

COOS COUNTY PLANNING DEPARTMENT 60 E. SECOND ST. COQUILLE, OR 97423 (LOCATION) 250 N. BAXTER, COQUILLE (MAILING ADDRESS) PHONE: 541-396-7770 / EMAIL: PLANNING@CO.COOS.OR.US

Amendment/Rezone Application

Date Received:		Red	ceipt #:		Received by:	
FILE NUMBERS	: AM-2	23	_	RZ-23		
This application shall be filled out electronically. If you need assistance please contact staff. Please be aware if the fees are not included the application will not be processed. (If payment is received on line a file number is required prior to submittal)						
LAND INFORMATION						
Land Owner(s) (print nar	ne):				
Mailing addres	ss:					
Phone:			I	Email:		
Applicant(s) (print name)	:				
Mailing address	ss:					
Phone:	Phone: Email:					
Type of Owner	rship: Cho	oose an item	l.			
Type of Use R	equested: (Choose a Use	e			
PROPERTY - sheet with prop			are part of thi	is review please	check here and attach a separate	
Township:	Range:	Section:	½ Section:	1/16 Section:	Tax lot:	
Township:	Range:	Section: choose	½ Section:	1/16 Section:	Tax lot:	
Tax Account Number(s): Site Address:						
Current Zone:				Acre	age:	
Proposed Zone	:					

JUSTIFICATION:

- (1) The following questions will need to be answered with an explanation.
 - a. Will the rezone conform with the comprehensive plan?
 - b. Will the rezone seriously interfere with the permitted uses on other nearby parcels
 - c. Will the rezone comply with other adopted plan policies and ordinances?

(2) If a Goal Exception is required please review and address this section.

All land use plans shall include identification of issues and problems, inventories and other factual information for each applicable statewide planning goal, evaluation of alternative courses of action and ultimate policy choices, taking into consideration social, economic, energy and environmental needs. The Coos County Comprehensive Plan (CCCP) and Implementing Zoning Land Development Ordinance (CCZLDO) was acknowledge¹ as having all necessary components of a comprehensive plan as defined in ORS 197.015(5) after the Coos County adopted the documents on April 4, 1985. The date of the effective plan and ordinance is January 1, 1986. Coos County did go through a periodic review exercise in the 1990's but due to lack of gain in population, economic growth and public request plan zones were not altered. Changes to the comprehensive plan and implementing ordinance have been done to ensure that any required statutory or rules requirements have been complied with. However, sometimes it is necessary for property owners or applicants to make a request to have certain properties or situations such as text amendments considered to reflect a current condition or conditions. These applications are reviewed on a case by case basis with the Board of Commissioners making a final determination. This type application and process is way to ensure that process is available to ensure changing needs are considered and met. The process for plan amendments and rezones are set out in CCZLDO Article 5.1.

Exception means a comprehensive plan provision, including an amendment to an acknowledged comprehensive plan, that; (a) Is applicable to specific properties or situations and does not establish a planning or zoning policy of general

A local government may adopt an exception to a goal when one of the following exception process is justified:

(a) The land subject to the exception is "physically developed" to the extent that it is no longer available for uses allowed by the applicable goal;

¹ "Acknowledgment" means a commission order that certifies that a comprehensive plan and land use regulations, land use regulation or plan or regulation amendment complies with the goals or certifies that Metro land use planning goals and objectives, Metro regional framework plan, amendments to Metro planning goals and objectives or amendments to the Metro regional framework plan comply with the goals. In Coos County's case the commission refers to the Land Conservation and Development Commission.

- (b) The land subject to the exception is "irrevocably committed" to uses not allowed by the applicable goal because existing adjacent uses and other relevant factors make uses allowed by the applicable goal impracticable; or
- (c) A "reasons exception" addressing the following standards is met:
 - (1) Reasons justify why the state policy embodied in the applicable goals should not apply;
 - (2) Areas which do not require a new exception cannot reasonably accommodate the use;
 - (3) The long-term environmental, economic, social and energy consequences resulting from the use of the proposed site with measures designed to reduce adverse impacts are not significantly more adverse than would typically result from the same proposal being located in areas requiring a goal exception other than the proposed site; and
 - (4) The proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts. Compatible, as used in subparagraph (4) is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses. A local government approving or denying a proposed exception shall set forth findings of fact and a statement of reasons which demonstrate that the

Compatible, as used in subparagraph (4) is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses. A local government approving or denying a proposed exception shall set forth findings of fact and a statement of reasons which demonstrate that the standards for an exception have or have not been met.

PART III -- USE OF GUIDELINES Governmental units shall review the guidelines set forth for the goals and either utilize the guidelines or develop alternative means that will achieve the

REQUIRED SUPPLEMENTAL INFORMATION TO BE SUBMITTED WITH APPLICATION:

- 1. A legal description of the subject property (deed);
- 2. Covenants or deed restrictions on property, if any;
- 3. A general location map of the property;
- 4. A detailed parcel map of the property illustrating the size and location of existing and proposed uses and structures on 8 ½" x 11" paper. If proposed structures are not know then the plot plan will need to include only existing with a note that no new structures are proposed at this time;
- 5. If applicant is not the owner, documentation of consent of the owner, including:
 - a. A description of the property;
 - b. Date of consent
 - c. Signature of owner
 - d. Party to whom consent is given
- 6. The applicant must supply a minimum of 2 copies of the entire application or one paper copy and electronic copy (email is acceptable), including all exhibits and color photocopies, or as directed by the Planning Staff.

Authorization:

All areas must be initialed by all applicants, if this application pertains to a certain property all property owners² must either sign or provide consistent for application unless otherwise allowed by Section 5.0.175 of the CCZLDO. As an applicant by initializing each statement I am accepting or agreeing to the statements next to each area designated for my initials and/or signature. All property owners shall sign and initial the designated areas of the application or

² Property owner" means the owner of record, including a contract purchaser

provide consent from another party to sign on their behalf. If another party is signing as part of a consent that does not release that party that gave consent from complying with requirements listed below or any conditions that may be placed on an application. In the case of a text amendment the procedures for set out in Section 5.1.110 WHO SEEK CHANGE applies and an applicant may not be a property owner.

I hereby attest that I am authorized to make the application and the statements within this application are true and correct to the best of my knowledge. I affirm to the best of my knowledge that the property is in compliance with or will become in compliance with CCCP and CCZLDO. I understand that any action authorized by Coos County may be revoked if it is determined that the action was issued based upon false statements or misrepresentation.

I understand it is the function of the planning staff to impartially review my application and to address all issues affecting it regardless of whether the issues promote or hinder the approval of my application. In the event a public hearing is required to consider my application, I agree, as applicant I have the burden of proof. I understand that approval is not guaranteed and the applicant(s) has the burden of proof to demonstrate compliance with the applicable review criteria.

As the applicant(s) I acknowledge that is in my desire to submit this application of free will and staff has not encouraged or discouraged the submittal of this application.

I understand as applicant I am responsible for actual cost of that review if the Board of Commissioners appoints a hearings officer to hear the application I have submitted. As applicant I will be billed for actual time of planning services, materials and hearings officer cost and if not paid the application maybe become void.

Applicant(s) Original Signature

Applicant(s) Original Signature

ATTACHMENT TO AMENDMENT/REZONE APPLICATION

Coos County Planning Department Physical Location: 60 E. Second Street, Coquille OR 97423 Mailing Address: 250 N. Baxter, Coquille OR 9423

Telephone: (541) 396–7770 email: planning@co.coos.or.us

File Number: PA-22-003

Owner: Brett L. Johnson

49108 Highway 101, Bandon OR 97411

Applicant: Robert S. Miller III, Attorney (with Mark Preslar, Attorney)

Bandon Professional Center

1010 First Street S.E. Suite 210, Bandon OR 97411

Situs: Common: 49108 Highway 101, Bandon OR 97411

Account: 1237808

Map: 29S 15W 12D0 Tax Lot 308

Reguest: Rezone from EFU to RR-2

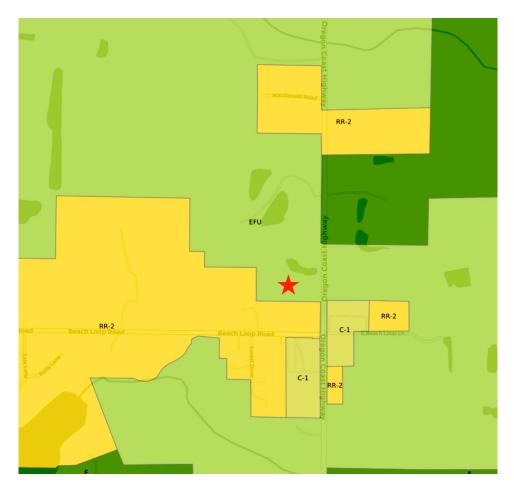
This is an application for a Rezone and a Coos County Comprehensive Plan Map Amendment.

The subject property (the "Property") is a ~4.77 acre parcel located just north of the intersection of Highway 101 and Beach Loop Drive near Bandon, Oregon.

The owner of the property is Brett L. Johnson.

The Property is presently developed with a non-farm, single-family, one-story dwelling of approximately 4,765 square feet. This dwelling was approved through an Administrative Conditional Use permit issued on October 13, 2005 (Coos County ACU-05-048). The Property is also host to a maintenance and shop structure of approximately 1,710 square feet.

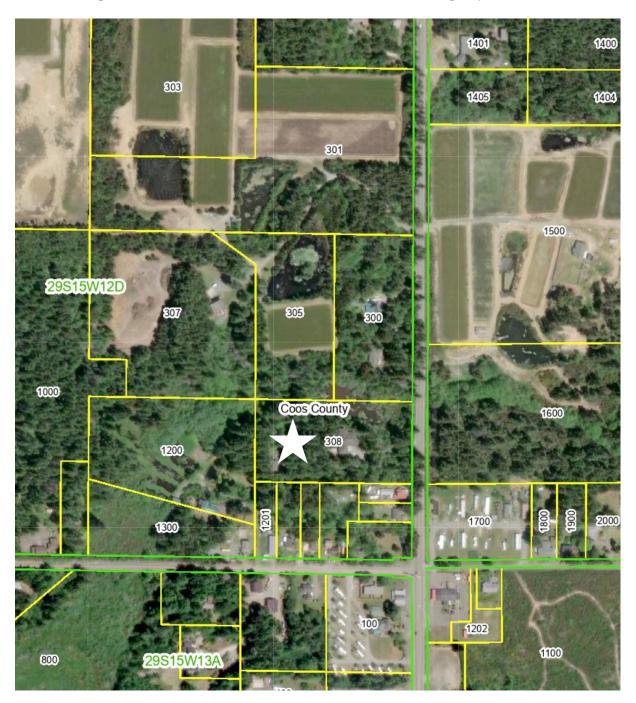
The Coos County Zoning Map is below. The star indicates the location of the Property.



The Property is presently zoned Exclusive Farm Use (EFU). The request is to rezone the Property to Rural Residential (RR-2).

Land South and West of the Property is zoned RR-2; land North of the Property is zoned EFU.

A tax lot map is below. The star indicates the location of the Property.



The applicant asked Paul Kennedy, a registered professional soils scientist (Oregon #355840), to advise on this proposed rezone from Exclusive Farm Use (EFU) to Rural

Mr. Kennedy does business as Oregon Soil & Environmental ("OSE").

Mr. Kennedy prepared an "Order 1" soil survey of the Property (the "Soils Assessment.")

An Order 1 soil survey is the most intensive soil survey available, and is commissioned whenever we want "a detailed and very precise knowledge of the soils and their variability." (*Soil Survey Manual* by Soil Science Division Staff, United States Department of Agriculture Handbook No. 18, Issued March 2017, Minor Amendments February 2018.)

The Oregon Department of Land Conservation and Development (DLCD) approved Mr. Kennedy's Soils Assessment as "complete" on March 20, 2023.

The Soils Assessment concludes:

Residential (RR-2).

The soil map units that are land use class VIe and VIIe, they are not considered prime farmland and are not statewide farmland of interest. The AOI ["Area of Interest"] Bullards sandy soil 30 to 50 slope and HAHT soil map units do not meet the definition primary farmland or statewide farmland of interest.

The sample points in the 4.7 acre AOI show most of the soils are limiting because slope and effective soil depth. These soils are not suitable for agriculture or timber production (low timber harvest potential) due the steep slope and shallow rooting depth that make these soils a risk for erosion. The vegetation on the site is predominately trees and shrubs. There are fir, alder and spruce trees in the northwest part of the AOI with salal and rhododendrons throughout the parcel. The site steep soils have a low ability for producing crops due steep slope and low soil water holding capacity. The shallow soil profile and along with the gravelly sand soil texture has a low available water holding capacity to sustain plants during hot dry summer months. The 30 to 50 percent gravels in the soil profile matrix subtracts for the total available water holding capacity as the parent material gravels does not hold water that's available for plants.

For land use on these soils without intensive and elaborate soil, nutrient and water management practices these soils are not suitable to commercial agriculture or timber production.

In conclusion the soil investigated in the AOI is not suitable for commercial farm crops and livestock or merchantable tree species; Due to the erodible nature of the upland soils, which are shallow to parent material with low water holding capacity. Most of the AOI soils are classified as class VIIe and VIe. OSE revised parts of NRCS pervious soil survey map by adding Human Altered Human Transport in the AOI. OSE soil survey found a majority of the acreage in the AOI is not prime farmland and is not farmland of interest.

The applicant asks the Coos County Planning Commission to recommend a rezone from EFU to RR-2 to the Coos County Board of Commissioners, because (a) the rezoning will conform with the Comprehensive Plan or Section 5.1.215 [of the Coos County Zoning and Land Development Ordinance ("CCZLDO")]; and (b) the rezoning will not seriously interfere with permitted uses on other nearby parcels; and (c) the rezoning will comply with other policies and ordinances as may be adopted by the Board of Commissioners. CCZLDO 5.1.225(1).

The principal review standard for allowing this rezone is Section 5.1.275 of the Coos County Zoning and Land Development Ordinance, which is as follows:

- 1. The subject property does not meet the definition of Agricultural Land under Statewide Planning Goal 3 and /or Forest Land under Statewide Planning Goal 4. NOTE: If the subject property is predominantly Class 1-IV soils or if it predominantly consists of soils capable of producing 5000 cubic feet of commercial tree species it is not considered to be nonresource land.
- 2. The subject property does not contain any natural resources defined in Statewide Planning Goal 5 which are identified in the Coos County Comprehensive Plan.
- 3. The subject property has been proven to be generally unsuitable for production of farm crops and livestock or merchantable tree species, considering terrain adverse soil conditions, drainage and flooding, vegetation, location and size of the tract.
- 4. The subject property is not considered to be nonresource land simply because it is too small to be farmed or forest managed profitably by itself. If the subject property can be sold, leased, rented or otherwise managed as part of a commercial farm, ranch or other forestland it is not considered to be nonresource land.
- 5. The subject property is not considered to be nonresource land if it has been given a special tax assessment for farm use or as designated forestland at any time in the past five years.
- 6. If the subject property is found to meet all of the standards above to be considered nonresource land the county shall also determine that rezoning the property to a nonresource zone will not materially alter the stability of the overall land use pattern in the area and lead to the rezoning of other lands to nonresource use to the detriment of the resource uses in the area.
- 7. The subject property shall be at least 10 acre in area unless it is contiguous to an area that is zoned for nonresource use. Any proposal of at least 2 acres but less than 10 acres requires approval of a Goal 14 exception pursuant to OAR 660-00-0040.
- 8. Rezoning of land that is found to be nonresource land shall be to a "rural" zone that is appropriate for the type of land and its intended use. Rural commercial or industrial development must comply with standards for small-scale, low impact commercial and industrial use.

These eight standards will be discussed synoptically, on pages following.

Following are the applicant's proposed findings for the eight elements of the principal review standard (CCZLDO 5.1.275):

1. The subject property does not meet the definition of Agricultural Land under Statewide Planning Goal 3 and /or Forest Land under Statewide Planning Goal 4. NOTE: If the subject property is predominantly Class I-IV soils or if it predominantly consists of soils capable of producing 5000 cubic feet of commercial tree species it is not considered to be nonresource land.

Proposed Finding: This element is met. The Soils Assessment indicates that the Property does not meet the definition of agricultural land under Statewide Planning Goal 3 and does not meet the definition of forest land under Statewide Planing Goal 4. The soils are not predominantly Class 1-IV soils, and the soils are not capable of producing 5000 cubic feet of commercial tree species.

2. The subject property does not contain any natural resources defined in Statewide Planning Goal 5 which are identified in the Coos County Comprehensive Plan.

Proposed Finding: This element is met. The Property is not an inventoried Statewide Planning Goal 5 site.

3. The subject property has been proven to be generally unsuitable for production of farm crops and livestock or merchantable tree species, considering terrain adverse soil conditions, drainage and flooding, vegetation, location and size of the tract.

Proposed Finding: This element is met. The Soils Assessment specifically concluded that the Property "is not suitable for commercial farm crops and livestock or merchantable tree species; Due to the erodible nature of the upland soils, which are shallow to parent material with low water holding capacity."

4. The subject property is not considered to be nonresource land simply because it is too small to be farmed or forest managed profitably by itself. If the subject property can be sold, leased, rented or otherwise managed as part of a commercial farm, ranch or other forestland it is not considered to be nonresource land.

Proposed Finding: This element is met. The Property is not considered nonresource simply because of its size; it is objectively nonresource. There is no credible evidence that the Property can be sold, leased, rented or otherwise managed as part of a commercial farm, ranch or other forestland.

5. The subject property is not considered to be nonresource land if it has been given a special tax assessment for farm use or as designated forestland at any time in the past five years.

Proposed Finding: This element is met. The Property has not been given a special tax assessment for farm use or designated forestland at any time in the past five years.

6. If the subject property is found to meet all of the standards above to be considered nonresource land the county shall also determine that rezoning the property to a nonresource zone will not

materially alter the stability of the overall land use pattern in the area and lead to the rezoning of other lands to nonresource use to the detriment of the resource uses in the area.

Proposed Finding: The rezone to nonresource will not materially alter the stability of the overall land use pattern in the area. Land to the South and West is already Rural Residential, and evidence from neighboring lands indicate that there will be no detriment to resource uses in the area.

7. The subject property shall be at least 10 acres in area unless it is contiguous to an area that is zoned for nonresource use. Any proposal of at least 2 acres but less than 10 acres requires approval of a Goal 14 exception pursuant to OAR 660-00-0040.

Proposed Finding: The Property is contiguous to land which is nonresource. This re-zone to Rural Residential-2 does not allow the creation of any new lots or parcels smaller than two acres. OAR 660-00-0040.

8. Rezoning of land that is found to be nonresource land shall be to a "rural" zone that is appropriate for the type of land and its intended use. Rural commercial or industrial development must comply with standards for small-scale, low impact commercial and industrial use.

Proposed Finding: The Property is being re-zoned to Rural Residential 2, identical to the neighboring land to the South and West. The existing development complies with standards for small-scale, low-impact commercial use, and future uses will be governed by regulation.

Sincerely,

RSMM

Robert S. Miller III, Attorney (with Mark Preslar, Attorney)

for Brett L. Johnson, Property Owner

Brett Johnson 49108 Highway 101 Bandon, Oregon 97411-8231

Dear Mr. Johnson:

I am Brenda Andersch, owner of Coos County Oregon Map 29S-15W-12D Tax Lot 300.

I am your neighbor to the North.

I support your efforts to rezone your property from Exclusive Farm Use to Rural Residential- 2.

Your existing uses, and whatever uses might later be permitted under a Rural Residential-2 zoning, will not conflict with my farm and resource land uses.

I ask the Coos County Board of Commissioners to approve your rezone request.

Mende Anderson 6/15/2023

Sincerely,

Brenda Andersch



Department of Land Conservation and Development

635 Capitol Street NE, Suite 150 Salem, Oregon 97301-2540

Phone: 503-373-0050

Fax: 503-378-5518 www.oregon.gov/LCD

Soil Assessment Completeness Review



In accordance with OAR 660-033-0045(6)(a), the Department of Land Conservation and Development (DLCD) finds that this soils assessment is complete. The county may make its own determination as to the accuracy and acceptability of the soils assessment.

DLCD has reviewed the soils assessment for completeness only. DLCD has not assessed whether the parcel qualifies as agricultural land as defined in OAR 660-033-0020(1) and 660-033-0030.

.

Hilary Foote March 20, 2023

The department will consider soil assessments under OAR 660-033-0030 to be complete if they meet the following standards:

- (1) General information, to include:
 - (a) Title of the report; Brett Johnson Order 1 Soil Survey
 - (b) Person making request for soils assessment; Robert S Miller III, 49108 Highway 101, Bandon, OR 97411
 - (c) Names of soil scientist/classifier conducting the field work and preparer of the report, along with their certification numbers; <u>Paul Kennedy</u> CPSS#355840
 - (d) Land use case file number (if available); n/a
 - (e) County in which the assessment was conducted; Coos County
 - (f) Location of the project site, including the township, range, section and tax lot numbers; <u>Taxlot 308</u>, <u>Section 12</u>, <u>Township 29 South</u>, <u>Range 15 West, Coos County</u>, <u>OR</u>.
 - (g) Present zoning designation; EFU/AG
 - (h) Current land use;
 - (i) Parcel acreage; 4.77 acres, evaluated: 4.77 acres
 - (i) A description of the purpose of the assessment. Zone Change
- (2) Previous Mapping or Background: The soil scientist/classifier shall provide a copy of the applicable and most current National Cooperative Soil Survey map(s) provided by the Natural Resources Conservation Service (NRCS) on the Web Soil Survey, with

the area of investigation outlined on the map(s). The scale of the map(s) shall be identified and a list of the map units under investigation shall be listed. The applicable interpretations and minor components (inclusions) for the map units for which the investigation is being made shall also be provided. NRCS map provided in Figure 3, page 10 and NRCS unit tables provided as Tables 1 and 2, pages 12 and 13. NRCS mapped soils are Bulllards sandy loam, 0 to 7 percent slope (capability class 3). Bullards sandy loam, 30 to 50 percent slope (capability class 6). Descriptions included on pages 11-12 include capability class information.

- (3) Methods Used by Soil Scientist/Classifier: The soil scientist/classifier shall describe the methodologies used for the preparation of the report and shall include the following:
 - (a) The level of order of survey used in the field survey, scale and type of maps used for field investigations, number of sample locations and observation points all confirming or disagreeing with the NRCS mapping units. The survey shall be one or more level of order higher than the NRCS survey as described in the NRCS Soil Survey Manual, 1993. Note that an Order 1 survey is more detailed than an Order 2 or greater survey. Order 1.
 - (b) The date(s) of the field investigation; October 17, 2022
 - (c) The methods used for observations (backhoe, auger, shovel, etc.) and methods used for documentation (for slope, color, pH, etc.); Methodology is described on page 14, and includes auger hole and test pit excavations, clinometer measurements, soil pH readings, soil texturing and use of Munsell color charts.
 - (d) The number and location of borings either shown on an aerial photograph base map of the parcel or provided in a table with latitude and longitude coordinates. In conducting Order 1 soil surveys, the scale of the base maps used for the survey needs to be large enough to enable the identification of polygons of soil map units as consociation map units. Soil map units identified as a complex, association, or undifferentiated group should be avoided as this defeats the purpose of an Order 1 survey. If, however, the soils are so intermingled that they cannot be mapped at a reasonable scale so as to identify consociation map unit polygons, then there should be sufficient sampling and documentation of the complex to demonstrate this soil component distribution. A percentage of each member of the complex will used in determining area of extent and the reported percentages will be based on this sampling and its documentation, including soil profile descriptions, boring locations and, where useful, photographs. Three augur holes as depicted in Appendix 4, page 26.

 Descriptions and coordinate locations are contained in Appendix 5, page 30.
 - (e) Geomorphic and vegetation correlations supporting the interpretation of land capability classes of soils that differ from those in the official soil survey information; and <u>Page 8</u>.
 - (f) A notation of any limitations encountered during the field investigation, such

as soil depth, drainage, slope or inaccessibility. <u>No investigation limitations</u> were noted

- (4) Results, Findings, and Decisions: The soils report shall describe how the level of order of survey used in this investigation differs from that used by NRCS in the original soil survey. The soils report shall also include:
 - (a) An overview of the geology or geologic setting, describing sources of parent material, bedrock and related factors; <u>Page 6.</u>
 - (b) A description of the landforms and topography, confirming the relationship of landforms to soil mapping units; <u>Page 7</u>
 - (c) A description of on-site and adjacent hydrology, including surface and subsurface features, intermittent versus perennial, floodplain and floodways and other related information; Pages 8
 - (d) A description of the revised soil mapping units with their range of characteristics, explaining how and why they differ from NRCS soil mapping. The soils report shall include a summary of soil variability incorporating significance of preceding weather (above or below average), where known and crops and natural vegetation present; and <u>Pages 14-15</u>
 - (e) A tabulation of all previous and revised soil mapping units complete with their acreages and land capability classification. <u>Table 1 describes previously mapped soils.</u> Table 2 describes revised soils.
- (5) Summary or Conclusion: The soils report shall contain a section reiterating the purpose of the investigation, explaining the significance of the revised soil mapping and describing any other significant issues related to the report's purpose. <u>See pages 17-18</u>
- (6) References: This section may list any manuals or publications utilized or referenced by the report. See Page 20
- (7) Attachments: Other informational materials provided as attachments, such as maps, figures or appendices shall include the following and shall be printed on 8 $\frac{1}{2}$ x 11" wherever possible:
 - (a) Vicinity map at a scale of 1:48,000 or smaller showing the project location; Map has been provided (Appendix 2)
 - (b) The NRCS soils map generated from Web Soil Survey at a scale of 1:20,000 or larger outlining the project site; Map has been provided (Figure 4, page 14)
 - (c) Site condition map (aerial photo) at a scale of 1:5,000 or larger outlining the project site and showing the location of site investigations (borings) and other relevant features; Map has been provided (Appendix 4)
 - (d) Topography map at a scale of 1:24,000 or larger outlining the project site;

Map has been provided (Appendix 3)

- (e) Assessor's map at a scale of 1:5,000 or larger outlining the project site; Map has been provided (Appendix 1)
- (f) Revised soils map of the project site at a scale of 1:5,000 or larger; Map has been provided (Appendix 6)
- (g) Soil profile descriptions and site observation notes; and Appendix 5
- (h) Representative soil profile descriptions of any soil type identified in the project area that is not described or identified in the published soil survey for the area mapped.



Brett Johnson Order 1 Soil Survey

Bandon OR

November 27, 2022

Oregon Soil & Environmental Paul Kennedy CPSS#355840



Picture of Area of Interest (AOI)

OSE_

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OSE

Land Owner: Brett Johnson
Client: Brett Johnson

Address: 49108 Hwy 101 Bandon OR 97411

Contacts: Brett Johson

(541) 347-6075

Robert Miller III, Attorney at Law

(541) 347-6075

Site Location: 49108 Hwy 101 Bandon OR 97411

4.7 acres

Map Tax Lot, Township, Range, Section:

Twp 28S R 14W Sec 17C tax lot 01000, 01001, 01002

Latitude and Longitude:

Lat. 43° 4.183'N, Long. 124° 21.919'W 75 ft ele.

General Information

Purpose of Soil Report: an order one soil assessment is required to determine if soil map units are on the proposed parcel qualifies for rezoning the parcel from exclusive farm use to rural residential -2 non-resource.

Be advised Coos Counting Planning has the statutory authority to make final land use decisions.

Present Zoning: EFU

Current Land Use: non resource dwelling

Assessor Map (Appendix 1) Vicinity Map (Appendix 2)

Previous Mapping

Coos County Soil Survey:

The United States Department of Agriculture (USDA) along with the Natural Resource Conservation Service (NRCS) reissued the Soil Survey Coos County Area (SSCCA) in 1983 (1).

Most of the Coos County soil survey is done at an Order 3 soil survey or a fractional map scale of 1:20,000 to 1:63,360.

Bandon Quadrangle, OR 1:24,000 scale. USGS 2000. Topographic maps (**Appendix 3**)

Soil Survey Principles, Methods, Practices Used: contour and slope transect survey

The USDA provides the principles and practices for conducting soil surveys. Soil survey is the process of interpreting landscapes 3 dimensional bodies of soil by describing mapping and classifying soils. The USDA's March 2017 Soil Survey Manual ⁽²⁾ gives guidance on the principles methodologies, terminologies and practices for making and interpreting soils surveys. The National Cooperative Soil Survey (NCSS) performs soils surveys across the United States. Natural Resource Conservation Service (NRCS) Field Book for Describing and Sampling Soils ⁽³⁾ was followed when conducting this order I soil survey. Order 3 soil surveys are generated by aerial comparison, transaction descriptions and are general land classification and planning tool. Order 1 soil surveys are more refined and can be used for specific land use and farm management decisions.

Soil scientists classified and named the soils in the survey area; they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research. The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements.

Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting or similar to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans using an Order 3 soil survey.

If intensive use of small areas is planned, onsite investigation of Area of Interest (AOI) is needed to define and locate the soils and miscellaneous areas. Soil scientists make many field observations in the process of producing a soil survey map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations.

Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components.

Properties of each soil typically vary from one point to another across AOI landscape. Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties. While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil. Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date. After soil scientists located and identified the significant natural bodies of soil in the survey area, they draw the boundaries of these bodies on aerial photographs and Custom Soil Resource Report identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately (1,2,3). In conclusion as a certified professional soil scientist I have the authority to investigate, interpret and revise the soil survey area of interest. Findings in this report better refine soil map units based on anthropogenic activities, soil properties. landform and climate.

Findings

Geology

Coos County near Bandon is made up of marine terraces and interior valleys of the Coquille River to the north that are a physiographic division of the sandstone Tyee Formation. Bandon is famous for its knockers, big blocks of hard rock that stand out when the softer geologic matrix erodes away. Geologists call these hard rock blocks knockers, and the Bandon shoreline is lined with knockers⁽⁴⁾⁽⁵⁾.

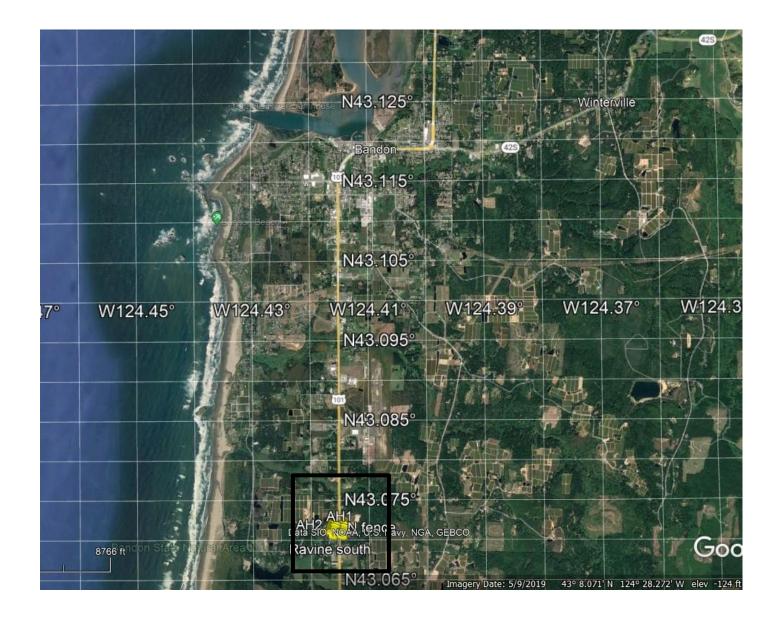


Figure 2. Location Map of Area of Interest

Landforms

Marine river terrace, backslopes, hillslopes and ridges. slopes 0% to 70% slope.

Elevation 75 feet.

Climate and Hydrology

The area's climate is cool winters and warm summers the area has a mean annual precipitation of 59 inches and mean annual temperature 53F. The vegetation on the area of interest is currently spruce, alder, fir, cedar, grasses, gorse, scotch broom black berries.

For Coos County the typical soil moisture regime is mesic boarding on xeric, where normally the soils are dry 45 or more days in the 4 months following the summer solstice and are moist for 45 days or more in the 4 months following the winter solstice. The difference between the mean summer and winter soil temperature is more 6° C; the mean annual soil temperatures regime is 8° C or higher, but lower than 15° C which can be called a mesic soil temperature regime (1,6).

Geomorphic and vegetation correlations

The site is westside of Hwy 101 south of Bandon. The geomorphic surface is designated as weathered marine terrace $^{(1,4,5,6)}$. Parent material is old sedimentary sandstone $^{(1,4,5,6)}$. The soils are well drained that supports vegetation types like spruce, fir, incense cedar, alder, salal, grasses and forbs vegetation $^{(1)}$.

Landform can be divided into physiography, relief and drainage. Physiographic would be the distinct geographic province such as the Coast and Coastal Range Mountains. The relief, drainage climate, geology, topography, soil and vegetative are site specific components. The land levelness or hilliness affected tectonic activity that effects soil formation by deposition and erosion of the landform. The AOI consists of a marine terrace that is part of the Coastal lowlands, a subset of the Coast Range Mountain province. With movement of the geologic Pacific plate along with a drop in ocean level and the deposition these alluvial marine terraces was formed. The Bandon area climate is cool marine air with wet winters and moisture summers. The Area of Interest is dissected to the north and south by seasonal drainages with slopes of 30 to 70 percent slope.

NRCS Soil Survey Coos County and Soil Map Units

USDA's Soil Survey Manual² list kinds of map unit components in a soil survey. The component of a map unit is that it can be delineated at some scale and that the components that make up a map unit can be identified on the ground and delineated separately at a sufficiently large scale. Map units used in soil survey are soil series, taxonomic, taxadjunts/variant, miscellaneous areas and phases of components. Soil series represents a three dimensional soil body of unique combination of properties that differ from neighboring series.

Soil taxonomic classes provide information that defines basic sets of soil properties. Taxon summarizes the significant soil properties and combination of properties. A soil map unit is unique and is distinguished from other map units in an area by name. Soil boundaries are seldom completely accurate on soil maps in that parts of adjacent polygons are included or excluded from mapping delineations. A soil component is an entity that can be delineated at some map scale for example a soil map unit or miscellaneous area. Soil map units can consist of up to three dominate and some minor components. Soil components are properties observed or measured as aggregate attributes or values for each soil map unit in a soil survey area. Major components are

included in the soil map name and can be a polypedons or part of several pedons. Phase is a term that may be part of unit component name to convey important information about that soil map unit or that differentiates it from other map units (e.g. frost hazard). Phases may only be part of a range of features characteristic of taxon in a map unit ⁽²⁾.

The map units delineated on a soil survey maps represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit. A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils.

Soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. An area of soil of a single taxonomic class is rare. Areas can be mapped without including small areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named can have some minor components that belong to taxonomic class other than those of the area's major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called *noncontrasting*, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called *contrasting*, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps, but may not be described. These small areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data.

Map units are made up of *complexes, associations*, or *undifferentiated* groups. A *complex* consists of two or more soils or miscellaneous areas in an unpredictable intricate pattern and in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the soil map. The pattern and relative proportion of the soils or miscellaneous areas are predictable and somewhat similar. An *undifferentiated group* is map units of dissimilar soils that are not consistently associated geographically and may not occur together in the same map delineation.

Some surveys include miscellaneous areas, *undifferentiated group* map units that are dissimilar to the soil and not consistent or mapped association geographically. The group features outside the soil would be flooding, stoniness or steepness. Such areas could have little or no soil material and support little or no vegetation such as rock outcrop.

Soils that have profiles that are almost alike in properties and characteristics are called soil *series*. Except for differences in texture of the surface layer, all the soils of a series have similar major horizons that are alike in composition, thickness, and arrangement. Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of these differences, a soil series is divided into soil *phases*. Most of the areas shown on a soil survey map are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management for example steep slope. Bullards sandy loan 0 to 7 percent slope (8B).

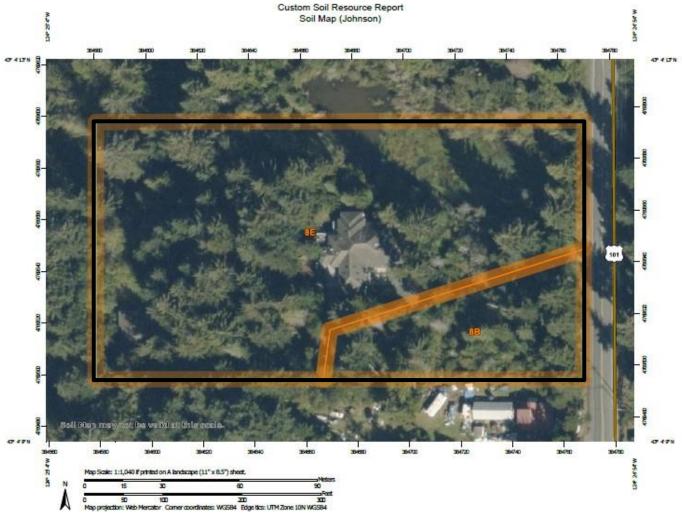


Figure 3. Area of Interest Map Units

NRCS Soil Survey Coos County Area Soil Map Units

The NRCS SSDCA mapped the AOI as complex of Bullards sandy loam 0 to 7 percent slope (8B) and Bullards sandy loam 30 to 50 percent slope (8E). The acreage of the AOI is approximately 4.7 acres (see Table 1).

Table 1 AOI NRCS soil map units acreages (1)

Map Unit Symbol	Map Unit Name	Acres In AOI	Percent of AOI
8B	Bullards sandy loam, 0 to 7 percent slopes	0.9	18.2%
8E	Bullards sandy loam, 30 to 50 percent slopes	3.8	81.8%
Totals for Area of Interest		4.7	100.0%

NRCS use of the Order 3 soil survey to interpret land use capabilities and land use decisions by taxon (soil series names) is not the intended use at this survey level.

The NRCS describes the AOI soil map units as follows:

8B—Bullards sandy loam, 0 to 7 percent slopes

Map Unit Setting

National map unit symbol: 21rc Elevation: 30 to 600 feet

Mean annual precipitation: 55 to 75 inches Mean annual air temperature: 52 to 54 degrees F

Frost-free period: 200 to 240 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Bullards and similar soils:75 percent

Minor components:9 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bullards

Setting

Landform: Marine terraces

Landform position (three-dimensional):Tread

Down-slope shape:Linear Across-slope shape:Linear

Parent material: Mixed eolian and marine deposits

Typical profile

Oi - 0 to 3 inches: slightly decomposed plant material

H1 - 3 to 10 inches: sandy loam

H2 - 10 to 44 inches: gravelly sandy loam

H3 - 44 to 63 inches: sand

Properties and qualities Slope:0 to 7 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding:None

Frequency of ponding:None

Available water supply, 0 to 60 inches: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: F004AC410OR - Coastal Upland Warm Forest

Forage suitability group: Well Drained <15% Slopes (G004AY014OR)
Other vegetative classification: Well Drained <15% Slopes (G004AY014OR)

Hydric soil rating: No Minor Components

Blacklock

Percent of map unit:9 percent

Landform: Depressions on marine terraces Landform position (three-dimensional): Tread

Down-slope shape:Linear Across-slope shape:Linear Hydric soil rating: Yes

8E—Bullards sandy loam, 30 to 50 percent slopes

Map Unit Setting

National map unit symbol: 21rg Elevation: 50 to 600 feet

Mean annual precipitation: 55 to 75 inches Mean annual air temperature: 52 to 54 degrees F

Frost-free period: 200 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Bullards and similar soils:80 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bullards

Setting

Landform: Marine terraces

Landform position (three-dimensional):Riser

Down-slope shape:Linear Across-slope shape:Linear

Parent material: Mixed eolian and marine deposits

Typical profile

Oi - 0 to 3 inches: slightly decomposed plant material

H1 - 3 to 10 inches: sandy loam

H2 - 10 to 44 inches: gravelly sandy loam

H3 - 44 to 63 inches: sand Properties and qualities

Slope:30 to 50 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding:None

Frequency of ponding:None

Available water supply, 0 to 60 inches: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: B

Ecological site: F004AC410OR - Coastal Upland Warm Forest

Hydric soil rating: No

Concepts worth repeating:

First, it's important to understand on the landscape, soils are natural phenomena that are variable in characteristics and properties. This also can mean soil map units can change several times across a field. It's important to understand what information is in the Natural Resource Conservation Service Soil Survey for each County in Oregon. Again the NRCS typically does soil surveys at an order 3 level (typically map scale 1:24,000). This means the field investigation is based on aerial data and one or more field samples of an area about 40 acres in size. Remote sensing and traversing transects were used to identify soil of taxonomic classes in an area. The level of an order 3 soil survey (map scale) can be used to identify soil morphology and taxonomic features of area soils and may be used for land use decisions; but at this level of soil mapping is really too general to be useful for land management decisions like farming and irrigation.

Typically an order 1 soil survey (for example map scale 1:5000 and mapped on a scale of 5 acres or less) is needed to make useful land management decisions because this level of field investigation captures the six USDA taxonomic categories of a soil map unit, which are *order*, *suborder*, *great group*, *subgroup*, *family* and *series*. The first five are taxonomic categories are used to characterize features of a family and soil series.

The last two categories, *family* and *series* are most useful for farming and land use management decisions. Family categories detail soil chemical and physical properties that affect farm management and crop quality and yields. At the field level soil series (soil map unit) can have phase that are used for land used decisions.

As mentioned before soils phases in one series can be the difference in texture of the soil horizons or surface layer, slope, stoniness, salinity, degree of erosion, soil water holding capacity and other characteristics that affect their use. Typically the areas shown on the detailed soil map are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management such slope. A good example would be the Bullards sandy loam, 0 to 7 percent slopes map unit should be managed differently for tillage and erosion control (soil texture and slope) than say a Bullards sandy loam of 30 to 70 percent slope.

OSE AOI Soil Survey for the AOI Bandon, OR

Date of survey: Oregon Soil & Environmental (OSE) conducted a Soil Survey on October 17, 2022.

Oregon Soil & Environmental (OSE) established a soil mapping plan for the area of interest (AOI). The AOI perimeter was surveyed and OSE used a transect to map this parcel. Auger holes were used to describe soil polygon. OSE mapped the property at approximate 1:1,200 scale (1 inch: 100 feet). Note reproduction of this report may cause distortion in the map scale.

Method of soil survey:

Landform slopes were measured with a clinometer, soil pH sampled and measured with hand held pH meter, soil textures were determined by hand texturing, and soil colors (wet) described using Munsell soil color charts using NRCS field soil sampling guide lines ⁽³⁾.

The survey plan used auger holes and test pits placed on transects on contour across the AOI to establish the soil polygon. The auger holes were described and test pit soil horizon samples pulled for further analysis. OSE found the effective soil depth in most the soil map units was weathered parent material was found in the soil profile (where roots stop). For this soil survey this is called the effective soil depth (ESD) which is where the depth that's root is limiting or a depth of auger rejection at parent material. For the soil sample location (soil auger holes) descriptions see **Appendix 4**.

OSE Description of the AOI Soil Map units

Order 1 Soil Survey and Soil Report: Oregon Soil & Environmental OSE's Paul Kennedy, a Soil Science Society of America (SSSA) certified soils classifier and Certified Professional Soil Scientist (CPSS # 355840) preformed a soil survey of the AOI. Certified soil scientist - soil classifier can make adjustment to soil taxonomy, soil map unit and land capability classification determinations to best reflect findings of the onsite soil survey.

This survey reviewed the suitability for grazing animals, and crop and timber production. Again, the Order 1 Soil Survey is more comprehensive than an order 2 or 3 soil survey because it delineates AOI at a map scale of 1:1,000 (e.g. more soil profile descriptions per unit area).

It's important to understand a soil scientist looks at the nature of a soil and investigates maps, describes and classifies the soil in the AOI. Identifying soil series is not the object of mapping in soil survey in as much as the soil series serves as a bridge between real soil body properties and conceptual taxonomic classes. Land use classifications in a general way are categorizing and interpreting the real properties of soil limitations and suitability to grow a normal commercial timber harvest potential for the area without inordinate expensive and or intensive management. The expensive and intensive management would be measures that are beyond reasonable practices employed by regional foresters can employ to stay in business.

OSE canvassed and completed a detailed Order I survey of the AOI soil characteristics using SSDC guidelines and found soil mapping by NRCS for the site to be correct. The AOI soil sample points (Auger Hole) AH1-AH3, have soil effective soil depths (soil depth root limiting) that ranged from 32 inches to more than 60 inches in depth to parent material see **appendix 5**.

AOI Soil Taxonomy

For the predominant soil map unit in the AOI the taxonomic classification is Bullards sandy loam: which is a coarse-loamy, isotic, isomesic Typic Haplorthod. Breaking down the taxonomic name by nomenclature hierarchy:

Order: the ending od, meaning the taxonomic soil order is Spodosol, with epipedon that can range

from 9 to 31 inches.

Suborder: *Hapl* meaning fits the concept of spodosol

Great group: Haplo meaning simple

Subgroup: isomesic

Family: coarse-loamy, isotic, (isotic mineralogy class was added to the U.S. Soil Taxonomy. The isotic mineralogy class includes those soils that have a colloidal fraction that is dominated by short-range order minerals or aluminum-humus complex. These soils do not meet all the criteria of the substitutes for particle size classes. Many soils with isotic mineralogy are not formed from parent materials influenced by tephra or volcanic rocks (Soil Survey Horizons 45(2): 55-61 2004), isomesic (The isomesic soil temperature regime annual soil temperatures of 8 °C or more, but a difference between mean summer and mean winter soil temperatures is less than 5 °C at 50 cm below the surface).

Series Name: Bullards sandy loam 0 to 7 percent slope (8B)

Particle Size Control Section: 9.8 inches to 31 inches

Surface diagnostic horizon: Ochric 3 to 9 inches, too thin to be an Umbric horizon

Subsurface diagnostic horizon: Spodic 10 to 30 inches

OSE canvassed and completed a detailed soil survey of the Johnson parcel and the AOI using SSDC guidelines. OSE found soil mapping by NRCS to be mostly correct. OSE found a soil polygon across the AOI and mapped it as Bullards sandy loam (**See appendix 6a**).

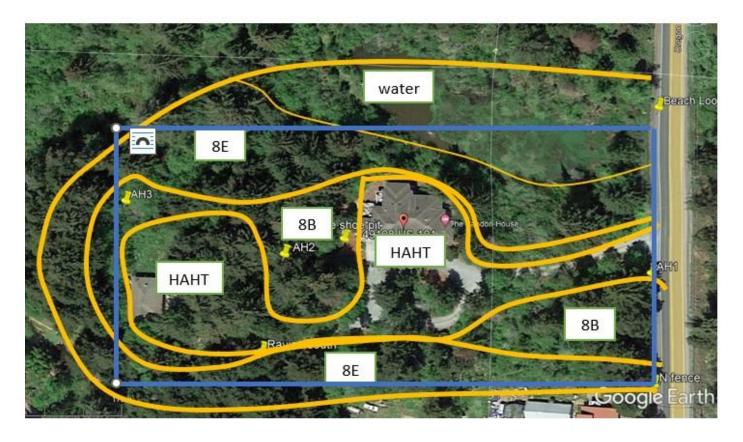
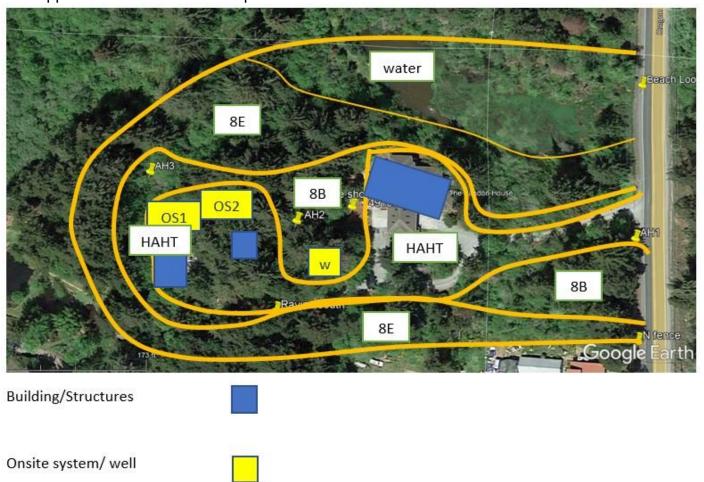


Figure 4. OSE Map Units on the parcel

Yellow approx. outlines the different soil map units, Blue approx. outlines the 4.7 acre parcel.



Note: map call outs are not to scale; the non-resource dwellings are larger than the blue rectangles, which they delineate. Also, the drive ways that dissect (compacted soil and cement) the ridge line are not delineated on the map, but are included in the HAHT designation (trees hide most of the areas).

Figure 5. Map Units on the parcel

Figure 5 shows several structures denoted in blue and the existing and replacement areas for the parcel onsite system as well as the drinking water source (well) denoted in yellow.

Table 2 Parcel soil map units and approximate acreages of 4.7 ac AOI(1)

Map Unit Symbol Map Unit Name Land Use Classification	Acres in AOI	Precent of AOI
---	--------------	----------------

HAHT	Human Altered	7e	1.7	35
	Human	not farmland of		
	Transport	interest		
8B	Bullards sandy	3e	1	22
	loam 0 to 7	farmland of		
	percent slope	interest		
8E	Bullards sandy	6e	2	43
	loam 30 to 50	not farmland of		
	percent slope	interest		
	Total for Area of	Interest	4.7	100%

OSE found on the parcel Human Altered Human Transport and mapped it has (HAHT). There are several structures, drive ways and parking areas on the parcel that have changed the orginal soil map unit; These areas are no longer viable for plant growth.

Summary

OSE conducted an Order 1 Soil Survey on this parcel is located on Twp 29S R 15W Sec 12 parcel number 308. The order 1 soil survey area of interest (AOI) is outlined in blue in Figure 5. The site is 4.7 acres. The AOI is made up of Human Altered Human Transport, Bullards sandy loam 0 to 7 and 30 to 50 percent slopes soil map units.

The Order 1 survey was performed to find potential areas on the property suitable for a nonfarm dwelling. OSE refined parts of the NRCS' pervious soil survey and remapped and adjusted soil map units and boundaries as shown in figure 5 above.

The NRCS defines "Prime Farmland" is defined under NSSH Part 622 622.03 Farmland Classification⁽⁵⁾ as follows: Prime farmland is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses. It has the combination of soil properties, growing season, and moisture supply needed to produce sustained high yields of crops in an economic manner if it is treated and managed according to acceptable farming methods. In general, prime farmland has an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, an acceptable level of acidity or alkalinity, an acceptable content of salt or sodium, and few or no rocks. Its soils are permeable to water and air. Prime farmland is not excessively eroded or saturated with water for long periods of time, and it either does not flood frequently during the growing season or is protected from flooding. Users of the lists of prime farmland map units should recognize that soil properties are only one of several criteria that are necessary.

The soil map units that are land use class VIe and VIIe, they are not considered prime farmland and are not statewide farmland of interest. The AOI Bullards sandy soil 30 to 50 slope and HAHT soil map units do not meet the definition primary farmland or statewide farmland of interest.

The sample points in the 4.7 acre AOI show most of the soils are limiting because slope and effective soil depth. These soils are not suitable for agriculture or timber production (low

timber harvest potential) due the steep slope and shallow rooting depth that make these soils a risk for erosion. The vegetation on the site is predominately trees and shrubs. There are fir, alder and spruce trees in the northwest part of the AOI with salal and rhododendrons throughout the parcel. The site steep soils have a low ability for producing crops due steep slope and low soil water holding capacity. The shallow soil profile and along with the gravelly sand soil texture has a low available water holding capacity to sustain plants during hot dry summer months. The 30 to 50 percent gravels in the soil profile matrix subtracts for the total available water holding capacity as the parent material gravels does not hold water that's available for plants.

For land use on these soils without intensive and elaborate soil, nutrient and water management practices these soils are not suitable to commercial agriculture or timber production.

In conclusion the soil investigated in the AOI is not suitable for commercial farm crops and livestock or merchantable tree species; Due to the erodible nature of the upland soils, which are shallow to parent material with low water holding capacity. Most of the AOI soils are classified as class VIIe and VIe. OSE revised parts of NRCS pervious soil survey map by adding Human Altered Human Transport in the AOI. OSE soil survey found a majority of the acreage in the AOI is not prime farmland and is not farmland of interest.

Paul Kennedy Cert. Prof. Soil Scientist # 355840 Oregon Environmental Health Specialist # EH-587859

Oregon Level II Wastewater #11580

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Be advised Coos Counting Planning has the statutory authority to make final land use decisions.

Coos County may require soils report submittal to DLCD for review

Oregon Department of Land Conservation and Development Hillary.foote@state.or.us accompany by \$625 and a Soil assessment Submittal Form.

Payment is non-refundable administrative fee should be sent by check.

Oregon Department of Land Conservation and Development

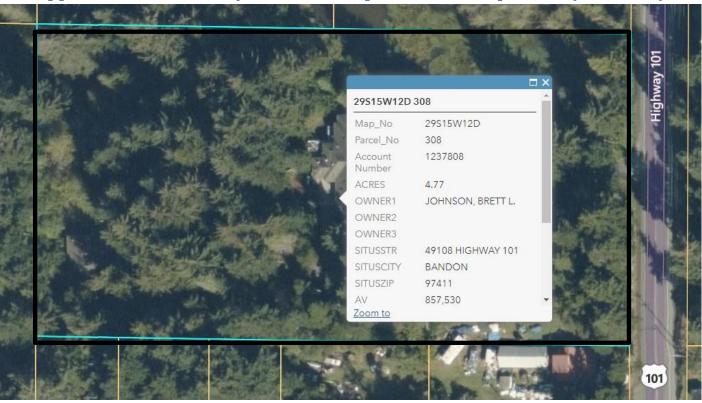
References:

- (1) USDA/NRCS Coos County Soil Survey, 1983.
- (2) USDA Soil Survey Manual Handbook No. 18, March 2017
- (3) USDA/NRCS Field Book for Describing and Sampling Soils ver. 3.0, Sept 2012
- (4) Roadside Geology of Oregon, Alt and Hyndman, 1978 Mountain Press Publ.
- (5) Geology of Oregon, Ewart M. Baldwin, 1976 Kendall/Hunt Publ.
- (6) USDA Keys to Soil Taxonomy Twelfth Edition, 2014

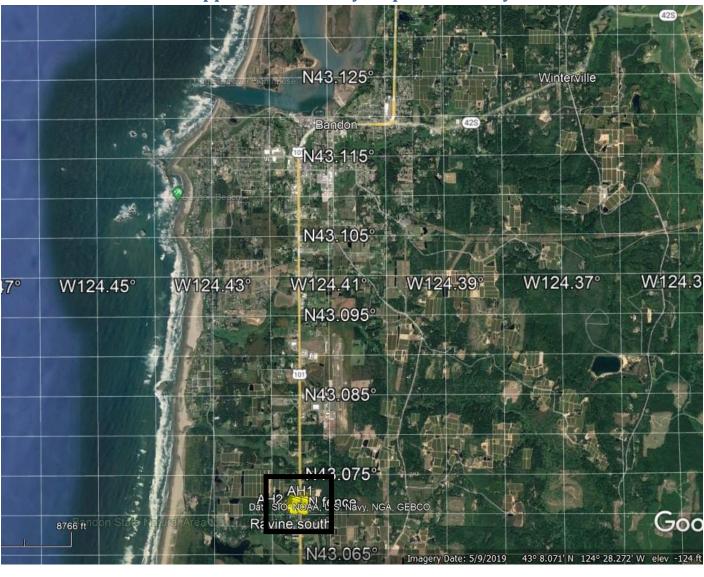
Appendices

- (1) Assessor Map
- (2) Vicinity Map
- (3) Topographic 1:24,000 1:62,000 scale
- (4) Soil Sample Plan
- (5) Auger hole descriptions
- (6) OSE soils map units for AOI

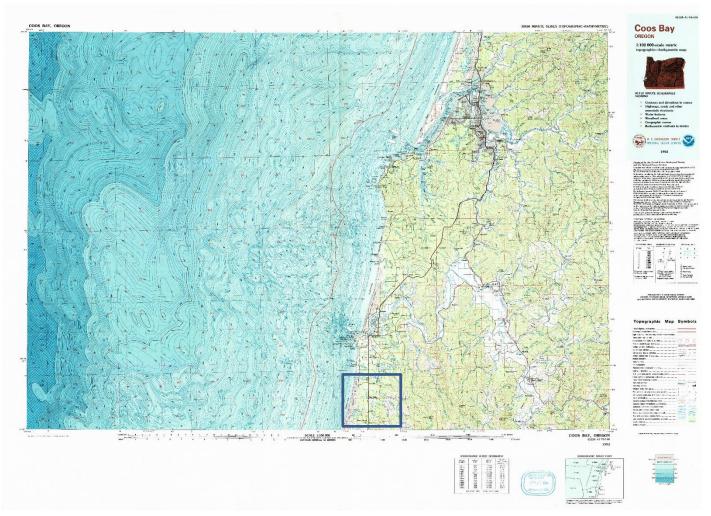
Appendix 1. Coos County Assessors Map and aerial map of AOI (black box)

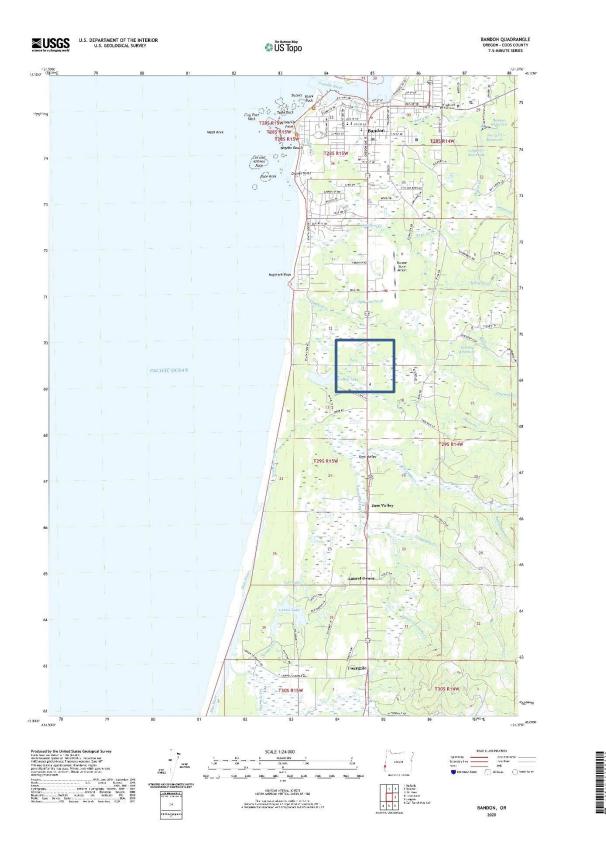


Appendix 2. Vicinity Map Coos County



Appendix 3. Topographic Map of AOI





Topographic Map of AOI



Appendix 4. OSE Order 1 Soil Survey Sampling Plan.

The Area of Interest (AOI, outlined in black) along ridge line (approximately 4.7 acre AOI).

AOI Auger Hole sample points (AH1-AH3)



The area outlined in yellow is being consider for rezoning. The existing onsite treatment system (blue box) is on an upper marine terrace/ridge line that run east to west. The slopes of 30 to 70 percent backslopes to the north and south.

OSE_

Appendix 5. Soil Desrcriptions AH1 - AH3,

Sample Point AH1

Sample 1 0	1111 / 1111						
Depth	Soil	Soil	Matrix	Roots	Pores	рН	Comments
inches	Texture	Structure	Color				
0-3-5	sl	gr 1msbk	10YR 3/3	3fmc	vf m irr		3-5 % slope
5-11	sl	2sbk	10YR 4/2	3fmc	f m irr		
11-15	gr-ls	2sbk	10YR 4/4	3f2m	vf irr		
15-24	gr-s	sg	10YR/7.5	3f2m	vf irr		
		_	YR 3/2				
24-32	gr-s	m-sg	7.5YR 5/4	3f			crossbedding
							sand dune
							parent material
32-60+	S	m-sg	10YR 5/3				



Sample Point AH2

<u>campic i c</u>	711 1C 7 (1 12						
Depth	Soil	Soil	Matrix	Roots	Pores	рН	Comments
inches	Texture	Structure	Color				
0-3	I	gr 1msbk	10YR 3/2	3fmc	vf m irr		3-5 % slope
3-8	sl	2sbk	10YR 3/2	3fmc	f m irr		
8-12	sl	2sbk	10YR 3/3	3f2m	vf irr		
12-24	gr-ls	2sbk	10YR/7.5	3f2m	vf irr		
			YR 3/4				
24-34	gr-sl	sbk	7.5YR 4/3	2f			
34-36	S	m	7.5YR 4/6				
36-60	S	sg	7.5YR 4/3				Fe Mn coatings
							om sand grains
43-48+	S	sg	7.5YR 4/4				Fe Mn coatings



Sample Point AH3

Depth	Soil	Soil	Matrix	Roots	Pores	рН	Comments
inches	Texture	Structure	Color				
0-4	Isl	gr 1msbk	10YR3/2	3fmc	vf m irr	4.8	3-5 % slope
4-9	sl	2sbk	10YR3/3	3fmc	f m irr		
9-15	gr-ls	2sbk	10YR4/2	3f2m	vf irr	4.4	
15-21	gr-sl	2sbk	10YR3/2	3f2m	vf irr		
			7.5YR3/2				
21-29	gr-sl	sbk	7.5YR 4/3	2f			Fe Mn coatings
							on gravels
29-35	S	sg	10YR 5/3				Fe Mn coatings
							on gravels
35-60	S	sg	10YR 6/2				



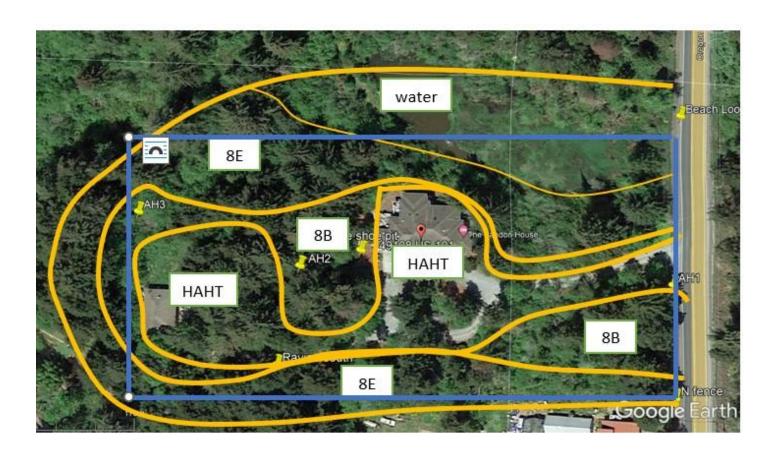


Page 29 OSE. O1SS

AOI AH 1-3, GIS coordinates and approximate elevation

Point	Lat	Long	Approx. elevation
AH1	43° 04.183'N	124° 24.919'W	74
AH2	43° 04.183'N	124° 25.015'W	75
AH3	43° 04.192'N	124° 25.058'W	58
Road cut Hwy 101	43° 04.184'N	124° 24.906'W	75

Appendix 6. Revised Soil Map for AOI





Department of Land Conservation and Development

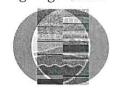
635 Capitol Street NE, Suite 150 Salem, Oregon 97301-2540

Phone: 503-373-0050 Fax: 503-378-5518

www.oregon.gov/LCD

LAND CONSERVATION WWY

Soils Assessment Submittal Form



Soils P	rofessional	Information
Soils pr	ofessional*	 Paul Kennedy

Sons professionar .		Certification number	: 355840
Property Information			
Person who requested soils assessr	nent: Robert S. Miller III Att	. at Law Brett Johns	on
Mailing address: 49108 Hwy 101 I	Bandon OR 97411		
Email address: rsmiller@aol.com br	rett@thebandonhouse.com 7	elephone number: (54	41) 639-6075
Property owner (if different): Bre			
Property address (if different):			
County: Coos	Township:29S	_Range: 15W Sec	ction: 12
Tax lot(s): 308	Parcel Acreage: 4.77	Acres Evaluated:	4.77
Comprehensive Plan designation:_	AG	Zone: EFU	
Proposed land use action: rezone I	EFU to Rural Residential		

The soils professional must submit an electronic copy of the soils assessment together with this form to Hilary Foote, Farm and Forest Lands Specialist, at the above address. The person requesting the soils assessment or the property owner must submit a check for a non-refundable administrative fee of \$625 made out to the Department of Land Conservation and Development, to Hilary Foote, at the same address.

Soils assessments must be consistent with the Soils Assessment Report Requirements and will be checked for completeness and be subject to audits as described in OAR 660-033-0030(9). Some soils assessments will additionally be subject to review and field checks by a DLCD-contracted soils professional as described in OAR 660-033-0030(9). Property owners and soils professionals will be notified of any negative reviews or field checks. Soils assessments will not be released to local governments without submittal of a signed release form by the property owner and person who requested the soils assessment; however, when released, any negative reviews or field checks will accompany the soils assessments.

The department and the Land Conservation and Development Commission will not be held liable for non-performance or information that is contained in soils assessments, or for negative reviews, field checks or audits of soils assessments. For the protection of the department and commission, we ask that you read and sign the following authorization and disclaimer:

I hereby expressly give my consent, should I be notified by the department that the submitted soils assessment for my property is selected for a review and field check, to authorize timely

access to my property by a DLCD-contracted soils professional to perform a field check to corroborate the information provided in the submitted soils assessment. I understand that failure to authorize access to the property may result in a negative review.

I hereby waive my right to pursue a claim for relief or cause of action alleging injury from the content of soils assessments or from any negative reviews, field checks or audits conducted by the department and any and all soils professionals used by the department under OAR 660-033-0030(5) and (9). I hold these entities harmless and release them from liability for any injury or damage that may occur in conjunction with the submitted soils assessment.

In exchange for the department's review of this submittal under the soils assessment program, I expressly agree to forever waive and give up all claims, suits, actions, proceedings, losses, damages, liabilities, awards and costs of every kind and description, including any and all federal and state claims, reasonable attorney's fees, and expenses at trial (collectively "claims") which I have or may have a right to bring against any agency, department, the state, or their agents, officials or employees arising out of or related to my participation and performance in the soil assessment program, including but not limited to claims for mistake or negligence of the department, the state of Oregon, and their officers, employees and agents. I further agree that the provisions of this Liability Waiver and Release from Federal and State Claims shall be effective and binding upon my heirs, executors, administrators, successors, assigns, beneficiaries, or delegatees and shall inure to the benefit of the department, the State of Oregon, and their officers, employees and agents.

ROBERT S. MILLER II	ATTORNEY FOR PROP	PERTY OWNER 11/29/2022
Person v	who requested soils assessmen	Date
	perty owner (if different)	11/29/2022 Date

In addition to agreeing to the above, I hereby certify that the attached soils assessment that I performed for the property identified on this form is soundly and scientifically based and meets the reporting requirements established by the department.

Soils professional 12/2/22
Date

^{*} Must be from the posted list of qualified soils professionals at: https://www.oregon.gov/lcd/FF/Pages/Soils-Assessment.aspx



Department of Land Conservation and Development

635 Capitol Street NE, Suite 150 Salem, Oregon 97301-2540

> Phone: 503-373-0050 Fax: 503-378-5518 www.oregon.gov/LCD

Soils Assessment Release Form



Soils Professional Information						
Soils professional*: Paul Kennedy	Certification number: 355840					
Date of submittal of soils assessment to department:						
Property Information Person who requested soils assessment: Robert S Miller III att. at Law Brett Johnson						
Mailing address: 49108 Hwy 101 Bandon OR 97						
Email address: rsmiii@aol.com brett@thebando	nhouse.com Telephone number: 541 639-6075					
Property owner (if different): Brett Johnson Property address (if different):						
County: Coos Town	nship: 29S Range: 15W Section: 12					
Tax lot(s): 308 Parcel Acre	age: 4.77 Acres Evaluated: 4.77					
Comprehensive Plan designation: AG	Zone: EFU					
Proposed land use action: rezone parcel from EF	U to Rural Residential					
If you would like the soils assessment for the subject property to be released to a County planning department for its consideration in a land use proceeding, please sign this form and send it to Hilary Foote at the above address, or email to: hilary.foote@state.or.us. I hereby request that the Department of Land Conservation and Development release the soils assessment submitted to the department on the above date regarding the above-described property to the Coos County Planning Department, as well as any department notifications of deficiencies. I understand that any and all previous soils assessments applying to this property produced under this rule, as well as any department notifications of deficiencies in such soils assessments, will also be released to the local government.						
Person who requested so	ils assessment Date					
Property owner (if d	ifferent)					