



FINDINGS OF FACT STAFF REPORT

Date: January 11, 2008 OPRD Coastal Land Use Coordinator: Tony Stein

OPRD File Number: BA-631-07 County: Tillamook Applicant: Judy Albers, Michael McMenamin, Wes Lematta, and Tillamook County

Project Location: The properties are located at 47710, 47760, 47800 and Tax lot 700, Breakers Blvd, Neskowin. Tillamook County Assessor's Map T5S, R11W, Section 25 BC, Tax Lots 700 (Tillamook County), 800, 801 and 900.

Brief Project Description: The proposed project involves the construction of a riprap revetment approximately 287.5 feet in length and includes the Tillamook County pedestrian beach access (TL 700). Riprap rock will be 3 to 6 foot in diameter and use smaller pit run rock and non-woven geotextile fabric underneath as structure backing. The slope of the structure will be 2H to 1V, and the revetment will extend approximately 25 feet above beach level. The southern portion of the proposed structure will tie into an existing rip rap revetment (BA# 625-07). In front of the Tillamook County access, the applicants have proposed a rock stairway for beach access, incorporated into the proposed structure and blended into the existing riprap structure to the north (BA# 551-02). The proposed stairway will be constructed with interlocking flat rocks, 4 to 6 feet in diameter, over a stabilized layer of small pit run rock and non-woven geotextile fabric.

GENERAL STANDARDS EVALUATED, OAR 736-020-0010

Project Need – There shall be adequate justification for a project to occur on and alter the ocean shore area.

In recent years, particularly during the 1998/1999 winter, many areas of Neskowin have experienced critical erosion. Active dunes receded, and beach sand levels were dramatically lowered. In the geologic report by GeoScience, Inc, June 2, 2007, it states that during the early to mid 1990's, the western edge of the foredune was located approximately 140 feet west of the subject homes, with significant erosion beginning in the late 1990's. The geologic report also states that since late 2002, NANOOS data indicates that erosion has accelerated significantly, and the estimated recent average annual rate of erosion of the active beach zone was on the order of 8 to 10 feet annually. GeoScience, Inc. also reports that unless the subject properties are protected, the installed riprap revetments to the north (TL 605) and the south (TLs 1000-1700), will focus increased erosion on the beach cliff in front of the subject properties.

During December of 2007 and January, 2008, ocean storms and high surf have caused continued erosion and lowering of the beach profile, and a steepened dune scarp has developed in front of the subject properties. At the time of the geologic report, the distances recorded from the residences to the top of the bluff were: McMenamin at 40 feet, Lematta at 61 feet, and Albers at 49 feet.

Based on the above considerations, OPRD finds that there is adequate justification for the project to occur on and alter the ocean shore area.

Protection of Public Rights – Public ownership of or use easement rights on the ocean shore shall be adequately protected.

The proposed riprap will extend out onto the beach from 35 to 40 feet from the existing dune escarpment, occupying up to 10,062 square feet of existing beach area at the toe of the slope. The proposed revetment will blend into the existing riprap revetments to the north and south.

Beach armoring, the dynamic nature of beach foredune erosion and long-term changes in sea level over the next 100 years may result in a gradual narrowing of the beach, due to the fixed nature of the shoreline. The possibility of long-term responses to beach armoring and easement rights on the ocean shore raises broader policy issues that are not appropriately addressed in this individual permit decision.

Public Laws – The applicant shall comply with federal, state, and local laws and regulations affecting the project.

Tillamook County Department of Community Development has indicated that compliance with the Tillamook County Comprehensive Plan and Land Use Code cannot be determined until the County approves a development permit for the project. The applicants are aware of this requirement, and have filed a permit application with Tillamook County. Any work authorized under the OPRD permit will require certification that all applicable County permits have been approved.

State laws and regulations are being addressed through this permit review. A condition of approval will require that the applicant be responsible for obtaining any required permit approvals from the U.S. Army Corps of Engineers.

Alterations and Project Modifications – There are no reasonable alternatives to the proposed activity or project modifications that would better protect the public rights, reduce or eliminate the detrimental affects on the ocean shore, or avoid long-term cost to the public.

GeoScience, Inc., does not specifically address non-structural solutions for protecting the subject properties, such as dynamic revetments, sand bags, gravel mounds, logs or composite revetments. Other geologic reports on nearby properties have concluded that these techniques would not be effective due to the high-energy wave environment along this section of the coastline coupled with the loose nature of the sand. Vegetative stabilization and sand alteration would not be sufficient to substantially slow or halt erosion. Geoscience states that because the subject properties are currently located between existing rip rap revetments which are expected to focus erosion further onto the subject properties, no stabilization measures other than the proposed revetment appears appropriate. Relocating the homes would not provide protection to the residences and would not avoid the need for placing riprap or other material on the ocean shore. The buildings are currently occupying much of the usable land at the top of the bluff, and would still be in danger even if they were to be moved to the east property line. Although there may be some room for relocating the houses on some of properties, shoreline protection would still be justified on all properties. By protecting all of the lots, the riprap can be made continuous from the existing riprap revetments to the north and south.

Public Costs – There are no reasonable special measures which might reduce or eliminate significant public costs. Prior to submission of the application, the applicant shall consider alternatives such as nonstructural solutions, provision for ultimate removal responsibility for structures when no longer needed, reclamation of excavation pits, mitigation of project damages to public interests, or a time limit on project life to allow for changes in public interest.

Public costs associated with the proposed riprap will be the loss of approximately 10,062 square feet of upper beach area. Alternative shore protection methods other than riprap have been discussed above. These alternatives are not considered reasonable special measures, as they would fail to provide the needed long-term protection for the property. Public costs of the riprap also include the loss of recreational beach area, heavy equipment activity on the beach during construction, and the visual presence of additional riprap. These costs can be reduced through careful and efficient construction practices.

There will be no public costs to maintain the rip rap structure and the Tillamook County beach access (TL 700), as maintenance and needed repairs are the responsibility of the upland property owners.

Compliance with LCDC Goals – The proposed project shall be evaluated against the applicable criteria included within Statewide Planning Goals administered by the Department of Land Conservation and Development.

Statewide Planning Goal 18 requires that permits for beachfront protective structures be issued only where development existed on January 1, 1977. Development is defined as houses, commercial and industrial buildings, and vacant subdivision lots which are physically improved through construction of streets and provision of utilities to the lots. The subject properties meet the criteria. The properties were developed with streets and infrastructure as part of the original Neskowin Subdivision, which was platted in 1909. The Tillamook County Comprehensive Plan includes a Goal 18 exception for the Neskowin Community, recognizing that the lots were developed prior to 1977.

SCENIC STANDARDS EVALUATED, OAR 736-020-0015

Projects on the ocean shore shall be designed to minimize damage to the scenic attraction of the ocean shore area.

Natural Features – The project shall retain the scenic attraction of key natural features, for example, beaches, headlands cliffs, sea stacks, streams, tide pools, bedrock formations, fossil beds and ancient forest remains.

The riprap project will result in some changes to the lower dune bluff profile and will occupy some beach area. However, the scenic attraction of the beach will not be significantly affected, considering the predominance of existing riprap structures already existing along the southern and northern sections of Neskowin beach.

Shoreline Vegetation – The project shall retain or restore existing vegetation on the ocean shore when vital to scenic values.

The project will not affect vegetation that is vital to scenic values. Very little vegetation remains on the dune face due to the dramatic erosion that has occurred during the past several winters.

View Obstruction – The project shall avoid or minimize obstruction of existing views of the ocean and beaches from adjacent properties.

The riprap revetment will not affect or obstruct ocean or beach viewing opportunities from adjacent properties.

Compatibility with Surroundings – The project shall blend in with the existing shoreline scenery (type of construction, color, etc.).

The riprap revetment will be visually consistent with other riprap revetment projects on adjoining properties, and the continuous riprap structures that front the Neskowin beach shoreline.

RECREATION USE STANDARDS EVALUATED, OAR 736-020-0020

Recreation Use – The project shall not be a detriment to public recreation use opportunities within the ocean shore area except in those cases where it is determined necessary to protect sensitive biological resources such as state of federally listed species.

The proposed riprap will only occupy a portion of the available beach area, and should not affect typical recreation uses such as sunbathing, surfing, kite flying, sandcastle building, walking, or beachcombing.

Recreation Access – The project shall avoid blocking off or obstructing public access routes within the ocean shore area except in those cases where it is determined necessary to protect sensitive biological resources such as state of federally listed species.

During high tides in the winter, wave run-up often reaches the upper areas of the beach, and may cover the entire beach at times. Riprap revetments encroach some distance out from the natural bluff toe, and increase the chance of high water covering the entire beach area. The project is designed to project as little as possible out onto the beach area, while still maintaining a stable slope that will not collapse or become a safety hazard. Access during times of extreme high water is already limited by the presence of riprap on adjoining properties; therefore, the proposed project will not result in any new obstruction to lateral beach access.

SAFETY STANDARDS EVALUATED, OAR 736-020-0030

The project shall be designed to avoid or minimize safety hazards to the public and shoreline properties. The following safety standards shall be applied, where applicable, to each application for an ocean shore permit.

Structural Safety – The project shall not be a safety hazard to the public due to inadequate structural foundations, lack of bank stability, or the use of weak materials subject to rapid ocean damage.

The riprap revetment has been designed by GeoScience, Inc. to withstand wave attack, and support the steep dune face. Rock size, slope, toe trench, and material specifications appear to be adequate for providing erosion control in this high-energy beach environment.

Obstructional Hazards – the project shall minimize obstructions to pedestrians or vehicles going onto or along the ocean shore area.

The riprap will project out approximately 35 feet from the toe of the existing dune escarpment. This normally will not affect lateral beach access, except during times of extreme high water. During these periods, however, wave run-up is likely to be hitting the riprap on neighboring properties to the north and south; therefore the proposed riprap will not create a new obstruction for beach access.

Neighboring Properties – The project shall be designed to avoid or minimize ocean erosion or safety problems for neighboring properties.

Adjacent properties to the north and south are protected with existing riprap and will not be affected by the project.

Property Protection – Beachfront property protection projects shall be designed to accomplish a reasonable degree of increased safety for the on-shore property to be protected.

The purpose of the revetment is to provide protection to the upland home structures, and to provide a safe access route to the beach for pedestrians.

APPLICABLE NATURAL AND CULTURAL RESOURCE STANDARDS EVALUATED, OAR 736-020-0030

Projects on the ocean shore shall avoid or minimize damage to the following natural resources, habitat, or ocean shore conditions, and where applicable, shall not violate state standards:

Fish and wildlife resources including rare, threatened or endangered species and fish and wildlife habitats.

There are no reported fish and wildlife resources that will be impacted by the proposed riprap revetment.

Estuarine values and navigation interests.

The project is not adjacent to an estuary, and does not affect navigable water on the ocean.

Historic, cultural and archeological sites.

Notice of the application was provided to the State Historic Preservation Office, and to the Confederated Tribes of Siletz Indians. There were no reports of historic, cultural, or archeological sites at this location.

Natural areas (vegetation or aquatic features).

The riprap will be placed primarily on the exposed dune face that does not contain significant vegetation or aquatic features.

Air and water quality of the ocean shore area.

Impacts to air quality will be limited to the operation of heavy equipment during the construction process, estimated to take approximately one to two weeks. The project will take place above the ordinary high tide line, and will not affect water quality.

Areas of geologic interest, fossil beds, ancient forest remnants.

None of these features have been identified at the site.

When necessary to protect native plant communities or fish and wildlife habitat on the subject or adjacent properties, only native, non-invasive, plant species shall be used for revegetation.

The site is within an urban residential area, and is not adjacent to protected native plant communities or fish and wildlife habitat.

PUBLIC COMMENT

Notice of the proposed project was posted at the site for 30 days in accordance with ORS 390.650. Individual notification and a copy of the application were mailed to government agencies and individuals on OPRD's ocean shore mailing list. OPRD received no requests for a public hearing. During the public comment period, no letters or comments were received in support or opposition with the riprap revetment and public access proposal.

STAFF FINDINGS

1. There is a critical need for the proposed project. Strong storms over the past couple of winters have caused significant erosion at this site. Existing structures are located in close proximity to the edge of the dune, and the public access way is deteriorating and unsafe during winter months. Construction of the proposed riprap revetment and blending into adjacent riprap structures will allow for continuous structural shoreline protection across these vulnerable properties.
2. Relocation of structures is not a viable option due to the limited room available on the upland properties. Non-structural alternatives to riprap are not feasible due to the high-energy wave environment along this section of the coastline coupled with the severity of erosion at this site.
3. The project will be consistent with the existing riprap shoreline protection on adjacent properties to the north and south and properties within the Neskowin area, and will not create any new obstruction to beach access or recreation uses.
4. The plan to create a rip rap rock beach access that blends into the proposed and existing riprap revetments will provide for improved pedestrian access to the beach, while allowing for necessary shore protection.

Tony Stein
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