THE GALLI GROUP
Geotechnical Consulting

02-6151-02
August 16, 2023

MEMO

TO: Darren Sandeno/ Parametrix
FROM: Dennis Duru, M.Sc., P.E., C.E.G., R.G.
SUBJECT: **GEOTECHNICAL DESIGN REPORT**
ADDENDUM REPORT NO. 1 (LANDSLIDE HAZARD POTENTIAL)
BEACH LOOP SUBDIVISION
T28S, R15W, SEC 36C
TAX LOTS 219, 400, 500, 600, 700 & 1500
BEACH LOOP ROAD
BANDON, OREGON

Darren,

Per your email request, we have provided the following additional information regarding the moderate to high landslide potential mapping of portions of the subject site in the Coos County "Coos All Hazard" Interactive GIS Mapping. The information within this addendum is to provide clarification for, and supersedes, information provided within *Section 6.2.2 "**Landslides / Slope Instability**"* of our original report for this project, titled *"**GEOTECHNICAL DESIGN REPORT…**"* dated October 18, 2022.

6.2.2 Landslides / Slope Instability

The east side of the site is relatively flat with mild slopes in the range of 1% to 3 %, therefore, the potential for mass wasting on the east side of the site is low.

The foredune area, located across portions of the west side of the site, contains areas with slopes typically between 20% and 50% with some localized slopes up to 80%. Based on the subsurface investigation, soil thicknesses in these areas are relatively deep (30 to 50 feet) before encountering weathered bedrock, and the sands which constitute these slopes (on the west side) are dry and loosely deposited. There are also some apparent signs of surface slides on this area of the site.

The project site is not within an existing deep-seated Quaternary landslide area (Qls), according to the air photos (Google Earth, 2016) and Lidar imagery (bare earth and highest hit imagery) of the Bandon Quadrangle (DOGAMI, 2021). However, the State Landslide Information Database for Oregon (SLIDO 4.2, 2023) mapped some areas on the west side of the project site as having moderate to high susceptibility for a landslide.

Therefore, in our professional opinion, the potential for localized slope instability on the **west** side of the project site is **high**. We have provided recommendations (site grading, site dewatering, excavation shoring, cut/fill slope, retaining wall, and aggregate pier and pile deep foundations recommendations) in our original geotechnical report to address this potential hazard. It is essential these recommendations be followed closely in order to mitigate slope instability both during and after construction. Similarly, recommendations addressing surface and subsurface drainage in the project area, as well as erosion control measures, were also provided and must be followed during, and in some cases, after construction, to maintain slope stability in the project area. In-progress grading inspections should be made during construction to note any adverse conditions which could negatively affect cut slopes or general site grading.

Conclusion and Recommendations

In our professional opinion, based on our field investigation, laboratory testing and office review, the soils conditions at the site are suitable for the proposed development, provided the recommendations of our report are incorporated in the design and construction of the project. Special attention must be paid to the design and construction of the roadways, foundations, and structures due to the presence of loose, sandy soils on the west side of the site. The geotechnical recommendations for the design and construction of the planned development provided in our original report dated October 18, 2022, must be followed to mitigate all identified potential hazards at the site.

This memorandum shall be considered an integral part of the Geotechnical Design Report. All other aspects of the report remain the same.

Respectfully Submitted,

THE GALLI GROUP
GEOTECHNICAL CONSULTING

Dennis Duru

EXPIRES: 12/31/2023

Expires:
12/2023

Dennis Duru, PE, CEG, RG.
Senior Project Engineer/Engineering Geologist

Reviewed by: Lyn Chand, PE