



FINDINGS OF FACT STAFF REPORT

Date: December 1, 2004 OPRD Coastal Land Use Coordinator: Steve Williams

OPRD File Number: BA-593-04 County: Lincoln Applicant: Lincoln County

Project Location: Ocean View Drive between 2nd and 6th Streets in Yachats.
Lincoln County Assessor's Map #14-12-27DA county right-of-way and tax lot 1200, and Lincoln County Assessor's May #14-12-27AC tax lot 5300.

Brief Project Description: The proposed project involves the construction of a riprap revetment, approximately 550 feet in length (450 feet, as modified), with the main portion extending along the shoreline between 4th and 6th Streets. Plans for the project indicate that the riprap, backed with smaller rock material and filter fabric, will be placed at a slope of 1.5H to 1V up to a height of approximately 19 feet above beach level. The riprap will project out beyond the existing bluff toe approximately 27 feet. Existing riprap is in place along 360 feet of the project area. This existing riprap will be repaired and fortified with new material to meet the current design specifications. A second small segment (approximately 20 feet in length) of riprap is proposed below the drainage culvert just south of 3rd Street.

The project is part of an overall project by Lincoln County and the City of Yachats to maintain Ocean View Drive, (also known as the 804 Trail) and construct a pedestrian trail along the shoreline from Marine Drive south through the Yachats State Recreation Area.

ADMINISTRATIVE RULE STANDARDS AND RELEVANT FACTS

I. GENERAL STANDARDS, OAR 736-020-0010

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

The overall purpose of the proposed riprap is to provide protection to two public resources: the existing street, and the proposed 804 Trail pedestrian pathway, which will exist along the west half of the current two-lane street. The improved path is expected to be a popular pedestrian route, providing views of the ocean and

shoreline, and establishing a walking route from Marine Drive to the North through Yachats State Recreation Area.

Existing riprap is located along the northern 360 feet of the project area was installed at some point in the past, most likely in the 1970's. Although this work is mostly intact, some of the riprap boulders have fallen out of place, either due to lack of maintenance, or poor initial construction. The proposed project will involve rebuilding the existing riprap to current standards and adding material where necessary in order to achieve a higher level of structural integrity and long-term durability. The proposed work below the drainage culvert near 3rd Street will repair erosion damage that occurred within the last year from the rerouting of surface water, and protect the lower part of the bluff from continued erosion caused by the existing drainage culvert.

According to the geologic report (Hart Crowser and Associates, August 9, 2004), recent and historical landsliding of the marine terrace bluff material across the length of the project area has caused the bluff edge to retreat landward to within close proximity (11 feet or less) of Ocean View Drive, causing a threat to the roadway. Evidence of slumping and sloughing of the bluff slope and episodes of marine terrace deposition can be seen along the southern parts of the project area, where there is currently no riprap protection. In some areas the bluff edge is back to within just several feet of the paved road surface. Much of this bluff erosion can be attributed to the El Niño and La Niña winters of 1997/98 and 1998/99 when extremely high surf caused severe wave erosion on many parts of the Oregon Coast.

The general erosion rates calculated for this area indicate a maximum rate of bluff retreat of approximately 0.45 inches per year. Under this scenario the unprotected bluff areas would retreat roughly 11.25 feet in the next 25 years. Much of the paved roadway is at or closer than this distance. From the County's perspective, this causes an immediate need for constructing the riprap revetment, and repairing the existing riprap. Additional bluff failures may cause damage to the road, or render it unusable, cutting off access to homes along the east side of the street. Waiting for additional bluff failures may result in higher repair costs, and cause the need for a much larger revetment than the current proposed project.

A finding of project need follows the review of all other applicable standards and is included in the findings summary at the end of this report.

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

Based on the project drawings, the proposed riprap will project out onto the ocean shore approximately 27 feet. This encroachment will be similar to the existing riprap currently in place along the northern 360 feet of the project, which currently projects between 10 and 30 feet onto the ocean shore. Public ownership or use easement rights will not be altered by the construction of the new riprap revetment, and the public use of the ocean shore will continue. Some reduction in usable beach area will occur due to the riprap placement, however this will not significantly affect public beach use.

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

The City of Yachats has certified that the project is in compliance with the Yachats Comprehensive Plan and Land Use Code. Other State of Oregon regulations are being addressed under the review of this permit. Federal regulations could potentially involve a U.S. Army Corps of Engineers permit, however a Corps permit is usually not required for this type of project. A condition of the permit will require that the applicants obtain any required permits from the Corps, if applicable.

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.

Ocean View Drive is an important arterial street within the City of Yachats, providing an alternative north-south route to Highway 101. The street also provides access to eight homes along the length of the riprap project. As explained in the application, moving the travel surface inland is not a viable option, as the pavement is already within close proximity to private property boundaries along the east side of the road. The County is going forward with plans to close one lane of traffic to vehicles and make Ocean View Drive a one-way street through the project area, which will help provide room for the planned gravel pedestrian trail. Construction of the trail will also remove an impervious paved surface from the immediate bluff edge, reducing the amount of surface runoff.

As discussed in the geologic report, non-structural alternatives such as vegetative stabilization, sand alterations, and cobble berms would be insufficient to resist wave attack in order to substantially slow or halt erosion, or to stabilize the bluff slope. The report contends that the high risk to road and trail facilities at the top of the bluff requires effective structural stabilization rather than a non-structural alternative that would be experimental in nature. In addition, OPRD notes that sand nourishment or cobble fill could adversely affect the adjacent rocky intertidal habitat, if the material was dispersed into the ocean.

Initially, the County proposed installing a much larger riprap structure to protect the entire bluff face. This original proposal would have extended considerably further out onto the ocean shore. In order to minimize encroachment out onto the ocean shore, a new plan was later submitted for a smaller riprap structure, terminating at approximately 10 feet below the top of the bluff. Rather than attempt to build the 804 Trail (pedestrian path) alongside the two-lane roadway, the County and the City chose to close one-lane of the roadway and build the pedestrian path within the existing westerly lane of the road. This makes protection of the bluff edge less critical and has enabled the County to reduce the scale of the riprap design. With the decreased height, encroachment out onto the beach is decreased by approximately 12 feet.

During the review of this permit, it became evident that a reduction in the length of the main riprap segment would be possible to help further minimize the riprap structure. Beginning at 4th Street, the setback distance from the Ocean View Drive paved surface to the edge of the bluff increases to approximately 30 feet, and widens to approximately 50 feet at the southernmost part of the proposed project (main riprap segment). Erosion rates for this area are also likely to be less than other areas of the project due to the offshore reef and wide, rocky shoreline in this area. OPRD staff discussed the possibility of terminating the riprap 100 feet north of the original design with Lincoln County Public Works Department and the consulting engineering geologist. They agreed that this was a feasible option, and would result in less beach impacts and lower project costs. This reduction in length for the main riprap segment has been noted on the project drawings, and will be required as a condition of permit approval.

The “do nothing” alternative is addressed in the geologic report, but is ruled out due to the continued bluff erosion and the immediate need to protect the roadway. The existing riprap could be repaired and/or maintained, however, the remaining unprotected bluff south of the riprap would continue to be problematic. If the bluff is allowed to continue to recede, a large failure of the roadway could result, creating a potential need for a larger riprap structure to stabilize the entire bluff face.

Based on the above considerations OPRD finds that the proposed alternative, along with the reduction in length as described above, is the most reasonable alternative. Compared to the larger, previous designs, the revised alternative reduces the encroachment onto the ocean shore, while providing needed protection for the upland roadway and the proposed walking trail where the erosion hazard is more critical.

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.

Alternative shore protection methods other than the proposed project have been discussed above. The alternatives ruled out are not considered reasonable special measures, based on reduced levels of protection that would be provided.

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.

OPRD determines goal compliance for ocean shore alteration permit applications by using the Type II Procedure required under its State Agency Coordination Rule OAR 736-070-0040(3)(b)(A). This rule states that the Department shall make its own compatibility determination based on information and findings supplied by the applicant confirming that the affected local government has determined that the Department's land use action is compatible with the local jurisdiction's acknowledged comprehensive plan and land use regulations.

The City of Yachats, through its City Planner, has certified that the project is in compliance with the Yachats Comprehensive Plan and Land Use Code, which are acknowledged by LCDC as meeting the Statewide Planning Goal requirements. In certifying the consistency with the local plan and Statewide Planning Goals, the City determined that the Goal 18 requirements for shoreline protective structures did not apply to this site, because the site is not inventoried as a Goal 18 beach, but rather a rocky shoreline area.

II. SCENIC STANDARDS, 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.

Existing riprap is in place along approximately 80 percent of the project area (as modified with the 100-foot reduction in length). The proposed project will utilize this existing material, and create a continuous riprap structure across the 450-foot length of shoreline. The old riprap material that is partially scattered along the shoreline will be consolidated into the riprap structure, establishing a continuous rocky slope against the marine terrace bluff. In addition to the existing riprap, natural basalt rock outcroppings exist along the beach and near shore area in the vicinity of the project. The basalt rock that is used for the riprap project will blend in with the colors and textures of the existing rock that characterizes this rocky shoreline.

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

Some existing vegetation along the base of the bluff will be disturbed during the project, however this vegetation is not vital to scenic values. This vegetation consists of primarily grasses and low-lying shrubs along the bluff slope or on the slide blocks that have dropped down to the base of the slope. Where possible, existing vegetation above the existing riprap revetment will be left in place. The existing vegetation along the

southern 100 feet of the original project proposal will be preserved by shortening the length of the project, as discussed earlier in this report.

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

The riprap will not affect existing views from upland properties.

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

As described earlier, much of the project will take place where existing riprap is already in place. Basalt rocks, outcroppings, and sea stacks exist throughout the area, which will allow the new riprap to blend in to the surrounding terrain.

III. RECREATION USE STANDARDS, 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 or federally listed species.

For 80% of the project area (as modified), the riprap project will be constructed where existing riprap is currently in place, resulting in minimal additional encroachment beyond the existing riprap boulders. Along the approximate 100 feet of shoreline that is currently unprotected, the riprap will extend approximately 25 feet of the existing bluff, for a total of approximately 2,700 square feet. This encroachment should not prevent the use of beach and shoreline areas fronting the project during normal ocean conditions. During severe storms and high water events, wave run up may cover the entire beach area, however, this now happens occasionally already with existing natural obstructions such as rock outcroppings, landslide colluvium, and natural crevasses and tidepools, causing an obstruction to recreational use of the shoreline. This is not a heavily used shoreline for recreation, and is mainly used by adventurous individuals walking along from access points to the north or south and exploring the rough terrain and pocket beaches. Slight impacts to recreational uses caused by the riprap project are necessary to maintain and protect what is likely to be a much used recreation use facility: the 804 Trail.

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 or federally listed species.

The proposed revetment has been reduced in size (height, width, and length) in order to avoid, as much as possible, any impacts to public access along the shore. During times of high water, the planned 804 Trail will be a safe alternative to traversing the shoreline below the bluff.

IV. SAFETY STANDARDS, 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 existing riprap revetment will be repaired and rebuilt to achieve better stability, reducing potential safety hazards. The overall project design indicates that the riprap will be constructed to current standards, with a toe trench and rocks placed individually to form a stable, interlocking structure.

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

As discussed previously, the size of the riprap structure has been reduced to minimize encroachment onto the ocean shore. Due to the rough terrain and lack of sufficient access points, vehicle use does not occur on this segment of shoreline.

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

The neighboring oceanfront residence north of the project is located on property that appears to be better protected from bluff erosion by offshore rocks and less exposure to direct wave energy. The existing riprap within the project area just to the south of this property will be repaired and rebuilt to the current specifications, but will basically retain its current configuration. No changes to water currents, wave reflection, or other factors that may increase erosion are expected to impact the adjoining property. On the south end of the project, the riprap will tie into the existing bluff outcropping, creating a smooth transition into the publicly-owned shoreline to the south.

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 proposed revetment will protect the street and future pedestrian trail, increasing safety for users of this facility.

V. NATURAL AND CULTURAL RESOURCE STANDARDS, 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.

The project is located adjacent to rocky shoreline habitat. Approximately 300 feet to the south is the Yachats Marine Gardens, a protected intertidal habitat identified in the Oregon Territorial Sea Plan. Comments from the Oregon Department of Fish and Wildlife referred to this protected area, and requested that all work avoid impacts to the Marine Gardens to the maximum extent possible. The project will take place above ordinary high water, and should cause no impacts to adjacent rocky intertidal habitat, or to the Marine Gardens south of the project site.

Estuarine values and navigation interests.

The project is within ¼ mile of the Yachats River estuary. No adverse affects are expected from the project on the water quality or marine habitat within this estuary. (See discussion relating to fish and wildlife resources above.)

Historic, cultural and archeological sites.

Notice of the application was provided to the State Historic Preservation Office (SHPO), and to the Confederated Tribes of Siletz and the Confederated Tribes of Grand Ronde. A response was received from SHPO, indicating that there is a reported archeological site in the project area. The SHPO Lead Archeologist has recommended that a professional archaeologist examine the project area prior to construction, to determine if cultural materials are present. This will be required as a condition of approval.

Natural areas (vegetation or aquatic features).

A majority (80%) of the project will occur on shoreline areas with existing riprap. Vegetation on or within this riprap material will be preserved to the extent possible. Along the southern 100 feet of the project area some low-lying vegetation along the base of the bluff will be removed or covered during construction. Reducing the length of the project by 100 feet will help minimize the impacts to natural bluff features and vegetation.

Air and water quality of the ocean shore area.

The project will take place above the ordinary high tide line, and will not cause foreign materials or pollutants to enter the water. The proposed project will not adversely affect water quality on the ocean shore.

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.

There are no known protected native plant communities or fish and wildlife habitat on or adjacent to the subject property.

VI. 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 10 requests for a public hearing, and a public hearing was held on October 20, 2004. Fourteen people attended the hearing. Two spoke in favor of the project, and two people testified in opposition.

In addition to the verbal testimony received at the hearing, OPRD received 2 written comments in support of the project, and letters from 3 individuals expressing opposition to the project.

Those expressing support of the project described the importance of the existing street, public infrastructure, and future trail improvements, and the need to provide protection before these public facilities are damaged or destroyed.

Those opposing the project raised issues relating to the need for the project, and suggested that the County shift the street inland by eliminating one lane of traffic, but wait until additional erosion occurs before installing riprap. Concern was raised about potential impacts to the beach and nearby shorelines, loss of beach area, visual impacts, and whether non-structural alternatives should be further considered. These issues have been addressed in this report.

VII. Findings Summary

Project Need – The proposed revetment is necessary to control bluff erosion that continues to pose a threat to existing improvements on Ocean View Drive. The project will include the needed repair and consolidation of existing riprap on the site, and new protection for a critical erosion area between the existing riprap and 4th Street. If this section of bluff remains unprotected, continued erosion of the bluff could affect the viability of Ocean View Drive and the 804 Trail improvements planned by the City of Yachats and Lincoln County. Through permit conditions, the design of the revetment will be modified to reduce its length by 100 feet, so that the riprap will be limited to the critical areas where the erosion threat is greatest. With these modifications, the project (not including the small area of fill proposed for the 3rd Street culvert) will result in only 100 feet of new riprap. The remainder of the project will consist of the repair and rehabilitation of the 360 feet of existing riprap.

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

The following checklist summarizes whether the application satisfies the general, scenic, recreation, safety and natural and cultural resource standards as defined in OAR 736-020-0010 through 736-020-0030:

| Standard | Yes | No | Standard | Yes | No |
|--------------------------------------|-------------------------------------|--------------------------|--|-------------------------------------|--------------------------|
| Project Need | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Structural Safety | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Protection of Public Rights | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Obstructional Hazards | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Public Laws | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Neighboring Properties | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Alteration and Project Modifications | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Property Protection | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Public Costs | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Fish and Wildlife Resources | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Compliance with LCDC Goals | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Estuarine Values and Navigation Interests | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Natural Features | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Historic, Cultural and Archeological Sites | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Shoreline Vegetation | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Natural Areas | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| View Obstruction | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Air and Water Quality of the ocean shore | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Compatibility with Surroundings | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Areas of Geologic Interest | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Recreation Use | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Use of Native Plant Species when Necessary | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Recreation Access | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

VIII. STAFF RECOMMENDATION:

Based on an analysis of the facts and in consideration of the standards evaluated under OAR-736-020-0005 through OAR 736-020-0030, I recommend the following action:

- Approval
- Approval with conditions
- Denial

Steve Williams,
Coastal Land Use Coordinator