

APPENDIX B
(Addenda)

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Addendum #1 (Technical Memorandum)

To: Jim Hurst

From: Todd Boire, P.E.

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Pages: 3 (including figure)

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Date: May 2, 2004

Re: Shelter Cove

Cc:

As you are aware, we recently completed a site investigation and engineering design/recommendations to stabilize a portion of a sand dune located along the east bank of the Siulsaw River within the Shelter Cove subdivision in Florence, Oregon. The results of our work were summarized in a letter-report with accompanying figures dated December 1, 2003. Upon obtaining construction cost estimates, you indicated our plan to extend the riprap buttress toward the river (to allow lost lot area to be reclaimed) would be too expensive and requested a least costly alternative. You also indicated you would be working from above the slope, rather than using a barge. This technical memorandum provides a revised alternative for the revetment design and clarifies some other items contained in our report.

DESIGN MODIFICATIONS

Revetment Section

The revetment section has been reduced to a minimum, uniform width as shown on Figure 6 (Modified). We have not provided a plan drawing; however, the modified revetment would run the full length of the project area previously identified. The rock fill and riprap should cross over the intermediate sand ridges, which would require removing the soil overburden in these areas to expose the underlying layer of compressed silt. The compressed silt should then be benched and/or terraced to provide a keyway for rock fill and riprap placement. After completion of the work, there should be no discontinuities in the revetment along the full length. Revised material quantities are as follows:

Graded Rock Ballast:	1,400 cubic yards
Riprap:	2,250 cubic yards

Geotextile

The contractor inquired as to whether a graded aggregate filter could be used in lieu of the synthetic, non-woven, geotextile for drainage. We would approve of this change if the proposed gradation of the filter rock were provided to us. Alternatively, we could conduct a field approval.

OTHER ISSUES

Slope Disturbance

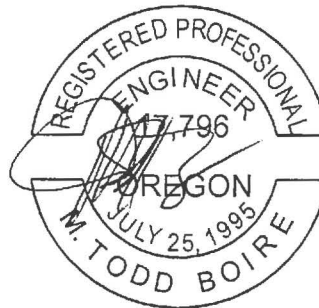
You indicated construction equipment would access the dune from the top. We recognize this would involve some slope disturbances. Any slope areas that are disturbed from access and related construction should be re-graded following completion of the work. Erosion protection should be applied as previously detailed.

House Drainage

You indicated there is no city storm drainage in the area. Still, our preference is that all roof and yard area drainage be tight-lined to the street. Discharging below the slope is less preferred but may be allowed if other disposal methods are not possible. Discharging on the slope should not be completed.

Setbacks

In our letter, we recommended a 40 ft setback from the slope edge for all homes. For the reduced revetment size (where the lot areas would not be increased), we realize this setback may not be possible. It should be understood that lessening the setback would involve some increased risk for future homes that would have to be assumed individual landowners. Since actual plans are not available, we would recommend reviewing the setbacks for each individual building and lot on a case-by-case basis. For planning, we strongly encourage house footprints be minimized and that simple, square-shaped structures be used wherever possible. Making foundations continuous and rigid, and as deep as possible would also provide added benefit. Extended portions of houses, including projected viewing areas and decks, would be more susceptible to undermining and the effects of differential settlement when slope erosion does occur.



EXPIRES 12/31/05

