

4.0 TECHNICAL ABILITY

The project team assembled for this development brings together national and international recirculating aquaculture systems (RAS) farm capabilities, combined with local civil engineering expertise. The assembled project team is highly qualified with extensive experience in developing, permitting, constructing, managing, and operating large scale developments projects, including land-based fish farms. The project has been under the supervision of Nordic's senior project and technical staff.

4.1 Applicant's Prior Experience

Nordic Aquafarms, based in Norway, is one of the world's largest investors and developers of land-based seafood production. We are dedicated to the highest environmental and quality standards in the industry, and already have development of three facilities in Europe behind us (Maximus, Sashimi Royal and Fredrikstad Seafoods). Our company has grown rapidly since its establishment in 2014 with a total of 54 employees at the time this application is filed. In 2017, we established a new subsidiary in the US, Nordic Aquafarms Inc., to pursue expansion in the US. The Belfast project is the company's fourth expansion step, with a fifth location in progress in Eureka, California.

Nordic Aquafarms has assembled significant experience and technical skill the design, development and operation of RAS. We have experienced commercial executives, experienced production leaders, and have a highly specialized internal engineering practice.

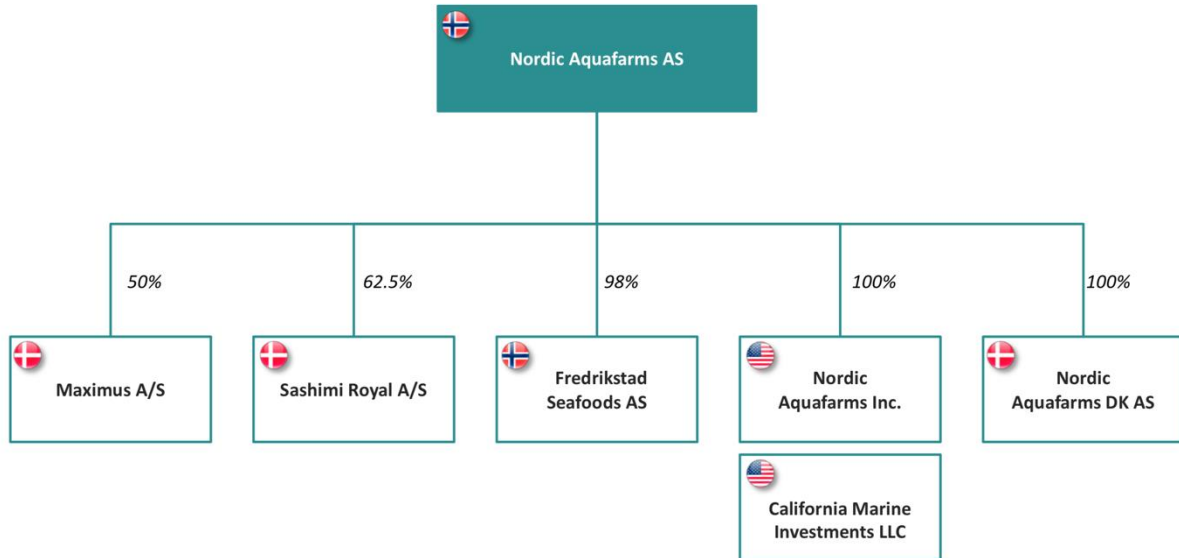
Nordic Aquafarms has the largest and strongest in-house engineering department in the land-based fish farming sector. Nordic Aquafarms has 14 full time engineers on staff, with the main design hub in Nordic Aquafarms DK, Denmark. The core civil team sits in Norway, with further expansions in the US team. Technical RAS design capabilities were expanded in 2018 with hires of six senior Inter Aqua Advance staff who had previously worked on our projects as consultants. Inter Aqua Advance has been a pioneer in RAS with delivery of designs and facilities to major seafood players all over the world for over 20 years. Inter Aqua built the first salmon smolt recirculating aquaculture system in the world for Scottish Seafarms, and the first salmon grow-out RAS design concept for Marine Harvest Canada. Our senior staff have several decades of working knowledge and experience in the industry and are viewed as experts in their field. Ivar Warren Hansen has 32 years of experience in aquaculture and has been involved with 45 separate RAS systems. Our most experienced engineers have delivered projects to international leaders in the segment such as Cooke, Grieg, Leroy Seafood, and Mowi amongst others.

In civil engineering and construction, Nordic Aquafarms has several experienced profiles. The engineering Director in Norway, Ketil Fjeld, has 30 years of project management experience from large commercial projects. We also have experienced construction designers. In Denmark we have Claus Rom with a long executive career in the construction industry. Civil capabilities are under expansion in the US (see below).

Our production and operations staff have decades of experience working in the industry, while making important contributions in pushing the industry to where it is today. As the Production Manager for Kuterra, Cathal Dineen helped bring commercial land-based aquaculture to North America. Cathal has been working for the last two years to successfully open Norway's largest land-based Salmon grow out facility in Fredrikstad for Nordic Aquafarms. He has over 20 year's experience with RAS production management and will be filling the position as production Director in Belfast. Site manager for Fredrikstad, Roger Fredriksen, has over 30 year's experience in Norway with farming several species, although he has worked primarily with large-scale commercial production of salmon.

Nordic Aquafarms currently operates the world's largest land-based Yellowtail Kingfish farm in Hanstholm, Denmark. Yellowtail are among the most demanding fish to raise. Nordic Aquafarms has been successfully producing 4 kg fish at this 1,200 mt farm for the European market in the past year with high praise from customers for several years, supported by the vertically integrated marine hatchery Maximus that holds approx. 90 brood stock. The facility received certifications from the Aquaculture Stewardship Council (ASC) in 2018. Sashimi Royal has never had any major incidents or issues with disease since the brood stock fish arrived three years ago.

The current legal structure of Nordic Aquafarms is as follows:



The company owns a number of patents and has a patent pending application for its new generation of RAS facility designs.

Nordic Aquafarms draws a vast amount of experience and operating knowledge from its Norwegian roots. Norway is a world leader in Salmon production, aquaculture technology, and research. Denmark has also developed a strong technical expertise in RAS through several world-class design vendors. Nordic Aquafarms has a foot in each of these markets and has now extended this to the US where we are also developing relations with many expert partners.

The company has systematically built its US executive team since 2018:

1. Nordic Aquafarms Inc President Erik Heim has overseen all company projects and has extensive experience in bringing together the various disciplines in project planning and execution.
2. Ed Cotter Nordic Aquafarms US project director has delivered 10 major projects totaling \$750m in value in his 12-year career with Gilbane, a respected leader in construction management. He had various construction management experience before this.
3. Cathal Dinneen is production director for the Maine facility with over 20 years of experience in RAS farming with numerous species. Dinneen has a long track-record of working with Salmon in RAS, including start-up of the first North-American land-based salmon facility Kuterra.

4. Marianne Naess is an experienced international executive from large companies such as Aker Solutions, McKesson, and others. She has experience from large construction, market development, and strategic organizational development. She is commercial director.
5. Nordic Aquafarms CTO David Noyes has worked for multiple land-based aquaculture companies and research groups such as the University of Maine Aquaculture Research Institute and the USDA ARS National Cold Water Marine Aquaculture Center in Maine, both are viewed as National experts on aquaculture.
6. Brenda Chandler is an experienced financial profile with a long track-record from the semi-conductor industry and complex projects, and is our CFO in the US.

The Nordic Aquafarms Inc organization will be scaled up further with expert resources upon permit clarifications, while working in concert with the Nordic organization.

4.2 External Project Team Experience

External consultants were selected based on their extensive experience and local expertise in their respective fields. The permitting phase has included contributions from the following vendors:

4.2.1 Ransom Consulting, Inc.

Ransom Consulting, Inc. (Ransom) has been retained to provide overall permitting and public participation services for local, state and federal permits, geotechnical engineering, storm water management analysis and design, environmental due diligence, hydrogeologic investigation, and coastal engineering services. Our staff includes professionals in civil, transportation, utility, stormwater, environmental, geotechnical, and coastal engineering, and we have been serving municipalities throughout New England for over 30 years.

Our services typically fall into the following major categories: civil/site engineering, municipal engineering/utility design services, geotechnical engineering, Brownfields redevelopment, environmental due-diligence and remediation services. Additionally, our Portland, Maine office has areas of specialty technical services that include storm water management analysis and design, civil/infrastructure design, geotechnical engineering, environmental permitting, public participation facilitation and local, state and federal permitting.

Providing civil, geotechnical, and environmental consulting and engineering services to municipal and private clients are all part of Ransom's core services, as such, these are areas in which our team members have exceptional expertise. We have worked collaboratively with diverse groups including municipal and state officials, regional planning and development commissions, developers, financial institutions, special interest groups, community groups, various review and approval agencies, as well as other consultants, engineers, architects, and construction experts. Ransom staff has provided professional engineering and environmental consulting services to municipalities throughout Maine and New England for many years. Some of the municipalities in Maine include Belfast, Bath, Eliot, Gardiner, Freeport, Camden, Rockland, Dover-Foxcroft, Kennebunk, Falmouth, Yarmouth, Brunswick, York, Portland, South Portland, and Cumberland for several years. This experience has served to build strong working relationships with federal, state, and local officials as well.

Our past clients include municipalities, utilities, large and small industrial companies, attorneys, real estate developers, hazardous waste contractors, and government agencies, among others. Our clients' satisfaction with our services has resulted in a large volume of repeat and referral business which has been a significant contribution to our sustained growth. Ransom has established a strong reputation in Maine and throughout New England by helping clients achieve project regulatory objectives.

4.2.2 SMRT Architects and Engineers

SMRT Architects and Engineers (SMRT's) roots go back to 1884, when John Calvin Stevens established his architectural design firm in Portland, Maine. Over the next 134 years, his one-man firm would evolve to become a multi-disciplinary industry leader with more than 100 employees. SMRT's integrated architectural and engineering practices support every project from the outset, bringing informed insight to ensure a facility functions dependably and efficiently and reflects its mission and culture.

Designing and engineering complex buildings for today's specialized technology industries requires both technical expertise and operations/facilities management experience. Our integrated and collaborative approach allows us to provide a full-responsibility model of project management. Given the high levels of coordination and oversight needed for the complexity of our clients' projects, SMRT's full-service team approach allows us to develop creative – yet practical – solutions to complex building problems.

While offering comprehensive services in-house, SMRT routinely partners with other consultants offering similar services. Our philosophy is simple: “structure a project in the way that is best for the client and the project's needs.” We value our partnering relationships, often with firms that others would consider competitors. A member of the US Green Building Council, SMRT considers sustainable design fundamental to our commitment to quality service. We practice “Green for a Reason,” where each sustainability element must fit our clients' operations, economic and schedule requirements. With Leadership in Energy and Environmental Design (LEED) certified professionals in every discipline, we develop each project using an integrated green planning program to ensure our clients fully understand their choices and implications.

We understand the importance of the functionality of a site design and the impacts on efficient operations while respecting the site attributes and natural environment surrounding the site. SMRT's landscape architects and consultant Civil Engineer, Andrew Johnston, are experienced in permitting a wide range of projects with the State of Maine Department of Environmental Protection (MEDEP) through Site Law (SLODA) and Natural Resources Protection Act (NRPA); Maine Department of Transportation (MEDOT), Army Corp of Engineers; and numerous local municipalities. Permitted projects range in size and complexity and include a new regional hospital, numerous medical office buildings and a cancer center in Scarborough. Our working relationships with state and local agencies and regulatory knowledge will ensure efficient communication among the team and to keep the project on schedule.

4.2.3 Cianbro Corporation

Cianbro Corporation (Cianbro) of Pittsfield, Maine, has been retained to provide the design and construction of the sea water access system, which includes saltwater intakes, pump station mechanical systems, and process water discharge.

Cianbro is a diversified full-service construction firm experienced in marine projects and the environmental considerations with water and wastewater treatment facilities. Since the company was formed in 1949, Cianbro has successfully performed both design-build and construction services for this type of work and many other construction projects of a waterborne nature. Cianbro specifically self-performs and subcontracts civil-structural, mechanical, piping and electrical construction tasks that this project will require.

Cianbro's key project team members have many years of combined expertise and experience in environmentally sensitive water and marine projects. Our management team is backed by a workforce of 1,500 craftspeople of all trades as well as a host of long standing subcontractor relationships to execute all aspects of this project. Cianbro's corporate support services include in house professional engineers to assist with temporary construction design, means and methods. Our local yards and facilities include shoreline deep water access for materials, tools and equipment to become waterborne for immediate and efficient deployment to the site.

Cianbro is the largest owner/operator in this region of the heavy construction equipment applicable for this type of work including cranes, barges, tugboats, dredges and clamming equipment, boats and sediment booms, compressors, welders and the applicable tooling. Cianbro has a long history of diving operations and underwater work. Cianbro is well equipped and staffed to efficiently work on water and land alike.

Cianbro's history of projects include bridges over coastal and inland waterways, hydro-electric facilities, wind projects and overland power lines to name a few. All these projects require extensive environmental and sediment controls and best management practices (BMPs). A broad variety of Cianbro supervisors and craftspeople have training and experience in applying the proper BMPs and controlling sediment during construction operations.

4.2.4 Woodard & Curran

Woodard & Curran (W&C) of Portland, Maine, has been retained to complete the design associated with the saltwater intake, pump station and process water discharge for the project. W&C is a national consulting engineering firm focused on water and the environment with expertise in civil, water and wastewater engineering, and the operations of water and wastewater treatment facilities. Since the company was formed in 1979, W&C has successfully designed, permitted and constructed projects for industrial, manufacturing, and municipal clients throughout the United States, and specifically within our home state of Maine. For this project, W&C's key project team members include Barry Sheff, PE (Principal in Charge), Jim Wilson, PE (Project Manager), and Technical Managers Jason Kreil, PE and Paul Porada, PE leading the pumping system and pipeline hydraulics designs respectively. The team has been selected based on specific expertise and experience with projects located adjacent to and within marine environments. Key team members have an average of 25 years of related professional experience in Maine and New England, including Ellsworth ME Wastewater Treatment Facility, Vinalhaven ME Wastewater System Design, Bucksport ME Water Filtration and Treatment Facility, St. Agatha ME Effluent Transmission System, Portland ME Rockland Avenue Outfall, Portland ME Preble Street Combined Sewer Outfall Alternatives Analysis, Portland ME Curtis Road and Franklin Street Pump Station Upgrades, MEDOT Ocean Gateway Multimodal Facility, Rockport ME Wastewater Discharge Licensing, McCain Foods Waste Discharge Licensing, Salem MA Canal Flood Mitigation Pump Station, and Lawrence MA Pump Station Upgrades among others.

4.2.5 Normandeau Associates, Inc.

Normandeau Associates, Inc. (Normandeau) has been retained to assist with natural resource assessments, environmental permitting, and related aspects of the project within the terrestrial and coastal zones, as well as within Belfast Bay. In business since 1970, Normandeau has been providing environmental consulting services for nearly 50 years, including natural resource surveys and permitting support for public and private sector clients throughout the Northeast and nationwide. We understand the issues unique to each state's regulatory programs in which we work and have broad understanding of state and federal permitting requirements. With offices in twelve states and nearly 200 staff, of which nearly 70 are positioned in the Northeast, our staff has the depth and breadth of highly-qualified technical leaders and field staff to provide the requested services. Normandeau's technical and regulatory staff and capabilities are well-known and respected by state and federal regulatory and resource agencies. For this assignment, Normandeau's Key Staff include Adele Fiorillo (PWS, NHCWS), Sarah Allen (PWS, NHCWS), Sarah Barnum (CWB), Ben Griffith, and Tyler Parent, supported by well-qualified field and laboratory staff, including Mike Taylor, Matt Balge, Joel Detty, and Hannah Proctor. Our Key Staff each have over 20 years of relevant experience in Maine and New England, including the Peirce Island Wastewater Treatment Facility (Portsmouth, NH), multiple tasks under our MEDOT MSA, town-wide wetland modeling for the Piscataqua Region Estuaries Partnership (Kittery, ME), long-term wetlands and biological resource monitoring throughout Maine including Waste Management's Crossroads facility, Maine Transit Authority, Great Bay Eelgrass Studies for the Great Bay Municipal Coalition and others, water quality and fisheries studies in various locations throughout coastal Maine, and shoreline characterizations for various towns in coastal Maine (Harpwell, Saco and Scarborough to name a few). Normandeau's regulatory and field efforts are supported by the latest in GIS, CAD, and GPS technologies. Our GIS mapping department has developed maps for wetland stream and river and watershed delineation, vernal pools and habitat mapping, soils mapping, vegetation classification, fish and turtle studies, as well as bathymetric maps, side-scan sonar images for substrate classification, acoustic Doppler current profiles, aquatic habitat maps, land use maps, natural resource maps, water resource maps, topographic maps, stream restoration maps, tax maps, environmentally sensitive areas and numerous other location maps utilizing field-collected GPS data, state GIS data, and high resolution remote sensing.

4.2.6 McDonald Morrissey Associates, LLC

McDonald Morrissey Associates, LLC (MMA) of Concord, New Hampshire has been retained to provide numerical modeling services to support the permit application associated with the proposed groundwater withdrawal system. MMA is nationally recognized for expertise in the analysis of complex groundwater flow systems for industrial and government clients. MMA principals share more than 100 years of experience in the conduct, management and technical oversight of a wide variety of groundwater projects. MMA's project experience includes groundwater resource development, wellhead and source-water protection area delineation, mine dewatering, contaminant transport evaluations, groundwater remediation assessment, plume allocation, and regional groundwater flow system analysis. For this project, MMA's key project team members include Michael Mobile, PhD, Charles Spalding, PG, and Daniel Morrissey, RPG.

4.2.7 Acentech, Incorporated

Acentech Incorporated (Acentech) headquartered in Cambridge, Massachusetts, with offices in Philadelphia, PA, Los Angeles, CA, and Charlottesville, VA has been retained to provide environmental noise consulting services associated with the design, construction, operation, and

maintenance of the Project. Acentech is among the largest, most experienced, and oldest acoustical consulting firms in North America with roots dating back to the late 1940's serving engineering, architectural, industrial, commercial, institutional, environmental, legal, education, and cultural clients throughout the United States and many countries overseas. For this Project, Acentech's project team members include James D. Barnes, PE, Alex Odom, and Eric Wood with an average of more than 30 years of related professional consulting experience serving industrial, commercial, and engineering clients. Representative consulting projects for clients in the State of Maine have included energy plants, manufacturing plants, oil pumping stations, gas compressor stations, transformer substations, paper mills, landfills, schools, office buildings, and entertainment and worship spaces.

4.2.8 Gridworks Energy Consulting LLC

GridWorks Energy Consulting LLC (GridWorks) has been retained to help Nordic Aquafarms create a sustainable energy infrastructure and ecosystem at its Belfast facility. GridWorks was formed in 2017 to help the world's electric grids and microgrids use Transactive Energy Management tools to increase their resilience and sustainability. Its principles bring extensive experience designing and building Transactive Energy systems at VCharge, a company that built and operated the largest Aggregated Transactive Load Asset in the world, doing real-time energy trading and delivering Ancillary Services to PJM (Pennsylvania), ISO-New England (Maine and Massachusetts), National Grid (UK) and EirGrid (Ireland). GridWorks is currently also working with another large industrial energy consumer in Maine and conducting a study for a European grid operator on delivering grid services with residential appliances. One of its principles (George Baker) also has deep experience permitting and financing renewables projects in Maine.

4.2.9 Steven Whipple

Steven Whipple is a licensed Professional Engineer and has worked as an environmental engineer in the field of air quality since 1993. Since 1995, after working for the State of Maine's Bureau of Air Quality, he has practiced as a consulting engineer for a variety of manufacturing, commercial, educational, health care, legal, and government agencies. Projects typically include permitting, regulatory compliance review, environmental impact mitigation, regulatory reporting, control technology analyses, air dispersion modeling analyses, green energy applicability and program implementation, and environmental operations and management.

4.2.10 Broadwater Environmental, LLC

Broadwater Environmental, LLC (Broadwater) is a small consulting firm in South Portland, Maine specializing in natural resource characterization and land use permitting. Ian Broadwater is the owner/operator and has over 32 years of experience in environmental consulting in New England. Broadwater provides services including wetland delineation surveys and characterization, vernal pool surveys, high intensity soil maps and subsurface wastewater disposal system designs. Mr. Broadwater also has completed numerous environmental permit applications, from simple to complex, for a variety of clients. Mr. Broadwater also has experience evaluating and designing river and wetland restorations, conducting environmental and geotechnical drilling oversight, and collecting environmental samples. Mr. Broadwater is a Certified Soil Scientist in Maine (SS305) and a Certified Wetland Scientist in New Hampshire (NHCWS No.162). Mr. Broadwater is also a Licensed Site Evaluator (SE230) in Maine.

4.2.11 Northeast Archaeology Research Center

The Northeast Archaeology Research Center (NE ARC) is a privately-owned corporation established in 2008 located in Farmington, Maine, in the foothills of the Western Maine Mountains. NE ARC is committed to historic preservation and provides a wide range of high quality and cost-effective cultural resource management consulting services to its clients. The principals and staff have over 30 years of consulting archaeology experience in northern New England, primarily in the States of Maine, New Hampshire and Vermont, and have completed several thousand cultural resource consulting studies during this time. These efforts are directed at cultural resource management studies for corporate, private, federal, state and municipal entities; these efforts being the direct result of historic preservation legislation as one compliance component of environmental studies.

The NE ARC co-Principal Investigators and Directors, Gemma Hudgell, Ph.D., and Robert N. Bartone, M.A., in addition to Sarah Loftus, Ph.D., Project Director/Historical Archaeologist are highly qualified with experience far exceeding the Secretary of the Interior's minimum professional qualifications for archaeology (Code of Federal Regulations, 36 CFR Part 61; Federal Register 48, 190:44738-44739). Robert Bartone, Sarah Loftus, and Gemma Hudgell, are qualified to perform all levels of cultural resource work in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont, although our area of expertise is primarily in the northern New England states.

The NE ARC provides the full range of archaeological services from small-scale assessments to large-scale surveys, evaluations and data recovery. NE ARC has extensive experience with both prehistoric and historic archaeology at sites representing the full range of Native American human occupation in the Northeast from the Paleoindian period to the Contact period and historic occupation to the 20th century.

4.2.12 Maine Drilling & Blasting

Maine Drilling & Blasting has earned a reputation as one of the safest, most experienced rock blasting and drilling companies in the Northeast and Mid-Atlantic areas. During the past 50+ years, they've performed over two million controlled blasts for highways, site development, quarries, houses lots, utilities and marine work. They've drilled some of the most aesthetic presplit faces, helped plan and develop over 180 quarries, installed rock anchors over water, under stadium seating and 50 feet above highways, and mechanically broken hundreds of thousands of cubic yards of rock with hoe rams. Maine Drilling and Blasting has extensive experience in projects from wind farms to ski-slope development.

Recognized as an industry leader in drilling and rock blasting services for the construction and quarry markets, they also offer a variety of specialty services throughout the Northeastern United States including: Foundation Services, Hoe Ramming, Rock Anchors, Engineering, Public Relations, Pre-Blast Surveys, Packaged Explosive Distribution, Quarry Planning & Quarry Blasting, and Leading Industry Technology.

Resumes detailing the experience and qualifications of key Nordic and external consultant personnel are presented in **Appendix 4-A**.

4.3 Project Delivery Phase

An external Construction Manager (CM) is being retained for execution of the proposed construction project in Belfast. The CM will be bringing in a specialized execution team to ensure high-quality delivery of project designs and construction on the site. Nordic Aquafarms is in the final phase of a tender process for a CM with final selection in May 2019. We are currently completing the selection process among a group of CM's experienced in large-scale project management. The selected candidate will manage bids, daily coordination of construction, and reporting, under supervision of our Project director and an internal steering group consisting of the US executive team. The CM will be selected in May 2019 and will be involved in pre-construction preparations. Nordic will notify MEDEP when a project CM has been selected.

Final contractors will be chosen based on a tender process upon permit clarifications, with support from the chosen CM partner. A range of contractors will be involved in the civil work. Nordic Aquafarms DK and our international installation manager will be responsible for all RAS process installations and commissioning. Our production management and CTO will be responsible for final testing and preparations of the RAS systems.

Final engineering of the civil engineering for the facility will be conducted with retained engineer vendor partners from the permitting phase. This work will commence upon further clarifications about progress on issuance of permits.

APPENDIX 4-A

Resumes