Launches

Unless otherwise indicated, the following standards apply to hand-carry launches that are subject to the notification provisions in Appendix 5,H,4, and to all private hand-carry launches.

a. Erosion Prevention and Control During Construction: Eroded soil or fill material from disturbed areas must be prevented from entering a water body. Properly installed erosion control measures, such as staked hay bales and silt fence, must be in place before the project begins. These erosion control measures must remain in place, functioning as intended, until the project area is permanently stabilized. Erosion and sedimentation control measures must comply with "Maine Erosion and Sedimentation Control Handbook for Construction: Best Management Practices," Cumberland County Soil and Water Conservation District and Maine Department of Environmental Protection, March 1991.

b. Avoidance of Water Bodies: No portion of a ramp or related facilities may be located in, on, or over wetlands, other than the water body being accessed, identified as P-WL1 on the Commission's zoning map for the project area. Parking areas, access roads, and paths must not be located in a stream, wetland designated as P-WL1, or other water body, except that an access roadway may cross a stream if requirements of Appendix 5,C, pertaining to water crossings, are met.

c. Maintenance of Vegetated Buffer: Hand-carry launches, and associated facilities must be designed to minimize disturbance to the water body's vegetated buffer. A vegetated buffer zone at least 25 feet wide for public facilities (100 feet for private facilities) must be maintained or established between any parking area and the water body. In the case of private trailered ramps, if the lot does not have a well established vegetated buffer consisting of trees, shrubs and woody or herbaceous ground cover within 100 feet of the normal high water mark of the water body, the applicant must propose to enhance the existing shoreland buffer to compensate for the loss of vegetated buffer due to construction of the ramp.

d. Runoff Diversion: Parking areas, access roads, and paths must divert runoff away from the ramp or launch to an area where it will infiltrate into the ground or pass through a sedimentation basin before reaching the water body. For private facilities, the total land area above the normal high water mark that drains directly into the water body along the approach or from cut slopes must be no greater than 200% of the area of the ramp or launch lane above the normal high water mark.

e. Hand-carry Launch: A hand-carry launch must meet the following specifications:

(1) The hand-carry launch area and access pathway must not be hard surfaced and must be constructed of gravel, rock, vegetation, or other natural erosion resistant materials;

(2) The sloped portion of the launch above the normal high water mark must have a slope no greater than 18%;

(3) The access path must have a maximum width of 6 feet and must have at least one bend to divert channelized runoff; and

(4) A landing area that is cleared of obstructions must be no wider than 20 feet and must extend no more than 20 horizontal feet below normal high water mark.

(5) Filled or cut slopes at or below the normal high water mark must be protected with riprap.

Within those subdistricts where hand-carry launches are allowed without a permit, the standards for hand-carry launches may be exceeded upon issuance of a permit.

f. Geoweb: Geoweb cellular confinement system must not be used below or within two vertical feet above the normal high water mark of the water body.

g. Concrete: Uncured concrete must not be placed directly into the water. Concrete must be pre-cast and cured at least three weeks before placing it in the water or, where necessary, must be placed in forms and must cure at least one week before the forms are removed.

h. Washing: No washing of tools, forms, or similar material may occur in or adjacent to the water body or wetland.

i. Lumber: The use of untreated lumber is preferred. Wood treated with creosote or pentachlorophenol must not be used below the normal high water mark. Lumber pressure-treated with chromated copper arsenate (CCA) may be used, provided it is cured on dry land in such a manner as to expose all surfaces to the air for a period of at least 21 days prior to construction.

j. Machinery in Water: Machinery may enter the water traveling or operating only on newly placed material or temporary mats and only when necessary to excavate or place material below the water level.

k. Debris: Any debris generated during the work must be prevented from washing into the water and must be removed from the wetland or water body. Disposal of debris must be in conformance with the Solid Waste Law, 38 M.R.S.A. §1301 et seq.

l. Dimensional requirements: The shoreline frontage requirement for public boat launches may be waived to no less than 200 feet provided the applicant demonstrates there will be no undue adverse impact to existing uses in the project area.

I. SERVICE DROPS

Service drops not in conformance with the standards of this section are prohibited. A permit is not required for a service drop provided one of the following conditions is met:

1. The Commission has issued a permit for the structure or development to be served; or

2. The Commission has confirmed, in writing, that the structure or development to be served is exempt from the Commission's permitting requirements.