

## **DIVISION 2. Permits**

### **Sec. 82-52. Application.**

**[Ord. No. 8-1997, § 16(C), 7-15-1997]**

Every applicant for a permit required by this chapter shall submit a written application, including a scaled site plan, on a form provided by the code enforcement officer or the Planning Board as indicated in section **82-135**. See table 1 in section **82-135** for the appropriate approval authority.

**Response:** *Refer to cover letter and table of contents at the front of this submission. Engineering drawings with Drawing Index are enclosed (Attachment 20), including site development plan CD001.*

All applications shall be signed by the owner of the property or other person authorizing the work, certifying that the information in the application is complete and correct. If the person signing the application is not the owner or lessee of the property, then that person shall submit a letter of authorization from the owner or lessee.

**Response:** *See cover letter included at the front of this submission.*

If the property is not served by a public sewer, a valid plumbing permit or a completed application for a plumbing permit, including the site evaluation approved by the licensed plumbing inspector, shall be submitted whenever the nature of the proposed structure would require the installation of a subsurface sewage disposal system.

**Response:** *Public sewer connection to be provided for domestic waste only, see drawings CU100, CU102, CU106-109. Capacity to serve letter is included, refer to **Attachment 10**.*

### **Sec. 82-55. Burden of proof.**

**[Ord. No. 54-2003, 6-17-2003; Ord. No. 20-2004, 1-6-2004]**

An applicant for a shoreland permit shall have the burden of proving that the proposed land use activity is in conformity with the purposes and provisions of this chapter.

**Response:** *The project includes uses as identified in Chapters 102 and 90 of the City ordinances (refer to Attachments 4 and 5 respectively). Uses in the Shoreland zone include Aquaculture (including associated support activities) as well as Significant Groundwater wells located within General Development District, and Significant water supply and discharge pipes located within the Limited Residential District. Statements below, supported by attachments to this application shall demonstrate adherence to the ordinance requirements.*

**Sec. 82-56. Standards for review of shoreland permits.**

**[Ord. No. 54-2003, 6-17-2003]**

The code enforcement officer or Planning Board shall review a completed application and shall approve, approve it with conditions, or deny an application based on its findings regarding conformance with the following standards:

- (1) Will not result in unsafe conditions;

**Response:** *The submitted project shall be designed and installed in full conformance with the applicable local, State, and Federal guidelines including environmental and building codes.*

- (2) Will not result in water pollution, erosion, or sedimentation to surface waters;

**Response:** *Refer to response provided for Chapter 90-41 (c)(1) within this submission.*

- (3) Will adequately provide for the disposal of all wastewater;

**Response:** *Refer to response provided for Chapter 90-41(c)(1) within this submission. In addition, the applicant has provided an application to the Maine DEP for a pollution discharge elimination system license under the waste discharge program. This discharge system will be utilized for safe discharge of treated effluent from the process systems, while traditional sanitary waste will be discharged to the municipal system, see attached drawings CU100, CU102, and CU106-109.*

- (4) Will not have an adverse impact on spawning grounds, fish, aquatic life, or bird or other wildlife habitat;

**Response:** *A Natural Resources Report (NRR) has been developed that addresses wetlands, streams, vernal pools, wildlife and fisheries. Wetlands have been included in this section for completeness because habitat discussions reference wetlands. Portions of the Natural Resources Report are included here but the report can be found in its entirety in **Attachment 11**.*

**Wetlands:** *A total of 17 wetlands were identified on site and shown in **Attachments 11, 34**. Of these, nine wetlands meet the criteria for freshwater wetlands of special significance (WOSS) under the Natural Resources Protection Act (NRPA). No Vernal pools were identified on the site. The proposed project will result in direct alteration of 4 acres (174,713 sqft) of wetland. Freshwater Wetlands W1, W2, W3, W4, W5, W6, W13, and W15 will be directly impacted by the proposed project. There will also be direct, temporary impacts to wetland W11, a coastal wetland, and temporary impacts to the freshwater wetland W16. Additionally, Wetlands W8, W9, and W12 will have impacts within the 75-foot regulated buffer. None of the directly impacted freshwater wetlands meet the criteria for wetland of special significance. The majority of impacts to upland buffers are within previously developed locations. Wetlands W1, W3, W4, W13, and W15 will be completely eliminated by the Project. As a result, these wetlands will completely cease to perform wetland functions and*

values. Wetland W2 will also have a significant (approximately 66%) reduction in area as a result of the project, but the impacted wetland will continue to perform the identified functions and values proportional to its reduced size. Wetland W5 will have a 75% reduction in area as a result of the project and will still be suitable for floodflow alteration and wildlife habitat but no longer will do so in a principal manner. Wetland W6 will experience an approximately 66% reduction in size as a result of the project. This wetland will no longer perform floodflow alteration and production export principally but will generally continue to function proportionally to the available area. Impacts to wetlands have been considered in the development of the mitigation package proposed within the **Natural Resources Protection Act application**.

Streams: There will be a total of 1,325 linear feet of impacts to streams within the project area. Streams S3, S5, S6, and S9 will be indirectly impacted by the project. Impacts to Stream S9 will be limited to a permanent crossing located between wetlands W8 and W9, along with a temporary crossing during the installation of the force main sewer line. The permanent crossing will be constructed in such a manner to not impair flow during storm events. Impacts to these streams will typically result in the loss of Groundwater Recharge/Discharge, Floodflow Alteration, and Wildlife Habitats in these locations

Wetland and stream restoration plans have been developed and are provided as part of the mitigation program outlined in the **Natural Resources Protection Act (NRPA) permit application**. Permanent impacts will be mitigated through participation in the in-lieu-fee program, riparian habitat restoration, culvert repairs to improve aquatic passage and deed restrictions on riparian buffers.

Wildlife: The proposed Nordic Aquaculture project site was evaluated for wildlife and habitat resources via a desktop review of existing information, including reviewing aerial photography (Google Earth), a timber inventory conducted on-site in 2019, e-Bird data, and other publicly available data regarding species distribution from the Maine Division of Inland Fisheries and Wildlife (MDIFW) and MDEP, two field visits, and a project review response from MDIFW dated March 11, 2019 (**Attachment 35**). The field visit was conducted on the upland parcels on December 12, 2018 and evaluated general wildlife habitat value and potential listed-species habitat. The visit was conducted midday under good weather conditions that included ideal snow cover conditions for tracking.

The desktop evaluation, augmented by a site visit on March 26, 2019, also considered the intertidal portion of Belfast Bay which will be impacted by the intake and outfall pipes. This area is included in the wildlife evaluations because it is designated as Tidal Waterfowl and Wading Bird Habitat (TWWH), which is a regulated Significant Wildlife Habitat under Maine's Natural Resources Protection Act. The desktop sources cited above as well as information collected during the benthic studies conducted for the project were considered for this portion of the evaluation. A full discussion of wildlife witnessed or expected on site can be found in the full NRR provided in the attachments.

Both temporary and permanent impacts to the wildlife habitat within the project footprint will occur due to construction and operation of the Nordic Aquafarms

facility. The temporary impacts, including general disturbance and the disruption of a small portion of the TWWH area, will be short-term and occur only during construction. Construction related disturbance will cease when construction is complete. The disturbed TWWH area is expected to recover to pre-construction conditions within 6 to 8 months, and this impact is not expected to have a significant effect on habitat quality or the species that use it.

The permanent impacts consist of a loss of about 35 acres of terrestrial wildlife habitat. However, the project should have little to no effect on the overall wildlife populations in the surrounding area. The habitat resources that will be lost to the project footprint are not unique to the area, and the individuals lost are only a very small portion of the wildlife populations in the surrounding area. Additionally, the proposed restoration plan for the S9 stream corridor will provide some improved habitat for a variety of species.

Fisheries: The proposed site for the Nordic Aquaculture project was evaluated for fisheries habitat resources via a desktop review of existing information, as well as field surveys conducted by Normandeau Associates in 2018. In addition to a literature review, a habitat characterization survey was conducted by towing a diver and a camera along the proposed pipeline route. Also, water quality data were collected to assess the existing ambient conditions at various locations where in-water structures are proposed. MDIFW and the Maine Department of Marine Resources (MDMR) were both consulted for guidance on species of interest as well as suggestions regarding potential impact mitigation strategies.

During analysis, the specific engineering characteristics, and construction plan of the proposed project were used to help determine the potential impact to each species. Impacts were characterized as temporary if they would only exist due to construction activities, or permanent if the impact would continue after construction was finished and facility operation continued. A full discussion of the findings can be found in the NRR.

Impacts to finfish is expected to vary based on species, but overall limited. Of the species assessed, only winter flounder is expected to be present in the project area during construction. This species is known to spawn in the area during the in-water construction window. Although this species is expected to be in the vicinity, spawning adults are expected to self-relocate and should be able to successfully spawn in adjacent and equivalent habitat available in the bay. The other species are not expected to occupy the project area in significant numbers during construction, so minimal construction impact should occur. Overall, the impact from construction on the species assessed is expected to be insignificant.

After the facility begins operation of the intake, the only ongoing potential for loss of finfish due to project operations would be by eggs and larvae at the intake. The intake is engineered to have a through screen velocity of less than 0.5 ft/sec, which will effectively minimize the chance for adult fish to become caught at the intake screen. The screen itself is proposed to be a 1-inch slot size wedge wire mesh, which will allow any larvae and eggs smaller than 1 inch to pass through the screen. It is not expected that mortality would occur due to temperature, rather, eggs and larvae would be lost

*via filtration of all the water entering the facility. The most likely species to experience this impact would be winter flounder and rainbow smelt as these species are likely to have the egg and/or larval life stages present in the vicinity of the intake. There is some chance that young glass or elver stage eels could be impacted by the intake, but it is unlikely that this would be significant as their swimming ability should be developed enough for them to avoid the screen due to the low intake velocity.*

*Mortality of individuals of the four shellfish species in question is not likely to occur strictly from the temporary increase in TSS during construction activities. Juvenile and adult lobsters will self-relocate during construction, thereby minimizing the chance for significant impact. Scallops, blue mussels, and softshell clams will be able to modify their behavior to temporarily endure the change in water conditions until their area of residence is no longer part of the active construction zone. Once the aquafarm begins operating, the cleaned discharge water is not expected to significantly impact shellfish in the area. Construction activities are not expected to significantly impact the shellfish community in the area. After construction is complete, all shellfish should be able to resume routine use of the project area. No commercial shellfisheries are expected to be negatively affected by the project because the proposed project area is located within an area which MDMR has classified as a prohibited shellfish growing area.*

- (5) Will conserve shoreland vegetation;

**Response:** *With the exception of the installation of intake and discharge pipes reaching into the Bay, no shoreland zone vegetation will be impacted. A full description of project impacts to natural resources is included in the Project Conditions Report (Attachment 35).*

- (6) Will conserve visual points of access to inland and coastal waters as viewed from public facilities and public (city and state) roads;

**Response:** *A complete visual impact assessment of the project has been completed and is included as **Attachment 27**. Particular attention is paid to areas of public view and “established public viewing areas.” The completed development has been designed with these viewpoints in mind, and building materials, massing, and project planting have been designed specifically to mitigate visual impacts. Noteworthy Scenic Views are noted in the City Comprehensive Plan and are addressed specifically in Attachment 27.*

*This proposed NAF facility has been studied through on-the-ground photographic documentation, use of survey located test balloons at proposed building locations, and computer-generated photomontage of existing conditions and computer-based building modeling, and line-of-sight profile creation. Portions of the new development will be visible from traveled public ways (not defined as “public viewing areas”) including U.S. Route 1 / Northport Avenue and Perkins Road. Disturbed areas not otherwise treated will be planted to naturalize them with a mix of evergreen and deciduous species to add visual buffer. Two publicly accessible trails (“viewing areas”), the Little River Community Trail (Belfast) and the McLellan-Poor Preserve (Northport) lie within 2,000 feet of the new development. A minimum of 250 feet of dense, mature, mixed-growth vegetation owned by the City of Belfast and to remain undisturbed, lies between viewer/user vantage points on those trails and the new development, providing effective visual screening. Therefore,*

*the NAF facility is determined to have “no unreasonable adverse effect on existing uses and scenic character”, will not “unreasonably interfere with views from established public viewing areas”, nor will it “unreasonably interfere with existing scenic and aesthetic uses of a scenic resource”.*

- (7) Will conserve actual points of public access to inland and coastal waters, particularly those areas to which the City has retained a public right-of-way;

**Response:** *The project will not adversely impact public access to inland or coastal waterways. The existing wooded path is on land that will be retained by the City, increasing the protection of the trail. Existing public parking areas will be maintained for continued access to the trail.*

- (8) Will not adversely impact archaeological and historic resources as designated in the Belfast Comprehensive Plan;

**Response:** *Initial screening of the National Register of Historic Places and the Cultural Architectural Resource Management Archive for Maine did not identify any sites or structures that would be impacted by the development. Further consultation with the Maine Historic Preservation Commission (MHPC) and federally recognized Indian tribes in Maine began in June 2018 to identify possible historic sites, historic structures, or archaeological sites that may be impacted by the development. In September of 2018 a Phase 1 Archeological survey was completed, no archeological sites were found. No areas of archeological or historic resources are noted at the site in the City Comprehensive Plan. Refer to Attachment 32 for additional information.*

- (9) Will not adversely affect existing commercial fishing or maritime activities in a Commercial Fisheries/Maritime Activities District;

**Response:** *MDIFW and the Maine Department of Marine Resources (MDMR)(Attachment 35) were both consulted for guidance on species of interest. Impacts to finfish is expected to vary based on species, but overall limited. Of the species assessed, only winter flounder is expected to be present in the project area during construction. This species is known to spawn in the area during the in-water construction window. Although this species is expected to be in the vicinity, spawning adults are expected to self-relocate and should be able to successfully spawn in adjacent and equivalent habitat available in the bay. The other species are not expected to occupy the project area in significant numbers during construction, so minimal construction impact should occur. Overall, the impact from construction on the species assessed is expected to be insignificant.*

*Operation of the proposed development is also not to impact existing fisheries. Design of the intake and discharge systems is in accordance with standard procedures and recommendations for minimizing flow velocities to mitigate impacts. The effluent water is not anticipated to have adverse impacts on the fishery.*

*For additional information, please refer to the Natural Resource Report, Attachment 11.*

(10) Will avoid problems associated with floodplain development and use; and

**Response:** *The proposed development will not have any adverse impacts related to floodplain development. Refer to section 90-41(c)(1)a within this submission for discussion regarding floodplain development.*

(11) Is in conformance with the provisions of article V of this chapter, pertaining to land use standards.

**Response:** *Refer below for a full discussion on compliance to land use standards.*

(12) If the application involves a structure, the structure cannot be located in an unapproved subdivision, and must conform to any other local ordinance or regulation or any state law which the City is responsible for enforcing.

**Response:** *Proposed development is not within an unapproved subdivision. All structures shall be fully compliant with all applicable codes and ordinances.*

**Sec. 82-58. Expiration of permit.**

**[Ord. No. 8-1997, § 16(E), 7-15-1997; Ord. No. 54-2003, 6-17-2003; Ord. No. 20-2004, 1-6-2004]**

A shoreland permit shall lapse and become void if no substantial start is made in construction or in the use of the property within one year of the date of the permit is issued, or if the improvements identified in the permit are not completed within two years of the date the permit is issued.

**Response:** *Work within the Shoreland zone will be complete within the prescribed time frame, with the exception of final landscaping and paving of the site driveway, located in the General Development District, which may be impacted by ongoing work on the upland portion of the project.*

**Sec. 82-135. Table of land uses.**

**[Ord. No. 8-1997, § 14, 7-15-1997; Ord. No. 16-2000, 8-15-2000; Ord. No. 54-2003, 6-17-2003; Ord. No. 20-2004, 1-6-2004; Ord. No. 3-2005, 7-20-2004; Ord. No. 3-2005, 7-20-2004]**

(1) All land use activities as indicated in Table 1 [1] shall conform with all of the applicable land use standards in article V of this chapter. The district designation for a particular site shall be determined from the official shoreland zoning maps.

(a) *Editors Note: Table 1, Land Uses in the Shore/and Zone, is included as an attachment to this chapter*

**Response:** *In the General Development District of the Shoreland Zone, the project will include land-based aquaculture including uses that are accessory to the aquaculture operation such as fish processing, process water cooling and*

*treatment, byproduct handling, sampling laboratory, offices, storage, and a visitor's center. The project also includes three significant groundwater wells within the General Development District. Work within the General Development District will fall within the areas previously developed by the Belfast Water District. In the Limited Residential District, significant water intake and discharge/outfall pipes are proposed. These uses are identified as permitted uses under Table 1 of this chapter. Refer to drawings in Attachment 20 for proposed site layout and details.*

(2) A person performing any of the following activities shall require a permit from the state department of environmental protection, pursuant to 38 M.R.S.A. § 480-C, if the activity occurs in, on, over or adjacent to any freshwater or coastal wetland, great pond, river, stream or brook and operates in such a manner that material or soil may be washed into them:

(a) Dredging, bulldozing, removing or displacing soil, sand, vegetation or other materials;

**Response:** *The applicant has submitted permit applications the ME DEP under both SLODA and NRPA for activities relating to this project. (Attachment 22)*

(b) Draining or otherwise dewatering;

**Response:** *The applicant has submitted permit applications the ME DEP under both SLODA and NRPA for activities relating to this project. (Attachment 22)*

(c) Filling, including adding sand or other material to a sand dune; or

**Response:** *Not applicable*

(d) Any construction or alteration of any permanent structure.

**Response:** *The applicant has submitted permit applications the ME DEP under both SLODA and NRPA for activities relating to this project. (Attachment 22)*

## **DIVISION 2. Area Requirements**

### **Sec. 82-181. Minimum lot area and shore frontage.**

**[Ord. No. 8-1997, § 15(A), 7-15-1997; Ord. No. 8-1996, 9-17-1996; Ord. No. 20-2004, 1-6-2004; Ord. No. 3-2005, 7-20-2004]**

(1) Minimum lot standards are as follows:

(a) Governmental, institutional, commercial or industrial per principal structure:

i. Within the shoreland zone adjacent to tidal areas exclusive of those areas zoned for waterfront development

**Response:** *The project site exceeds all minimum lot standards as listed. Refer to project*

surveys and conditions plan CD001.

Minimum Lot Area (Square Feet)	Minimum Shore Frontage (Feet)
30,000	150
40,000	200
10,000	50
5,000	25

### DIVISION 3. Structures

#### Sec. 82-201. Setbacks, maximum height and lot coverage.

[Ord. No. 8-1997, § 15(8)(1), 7-15-1997; Ord. No. 16-2000, 8-15-2000; Ord. No. 20-2004, 1-6-2004; Ord. No. 3-2005, 7-20-2004]

(1) All new principal and accessory structures and expansions of existing principal and accessory structures shall satisfy the following minimum requirements.

District	Amount of Setback (Feet)	Maximum Height (Feet)	Lot Coverage (Percent)
Resource protection	100	35	20
Limited residential	100 <sup>1</sup>	35	20
	75 <sup>2</sup>		
Urban residential	25	35	35
General development	25	50	70
Reserved			
Stream protection	75	35	20
Stream development	25	50	70
Manufactured housing community	25 <sup>3</sup>	35	80
Waterfront development	0 <sup>4</sup>	35 <sup>4</sup>	100 <sup>4</sup>

#### NOTES:

<sup>1</sup> 100 feet from Upper Mason Pond and the section of the Goose River that flows to this pond.

<sup>2</sup> 75 feet from all other waterbodies

<sup>3</sup> In the Manufactured Housing Community District, no new or existing structure in the Swan Lake Mobile Home Park shall be located closer to the normal high mark of the Goose River than any existing manufactured housing unit, and the Park owner must demonstrate why any unit should be permitted to have a setback of less than 25 feet from the normal high-water mark. For all other structures on all other properties in this district, the minimum structure

setback shall be 25 feet from the normal high-water mark.

- <sup>4</sup> In the Waterfront Development district, standards may be subject to the contract rezoning process established in this chapter and chapter **102**, zoning, article x, division 4.

**Response:** *All applicable setbacks for proposed structures are in compliance with respective zoning regulations. Refer to engineering plans, particularly CD001 and C101 for overall site plans with setback identification, as well as CP series for details on particular areas of the site. Pipes installed within prescribed setbacks are generally perpendicular to the property lines and there are no other options available to gain access to the shore. These pipes are a permitted use in all Districts which they cross.*

**Sec. 82-203. Elevation.**

**[Ord. No. 8-1997, § 15(B)(3), 7-15-1997]**

The first-floor elevation or openings of all buildings and structures shall be elevated at least one foot above the elevation of the one-hundred-year flood, the flood of record, or, in the absence of these, the flood as defined by soil types identified as recent floodplain soils. All structures or substantially improved structures shall comply with chapter 78, article II. Basements which are not elevated at least one foot above the elevation of the one-hundred-year flood, the flood of record or, in the absence of these, the flood as defined by soil types identified as recent floodplain soils, may not be used for living space.

**Response:** *Refer to section 90-41(c)(1)a within this submission for discussion regarding floodplain development. With exception of hydraulic structures that are designed to convey stormwater, structures on the site will be constructed either outside the existing SFHA or above the existing approximated BFE. Because development will not cause an increase in the BFE, development will not cause an unreasonable increase in the flood hazard for any new or existing structures or any adjacent properties.*

**Sec. 82-204. Piers, docks or other structures projecting into or over water body or wetland, provided such structures are not subject to the contract rezoning process.**

**[Ord. No. 8-1997, § 15(C), 7-15-1997; Ord. No. 16-2000, 8-15-2000; Ord. No. 54-2003, 11-6-17-2003; Ord. No. 3-2005, 7-20-2004]**

(1) Piers, docks, wharfs, bridges and other structures and uses extending over or beyond the normal high-water line of a water body or within a wetland shall be subject to the following standards:

- (a) Access from shore shall be developed on soils appropriate for such use and constructed so as to control erosion.

**Response:** *Structures projecting beyond high-water line are limited to the intake and discharge pipes, along with the intake structures. These pipes will be backfilled with native materials so that the long-term impacts are mitigated, and that the material is suitable for the location. Refer to soils report in **Attachment 12** for more information. Where the*

*pipes lie on the sea floor, protective stone will be placed to prevent damage, movement, or other impacts from water currents and wave action. Refer to CS series drawings.*

(b) The location shall not interfere with existing developed or natural beach areas.

**Response:** *The intake and discharge pipes shall be buried until they reach a natural section of steep slope at 25' of water depth. At this point the pipes will be "daylighted" and protected with stone. (Attachment 20)*

(c) The facility shall be located so as to minimize adverse effects on fisheries.

**Response:** *Refer to section 82-56 (4) above for a discussion of fisheries in the area as well as any potential impacts and mitigation. By locating our operation on land, we drastically reduce impacts to the fisheries.*

(d) The facility shall be no larger in dimension than necessary to carry on the activity and be consistent with the existing conditions, use, and character of the area.

**Response:** *The portion of the facility that extends beyond mean high water level is limited to buried/submerged pipelines and associated submerged intake structures that will not be visible. The pipes are sized to provide adequate flow capacities for the planned operations, along with appropriate contingencies for settling of solids and other material in between maintenance periods. The intake structures have been designed to minimize flow at the intake to mitigate impingement risk for native finfish and benthic species. All structures are designed to be no bigger than necessary.*

(e) The facility shall not encroach into, interfere with, or pose a hazard to navigational channels, and shall not extend within 25 feet of the established channels in Belfast Harbor.

**Response:** *The proposed facility will be located upland and require a minimal marine footprint consisting of 3 pipes for withdrawing and redepositing ocean water. These pipes will be located along the southern border of Belfast and will not be placed within 25 feet of the established channels in Belfast harbor. Plan **CS101** clearly depicts the pipe route to be used.*

(f) The facility shall not interfere with access to and from existing mooring and berthing areas for both commercial and recreational uses in Belfast harbor.

**Response:** *The proposed piping structures are buried until they reach a water depth of 25 feet, at which time they extend along the seafloor and will have no impact to access to any waterways, mooring, or berthing areas. The Belfast City Council was asked to comment on the submerged lands lease application. The council had no comments of concern with access to moorings or berthing areas.*

(g) The facility shall not displace or eliminate existing mooring and berthing areas, both public and private, for commercial and recreational uses in Belfast harbor.

**Response:** *The proposed pipelines are not located within or adjacent to any existing*

mooring or berthing areas. Because of the depth where the pipe emerges from the soil (-30 feet NAV88) there will be no interference with commercial or recreational uses. Consistent with City Council and Harbor Committee comments to the State, NAF proposes to place locational markers above the pipe, in accordance with ACOE and USCG recommendations in order to notify vessels of the pipe location.

(h) The facility shall not interfere with public access to and use of the waters of Belfast harbor, including public rights of way and public and private launching ramps and related facilities.

**Response:** Refer to section 90-41(c)(1)a within this submission for discussion regarding floodplain development. The Belfast City Council was asked to provide comments specifically around public access and riparian rights. A letter issued from City Director of Code and Planning, as authorized by the City Council, was issued to the State and did not indicate any concerns with access. There are no docks or launching facilities in the area.

(i) All points and location of the facility shall comply with the following wharf line restrictions for Belfast harbor established in City code of ordinances, marine activities, section **30-95**:

Harbor District	Distance Standard
a. Coastal harbor	300 feet from normal high water
b. Outer harbor	200 feet from normal high water
c. Inner harbor	
c.1 West side of harbor	100 feet from normal high water
c.2 East side of harbor	100 feet from normal high water
d. Bridge	
d.1 West side of harbor	25 feet from designated navigational channel
d.2 East side of harbor	100 feet from normal high water for structures connected to shore. 25 feet from the designated navigational channel for structures connected to the footbridge
e. River	100 feet

**Response:** The proposed structures are submerged pipes and the above wharf line restrictions are therefore not applicable.

(j) The facility shall not interfere with or pose a hazard to navigation by obscuring visibility or by the display of distracting lights. The facility, if deemed appropriate, shall display appropriate warning lights to aid in navigation and public safety.

**Response:** The relevant structures are submerged and will therefore not obscure visibility or display lights. As requested by the City's Harbor Council, NAF proposes to install locational markers if in accordance with recommendations from the ACOE and USCG.

(2) Permanent structures projecting into or over water bodies shall require a permit from the state department of environmental protection pursuant to the Natural Resources Protection Act, 38 M.R.S.A. § 480-C.

**Response:** *The applicant has submitted permit applications the ME DEP under both SLODA and NRPA for activities relating to this project (Attachment 22).*

## **DIVISION 6. Parking Areas**

### **Sec. 82-261. Setback.**

**[Ord. No. 8-1997, § 15(G)(1), 7-15-1997; Ord. No. 20-2004, 1-6-2004; Ord. No. 3-2005, 7-20-2004]**

Parking areas shall meet the normal high-water line setback requirements for structures for the district in which such parking areas are located. The setback requirement for parking areas serving public boat launching facilities in the Resource Protection district, Limited Residential district and Stream Protection district, may be reduced to no less than 50 feet from the normal high-water line or upland edge of a wetland if the Planning Board finds that no other reasonable alternative exists.

**Response:** *Facility parking is provided in accordance with applicable site and building regulations, refer to Chapter 90-98. All new parking for the facility will be installed outside of the Shoreland Zone. Existing parking at the current Belfast Water District and at the existing trail head shall remain and be improved per current access and storm water management requirements, but will not move any closer to shorelands. 25' setbacks required for General Development District shall be maintained. Refer to engineering drawing CP101.*

### **Sec. 82-262. Design generally.**

**[Ord. No. 8-1997, § 15(G)(2), 7-15-1997]**

Parking areas shall be adequately sized for the proposed use and shall be designed to prevent stormwater runoff from flowing directly into a water body, and, where feasible, to retain all runoff on-site.

**Response:** *Refer to response to 82-61 Setback, above.*

## **DIVISION 7. Roads and Driveways**

### **Sec. 82-281. Generally.**

**[Ord. No. 8-1997, § 15(H), 7-15-1997].**

The standards in this division shall apply to the construction of roads and/or driveways and drainage systems, culverts and other related features.

### **Sec. 82-282. Setbacks.**

**[Ord. No. 8-1997, § 15(H)(1), 7-15-1997; Ord. No. 16-2000, 8-15-2000; Ord. No. 20-2004, 1-6-2004; Ord. No. 3-2005, 7-20-2004]**

(1) New roads and driveways in the General Development, and Urban Residential, Stream Development and Manufactured Housing Community districts shall be setback 25 feet from the normal highwater line. There is no setback requirement from the normal highwater line for new roads and driveways in the Waterfront Development district. New roads and driveways in the Limited Residential district shall be set back at least 100 feet from the normal high-water line of Upper Mason Pond and the portion of the Goose River that flows into this Pond and 75 feet from the normal high-water line of other water bodies, tributary streams, or the upland edge of a wetland unless no reasonable alternative exists as determined by the Planning Board. If no other reasonable alternative exists, the Planning Board may reduce the road and/or driveway setback requirement to no less than 50 feet upon clear showing by the applicant that appropriate techniques will be used to prevent sedimentation of the water body. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed so as to avoid sedimentation of the water body, tributary stream, or wetland.

**Response:** *All proposed roads will meet the setback requirements described above. Existing roads currently on the site will remain, but in no case will be increased in a way that will reduce the existing buffer beyond these requirements. Refer to section 90-41(c)(1)a within this submission for discussion regarding floodplain development. Proposed road layouts can be seen in Attachment 20.*

(2) On slopes of greater than 20%, the road and/or driveway setback shall be increased by 10 feet for each 5% increase in slope above 20%.

**Response:** *There are no road grades greater than 20% proposed for the site.*

**Sec. 82-283. Expansion of existing public roads.**

**[Ord. No. 8-1997, § 15(H)(2), 7-15-1997]**

Existing public roads may be expanded within the legal road right-of-way, regardless of the setback from a water body.

**Response:** *Nordic Aquafarms will continue to use the existing entrance at 285 Northport Ave. There is appropriate line of sight in both directions. A traffic study was conducted indicating that the facility would have no significant impact. The only alteration to Route 1 will be temporary in nature.*

**Sec. 82-286. Road banks.**

**[Ord. No. 8-1997, § 15(H)(5), 7-15-1997]**

Road banks shall be no steeper than a slope of two horizontal to one vertical, and shall be graded and stabilized in accordance with the provisions for erosion and sedimentation control contained in division 13 of this article.

**Response:** *All road banks are limited to a slope of 2:1 or less, refer to grading plans CG101-*

**CG107.**

**Sec. 82-287. Road grades.**

**[Ord. No. 8-1997, § 15(H)(6), 7-15-1997; Ord. No. 20-2004, 1-6-2004]**

Road banks shall conform to specifications identified in chapter **98**, Technical Standards, and shall be no greater than 10% except for short segments of less than 200 feet.

**Response:** *Refer to response provided under Chapter 98 within this submission.*

**Sec. 82-288. Drainage buffer strip.**

**[Ord. No. 8-1997, § 15(H)(7), 7-15-1997; Ord. No. 3-2005, 7-20-2004]**

In order to prevent road surface drainage from directly entering water bodies, roads shall be designed, constructed, and maintained to empty onto an buffer strip at least 50 feet plus two times the average slope in width between the outflow point of the ditch or culvert and the normal high-water line of a water body, tributary stream, or upland edge of a wetland. Road surface drainage which is directed to a buffer strip shall be diffused or spread out to promote infiltration of the runoff and to minimize channelized flow of the drainage through the buffer strip. This standard shall not apply to roads and driveways in the Waterfront Development District.

**Response:** *Refer to storm water management plan and maintenance plan (**Attachments 15-16**) for full stormwater design. All drainage is designed to prevent run-off into existing waterbodies. The proposed design is in compliance with this standard where runoff is not captured and treated.*

**Sec. 82-289. Design of drainage structures.**

**[Ord. No. 8-1997, § 15(H)(8), 7-15-1997]**

Ditch relief (cross drainage) culverts, drainage dips and water turnouts shall be installed in a manner effective in directing drainage onto buffer strips before the flow in the road or ditches gains sufficient volume or head to erode the road or ditch. To accomplish this, the following shall apply:

<b>Road Grade (Percent)</b>	<b>Spacing (Feet)</b>
0-2	250
3-5	200-135
6-10	100-80
11-15	80-60
16-20	60-45
21+	40

- (1) Drainage dips may be used in place of ditch relief culverts only where the road grade is 10% or less.
- (2) On road sections having slopes greater than 10%, ditch relief culverts shall be placed across the road at approximately a thirty-degree angle downslope from a line perpendicular to the centerline of the road.
- (3) 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.

**Response:** *All drainage structures have been designed in accordance with the above requirements, as well as other applicable codes, standards, and Best Management Practices (BMP's). Please refer to the plan sheets and engineering drawings (**Attachment 20**) as well as soil erosion and sediment control report (**Attachment 14**) and storm water design and management reports (**Attachments 15-16**)*

#### **Sec. 82-290. Maintenance of drainage structures.**

**[Ord. No. 8-1997, § 15(H)(9), 7-15-1997]**

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

**Response:** ***Attachment 14** contains the proposed SESC maintenance during facility construction, and **Attachment 16** includes a post-construction maintenance plan that has been developed as a part of the proposed project requirements. The applicant has also received a letter of intent (see **Attachment 16**) from a vendor trained and capable of performing all required maintenance activities listed.*

#### **DIVISION 9. Stormwater Control**

##### **Sec. 82-331. Required.**

**[Ord. No. 8-1997, § 15(J)(1), 7-15-1997]**

All new construction and development shall be designed to minimize stormwater runoff from the site in excess of the natural pre-development conditions. Where possible, existing natural run-off control features, such as berms, swales, terraces and wooded areas, shall be retained in order to reduce runoff and encourage infiltration of stormwater.

**Response:** *A comprehensive stormwater management plan has been developed for the project and is included as **Attachment 15**. The plan, developed by a professional engineer licensed in the State of Maine, is in full conformance with all local, state, and federal requirements.*

##### **Sec. 82-332. Maintenance of runoff control facilities.**

**[Ord. No. 8-1997, § 15(J)(2), 7-15-1997]**

Stormwater runoff control systems shall be maintained as necessary to ensure proper functioning.

**Response:** Refer to response for 82-331 above. **Attachment 16.** includes a maintenance plan that has been developed as a part of the proposed project requirements. The applicant has also received a letter of intent (see **Attachment 16**) from a vendor trained and capable of performing all required maintenance activities listed.

**Sec. 82-333. through Sec. 82-350. (Reserved)**

**DIVISION 10. Utilities**

**Sec. 82-351. Subsurface sewage disposal systems.**

**[Ord. No. 8-1997, § 15(K), 7-15-1997]**

All subsurface sewage disposal systems shall be installed in conformance with the state subsurface wastewater disposal rules. The rules, among other requirements, include the following:

(1) The minimum setback for new subsurface sewage disposal systems shall be no less than 100 horizontal feet from the normal high-water line of a perennial water body. The minimum setback distances from water bodies for new subsurface sewage disposal systems shall not be reduced by variance.

(2) Replacement systems shall meet the standards for replacement systems as contained in the rules.

**Response:** No subsurface sewage disposal plan is proposed. Public sewer connection will be provided, see drawings CU100, CU102, CU106-109. Capacity to serve letter is included, refer to **Attachment 10.**

**Sec. 82-352. Essential services.**

**[Ord. No. 8-1997, § 15(L), 7-15-1997]**

Where feasible, the installation of essential services shall be limited to existing public ways and existing service corridors.

**Response:** Essential services shall be provided to the site from Perkins Road and a utility easement (sanitary sewer), or from RT 1 at the facility driveway. Due to the significant underground infrastructure, a carefully coordinated underground piping effort has been made, with essential services forming utility corridors as identified. Refer to the CU series of the engineering drawings.

The installation of essential services is not permitted in a Resource Protection or Stream Protection District, except to provide services to a permitted use within the

district, or except where the applicant demonstrates that no reasonable alternative exists. Where permitted, such structures and facilities shall be located so as to minimize any adverse impacts on surrounding uses and resources, including visual impacts.

**Response:** *Nordic Aquafarms has filed a NRPA permit application (Attachment 22) The City of Belfast has three classifications for 250' shoreland zones within and adjacent to the project site:*

- 1. Resource Protection Zone*
- 2. General Development Buffer*
- 3. Limited Residential Buffer*

*Adjacent to the project site is the 250' Resource Protection Zone associated with Reservoir Number One. The majority of the 250' Resource Protection Zone is not part of the project site; however, the existing Belfast Water District buildings and storage areas are currently within the 250' General Development Zone as a result of a zoning amendment by the City of Belfast. Therefore, all portions of the Nordic Aquafarms development within 250' of the reservoir are within the General Development Zone and the entirety of the Resource Protection Zone is outside the project property. The existing Water District office building is within the General Development Zone and will remain as part of the project as a Visitors Center. Additionally, the 250' General Development Zone extends between the lower dam and the Little River outlet within the shoreland zone and there is a 250' Limited Residential Zone from the Little River outlet that runs along the City's coastline. Portions of the intake and discharge pipes will be constructed within the General Development Zone and Limited Residential Zone. In summary, there are a number of buffers imposed on the property that serve to protect water quality, create visual screening and, provide for and protect wildlife habitat and travel corridors. Some temporary encroachment into the buffers is required to install the project infrastructure. Areas of encroachment have been either avoided where possible or minimized where practicable.*

## **DIVISION 12. Agriculture, Timber Harvesting and Clearing of Vegetation**

### **Sec. 82-391. Agriculture.**

**[Ord. No. 8-1997, § 15(N), 7-15-1997; Ord. No. 20-2004, 1-6-2004]**

Storage of manure. Manure shall not be stored or stockpiled within 100 feet, horizontal distance, of Upper Mason Pond and the portion of the Goose River that flows into this pond, or within 75 feet, horizontal distance, of other water bodies, tributary streams, or wetlands. Within five years of the effective date of the ordinance from which this chapter is derived, all manure storage areas within the shoreland zone must be constructed or modified such that the facility produces no discharge of effluent or contaminated stormwater. Existing facilities which do not meet the setback requirement may remain, but must meet the no-discharge provision within the five- year period.

**Response:** *Our operations will be land-based aquaculture. All activities will take place indoors to include storage of filtrate which will be stored in tanks until it is out-shipped for beneficial*

reuse such as biogas production.

**Sec. 82-393. Clearing of vegetation for development.**

[Ord. No. 8-1997, § 15(P), 7-15-1997; Ord. No. 16-2000, 8-15-2000; Ord. No. 20-2004, 1-6-2004; Ord. No. 3-2005, 7-20-2004]

Vegetation buffer strip. Except in areas as described in subsection (a) of this section, and except to allow for the development of permitted uses, within a strip of land extending 75 feet, horizontal distance, from any regulated water body, tributary stream, or the upland edge of a wetland, a buffer strip of vegetation shall be preserved as follows:

(1) Cleared openings; footpaths. 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 not to exceed 10 feet in width as measured between tree trunks is permitted provided that a cleared line of sight to the water through the buffer strip is not created. Adjacent to an area that is zoned Resource Protection or Limited Residential near Upper Mason Pond, the width of the footpath shall be limited to six feet.

(2) General standards.

a. 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 subsection, a well-distributed stand of trees and other vegetation adjacent to Upper Mason Pond and the section of the Goose River adjacent to this pond (a great pond) shall be defined as maintaining a rating score of 12 or more in any twenty-five-foot by twenty-five-foot square area (625 square feet).

**Response:** *No cleared footpaths are proposed as part of this development. Regarding (2) General standards, some instances of selective removal are proposed as a matter of the development construction requirements. These locations are limited to areas associated with the installation of the seawater pipes. The proposed removals and associated replacement plantings are indicated on drawings CE110, CE116, CS102, and the LP drawing series. Removals shall be completed as to maintain a well distributed stand of trees in the areas.*

b. For other regulated water bodies, tributary streams, and wetlands, a well-distributed stand of trees and other vegetation is defined as maintaining a minimum rating score of eight per twenty-five-foot-square area. The following rating system shall be used to determine what constitutes a well-distributed stand of trees and other vegetation.

Diameter of Tree at 4 1/2 Feet Above Ground Level (inches)	Points
2-4	1
4-12	2
Over 12	4

c. As an example, adjacent to a regulated water body, if a twenty-five-foot by twenty-five-foot plot contains three trees between two and four inches in diameter, three trees between four and 12 inches in diameter, and three trees over 12 inches in diameter, the rating score is as follows:

$$(3 \times 1) + (3 \times 2) + (3 \times 4) = 21 \text{ points}$$

Thus, the twenty-five-foot by twenty-five-foot plot contains trees worth 21 points. Trees totaling 13 points ( $21 - 8 = 13$ ) may be removed from the plot provided that no cleared openings are created.

(3) Notwithstanding the provisions of this subsection, 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-year period.

(4) Replacement of trees. 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, these openings shall be replanted with native tree species unless existing new tree growth is present. The provisions contained in this subsection (b) shall not apply to those portions of public recreational facilities adjacent to public swimming areas. Cleared areas, however, shall be limited to the minimum area necessary.

(5) Tree removal outside buffer strip. At distances greater than 100 feet, horizontal distance, from Upper Mason Pond and 75 feet, horizontal distance, from the normal high-water line of any regulated water body, tributary stream, or the upland edge of a wetland, except to allow for the development of permitted uses, there shall be permitted on any lot, in any ten-year period, selective cutting of not more than 40% of the volume of trees four inches or more in diameter, measured 4 1/2 feet above ground level. Tree removal in conjunction with the development of permitted use shall be included in the 40% calculation. For the purposes of this subsection, volume may be considered to be equivalent to basal area. In no event shall cleared openings for development, including but not limited to principal and accessory structures, driveways and sewage disposal areas, exceed, in the aggregate, 25% of the lot area or 10,000 square feet, whichever is greater, including land previously developed. This provision shall not apply to the General Development, Stream Development or Waterfront Development districts

...

### **DIVISION 13. Erosion and Sedimentation Control**

#### **Sec. 82-411. Erosion and sedimentation control plan.**

**[Ord. No. 8-1997, § 15(Q)(1), 7-15-1997]**

All activities which involve filling, grading, excavation or other similar activities which result in unstabilized soil conditions and which require a permit shall require a written soil erosion and sedimentation control plan. The plan shall be submitted to the permitting authority for approval and shall include, where applicable, provisions for:

(1) Mulching and revegetation of disturbed soil.

- (2) Temporary runoff control features such as hay bales, silt fencing or diversion ditches.
- (3) Permanent stabilization structures such as retaining walls or riprap.

**Response:** *A comprehensive soil erosion and sediment control plan has been developed for this project and is included as **Attachment 14**. Project sub-phasing and scheduling have been coordinated to meet all local, state, and federal guidelines regarding clearing of portions of the site. Storm water retention structures, hay bales, silt fence, soil stabilization materials, and many other tools and Best Management Practices are to be employed to ensure control of the site while under development.*

**Sec. 82-412. Adaptation to existing topography.**

**[Ord. No. 8-1997, § 15(Q)(2), 7-15-1997]**

In order to create the least potential for erosion, development shall be designed to fit with the topography and soils of the site. Areas of steep slopes where high cuts and fills may be required shall be avoided wherever possible, and natural contours shall be followed as closely as possible.

**Response:** *Development of the project site minimizes the potential for erosion using a variety of methods and approaches. In general, water approaching the site from surrounding areas will be redirected to existing drainage features such as the stream along the eastern property border, and water collected on site will be treated, collected and will exit the site through an existing structure to the Bay. Structures have been sited to reflect the existing slope of the site and to facilitate effective stormwater collection.*

*The project is roughly split into two areas: the larger northern area housing the majority of the new structures, and the smaller area along Northport Ave. In the northern area, siting of the buildings and finished floor elevations were chosen to reflect the existing topography and water drainage. Along the northern most edge of the site, the Building 1 modules have been stepped down to reflect existing contours and to help create a drainage swale parallel to the property line which feeds into the existing stream along the eastern property line. Buildings 3, 4 and 5 are within the core of the site and have been designed to use the foundation walls as retaining structures to allow grades to reflect the existing slope towards the Reservoir. At Building 2 the site has been raised relative to existing grade to create the perimeter access road, south of the road grades are blended down to the existing contours. Where slopes are steeper than 1:1.5 surfaces are armored against erosion using a 12" thick layer of stone rip rap. See drawings CG102 through CG107 for site grading information.*

*In the Northport Avenue portion of the site, much of the existing grading will be maintained. The exception to this is the area around Building 8 and the approach drive which will cut into the existing grade to lower the slope of the drive and to reduce the visual impact of Building 8 from the street. This will require the installation of a retaining wall along the northern edge of the developed area to maintain grades along the property line. Slopes around the remaining edges of the building pad will be tightly graded to blend back into the existing contours allowing water from surrounding areas to retain existing*

*drainage paths. See drawing CG101 and CG501 for additional site grading information.*

*In all the areas plantings will be used to permanently stabilize soils. Plantings have been specified using native species that reflect localized needs such as wetland restorations or reforestation. See drawings LP101 through LP107 and LP501 for additional planting information.*

*During the construction phase temporary sediment and erosion controls will be utilized to protect existing soils from erosion. See drawings CE100 through CE118 for further description of the measures, and drawings CE501 through CE504 for details of the measures.*

**Sec. 82-413. Control measures to apply to all stages of development.**

**[Ord. No. 8-1997, § 15(Q)(3), 7-15-1997]**

Erosion and sedimentation control measures shall apply to all aspects of the proposed project involving land disturbance and shall be in operation during all stages of the activity. The amount of exposed soil at every phase of construction shall be minimized to reduce the potential for erosion.

**Response:** *Refer to response to Section 82-411 above.*

**Sec. 82-414. Stabilization of exposed ground areas.**

**[Ord. No. 8-1997, § 15(Q)(4), 7-15-1997]**

Any exposed ground area shall be temporarily or permanently stabilized within one week from the time it was last actively worked, by use of riprap, sod, seed, and mulch, or other effective measures. In all cases, permanent stabilization shall occur within nine months of the initial date of exposure. In addition:

- (1) Where mulch is used, it shall be applied at a rate of at least one bale per 500 square feet and shall be maintained until a catch of vegetation is established.
- (2) Anchoring the mulch with netting, peg and twine or other suitable method may be required to maintain the mulch cover.
- (3) Additional measures shall be taken where necessary in order to *avoid* siltation into the water. Such measures may include the use of staked hay bales and/or silt fences.

**Response:** *Refer to response to Section 82-411 above.*

**Sec. 82-415. Drainageways and drainage outlets.**

**[Ord. No. 8-1997, § 15(Q)(5), 7-15-1997]**

Natural and manmade drainageways and drainage outlets shall be protected from erosion from water flowing through them. Drainageways shall be designed and constructed in order to carry water from a twenty-five-year storm or greater, and shall be stabilized with

vegetation or lined with riprap.

**Response:** *Refer to response to Section 82-411 above. For permanent conditions, the project specific storm water management plan has been developed based on a 100-year storm event and includes appropriate measures to protect drainages, streams, and all other structures during such an event.*

#### **DIVISION 14. Natural Resources**

##### **Sec. 82-431. Protection of soils.**

**[Ord. No. 8-1997, § 15(R), 7-15-1997]**

All land uses shall be located on soils in or upon which the proposed uses or structures can be established or maintained without causing adverse environmental impacts, including severe erosion, mass soil movement, improper drainage, and water pollution, whether during or after construction. Proposed uses requiring subsurface waste disposal, and commercial or industrial development and other similar intensive land uses, shall require a soils report based on an on-site investigation and be prepared by state-certified professionals. Certified persons may include Maine certified soil scientists, Maine registered professional engineers, Maine state-certified geologists and other persons who have training and experience in the recognition and evaluation of soil properties. The report shall be based upon the analysis of the characteristics of the soil and surrounding land and water areas, maximum groundwater elevation, presence of ledges, drainage conditions, and other pertinent data which the evaluator deems appropriate. The soils report shall include recommendations for a proposed use to counteract soil limitations, where they exist.

**Response:** *Both a Class B Soil Map Report (**Attachment 12**), as well as a full Geotechnical investigation and report (**Attachment 13**) were conducted for this project. The geotechnical report identifies several specific conditions present in the site which cause limitations for which the design must address. The most significant concern relates to the discovery of a glaciomarine deposit of silt and clay of varying thickness throughout the site. This layer of material is unsuitable for heavy loadings as will be encountered in the process buildings, and the material will be removed and replaced with suitable structural fill per the engineers' recommendations. Unsuitable soils will be trucked off site and disposed of at a properly licensed and registered facility. Other notable findings include relatively shallow bedrock in several area of the site as well as a distinct separation of groundwater due to a relatively impervious clay layer.*

##### **Sec. 82-432. Protection of water quality.**

**[Ord. No. 8-1997, § 15(8), 7-15-1997]**

No activity shall deposit on or into the ground or discharge to the waters of the state any pollutant that, by itself or in combination with other activities or substances, will impair designated uses or the water classification of the water body.

**Response:** *Nordic Aquafarms has filed an application for a MEPDES permit. This permit application demonstrates Nordic Aquafarms will not impair the designated uses or the water classification of Penobscot bay. (Attachment 22)*

## **DIVISION 15. Archaeological Sites**

### **Sec. 82-451. Approval of development affecting historic sites.**

**[Ord. No. 8-1997, § 15(T), 7-15-1997]**

Any proposed land use activity involving structural development or soil disturbance on or adjacent to sites listed on or eligible to be listed on the National Register of Historic Places, as determined by the permitting authority, shall be submitted by the applicant to the state historic preservation commission for review and comment at least 20 days prior to action being taken by the permitting authority. The permitting authority shall consider comments received from the commission prior to rendering a decision on the application.

**Response:** *Initial screening of the National Register of Historic Places and the Cultural Architectural Resource Management Archive for Maine did not identify any sites or structures that would be impacted by the development. Further consultation with the Maine Historic Preservation Commission (MHPC) and federally recognized Indian tribes in Maine began in June 2018 to identify possible historic sites, historic structures or archaeological sites that may be impacted by the development. In September 2018 the MHPC was notified of a potential archaeological site located within the project area and the completion of a Phase I Archeological Survey was recommended. This survey was conducted in September 2018 by Northeast Archeology Research Center, Inc. (NE ARC), whose director is listed on the MHPC approved prehistoric archeologist list. The study included the excavation of 196 test pits along 27 sampling transects across the site and pipeline easement properties. According to the final "Nordic Aquafarms Development Project Archaeological Phase I Survey, MHPC# 0737-18" (Attachment 32) no archaeological sites were identified, and no additional archeological work was recommended. Following a review of this report by the MHPC staff archeologist, and a review of updated project details, in October 2018 the MHPC concluded in a set of letters that no historic or archaeological properties would be affected by the development (Attachment 32).*

NOTE TO USERS: NEW LAND USE STANDARDS ADDED ON 10/16/18 OTHER LAND USE STANDARDS WERE NOT AFFECTED BY THE 10/16/18 AMENDMENTS

## **ARTICLE V. Land Use Standards**

### **DIVISION 16. Significant Groundwater Well.**

#### **Sec. 82-460. Exploration to establish a significant groundwater well.**

A person may conduct exploratory drilling and testing to identify the potential availability of significant groundwater resources in anticipation of establishing a significant groundwater well. A permit from the Code Enforcement Officer shall be required for all such exploratory drilling. All areas disturbed by such exploratory drilling shall be restored and revegetated to prevent erosion.

**Sec. 82-461. Extraction of a significant groundwater resource.**

A request to extract water from a significant groundwater resource located in the Shoreland Zone by the development of one or more significant groundwater wells shall require the issuance of a permit by the Belfast Planning Board pursuant to the process and standards identified in Chapter 102, Zoning, Article VIII, Supplementary District Regulations, Division 7, Significant Groundwater Well Permit.

**Response:** *The applicant proposes the installation and operation of Significant Groundwater Wells as part of this application. Refer to Chapters 102 (Attachment 4) and 90 (Attachment 5) of this application.*

**DIVISION 17. Significant Water Intake or Significant Water Discharge/Outfall Pipe.**

A significant water intake or significant water discharge/outfall pipe may be permitted by the Planning Board under the following conditions:

- (1) The installation and physical location of the pipe or pipes does not have a significant adverse impact, if any, on a shoreland regulated area, and the amount of area disturbed by the installation of the pipe is minimized to the greatest extent practical.

**Response:** *The installation of intake and discharge pipes reaching into the Bay will not have significant adverse impacts. Shoreland zone vegetation will not be significantly impacted. Any impacts as a result of construction will be temporary and fully restored. As part of the pipeline installation, some trees and other smaller vegetation will be removed. Upon installation of the pipes, the soil will be replaced at a gentler, more stable slope, and the area will be replanted with appropriate native species. Refer to engineering drawings CS101-103 for details.*

- (2) The applicant restores the area disturbed by the installation of a significant water intake or significant water discharge/outfall pipe so as to prevent both short-term and long-term soil erosion and sedimentation and the area is revegetated to present a natural appearance that is consistent with the surrounding area.

**Response:** *A detailed soil erosion and sediment control (**Attachment 14**) has been developed to guide the management of major earthwork activities at the site. This plan includes a detailed breakdown of project phasing to minimize the exposure of erodible soils and to prevent significant sediment transport both within the site, and to downstream receiving waters. The project Soil Erosion and Sediment Control Plan is intended to be a live document and will be regularly reviewed and amended throughout the construction process to ensure the continued effectiveness of the Best Management Practices at the site, and the adequate protection of downstream resources. The primary methods included in the Soil Erosion and Sedimentation Control Plan to be implemented for this project are as follows:*

- i. *Construction Phasing - The major earthwork activities will be phased to minimize the area of potentially erodible native soils exposed at any given time. This will minimize the potential for soil erosion and runoff contamination during inclement weather conditions. It will also reduce the potential for sediment transport and result in*

*manageable quantities of accumulation in treatment Best Management Practices. A detailed construction and Soil Erosion and Sediment Control Phasing Plan is included in **Attachment 14**.*

- ii. Diversion of Run-on from Upstream Areas – Diversion measures will be installed at the beginning of construction to capture and divert surface runoff and groundwater around the work area, reducing the need for de-watering in excavation areas.*
- iii. Perimeter Controls – Perimeter sediment barriers will be installed downstream of all work areas to prevent the transport of sediment to receiving waters and natural resources. Stabilized construction entrances (wheel cleaning pads) will be installed at all site entrances to prevent tracking of sediments onto roadways.*
- iv. Temporary Cover Materials – The plan includes the installation of temporary cover materials in some areas to prevent erosion from occurring during construction.*
- v. Rapid Stabilization of Excavated Areas – Cover materials including geotextile fabric and imported granular borrow will be placed over exposed native soils immediately after excavation and subgrade preparation to minimize the period of soil exposure. · Stabilization of drainage outlets and channels to avoid rill and gully erosion.*
- vi. Inlet Protection – Silt sacks and coir logs will be installed to protect drainage inlets and conveyances from sediment contamination.*
- vii. On-site sediment barriers - On-site measures to capture sediment (hay bales, silt fence, etc.) before it is conveyed to sediment sumps.*
- viii. Temporary Sediment Basins and Sumps – Sediment capture and treatment BMPs will be installed to provide detention, storage and treatment of any sediment contaminated runoff generated at the site.*
- ix. Permanent Measures – Stormwater BMPs, conveyances and stable permanent cover materials will be installed to provide long-term protection of the site and receiving waters. Nordic Aquafarms has developed a replanting and revegetation plan and encourage the participation of the community and abutting neighbors to ensure a best fit is realized.*

(3) The location of any above ground structures associated with the intake or discharge/outfall pipes complies with the minimum structure setback requirement for the respective Shoreland District, subject to consideration of structure setback requirements that apply to a structure that is a water dependent activity. A person who proposes to install a significant water intake or significant water discharge/outfall pipe shall provide evidence to the City that they can or have obtained any and all state and federal permits associated with the location and operation of the proposed water intake or discharge, including ongoing monitoring, that may be required.

**Response:** *Nordic Aquafarms has filed the following permit applications: MEPDES, SLODA, NRPA, ACOE, and a submerged lands lease with DACF, BPL(Attachment 22). The proposed facility will be fully compliant with all regulations and ordinances. The city will continue to receive copies of these permits as they are submitted and received.*

The Planning Board is responsible for the review and issuance of the required City permit. The permit application does not require review by any other City board, committee, or similar body.