



## NOTICE OF LAND USE DECISION BY THE COOS COUNTY PLANNING DIRECTOR

Coos County Planning  
225 N. Adams St.  
Coquille, OR 97423  
<http://www.co.coos.or.us/>  
Phone: 541-396-7770  
Fax: 541-396-1022

Date of this Decision: December 16, 2019  
File No: ACU-19-022

RE: Request for approval to alter the existing dwelling located within the very high landslide susceptibility natural hazard.

Applicant(s): Dave Reed  
PO Box 1808  
Bandon, OR 97411

This decision notice serves as public notice to all participants, adjacent property owners, special districts, agency with interests, or person with interests. If you are an adjacent property owner, this notice is being mailed to you because the applicant has applied for a use or activity on their property that requires that you receive notice pursuant to ORS 197.763. Please read all information carefully as this decision may affect you. (See attached vicinity map for the location of the subject property).

Mailed notices to owners of real property required by ORS 215 shall be deemed given to those owners named in an affidavit of mailing executed by the person designated by the governing body of a county to mail the notices. The failure of a person named in the affidavit to receive the notice shall not invalidate an ordinance. The failure of the governing body of a county to cause a notice to be mailed to an owner of a lot or parcel of property created or that has changed ownership since the last complete tax assessment roll was prepared shall not invalidate an ordinance.

**NOTICE TO MORTGAGEE, LIEN HOLDER, VENDOR OR SELLER: ORS CHAPTER 215 (ORS 215.513) REQUIRES THAT IF YOU RECEIVE THIS NOTICE, IT MUST PROMPTLY BE FORWARDED TO THE PURCHASER.”**

The requested proposal has been  Approved  Denied subject to the findings to the criteria found in Exhibit A. The decision is based on findings and facts represented in the staff report.

### SUBJECT PROPERTY INFORMATION

Account Number: 1158700  
Map Number: 29S122200-00101

Property Owner: LAFRANCHI, RON  
580 CENTRAL BLVD  
COQUILLE, OR 97423-1248

Situs Address: 95667 GUERIN LN MYRTLE POINT, OR 97458

Acreage: 6.15 Acres

Zoning: RURAL RESIDENTIAL - 5 (RR-5)

Special Considerations: ARCHAEOLOGICAL SITES (ARC)  
NATURAL HAZARD - LANDSLIDE (NHLND)

Proposal: Request for Planning Director Approval for alteration of the existing dwelling (addition) within the Landslide Natural Hazard pursuant to Coos County Zoning and Land Development (CCZLDO) § 4.11.125(7)(b) Special Development Considerations – Natural Hazards – Landslide and Article 5.11 Geologic Assessment Reports.

Decision: This request meets the criteria subject to conditions of approval found at Exhibit A. Approval is based on findings and facts represented in the staff report.

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This notice is to serve as public notice and decision notice and if you have received this notice by mail it is because you are a participant, adjacent property owner, special district, agency with interest, or person with interest in regard to the following land use application. Please read all information carefully as this decision may affect you. (See attached vicinity map for the location of the subject property).

The purpose of this notice is to inform you about the proposal and decision, where you may receive more information, and the requirements if you wish to appeal the decision by the Director to the Coos County Hearings Body. Any person who is adversely affected or aggrieved or who is entitled to written notice may appeal the decision by filing a written appeal in the manner and within the time period as provided by the Coos County Zoning and Land Development Ordinance (CCZLDO) Article 5.8. If you are mailing any documents to the Coos County Planning Department the address is 250 N. Baxter, Coquille OR 97423, but if an appeal is not received in the office by the time and date noted in this decision it will not be accepted. An appeal shall not be directly filed with the Land Use Board of Appeals until all local appeals have been exhausted. If appealed, failure of an issue to be raised in a hearing, in person or in writing, or failure to provide statements of evidence sufficient to afford the Approval Authority an opportunity to respond to the issue precludes raising the issue in an appeal to the Land Use Board of Appeals.

The application and all documents and evidence contained in the record, including the staff report and the applicable criteria, are available for inspection, at no cost, in the Planning Department located at 225 North Adams Street, Coquille, Oregon. Copies may be purchased at a cost of 50 cents per page or if available may be viewed at <http://www.co.coos.or.us/Departments/Planning/PlanningDepartment--Applications2019.aspx> Staff makes every effort to place all noticeable decisions on the webpage but it is not a legal requirement. The decision is based on the application submittal and information on record. The name of the Coos County Planning Department representative to contact is the person that

prepared the report and the telephone number where more information can be obtained is (541) 396-7770.

This decision will become final at 5 P.M. on December 31, 2019 unless before this time a completed **APPLICATION FOR AN APPEAL OF A DECISION BY THE PLANNING DIRECTOR** form is submitted to and received by the Coos County Planning Department.

Prepared by: Amy Dibble Date: December 16, 2019  
Amy Dibble, Planner II

Authorized by: Jill Rolfe Date: December 16, 2019  
Jill Rolfe, Planning Director

**EXHIBITS**

Exhibit A: Conditions of Approval  
Exhibit B: Vicinity Map

**The Exhibits below are mailed to the Applicant and Planning Commission only. Copies are available upon request or may be found at the following website:**  
<http://www.co.coos.or.us/Departments/Planning/PlanningDepartment--Applications2019.aspx>  
or by visiting the Planning Department at 225 N. Baxter, Coquille OR 97423. If you have any questions please contact staff at (541) 396-7770.

Exhibit C: Staff Report  
Exhibit D: Comments Received

**EXHIBIT "A"**  
**CONDITIONS OF APPROVAL**

**EXHIBIT "A"**

The applicant shall comply with the following conditions of approval with the understanding that all costs associated with complying with the conditions are the responsibility of the applicants and that the applicants are not acting as an agent of the county. If the applicant fails to comply or maintain compliance with the conditions of approval the permit may be revoked as allowed by the Coos County Zoning and Land Development Ordinance. Please read the following conditions of approval and if you have any questions contact planning staff.

**CONDITIONS OF APPROVAL**

The applicant has met the criteria to site a alter an existing Single Family Dwelling located within the Landslide Natural Hazard, with the following conditions:

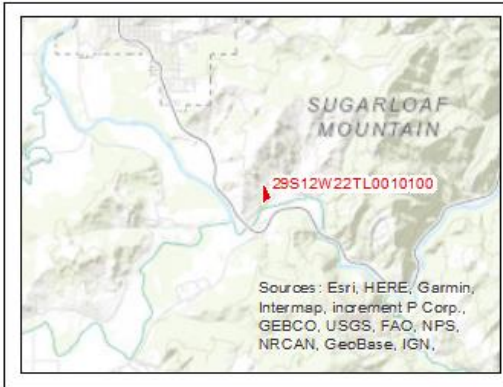
- a. All applicable federal, state, and local permits shall be obtained prior to the commencement of any development activity.
- b. The property owner is responsible for ensuring compliance, and land use authorization shall remain recorded in the chain of title. The statement needs to include language that the purchaser of the property has been provided a copy of the land use approval containing all conditions or restrictions understands the obligation and agrees to fulfill the conditions, unless a modification is approved as provided in this ordinance. The property owner is responsible for ensuring compliance, and land use authorization.
- c. All suggested requirements made by the geotechnical report shall be complied with through the development. A follow up report after development has finished must be submitted to assure that the construction was performed according to the Geologists recommendations.
- d. Shall comply with the comments received from the Coquille Indian Tribe found at Exhibit "D".
- e. Pursuant to CCZLDO § 5.9.100, a Zoning Compliance Letter shall be required prior to the commencement of construction.

# EXHIBIT "B" VICINITY MAP

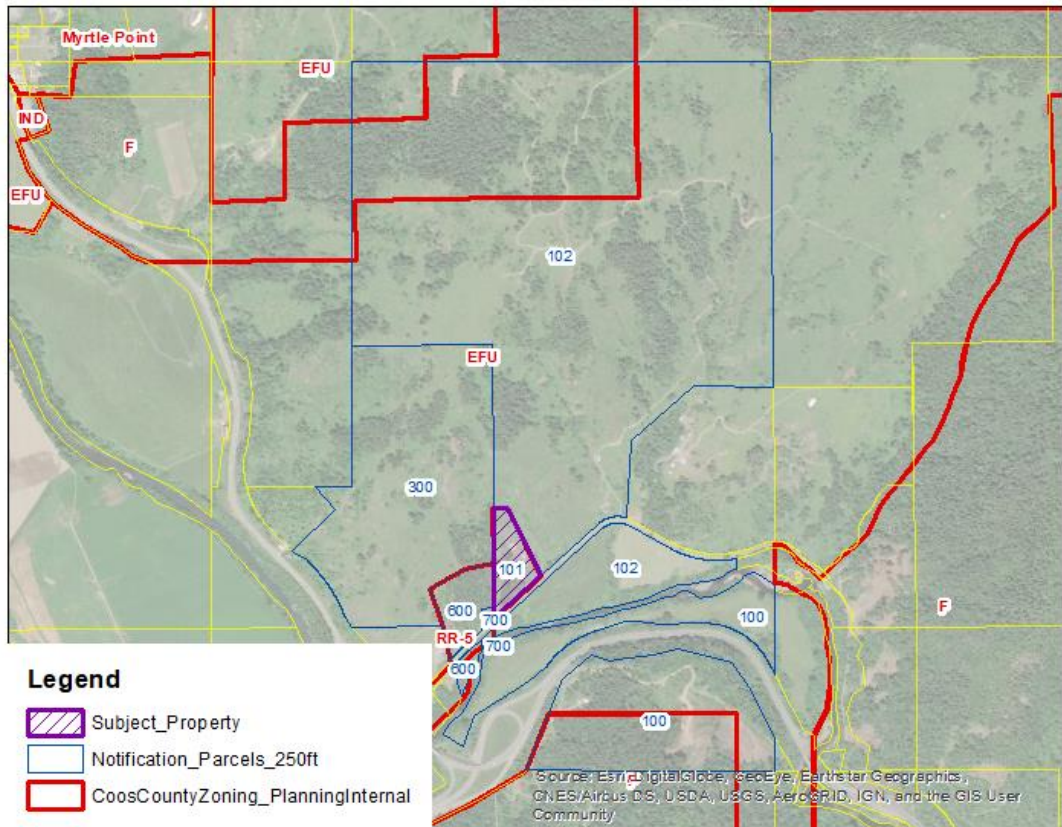


## COOS COUNTY PLANNING DEPARTMENT

Mailing Address: 250 N. Baxter, Coos County Courthouse, Coquille, Oregon 97423  
 Physical Address: 225 N. Adams, Coquille Oregon  
 Phone: (541) 396-7770  
 Fax: (541) 396-1022/TDD (800) 735-2900



File:	ACU-19-022
Applicant/ Owner:	Dave Reed/ Ron LaFranchi
Date:	October 3, 2019
Location:	Township 29S Range 12W Section 22 TL 101
Proposal:	Administrative Conditional Use



**EXHIBIT "C"**  
**Staff Report**

File Number:	ACU-19-022
Applicant:	Dave Reed
Account Number	1158700
Map Number	29S122200-00101
Property Owner	LAFRANCHI, RON 580 CENTRAL BLVD COQUILLE, OR 97423-1248
Situs Address	95667 GUERIN LN MYRTLE POINT, OR 97458
Acreage	6.15 Acres
Zoning	RURAL RESIDENTIAL - 5 (RR-5)
Special Considerations	ARCHAEOLOGICAL SITES (ARC) NATURAL HAZARD - LANDSLIDE (NHLND)

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**Reviewing Staff:** Amy Dibble, Planner II  
**Date of Report:** December 16, 2019

**I. PROPOSAL**

Request for Planning Director Approval for alteration of the existing dwelling (addition) within the Landslide Natural Hazard pursuant to Coos County Zoning and Land Development (CCZLDO) § 4.11.125(7)(b) Special Development Considerations – Natural Hazards – Landslide and Article 5.11 Geologic Assessment Reports.

**III. PROPERTY DESCRIPTION AND PROPOSAL**

**LAWFULLY CREATED:** This property is acknowledged as a lawfully created parcel (Deed Doc # 81-10649) pursuant to CCZLDO § 6.1.125(8) as it was described by legal description conveying real property prior to 1986.

**LOCATION:** The subject property is located southeast of the City of Myrtle Point at 95667 Guerin Lane.

**SITE DESCRIPTION AND SURROUNDING USES:**

- a. **SITE DESCRIPTION AND SURROUNDING USES:** This property is located southeast of the City of Myrtle Point with an address of 95667 Guerin Lane. The property is zoned Rural Residential – 5 (RR-5) contains residential development and consists mainly of grass coverage with minimal trees. The property to the east and south is zoned Exclusive Farm Use (EFU) and contains a single family dwelling and an agricultural structure and consists of pasture land. The properties to the west are zoned RR-5 and EFU, they contain residential development and agricultural structures and consist of pasture land and tree coverage.

**PROPOSAL:** Request for Planning Director Approval for alteration of the existing dwelling by way of an 1127 square foot single story addition within the identified very high Landslide Susceptibility Natural Hazard pursuant to Coos County Zoning and Land Development (CCZLDO) § 4.11.125(7)(b) Special Development Considerations – Natural Hazards – Landslide and Article 5.11 Geologic Assessment Reports. The application was received on May 28, 2019 but was found to be incomplete. The application was not deemed to be complete for review on August 18, 2019.

#### **IV. APPROVAL CRITERIA & FINDINGS OF FACT**

- **RURAL RESIDENTIAL (RR)**

*There are two RR zonings: Rural Residential-5 (RR-5) and Rural Residential-2 (RR-2). The intent of the Rural Residential Districts includes justified sites plus "committed" areas. The County's plan prescribes and allocates a finite number of rural dwelling/units/acreage. The zoning ordinance will specify permitted uses and minimum lot sizes.*

*The purpose of the "RR-2" and "RR-5" districts are to provide for small to medium acreage dwelling sites outside of Urban Growth Boundaries, where a moderate intensity of land development is appropriate, but where urban services and facilities may not be available or necessary.*

*The "RR-5" district provides for the orderly development of rural land so as to encourage the continued existence of rural family life and to provide a transition of densities between urban development and exclusive agricultural or forestry uses.*

- **SECTION 4.11.125 Special Development Considerations:**

*The considerations are map overlays that show areas of concern such as hazards or protected sites. Each development consideration may further restrict a use. Development considerations play a very important role in determining where development should be allowed In the Balance of County zoning. The adopted plan maps and overlay maps have to be examined in order to determine how the inventory applies to the specific site.*

#### **7. NATURAL HAZARDS (BALANCE OF COUNTY POLICY 5.11)**

*Purpose Statements:*

*Coos County shall regulate development in known areas potentially subject to natural disasters and hazards, so as to minimize possible risks to life and property. Coos County considers natural disasters and hazards to include river and coastal flooding, landslides, liquefaction potential due to earthquakes, fault lines, tsunamis, river bank erosion, coastal erosion along shorelines and headlands, coastal erosion due to wind, and wildfires, including those areas affected by gorse.*

*This strategy shall be implemented by enacting special protective measures through zoning and other implementing devices, designed to minimize risks to life and property associated with new development. The determination of whether a property is located in one of the above referenced potentially hazardous areas shall be made by the reviewing body (Planning Director, Planning Commission, Board of Commissioners, or any designee based upon adopted inventory mapping). A specific site may not include the characteristics for which it is mapped. In these circumstances staff shall apply § 5.11.100.2.c.*

*Hazard review shall not be considered applicable to any application that has received approval and requesting an extension to that approval or any application that was deemed completed as of the date this*

ordinance effective (July 31, 2017). If a land use authorization has expired the applicant will be required to address any applicable hazards.

- b. *Landslides: Areas subject to landslides (mass movement) include active landslides, inactive landslides, earth flow and slump topography, and rockfall and debris flow terrain as identified on the 2015 Coos County Comprehensive Plan Hazards Map (mapped as the very high-existing landslides).*

*Coos County shall permit the construction of new structures in an inventoried Landslide hazard area (earth flow/slump topography/rock fall/debris flow) through a conditional use process subject to a geological assessment review as set out in Article 5.11.*

**Finding: The applicant’s proposal is to alter the existing single family dwelling with an 1,127 square foot single story addition. The majority of the subject property is located within the very high landslide susceptibility hazard, this includes the proposal area. Coos County regulates the mapped very high landslide susceptibility areas and when development occurs in this hazard area an Administrative Conditional Use Application is required accompanied by a Geologic Assessment. The applicant submitted a completed Conditional Use Application and a Geological Study and Report prepared by Matt Keller, Registered Professional Engineer for Pinnacle Engineering, Inc.; Therefore, this criterion has been satisfied.**

#### ***ARTICLE 5.11 Geologic Assessment Reports***

- ***Section 5.11.100 Geologic Assessment Requirements***
  1. *Applications for a geologic hazard review may be made concurrently with any other type of application required for the proposed use or activity. A review of the property must be conducted prior to any ground disturbance. All geologic hazard assessment reports shall include a description of the qualification of the licensed professional or professionals that prepared the assessment.*

**Finding: The applicant’s proposal was for an addition in the Rural Residential zoned which is permitted with a compliance determination review; however, due to the fact it is in an existing landslide area a conditional use review is required to address the Geological Assessment. Therefore, this criterion has been addressed.**

2. *The applicant shall present a geologic hazard assessment report (geologic assessment) prepared by a qualified licensed professional competent in the practice of geosciences, at the applicant’s expense, that identifies site specific geologic hazards, associated levels of risk, and the suitability of the site for the use and/or activity in view of such hazards. The geologic assessment shall include an analysis of the risk of geologic hazards on the subject property including the upslope and downslope properties that may be at risk from, or pose a risk to, the use and/or activity. The geologic hazard assessment shall also address the erosion impacts, any increase in storm water runoff, and any diversion or alteration of natural storm water runoff patterns resulting from the use and/or activity. The geologic hazard assessment shall include one of the following:*



- a. *A statement that the use and/or activity can be accomplished without measures to mitigate or control the risk of geologic hazard to the subject property resulting from the proposed use and/or activity;*
- b. *A statement that there is an elevated risk posed to the subject property by geologic hazards that requires mitigation measures in order for the use and/or activity to be undertaken safely sited on the property; or*
- c. *A certification that there are no geological hazards present on site. If such is certified by a licensed profession then an application is not required. Coos County is not liable for any type of certification that a geological hazard is not present on site.*

**Finding: The applicant submitted a Geotechnical Study and Report completed by Matt Keller, Registered Professional Engineer, Pinnacle Engineering, Inc., stating that the existing and proposed site work, soils, and geological conditions at the project site are suitable for the proposed structure, provided the recommendations of their report are incorporated during design and construction. Therefore, he addressed the criteria listed a above.**

3. *If the assessment identifies any past or present risk then an administrative conditional use is required to evaluate such risk and if mitigation measures are necessary to ensure that proposed development can be safely sited. The assessment shall describe and recommend how the proposed use and/or activity will be adequately protected from geologic hazards, including land sliding and sloughing, soil erosion or deposition, and earthquakes.*

*If structural requirements are part of the recommendation, then as a condition of approval, an engineering geologic report consistent with standard geologic practices and generally accepted scientific and engineering principles is required and shall, at a minimum, be consistent with the Oregon State Board of Geologist Examiners "Guidelines for Preparing Engineering Geologic Reports in Oregon". This shall be supplied to the planning department to be attached to a zoning compliance before a building permit may be obtained.*

**Finding: Matt Keller, Registered Professional Engineer, Pinnacle Engineering, Inc, stated in the Geotechnical Study and Report that he prepared that special attention would be required during site preparation, construction, building foundations and drainage features, and other associated improvements. Mr. Keller provides geotechnical recommendations for the design and construction in his report; therefore, requiring an administrative conditional use. The recommendations shall be addressed later in this staff report.**

- ***Section 5.11.200 Geotechnical application Reviews***

*An application for a geotechnical review shall be reviewed under an administrative conditional use procedure unless Section 5.11.100.2 applies.*

1. *A geologic hazard assessment shall be deemed complete if the geologic report meets the content standards listed in Section 5.11.300.*
2. *Specific recommendations contained in the geologic report shall be incorporated into the approval as conditions. Based on content, recommendations and conclusions of the geotechnical report, the decision maker may apply other reasonable conditions.*
3. *The specific recommendations contained in the geotechnical report, and conditions applied to the geologic hazard permit shall be incorporated into the plans and specifications of the development which is the subject of the development permit.*

4. *The review requires an administrative application and all components shall be submitted with the Coos County Zoning and Land Development Ordinance (CCZLDO) §5.0.150 and Section 5.11.300. This review will be processed in accordance with Article 5.2.*
5. *At the discretion of the decision maker and at the applicant's expense, it may be required to have an evaluation of a geologic assessment by another expert as part of the review of a land use application located in an area subject to this section. The results of that evaluation shall be used in making the final decision on the effected land use application.*
6. *If § 5.11.100.2.b applies then prior to approval of the use and/or activity, the applicant shall provide a mitigation plan specific to the use and/or activity, including land divisions, and the approved geologic hazard mitigation report shall address the following:*
  - a. *The mitigation plan must adequately address all issues identified in the geologic hazard mitigation report and must identify any potential appropriate protection methods for the subject property;*
  - b. *The mitigation plan shall specify which, if any, measures and improvements must be installed or constructed under the direction of a supervising engineer;*
  - c. *The applicant shall, prior to the issuance of any development permits, record on the title to the subject property a notification that includes a description of the measures or improvements and that also specifies the obligation of the property owners to refrain from interfering with such measures or improvements and to maintain them; and*
  - d. *A schedule of inspections to be completed by the geologist or engineer to assure compliance with recommendations.*

**Finding: The geological hazard assessment contained recommendations that staff will incorporate into the conditions of approval. Staff does not find that an evaluation of the geological assessment provided is necessary. There was no recommendation for mitigation; therefore, these criteria have been addressed.**

- ***Section 5.11.300 application and development Standards for geotechnical applications:***

*The review and approval of a conditional use in a Geologic Hazard Special Development Consideration area shall be based on the conformance of the proposed development plans with the following standards. Conditions of approval may be imposed on the development permit to assure that the development plan meets the standards of this section and to prevent the creation of a hazard to public or private property.*

1. *All Geologic Assessments are valid as prima facie evidence of the information therein contained for a period of five (5) years. Coos County assumes no responsibility for the quality or accuracy of such reports.*
2. *The geologic assessment shall include the following:*
  - a. *A topographic plot plan that shall include to scale:*
    - i. *All adjacent, contiguous and related property identified in the geologic hazard assessment as being at risk from, or posing a risk to, the use and/or activity;*
    - ii. *The degree of slope on the subject and adjacent properties;*
    - iii. *All features on the subject and adjacent properties that may cause or contribute to mass movement. Such features shall specifically include any landslide, bluff failure or shoreline erosion that could migrate upslope into the subject or adjacent properties;*
    - iv. *The location of all identified geomorphic features and micro-topographic features related to the identified geologic hazards;*
    - v. *All on site or adjacent features or conditions, which contribute to the hazard or risk from the hazard(s); and*

- vi. *A map that depicts features and conditions associated with any building site or construction site associated with the development activity.*

**Finding: The Geotechnical Study was performed on May 23, 2019; therefore, is a valid report until May 23, 2024. The report did not include a topographic plot plan; however, it did include surface geologic mapping of the site. The study provides a detailed explanation of the site and adjacent features as described in subsection i. through vi above. Therefore, the report has been accepted.**

- b. *A technical analysis and narrative describing the following:*
  - i. *The geologic features or conditions of the property as well as those features or conditions which gave rise to the hazard from the use and/or activity;*
  - ii. *All features related to earth movement or geologic instability on adjacent touching parcels or lots to the site;*
  - iii. *The results of all geologic and/or engineering tests performed on soils, material, and rock type subsurface data from drill holes, or other data obtained from the site investigation with data points clearly identified on a map;*
  - iv. *Whether the proposed development activity can be sited in a manner to mitigate the substantial risk to the subject property in view of the geological hazards and risks that have been identified in the geologic assessment;*
  - v. *All features related to earth movement or geologic instability on, adjacent to, upslope or downslope from the subject property;*
  - vi. *A clear statement of all requirements or conditions on the use and/or activity that the geologist has determined are necessary to mitigate the geologic hazards that require mitigation; and*
  - vii. *A schedule of inspections to be completed by the geologist or engineer to assure compliance with recommendations.*

**Finding: The analysis and narrative explain that the project site is suitable for the proposed site work, soils and geological conditions at the project site are suitable for the proposed structure, provided that the recommendations of their report are incorporated during design and construction. Stating that special attention will be required during site preparation, construction of the building foundations, and drainage features and other associated improvements. Rapid runoff of surface waters during rainfall events can occur due to the moderate slopes of the subject site. Laboratory testing of all soil samples were performed and the testing results were provided.**

**The assessment provided the geology of the property as follows:**

- **Site soils consist of a thin layer of top soil overlying a thicker layer of silt clay.**
- **A layered matrix of residual turbidite sandstone and mudstone is intermixed and underlies the surface soils.**
- **The soil matrix overlies Early Eocene and late Paleocene Submarine Basalt flows at the project site.**
- **The soil underlying the residential pad is consistent with Site Class C, as defined by the 2017 Oregon Residential Specialty Code (OSSC).**
- **A seismic refraction survey was not requested nor conducted but in regards to the site:**
  - **Underlying the root zone, the low plasticity SILT material can be expected to transmit lateral accelerations typical of a lower velocity range 800 to 1,200 feet per second.**
  - **Beneath the surface soils, the SILT grades to SANDSTONE, which can be expected to transmit lateral accelerations typical of a medium velocity range of 1,200 to 1,500**

- feet per second.
- **Field studies yielded the following:**
    - **Surface Reconnaissance:**
      - Contemporaneous with the geotechnical site characterization, a surface reconnaissance was conducted.
      - The surface reconnaissance concluded that there were no observable site defects that would compromise viability of the site for planned use.
    - **Surface Hydrology:**
      - The subject site is located on a northerly trending margin of a moderately sloped hillside inclining north of Guerin Lane
      - The moderate sloped of the subject site can receive significant inflow from the slopes to the north and can facilitate a relatively rapid runoff of surface water during rainfall events.
      - Cutting and filling activities will disturb the shallow perched water in a number of locations.
        - This disturbance must be closely managed in order to avoid raiding the phreatic surface<sup>1</sup> within the embankment mass, possibly resulting in a decrease in stability.
      - Post development, the surface runoff will be conveyed by way of gutters, ditches, and storm drains that will be diverted to the Coquille River.
    - **Field Observations included soil description, classification, qualitative density measurement, measurements of thickness of the various soil horizons and depth to or presence of groundwater.**
    - **Site Exploration and Field Testing:**
      - On May 10, 2019 field investigations were conducted, which included geologic reconnaissance of the site and immediate surrounding area, and observation, sampling and testing in conformance to ASTM D-2488 of the underlying soils encountered in one test boring.
    - **Geotechnical Characterization:**
      - Surface soils consist of high plasticity clayey SILT which continues for three (3) feet below ground surface.
      - Beneath the clayey SILT material lays a layer of SILT that contains traces of sand, this soil type continues for approximately seven (7) feet in depth.
      - Approximately ten (10) feet below ground surface lies the SANDSTONE layer.
      - After removal of the vegetative component the shallow soils are compactible and can be used as non-structural site fill provided the construction takes place during dry weather.
      - The silt soils can be excavated with light to moderate excavation equipment.
      - Seepage and wet weather combined with occasional weaker zones of soils increase the likelihood of sloughing, which effects the ability of the soils to stand steep angles.
    - **Groundwater:**
      - Groundwater was not encountered during the field investigation.
      - The phreatic surface is expected to fluctuate both seasonally and during the typical five year hydrologic cycle.

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<sup>1</sup> The term 'phreatic surface' indicates the location where the pore water pressure is under atmospheric conditions (i.e. the pressure head is zero). This surface normally coincides with the water table.

- Taking into consideration the annual precipitation records during the past several years, the absence of measurable changes in the ground water surface should not be regarded as evidence that higher groundwater conditions will not occur in the future.
- They project that the average high groundwater elevation will be approximately 8 feet below the finished surface and considerable amounts of seepage to be expected occasionally at the transitional zone between the residual soils and the underlying transitional bedrock.
- Soil Permeability:
  - Permeability test were not performed.
  - They deduced through their experience that the flow velocities within the native shall soils can be expected to range between  $10^{-4}$  and  $10^{-5}$  centimeters per second and as high as  $10^{-2}$  centimeters per second at the bedrock interface where the fine grained soils transition directly to weathered formational material.
  - They expect that the permeability will decrease to a range between  $10^{-5}$  and  $10^{-6}$  centimeters per second after compaction of fills.
  - Permeability will be approximately  $10^{-3}$  centimeters per second where sandy layers exist.

#### **Engineering Studies and Recommendations:**

- Geological factors that may influence design and construction include:
  - Control of both ground and surface water will be required during construction to facilitate constructability and during the life of the project to assure satisfactory long term performance.
  - Stability of excavations during construction of all structures and trenches will require careful monitoring by a contractor.
- Site Preparation and Grading:
  - Clearing, Grubbing, and Stripping:
    - All areas where roadways, structures, driveways, parking, walkways, or structural fill is proposed should be cleared and grubbed if all trees, stumps, brush or other debris and/or deleterious materials.
    - The site should then be stripped and cleared of all vegetation, sod, and organic topsoil.
      - The depth for stripping is likely to vary between 6 to 8 inches.
      - The removed material will consist of root zone.
    - Pinnacle Engineering, Inc. (PEI) should be contracted to verify suitable subgrade.
  - Removal of Unsuitable Soil:
    - The top 24 inches of soil should be removed beneath the footings and replaced with a minimum of 12 inches of structural backfill.
    - Areas of unsuitable soil, wood waste, building debris or other deleterious materials are encountered during excavation:
      - Should be removed and replaced with compacted structural fill:
        - With the over-excavation lined with Type 2 drainage geotextile as recommended; or
        - Specified by Engineer.
  - Density Testing and Subgrade Re-compaction:



loose thickness, or thinner if necessary to obtain specified density.

- Each lift should be compacted to 90 percent of the maximum density.
- Lift thickness may be increased if specified density is consistently being exceeded and approved by the Engineer.
- In order to accomplish effective compaction for the full footprint, they recommend that fills be over built by five (5) feet, then the face cut back to achieve the design fill face.
- Structural fill placed beneath footings or other structural elements should be centered on the footings.
- Thickness of the structural fill should be equal to the width of footing plus twice the depth of the structural fill beneath the footing.
- **Compaction:**
  - Contractor should place and compact fill materials at one (1) percent to two (2) percent above their optimum moisture content<sup>5</sup>.
    - If fill source soils are too wet to compact they may be dried by continuous windrowing and aeration to achieve optimum moisture.
    - If soils become dry, moisture should be added to maintain the moisture content at or near optimum during compaction operations.
    - If soils having swell potential is used for fills beneath structures, it should be moisture conditioned at two (2) percent to four (4) percent over optimum moisture.
      - Swell properties should be determined by laboratory testing prior to use as structural fill.
  - **Fill Observation and Testing Methods:**
    - Field density testing by nuclear methods is appropriate for compaction of 2½ inch to ¾ inch minus crushed base rock, fine grained soils, decomposed granite and other materials 2½ inches or smaller in size.
    - Due to the effect of particle size on test methods, other methods of compaction testing may be favored.
    - Testing of only the upper lifts is not adequate to verify compaction.
  - **Non-Structural Fill**
    - All natural clayey SILT, waste soil, organic stripping or other deleterious soil is considered suitable only for non-structural fills.
    - It is recommended that these soils be compacted to 88 percent relative compaction to help seal them from surface water.
    - They should be utilized in berms less than 10 feet in height having slopes no steeper than 3 ½ horizontal to 1.0 verticle.
- **Slopes:**
- **Cut Slopes:**

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<sup>5</sup> Moisture content: The weight of water in a sample divided by the weigh of dry soil in the sample, expressed as a percentage.

- Permanent cut slopes, overlot grading, and placement of fills will occur due to site excavation.
- Temporary cut slopes will be required for construction of retaining structures and other portions of the project.
  - These may be excavated at steeper angles than listed above for a brief period of time.
- The SILT soil may stand vertical to a depth of four (4) feet for brief periods, except when saturated.
- In deeper trenches, side walls are likely to slough.
- PEI recommends cut slope angles be no steeper than what is found on Table G1 – Cut Slopes

Table G 1 - Cut Slopes		
Soil Classification	Type of Cut	Inclination
CLAY and SILT Soils	Temporary Cuts	1½ H to 1V
CLAY and SILT Soils	Permanent Cuts	2½ H to 1V
Tan SILT w/ SHALE	Temporary Cuts	1 H to 1V
Tan SILT w/ SHALE	Permanent Cuts	2 H to 1V
Intact SHALE	Temporary Cuts	½ H to 1V
Intact SHALE	Permanent Cuts	1 H to 1V

▪ **Fill Slopes:**

- If continuous CoMET services are provided they recommend the following maximum permanent fill slope inclinations:

Table G 2 - Fill Slopes		
Soil Classification	Type of Fill	Inclination
Fine grain soils (CLAY and SILT)	All	2 H to 1 V
Tan SILT w/ SHALE	All	1¾ H to 1V
Compacted, crushed base course	All	1½ H to 1V

- All materials should be considered and constructed as structural fill, compacted as described above.
  - In order to accomplish effective compaction for the full fill footprint, PEI recommends that fill deeper than six (6) feet be over built by five (5) feet width, then the face cut back to achieve the design fill face.
  - Prior to placement of fill:
    - The underlying subgrade must be prepared and compacted.
    - Keys and benches are critical and must be excavated.
  - Effective compaction is necessary and can be achieved by:
    - Sheepsfoot rollers are recommended to ingrate each lift with the one below
    - Rubber-tired rollers can also achieve this result
      - Smooth-drum rollers should be used
  - Care should be exercised when placing dried hard clay to avoid leaving voids within the fills mass, which may allow the soil to lose strength when wetted.
- **Slope Creep:**
- It is likely that surface creep will occur at locations where the organic SILT soils are utilized to construct fill slopes and in the



- organic layer of natural slopes.
    - Creep will occur in response to seasonal volume changes resulting from variations in the moisture content.
    - After repeated cycles a slight shift of the soils in the downslope direction will result and may become apparent.
  - **Recommended Clearances:**
    - The minimum recommended separation between the crest or face of descending slopes and edge of footings should be five (5) feet.
    - The minimum recommended separation between ascending slopes and edge of footing should be five (5) feet.
      - This is not a stability concern but to provide access for future maintenance activities.
    - These slope setbacks apply to slopes constructed in conformance with the report prepared by PEI.
    - Engineer should be contacted to verify suitable setback prior to placement of footings.
    - Where minimum clearances recommended in the report, prepared by PEI, from the crests of slopes are not achievable, the footing bearing elevation may be deepened or it may bear on a deep foundation (drilled shafts or helical piers) to achieve the recommended clearance.
    - Drilled shafts are favored over helical piers due to greater bending strength.
    - PEI can provide a required depth for deepened footings upon request.
- **Paved Areas and Non-Structural Slabs on Grade**
  - **Asphaltic Concrete Pavements**
    - Site specific paving design was beyond the scope of the investigation that was performed.
    - It should generally consist of compacted bituminous surface mix placed over a layer of 1 ½ inch minus aggregate base and compacted sub-base.
    - Geotextile should be used as a separation medium to isolate localized subgrade failures.
    - For design purposes CBR's can be expected to vary between one (1) for soaked subgrade in fill areas to in excess of twenty (20) in areas competent weathered rock.
    - If the applicant/contractor(s)/owners need assistance contact PEI.
  - **Non-Structural Slab on Grade:**
    - Exterior concrete slabs on grade will be subject to moisture induced movement which is likely to result in cracking and vertical offsets at joints and connections with other structures.
    - More uniform support can be achieved by placing a minimum thickness of eight (8) inches of crushed rock, crushed shale, or decomposed granite fill beneath the slabs in these areas and conforming to the concrete pavement recommendations per the Portland Cement Association.
    - Slabs and walkways reinforced with #3 or #4 deformed steel



- for residential structures.
  - To compensate for swell pressures, footings should be bear on non-swelling imported structural fill.
- **Spread Footings:**
  - **Fill:**
    - Please refer to the above sections titled Site Preparation and Grading and Structural Fill Placement and Compaction.
  - **Footing Embedment:**
    - Spread footing should be embedded a minimum of twelve (12) inches below natural or finish grade to provide lateral support and frost protection.
    - Footing excavation should be backfilled with structural fill.
  - **Allowable Bearing Pressure:**
    - To calculate allowable bearing capacity, it is assumed that the footing will be embedded one (1) foot below the adjacent surface, yielding a  $D_t/B$  ratio of 0.75.
    - Footings placed in this configuration may be designed for an allowable bearing pressure of 1,600 #/Ft<sup>2</sup>.
      - **Load Duration and Shape Increases:**
        - Allowable bearing pressure may be increased by one-third for short term loads.
        - Allowable bearing pressures on square spread footing may be increased by twenty (20) percent.
  - **Minimum Dimensions:**
    - The minimum recommended width for continuous footings is one (1) foot four (4) inches and the minimum recommended dimension for spread footings in one (1) foot six (6) inches.
- **Footing Drains**
  - It is recommended that exterior footing drains be provided for below grade components:
    - located at an elevation low enough to intercept groundwater, and
    - limit it from rising above the surface of crawlspaces and the bearing area of interior slabs on grade.
  - Footing drains should discharge clear of the foundation influence area.
- **Settlement**
  - Building settlement will vary with thickness and swell/consolidation potential of fill, type and thickness of underlying soils and methodology of foundation construction.
  - In addition to settlement, vertical movement due to swelling of the foundation soil is possible for lightly or differentially loaded structural components placed on over-compacter non-natural imported soil having swell potential.
  - Relying on the loads estimated herein and assuming that the dead load portion will be approximately 1/3 the total.
  - PEI projected total vertical movement to be up to one (1) inch.

- Differential movement could be as much as 0.3 inches.
- Interior Floor Slabs:
 

Interior floor slabs should not be rigidly connected to the perimeter footing. The following recommendations are provided for slabs constructed on structural fill over properly prepared subgrade soils:

  - Aggregate Base Course (ABC)
    - A six (6) inch thick layer of clean (less than 2% passing the No. 200 sieve) ¾ inch minus crushed rock should be placed over the structural fill to provide a positive capillary moisture break and uniform slab support.
    - The capillary break is essential in areas to receive:
      - Tile
      - Linoleum
      - Other areas with relatively impermeable floor finishes.
    - To decrease drying stress, a ¼ inch thickness of clean sand should be placed on top of the ABC.
  - Underslab Membrane
    - A moisture retarder or barrier should be used to decrease seepage or upward migration of moisture through the concrete, but is likely to increase soil moisture and exacerbate expansion if soils having expansion potential are imported.
    - To protect the membrane, a ¼ inch thickness of clean sand should be placed on top of the membrane.
  - Minimum Slab Thickness
    - Minimum recommended slab thickness is five (5) inches to allow sufficient cover over the reinforcing steel.
    - Note that all slabs should be designed for the actual use and equipment anticipated.
  - Isolation
    - Floor slabs and walls, both bearing and non-bearing, resting on floor slabs should be isolated from other structural components.
    - PEI would be please to provide typical isolation details or to review structural plans prepared by others.
  - Reinforcement
    - The slabs should be reinforced with deformed reinforcing steel instead of welded wire fabric.
  - Reinforcement Location
    - Locate reinforcing a dimension of 1/3 slab thickness below the surface.
    - Use “dobies<sup>6</sup>” or bolsters<sup>7</sup> to establish accurate position of reinforcing.
  - Fiber
    - Polypropylene fiber may be added to the concrete mix to help decrease plastic shrinkage cracking

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<sup>6</sup> Dobies are used to hold reinforcing steel or rebar when you are pouring concrete .

<sup>7</sup> Slab Bolsters. Provide support for reinforcement when pouring concrete slabs. Slab bolster is used for supporting lower slab steel from slab form.

- However, it is not a replacement for structural reinforcing.
- **Joints**
  - Contraction and control joints conforming to ACI recommendations should be incorporated in the construction.
  - Saw cut joint and wet scored joints should be accomplished within 12 hours after concrete placement.
  - Concrete joints and joints across dissimilar pours should be joined by square dowels to decrease the potential for differential vertical movement or curling.
- **Footing and Floor Drains**
  - **Footing Drains**
    - Drains should consist of a ridged, smooth interior perforated drain pipe placed adjacent to the base of the footing.
    - The perforated pipe should be encapsulated in a minimum of eight (8) inches of clean drain rock or pea gravel wrapped in ODOT drainage geotextile Type 1.
  - **Wall Drains**
    - Drains are recommended for below grade walls.
    - These walls should be provided a minimum 12 inch wide zone of drain rock isolated with non-woven drainage geotextile.
    - A performed, fabric-wrapped, polymer sheet drain may be used instead of the vertical drainage zone, provided the excavation is backfilled with clean, free draining material. Types of fabric-wrapped, polymer sheet drain include:
      - Linq Drain
      - Enkamat
      - Amerdrain
    - Design of such walls should disregard friction between the wall and fill for stability computations.
    - Walls demising habitable areas should be provided durable wall sealant coating or other water proofing membrane before installing the sheet drain.
  - **Floor Subdrains**
    - Where the drain rock layer below slabs will be lower than the adjacent exterior grades, water will tend to accumulate.
      - In these locations, positive drainage of the under slab layer should be provided.
    - Discharge
      - Foundation drains and subdrains should be routed to discharge clear of the foundation influence area or slopes.
      - Interconnection of roof downspouts or surface area drains with foundation, wall, or floor subdrain systems is not allowed.
- **Lateral Earth Pressures and Drainage**
  - **Lateral Load Resistance**
    - Lateral loads exerted upon these structures can be resisted by passive pressure acting on buried portions of the foundation and other buried structures and by friction between the bottom of

- concrete elements of the foundations and slabs underlying soil.
  - Lateral load resistance should be calculated using the values presented in Section F.3 of the Geotechnical Study and Report, prepared by Matthew Keller, Registered Professional Engineer for PEI for the recommended depth of embedment as;
    - $P_a$  or  $P_p = \frac{1}{2} k_{(a \text{ or } p)} y H^2$  where;
      - $P_a$  is active earth pressure
      - $P_p$  is passive earth pressure
      - $k_a = \tan^2 (45^\circ - \phi/2)$
      - $k_p = 1/k_a$
      - $y$  = soil unit weight
  - The first one foot below ground surface should be ignored when computing passive resistance.
    - A coefficient of friction of 0.45 is recommended for elements poured neat against structural rock fill or bedrock.
    - A coefficient of friction of 0.30 is recommended for elements poured against natural soils.
    - The above values should be reduced to 0.2 for areas where bearing is over non-soil vapor barrier or low permeability membrane.
- Lateral Earth Pressures
  - It is possible that both unrestrained and restrained retaining walls may be constructed for the project.
  - Lateral earth pressures will be imposed on below-ground and backfilled structures or walls, including daylight basements and foundations which do not have uniform heights of fill on both sides.
  - The following recommendations are provided for design and construction of retaining walls:
    - Walls which are free to rotate at the top when backfilled should be designed for an equivalent fluid pressure of 4 #/ft<sup>3</sup>.
      - This value should be increased to 52 #/ft<sup>3</sup> for a 2 H to 1 V back slope
    - Walls that are fixed at the top should be designed for an equivalent fluid pressure of 60 #/ft<sup>3</sup>.
      - This should be increased to 67 #/ft<sup>3</sup> for a 2 H to 1 V back slope.
    - A wet soil unit weight of 135 #/ft<sup>3</sup> should be used for design.
    - Backfill should consist of non-expansive, free draining, soil material.
      - The backfill should be placed in lifts at near the optimum moisture content and compacted to between 88 and 90 percent of the maximum density.
      - Care should be employed to avoid over compacting the backfill.
      - Loosely placed backfill and over-compacted backfill will exert greater pressures on the wall than the pressures considered above.
    - To prevent damage, backfill and compaction against walls or embedded structures should be accomplished with hand-

- operated equipment within a lateral distance of  $\frac{1}{2}$  to  $\frac{1}{3}$  the unsupported height of wall.
      - Beyond this zone, normal compaction equipment may be used.
  - While proper compaction of wall backfill is critical to long-term performance, care should be taken to avoid over compaction of the backfill materials, which can result in lateral loads greater than the design pressures recommended above.
  - For design of retaining walls supporting or bracing structures, a peak horizontal acceleration coefficient of  $0.2g$  is recommended for seismic loads.
  - To prevent development of hydrostatic pressures exceeding the lateral earth pressures, a perimeter drainage system is recommended for underground structures, including basements.
  - Hydrostatic pressures behind retaining walls should be relieved by installation of free draining backfill behind the walls.
    - With weep holes spaced as necessary (typically 10 feet on center) to achieve effective drainage.
    - The free draining backfill should be protected from plugging by encapsulating with drainage geotextile as recommended above.
  - Allowable bearing capacities should be as recommended for Building Structures.
- **Trenching and Piping**
  - Additional underground piping will be constructed.
  - Excavation can be accomplished by normal means above the rock elevations projected to underlie the site at an average depth of two (2) to six (6) feet.
  - Depending on when construction occurs, dewatering of the trench may be necessary to facilitate construction.
    - Pipe should be cradled in coarse aggregate compacted to 90 percent density, having a minimum thickness equal to  $\frac{1}{4}$  pipe diameter below bottom of pipe and extending upward to the pipe spring line.
    - The trench backfill should consist of clean excavated material, compacted to 90 percent density.
    - Beneath paved areas, full depth granular backfill is recommended as a minimum, and use of lean cement slurry should be considered.
    - The top 12 inches of trench backfill should be compacted to a density of 92 percent.
      - Loads on pipe will vary with depth and width of trench.
    - For pipe design, an effective pressure of  $130 \text{ #/ft}^3$  per foot of depth is recommended.
    - Underground pipes located beneath paved areas and having

shallow cover should be designed to withstand vehicular loads.

- **Additional Services and Limitations of Report**
  - **Additional Services**
    - **Additional services by the geotechnical engineer are recommended to help insure that design recommendations are correctly interpreted during final project design and to help verify compliance with project specifications during construction.**
    - **Additional services include but not be limited to:**
      - **Review of final construction plans and specifications for compliance with geotechnical recommendations.**
      - **Attend project team meetings to clarify issues raised during the construction process.**
      - **Review and/or design of swale, fill and basement subdrain systems.**
      - **Review of proposed cuts and fills, fills on slopes, surface and subdrains, swale drains, foundation support, and basement or rock fill subdrains.**
      - **Site observation and/or comet services, i.e., observation of over excavated areas below keys, benches, footings and slabs, subgrade proof rolling, placement and compaction testing of structural fill, fill subdrains, swale subdrains, foundation drains, wall drains, subgrade proof rolling, pavement subgrade and aggregate base placement, site grading, surface drainage, etc.**
      - **Special Inspection as defined by the OSSC may be required for certain of the components.**
      - **Periodic construction field reports, as requested by the client and required by the building department.**

## **VI. DECISION:**

There is evidence to support the alteration of the existing single family dwelling with the Landslide natural hazard area. There are conditions that apply to this use that can be found at Exhibit "A".

## **VII. EXPIRATION AND EXTENSION OF CONDITIONAL USES**

- **Section 5.2.600 Expiration and Extension of Conditional Uses**
  1. Permit Expiration Dates for all Conditional Use Approvals and Extensions :
    - b. On lands not zoned Exclusive Farm, Forest and Forest Mixed Use:
      - (1) All conditional uses for residential development including overlays shall not expire once they have received approval.

Please note that while the Conditional Use approval does not expire the geotechnical study and report is only valid for five (5) years; Therefore, if the proposal is not completed prior to this a new report will be required.



**EXHIBIT "D"**  
**Comments Received**



**COQUILLE INDIAN TRIBE**

3050 Tremont Ave. North Bend, OR 97459  
Telephone: (541) 756-0904 ~ Fax: (541) 756-0847  
[www.coquilletribe.org](http://www.coquilletribe.org)

June 24, 2019

Coos County Planning Department  
250 N Baxter  
Coquille, Oregon 97429

Re: ACU-19-022

Project location: 95668 Guerin Lane, Myrtle Point, Oregon 97458

Thank you for the opportunity to comment on the proposal for an addition to an existing dwelling at the above referenced location. The Coquille Indian Tribe THPO concurs with the anticipatory finding of no historic properties/cultural resources effected. **Extreme caution is recommended.** If any known or suspected cultural resources are encountered during the work, ground-disturbing activities should cease and the landowner or contractor should contact our office immediately.

Please be aware that state statutes and federal law governs how archaeological sites are to be managed. 43 CFR 10 applies on tribal and federal lands, federal projects, federal agencies, as well as to federal actions and federally funded (directly or indirectly) projects. ORS 97.745 prohibits the willful removal, mutilation, defacing, injury, or destruction of any cairn, burial, human remains, funerary objects, or objects of cultural patrimony of a Native Indian. ORS 358.920 prohibits excavation, injury, destruction, or alteration of an archaeological site or object, or removal of an archaeological object from public or private lands. If archaeological materials are discovered, uncovered, or disturbed on the property, we will discuss the appropriate actions with all necessary parties.

Thank you again and feel free to contact me at (541) 217-5721 if you have any questions.

Best,

A handwritten signature in black ink, appearing to read "Todd Martin".

Todd Martin  
Tribal Historic Preservation Specialist

CRT19147

**Amy Dibble**

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**From:** Courtney Krossman <ckrossman@ctclusi.org>  
**Sent:** Thursday, June 27, 2019 4:35 PM  
**To:** Sierra Brown  
**Cc:** Planning Department; Stacy Scott  
**Subject:** RE: request for comments ACU-19-022 Reed

Good afternoon Ms. Brown,

The proposed work is outside of the Ancestral Territory of the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians. The Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians therefore, defer comments to the appropriate Tribe(s). Please feel free to reach out if we can be of further assistance.

Sincerely,  
Courtney Krossman

*Courtney Krossman*  
Archaeological Assistant  
Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians  
1245 Fulton Avenue  
Coos Bay, Or 97420  
(Office) 541.888.9577 ext. 7547  
(Cell) 541.808.5085

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**From:** Sierra Brown [<mailto:sbrown@co.coos.or.us>]  
**Sent:** Wednesday, June 05, 2019 9:56 AM  
**To:** Stacy Scott <[sscott@ctclusi.org](mailto:sscott@ctclusi.org)>  
**Subject:** request for comments ACU-19-022 Reed

Hello,

Attached please find a request for comments for: ACU-19-022. They are proposing to add to the existing dwelling at location: Township 29, Range 12, Section 22, and Tax Lot 101.

Please let me know if you have any questions/concerns.

Thank you,

*Sierra Brown*

Sierra Brown, Planning Specialist  
Coos County Planning Department  
225 N. Adams (physical address)  
250 N. Baxter (mailing address)  
Coquille, OR 97423

This email and its attachments are confidential under applicable law and are intended for use of the sender's addressee only, unless the sender expressly agrees otherwise, or unless a separate written agreement exists between Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians and a recipient company governing