

June 7, 2019

Ms. Sarah Absher, Director  
Tillamook County Department of Community Development  
1510 – B Third Street  
Tillamook, Oregon 97141

**RE:** Additional Material in Support of the Conditional Use Review 851-19-000105-PLNG

Dear Ms. Absher,

This letter is in response to the Tillamook County Department of Community Development's request, dated April 4, 2019, for additional information on the above-referenced Conditional Use Permit application. The Applicant, Edge Cable Holdings, USA, LLC, (the Applicant) has completed a geotechnical study of Lot 3200, providing the Department additional information documenting that the site development will meet the Beach and Dune Overlay Zone requirements. This study accompanies this letter.

The intent of this letter is to provide an expanded explanation as to how the proposed utility line, the Jupiter Submarine Cable System, is consistent with the goals and policies of the Tillamook County Comprehensive Plan (TCLUO Section 6.040 Criteria #2). We understand that the applicable goals and policies of Criteria #2 of the Comprehensive Plan are:

- Goal 6: Air, Water, Land
- Goal 11: Public Facilities
- Goal 18: Beaches and Dunes.

*Goal 6: Air, Water, Land*

The installation of the beach manhole (BMH) and conduit from the BMH to Sandlake Road will use standard excavating equipment, such as a backhoe and excavator, along with small diesel generators, that meet both the State and Federal air quality standards. As a result, the project will meet all applicable air quality standards.

As discussed above, the Applicant has completed a geotechnical study of Lot 3200. As part of this study, the potential impact to groundwater from the horizontal directional drilling (HDD) activities have been assessed. The report notes that there are no surface waters onsite, and excluding the Pacific Ocean, there are no surface waters immediately adjacent the project area.

It should also be noted that the methodology proposed for this HDD effort is consistent with the methodology outlined in the Oregon Department of Environmental Quality's (DEQ) *Groundwater Monitoring Well Drilling, Construction, and Decommissioning* (OAR 690-240-0035).

Based on our geotechnical study, the potential for the HDD to cause any impacts to the water or land on site or in the adjacent area is low. On page 6, the geotechnical study specifically concludes that:

- *Hydraulic Fracture: The proposed plan of a 10-degree pipe installation angle within the Site soil conditions will not result in hydraulic fracture, assuming the contractor uses and maintains typical fluid pressures and drilling methods.*
- *Ground-Borne Vibration: The risk of vibratory damage to adjacent buildings and infrastructure located 50 feet or more from the HDD drill rig in the center of the property should be considered low. We do recommend movable equipment and stationary equipment that generate vibration operate at least 25 feet from any structure to maintain vibration levels well below the threshold values.*
- *Bentonite Mud: Bentonite is generally considered inert and approved by Oregon Department of Environmental Quality (DEQ) and the OWRD for use in a number of different drilling applications, including as a permanent plug to seal boreholes. An additive mixture will be needed to stabilize the mud in the saltwater conditions.*
- *Bentonite Mud Dispersion: Drilling mud is intended to remain within a narrow annulus of the HDD borehole and will not migrate any significant distance within the surrounding soil media, above or below groundwater.*
- *Surface Soil Stability: The Site is not part of the active dune and beach shoreline and the property is well vegetated with grasses, shrubs, and trees, which significantly reduces the susceptibility to wide-spread erosion across the property.*
  - *Construction will expose the ground surface, increasing erosion potential in these localized areas.*
  - *Construction, laydown, and access areas requiring clearing of vegetation should be planned in advance; the amounts and exposures should be limited to the practical extent possible and protected based on an approved erosion control plan.*
- *Construction monitoring is recommended to verify the conclusions within this report.*

In recognition of the low-impact approach to installation of this utility line, DEQ issued a Water Quality Certification for the Jupiter Submarine Cable System on April 4, 2019. Furthermore, as noted in the study, groundwater monitoring wells will be installed to demonstrate that no groundwater impacts will result from the HDD.

With regard to noise it should be noted that the projected timeline for construction is approximately 34 days. The initial activities on the site would include the clearing of vegetation within the work area with the use of hand tools and a Bobcat, earth excavation for the BMH and conduit, and a 15-day HDD boring effort. In addition to these onsite vehicles, light to medium duty trucks carry water to the site, periodically. To mitigate any potential noise impacts over 68 decibels [dB] at 50 feet from the nearest noise sensitive property, the applicant will place noise barriers around the work area. These noise barriers will lower the noise levels from the point source, to below 68 dB at the nearest noise-sensitive property.

Furthermore, all construction activities will operate during county-approved daily time periods. The implementation of these measures will mitigate any significant noise impacts to the adjacent neighborhood.

*Goal 11: Public Facilities*

The installation and operation of the proposed buried utility line will not impact any of the following Public Facilities present in or around the Tierra del Mar community:

- Sewage Treatment
- Solid Waste Disposal
- Fire Protection
- Public Schools
- Police Protection
- Storm Drainage
- Planning, Zoning, and Subdivision Control
- Community Health
- Energy Utilities
- Community Government.

*Goal 18: Beaches and Dunes*

With regard to Goal 18 (Beaches and Dunes) the County's comprehensive plan indicates that Lot 3200 and the area adjacent to it is classified as "Recently Stabilized Foredunes" (or "FD). The applicant's geotechnical report confirmed that the site is not part of an active dune or beach shoreline, and that the property is well vegetated with grasses, shrubs, and trees, which significantly reduce the susceptibility to erosion across the site. Construction activities will be subject to an approved temporary erosion and sedimentation control plan (TESC), subject to best management practices (BMPs). As a result, the risk of any impacts to adjacent beaches and dunes will be low and will be monitored through an approved construction management plan.

*Conclusion*

The proposed installation and operation of this utility line has been designed to minimize impacts to air, water, land, public facilities, beaches, dunes, and nearby residential properties. The geotechnical study confirms these conclusions and provides additional analysis and technical data to support these conclusions.

Please do not hesitate to contact me if you have any additional questions upon review of both this summary and the geotechnical study. I can be reached at either (206) 714-5474 or at [cfisher@48northsolutions.com](mailto:cfisher@48northsolutions.com).

Sincerely



Cameron Fisher

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