BEFORE THE PLANNING COMMISSION

OF

ROCKAWAY BEACH, OREGON

Applicant: Troy Johns Agent: OTAK Engineering	) Case File: SUB-23-01) Findings, Conclusions, and Final Order

Nature of the Application

The Applicant is requesting approval of an 85-lot subdivision of vacant land to be named Lake Lytle Estates Phases IV-VII, on land zoned R-3 (Lower Density Residential). Details of the request are included on the submitted application materials and are available for inspection at Rockaway Beach City Hall.

Relevant Facts

The following is a summary of the facts and testimony found to be relevant to this decision:

1. The property is located to the south of the existing Lake Lytle Estates Subdivision Phases I-III, east of Lake Lytle in Rockaway Beach, and is further identified on Tillamook County Assessor's Map # 2N10W Lot #5201. Access to the property is proposed via existing Tillamook, Frances, and Necarney Streets at their south terminus at the subject property.

2. The Comprehensive Plan designation is Residential.

3. The subject property is zoned R3 (Lower Density Residential Zoning)

4. The subject property is approximately 18.9 acres.

5. Adjacent to the north is the existing Lake Lytle Estates Subdivision Phases III. To the east is industrial forest land outside of the Rockaway Beach city limits. To the south is undeveloped land zoned R-R (Residential Resort), and the existing Timberlake Subdivision further to the south. West of the subject property is undeveloped land zoned S-A (Special Area Wetlands) adjacent to Lake Lytle.

6. The property contains wetlands that have been delineated by a professional wetlands consultant, and the Oregon Department of State Lands has given agency concurrence with the delineation. The Applicant's proposal includes impacts to portions of the wetlands for street and utility

construction, and the Applicant understands that permits from DSL and the U.S. Army Corps of Engineers are required before any disturbance or impacts to the wetlands takes place.

7. Details of the Applicant's proposal can be found in the staff's report and evidence submitted by the Applicant, which is incorporated into the record herein. Included in the application materials is the Burden of Proof document, which provides responses to the applicable criteria.

8. A public hearing was held before the Rockaway Beach Planning Commission on Thursday, October 19, 2023. All interested parties were given an opportunity to attend the public hearing and to present written and oral testimony.

9. Written comments from the City Engineer are on record and have been provided to the Applicant. These comments indicate that significant public infrastructure improvements will be necessary for the development to occur, and that the Developer will be required to bear the costs of these improvements, both on and off-site.

10. The Applicant gave testimony on the request, summarizing the proposal. The Applicant explained the development would be phased and estimated to produce approximately 10 homes per year. The Applicant acknowledged that significant and detailed engineering design was needed before the plan could be ready for City review.

11. The Applicant provided further testimony regarding street connections to the adjoining property to the south of the property site and explained that Tillamook Avenue was not proposed to be extended as a through street to the adjoining property to the south due to opposition from the Oregon Department of State Lands. The Applicant emphasized that the proposed application was prepared to minimize wetland impacts.

12. Testimony in opposition to the request were presented as follows:

    a. Terry Savino, a resident of the neighboring Lake Lytle Estates subdivision, shared her opposition to the proposed street to go through the Francis Street cul-de-sac, which would go through wetlands. She expressed concerns about the proposed neighborhood having only one access point from 12th Street and stated that she believed a connection to the south would be necessary. She expressed additional concerns regarding the application proposal that only open space areas would be wetlands and felt this would be insufficient for the proposed development.

    b. Owe Berg, a resident of the neighboring Lake Lytle Estates subdivision, expressed concerns about the additional traffic the proposed neighborhood would have on the intersection of Highway 101 and 12th Street and potential congestion throughout the existing neighborhood. He shared additional concerns about the city's water supply and questioned if the city water supply was sufficient for the additional homes proposed.

c. James Young, a resident of the neighboring Lake Lytle Estates subdivision, expressed concerns the impact the additional traffic would have on the existing roads, particularly at the intersection of Highway 101 and 12th Street, which he stated is already eroding. He stated that the additional traffic would cause the existing road to deteriorate rapidly. He expressed additional concerns regarding the 12th Street bridge and its capacity to handle the additional traffic and heavy machinery that would be necessary to develop. He stated that the 12th Street bridge is already rutted. He shared additional concerns regarding the number of homes in the proposed development that would become short term rentals.

d. Ted Hewitt, a resident of the neighboring Lake Lytle Estates subdivision, expressed concerns regarding the age of the reports and studies included in the application materials. He expressed additional concerns about the amount of traffic the proposed development would generate throughout the neighborhood, as well as at the intersection of Highway 101 and 12th Street. He shared additional concerns regarding the number of homes in the proposed development that would become short term rentals.

e. Maggie Hewitt, a resident of the neighboring Lake Lytle Estates subdivision, expressed concerns regarding the impacts the proposed development would have on livability in the current neighborhood. She shared a personal experience of having lived through quick and expansive development in Portland, which she stated negatively impacted the community and neighborhood feel. She stated that she would like to see the proposed development slowed and that 85 homes would be too much. She shared additional concerns regarding the number of homes in the proposed development that would become short term rentals. Additionally, she voiced concerns about the noise the development construction would create.

f. Todd Bostick, a resident of the neighboring Lake Lytle Estates subdivision, expressed concerns the number of vehicles and traffic congestion the proposed development would generate. He stated that the intersection of 101 and 12th Street would be worsened with traffic congestion and would become less safe. He shared additional concerns that the existing roads would be damaged through the construction period. He stated that water pressure is already an issue in the Lake Lytle Estates neighborhood and expressed concern that the additional connections to the water system would worsen this problem.

g. Robert Tarter, a resident of the neighboring Lake Lytle Estates subdivision, expressed concerns about the Francis Street connecting through to serve additional homes and stated that the street is not wide enough as is when residents park on the street in front of their homes. He stated that he is opposed to the proposed street to go through the Francis Street cul-de-sac. He shared additional concerns regarding poor water pressure in the neighborhood.

h. Mary King, a resident of the neighboring Lake Lytle Estates subdivision, shared her opposition to the proposed street to go through the Francis Street cul-de-sac. She stated that she purchased her home because it was located on a cul-de-sac, which she felt kept her autistic child safer, since there is little traffic in the cul-de-sac. She shared that she works for the local school and stated that with their current staffing levels, they would not be able to provide for more children.

i. Kat Wright, a resident of the neighboring Lake Lytle Estates subdivision, expressed concerns regarding the proposed street to go through the Francis Street cul-de-sac. She stated that living on the cul-de-sac makes her feel safe and has less traffic. She expressed concern that her home no longer being located on a cul-de-sac may negatively impact her property value. She stated that there are several children with special needs that live on the cul-de-sac who often play in the road in front of their homes. She shared additional concerns about the number of homes in the proposed development that would become short terms rentals and how this may lead to higher crime in the neighborhood. She stated that she would like to see more housing for the local workforce.

13. Written testimony in opposition to the request was received from Michael King, Richard Dilbeck, Theodore Hewitt and Margaret Blanke-Hewitt, and Linda Battson, which are incorporated into the record herein.

14. In rebuttal to the opposing testimony, David Rosenberger, on behalf of the Applicant, addressed the concerns raised by the public. Mr. Rosenberger agreed with the public comments that had been made regarding the age of the materials contained in the application. He stated that the application had been approved over 10 years ago, however due to numerous circumstances, the development was not constructed and the Applicant was required to bring the application back to the city for consideration a second time. At the time the application approval lapsed, the Applicant was advised by the previous City Planner to bring the application back to be reconsidered. He stated that the reports and studies included in the application materials would be updated through the engineering and planning process. Mr. Rosenberger stated that the proposed street through the Francis Street cul-de-sac is not something the Applicant would like to do, as there are wetland impacts, but believed an alternative could be determined through the engineering process to reduce the need for the connection. Mr. Rosenberger acknowledged the public's concerns regarding the intersection of Highway 101 and 12th Street and stated that this issue would be addressed through the traffic study. Mr. Rosenberger stated that they would be conditioned to look at the 12th Street bridge, which would be done. Mr. Rosenberger acknowledged that there were multiple comments opposed to short term rentals, but stated that the Applicant would not go against current city standards or regulations, but encouraged the public to address this issue with their City Council. Mr. Rosenberger addressed the public concern regarding the speed at which the development would progress and stated that this would be a phased development, constructed as the market dictated. Mr. Rosenberger stated that water supply concerns would be addressed with the City Engineer and Public Works Department. Mr. Rosenberger stated that the concerns raised

regarding school impacts could possibly addressed through development impact fees, if those exist within this jurisdiction.

Relevant Criteria

1. Rockaway Beach Zoning Ordinance
    a. Section 3.090 – Lower Density Residential Zone (R-3)
    b. Section 3.080 – Special Area Wetlands (SA)
    c. Section 3.092 – Flood Hazard Overlay Zone (FHO)
    d. Section 3.094 – General Provisions
    e. Section 3.095 – Administration
    f. Section 3.096 – Provisions for Flood Hazard Reduction
    g. Section 4.041 – Shoreland Development Criteria
2. Rockaway Beach Subdivision Ordinance
    a. Section 5 – Procedure for Review
    b. Section 7 – Information on Tentative Plan
    c. Section 8 – Partial Development
    d. Section 9 – Information in Statement
    e. Section 10 – Supplemental Proposals with Tentative Plan
    f. Section 32 – Principals of Acceptability
    g. Section 33 – Streets
    h. Section 34 – Utility Easements
    i. Section 35 – Building Sites
    j. Section 36 – Blocks
    k. Section 37 – Large Building Sites
    l. Section 38 – Water Courses
    m. Section 39 – Land for Public Purposes
    n. Section 40 – Unsuitable Land
    o. Section 41 – Land Subject to Inundation
    p. Section 42 – Proposed Name of Subdivision
    q. Section 43 – Improvement Standards and Approval
    r. Section 44 – Improvement Requirements

The above criteria are found in the Applicant's Burden of Proof, which is attached to this document as Exhibit "A", and the Staff Report – Supplemental 2, which is attached as Exhibit "B".

Findings

The Planning Commission finds:

1. The subject property consists of 18.9 acres of land zoned R-3 (Lower Density Residential) on which subdivision of land may be allowed when the subdivision meets applicable standards of the Rockaway Beach Zoning Ordinance and the Rockaway Beach Subdivision Ordinance. The

Applicant has submitted a detailed subdivision plan with supporting evidence and documentation to support the request.

2. As proposed, each lot in the subdivision would meet the minimum standards of the R-3 zone for lot size, width, area, and access.

3. Overall density of the subdivision does not exceed the density provision of the R-3 zone.

4. The request provides for open space within the development that includes wetlands and other natural vegetation, a pedestrian pathway, and other areas below the 100-year floodplain elevation. A homeowner's association is necessary to take responsibility of the ownership and management of these natural open space areas.

5. Streets in the subdivision are of adequate widths to serve the development and are located such that future street projections to the adjacent property to the south are possible by the extension of Necarney Street.

6. Proposed public street improvements include curbs, gutters, sidewalks, paving, and storm drainage facilities. Appropriate conditions of approval will ensure that the details of street improvements are in accordance with applicable City Technical Specifications and Design Standard, which are applied by the City Engineer at the time of engineering plan review.

7. The Applicant has submitted materials in support of the request, including a Burden of Proof document, which provides specific responses to the applicable criteria under review. These responses, attached as Exhibit "A" in the Burden of Proof, demonstrate that the applicable criteria for land-use approval are met, and serve as findings to support a decision to approve the request.

Conclusion

The record and findings support the conclusion that:

1. Substantive evidence in the record demonstrates that the proposed 85-lot subdivision can be developed in accordance with the appliable standards of the Rockaway Beach Zoning Ordinance and the Rockaway Beach Subdivision Ordinance.

2. Future review and necessary approval of the Applicant's detailed engineering plans for streets and utilities by the City Engineer is necessary. Such review and approval, prior to development, will ensure that the required improvements are in accordance with applicable City of Rockaway Beach Technical Specifications and Design Standards.

Order

It is ORDERED by the Rockaway Beach Planning Commission that Case File #SUB-23-01 be APPROVED, subject to the following conditions:

1. Approval is based upon the submitted plan. Any substantial change in the approved plan shall be submitted to the City of Rockaway Beach as a new application for a subdivision.

2. Tentative approval of the subdivision shall be for a period of one year. The Planning Commission, upon written request by the Applicant, may grant an extension of the tentative plan approval for a period of one year. Failure to obtain a time extension or final plat approval prior to expiration of the tentative plan shall render the tentative plan approval void. Such yearly time extensions will be necessary until all four phases of the development have been granted final plat approval.

3. The Applicant shall provide documentation that the proposed subdivision name has been approved and reserved by the Tillamook County Surveyor.

4. The Applicant shall provide an Engineer's Estimate to the City of Rockaway Beach for the public improvements required for each phase for bonding and for factoring the plan review fee by the City Engineer.

5. The Applicant shall provide updated preliminary plat plans, and all additional plat plans, with scales and north arrow to each sheet for review by the City Engineer.

6. The Applicant shall provide updated preliminary plat plans, and all additional plat plans, with existing waterline sizes for review by the City Engineer.

7. The Applicant shall provide a topographic survey stamped by a professional license surveyor.

8. The Applicant shall provide a phasing plan for review by the City Engineer for each phase, depicting how pedestrian circulation, traffic circulation and utility extensions will be provided.

9. The Applicant shall submit detailed engineered plans for review by the City Engineer, that demonstrate that City standards for access, street improvements, sewer and water services, fire flow, storm water drainage, and other improvements deemed necessary as determined by the City Engineer have been satisfied. The cost for plan review by the City Engineer shall be the responsibility of the Applicant/Developer.

10. The Applicant shall provide a traffic study for the subdivision and NE 12th Avenue.

11. The Applicant shall provide a study of the impacts to the NE 12th Avenue bridge and analysis of the bridge structural capacity.

12. The Applicant shall provide the City Engineer with a preliminary profile of the streets, including the extensions for 200 feet past the project on all streets. The Applicant shall include vertical curves and large culverts in the profile for review.

13. The Applicant shall extend the Tillamook Avenue full street improvements to the southern edge of the property.

14. The Applicant shall extend the Necarney Street improvements to the north end of the existing cul-de-sac and show the culvert size on the north end. The Applicant shall provide easements for utility extensions east of Necarney Street into the UGB.

15. The Applicant shall place street barricades at the end of the phases and southern end of Necarney Street.

16. The Applicant shall use curbs and gutters on street sections per City standards. The Applicant shall follow ODOT design for pavement callouts per City standards.

17. The Applicant shall provide the City Engineer with pipe inverts for the storm crossing at the north end of Tillamook Avenue and for Necarney Street crossing.

18. The Applicant shall extend the pavement north to Charlotte Street and show the culvert size on the north end. The City Engineer will review existing pavement from Charlotte Street south to the site to determine its ability to handle traffic.

19. The Applicant shall add stationing to all roads and identify between what stations the road sections will be used at and supply this information to the City Engineer for review.

20. The Applicant shall provide easements for any sidewalks on public street sections that expand outside of the right-of-way.

21. The Applicant shall provide the City Engineer with sewer inverts, rim elevations, and existing ground shots across the wetlands for review. The sewer line shall be in a casing. The sewer bore option will require a public sewer easement. The Applicant shall provide Department of State Lands and U.S. Army Corps of Engineers approval for this sewer bore.

22. The Applicant shall provide the City Engineer with preliminary profiles with slopes for all gravity sewers.

23. The Applicant shall provide an all-weather access to all sewer manholes located in the easement or right-of-way.

24. The Applicant shall extend the maintenance road and easement beyond the sewer manhole at least 5 feet.

25. The Applicant shall construct a new Lake Lytle Pump Station and force main to 6th Street prior to the first phase. The Applicant shall submit a pre-design report to the City Engineer for review and approval.

26. The Applicant will provide preliminary sewer inverts at manholes. The Applicant will provide sewer stubs on Florence Street as determined by the City Engineer.

27. The Applicant shall provide concurrence from Department of State Lands and U.S. Army Corps of Engineers for the wetland in the common space and obtain permits prior to approval of the construction drawings. The approval from Department of States Lands must be current (no more than 2 years old).

28. The Applicant shall provide a geotechnical report covering roadway construction, including wet weather sections and fills on the lot.

29. The Applicant shall ensure all lots are numbered sequentially throughout the subdivision and provided verification from the County Surveyor.

30. Applicant shall hold a pre-design conference with the City Engineer prior to beginning the final design to ensure utility line locations conform to City standards and confirm mainline locations.

31. The Applicant shall provide a public utility easement at the north end, west side of Tillamook Avenue. The Applicant shall provide evidence to the City Engineer that all public utility easements will not impact stormwater quality swale.

32. On the 32-foot public street section of Francis Court, the Applicant shall reduce the swale width to 4 feet so that it is entirely in the right-of-way, ensure the maximum depth of the swale is 6 inches, and construct the swale to City standards.

33. The Applicant shall modify the easement description on the 32-foot public street section for Florence Street and Troy Street to include utility/road construction.

34. The Applicant will provide the City Engineer with a survey or the roadway, extensions and drainage areas. This survey must extend into the wetlands and into the existing roadways.

35. The Applicant shall provide a storm drainage study, including basin map and flow rates.

36. The Applicant shall provide details for roof drainage piping for lots 19 through 21, block 12, and all lots on the west side of Necarney Street to the City Engineer for review.

37. The Applicant shall provide a cross section and plan view of the proposed swales, including tract 3 and 4. The Applicant shall provide the City Engineer with the outlet elevation to the wetlands.

38. The Applicant shall provide the City Engineer with detailed information for how the creek/ditch at the south end of Nacarney Street, which crosses under the sidewalk and through Block 20, Lot 5, will impact to the roadway, utilities and lots.

39. The Applicant shall submit evidence that all necessary permits and approval from the U.S. Army Corps of Engineers and Oregon Department of State Lands have been obtained for impacts to wetlands in accordance with the approval plan.

40. The Applicant shall submit evidence of approval from the State Fire Marshall for all fire hydrant locations, street widths, and applicable Fire Code requirements.

41. The Applicant shall provide evidence that a 1200C Permit has been obtained from the Oregon Department of Environmental Quality for erosion control prior to grading and construction of the development.

42. The Applicant shall provide the City Engineer with a street lighting plan to ensure lighting is provided on pedestrian paths.

43. The Applicant shall construct sidewalks and directional ADA ramps on all public frontage areas. The Applicant shall provide the City Engineer with information on the construction materials of the pavement section of the pedestrian path to ensure compliance with City standards, increase the rock section of the path to 6 inches and ensure positive drainage away from the trail.

44. Prior to final plat approval, the Applicant shall be responsible for providing and installing all improvements including sewer, water, street and sidewalks, stormwater management facilities, street lights, street name signs, and street trees in accordance with Subdivision Ordinance Section 44 entitled Improvements Required, and in accordance with the City Engineer approved plans.

45. The Applicant shall be responsible for all costs necessary for off-site public infrastructure improvements that are triggered by the proposed new subdivision.

46. The applicant shall establish a homeowner's association for the development, and all open space within the development shall be owned and maintained by the homeowner's association. The required homeowner's association shall be responsible for any and all necessary stormwater maintenance facilities that serve the development. The required homeowner's association shall be responsible for maintaining the pedestrian paths within the development. The required homeowner's association shall be responsible for maintaining the storm water quality tracts.

47. The Applicant shall record a deed restriction or other covenant applicable to each lot in the subdivision, in a form acceptable to the State of Oregon Fish and Wildlife Department, that indemnifies ODFW for any damage or inconvenience to persons, real property, or personal property caused by big game and furbearing animals.

48. The Applicant shall investigate an alternative traffic route that does not require connection through the Francis Street cul-de-sac. If no alternative can be used, the Applicant shall show the need for the connection through Francis Street in the traffic study.

49. The Applicant shall dedicate a suitable area for a public park and playground for the use of the residents of the subdivision.

This ORDER was presented to and approved by the Rockaway Beach Planning Commission Chair on October 27th, 2023

William Hassell

Rockaway Beach, Oregon
Planning Commission

Case File: SUB-23-01
Findings, Conclusions, and Final Order

Exhibit “A”

Burden of Proof

for

Lake Lytle Estates Units 4 Through 7

Tentative Subdivision Plan Review for an Eighty-Five Lot Subdivision

Prepared For

Troy Johns

Prepared By

otak

June 6, 2010

Application Goes Here

Lake Lytle Estates
Units 4 Through 7
Tentative Subdivision Plan Review
for an
Eighty-Five Lot Subdivision

Property Owners

Robert W. Schmeling and Troy Johns
1621 84th Court
Vancouver, Washington 98664

Applicant:

Troy Johns
12432 NE 20th Street
Vancouver, Washington 98684
Phone: (360) 600-4425

Planners/ Engineers:

Otak, Inc.
Richard Stelzig, PE
Duncan Brown, Senior Planner
4253-A HWY 101 NORTH
Gearhart, Oregon 97138
Phone: (503) 738-3425
Fax: (503) 738-7455

Site:

Map 2N 10W, Tax Lot 5201

Current Zoning is R-3, Lower Density Residential

Request:

Tentative Subdivision Plat approval for an 85-lot residential subdivision, including two open space tracts, on an 18.90-acre site. The subdivision will be developed in four phases. Residential lots will range from 5,000 to 15,151 square feet in area with an average of 5,768 square feet.

Lake Lytle Estates
Units 4 Through 7
An Eighty-Five Lot Subdivision

Table of Contents

I. INTRODUCTION

Project Description

An 85-lot subdivision, to be developed in four phases on an 18.90-acre tract of land east of Lake Lytle, is proposed. The subdivision is a continuation of the existing Lake Lytle Estates development north of the site. The proposed new phases will be known as Lake Lytle Estates Units 4 through 7. The subdivision will cluster the detached single-family residences on the upland portion of the site, allowing preservation of land along a small creek containing significant wetlands forested with large spruce trees, and the wetland boundary for Lake Lytle along the west site boundary.

A goal of the development is to provide a quality residential addition to the Lake Lytle Estates neighborhood in a manner that avoids adverse impacts to wetlands and other significant natural resources. To achieve this, the lots, utilities, and roads have been designed to avoid wetland fill or alteration to the greatest extent practicable. Approximately 7,553 square feet of wetland fill may result from this project (almost entirely from acess road construction). Approximately 13,230 square feet of wetland mitigation will offset the impacts of fill. Most remaining wetlands will be placed in common open space tracts, ensuring long-term natural resource protection.

Table 1. Development Summary

	Total Area (acres)*
Rights-of-Way	3.53
Phase I Lots	3.10
Phase II Lots	1.20
Phase III Lots	3.58
Phase IV Lots	3.37
Open Space Tracts	4.12
Site Total	**18.90**
Adjacent Land Under the Same Ownership (not part of the Subdivision)	12.57

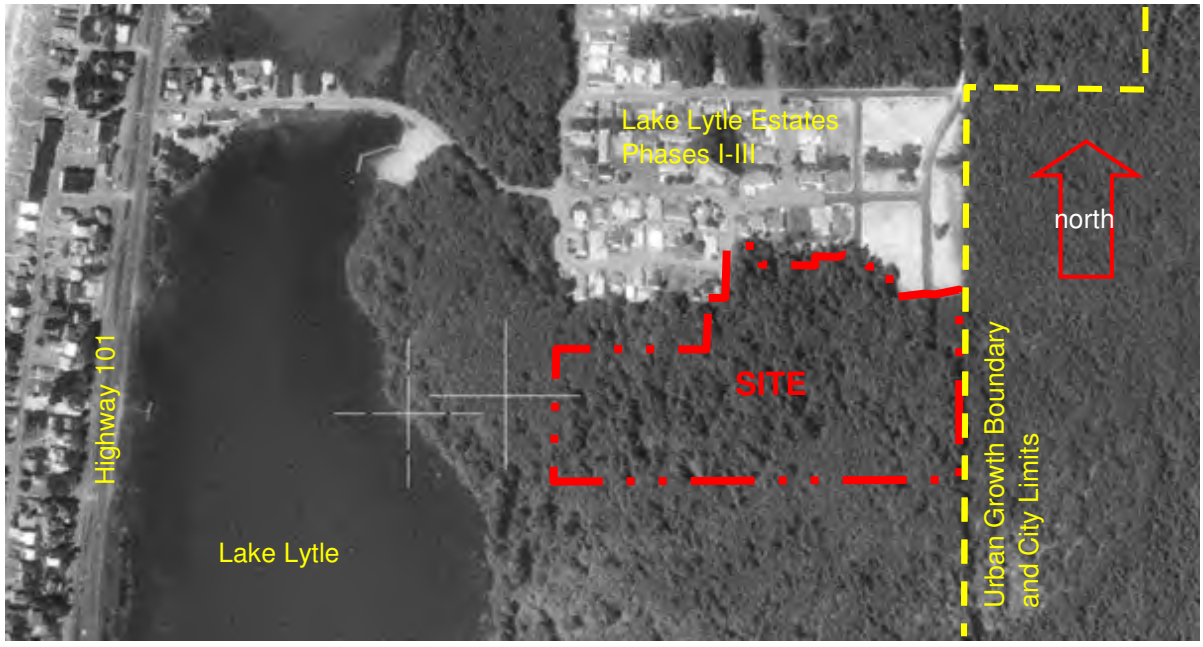
* Areas are rounded to the nearest hundredth of an acre.

Site Description

The site is an irregularly-shaped parcel of 18.90 acres with dimensions of approximately 825 feet in a north-south direction and 1,355 feet in an east-west direction. Land generally slopes gradually upward in a west-to-east direction from an elevation of approximately ten feet to approximately 75 feet mean sea level (msl). Proposed lots and all developed area will be at an elevation of 13 feet msl or greater; at least one foot above the FEMA-established Flood Hazard elevation of 12 feet msl. A wetland that forms the east edge of Lake Lytle is located along the west and northwest site boundaries. A series of wetlands and a seasonal creek extend across the northern portion of the site, forming a buffer between the site and the existing Lake Lytle Estates development to the north. The site is forested with a mix of native conifers and

deciduous trees typical of the Pacific Coast. Road and utility access to the site is from the north, through the existing Lake Lytle Estates development.

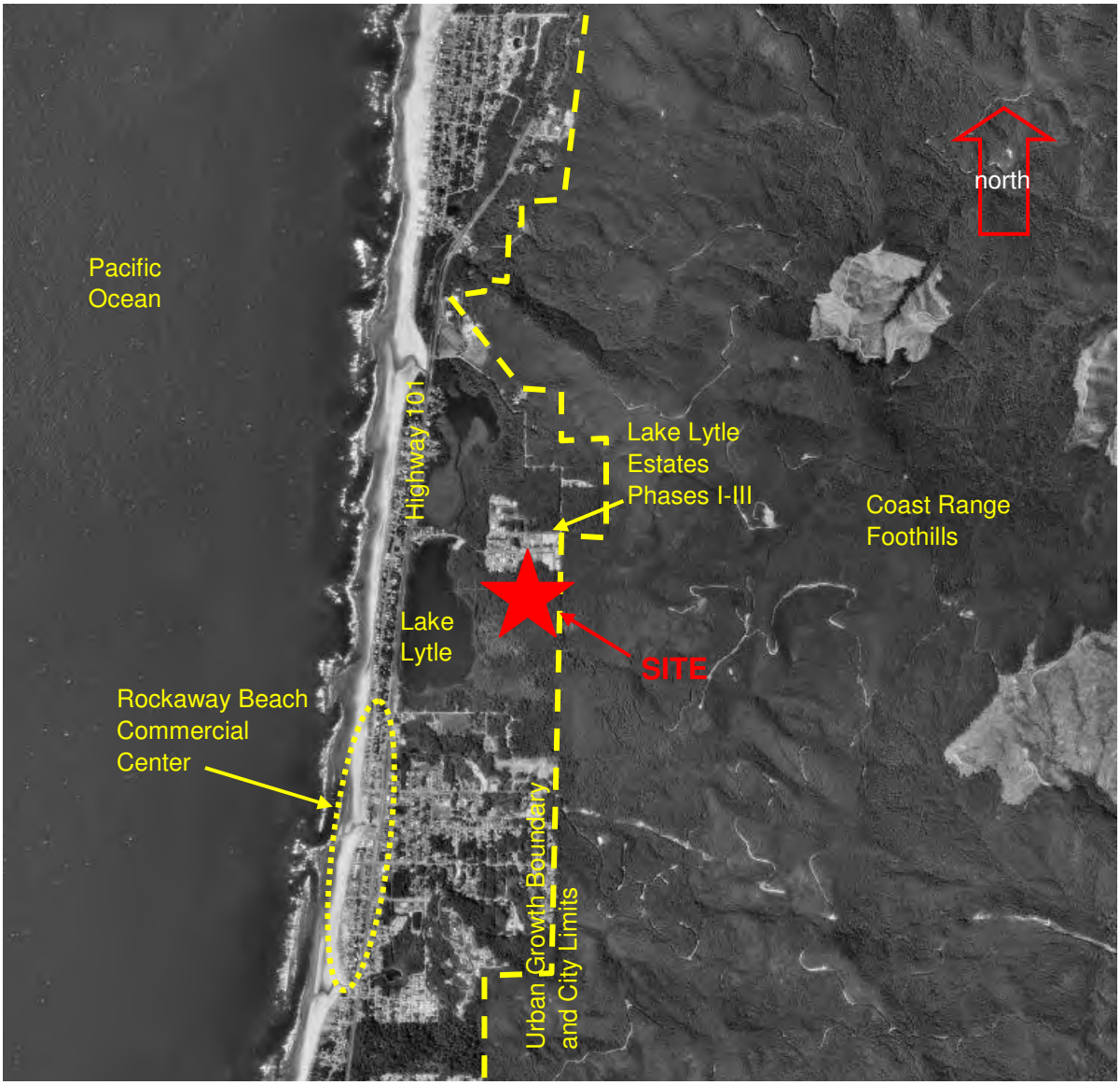
Figure 1. Aerial Photo of the Site



Surrounding Area and Land Uses

The site is located on the east side of Lake Lytle near the center of the City of Rockaway Beach. It is bounded by Lake Lytle on the west, the first three phases of Lake Lytle Estates, a single-family residential neighborhood, on the north, unimproved land outside of the city limits and Urban Growth Boundary on the east, and undeveloped land within the city on the south. Access at this time is only from the north, through the existing Lake Lytle Estates development, although streets will be extended south to allow future connections. Land to the west, between the site and Lake Lytle, is a delineated forested wetland, preventing future road access. West of Lake Lytle is Highway 101, the major Oregon Coast highway. The central commercial area for the City of Rockaway Beach is located adjacent to Highway 101 south of Lake Lytle.

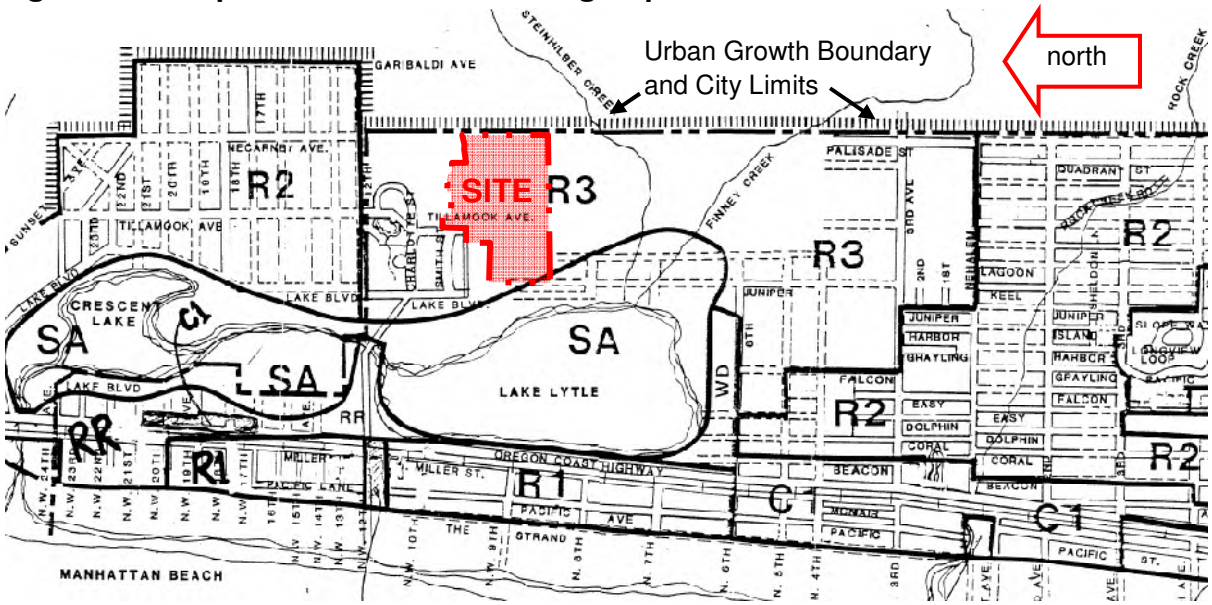
Figure 2. Area Surrounding the Site



Zoning

Zoning on the site and surrounding area is in conformance with the Comprehensive Plan. The developable portion of the site, approximately 17.40 acres, is zoned R-3, Lower Density Residential. This allows detached single-family dwellings, manufactured homes, duplexes, and multifamily homes as outright uses. Detached single-family dwellings are proposed. Minimum lot size in the R-3 Zone is 5,000 square feet, and overall maximum density of the subdivision cannot exceed nine dwelling units per acre. Wetlands on the site that are adjacent to Lake Lytle, approximately 1.45 acres, are zoned SA, Special Area Wetlands. This zone places significant restrictions on development, largely limiting it to structures and activities that relate directly to natural resource functions and values. Residential development is not allowed in the SA Zone.

Figure 3. Comprehensive Plan and Zoning Map



In addition to the R-3 and SA base zones, the FHO, Flood Hazard Area Overlay Zone, applies to all land below 12 feet msl. The Wetland Notification Overlay Zone may also apply to wetlands located on the site, so is also discussed in this Burden of Proof.

Required Reviews

Because 85 detached single-family residential lots, open space tracts, and street dedications are proposed, Tentative Subdivision Plan review is required.

II. ZONE REQUIREMENTS

R-3 Lower Density Residential Zone

3.090. LOWER DENSITY RESIDENTIAL ZONE (R-3). In an R-3 zone the following regulations shall apply:

(1) Uses Permitted Outright. In an R-3 zone, the following uses and their accessory uses are permitted outright:

(a) Single family dwellings, including modular housing and manufactured homes, duplexes and multifamily homes. Manufactured homes shall be subject to the standards of Section 4.091.

...

Response: Detached single-family dwellings, allowed as an outright in the R-3 Zone, are proposed.

(2) Conditional Uses Permitted. In an R-3 zone the following conditional uses and their accessory uses are permitted subject to the provisions of Article 6:

...

Response: No conditional uses are proposed.

(3) Standards. In an R-3 zone, the following standards shall apply:

(a) Minimum lot size in an R-3 zone shall be 5,000 square feet where sanitary sewer service is available, or will be made available, except as provided in (h) below; otherwise, minimum lot size shall be 7,000 square feet.

(b) Density limits for this area shall be 9 dwellings per acre, except as provided in (h) below.

(c)Minimum lot width is 50 feet, except that for lots between 3,500 and 4,999 square feet, the minimum lot width shall be 35 feet.

(d) Minimum lot depth is 70 feet, except for lots between 3,500 and 4,999 square feet, the minimum lot depth shall be 60 feet.

Response: Sanitary sewer service will be extended to the site. Table 2 below summarizes the applicable dimensional lot standards for each lot. Eighty-Five lots are proposed on the 18.90-acre site, for an overall gross density of 4.50 dwellings per acre and a net density (after subtracting streets and tracts) of 7.56 dwellings per acre, both of which are below the maximum density limit of nine dwellings per acre.

Table 2. Lot Standards

	Minimum Lot Dimension		
	Area (square feet)	**Width (feet)**	**Depth (feet)**
Code Requirement	**5,000**	**50**	**70**
Block and Lot Number			
Phase 1			
Block 12 Lot 1	5,447	55	100
Block 12 Lot 2	5,531	55	100
Block 12 Lot 3	5,531	55	100
Block 12 Lot 4	5,466	53	102
Block 12 Lot 5	5,587	50	120
Block 12 Lot 6	6,325	50	140
Block 12 Lot 7	10,439	68	160
Block 12 Lot 8	6,598	50	130
Block 12 Lot 9	9,383	75	125
Block 12 Lot 10	7,072	70	110
Block 12 Lot 11	7,380	80	90
Block 12 Lot 12	6,324	60	105
Block 12 Lot 13	8,177	60	95
Block 12 Lot 14	6,269	50	130
Block 12 Lot 15	6,121	70	75
Block 12 Lot 16	5,019	52	93
Block 12 Lot 17	5,479	58	93
Block 12 Lot 18	5,434	58	93
Block 12 Lot 19	5,839	50	116
Block 12 Lot 20	5,815	50	116
Block 12 Lot 21	5,790	50	115
Phase 1 Total Lot Area	**135,026**		
Phase 2			
Block 13 Lot 1	5,015	65	75
Block 13 Lot 2	5,443	50	107
Block 13 Lot 3	6,476	50	122
Block 13 Lot 4	7,164	50	137
Block 13 Lot 5	6,757	50	111
Block 13 Lot 6	6,398	70	75
Block 13 Lot 7	15,151	96	129
Phase 2 Total Lot Area	**52,404**		
Phase 3			
Block 15 Lot 1	5,163	56	95
Block 15 Lot 2	5,144	56	92
Block 15 Lot 3	5,151	60	87
Block 15 Lot 4	5,039	61	83
Block 15 Lot 5	5,018	62	81

	Minimum Lot Dimension		
	Area (square feet)	**Width (feet)**	**Depth (feet)**
Code Requirement	**5,000**	**50**	**70**
Block and Lot Number			
Block 15 Lot 6	5,060	63	82
Block 15 Lot 7	5,015	60	86
Block 15 Lot 8	5,291	54	95
Block 15 Lot 9	5,298	50	105
Block 15 Lot 10	5,683	75	75
Block 15 Lot 11	5,255	70	75
Block 16 Lot 1	5,663	50	113
Block 16 Lot 2	6,010	50	118
Block 16 Lot 3	5,682	50	114
Block 16 Lot 4	5,549	50	109
Block 16 Lot 5	5,156	55	80
Block 16 Lot 6	5,094	62	78
Block 16 Lot 7	5,727	50	106
Block 16 Lot 8	5,076	50	101
Block 16 Lot 9	6,126	68	91
Block 16 Lot 10	5,638	70	80
Block 16 Lot 11	6,989	78	88
Block 17 Lot 1	5,731	58	96
Block 17 Lot 2	5,073	53	96
Block 17 Lot 3	5,074	53	96
Block 17 Lot 4	5,075	53	96
Block 17 Lot 5	5,076	53	96
Block 17 Lot 6	5,077	53	96
Block 17 Lot 7	5,079	53	96
Phase 3 Total Lot Area	**156,012**		
Phase 4			
Block 18 Lot 1	5,028	50	100
Block 18 Lot 2	5,434	54	100
Block 18 Lot 3	5,274	52	99
Block 18 Lot 4	5,000	52	95
Block 18 Lot 5	5,000	56	89
Block 18 Lot 6	5,000	57	87
Block 18 Lot 7	5,000	55	91
Block 18 Lot 8	5,020	50	100
Block 18 Lot 9	5,738	50	114
Block 18 Lot 10	6,455	50	128
Block 18 Lot 11	6,840	50	135
Block 18 Lot 12	5,172	69	75
Block 18 Lot 13	5,151	68	75
Block 19 Lot 1	5,137	56	95

	Minimum Lot Dimension		
	Area (square feet)	**Width (feet)**	**Depth (feet)**
Code Requirement	**5,000**	**50**	**70**
Block and Lot Number			
Block 19 Lot 2	5,075	56	91
Block 19 Lot 3	5,110	60	87
Block 19 Lot 4	5,128	61	83
Block 19 Lot 5	5,122	62	81
Block 19 Lot 6	5,173	63	82
Block 19 Lot 7	5,209	60	86
Block 19 Lot 8	5,147	54	95
Block 19 Lot 9	5,187	50	105
Block 19 Lot 10	5,076	68	75
Block 20 Lot 1	5,080	96	96
Block 20 Lot 2	5,081	96	96
Block 20 Lot 3	5,082	96	96
Block 20 Lot 4	5,083	96	96
Block 20 Lot 5	5,104	96	96
Phase 4 Total Lot Area	**146,906**		
Total Lot Area	**490,348 sq ft (5,768 sq ft average)**		

(e) Minimum front yard setback shall be 10 feet from the street right-of-way.

(f) Minimum setback on all other sides shall be 5 feet from the lot line.

Response: Setbacks of ten feet from the front lot line and five feet from either side and rear lot lines or delineated wetland boundaries (whichever is greater), are shown on the Tentative Site Plan, Appendix A. All dwellings will comply with these minimum setback requirements. These requirements will be met at the time of home construction.

(g) Maximum building height shall be 24 feet, except where the Planning Commission determines a greater height to be appropriate.

Response: This requirement will be met at the time of home construction.

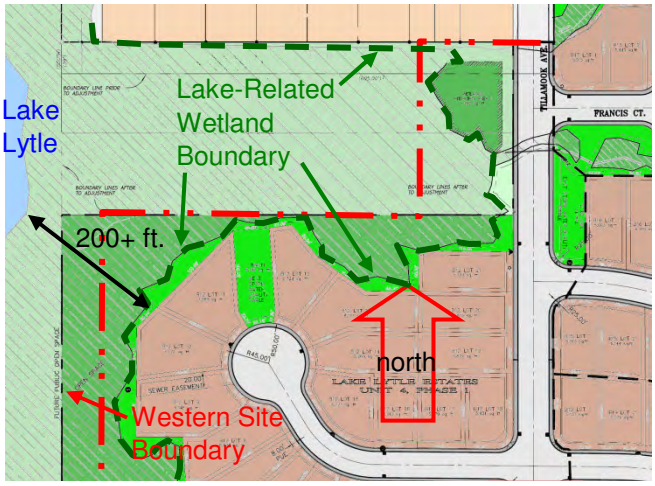
(h) Where a proposed use is to be a Planned Unit Development involving residential structures, the Planning Commission may authorize an additional two dwelling units per acre if the development is properly designed. Aesthetic, geologic and environmental factors shall be taken into account. The Planning Commission may require an engineering, geologic, or structural analysis where it appears that steep slopes or wetlands are to be used for construction purposes rather than open space. The Planning Commission may attach any reasonable conditions it sees fit in the course of the Planned Unit Development process.

Response: Additional density, as allowed by this section, is not requested.

(i) The requirements of Section 4.041, Shorelands Development Criteria, shall be met where uses are to be located within 50 feet of a lake within the Rockaway Beach Urban Growth Boundary.

Response: The west site boundary is east of Lake Lytle, separated from the lake by a minimum of approximately 40 feet of delineated wetlands. In addition, all development will be set back at least 90 feet from the west site boundary, the area of which is largely wetlands, resulting in a minimum distance of at least 200 feet of wetlands and uplands separating the proposed development from Lake Lytle. The west portion of the site separating the developed area from Lake Lytle will be placed in a common open space tract and remain in its natural state. The requirements of Section 4.041 do not apply.

Figure 4. Wetland and Lake Lytle Boundaries



(j) A minimum of 30% of the lot will be maintained in natural vegetation or landscaping.

Response: This requirement will be met at the time of home construction.

SA Special Area Wetlands Zone

3.080. SPECIAL AREA WETLANDS (SA). In an SA Zone the following regulations shall apply:

(1) Purpose. The purpose of the SA Zone is to conserve significant freshwater wetlands and the shoreland and aquatic environment of Rockaway Beach's lakes. Low intensity uses which do not result in major alterations are appropriate in the zone. High intensity recreation, related to boating is appropriate on the lakes.

Response: With the exception of 7,553 square feet of wetlands mostly located in existing and proposed rights-of-way, and driveway access for two lots, no wetland fill is proposed. These wetlands are associated with an unnamed seasonal creek that flows into Lake Lytle, and are not associated with the lake and lake boundaries protected under Section 3.080. Other remaining wetlands on the site, including those associated with Lake Lytle, will remain in their natural

undeveloped state to the greatest extent practicable. In addition, mitigation for the wetland fill previously described will occur onsite or immediately adjacent to it.

(2) Uses Permitted Outright. In an SA zone, the following uses are permitted outright:

(a) Low intensity recreation;

(b) Passive restoration measures;

(c) Vegetative shoreline stabilization;

(d) Individual dock limited to a maximum of 200 square feet for recreation or fishing use, plus necessary piling;

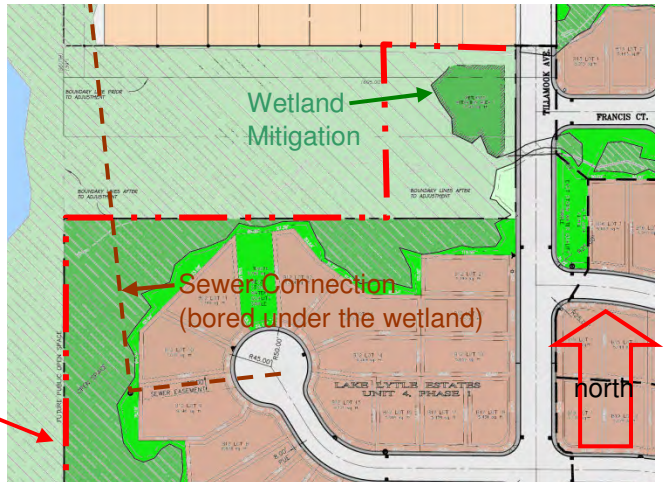
(e) Submerged cable, sewer line, water line or other pipeline.

(f) Storm water outfall.

Response: A sewer extension under the wetland is proposed, extending from the western boundary of the development north approximately 550 feet to the existing sewer in Lake Boulevard. To eliminate wetland impacts, the sewer will be constructed using boring techniques instead of excavation.

In addition to the sewer extension, there will be a wetland mitigation site adjacent to the existing wetlands and west of Tillamook Avenue, expanding the wetland boundary of the lake. In the future, passive restoration measures and vegetative shoreline stabilization may occur on a limited basis. Any future activities will comply with the land use regulations in place at the time they occur.

Figure 5. Development in the SA Zone



(3) Conditional Uses Permitted. In an SA zone the following conditional uses are permitted subject to the provisions of Article 6.

(a) Active restorations including dredging;

(b) Boat launch ramps, including necessary dredging and filling;

(c) Structural shoreline stabilization;

(d) Public parks and recreation areas with associated low intensity development such as docks, raised walkways, and footpaths.

Response: No conditional uses are proposed.

(4) Standards. In an SA zone, the following standards shall apply:

(a) All activities involving construction or alteration in wetlands or aquatic areas shall be reviewed by the Oregon Division of State Lands and the US Army Corps of Engineers to determine permit applicability.

Response: Wetland boundaries were delineated by Nancy Rorick of Rorick Environmental Services July 2006 and submitted to the Oregon Department of State Lands (DSL) for review and concurrence. Delineated wetland boundaries have been surveyed and are shown on the Tentative Site Plan, Appendix A. With the exception of 7,553 square feet of wetlands in proposed rights-of-way and driveway access, no wetland fill is proposed. Application has been made to DSL and the US Army Corps of Engineers for wetland alteration as described. Remaining wetlands on the site will remain in their natural undeveloped state to the greatest extent practicable.

(b) The Shorelands Siting Criteria in Section 4.041 shall be applicable to all activities in the SA zone. Nothing in the Shorelands Siting Criteria shall be interpreted to permit uses which are not otherwise allowed in (2) or (3) above.

Response: Shorelands Siting Criteria of Section 4.041 are stated below. Each is followed by a brief discussion of how they are met.

> ***Section 4.041. Shoreland Development Criteria. The Planning Commission shall review all development within 50 feet of the shore of any lake in the Rockaway Beach Urban Growth Boundary to ensure that the development:***
>
> ***(1) Maintains existing riparian vegetation in accordance with Section 4.150.***

The only lake near the site is Lake Lytle. It is separated from the subdivision boundary by at least approximately 40 feet of identified wetlands, and all above-ground development is at least an additional 50 feet from the west site boundary (Figure 4). No development will occur within 50 feet of the Lake Lytle shoreline. Existing riparian vegetation along Lake Lytle and within the bordering wetland will be retained. A sewer under the wetland is proposed, extending from the western development north approximately 550 feet to the existing sewer in Lake Boulevard (Figure 5). To eliminate impacts, the sewer will be constructed using boring techniques instead of excavation. Lands subject to Section 4.041 will not be affected by the proposed development.

> ***(2) Maintains the scenic quality of existing undeveloped shoreline area such as along the east side of Lake Lytle; or improves the appearance of developed shoreline areas such as those adjacent to Clear Lake or Seaview Lake.***

As noted above, development will be at least 200 feet from the edge of Lake Lytle (Figure 4). This area will remain in native vegetation, providing visual screening of development from the lake.

(3) Does not require the fill of any wetland or aquatic areas, except for water-dependent uses.

There will be no fill of wetlands within 50 feet of Lake Lytle. Lands subject to Section 4.041 will not be affected by the proposed development.

(4) Existing public access to the shoreline shall be maintained in accordance with Section 4.140. New commercial development shall make provision for public access to the shoreline.

There is no public access to Lake Lytle across the site.

(c) Every effort shall be made to use common or community docking facilities prior to construction of an individual, single-purpose dock. Generally, there should be a maximum of one dock every 250 feet. Docks shall not include covered structures or boathouses.

Response: No docks are proposed.

(d) Access to the water area through wetlands may be constructed in the form of raised walkways on pilings, posts or piers. Where the affected resource agencies (e.g. Oregon Department of Fish & Wildlife) determine the activity to have minimal environmental impacts, trails or paths consisting of clean gravel, bark chips, or other material may be placed through wetlands. Such walkways shall not be wider than eight (8) feet. Wherever possible, trails or walkways shall be constructed for the common usage of a development or group of structures.

Response: No development described in this subsection, including walkways on pilings, is proposed.

(e) Removal or control of aquatic vegetation may be permitted, where allowed by the Oregon Department of Fish and Wildlife, in order to provide angler access, or other valid purpose.

Response: Aside from vegetation removal resulting from fill of wetlands that are not associated with Lake Lytle (see subsection 3.080(1)), there will be no impacts to vegetation.

(f) Dredging shall be allowed only:
(i) If a need (i.e., a substantial public benefit) is demonstrated, and
(ii) If the use or alteration does not unreasonably interfere with public trust rights, and

(iii) If no feasible alternative upland locations exist, and
(iv) If adverse impacts are minimized.

(g) When dredging is permitted, the dredging shall be the minimum necessary to accomplish the proposed use.

(h) The timing of dredging operations shall be coordinated with state and federal resource agencies, to protect aquatic and shoreland resources, and minimize interference with recreational fishing.

Response: No dredging is proposed.

(i) Piling installation may be allowed only if all of the following criteria are met:
(i) A substantial public benefit is demonstrated, and
(ii) The proposed use does not unreasonably interfere with public trust rights, and
(iii) Feasible alternative upland locations do not exist, and
(iv) Potential adverse impacts are minimized.

Response: No pilings are proposed.

(j) Shoreline stabilization measures shall meet the criteria of Section 4.120.

Response: No shoreline stabilization is proposed.

(k) Fill may be permitted only if all of the following criteria are met:
(i) If required for a water-dependent use requiring an aquatic location, or if specifically allowed in the SA zone, and
(ii) A substantial public benefit is demonstrated, and
(iii) The proposed fill does not unreasonably interfere with public trust rights, and
(iv) Feasible upland alternative locations do not exist, and
(v) Adverse impacts are minimized.

Response: With the exception of 7,553 square feet of wetlands located in existing and proposed rights-of-way, and driveway access, no wetland fill is proposed. Wetlands proposed for fill are associated with an unnamed seasonal creek that flows into Lake Lytle, and are not associated with the lake and lake boundaries protected under Section 3.080 (Figure 6). Other wetlands on the site, including those associated with Lake Lytle, will continue in their natural undeveloped state to the greatest extent practicable. In addition, mitigation for the wetland fill previously described will occur onsite or immediately adjacent to it.

(l) A fill shall cover no more area than the minimum necessary to accomplish the proposed use.

(m) Projects involving fill may be approved only if the following alternatives are examined and found to be infeasible.

(i) Construct some or all of the project on piling.

(ii) Conduct some or all of the proposed activity on existing upland areas;

(iii) Approve the project at a feasible alternative site where adverse impacts are less significant.

Response: Proposed wetland fill is to allow a street network and motor vehicle access to extend into and through the site in accordance with the subdivision requirements. No fill will occur in wetlands associated with Lake Lytle and subject to the requirements of this section.

(5) Zone Boundary Determination. At such time that a development is proposed in the vicinity of an area designated Special Area Wetlands, the City may require a site investigation to determine the exact location of the zone boundary. The site investigation shall be performed by a qualified agent such as a biologist from the U.S. Army Corps of Engineers or the Division of State Lands.

Response: Wetland boundaries were delineated by Nancy Rorick of Rorick Environmental Services in July 2006 and submitted to the Oregon Department of State Lands (DSL) for review and concurrence. Delineated wetland boundaries have been surveyed and are shown on the Tentative Site Plan, Appendix A. With the exception of 7,553 square feet of wetlands in proposed rights-of-way and driveway access, no wetland fill is proposed. Application has been made to DSL and the US Army Corps of Engineers for wetland alteration as described. Remaining wetlands on the site will remain in their natural undeveloped state to the greatest extent practicable. Buildable areas identified on all lots (Appendix A) are at least five feet from delineated wetland boundaries.

Flood Hazard Zone

3.092. FLOOD HAZARD OVERLAY ZONE - FHO ZONE. Purpose and objectives: It is the purpose of this Flood Hazard Overlay Zone to regulate the use of those areas subject to periodic flooding, to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions. In advancing these principles and the general purposes of the Rockaway Beach Comprehensive Plan and Zoning Ordinance, the specific objectives of this zone are:

(1) To combine with the present zoning requirements certain restrictions made necessary for the known flood hazard areas to promote the general health, welfare and safety of the City.

(2) To prevent the establishment of certain structures and land uses in areas unsuitable for human habitation because of the danger of flooding, unsanitary conditions, or other hazards.

(3) To minimize the need for rescue and relief efforts associated with flooding.

(4) To help maintain a stable tax base by providing for sound use and development in flood-prone areas and to minimize prolonged business interruptions.

(5) To minimize damage to public facilities and utilities located in flood hazard areas.

(6) To ensure that potential home and business buyers are notified that property is in a flood area.

(7) To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

3.094. GENERAL PROVISIONS.

(1) Lands To Which This Ordinance Applies. This ordinance shall apply to all areas of special flood hazards (Flood Hazard Overlay Zone) in combination with present zoning requirements within the jurisdiction of the City of Rockaway Beach.

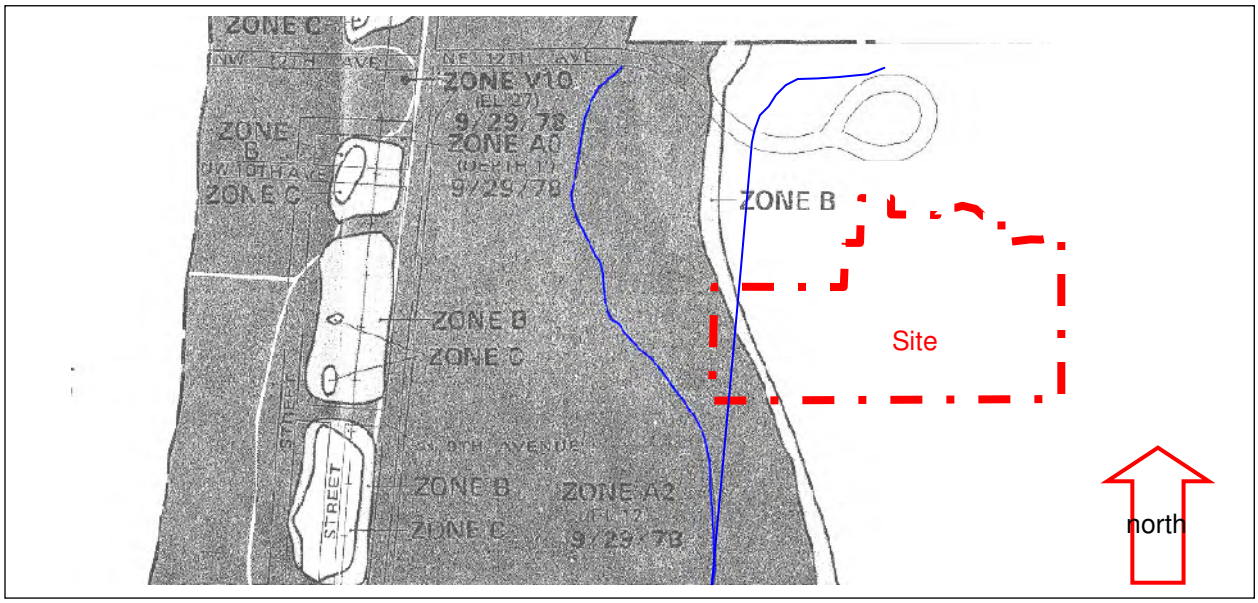
(2) Basis For Establishing The Areas Of Special Flood Hazard. The areas of special flood hazard identified by the Federal Insurance Administration through a scientific and engineering report entitled 'The Flood Insurance Study for the City of Rockaway Reach', dated January 1977, with accompanying Flood Insurance Rate Maps and Flood Boundary Maps and any revision thereto is hereby adopted by reference and declared to be a part of this Ordinance. The Flood Insurance Study is on file at Rockaway Beach City Hall.

(3) Compliance. No structure or land shall hereafter be located, extended, converted or altered without full compliance with the terms of this ordinance and other applicable regulations.

(4) Warning and Disclaimer of Liability. The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. The ordinance shall not create liability on the part of the City of Rockaway Beach, or any officer or employee thereof, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

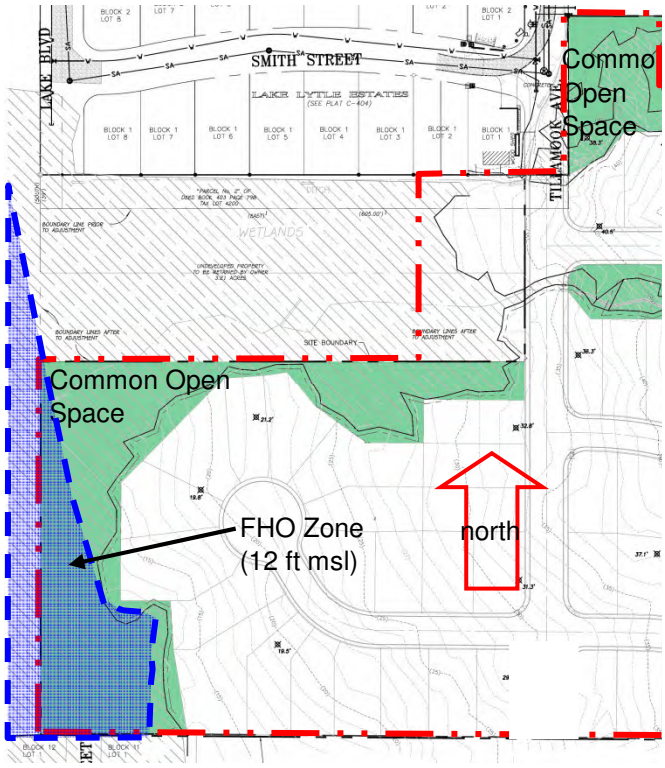
Response: Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), all but the southwest corner of the site is outside of the A2 Flood Hazard Zone. Elevation of a one percent (100-year) Base Flood event is 12 feet mean sea level (msl) (Figure 6 below).

Figure 6. Flood Insurance Rate Map



The FIRM is a generalized map at a large scale depicting approximate areas of inundation. A more detailed and accurate topographic survey has been prepared by the applicant, illustrating specific areas of the portion of the PUD site proposed for development that are at or below an elevation of 12 feet msl (Appendix A and Figure 7 below). All land below elevation 12 feet msl will be placed in a common open space tract and preserved in its natural state.

Figure 7. Topographic Map and FHO Zone Boundary



3.095. ADMINISTRATION.

(1) Establishment of Building/Development Permit. A Building/Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 3.094(2). The permit shall be for all structures including manufactured homes, as set forth in the 'definitions' and for all developments including fill and other activities, also as set forth in the 'definitions'. Application for a Building/Development Permit shall be made to the City Recorder on forms furnished by him, and shall specifically include the following information:

(a) Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures.

(b) Elevation in relation to mean sea level to which any structure has been floodproofed.

(c) Certification by a registered professional engineer or architect that the floodproofing method for any non-residential structure meets the floodproofing criteria in Section 3.096(6)(b).

(d) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

Response: No buildings will be constructed in the FHO Zone. These requirements do not apply.

(2) Duties and Responsibilities. The duties of the City Recorder shall include, but not be limited to permit review:

(a) Review of all development permits to determine that the permit requirements of this ordinance have been satisfied.

(b) Review all development permits to require that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.

(c) Review all development permits in the area of special flood hazard to determine if the proposed development adversely affects the flood carrying capacity of the area.

(3) Uses of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Section 3.094.(2), Basis for Establishing the Areas of Special Flood Hazard, the City Recorder shall obtain, review and reasonably utilize any base flood elevation data available from a federal, state or other source, in order to administer Section 3.096(6)(a), Specific Standards, Residential Construction, and Section 3.096(6)(b), Specific Standards, Non-residential Construction.

Response: These sections will be implemented by the City.

(4) Information to be Obtained and Maintained. Where base flood elevation data is provided through the Flood Insurance Study or required as in Section 3.095(3) obtain:`

(a) Verify and record actual elevation (in relation to Mean Sea Level) of the lowest floor (including basement) of all new or substantially improved structures and whether or not the structure contains a basement.

(b) For all new or substantially improved floodproofed structures:
(i) verify and record the actual elevation (in relation to Mean Sea Level), and
(ii) maintain the floodproofing certifications required in Section 3.095(i)(c).

(c) Maintain for public inspection all records pertaining to the provisions of this ordinance.

(d) In coastal high hazard areas, certification shall be obtained from a registered professional engineer or architect that the structure is securely anchored to adequately anchored pilings or columns in order to withstand velocity waters.

Response: No buildings will be constructed in the FHO Zone. These requirements do not apply.

(5) Alterations of Watercourses. The City Recorder shall:

(a) Notify adjacent communities and the Oregon Water Resources Department prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

(b) Require that maintenance is provided within the altered or relocated portion of said watercourse, so that the flood carrying capacity is not diminished.

Response: No water courses in the FHO Zone will be altered. These requirements do not apply.

(6) Interpretation of FIRM Boundaries. The City Recorder shall make interpretations where needed, as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretations as provided in Section 3.095(7).

Response: The FIRM boundary is based on elevation of the Base Flood. The Base Flood elevation at the site is 12 feet msl. A topographic map was prepared and the 12-foot msl elevation identified (Appendix A and Figure 7 above).

(7) Appeals and Variance Procedures.

Response: No appeal of the FIRM boundary (the 12-foot msl elevation) is requested.

3.096. PROVISIONS FOR FLOOD HAZARD REDUCTION. General Standards. In the Flood Hazard Overlay Zone (FHO Zone) the following provisions are required:

(1) Anchoring.

(a) All new construction and substantial improvement shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

(b) All manufactured homes must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (reference FEMA's 'Manufactured Home Installation in Flood Hazard Areas' guidebook for additional techniques). A certificate signed by a registered architect or engineer which certifies that the anchoring system is in conformance with FEMA regulations shall be submitted prior to final inspection approval.

(2) Construction Materials and Methods.

(a) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(b) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.

(c) Electrical, heating, ventilation, plumbing, and air-conditioning equipment, and other service facilities shall be elevated to one foot above flood level so as to prevent water from entering or accumulating within the components during conditions of flooding.

Response: No buildings will be constructed in the FHO Zone. These requirements do not apply.

(3) Utilities.

(a) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

(b) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters; and

(c) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

Response: A sewer extension under the wetland is proposed, extending from the western boundary of the development north approximately 550 feet to the existing sewer in Lake Boulevard. The sewer will be designed and constructed to City standards, minimizing infiltration of flood waters into the systems and minimize discharge into flood waters. This requirement will be met at the time of sewer extension into and through the site.

(4) Subdivision Proposals.

(a) All subdivision proposals shall be consistent with the need to minimize flood damage.

Response: Flood damage will be minimized by doing no grading or development in the FHO Zone except for sewer extension as described in Subsection 3.096(3) above, and by placing all land in the FHO Zone in a common open space tract.

(b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

Response: A sewer extension under the wetland is proposed, extending from the western boundary of the development north approximately 550 feet to the existing sewer in Lake Boulevard. The sewer will be designed and constructed to current city standards, minimizing infiltration of flood waters into the systems and minimize discharge into flood waters. This requirement will be met at the time of sewer extension into and through the site.

(c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

Response: Grading is limited to rights-of-way at this time. Stormwater from roadways will be collected by a system of catch basins and directed through a piped system to stormwater swales, where water will be treated prior to discharge to adjacent wetlands. Stormwater on each lot will disposed of onsite through infiltration in stormwater swales.

(d) Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

Response: A Base Flood elevation of 12 feet msl has been established through the FIRM. This criterion does not apply.

(5) Review of Building Permits. Where elevation data is not available either through the Flood Insurance Study or from another administrative source (Section 3.095(3)), applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

Response: A Base Flood elevation of 12 feet msl has been established through the FIRM. This criterion does not apply.

(6) Specific Standards. In all areas of special flood hazards (FHO Zone) where baseflood elevation data has been provided as set forth in Section 3.094(2), Basis For Establishing The Areas of Special Flood Hazard, or Section 3.095(3), Use of Other Base Flood Data, the following provisions are required:

(a) Residential Construction. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to one foot above the base flood elevation. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for

the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect and must meet or exceed the following minimum criteria:

(i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

(ii) The bottom of all openings shall be no higher than one foot above grade.

(iii) Openings may be equipped with screens, louvers, or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.

Response: No buildings will be constructed in the FHO Zone. These requirements do not apply.

(b) Nonresidential Construction.

Response: No buildings will be constructed in the FHO Zone. These requirements do not apply.

(c) Manufactured Homes.

Response: No manufactured homes will be placed in the FHO Zone. These requirements do not apply.

(7) Coastal High Hazard Area. Coastal high hazard areas (V Zones) are located within the areas of special flood hazard established in Section 3.094. These areas have special flood hazards associated with high velocity waters from tidal surges and, therefore, in addition to meeting all provisions in this ordinance, the following provisions shall also apply:

Response: The site is not within a Costal Hazard Area (V Zone).

(8) Areas of Shallow Flooding (AO Zone). Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from 1 to 3 feet where a clearly defined channel does not exist, or where the path of flooding is unpredictable usually characterized as sheet flow. In these areas, the following provisions apply:

(a) New construction and substantial improvements of residential structures within AO Zones shall have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, to or above the depth number specified on the FIRM (at least two feet if no depth number is specified).

(b) New construction and substantial improvement of nonresidential structures shall, either:

(i) have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, to or above the depth number specified on the FIRM (at least two feet if no depth number is specified); or

(ii) together with attendant utility and sanitary facilities, be completely floodproofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect.

(c) Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

Response: All portions of the site at or below an elevation of 12 feet msl are in the A2 Zone. No buildings will be constructed in the A2 Zone.

3.097. RESTRICTIONS AND PROHIBITED USES.

(1) Restrictions. Restrictions regarding height, rear yards, side yards, front yard setbacks, minimum lot area, signs, vision clearance and parking space shall be the same as set forth in each specific zone located within the Flood Hazard Overlay Zone area.

Response: As discussed throughout this Burden of Proof, other zoning restrictions will be met. To the extent that those various requirements are met, this criterion is also met.

(2) Prohibited Uses. It shall be unlawful to erect, alter, maintain or establish in a flood hazard overlay zone any building, use or occupancy not permitted or allowed in the foregoing provisions, except existing nonconforming uses, which may continue as provided in Article 7.

Response: This requirement will be enforced by the City.

Notification for Wetland Alteration

3.130. WETLAND NOTIFICATION OVERLAY ZONE.

Purpose. It is the purpose of the Wetland Notification Overlay Zone to establish a procedure that ensures that the permitting requirements of the Division of State Lands and the US Army Corps of Engineers are met in those wetland areas of the City which have not been designated Special Area Wetland.

3.131. Zone Boundaries. The boundaries of the Wetland Notification Overlay Zone shall conform to areas so designated in the Comprehensive Plan map titled 'Wetland Areas of Rockaway Beach.'

Response: There is no Comprehensive Plan map entitled *Wetland Areas of Rockaway Beach*. However, there are wetlands on the site that have been delineated and mapped, and the information has been submitted to the Department of State Lands (DSL) for review and concurrence. Responses under Section 3.132 below are explain how the proposed subdivision meets the requirements of the Wetland Notification Overlay Zone, should they apply.

3.132. GENERAL PROVISIONS.

(1) No person shall do any site preparation work in conjunction with a use permitted in the underlying zoning district in which the property is located, without first notifying the City of the proposed action. Site preparation work is defined as any grading, filling, drainage, excavation or tree removal on the subject property.

Response: No site preparation work as regulated by this criterion has been done. Notification to the City for proposed wetland fill is through this subdivision proposal, and through notification by DSL.

(2) The required notification shall take the form of a description of the location of the property and a sketch describing the site preparation work to be undertaken.

(3) Upon receipt of the notification, the City shall meet with the applicant and inform him/her that the subject property and proposed site preparation activities may be subject to the jurisdiction of the Division of State Lands and the US Army Corps of Engineers.

(4) The applicant shall contact the Division of State Lands and the US Army Corps of Engineers and seek a determination of whether the subject property and proposed site preparation activities are subject to their jurisdiction.

(5) If the US Army Corps of Engineers and/or the Division of State Lands determines that it has jurisdiction, the applicant shall receive a permit from these agencies before site preparation work may begin.

(6) If the Division of State Lands and/or the US Army Corps of Engineers determines that it does not have jurisdiction, the applicant may begin site preparation work upon presenting the City with a written confirmation of such a determination, and subject to applicable City requirements.

Response: Wetlands have been delineated and mapped, and the information has been submitted to the DSL for review and concurrence. Application to DSL and the US Army Corps of Engineers (USACE) has been made for wetlands identified for alteration on the Site Plan (Appendix A). A permit will be obtained from the USACE and/or DSL before site preparation work will begin, in conformance with these criteria.

Shoreland Development

4.041 SHORELAND DEVELOPMENT CRITERIA. The Planning Commission shall review all development within 50 feet of the shore of any lake in the Rockaway Beach Urban Growth Boundary to ensure that the development:

(1) Maintains existing riparian vegetation in accordance with Section 4.150.

Response: All development will be a minimum of approximately 200 feet from the edge of Lake Lytle, separated by a wetland. There will be no development within the area protected under Section 4.041.

(2) Maintains the scenic quality of existing undeveloped shoreline area such as along the east side of Lake Lytle; or improves the appearance of developed shoreline areas such as those adjacent to Clear Lake or Seaview Lake.

Response: All development will be a minimum of approximately 200 feet from the edge of Lake Lytle, separated by a wetland. There will be no vegetation removal or alteration of the area protected under Section 4.041.

(3) Does not require the fill of any wetland or aquatic areas, except for water-dependent uses.

Response: All development will be a minimum of approximately 200 feet from the edge of Lake Lytle, separated by a wetland. There will be no fill of wetland or aquatic areas associated with Lake Lytle.

(4) Existing public access to the shoreline shall be maintained in accordance with Section 4.140. New commercial development shall make provision for public access to the shoreline.

Response: There is no existing public access to Lake Lytle across the site.

Riparian Vegetation

4.150. RIPARIAN VEGETATION. Riparian vegetation adjacent to the lakes and streams in Rockaway Beach shall be protected in accordance with the following provisions:

(1) The following areas of riparian vegetation are defined:

(a) Fifteen feet on either side of McMillan, Steinhilber, Finney, Rock, Heitmiller, Saltair, and Spring Creeks and any other known stream bed.

(b) Fifteen feet adjacent to Seaview Lake, Marie Lake and the unnamed lake at Minnihaha Avenue.

(c) Twenty-five feet adjacent to Spring Lake and Lake Lytle where there are no adjacent wetlands.

(d) The extent of wetland vegetation adjacent to Crescent Lake, Lake Lytle, Clear Lake and that portion of Spring Lake that is bordered by wetlands.

Response: The site is east of Lake Lytle, with portions along the west site boundary containing delineated wetlands associated with Lake Lytle. These wetlands will remain in their natural state, and the portion of them that is within the site boundary will be placed in an open space tract.

(2) All structures and uses shall be located outside of areas listed in (1) above with the following exceptions:

(a) Where direct water access is required in conjunction with a water-dependent use; or

(b) Access to a lot where the proposed access is only reasonable alternative; or

(c) Structural shoreline stabilization; or

(d) Trails or other pedestrian walkways that provide access to the water.

Response: No development, including structures, will be located within the delineated wetland area associated with the Lake Lytle riparian area.

(3) For areas described in (1) a), b), and c) above, all trees 6 inches in diameter at four and one-half feet above grade, and 50% of the understory vegetation shall be retained within the areas listed with the following exceptions:

(a) Removal of dead, diseased, or dying trees, or trees that pose an erosion hazard.

(b) Removal of vegetation necessary to provide for uses listed in (2), above.

(c) Vegetation removal in conjunction with an approved in-water project.

(d) The removal of noxious weeds as defined by the City's nuisance ordinance.

Response: No trees identified in this subsection will be removed as part of this development.

(4) For all areas described in (1) d) above, all riparian vegetation shall be retained with the following exceptions:

(a) Removal of vegetation necessary to provide for uses listed in (2) above.

(b) Removal of dead, diseased, or dying trees.

(c) Vegetation removed in conjunction with an approved in-water project.

(5) The City may approve the removal of riparian vegetation not vegetation removal has been reviewed and approved by the Oregon department of Fish and Wildlife.

Response: No riparian vegetation identified in this subsection will be removed as part of this development.

III. SUBDIVISION REQUIREMENTS

General Provisions

5. PROCEDURE FOR REVIEW.

Response: The required information has been submitted to the City of Rockaway Beach with this Burden of Proof. Procedural requirements will be followed in accordance with this section.

6. TENTATIVE PLAN SCALE. Tentative plans shall be to a scale of one inch equals 50 feet or better except tracts over 10 acres which may be to a scale of one inch equals 100 feet, and shall be clearly and legibly produced.

Response: Tentative Plans of the proper scale are submitted as part of this application.

7. INFORMATION ON TENTATIVE PLAN.

(1) Proposed name, date, north point and scale of drawing.

(2) Location of the subdivision sufficient to define its location and boundaries and a legal description of the tract boundaries.

(3) Name and address of the subdivider.

(4) Appropriate identification of the drawing as a tentative plan.

(5) Name, business address, and number of the registered engineer or licensed surveyor who prepared the plan of the proposed subdivision.

(6) The locations, names, widths, approximate radii of curves and grades of all existing and proposed streets and easements in the proposed subdivision and along the boundaries thereof, and the names of adjoining platted subdivisions and portions of the subdivisions as shall be necessary to show the alignment of streets and alleys therein with the streets and alleys in the proposed subdivision.

(7) Names of the record owners of all contiguous land.

(8) The approximate location and character of all existing and proposed easements and public utility facilities except water and sewer lines in the subdivision or adjacent thereto.

(9) The location and approximate dimensions of each lot and each to be numbered.

(10) Setback lines, if any, proposed by the subdivider.

(11) The outline of any existing buildings and their use showing those which will remain.

(12) Contour lines where the data is made available by the city.

(13) `The location of at least one temporary bench mark within the subdivision boundaries.

(14) City limit or Urban Growth Boundary lines crossing or bounding the subdivision.

(15) Approximate location of all areas subject to inundation or storm water overflow and the location, width, high water elevation flood flow and direction of flow of all watercourses.

(16) Any area proposed to be cut or filled or otherwise graded or protected from flooding.

(17) If impractical to show on the preliminary plat, a key map showing the location of the tract in relationship to section and township lines and to adjacent property and major physical features such as streets, railroads and watercourses.

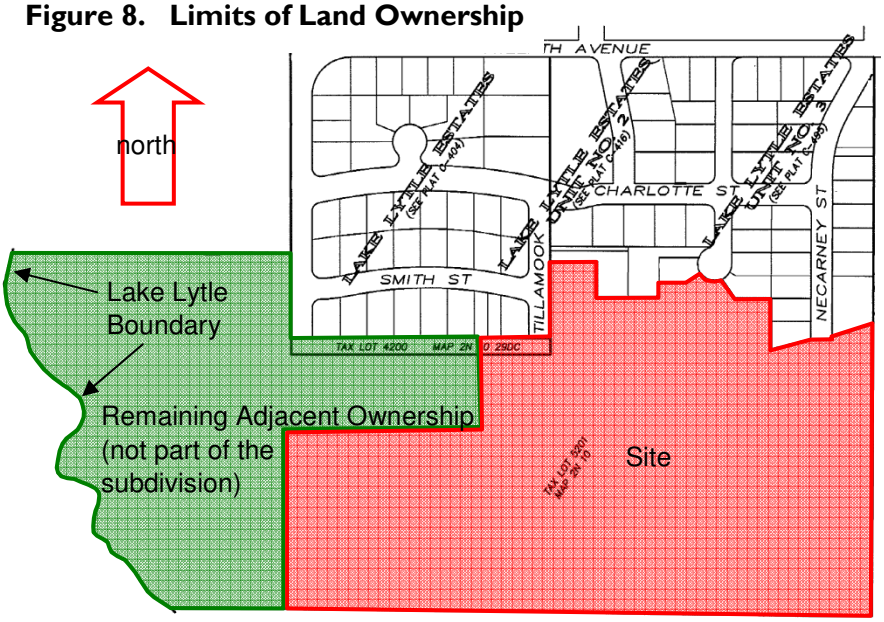
(18) Streets to be held for private use shall be so indicated and all reservations or restrictions relating to such private streets shall be fully described.

Response: All of the required information is included on the tentative subdivision plans (Appendix A) and in this Burden of Proof.

8. **PARTIAL DEVELOPMENT. If the subdivision proposal pertains to only part of the tract owned or controlled by a subdivider, the Planning Commission may require a sketch of a tentative layout for streets in the unsubdivided portion.**

Response: The site is an 18.90-acre portion of a 31.15-acre parcel of land under the ownership of the applicant.

Figure 8. Limits of Land Ownership



9. INFORMATION IN STATEMENT. The statement to accompany the tentative plan shall contain the following information:

(1) A general explanation of the improvements and public utilities, including water supply and sewage disposal proposed to be installed.

Response: Public water and sewer lines will be installed within the public rights-of-way. A sewer line will also be extended from the west site boundary north to the existing sewer in Lake Boulevard by boring under the wetland boundary of Lake Lytle (Figure 5). All preliminary utility locations are shown on the Tentative Site Plan, Appendix A.

(2) Deviations from subdivision ordinance, if any.

Response: No Deviation from the subdivision ordinaces.

(3) Public areas proposed, if any.

Response: No public areas beyond the public rights-of-way are proposed.

(4) A preliminary draft of restrictive covenants proposed, if any.

Response: A preliminary draft of the restrictive covenants for the residential lots is contained in Appendix C. A homeowners association will be formed for the purpose of maintaining the common open space tracts.

10. SUPPLEMENTAL PROPOSALS WITH TENTATIVE PLAN. Any of the following may be required to the Planning Commission to supplement the plan of a subdivision.

(1) Approximate center line profiles with extensions for a reasonable distance beyond the limits of the proposed subdivision showing the finished grade of streets and the nature and extent of street construction.

Response: All proposed street construction is shown on the Tentative Site Plan (Appendix A).

(2) A plan for domestic water supply lines and related water service facilities.

Response: Water lines are shown on the Tentative Site Plan, Appendix A.

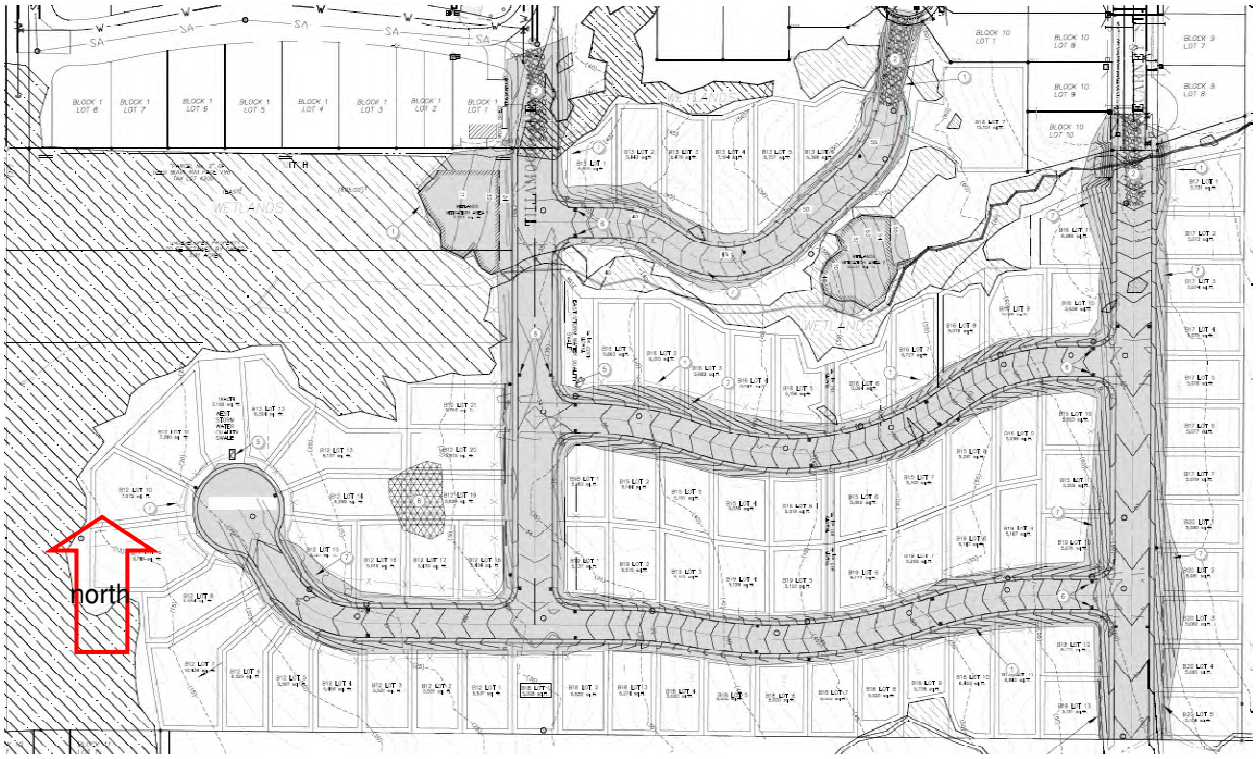
(3) Proposals for sewage disposal, storm water drainage and flood control, including profiles of proposed drainageways.

Response: Sewer lines are shown on the Tentative Site Plan, Appendix A. Stormwater runoff from streets will be collected through a series of catch basins and directed through a pipe system to a series of stormwater swales for treatment prior to discharge to adjacent wetlands. Stormwater on individual lots will be collected in shallow swales, for infiltration into the ground. Precise swale size and location for the individual lots will be determined at the time of building permit application. Developed areas of the site are above the FEMA 100-year flood elevation, so no additional flood control measures are necessary.

(4) If lot areas are to be graded, a plan showing the nature of the cuts and fills and information on the character of the soil.

Response: The Tentative Grading Plan is illustrated in Appendix A and in Figure 9 below. All grading will be for street construction. Any grading for individual lots will be made at the time home plans are submitted.

Figure 9. Site Grading



(5) Proposals for other improvements such as electric utilities and sidewalks.

Response: Five-foot-wide sidewalks will be constructed along both sides of all streets, abutting curbs as shown in Appendix A. In order to protect sidewalks from home-building construction equipment and activities, they will not be constructed when streets are improved, but instead at the time the home on which the sidewalk fronts are constructed. Electric utilities will be located within an eight-foot-wide public utility easement or along lot frontages as required by the franchise utility companies.

(6) Site investigations as required by the Hazards Overlay Zone provisions of the Zoning Ordinance. Where such an investigation indicates the potential for erosion, an erosion control plan shall also be submitted.

Response: Portions of the site that are under an elevation of 12 feet msl will be placed in a common open space tract and not developed. The seasonal creek that drains into Lake Lytle will be placed in a common open space tract. No areas proposed for development are in a designated Hazards Overlay Zone.

Erosion control plans illustrated on the Tentative Site Plan (Appendix A) will be submitted with all subdivision improvement construction plans, and will assure that sediment will not enter wetlands or public roadways in a manner that will violate City or Oregon Department of Environmental Quality requirements.

(7) If an area is to be graded, a plan showing the nature of the cuts and fills and evidence provided in a site investigation that such a grading will be stable.

Response: The Tentative Grading Plan is illustrated in Figure 9 and Appendix A. All grading will be for street construction. Grading for individual lots will be made at the time home plans are submitted.

32. PRINCIPLES OF ACCEPTABILITY. A land division, whether by a subdivision, creation of a street, or a partitioning, shall conform to any development plans, shall take into consideration any preliminary plans made in anticipation thereof, and shall conform to the design standards established by this ordinance. The City Engineer shall prepare and submit to the City Council specifications to supplement the standards of this ordinance, based on standard engineering practices, concerning streets, drainage facilities, sidewalks, sewer and water systems.

Response: All requirements of the City and conditions of tentative plan approval will be met during development.

33. STREETS.

(1) The location, width and grade of streets shall be considered in their relation to existing and planned streets, to topographical conditions, to public convenience and safety, and to the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. Where location is not shown in a development plan, the arrangement of streets shall either:

a. Provide for the continuation or appropriate projection of existing principal streets in surrounding areas; or

b. Conform to a plan for the neighborhood approved or adopted by the Planning Commission to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical.

Response: Tillamook Avenue and Necarney Street are direct extensions of existing streets of the same name within earlier phases of Lake Lytle Estates, and Necarney Street will continue through the site to the south site boundary to serve future abutting development to the south. It extends the established street grid in a north-south direction. Tillamook Avenue will not extend to the abutting development to the south because of sever opposition from DSL. Troy and Florence Streets connect Tillamook Avenue and Necarney Street in an east-west direction to provide a grid street pattern. Florence Street also extends west of Tillamook Avenue approximately 385 feet to form a cul-de-sac near wetlands associated with Lake Lytle. Francis Court extends east from Tillamook Avenue near the north site boundary and connects to existing Francis Street. Troy and Florence Streets do not extend to the site boundaries because Lake Lytle and associated wetlands abut the site to the west, and the Rockaway City Limits and Urban Growth Boundary abut the site to the east.

(2) Street Widths. Street widths shall conform with City standards, except where it can be shown by the land divider, to the satisfaction of the Planning Commission, that the topography or the small number of lots or parcels served and the probable future traffic development are such as to unquestionably justify a narrower width. Increased widths may be required where streets are to serve commercial property, or where probable traffic conditions warrant. Approval or determination of street and area classification shall be made by the Planning Commission taking into consideration the zoning designations imposed by the Comprehensive Plan and the Development Code, the present use and development of the property in the area, the logical and reasonable prospective development of the area based upon public needs and trends, and the public safety and welfare.

Response: Tillamook Avenue and Necarney Street are 38-foot-wide streets within 50-foot-wide rights-of-way, and Necarney Street will be a future through streets to serve land to the south when it is developed in the future. Other streets are 32 feet wide with Francis Court reducing to 20-foot-wide to reduce wetlands fill, all have 40-foot-wide rights-of-way, designed to serve abutting lots.

(3) Alignment. As far as is practical, streets other than minor streets shall be in alignment with existing streets by continuations of the center lines thereof. Staggered street alignment resulting in 'T' intersections shall, wherever practical, leave a minimum distance of 200 feet between the center lines of streets having approximately the same direction, and in no case, shall be less than 150 feet.

Response: Tillamook Avenue and Necarney Street are direct extensions of existing streets of the same name within earlier phases of Lake Lytle Estates, and Necarney Street will continue through the site to the south site boundary to serve future abutting development to the south. It extends the

established street grid in a north-south direction. Tillamook Avenue will not extend to the abutting development to the south because of sever opposition from DSL. Troy and Florence Streets connect Tillamook Avenue and Necarney Street in an east-west direction to provide a grid street pattern. Florence Street also extends west of Tillamook Avenue approximately 385 feet to form a cul-de-sac near wetlands associated with Lake Lytle. Francis Court extends east from Tillamook Avenue near the north site boundary and connects to existing Francis Street. Street intersections are separated by at least 200 feet.

(4) Future Street Extension. Where necessary to give access to, or permit a satisfactory future division of adjoining land, streets shall extend to the boundary of the subdivision or partition, and the resulting dead-end streets may be approved without a turnaround. Reserve strips including street plugs may be required to preserve the objectives of street extensions.

Response: Tillamook Avenue, Francis Street, and Necarney Street are direct extensions of existing streets of the same name within earlier phases of Lake Lytle Estates, and Necarney Street will continue through the site to the south site boundary to serve future abutting development to the south. Lake Lytle and associated wetlands to the west, and the Rockaway City Limits and Urban Growth Boundary to the east, prevent street future extensions in those directions.

(5) Intersection Angles. Streets shall intersect at right angles as practical except where topography requires a lesser angle, but in no case shall the acute angle be less than 60 degrees unless there is a special intersection design. An arterial or collector street intersecting with another street shall have at least 100 feet of tangent adjacent to the intersection unless topography requires a lesser distance. Other streets, except alleys, shall have at least 50 feet of tangent adjacent to the intersection unless topography requires a lesser distance. Intersections which contain an acute angle of less than 80 degrees or which include an arterial street shall have a minimum corner radius sufficient to allow for a roadway radius of 20 feet and maintain a uniform width between the roadway and the right-of-way line. Ordinarily, the intersection of more than two streets at any one point will not be approved.

Response: All intersections are at near-right angles.

(6) Existing Streets. Whenever existing streets adjacent to or within a tract are of inadequate width, additional right-of-way shall be provided at the time of the land division.

Response: There are no existing streets on the site, so no additional dedication for street widening is required.

(7) Reserved Strips. No reserved strips controlling the access to public ways will be approved unless the strips are necessary for the protection of the public welfare, and in these cases they may be required. The control and disposal of the land comprising the strips shall be placed within the jurisdiction of the City under conditions approved by the Planning Commission.

Response: Reserve strips are not proposed, but can be provided at the request of the City.

(8) Half Streets. Half streets shall be prohibited except they may be approved where essential to the reasonable development of the subdivision or partitions when in conformity with the other requirements of these regulations, and when the Planning Commission finds it will be practical to require the dedication of the other half when the adjoining property is divided. Whenever a half street is adjacent to a tract to be divided, the other half of the street shall be platted within the tract. Reserve strips may be required to preserve the objectives of half streets.

Response: No half streets are proposed.

(9) Cul-de-Sac. A cul-de-sac shall be as short as possible and shall have a maximum length of 400 feet and serve building sites for not more than 18 dwelling units. A cul-de-sac shall terminate with a circular turnaround.

Response: No cul-de-sacs are proposed.

(10) Alleys. When any lots or parcels are proposed for commercial or industrial usage, alleys of at least 20 feet in width may be required at the rear thereof with adequate ingress and egress for truck traffic unless alternative commitments for off-street service truck facilities without alleys are approved. Intersecting alleys shall not be permitted.

Response: Only single-family residential development is proposed. Alleys are not proposed.

(11) Grades and Curves. Grades shall not exceed 6% on arterials, 10% on collector streets, or 12% on other streets. Center line radii of curves shall not be less than 300 feet on major arterials, 200 feet on secondary arterials, or 100 feet on other streets, and shall be to an even 10 feet. Where existing conditions, particularly the topography, make it otherwise impracticable to provide buildable sites, the Planning Commission may accept steeper grades and sharper curves. In flat areas, allowance shall be made for finished street grades having a minimum slope, preferably, of at least 05%.

Response: The steepest grade is approximately 6.5 percent for Francis Court. All other street grades are less than six percent.

(12) Marginal Access Streets. Where a land division abuts or contains an existing or proposed arterial street, the Planning Commission may require marginal access streets, reverse frontage lots with suitable depth, screen planting contained in a non-access reservation along the rear or side property line, or other treatment necessary for adequate protection of residential properties and to afford separation of through and local traffic.

Response: The site does not abut or contain an existing or proposed arterial street.

(13) Street Names. All street names shall be approved by the Planning Commission for conformance with the established pattern and to avoid duplication and confusion.

Response: Tillamook Avenue and Necarney Street are extensions of existing streets, and will continue with those names. Francis Court, Troy Street, and Florence Street are not extensions of abutting streets. There are no other streets in Rockaway with similar names.

(14) Private Streets. The design and improvement of any private street shall be subject to all requirements prescribed by this ordinance for public streets. The land divider shall provide for the permanent maintenance of any street required for access to property in a private street subdivision or a major partition.

Response: No private streets are proposed.

34. UTILITY EASEMENTS. Easements for sewer, drainage, water mains, public utility installations, including overhead or underground systems, and other like public purposes shall be dedicated, reserved or granted by the land divider in widths not less than five (5) feet on each side of the rear lot or parcel lines, alongside lot or parcel lines and in planting strips wherever necessary, provided that easements of width, such as for anchorage, may be allowed when the purposes of easements may be accomplished by easements of lesser width as approved by the City.

Response: The sewer main servicing the subdivision will be located in a sewer easement under the wetland at the Lake Lytle boundary, extending from the Florence Street cul-de-sac at the west side of the site to the sewer located in Lake Boulevard at the intersection with Smith Street, in the developed subdivision to the northwest. All other public utilities will be located in public rights-of-way. Private utilities will be placed in an eight-foot-wide easement located on lot and tract frontages as required by this standard (Appendix A).

35. BUILDING SITES.

(1) Size and Shape. The size, width, shape and orientation of building sites shall be consistent with the residential lot size provisions of the Development Code with the following exceptions.

(a) In areas that will not be served by a public sewer, minimum lot and parcel sizes shall permit compliance with the requirements of the Department of Environmental Quality and shall take into consideration problems of sewage disposal, particularly problems of soil structure and water table as related to sewage disposal by septic tank.

Response: Public sewers will serve the subdivision. As illustrated in Table 1 of this Burden of Proof, all lots meet the lot size requirements for the R3 Lower Density Residential Zone.

(b) Where property is zoned and planned for business or industrial use, other widths and areas may be permitted at the discretion of the Planning Commission. Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for the off-street service and parking facilities required by the type of use and development contemplated.

Response: The site is zoned R3, Lower Density Residential, and SA, Special Area Wetland. This criterion does not apply.

(2) Access. Each lot and parcel shall abut upon a street other than an alley for a width of at least 25 feet.

Response: All lots abut a street for a distance of at least 25 feet.

(3) Through Lots and Parcels. Through lots and parcels shall be avoided except where they are essential to provide separation of residential development from major traffic arteries or adjacent non-residential activities or to overcome specific disadvantages of topography and orientation. A planting screen easement at least ten (10) feet wide and across which there shall be no right of access may be required along the line of building sites abutting such a traffic artery or other incompatible use.

Response: No through lots are proposed.

(4) Lot and Parcel Side Lines. The lines of lots and parcels, as far as is practicable, shall run at right angles to the street upon which they face, except that on curved streets they shall be radial to the curve.

Response: Side lot lines for lots west of Tillamook Avenue, east of Necarney Street intersect street lot lines at near-right angles. Florence Street, Francis Court and Troy Street are curvilinear to provide a variety of lot sizes and to reduce the visual impact of a strict street grid pattern. In order to retain a suitable lot width for as much of the lot as possible, side lot lines are parallel to each other. This has resulted in many of the lots having side lot lines that intersect with the frontage street at other than right angles. All lots will have frontage in excess of 50 feet and will allow a regular and orderly row of building facades that follows the curved street layout in a stepped pattern, which will help to establish neighborhood identity and variety.

36. BLOCKS.

(1) General. The length, width and shape of blocks shall take into account the need for adequate building site size and street width and shall recognize the limitations of the topography.

Response: Block length is determined by the access points onto the site (Tillamook Avenue and Necarney Street), the Rockaway City Limits and Urban Growth Boundary to the east, and Lake Lytle and associated wetlands protected by the SA zone to the west.

(2) Size. No block shall be more than 1,000 feet in length between street corner lines unless it is adjacent to an arterial street or unless the topography or the location of adjoining streets justifies an exception. The recommended minimum length of blocks along an arterial street is 1,800 feet. A block shall have sufficient width to provide for two tiers of building sites unless topography or the location of adjoining streets justifies an exception.

Response: Block size is limited by the location of existing streets to the north that extend into the site, Lake Lytle and associated wetlands to the west, the Rockaway City Limits and Urban Growth Boundary to the east and associated wetlands that extend across the northern portion of the site.

The block west of Tillamook Street will be approximately 750 feet long from the intersection with Smith Street (located approximately 90 feet north of the north site boundary) to the south site boundary. Presence of Lake Lytle and wetlands along its boundary prevent connecting streets to the west, which would reduce block size.

Lots fronting the east side of Necarney Street back on the Rockaway City Limits and Urban Growth Boundary, prventing extension of local urban streets in that direction. As a result, the block length is approximately 1,270 feet from the intersection of 12th Avenue with Necarney Street to the south site boundary, and in all likelihood will be extended even further as land to the south develops.

(3) Walkways. The applicant may be required to dedicate and improve ten (10) foot walkways across blocks over 600 feet in length or to provide access to school, park, or other public areas.

Response: The east-west blocks between Tillamook Avenue and Necarney Street are slightly more than 600 feet in length. A pedestrian pathway is provided at approximately midblock to connect Florence and Troy Streets, and extends north of Troy street to the common open space tract containing the seasonal creek and associated wetlands.

37. **LARGE BUILDING SITES. In dividing tracts into large lots or parcels which at some future time are likely to be redivided, the Planning Commission may require that the blocks be of such size and shape, be so divided into building sites and contain such site restrictions as will provide for extension and opening of streets at intervals which will permit a subsequent division of any tract into lots or parcels of smaller size.**

Response: Full residential development is proposed. No developable tracts or large building sites are proposed.

38. **WATER COURSES. The land divider shall, subject to riparian rights, dedicate a right-of-way for storm drainage purposes, conforming substantially with the lines of any natural water course or channel, stream or creek that traverses the subdivision or partitions, or, at the option of the land divider, provide, by dedication, further and sufficient easements or construction, or both to dispose of the surface and storm waters.**

Response: Significant wetlands are located on the site. Most are located in common open space tracts, where they will remain in their natural state and provide stormwater drainage and detention values. The remainder (approximately 3,100 square feet) will be on portions of private lots, and will be protected through CC&Rs.

39. **LAND FOR PUBLIC PURPOSES.**

    (1) The Planning Commission may require the reservation for public acquisition, at a cost not to exceed acreage values in the area prior to subdivision, or appropriate areas within the subdivision for a period not to exceed one year providing the City has an interest or has been advised of interest on the part of the State Highway Commission, school district or other public agency to acquire a portion of the area within the proposed subdivision for a public purpose, including substantial assurance that positive steps will be taken in the reasonable future for the acquisition.

    (2) The Planning Commission may require the dedication of suitable areas for the parks and playgrounds that will be required for the use of the population which is intended to occupy the subdivision.

Response: The applicant has placed approximately 20 percent of the PUD site in common open area for the benefit of both future PUD property owners and the community as a whole. Because of the environmentally sensitive nature of the wetland resource, it would be unadvisable to allow uncontrolled access or alteration of the areas, so further reservations or dedications are not beneficial.

40. **UNSUITABLE LAND. The Planning Commission may refuse to approve a subdivision or partition when the only practical use which can be made of the property proposed to be subdivided or partitioned is a use prohibited by this code or law, or if the property is deemed unhealthful or unfit for human habitation or occupancy by the County or State health authorities, or, if the property is deemed unhealthful or unfit for human habitation or occupancy by the county or state health authorities.**

Response: The proposed use in the R3 Zone is detached single-family residences. It is a use that is allowed outright. No development is proposed in the SA zone.

41. **LAND SUBJECT TO INUNDATION. If any portion of land proposed for development is subject to overflow, inundation or flood hazard by, or collection of, storm waters, an adequate system of storm drains, levees, dikes and pumping systems shall be provided.**

Response: The far western portion of the site is below elevation 12 feet msl, so is in an A0 Flood Hazard Zone. The portion of the site within the AO zone will be placed in an open space tract and remain undisturbed. All streets and lots will be above the Base Flood elevation. Stormwater runoff from streets will be collected through a series of catch basins and directed through a pipe system to a series of stormwater swales for treatment prior to discharge to adjacent wetlands. Onsite stormwater detention systems will be used on individual lots, and designed to City requirements. All lots are above the Base Flood level, so all homes will be constructed above the Base Flood level as required by City standards.

42. **PROPOSED NAME OF SUBDIVISION. No tentative subdivision plat or subdivision plan or subdivision shall be approved which bears a name approved by the County Surveyor or County Assessor, which is the same as similar to or pronounced the same as the name of any other subdivision in Tillamook County unless the land platted is contiguous to and platted by the same party that platted the subdivision bearing that name, or unless the party files and records the consent of the party that platted the contiguous subdivision bearing that name. All subdivision plats must continue the lot numbers and if used, the block numbers of the subdivision plat of the same name last filed.**

Response: The proposed name of the Subdivision is Lake Lytle Estates Units 4, 5, 6, and 7. There is no other subdivision of that name in Tillamook County.

43. IMPROVEMENT STANDARDS AND APPROVAL In addition to other requirements, all improvements shall conform to the requirements of this ordinance and any other improvement standards or specifications adopted by the City, and shall be installed in accordance with the following procedure:

…

44. IMPROVEMENT REQUIREMENTS. Improvements to be installed at the expense of the subdivider or applicant and at the time of subdivision or partition:

…

Response: These requirements will be met during development.

45. MONUMENTS.

...

46. SURVEY REQUIREMENTS.

…

Response: These requirements will be met at final plat.

IV. CONCLUSION

An 85-lot subdivision, to be developed in four phases on an 18.90-acre portion of a 31.15-acre tract of land east of Lake Lytle, is proposed. The site is in a unique location, being between Lake Lytle on the west, a significant natural feature of Rockaway Beach, and the Rockaway City Limits and Urban Growth Boundary on the east. The subdivision is a continuation of the existing Lake Lytle Estates development north of the site, and will extend the street system and services to undeveloped land to the south. The subdivision will cluster the detached single-family residences on the upland portion of the site, allowing preservation of land along a small creek containing significant wetlands forested with large spruce trees. The proposed development will provide a quality residential addition to the Lake Lytle Estates neighborhood in a manner that avoids adverse impacts to wetlands to the greatest extent practicable. Most remaining wetlands will be placed in common open space tracts, ensuring long-term natural resource protection. All City subdivision and development requirements are met, and the proposal can be approved.

APPENDIX A

XREF LIST
Ltscale: 100
Resolved
C703X001
C703X190
C703X230
C703X230H

TENTATIVE DEVELOPMENT PLANS FOR
LAKE LYTLE ESTATES UNITS 4, 5, 6 &7
ROCKAWAY BEACH, OREGON

APPLICANT

Name: TROY JOHNS
Address: 12432 NE 20TH STREET
VANCOUVER, WA 98684
Phone: (503) 904-9144
(360) 600-4425

LAND OWNER

Name: ROBERT SCHMELING (1/2) & TROY JOHNS (1/2)
Address: 1621 84TH COURT
VANCOUVER, WA 98664

CIVIL ENGINEER

Name: HLB OTAK, INC.
Contact: RICHARD STELZIG, P.E.
Address: 4253-A HWY 101 NORTH
GEARHART, OR 97138
Phone: (503) 738-3425
Fax: (503) 738-7455

WETLANDS CONSULTANT

Name: RORIK ENVIRONMENTAL SERVICES
Contact: NANCY RORIK, REGISTERED GEOLOGIST
Address: 37552 SE RACHAEL DRIVE
SANDY, OR 97055
Phone: (503) 668-8660

GOVERNING JURISDICTION

Name: CITY OF ROCKAWAY BEACH
Address: PO BOX 5
ROCKAWAY BEACH, OR 97136
Phone: (503) 355-2291
Fax: (503) 355-8221

PROJECT DATA

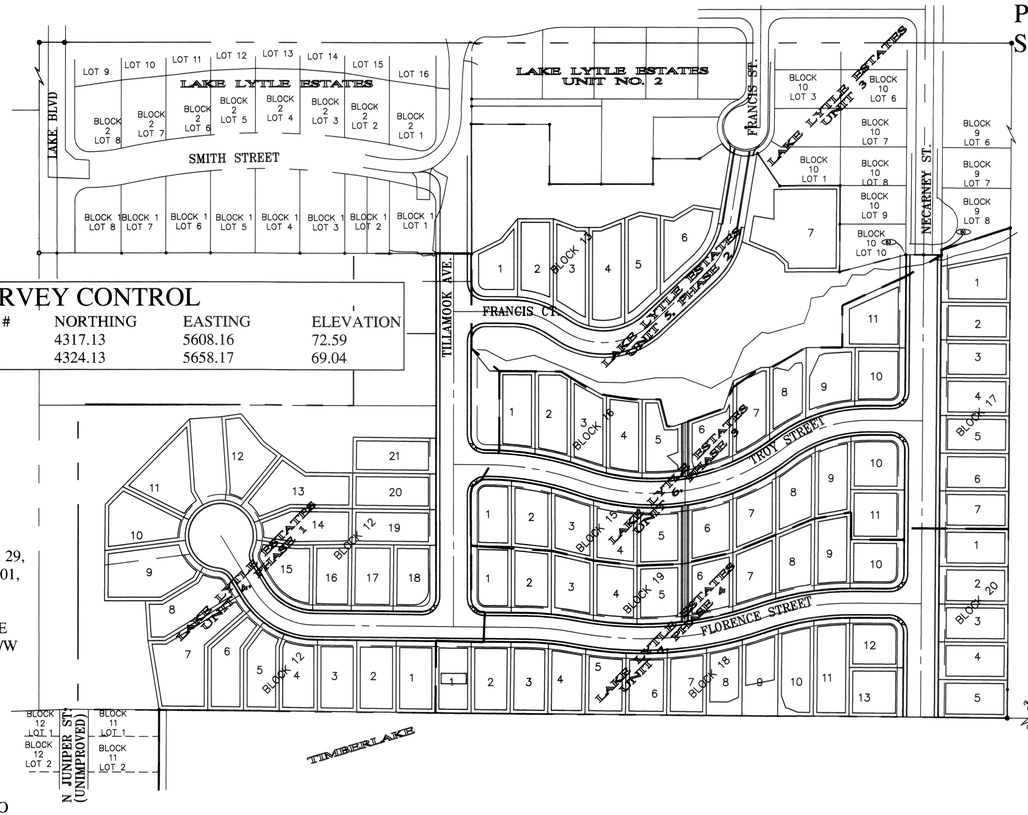
TAX MAP AND LOT: PORTION OF SW 1/4 SE 1/4 AND SE 1/4 SW 1/4, SEC. 29, T2N, R10W, WILLAMETTE MERIDIAN, TAX LOT 5201, MAP 2N 10 AND TAX LOT 4200, MAP 2N 10 29DC (TAX LOT 4200 IS A 39' STRIP OF LAND, 605' LONG LOCATED ON THE SOUTH SIDE OF BLOCK 1, LAKE LYTLE ESTATES, EXTENDING FROM THE WEST R/W LINE OF LAKE BLVD. TO THE EAST R/W LINE OF TILLAMOOK AVENUE)

LOT SIZE RANGE: 5,000 - 15,151 SF
TOTAL LOTS: 85
GROSS AREA: 18.90 acres
DENSITY: 4.50 lots per acre
CURRENT ZONING: R-3
ADJOINING ZONES: R-3 TO NORTH, R-R TO SOUTH, R-3 TO EAST, SA TO WEST

PROPOSED USE: SINGLE FAMILY RESIDENCE
PRESENT USE: VACANT
ACCESS: FRANCIS STREET, LAKE BLVD, TILLAMOOK AVE & NECARNEY ST.

DOMESTIC WATER: CITY OF ROCKAWAY BEACH
SEWAGE DISPOSAL: CITY OF ROCKAWAY BEACH
POWER: TILLAMOOK PEOPLE'S UTILITY DISTRICT
FIRE PROTECTION: CITY OF ROCKAWAY BEACH
GAS: N/A
CABLE TELEVISION: CHARTER COMMUNICATIONS
PHONE: EMBARQ

ALL LOTS ARE SUBJECT TO ALL EASEMENTS, RESTRICTIONS, AND RIGHTS-OF-WAY OF RECORD AND THOSE COMMON AND APPARENT ON THE LAND.
EACH LOT SHALL HAVE SEPARATE WATER, SEWER, AND UTILITY SERVICES.

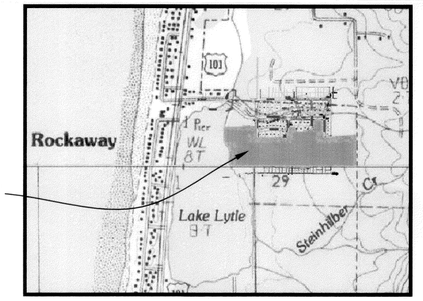


SURVEY CONTROL

PNT #	NORTHING	EASTING	ELEVATION
80	4317.13	5608.16	72.59
83	4324.13	5658.17	69.04

KEY MAP SCALE: 1"=100'

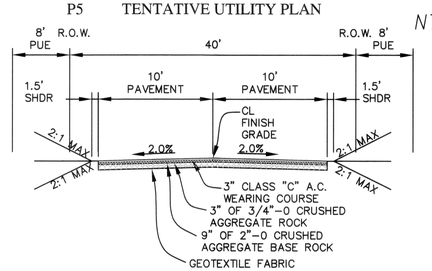
PROJECT SITE



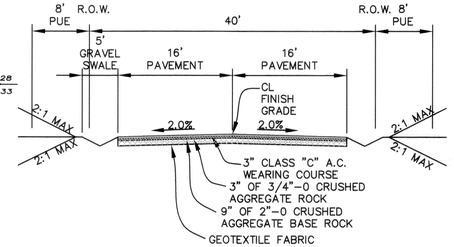
VICINITY MAP

SHEET INDEX

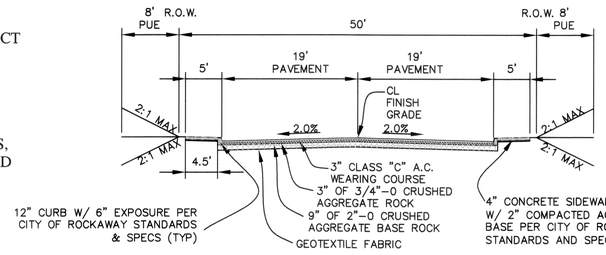
NTS



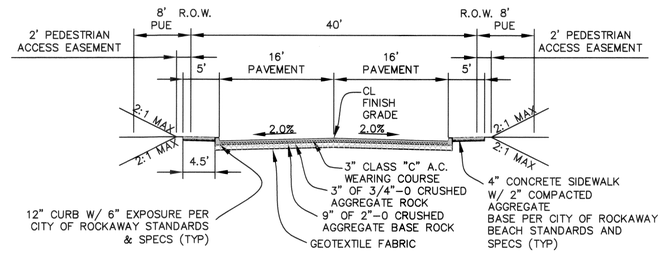
3B P3 NTS — 20' PUBLIC STREET — TYPICAL 40' ROW CROSS SECTION REDUCED FRANCIS CT.



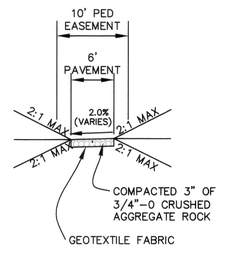
3A P3 NTS — 32' PUBLIC STREET — TYPICAL 40' ROW CROSS SECTION FRANCIS CT.



1 P3 NTS — 38' PUBLIC STREET — TYPICAL 50' ROW CROSS SECTION TILLAMOOK AVE NECARNEY ST.



2 P3 NTS — 32' PUBLIC STREET — TYPICAL 40' ROW CROSS SECTION FLORENCE STREET TROY STREET



4 P3 NTS — PEDESTRIAN TRAIL

NO.	DATE	BY	REVISION COMMENTS
1	0929	RCS	LOT LAYOUT POINT INFO
2	0410	RCS	LOT LAYOUT FRANCIS CT

Design CJH Drawn CJH Checked RGL Initial issue Date: MARCH 31, 2009

REGISTERED PROFESSIONAL ENGINEER 60141PE OREGON RICHARD C. STELZIG

RENEWAL DATE: JUNE 30, 2010

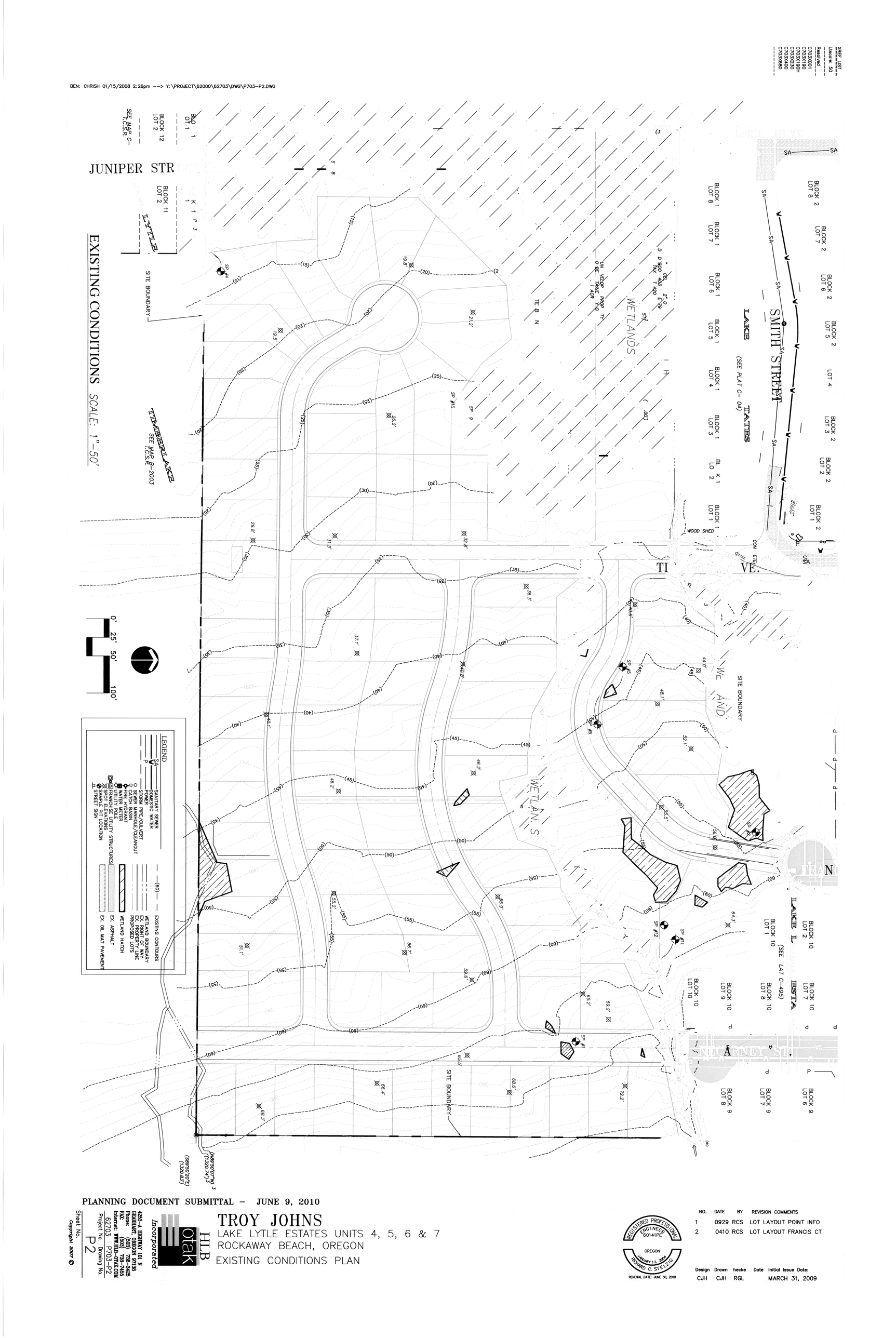
PLANNING DOCUMENT SUBMITTAL - JUNE 9, 2010

TROY JOHNS
LAKE LYTLE ESTATES UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OREGON
COVER PLAN

HLB otak Incorporated
4253-A HWY 101 NORTH
SEASIDE, OREGON 97138
Phone: (503) 738-3425
FAX: (503) 738-7455
Internet: WWW.HLB-OTAK.COM

62703 P703-P1
Project No. Drawing No.
P1
Sheet No.

BEN: CHRISH 06/09/2007 4:31pm ---> Y:\PROJECT\62000\62703\DWG\P703-P1.DWG



PLANNING DOCUMENT SUBMITTAL – JUNE 9, 2010

HLB otak Incorporated
4635-A HIGHWAY 101 N
CLEARWATER, OREGON 97138
PHONE: (503) 708-7455
FAX: (503) 708-7465
Internet: WWW.HLB-OTAK.COM

TROY JOHNS

LAKE LYTLE ESTATES UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OREGON
EXISTING CONDITIONS PLAN

Project No. 62703 P703-P2
Sheet No. P2

REGISTERED PROFESSIONAL ENGINEER 60141PE OREGON JANUARY 13, 2004 RICHARD C. STEELE RENEWAL DATE: JUNE 30, 2010

NO.	DATE	BY	REVISION COMMENTS
1	0929	RCS	LOT LAYOUT POINT INFO
2	0410	RCS	LOT LAYOUT FRANCIS CT

Design	Drawn	hecke	Date	Initial Issue Date:
CJH	CJH	RGL		MARCH 31, 2009

XREF LIST
Ltscale: 50

Resolved
C703X001
C703X190
C703X230
C703X600
C703X950
C703X230H

TENTATIVE SITE PLAN *SCALE: 1"=50'*

0' 25' 50' 100'

LEGEND
- LOT LINES
- RIGHT OF WAY LINES
- CENTER LINES
- EASEMENT LINES
- CURB
- PHASE LINE
- SEWER MANHOLE/CLEANOUT
- STORM MANHOLE
- CATCH BASIN
- FIRE HYDRANT
- STREET LIGHT

SITE NOTE
SIDEWALKS INDICATED ON THIS PLAN WILL BE BONDED. ONLY ADA RAMPS WILL BE INSTALLED PRIOR TO PLATTING. SIDEWALKS WILL BE CONSTRUCTED AT THE TIME OF DWELLING CONSTRUCTION BY THE INDEPENDENT BUILDERS.

A FOOTBRIDGE WILL BE CONSTRUCTED OVER THE WETLAND AREA NORTH OF TROY STREET AS INDICATED.

NO.	DATE	BY	REVISION COMMENTS
1	0929	RCS	LOT LAYOUT POINT INFO
2	0410	RCS	LOT LAYOUT FRANCIS CT

Design CJH Drawn CJH hecke RGL Date Initial issue Date: MARCH 31, 2009

REGISTERED PROFESSIONAL ENGINEER OREGON JANUARY 13, 1978 RICHARD G. STELZI 60141PE
RENEWAL DATE: JUNE 30, 2010

PLANNING DOCUMENT SUBMITTAL – JUNE 9, 2010

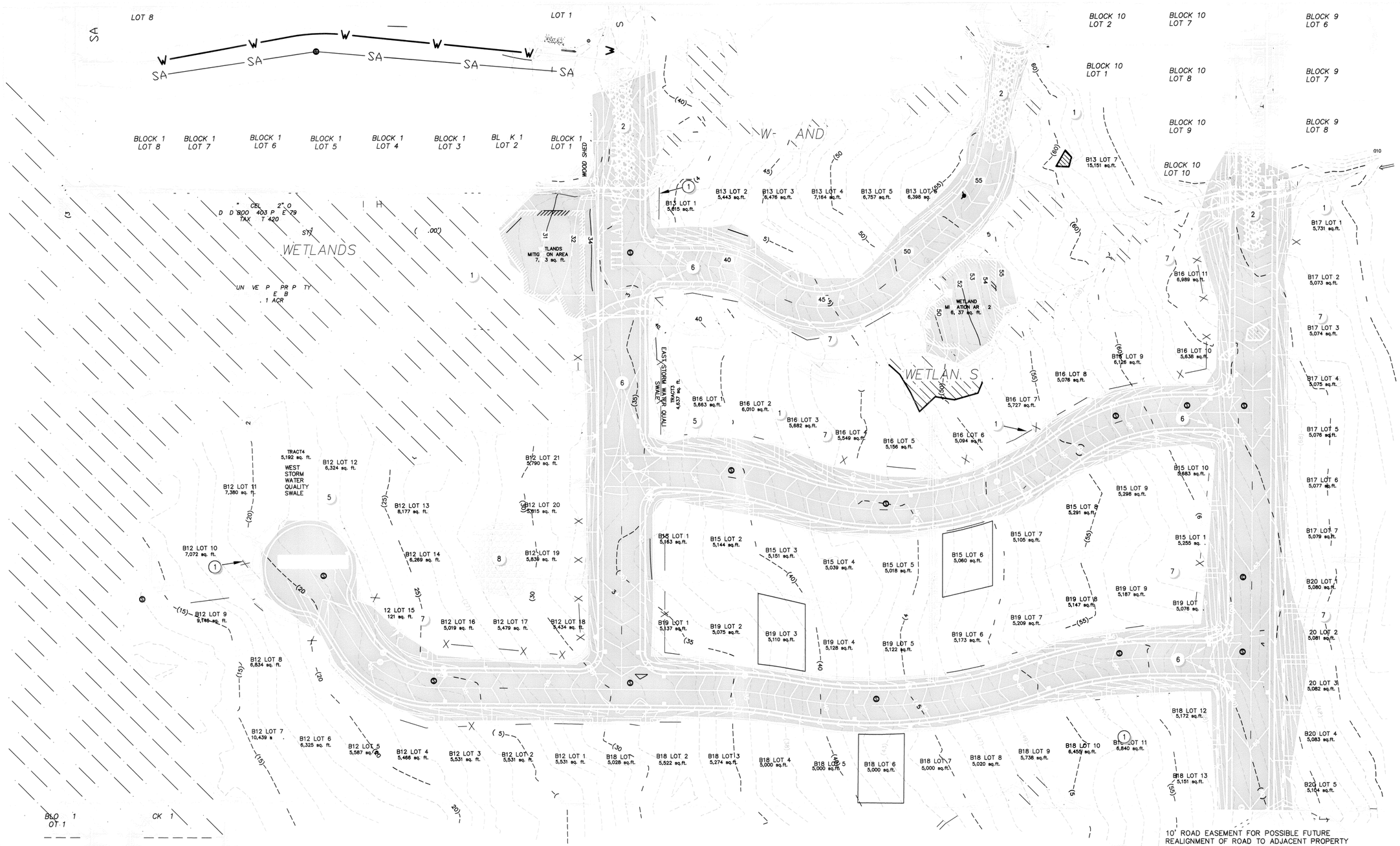
TROY JOHNS
LAKE LYTLE ESTATES UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OREGON
TENTATIVE SITE PLAN / PHASING PLAN

HLB otak Incorporated
4253-A HWY 101 NORTH
SEASIDE, OREGON 97138
Phone: (503) 738-3425
FAX: (503) 738-7455
Internet: WWW.HLB-OTAK.COM

62703 P703-P3
Project No. Drawing No.
P3
Sheet No.

BEN: CHRISH 01/15/2008 3:00pm --> I:\PROJECT\62000\62703\DWG\P703-P3.DWG

XREF LIST
Ltscale: 80
Resolved
C703X001
C703X190
C703X230
C703X400
C703X430
C703X460
C703X600
C703X680



CONSTRUCTION NOTES

1. INSTALL SEDIMENT FENCE (TYP), SEE DETAIL 1 SHEET EC3
2. INSTALL CONSTRUCTION ENTRANCE, SEE DETAIL 2 SHEET EC3
4. CONSTRUCT CONCRETE CHUTE CLEANING AREA, APPROX. SIZE 4 FT. X 4 FT. AND 1.5 FT. DEEP.
5. ROCK ENERGY DISSIPATER, SEE DETAIL 4 SHEET EC3
6. INSTALL CATCH BASIN INSERT BAG IN AREA DRAIN INLET, SEE DETAIL 3 SHEET EC3
7. COMPOST BLANKET AND HYDROSEED CUT/ FILL SLOPES, SEE DETAIL 5 SHEET EC3
8. SOIL STOCKPILE AREA, SEE DETAIL 6 SHEET EC3

NOTE

1. CONTRACTOR MUST ENSURE THAT VEGETATION IS NOT DISTURBED OUTSIDE OF GRADING LIMITS.

2. CONCRETE WASHOUT SHOULD NOT BE ALLOWED TO OVERFLOW, IF ADDITIONAL WASHOUT AREA IS REQUIRED THE LOCATION MUST BE APPROVED BY ENGINEER.

NO.	DATE	BY	REVISION COMMENTS
1	0929	RCS	LOT LAYOUT POINT INFO
2	0410	RCS	LOT LAYOUT FRANCIS CT

Design RCS Drawn RCS hecke RCS Date Initial Issue Date: MARCH 31, 2009

REGISTERED PROFESSIONAL ENGINEER 60141PE OREGON JANUARY 13, 2006 RICHARD C. SISTRUNK
PRELIMINARY
RENEWAL DATE: JUNE 30, 2010

PLANNING DOCUMENT SUBMITTAL - JUNE 9, 2010

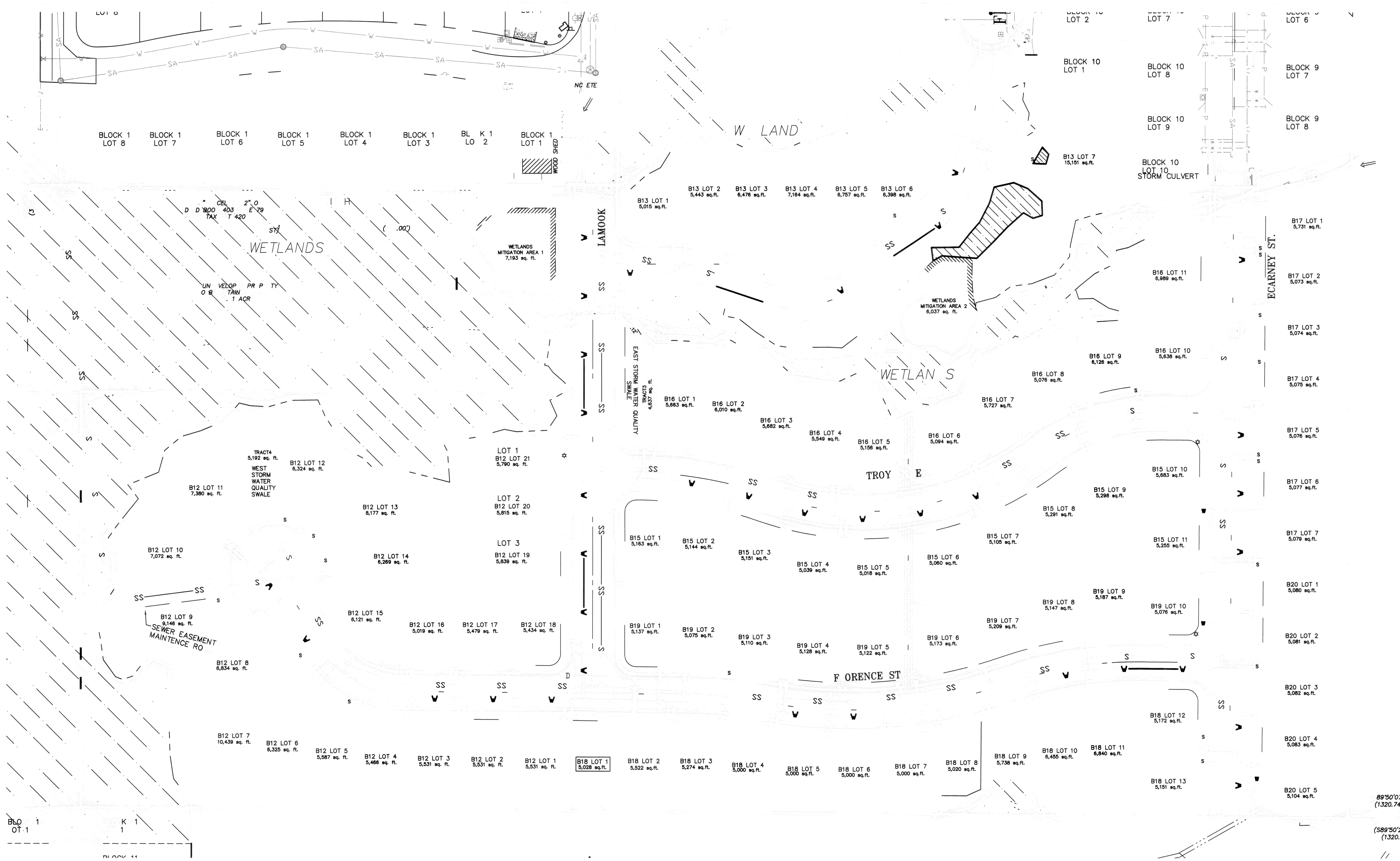
TROY JOHNS
LAKE LYTLE ESTATES UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OREGON
TENTATIVE GRADING & EROSION PLAN

HLB otak Incorporated
4253-A HWY 101 NORTH
SEASIDE, OREGON 97138
Phone: (503) 738-3425
FAX: (503) 738-7455
Internet: WWW.HLB-OTAK.COM

62703 P703-P4
Project No. Drawing No.
P4
Sheet No.

BEN: CHRISH 08/09/2007 4:32pm ---> Y:\PROJECT\62000\62703\DWG\P703-P4.DWG

XREF LIST
Ltscale: 50
Resolved
C703X001
C703X190
C703X230
C703X600
C703X680



LEGEND

EXISTING	PROPOSED
SA — SANITARY SEWER	SS — SANITARY SEWER
W — DOMESTIC WATER	W — DOMESTIC WATER
P — POWER	SD — STORM PIPE
STORM PIPE/CULVERT	STORM MANHOLE
SEWER MANHOLE/CLEANOUT	CATCH BASIN
CATCH BASIN	SEWER MANHOLE
FIRE HYDRANT	SEWER CLEANOUT
WATER METER	FIRE HYDRANT
UTILITY POLE	THRUST BLOCK
FRANCHISE UTILITY STRUCTURES	WATER METER
	STREET LIGHT

TENTATIVE UTILITY PLAN

SCALE: 1"=50'

0' 25' 50' 100'

NO.	DATE	BY	REVISION COMMENTS
1	0929	RCS	LOT LAYOUT POINT INFO
2	0410	RCS	LOT LAYOUT FRANCIS CT

Design CJH · Drawn CJH · Check RQL · Date Initial Issue Date: MARCH 31, 2009

REGISTERED PROFESSIONAL ENGINEER 60141PE OREGON JANUARY 13, 2000 RICHARD C. STEIN
RENEWAL DATE: JUNE 30, 2010

PLANNING DOCUMENT SUBMITTAL - JUNE 9, 2010

TROY JOHNS
LAKE LYTLE ESTATES UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OREGON
TENTATIVE UTILITY PLAN

HLB otak Incorporated
4253-A HWY 101 NORTH
SEASIDE, OREGON 97138
Phone: (503) 738-3425
FAX: (503) 738-7455
Internet: WWW.HLB-OTAK.COM

62703 P703-P5
Project No. Drawing No.

P5
Sheet No.

BEN: CHRISH 08/09/2007 4:28pm ---> Y:\PROJECT\62000\62703\DWG\P703-P5.DWG

APPENDIX B

Legal Description
for
Troy Johns
of Adjusted Parcel 1

September 5, 2008

A tract of land located in the southeast one-quarter of Section 29, Township 2 North, Range 10 West, W.M., County of Tillamook, State of Oregon, further described as follows:

Commencing at the southwest corner of LAKE LYTLE ESTATES, (Map C-404), Tillamook County Plat Records;

thence N90°00'00"E along the south line of said plat 440.00 feet to the **Point of Beginning**;

thence continuing N90°00'00"E along the south line of said plat 165.00 feet;

thence N00°06'03"W along the east line of said plat 180.93 feet;

thence the following courses and distances along the south line of LAKE LYTLE ESTATES UNIT NO. 3, (Map C-495) Tillamook County Plat Records:

thence N90°00'00"E, 109.22 feet;

thence S00°19'44"W, 83.53 feet;

thence N90°00'00"E, 145.00 feet;

thence N00°19'44"E, 35.49 feet;

thence S90°00'00"E, 64.73 feet;

thence N56°17'45"E, 38.24 feet;

thence along a 40.00 foot radius curve to the right, through a central angle of 80°38'33" (the chord of which bears S74°15'38"E, 51.77 feet) an arc distance of 56.30 feet;

thence S34°15'31"E, 54.79 feet;

thence N90°00'00"E, 84.72 feet;

thence S00°19'44"W, 120.62 feet;

thence N75°29'44"E, 95.86 feet;

thence S89°40'16"E, 50.00 feet;

thence N00°19'44"E, 7.24 feet;

thence N72°02'57"E, 100.97 feet;

thence leaving the south line of LAKE LYTLE ESTATES UNIT NO. 3 S00°18'17"W, 686.13 feet to the south line of Section 29, Township 2 North, Range 10 West, W.M.;

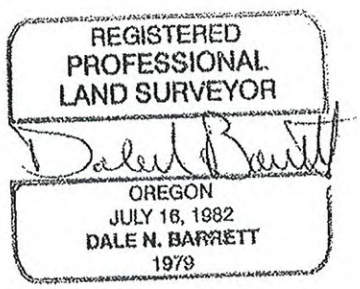
thence N89°31'17"W along said section line 1,300.16 feet;

thence N00°00'00"W, 429.03 feet;

thence N90°00'00"E, 385.00 feet;

thence N00°00'00"W, 210.00 feet to the **Point of Beginning**;

Containing +/- 18.9 acres.



RENEWAL DATE: DEC. 31, 09

APPENDIX C

AFTER RECORDING
RETURN TO:

Name of attorney
Attorney at Law
address
Vancouver, WA 98660

LAKE LYTLE ESTATES SUBDIVISION, UNITS 4, 5, 6 & 7
DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS is made this ____ day of January, 2007, by LAKE LYTLE ESTATES, LLC, an Oregon Limited Liability Company ("Declarant").

I. PURPOSE

1.1 Property: Declarant is the owner of real property legally described as Block 12 Lots 1-21, Block 13, Lots 1–12, Block 14, Lots 1-5, Block 15, Lots 1-10. Block 16, Lots 1-11, Block 17, Lots 1-11, Block 18, Lots 1-7, Block 19, Lots 1-8, Block 20, Lots 1-2, LAKE LYTLE ESTATES Subdivision, as platted and recorded in Plat Cabinet _____ of Plat Records, in Tillamook County, Oregon. The entire property described herein is the "Property."

1.2 Development Plan: Declarant desires to create a general plan of development of the Property for the mutual benefit of all future owners. The plan, in general, will provide for the development of the Property in separate building parcels to be used for single family residences. In addition, no more than a duplex building shall be allowed on any one lot within LAKE LYTLE

ESTATES, with the exception that no more than one single family residence shall be allowed on any lot within the first phase of 21 lots.

1.3 Declaration: NOW, THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, and conveyed subject to the following covenants, conditions, restrictions, and easements, which shall run with the Property and shall be binding upon all parties having or acquiring any right, title or interest in the Property or any part thereof, shall be part of all transfers and conveyances of the Property, or any portion thereof within such platted areas as if set forth in full in such transfers and conveyances, and shall inure to the benefit of each owner thereof.

II. DEFINITIONS

2.1 Owner: Owner shall mean and refer to the record owner, whether one or more persons or entities of a fee simple title to any parcel which is part of the Property, including contract purchasers, but excluding those having such interest merely as a security for the performance of an obligation; and shall mean and refer to Declarant for all land not yet sold.

2.2 Lot/Parcel: Lot or parcel shall mean any portion or combination of all properties utilized as a separate building site, and designated by Tillamook County or the City of Rockaway Beach as a separate building site for building permit purposes.

2.3 Association: Association shall mean and refer to the LAKE LYTLE ESTATES Homeowners Association, a nonprofit corporation, its successors and assigns.

2.4 Common Property or Common Area: Common Property or Common Area shall mean all real property (including the improvements thereto), owned by the Association, wetlands located in separate tracts, and facilities existing within easements where the Association is grantee, and facilities existing within private roadway easements, for the common use and enjoyment of the Owners and all wetland areas. The common area to be owned by the Association is described as follows:

The common areas as designated on the recorded Plat or Plats of the LAKE LYTLE ESTATES Subdivision, including but not limited to open space, wetland tracts, landscaping, private roadways, and any other facility or improvement located or to be located within the common area.

"Common Property" or "Common Area" shall also mean and include any "common property" or "common area" included within contiguous properties annexed to this Declaration by Declarant by executing and recording an affidavit with the Tillamook County Clerk.

III. DEVELOPMENT AND USE RESTRICTIONS

3.1 Enjoyment of Property: The Owners shall use their respective properties to their own enjoyment in such a manner so as not to offend or detract from other Owners' enjoyment of their own respective properties. All Owners shall use their property solely and exclusively for private one family residences, not to exceed one (1) duplex building per lot(except that Phase I consisting of 21 lots shall not exceed one single family dwelling per lot) which may include appurtenant or non appurtenant garages, No parcel shall be further subdivided without Declarant's prior written approval. Thereafter, no parcel shall be further subdivided without prior approval conferred by the Association. The maintenance, upkeep and repair of parcels, other than wetland areas lying within owners lots, shall be the sole responsibility of the individual owners, and in no way shall it be the responsibility of the Association. Owners shall maintain their parcels and any and all appurtenances in good order, condition and repair, and in a clean, sightly and sanitary condition at all times. Without limitation of the foregoing, each owner shall be obligated to maintain the landscaping on his parcel in a healthy and attractive state.

The owners of the parcels shall obtain approval from the Architectural Control Committee, as set forth elsewhere in the Declaration, for the construction of any residence. All Owners shall comply with all the terms and conditions of the final LAKE LYTLE ESTATES Plat approved by the City of Rockaway Beach and/or Tillamook County, Oregon. The terms and conditions of said Plat approval is incorporated by reference herein as though fully set forth.

3.2 Temporary Dwelling: No structure of a temporary character, mobile home or trailer, tent, shack, garage, barn or other outbuildings shall be used as a residence.

3.3 Building Location and Views: No structure shall be located on any Parcel with respect to set-back from front, side and rear property lines, except in conformity with the planning regulations and requirements of the municipal government having jurisdiction within the area in which this Property is located. A reasonable effort shall be made to retain the existing view for each Parcel.

3.4 Dwelling: No more than one duplex building and/or single family residence shall be allowed on any parcel.

3.5 Derogation of Law: No owner shall carry on any activity of any nature whatsoever on his property that is in derogation of in violation of the laws and statutes of the State of Oregon, Tillamook County, the City of Rockaway Beach or other applicable government body.

3.6 Easement: Easements for the installation and maintenance of utilities are reserved as shown on the recorded survey or subdivision plat.

3.7 Fences, Hedges and Trees: All fences, hedges or trees situated anywhere upon a parcel, the properties or the common area must be approved in writing by the ACC as to its height, design, and consistency with the landscape plan and stormwater plans for the Plat, prior to construction. No portion of any wetland, landscaping or stormwater facilities, including buffers or swales, shall be altered or adversely affected by the Owner or Owner's agents.

No trees measuring a minimum six (6) inches in diameter at breast height shall be removed from outside the building envelope on any parcel unless necessary for construction, access or utilities, or from within such building envelope on any parcel unless necessary for construction, access, utilities or the creation of a reasonable yard. Furthermore, no trees shall be removed from the Common Areas without permission from the ACC. The ACC shall have the right to replace any tree or trees removed without authorization and replacement costs shall be borne by the person or persons removing such tree or trees.

3.8 Maintenance: Nuisance: No Parcel shall be used or maintained as a dumping ground for discarded equipment, vehicles, rubbish, trash, garbage or similar material. Each Parcel shall be kept clean of refuse and in a sanitary condition. Each Parcel shall be kept free of all noxious weeds and grass is to be mowed or regularly hayed to prevent fire hazards. No noxious or offensive activity shall be carried on or upon any Parcel nor shall anything be done thereon which may be or become a nuisance or annoyance to the neighborhood.

3.9 Landscape Requirements: Parcels shall be adequately landscaped to maintain a neat and consistent appearance with the remaining Parcels. A landscaping plan shall be submitted with the plans and specifications required under Paragraph 4.2 herein. All front yard landscapes shall be completed prior to occupancy, weather permitting.

3.10 Pets: No animals, livestock, or poultry of any kind, other than household pets shall be kept or maintained on any part of any Parcel. Dogs and cats may be kept on a Parcel, provided that they are not kept, bred, or maintained for any commercial use or purpose.

3.11 Parking: No person shall park a motor vehicle, boat, trailer, aircraft, or other vehicles on streets or alleyways of the Property except that Owner's visitors and guests may park in said streets for short term visitation.

3.12 Signs: No signs of any kind, except public notice by a political division of the State or as required by law, shall be erected, posted, or displayed on any Parcel whatsoever; provided, however, that any builder may erect and display signs during the period he/she is building and selling property in and that any Owner wishing to sell his home may place one sign not larger than four hundred (400) square inches advertising the Parcel for rent or sale.

3.13 Storage: No person shall store, repair or restore any motor vehicle, boat, trailer, aircraft, or other vehicle upon any Parcel or streets except for such emergency repairs necessary to enable the movement thereof.

3.14 Satellite Dishes: Satellite dishes or other similar devices shall be no larger than 18" in diameter and shall be located in a manner that does not adversely impact the view of adjoining lots, or adversely impact the character of the neighborhood, or which can be seen from the street. The location of the satellite dishes shall be approved by the ACC prior to installation.

3.15 Inoperable Automobiles: Inoperable cars or other unsightly vehicles shall not be stored on any parcel in view of the roads or the homes of other parcel owners.

3.16 Trash and Trash Containers: All garbage or trash containers must be stored within a permanent structure where they are not visible from outside the premises. No trash, garbage, ashes, yard rakings or other materials resulting from landscaping activity, or other refuse, shall be thrown, dumped, or allowed to accumulate on any parcel, building site, street, alley, driveway or Common Area. All such materials placed in open view for collection shall be removed within 24 hours of such placement.

3.17 Unoccupied Parcels: Owners of unoccupied parcels shall maintain the same in an orderly fashion including maintaining grass and trees in a condition equal to that which existed at the time of parcel purchase. In the event a condition exists inconsistent with this or any other restriction herein, any person entitled to hereunder may use the legal powers as set forth in this Declaration to correct said inconsistent condition.

3.18 Automobile Storage Areas: Each residence shall have an enclosed garage providing sufficient storage space for at least one automobile. No automobile garage shall be permanently enclosed or converted to other use without the substitution of another automobile garage. Garage doors shall be kept closed at all times practicable so as to maintain the sightliness of the subdivision as a whole.

3.19 Building Type and Completion: When construction on any unit has begun, it must be pursued to completion with diligence and finished within twelve (12) months from the issuance of the building permit. This term may be waived and extended for a reasonable time by the Board or the ACC. No building shall be erected, placed or permitted to remain on any parcel other

than either one duplex unit or one single-family dwelling containing not less than 1400 finished square feet of livable enclosed floor area for a single story dwelling, and not less than 1500 square feet of livable enclosed floor area for a two story dwelling (exclusive of open or screen porches, basements, terraces, patios or garages).

3.20 Roofing Material: All roofs shall be guaranteed to last for 40 years.

3.21 Driveway Construction: All driveways shall be constructed with concrete from the edge of the paved street to the edge of the garage floor. Any variation in design or material must be submitted to and approved the ACC, which must review and approve all driveway designs.

3.22 Architectural Design: All homes shall be designed to reflect a quality similar to the quality of homes pictured in the attached Exhibit "A." Cedar shingle and/or cedar lap siding or painted hardi plank or equivalent siding and or brick/stone are the preferred siding materials for home construction within the Plat. Said materials shall be used unless a substitute material is reviewed and approved by the ACC.

3.23 Enforcement: The failure on the part of the Declarant or any Owner affected by these restrictions, at any time, to enforce any of the provisions hereof shall in no event be deemed a waiver thereof, or of any existing violation thereof, nor shall the invalidation of any of said reservations, conditions, agreements, covenants and restrictions by judgment of court order affect any of the other provisions hereof, which shall remain in full force and effect. Should any suit or action be instituted by any of said parties to enforce any of said reservations, conditions, agreements, covenants, and restrictions, or to restrain the violation of any thereof, after demand for compliance therewith or for the cessation of such violation and failure to comply with such demand, then and in either of said events and whether such suit or action be reduced to decree or not, the party instituting such suit or action shall be entitled to recover from the defendants therein such sum as the court may adjudge reasonable attorney's fees in such suit or action, in addition to statutory costs and disbursements.

IV. DESIGN AND ARCHITECTURAL CONTROL

4.1 Design Review and Architectural Control Committee

4.1.1 The Association shall have an Architectural Control Committee (ACC) composed of the Declarant.

4.1.2 The Declarant shall act as the whole ACC until such time as the Declarant no longer owns any property in the Plat or until it elects to terminate its authority under Section 5.2. At the termination of the Declarant's interest, it shall appoint all of the original members of the ACC, which shall be three (3).

4.2 Power of the Architectural Control Committee: The ACC shall have the following powers:

4.2.1 To review and approve, disapprove or conditionally approve all plans, submittals, applications and requests made or tendered to it by Owners, or their agents, pursuant to its rules and regulations. In connection therewith, the ACC shall investigate and consider the architecture, design, layout, landscaping, energy conservation measures, view protection or enhancement measures, water conservation measures, fence detail, relationship of dwelling to adjacent dwellings and existing trees, and all other features of the proposed improvement for consistency with the requirements and guidelines of the CC&Rs and the final plat.

4.2.2 To adopt rules and regulations for the transactions of business, scheduling of meetings, conduct of meetings and related matters.

4.2.3 To require the submission of site plans, diagrams, photographs, materials or other presentation material as may be necessary for complete review and consideration of the proposed development. All such plans and specifications shall be submitted in writing in duplicate and each shall be signed by the Owner of the parcel or his or her authorized agent.

4.2.4 To adopt criteria, consistent with the purpose and intent of this Declaration to be used in making its determination to approve, disapprove, or conditionally approve any matter submitted to it for decision.

4.2.5 To adopt a schedule of reasonable fees for processing submittals and to establish the time and manner in which such shall be paid.

4.3 Duties of the ACC: The ACC shall:

4.3.1 Render a decision on each matter submitted to it, in writing, within thirty (30) days of receipt of all data required by its rules and regulations.

4.3.2 Publish and make available to Owners and prospective Owners all of its rules, regulations, and criteria from time to time adopted.

4.3.3 As conditions precedent to approval of any matter submitted to it, the ACC shall find:

4.3.3.1 The approval of the plan is consistent with these CC&Rs.

4.3.3.2 General architectural consideration including site layout, relationship of site to natural features, and adjacent home, open space and topography, orientation and locations of buildings, vehicular access, circulation and parking, setbacks, height, walls, fences, view protection and enhancement, and similar elements have been designed to provide a desirable environment for the development.

4.3.3.3 General site considerations including site layout, relationship of site to trees and other natural features, open space and topography, orientation and locations of buildings, vehicular access, and driveway lighting, circulation and parking, setbacks, height, walls, fences, and similar elements have been designed to provide a desirable environment for the development.

4.3.3.4 General landscape consideration, including the location, type, size, color, texture, and coverage of plant materials, maintenance and protection of existing landscaped areas and similar elements have been considered to ensure visual relief, to complement buildings and structures, and to provide an attractive environment for the enjoyment of the Owners in general and the enhancement of the property values in LAKE LYTLE ESTATES Plat or any future annexations.

4.3.4 If the ACC makes a negative finding on one or more of the matters set forth in paragraph 4.3.3 above, as applicable to the matter before it, it shall disapprove such matter, or condition its approval so as to allow such findings to be made.

4.5 Waiver of Liability of Declarant: Neither Declarant nor its successors or assigns shall be liable in damages to anyone submitting plans to them for approval, or to any Parcel Owner, lessee or occupant of land affected by this Declaration by reason of mistake in judgment, negligence, or nonfeasance arising out of or in connection with the approval or disapproval of failure to approve, deny or review such plans. Every person who submits plans to Declarant for approval agrees, by submission of such plans, and every Owner, lessee or occupant of any of said Parcels agree, by acquiring title thereto or interest therein, that he or she will not bring any action or suite against Declarant to recover any such damages. Declarant's review and approval or disapproval of plans and specifications shall be for all Owners' benefit, and shall not be relied upon by the applicant in any way as an indication of sufficiency, structural soundness or in any other way, such review having been made solely to assure Declarant that the improvements contemplated would be aesthetically compatible with the general plan of the Property.

V. OWNERS COMMITTEE

5.1 Declarant Control: Declarant shall exclusively exercise all architectural, landscaping, maintenance controls, and all authority vested in the Association by the covenants, so long as Declarant holds title to any Parcels of Property, or until Declarant elects to terminate its interest in the Property as set forth in Section 5.2 below, whichever occurs first.

5.2 Declarant Controls Termination: Declarant reserves the right to terminate its interest or authority in the Plat at any time. At such time the Declarant's interest in the Property is terminated, whether voluntarily or involuntarily, Declarant shall cause to be recorded in the records of Tillamook County, Oregon a document stating that Declarant no longer holds any interest or does not desire to exercise any further control over development of the Property. Copies of such document shall be provided to each Parcel Owner contemporaneously with recording of such document. Recordation of such document shall formally terminate Declarant's interest in the Property, and all right of architectural, landscaping and maintenance controls, as well as any other duties of Declarant under this Declaration.

5.3 Election Board: Within thirty (30) days after formal termination of Declarant's interest in the Plat the initial Board government committee (the "Committee") shall be elected. Persons eligible for the initial committee shall be limited to Owners of any parcel within the Property. Declarant shall solicit from, and then circulate to all Parcel Owners, a list of nominees for the initial committee's positions within the thirty (30) day organizational period. Declarant shall then conduct an election of the initial committee. The three (3) nominees obtaining the highest vote totals shall constitute the initial committee.

5.4 Voting Rights: Each Parcel Owner shall have the right to cast one (1) vote per each Parcel of property owned in the Property for each committee's position. The initial committee shall meet within ten (10) days after their election, and may at that time adopt any governing documents relating to the Committee and the Plat. The membership held by an Owner may not be transferred, pledged or alienated in any way except upon sale to a purchaser of a Parcel, at which time such membership and voting rights shall automatically be deemed assigned to the purchaser of such Parcel.

5.5 No Further Responsibility: In the event Declarant is unsuccessful in organizing the committee within the thirty (30) day organizational period, Declarant shall have no further responsibilities relating to the Committee, and the Committee shall be organized exclusively

by the Owners of Parcels within the Property. Such failure of organization of the Committee shall not affect the effectiveness of this Declaration.

5.6 Annexation: Additional contiguous residential property and Common Area may become part of the LAKE LYTLE ESTATES Subdivision Plat. Declarant shall have this right regardless of whether Declarant shall have terminated his interest in the Owners Committee or the ACC, and regardless of whether Declarant owns a lot. Owners of lots in future phases of LAKE LYTLE ESTATES shall have the same rights to utilize Common Areas as do current lot Owners.

5.7 Effect of Nonpayment of Annual or Special Assessments: Remedies of the Association: Any assessment not paid within thirty (30) days after the due date shall bear interest from the due date at twelve percent (12%) per annum or the maximum rate allowed under Washington law, whichever shall be greater. The Association may bring an action at law against the Owner/Member personally obligated to pay the same, or foreclose the lien in any manner or by any means available under the laws of the State of Oregon. Costs and reasonable attorney's fees or any such action shall be added to the total amount of such assessments. No Owner may waive or otherwise escape liability for assessments provided for herein by nonuse of the Common Area or by abandonment of his or her parcel.

5.8 Exempt Property: The following property subject to this Declaration shall be exempt from assessments created herein:

5.8.1 All properties and parcels owned by the Declarant, except any parcel occupied and developed by Declarant as a homestead.

5.8.2 All properties dedicated to and accepted by a local public authority.

5.8.3 All Common Area and properties.

VI. COVENANT FOR ANNUAL AND SPECIAL ASSESSMENTS

6.1 Creation of Lien and Personal Obligation of Assessments: The Declarant for each parcel owned within the Properties hereby covenants and each Owner of any parcel is deemed to covenant, and agrees to pay to the Association: Annual maintenance and operation assessments and special assessments for emergency and capital improvements, such assessments to be established by the Declarant or if it has no further interests in the Property of the Plat, then by the Committee. The annual and special assessments together with interest, costs, and reasonable attorney's fees shall be a personal obligation of the person who was the Owner of such property at the time the assessment fell due. Delinquent assessments together with interest, costs, and reasonable attorney's fees shall be a lien upon the parcel if the Association files a claim of lien with the Tillamook County Recording Office. The priority of such lien shall be based on the date the claim of lien is filed.

6.2 Purpose of Assessments: The assessment levied by the Association shall be used exclusively to promote the recreation, health, safety and welfare of the residents in the properties and for the capital improvements and/or maintenance of the Common Area, facilities, improvements and private roads, depending upon the stated purpose for which said assessment is levied, and to support the operations of the Association.

6.3 Annual Assessments: Procedure and Maximum: The Association shall have the power and authority to levy annual operating and maintenance assessments on its members. Prior to the commencement of each fiscal year, the Declarant or the committee shall estimate the costs and expenses to be incurred by the Association during each fiscal year in performing its function under this Declaration (including a reasonable provision for contingencies). A budget for such fiscal year shall be prepared and distributed not less than thirty (30) days before the beginning of such year. The budget shall also show the anticipated balance (exclusive of any reserves) in the operating fund at the start of such fiscal year which is attributable to operation and maintenance assessments for the prior fiscal year which shall be subtracted from the gross operation expenses shown. The net estimated operating revenue so determined shall be assessed to the Owners as the regular operation and maintenance assessment by dividing the total net estimated operation revenue by the total number of parcels in the properties to which the respective assessments apply, and assessing the resulting amount to the Owner of each parcel.

6.4 Special Assessment for Capital Improvements: In addition to the annual assessment authorized above, the Association may levy in any year a special assessment applicable to that year only for the purpose of defraying, in whole or in part, the costs of any construction, reconstruction, repair or replacement of a capital improvement upon the Common Area or facilities, including fixtures and personal property related thereto, when such improvements are deemed necessary by the Committee. Prior to Assessment, the Declarant or Committee shall solicit no less than three competitive bids from reputable suppliers or contractors, and use its best judgment in the selection thereof. In the case of alley maintenance, should they be necessary, only those Owners who own lots adjacent to those alleys may be assessed.

6.5 Rate of Assessment and Reserve Fund: Both annual and special assessments shall be fixed at equal rates for each parcel to which the assessment applies, and shall be paid when and as directed by the Declarant or the Committee. The Association shall establish and maintain an adequate reserve fund for capital improvements and emergency repairs.

6.6 Date of Commencement of Assessments: Due Dates: The first annual assessment shall be adjusted according to the number of months remaining in the calendar year and shall become payable on the first day of the month following the closing of the purchase transaction. Written notice of the annual and special assessment shall be sent to every Owner subject thereto. The Association shall, upon demand and for a reasonable charge, furnish a certificate signed by an Officer of the Association setting forth whether the annual and special assessment on a specified parcel has been paid. A properly executed certificate of the Association as to the status of annual and special assessment on a parcel is binding upon the Association as of the date of its issuance.

6.7 Interpretation: The captions herein are for convenience of use and reference only and do not define, limit, augment or describe the scope, content or intent of this Declaration or any parts of this Declaration. Any reference to the neuter, feminine or masculine gender each also includes the other when the context so requires. The single number includes the plural whenever the context so requires.

VII. PROPERTY RIGHTS

7.1 Owner's Rights of Enjoyment: Every owner shall have a right of enjoyment in and to the Common Areas, facilities and improvements thereof which shall be appurtenant to and shall pass with the title to every parcel, subject to the following provisions:

7.1.1 The right of the Association to charge reasonable assessments for the maintenance and operation of Common Areas or facilities situated within the plat;

7.1.2 The right of the Association to suspend the voting rights and the right to the use of any common facilities by an Owner for any period during which any dues or assessments against his or her parcel remain unpaid after the 30 day grace period; and for a period not to exceed sixty (60) days for any infraction of its published rules and regulations;

7.1.3 The right of the Association to dedicate, sell, convey, or transfer all or any part of the Common Area and/or facilities to any individual, public agency, authority, utility or other entity for such purposes and subject to such conditions as may be agreed to by members or required by law, and also subject to the requirements of Section 3.1 of this Declaration relating to the recorded Plat approved by the City of Rockaway Beach, Oregon; and subject to Section 8.4.

7.1.4 The right of the Architectural Control Committee ("ACC") to review and approve, pursuant to the terms and conditions of this Declaration, the construction of all residences and appurtenant structures constructed upon any parcel, the properties or the common area.

VIII. COMMON AREA AND FACILITIES

8.1 Maintenance: The Association shall have full responsibility for maintenance and repair of the Common Area and Facilities as herein defined. The Association shall also have full responsibility for any wetland mitigation conditions imposed upon the approval of this Plat or upon the approval of the LAKE LYTLE ESTATES final plat by the Army Corps of Engineers or the City of Rockaway Beach, including but not limited to, monitoring, maintenance, enhancement, or

protection from degradation. The tracts identified on the final plat as wetlands shall be left undisturbed and in their natural state. Provided, however, the Association shall maintain the wetlands areas by periodically weeding or spraying noxious plants harmful to the wetlands, so long as such maintenance is allowed by the Division of State Lands and the United States Army Corps of Engineers. The Association shall strictly enforce this wetland protection provision.

8.1.1 Declarant shall for a period of twenty (20) years have the right to sell or otherwise convey a conservation or wetlands easement over any common area wetlands to any third party; provided, however, that such easement shall be used exclusively for enhancement of the quality of the wetland common areas; and provided further that such wetland enhancement shall be approved by the governmental agency, who at the time of enhancement has jurisdiction over the wetland enhancement proposal. Declarant's right shall exist regardless of whether Declarant owns any parcels at the time such enhancement is proposed. Provided, further, that the Association shall have the right to place a trail through the wetlands tract, but such right is contingent upon obtaining any necessary permits from the Army Corps of Engineers, the Division of State Lands, the Department of Environmental Quality, the City of Rockaway Beach or any other agency having jurisdiction over such wetland trail construction.

8.2 Government Access. Declarant hereby grants to the City of Rockaway Beach, including its police and fire departments and other governmental agents and officials with jurisdiction, the nonexclusive right to enter upon the Common Area for the purpose of carrying out their official duties, including road, stormwater and utility maintenance.

8.3 Declarant's Reserved Rights: Declarant reserves the right to maintain, alter and improve the Common Areas and Facilities during and beyond the period of these Covenants, together with the right to enter any portions of the Properties necessary to maintain, alter and improve said Common Area and Facilities. Declarant reserves to itself and its successors and assigns a nonexclusive perpetual easement for ingress and egress over, under, upon and above the Common Area and the right to grant easements for ingress and egress and utility service over, under, upon and above the Common Area including private roadways.

8.4 Conveyance of Common Area: The Association may dedicate, sell, convey or transfer all or any part of its real property and the Common Area to any individual, public agency, authority, utility or other entity for such purposes and subject to such conditions as may be agreed to by the members or required by law, provided that such dedication, sale conveyance or transfer must have the assent, by vote or written consent, of two-thirds of the members; provided further, that so long as there are two classes of membership such action may be taken only with the assent (by vote or written consent) of two-thirds (2/3) of the voting power of each class of membership.

The grant of an easement by the Declarant shall not be considered a dedication, sale, conveyance or transfer for purposes of this provision as set forth in this paragraph or elsewhere in these Covenants.

8.5 Indemnity and Hold Harmless: In consideration of the rights to enjoy the use of Association property, any Member, or Member lessee or occupant, for him or herself, spouse, family, guests, legal representatives, heirs and assigns, hereby releases, waives and discharges the LAKE LYTLE ESTATES Homeowners Association, its directors, officers, members and employees, and the Declarant, from any and all liability, for any and all claims, loss or damage, and any claim, loss or damage resulting from bodily injury, death or property damage, due to or resulting from presence upon or in use of the Association property and Common Areas.

Members, occupants, spouses, family, guests, legal representatives, heirs and assigns, and any others who shall use the Association property and Common Areas agree to indemnify and hold harmless the LAKE LYTLE ESTATES Homeowners Association, its directors, officers and employees, and the Declarant, from any loss, liability, damages or cost, including attorney fees, that may incur from any bodily injury, death or property damage suffered by such persons caused by or resulting from presence upon or in use of the Association property and Common Areas.

Said Member, occupant or lessee, for him or herself, spouses, family, guests, legal representatives, heirs and assigns, shall assume full responsibility for the risk of bodily injury, death or property damage due to or resulting from presence upon or in use of the Association property

and Common Areas, and from acts of God and acts of nature, and all acts, negligence or omissions of such person while in or upon or in use of the Association property and Common Areas. Members, occupants, lessees, spouses, family, guests, legal representatives, heirs and assigns, and others who shall use the Association property and Common Areas understand and agree they do so at their own risk, that such property and areas are unsupervised, and that they are responsible for monitoring and supervising the conduct, safety and use of Association property and Common Areas by themselves, their children, family members, and guests.

IX. INSURANCE

9.1 Required Insurance: The Association shall obtain and maintain at all times as a common expense insurance policy or policies written by companies licensed to do business in Oregon which provides:

9.1.1 Insurance against loss or damage by fire and other casualty covered by the standard extended endorsement in an amount as near as practicable to the full insurable replacement value (without deduction for depreciation) of the Common Areas and structures and improvements within the Common Areas. Notwithstanding the foregoing, fire insurance shall be required only if substantial or significant structures are built in the Common Areas.

9.1.2 General comprehensive public liability insurance insuring the Associations, the Board of Directors, Declarant, officers, and all agents and employees of the Association and all owners and other person entitled to occupy the Common Areas against any liability to the public or to the owners and their guests, invitees, licensees, or tenants incident to the ownership or use of the Common Areas in an amount not less than One Million Dollars ($1,000,000.00) or a higher amount deemed appropriate by the Association Board of Directors.

All such insurance shall be written in the name of the Association as trustee for each of the owners. It shall be the duty of the Board of Directors annually to conduct an insurance review to determine if the policy in force is adequate to meet the needs of the Association and to

satisfy the requirements of this Section. Such insurance shall run to the benefit of the Association, the respective owners, and their respective mortgagees, as their interests may appear.

9.2 Authorized Insurance Terms: The Board of Directors shall utilize every reasonable effort to secure a policy covering physical damage that will provide the following:

9.2.1 That the insurer waives its right of subrogation of any claims against the directors, officers, the ACC, the individual owners, member, and their respective household members.

9.2.2 That the policy cannot be canceled, invalidated, or suspended on account of the conduct of any director, officer, ACC, agent or employee of the Association without a prior demand in writing delivered to the Association to cure the defect and the allowance of a reasonable time thereafter within which the defect may be cured.

9.2.3 That any "no other insurance" clause contained in this policy shall expressly exclude individual parcel owner's polices from its operations.

9.2.4 That the policy may not be canceled or substantially modified without at least, thirty (30) days' prior notice in writing to the Board of Directors.

9.2.5 An agreed value or amount endorsement and waiver of coinsurance.

9.2.6 That the deductible amount per occurrence shall not exceed an amount to be set in the discretion of the Board of Directors.

9.2.7 Coverage of at least One Million Dollars ($1,000,000) per occurrence.

9.3 Contributions: In no event shall the insurance coverage obtained and maintained by the Association hereunder be brought into contribution with insurance purchased by individual unit owners or their mortgagees.

9.4 Cross Discretionary Endorsement: All liability insurance shall contain a cross liability endorsement.

9.5 Other Discretionary Insurance: In addition to the insurance required herein above, the Board may obtain as a common expense:

9.5.1 Workmen's Compensation Insurance if and to the extent necessary to meet the requirements of law.

9.5.2 Fidelity bonds covering officers, directors, employees, and other persons who handle or are responsible for handling Association funds. Such bonds shall be in an amount approved by the Board of Directors and shall contain waivers of any defense based upon the exclusion of persons serving without compensation.

9.5.3 Such other insurance as the Board of Directors may determine to be necessary including officers' and directors' liability insurance.

9.6 Individual Insurance: By virtue of taking title to a parcel subject to the terms of this Declaration, each owner covenants and agrees with all owners and the Association that he or she shall carry an individual homeowner's policy. Each individual owner further covenants and agrees that in the event of a partial loss or damage and destruction resulting in less that total destruction, the individual unit owner shall proceed promptly to repair or reconstruct the damaged structure in a manner consistent with the original construction. In the event that the structure is totally destroyed and the individual owner determines not to rebuild or to reconstruct, the individual owner shall clear the parcel of all debris and return it to substantially the natural state in which it existed prior to the beginning of construction.

X. ADMINISTRATION AND ENFORCEMENT OF THESE COVENANTS

10.1 Entry/Rules and Regulations: The Association may at all reasonable times enter upon any parcel for the purpose of performing its function under this Declaration. The Board of Directors may adopt and publish reasonable rules and regulations governing the use of the Common Area and Facilities and interpreting this Declaration and to establish penalties for the violation thereof.

10.2 Agreed Compliance: By acceptance of a deed to a parcel, execution of a contract therefore, or any other means of acquisition of an ownership interest, whether or not it shall be so expressed in any such deed or other instrument, the owner covenants and agrees thereby, on behalf of himself or herself and his or her heirs, successors and assigns, to observe and comply with all terms of the Articles of Incorporation and the Bylaws of the LAKE LYTLE ESTATES Homeowners Association, and all rules and regulations duly promulgated by the Association, as they now exist and are hereafter amended.

10.3 Rights of Enforcement: The Association or any owner shall have the right to enforce by proceeding at law or in equity all restrictions, conditions, covenants, reservations, liens and charges now or hereafter imposed by the provisions of these Declaration. Failure by the Association or by an owner to enforce any covenant or restriction herein contained shall in no event be deemed a waiver of the right to do so thereafter. The violators shall be responsible for all costs incurred in enforcing these Declarations, including reasonable attorney's fees, whether or not litigation is commenced, and if so, during any arbitration, trial or appeal, or in any proceeding in federal bankruptcy court or under state receivership or insolvency statutes. The Association may add any such cost due to the current or next annual assessment of the offending owners.

10.4 Disclaimer of Liability: The Association, it's Board of Directors, the Declarant, and the ACC, and any officers, agents or employees shall not be liable to any person for acts and omissions in administration and enforcement of the Declaration, unless such actions constitute recklessness or intentional disregard of the law.

10.5 Remedies: Remedies provided herein are in addition to, cumulative with, and are not in lieu of other remedies provided by law. There shall be, and there is hereby created and

declared to be, a conclusive presumption that any violation or breach or attempted violation or breach of the Covenants herein cannot be adequately remedied by an action at law or exclusively by recovery of damages.

10.6 Liens Consensual: By virtue of taking title to a parcel subject to the terms of this Declaration, each owner covenants, agrees and consents to subject its parcel or parcels to the lien authority of the Association set forth herein.

XI. AMENDMENT

The covenants and restrictions of this Declarations shall run with the and bind the land for a term of twenty (20) years from the date this Declaration is recorded, after which time said covenants shall be automatically extended. Otherwise this Declaration may be amended until all parcels have homes constructed upon them. Otherwise this Declaration may be amended during the initial 20-year period and by an instrument which has received the signatures of at least 90 percent of the votes eligible to be cast. The Declaration may be amended at any time thereafter by an instrument which has received the signatures of at least 75 percent of the votes eligible to be cast. This Declaration may be amended during the Development Period by an instrument signed by both Declarant and the owners of at least 51 percent of the parcels, including Declarant's. The provisions expressly referring to Declarant may not be amended without Declarant's approval.

Not withstanding the amendment provisions of this paragraph, Declarant reserves the exclusive right to amend this Declaration by annexation of contiguous properties in the form of affidavit recorded with the Tillamook County Clerk, subject to the requirement that such contiguous properties are bound by and to the terms and conditions of this Declaration.

12.1 Binding Effect: All present and future owners or occupants of Parcels shall be subject to and shall comply with the provisions of this Declaration as they may be amended from time to time. The acceptance of a deed or conveyance or the entering into occupancy of any Parcel shall constitute an agreement that the provisions of this Declaration are accepted and ratified by such owner or occupant, and running with the land and shall bind any person having at any time any

interest or estate in such Parcel, as though such provisions were recited and stipulated at length in each and every deed and conveyance or lease thereof. Failure to comply with this Declaration shall be grounds for an action to recover sums due for damages or injunctive relief, or both, maintainable by the committee or by any aggrieved owner.

12.2 Enforcement: Should any Parcel Owner violate or attempt to violate any of the provisions of this Declaration, the Declarant or any other Owner of Parcels within the Property, at its or their option, shall have the full power and authority, but not the requirement, to prosecute any proceedings at law or in equity against the Owner violating or attempting to violate any of the provisions of this Declaration, either to prevent the doing of such or to recover damages sustained by reason of such violation. Failure by any Owner to enforce any covenant or restriction herein contained shall in no event be deemed a waiver of the right to do so thereafter.

12.3 Venue: Any court action to assert any rights under this Agreement shall be brought in Tillamook County Court.

12.4 Choice of Law: The law of the State of Oregon shall govern the terms and interpretation of this Agreement.

12.5 Severability: Invalidation of any of these covenants or restrictions by judgment or court order shall in no way affect any other provisions which shall remain in full force and effect.

12.6 Notice: Any notice required to be sent to any Owner under the provisions of this Declaration shall be deemed to have been properly sent when mailed, postage prepaid, to the last know address of the person who appears as the Owner of Record as the time of such mailing.

IN WITNESS WHEREOF, the undersigned have caused this Declaration to be executed this ____ day of _____ 2007.

DECLARANT:
LAKE LYTLE ESTATES, LLC

By: _____

_____

STATE OF OREGON)
) :ss
County of _____)

Personally appeared before me, _____, to me known to be the Declarant of LAKE LYTLE ESTATES, LLC and acknowledged that he/she signed the same as his/her free and voluntary act and deed for the uses and purposes therein mentioned.

Witness my hand and official seal hereto affixed this ____ day of _____, 2007.

_____
NOTARY PUBLIC in and for the State of Oregon

My Commission Expires: _____

APPENDIX D

Rorick Environmental Services

Wetland Delineation and Determination
Lake Lytle Wetland Delineation
Rockaway Beach, Oregon
Tillamook County

Prepared for:

Troy Johns
14801 NE 13th Circle
Vancouver, WA 98684

Submitted by:

Nancy Rorick
Rorick Environmental Services
37552 SE Rachael Drive
Sandy, OR 97055
503-668-8660
nrorick@verizon.net

July 2006

Table of Contents

Tables

Charts

Figures

Site Data Sheet

Project	Lake Lytle Wetland Delineation
Property owner	Troy Johns 14801 NE 13th Circle Vancouver, WA 98684
County	Tillamook
Tax Lot Map	Tax Map 2N 10, Tax Lot 5201
Legal Description	T2N, R10W, SE ¼ of Sec. 29
Latitude / Longitude	45° 37.499,0' N, 123° 55.991,5' W
Zoning	Residential
Study area size	24.06 acres
USGS Topographic Map	Garibaldi (1985) and Nehalem (1985)
Topography	Site slopes gently to the west.
Elevation	25 to 85 feet (NGVD)
Drainage basin	Lake Lytle
Nearest water	Ephemeral streams on site and Lake Lytle.
Land form	Marine terrace.
Mapped soil types	17B – Chitwood-Hebo Complex, 0-5% Slopes (Hebo is a hydric soil) 59B – Chitwood-Knappa silt loams, 0-7% Slopes (the Chitwood and Knappa are not hydric soils)
NWI map	Garibaldi, Oregon 1985 and Nehalem, Oregon1985
LWI maps	Western portion of project site is mapped as wetland.
Hydrogeomorphic classification of site wetlands	slope/flats – 7.59 acres riverine flow through – 0.49 acres small depressional wetlands – 0.48 acres
Cowardin classification of site wetlands	PFOC – palustrine forested seasonally flooded
Proposed land use	Housing development
Current land use	Open space
Adjacent land use	Residential to north, open space to east, south and west.

Wetland Delineation Summary

Determination: The consultants delineated 8.56 acres of jurisdictional wetlands within the study area boundary.

Hydrology: The wetlands are supported by a seasonally high water table, inflow from ephemeral streams, runoff from adjacent uplands and direct precipitation.

Soils: The wetlands soils are low chroma silt loams with mottles.

Vegetation: The wetlands are forested. The dominant species are red alder, Sitka spruce, skunk cabbage, lady fern, deer fern, slough sedge, and salmonberry.

Method: Routine, on-site method as described in the U.S. Army Corps of Engineers 1987 manual. Site work June 28, 2005 through July 3, 2005.

Project Staff: Nancy Rorick, Rorick Environmental Services, 503-668-8660
Laura Miller, 503-948-7295
Loverna Wilson, Environmental Consultant, 541-758-3403
Dennis O'Connor, 503-617-6553

Introduction

Rorick Environmental Services (RES) delineated 8.56 acres of jurisdictional wetland on property owned by Troy Johns. The 24.06-acre project site is located on the east edge of Lake Lytle and south of NE Smith Street in Rockaway Beach, Oregon (figures 1, 2 and 3). Mr. Johns is proposing to develop the site for residential use.

Project Description

The project is located on gently sloping land between Lake Lytle to the west and the Coast Range to the east. The Local Wetland Inventory (Brophy and Wilson 2000) and National Wetland Inventory (USFWS wetland mapper 2006) maps show that the wetlands on the site are part of a large wetland complex associated with Lake Lytle (figures 4 and 5). The City of Rockaway Beach's comprehensive plan designates these wetlands as Special Wetland Areas. The USFWS has classified the site wetlands as (PFOC) Palustrine Forested Seasonally Flooded (2006 wetlands mapper).

The elevation on the project site ranges from 25 to 85 feet NGVD. The site slopes at 15% on the east side of the site and flattens out to a 2% slope on the west side. A small unnamed ephemeral drainage crosses the site from east to west. This drainage receives runoff from the Coast Range to the east.

The property is zoned residential. The surrounding land use consists of forested open space to the east and south, Lake Lytle to the west, and a residential subdivision to the north (figure 6).

Figure 7 shows the two soil units mapped on the site (NRCS draft map). The Chitwood-Hebo Complex located on the west side of the site is a combination of Chitwood and Hebo soils, of which the Hebo is a listed as a hydric soil (NRCS 2000). Neither the Chitwood or Knappa soils in the Chitwood-Knappa complex mapped on the east side of the site are hydric, but the unit does contain inclusions of the hydric Hebo Series. The soil characteristics are described in Tables 1 and 2.

Table 1 Mapped soils hydric soils classification (NRCS draft Hydric Soils List 2000).

Map Symbol	Soil	Hydric Soils List
17B	Chitwood-Hebo Complex, 0-5% slopes	Chitwood - No Hebo - Yes
59B	Chitwood-Knappa silt loams, 0-7% slopes	Chitwood – No Knappa – No Hebo - Yes

Table 2 Soil Series characteristics (NRCS 2006 and draft map).

Soil	Drainage	Taxonomy	Typical Profile
Chitwood	somewhat poorly drained	Aquandic Dystrudepts	**0-7 in.** 10YR 3/2 silt loam **7-11 in.** 10YR 3/2 silt loam **11-19 in.** 10YR 3/3 silty clay loam with few fine faint iron masses
Hebo	poorly drained	Typic Humaquepts	**0-4 in.** 10YR 3/1 silty clay loam with iron-manganese masses **4-10 in.** 10YR 3/1 silty clay with iron-manganese masses **10-18 in.** 5Y 4/1 clay
Knappa	well drained	Andic Dystrudepts	**0-9 in.** 10YR 2/2 silt loam **9-20 in.** 10YR2/2 silt loam

The total rainfall recorded in Astoria, Oregon during the two weeks prior to the start of fieldwork on June 28, 2005 was 0.69 inches. During the three months prior to the field work, rainfall was above normal in April and May; and slightly below normal in June (Table 3).

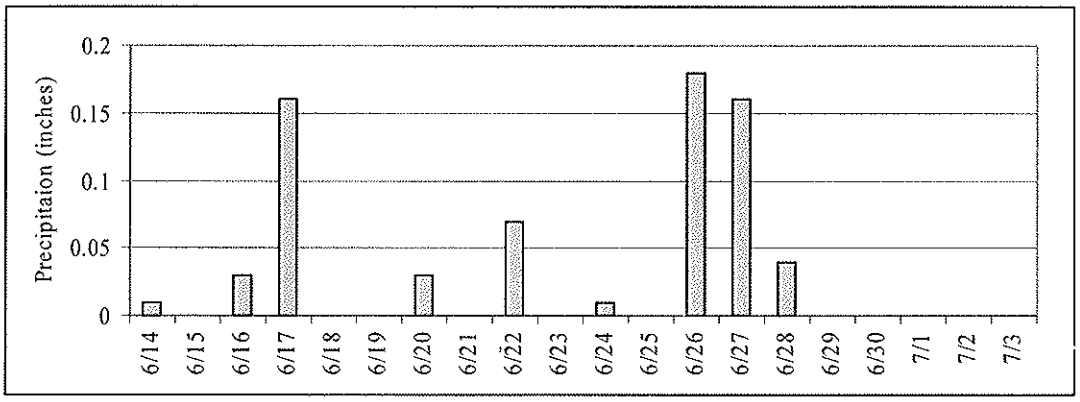


Chart 1 Daily rainfall prior to the June 28, 2005 field visit as recorded in Astoria, Oregon (Oregon Climate Service 2006).

Table 3 2005 monthly rainfall data for Astoria, Oregon (Oregon Climate Service 2006).

Month	Total Rainfall for Astoria (inches)	Departure from normal (inches)
April	8.39	3.39
May	5.46	2.18
June	1.67	-0.90

Wetland Definitions

The wetlands in this report were delineated according to the methods described in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual (Environmental Laboratory 1987). The Corps (Federal Register 1985) and the Environmental Protection Agency (Federal Register 1980) have jointly defined wetlands as: "Those areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

The 1987 Manual provides guidelines for delineating wetlands based on soils, hydrology and vegetation. An area will be classified as a jurisdictional wetland if it meets the three requirements described below:

Vegetation: Greater than 50 percent of the dominant plant species must be obligate wetland plants (OBL), facultative wetland plants (FACW), or facultative plants (FAC). The probability that OBL plants will occur in wetlands is 99%, FACW plants have a 67-99% probability, and FAC plants a 33-67% probability. Plants that usually occur in drier areas are facultative upland plants (FACU) and obligate upland plants (UPL). Species that are not listed (NL) are assumed to be upland plants.

Soils: Wetland soils have developed physical characteristics (redoximorphic features) as the result of oxygen-poor conditions due to prolonged wetness. In oxygen-deficient environments, iron is reduced to a mobile form. The reduced iron oxidizes when it migrates into an oxidizing zone such as a root trace or fracture. This results in iron depleted portions of the soil that have a low chroma or gray color and iron rich portions of the soils (mottles) that have a high chroma or reddish orange color. Live oxidized root channels occur when iron oxidizes along a live root trace. Wetland soils are also characterized by soil horizons of partially decomposed organic material (histic epipedons). The organic material accumulates in these soils, called Histosols, because the oxygen-poor environment inhibits the decay of organic matter.

Hydrology: An area may have wetland hydrology if it is saturated or inundated for 5% to 12.5% of the growing season. An area does have wetland hydrology if it is saturated for more than 12.5% of the growing season. Wetland hydrology is commonly determined by digging a 16-inch-deep soil pit to observe whether the root zone, or upper 12 inches of the soil, is saturated. Depth to saturation is determined by observing the rise of water within the soil pit. Signs of inundation, such as silt deposits on leaves, flood debris, or live oxidized root channels can

also indicate wetland hydrology. Gauging station records and aerial photographs are also used to determine inundation history.

Methods

The preliminary site review entailed analyzing soil maps (NRCS draft soils map), the topographic map (USGS 1985), aerial photographs, and the National Wetland Inventory map available online from the USFWS.

RES evaluated the wetlands on the project site according to guidelines in the COE 1987 Manual (Environmental Laboratory 1987) and completed data sheets (Appendix A) that describe the vegetation, soils and hydrology at thirteen sample point locations (figure 8). The sample points were chosen to document differences between upland and wetland conditions and to determine wetland boundaries.

Soils

RES analyzed soil collected from 16-inch-deep pits for texture, color, mottles, and structure. The soil colors were determined using the Earth Colors Soil Color Book (Color Communication Inc. 1997).

Hydrology

RES determined the hydrology at each data point by observing the depth to free water in the soil pits, examining the sides of soil pit walls for seepage, and examining the soils for signs of prolonged wetness. Due to the dry summer conditions, the consultants relied on indirect indicators of wetland hydrology such as drainage patterns, water marks, and live oxidized root channels.

Vegetation

RES estimated vegetation dominance and cover visually at each sample point, identified the vegetation, and assigned the plants an indicator status from national (Reed 1988) and regional (Reed et al. 1993) lists.

Wetland boundary

HLB and Associates, Inc. surveyed the wetland boundary.

Plant List

Table 4 is a list of some of the plants that were observed on the site.

Table 4 List of plants observed on the project site.

Common Name	Scientific Name	Indicator Status
common foxglove	*Digitalis purpurea*	FACU
Cooley's hedge nettle	*Stachys cooleyae*	FACW
creeping buttercup	*Ranunculus repens*	FACW
deer fern	*Blechnum spicant*	FAC+
evergreen huckleberry	*Vaccinium ovatum*	NL

Common Name	Scientific Name	Indicator Status
false lily of the valley	*Maianthemum dilatatum*	FAC
forget me not	*Myosotis laxa*	OBL
Himalayan blackberry	*Rubus discolor*	FACU
inside-out flower	*Vancouveria hexandra*	NL
lady fern	*Athyrium filix-femina*	FAC
Pacific ninebark	*Physocarpus capitatus*	FAC+
red alder	*Alnus rubra*	FAC
red elderberry	*Sambucus racemosa*	FACU
red huckleberry	*Vaccinium parvifolium*	FACU
salal	*Gaultheria shallon*	FACU
salmonberry	*Rubus spectabilis*	FAC+
Siberian spring beauty	*Claytonia sibirica FACW*	FACW
Sitka spruce	*Picea sitchensis*	FAC
skunk cabbage	*Lysichiton americanum*	OBL
slough sedge	*Carex obnupta*	OBL
soft rush	*Juncus effusus*	FACW+
sword fern	*Polystichum munitum*	FACU
water parsley	*Oenanthe sarmentosa*	OBL
western hemlock	*Tsuga heterophylla*	FACU-

Results and Discussion

RES delineated 8.56 acres of jurisdictional wetland within the study area boundary (figure 8). The wetlands consist of 13 small depressional wetlands, a 0.49-acre riverine-flow-through wetland, and a 7.59-acre slope/flats wetland. The depressional wetlands range in size from 27 to 10,698 square feet. These wetlands are located in shallow basins that receive runoff from adjacent uplands, direct precipitation and have a seasonally high water table. The riverine-flow-through wetland (wetland H on figure 8) is supported by ephemeral stream flow, runoff from the adjacent uplands, and a seasonally high water table. The slope / flat wetland (wetland A on figure 8) connects to Lake Lytle. This wetland receives water from seasonal streams, a seasonal high water table, direct precipitation and runoff from adjacent uplands. This wetland is classified as slope/flats because it is partially supported by groundwater and is located in a low broad area at the base of a slope (Adamus 2001).

The uplands on the project site are forested. The wetlands belong to the PFOC (palustrine forested seasonally flooded) Cowardin class. The dominant plant species growing in the wetlands are red alder, Sitka spruce, skunk cabbage, lady fern, deer fern, slough sedge, and salmonberry. The dominant vegetation in the uplands is red alder, western hemlock, salmonberry, red elderberry, sword fern, red huckleberry, and evergreen huckleberry.

The textures of the site soils are silty clay, silt loam and loam, with silt loam as the dominant texture. At some of the sample locations (SP6, SP7, SP9 and SP10) the

consultants encountered shallow bedrock consisting of highly weathered shale. The upland soils were colored 10YR 3/2 to 7.5YR 3/3. The wetland soils were colored 10YR 2/1 with mottles and 7.5YR 3/1 with mottles.

RES mapped the wetland using changes in vegetation, soil characteristics and topography as indicators of the boundary. Typically, a change in vegetation from sword fern, salal, and huckleberry to slough sedge and skunk cabbage marked the wetland boundary. The consultants frequently check soil colors in determining the wetland boundary. The boundary was also characterized by slight changes in topography. For example, a pronounced change in topography, to wit, its streamside location, marked the boundary of wetland H.

DSL Review

This report documents the investigation, best professional judgment and conclusions of the investigators. It should be considered a Preliminary Jurisdictional Determination and used at your own risk until it has been reviewed and approved in writing by the Oregon Division of State Lands in accordance with OAR 141-090-0005 through 141-090-0055.

References

Adamus, Paul R., 2001, Guidebook for Hydrogeomorphic (HGM) based Assessment of Oregon Wetland and Riparian Sites: Statewide Classification and Profiles, Oregon Division of State Lands, Salem, Oregon, 162p.

Brophy, Laura and Loverna Wilson, 2000, Rockaway Beach Riparian Inventory and Extension of Local Wetland Inventory to Urban Growth Boundary, prepared by Green Point Consulting.

Color Communications Inc., 1997, Earth Colors Soil Color Book A Guide for Soil and Earthtone Colors, Color Communications Inc., Poughkeepsie, NY.

Environmental Laboratory, 1987, Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss.

Federal Register, 1980, 40 CFR Part 230: Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material, U.S. Government Printing Office, Washington, DC, 45(249), 85,352-85,353.

Federal Register, 1982, Title 33: Navigation and Navigable Waters; Chapter 2 Regulatory Programs of the Corps of Engineers, U.S. Government Printing Office, Washington, DC, 47(138), 31,810.

National Resource Conservation Service, 2000, Hydric Soils List (Draft) of Tillamook County Area.

Oregon Climate Service, 2006, Daily Observations in Astoria, Oregon, available online at: http://www.ocs.oregonstate.edu/.

Reed, Porter B. Jr., 1988, National List of Plant Species that Occur in Wetlands: 1988, U.S. Fish and Wildlife Service.

Reed, Porter B. Jr., Dennis Peters, Jim Goudzwaard, Ivan Lines, and Fred Weinmann, 1993, 1993 Supplement to List of Plant Species that Occur in Wetlands: Northwest (Region 9), U.S. Fish and Wildlife Service.

National Resource Conservation Service, draft, map of the Tillamook County Soils.

Natural Resource Conservation Service, 2006, Official Soil Series Descriptions, available online at: http://soils.usda.gov/technical/classification/osd/index.html

United States Fish and Wildlife Service, 2006, National Wetland Inventory, Nehalem and Garibaldi Quadrangles available on line from Wetland Mapper at: http://www.nwi.fws.gov/

United States Geological Survey, 1985, Garibaldi Quadrangle, Oregon-Tillamook County, 7.5-Minute Series (Topographic), map scale 1:24,000.

United States Geological Survey, 1985, Nehalem Quadrangle, Oregon-Tillamook County, 7.5-Minute Series (Topographic), map scale 1:24,000.

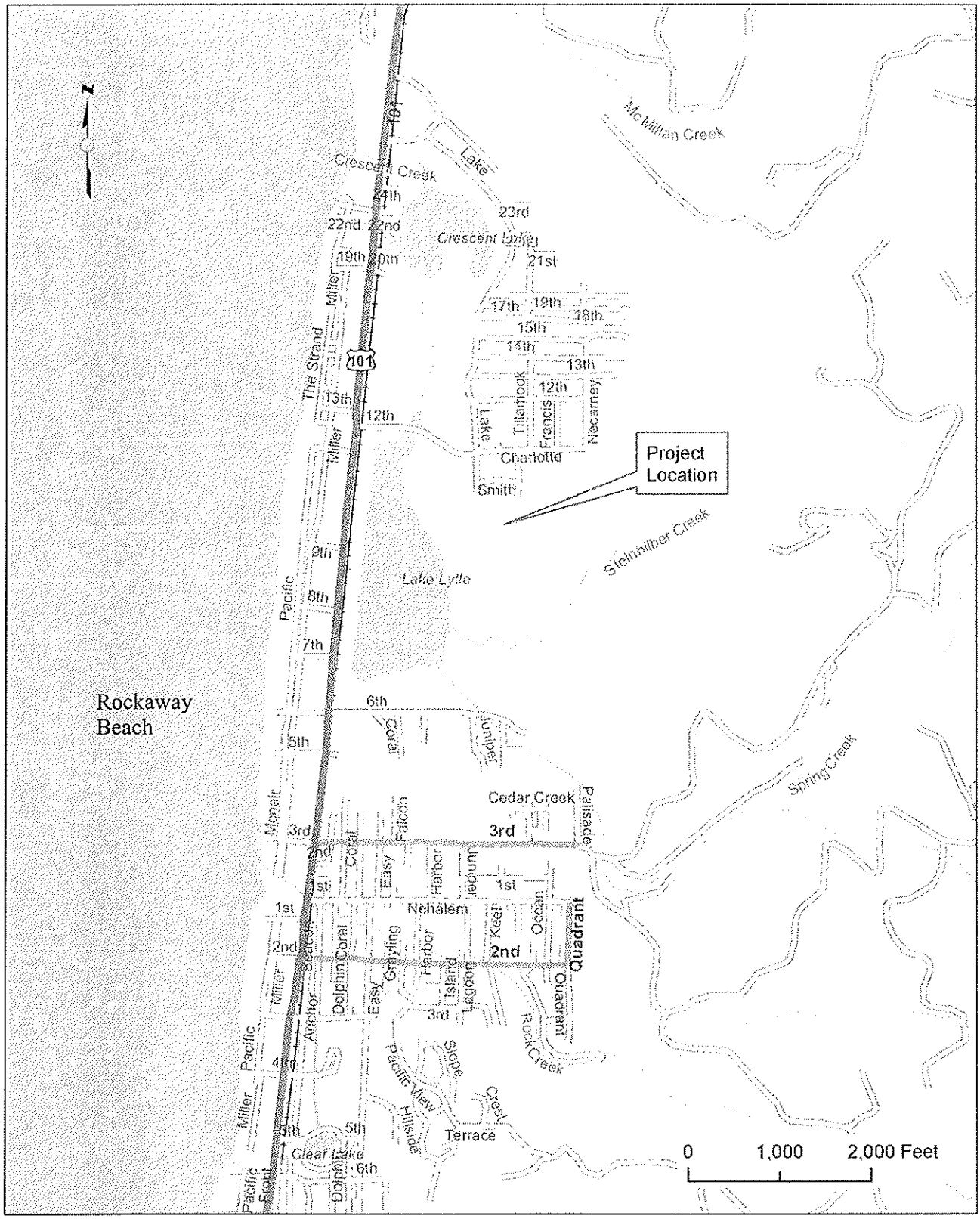


Figure 1 Project locatin map.

Lake Lytle Wetland Delineation Report

Rorick Environmental Services
37552 SE Rachael Drive
Sandy, OR 97055
503-668-8660

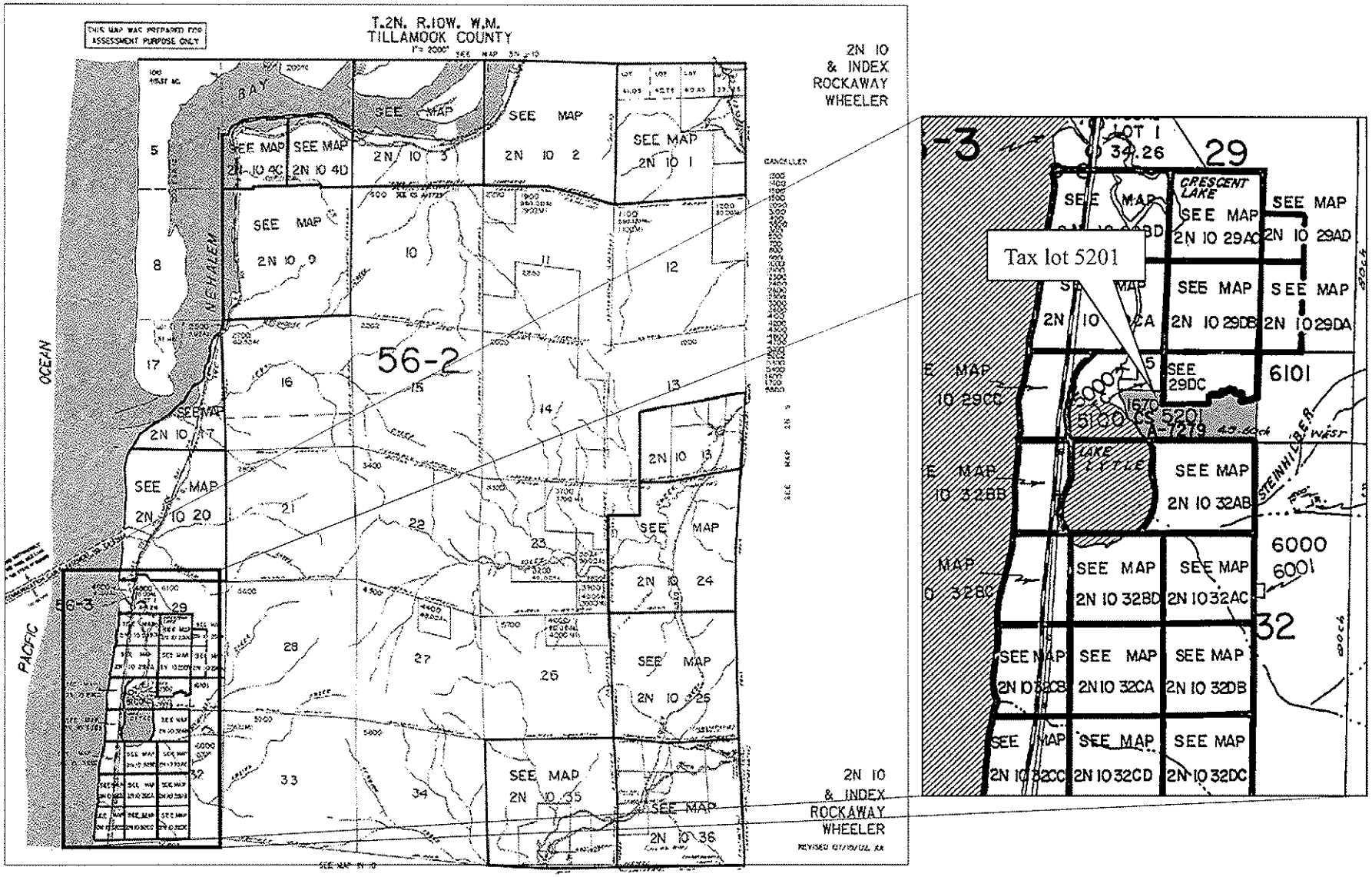


Figure 2 Tax map.

Lake Lytle Wetland Delienation

Rorick Environmental Services
37552 SE Rachael Drive
Sandy, OR 97055
503-668-8660

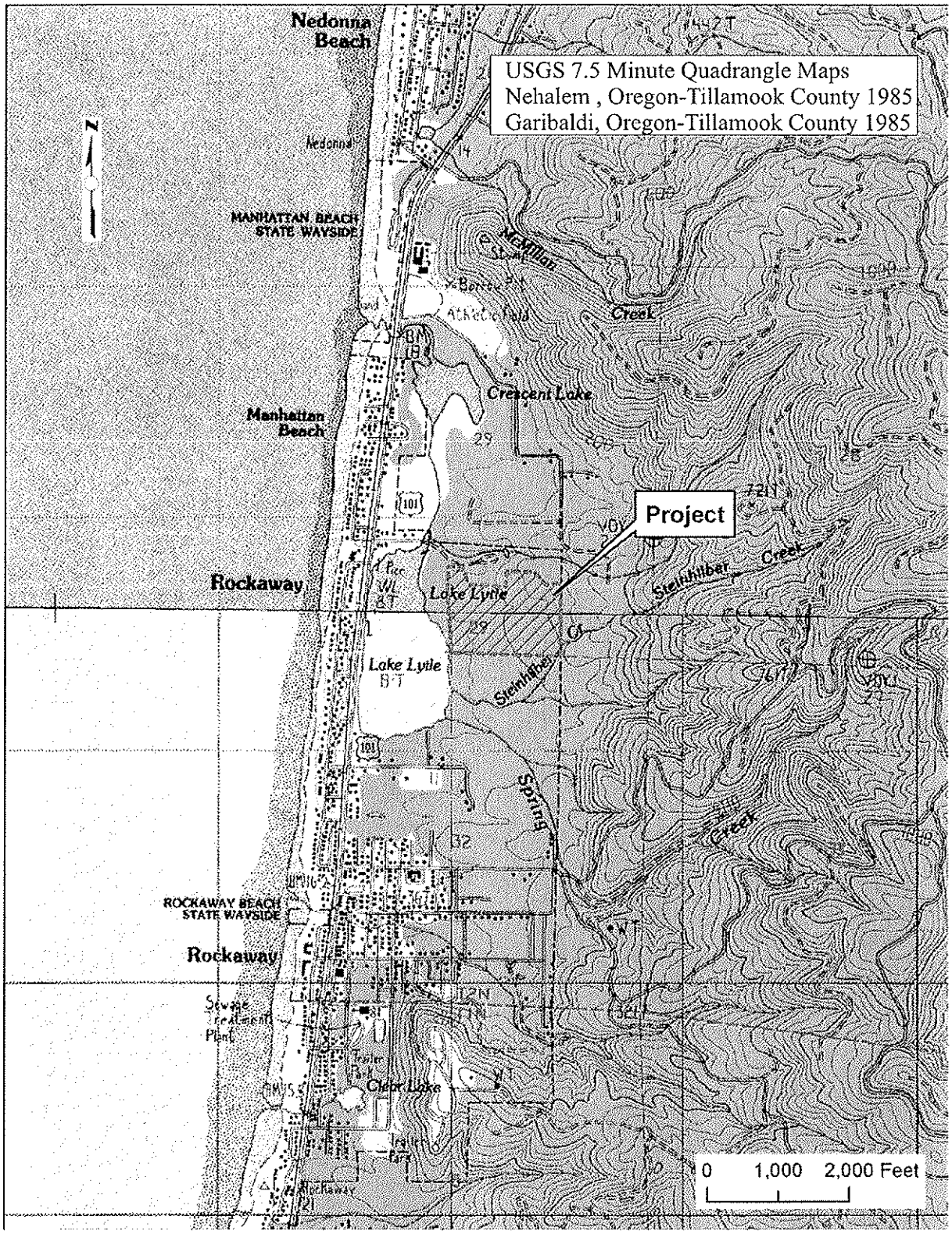
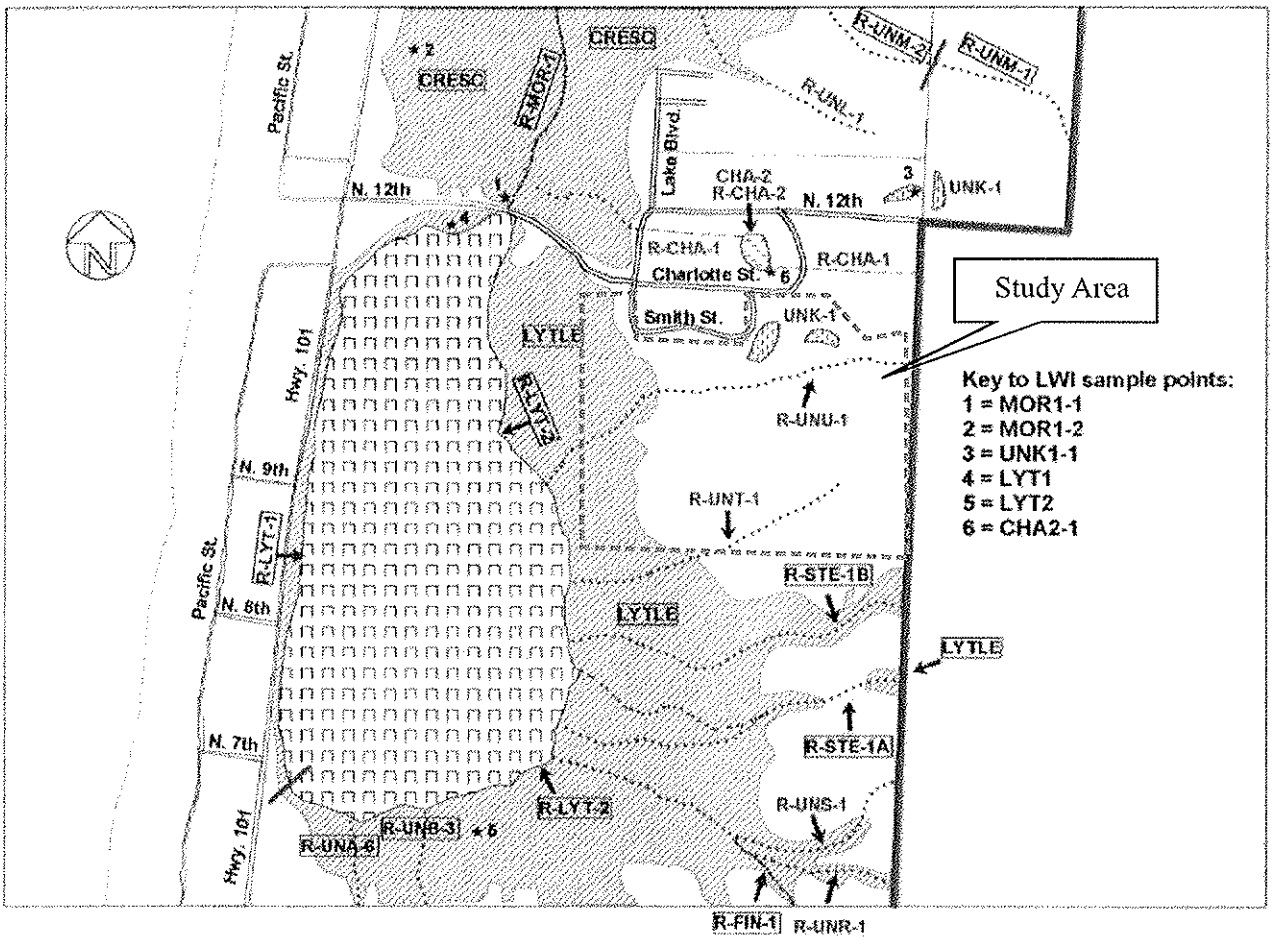


Figure 2 Topographic map (USGS 1985).

Lake Lytle Wetland Delineation Report

Rorick Environmental Services
37552 SE Rachael Drive
Sandy, OR 97055
503-668-8660

City of Rockaway Beach, Oregon
Riparian Inventory and Extension of Local Wetland Inventory to Urban Growth Boundary: November 1999
MAP 3: LAKE LYTLE AREA



Green Point Consulting

0' 1000' 2000'

Laura Brophy, Green Point Consulting (541) 752-7671 Loverna Wilson, Environmental Consultant (541) 758-3403
http://www.peak.org/~brophyl

Figure 4 Local Wetland Inventory Map (Brophy and Wilson 2000).

Troy Johns Wetland Delineation Report

Rorick Environmental Services
37552 SE Rachael Drive
Sandy, OR 97055
503-668-8660

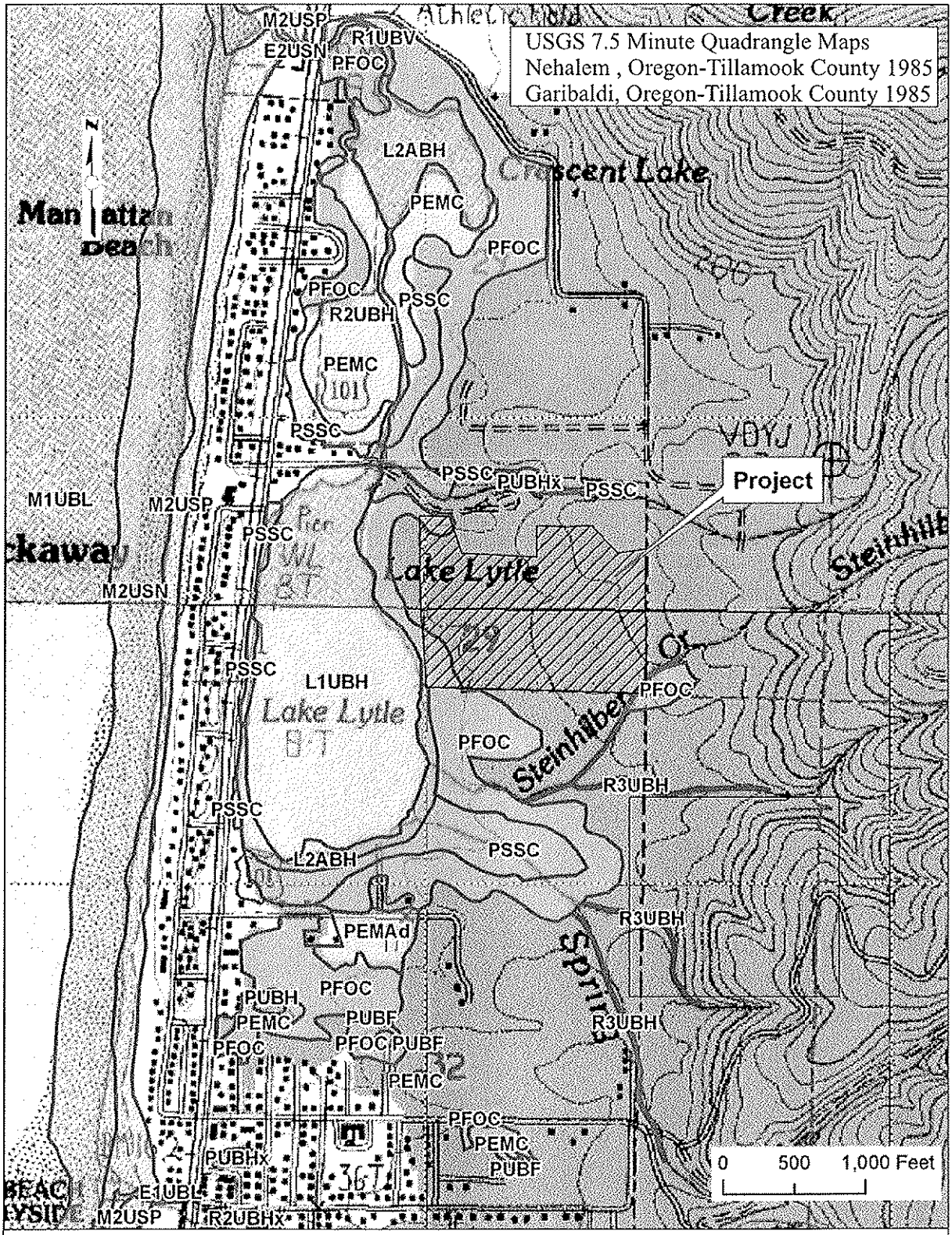


Figure 5 National Wetland Inventory (USFWS Wetlands Mapper 2006).

Lake Lytle Wetland Delineation Report

Rorick Environmental Services
37552 SE Rachael Drive
Sandy, OR 97055
503-668-8660

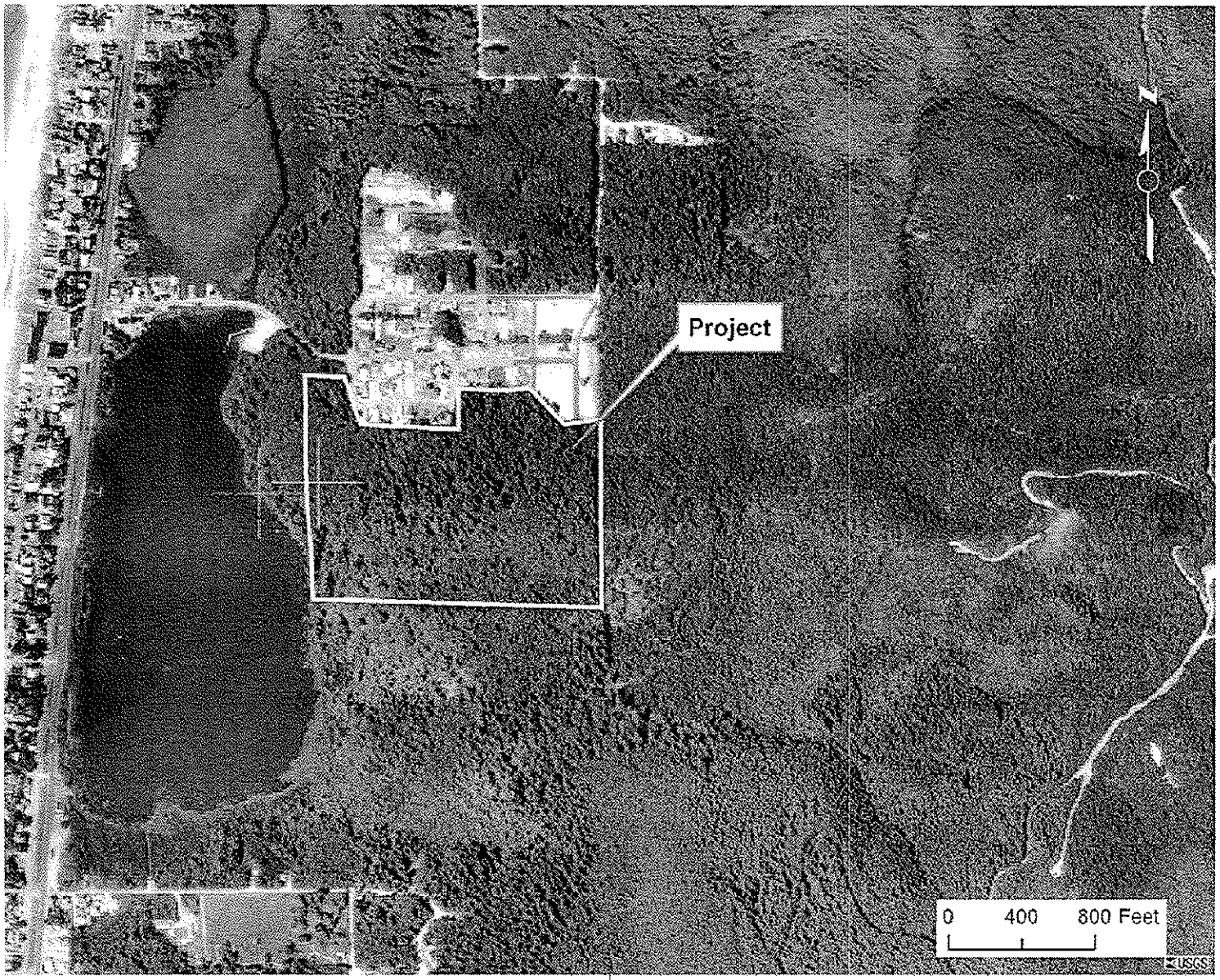
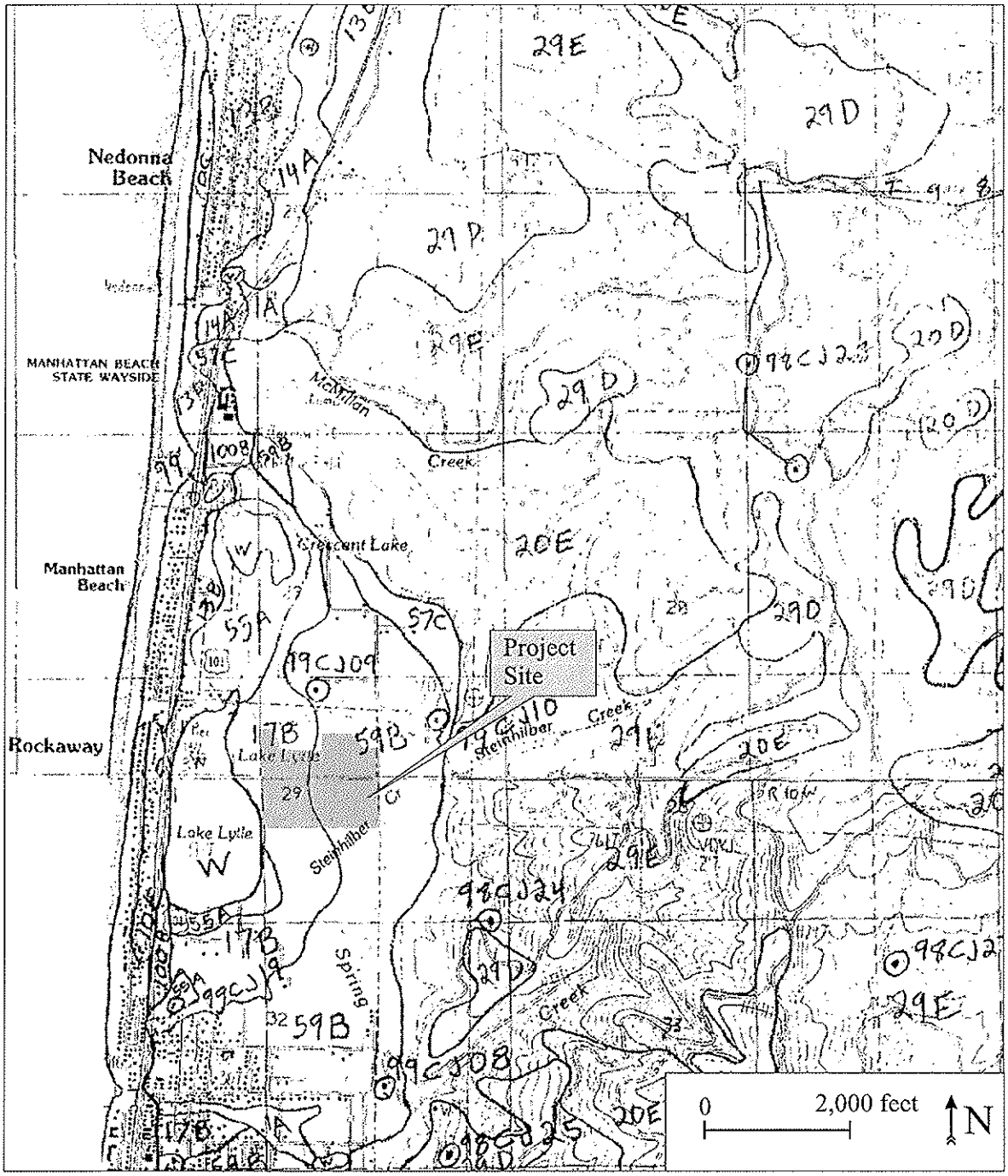


Figure 6 Aerial photograph (USGS 2000).

Lake Lytle Wetland Delineation Report

Rorick Environmental Services
37552 SE Rachael Drive
Sandy, OR 97055
503-668-8660



Map Symbol	Soil	Hydric Soils List
17B	Chitwood-Hebo Complex, 0-5% slopes	Chitwood - No Hebo - Yes
59B	Chitwood-Knapp silt loams, 0-7% slopes	Chitwood – No Knappa – No Hebo - Yes

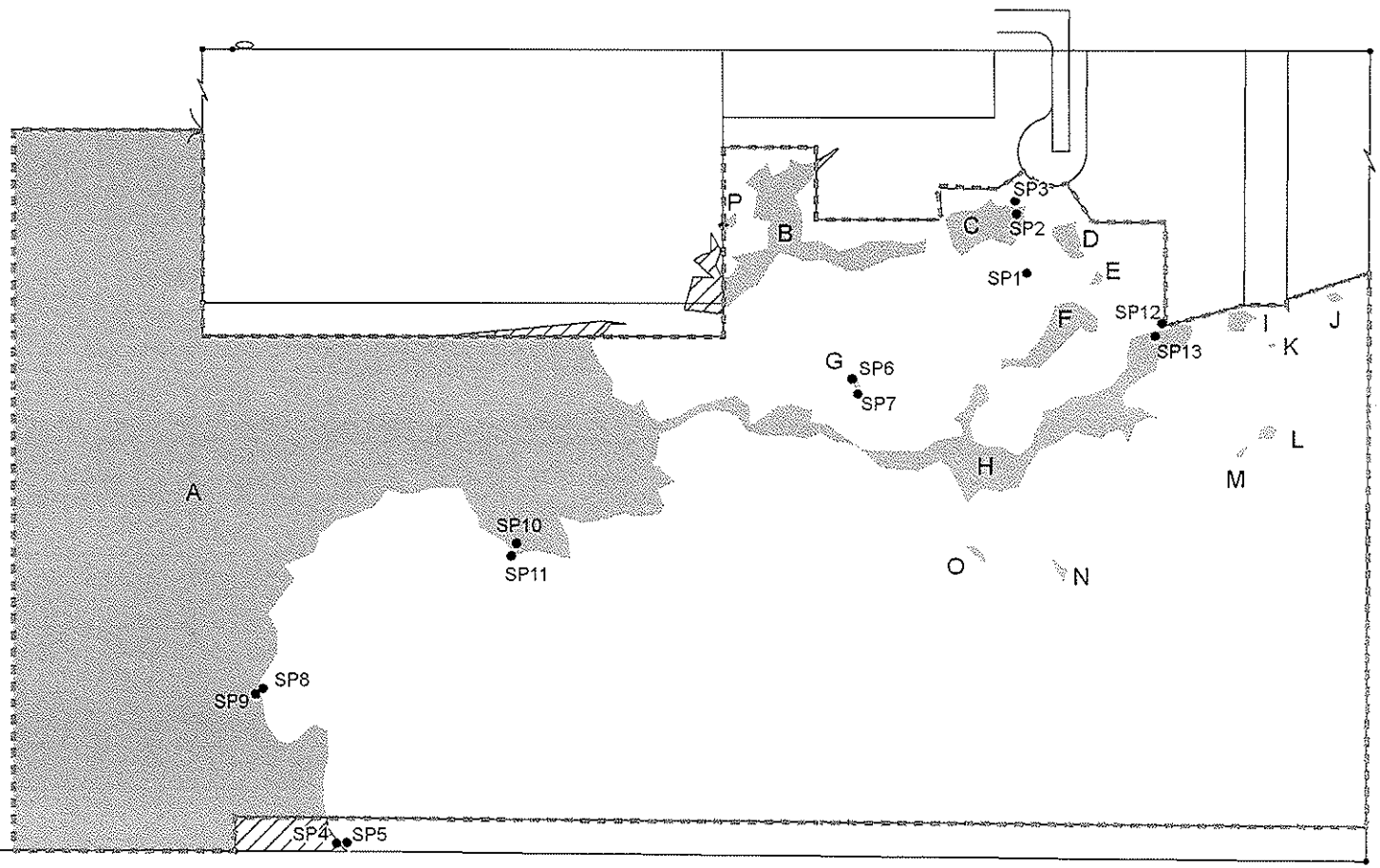
Figure 7 Soils map (NRCS draft).

Lake Lytle Wetland Delineation Report

Rorick Environmental Services
37552 SE Rachael Drive
Sandy, OR 97055
503-668-8660

Wetland	Area (ft^2)
A	330,561
B	10,698
C	3,840
D	1,013
E	156
F	3,139
G	158
H	21,378
I	588
J	169
K	27
L	278
M	90
N	187
O	174
P	206

Total 372,662 ft^2 (8.56 acres)



Wetland boundary surveyed by HLB and Associates Inc.

Sample points

Study area boundary

Wetlands

Wetlands outside of study area

N

0 100 200 Feet

1 inch equals 200 feet

Figure 8 Wetlands map.

Lake Lytle Wetland Delineation Report

Rorick Environmental Services
37552 SE Rachael Drive
Sandy, OR 97055
503-668-8660

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP1	Date & Time	6/28/05
Recent Weather	Sunny and warm	Plant Community	coastal woodland
Plot Location	Northern portion of the site		

Has the soil, vegetation or hydrology been significantly disturbed? No

VEGETATION

Trees		% Cover	80	Herbs		% Cover	85
Species	Status	Percent	Dom	Species	Status	Percent	Dom
Picea sitchensis	FAC	40	✓	*Lysichiton americanum*	OBL	25	✓
Alnus rubra	FAC	40	✓	*Oenanthe sarmentosa*	OBL	40	✓
				Gaultheria shallon	FACU	5	
				Myosotis laxa	OBL	10	
				Stachys cooleyae	FACW	5	
Sapling / Shrub		% Cover	50				
Sambucus racemosa	FACU	10					
Rubus spectabilis	FAC	40	✓				

Percent of dominant species that are OBL, FACW, FAC: 100%
Criteria met? Yes

SOILS

Map Unit Name: Chitwood-Knappa silt loams, 0-7% slopes Drainage class: somewhat poorly drained & well drained
Taxonomy: Aquandic Dystrudepts and Andic Dystrudepts On hydric soils list? No

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
0-8 in.		7.5YR 3/3	none	silt loam	fine granular
8-16 in.		7.5YR 3/2	none	silt loam	fine granular

Hydric Soil Indicators

	Histosol		Concretions / Nodules (w/in 3";>2 mm)
	Histic Epipedon		High organics near surface (sandy soils)
	Sulfidic Odor		Organic pan (in sandy soils)
	Reducing Conditions (tests positive)		Hydric soils list and profile matches
	Gleyed		Other:
No	Redox features within 10 inches		

Criteria met? No *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

	Recorded data available		Aerial Photographs		Stream gauge
✓	No recorded data available		Other		

Depth of Inundation dry Depth to free water (saturation) dry Time
Depth to Seepage dry Depth to free water (saturation) Time

	Inundated		Oxidized root channels
	Saturated w/in 12 inches		Water-stained leaves
	Water marks		Local soil survey data
	Drift lines		FAC – Neutral Test
	Sediment patterns		Other
	Drainage patterns		

Criteria met? No Also, no indirect indicators

Wetland? No Staff: Nancy Rorick and Dennis O'Connor
Comments: Does not meet the soils or hydrology criteria for jurisdictional wetlands

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP2	Date & Time	6/29/05
Recent Weather	Sunny and warm	Plant Community	coastal woodland
Plot Location	end of cull de sac in skunk cabbage patch at base of drain pipe; in wetland E		
Has the soil, vegetation or hydrology been significantly disturbed?	Yes, receives runoff from road.		

VEGETATION

Trees		% Cover	20
Species	Status	Percent	Dom
Tsuga heterophylla	FACU-	20	✓
Sapling / Shrub		% Cover	85
Physocarpus capitatus	FAC+	5	
Gaultheria shallon	FACU	30	✓
Vaccinium ovatum	NL	50	✓

Herbs		% Cover	105
Species	Status	Percent	Dom
Lysichiton americanum	OBL	100	✓
Polystichum munitum	FACU	5	

Percent of dominant species that are OBL, FACW, FAC: 100%
Criteria met? Yes Note: *Gaultheria shallon*, *Vaccinium ovatum*, *Polystichum munitum*, and *Tsuga heterophylla* are all rooted in the upland adjacent to wetland.

SOILS

Map Unit Name: Chitwood-Knappa silt loams, 0-7% slopes Drainage class: somewhat poorly drained & well drained
Taxonomy: Aquandic Dystrudepts and Andic Dystrudepts On hydric soils list? No

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
0-4 in.		10YR 2/1	none	peat	massive
4-9 in.		7.5YR 2.5/2	none	silt loam	massive
9-16 in.		10YR 2/2	none	silt loam	massive

Note: from 9-16 inches, soil has high organic content and H_2S odor. Soil is a developing histosol.

Hydric Soil Indicators

	Histosol		Concretions / Nodules (w/in 3";>2 mm)
	Histic Epipedon		High organics near surface (sandy soils)
	Sulfidic Odor		Organic pan (in sandy soils)
	Reducing Conditions (tests positive)		Hydric soils list and profile matches
	Gleyed	✓	Other: Low chroma matrix
	Redox features within 10 inches		

Criteria met? Yes *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

	Recorded data available		Aerial Photographs		Stream gauge
✓	No recorded data available		Other		

Depth of Inundation ____ Depth to free water (saturation) ____ Time ____
Depth to Seepage ____ Depth to free water (saturation) ____ Time ____

	Inundated		Oxidized root channels
	Saturated w/in 12 inches		Water-stained leaves
	Water marks		Local soil survey data
	Drift lines		FAC – Neutral Test
	Sediment patterns		Other
✓	Drainage patterns		

Criteria met? Yes Water discharges to wetland from drainpipe.

Wetland? ____ Staff: Nancy Rorick and Dennis O'Connor
Comments: ____

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP3	Date & Time	6/29/05
Recent Weather	Sunny and warm	Plant Community	Upland shrub
Plot Location	Upland adjacent to SP2 in wetland E.		

Has the soil, vegetation or hydrology been significantly disturbed? Yes, fill material from road embankment.

VEGETATION

Trees		% Cover	15	Herbs		% Cover	25
Species	Status	Percent	Dom	Species	Status	Percent	Dom
Alnus rubra	FAC	10		*Digitalis purpurea*	FACU	5	
Tsuga heterophylla	FACU-	5		*Ranunculus repens*	FACW	20	✓
Sapling / Shrub		% Cover	80				
Rubus spectabilis	FAC+	30	✓				
Vaccinium ovatum	NL	20	✓				
Gaultheria shallon	FACU	20	✓				
Rubus discolor	FACU	10					

Percent of dominant species that are OBL, FACW, FAC: 25
Criteria met? No

SOILS

Map Unit Name: Chitwood-Knappa silt loams, 0-7% slopes Drainage class: somewhat poorly drained & well drained
Taxonomy: Aquandic Dystrudepts and Andic Dystrudepts On hydric soils list? No

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
0-16 in.		10YR 4/3	none	sandy loam with gravel	massive

Note: Soil is fill material for roadside.

Hydric Soil Indicators

	Histosol		Concretions / Nodules (w/in 3";>2 mm)
	Histic Epipedon		High organics near surface (sandy soils)
	Sulfidic Odor		Organic pan (in sandy soils)
	Reducing Conditions (tests positive)		Hydric soils list and profile matches
	Gleyed		Other:
	Redox features within 10 inches		

Criteria met? No *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

	Recorded data available		Aerial Photographs		Stream gauge
✓	No recorded data available		Other		

Depth of Inundation ____ Depth to free water (saturation) ____ Time ____
Depth to Seepage ____ Depth to free water (saturation) ____ Time ____

	Inundated		Oxidized root channels
	Saturated w/in 12 inches		Water-stained leaves
	Water marks		Local soil survey data
	Drift lines		FAC – Neutral Test
	Sediment patterns		Other
	Drainage patterns		

Criteria met? No

Wetland? No Staff: Nancy Rorick and Dennis O'Connor
Comments:

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP4	Date & Time	6/29/05
Recent Weather	Sunny and warm	Plant Community	coastal woodland
Plot Location	South boundary of site, west of SP5		

Has the soil, vegetation or hydrology been significantly disturbed? No

VEGETATION

Trees		% Cover	60	Herbs		% Cover	10
Species	Status	Percent	Dom	Species	Status	Percent	Dom
Alnus rubra	FAC	50	✓	*Blechnum spicant*	FAC+	5	
Tsuga heterophylla	FACU-	10		*Athyrium filix-femina*	FAC	5	
				Juncus effusus	FACW+	T	
				Claytonia sibirica	FACW	T	
Sapling / Shrub		% Cover	75				
Rubus spectabilis	FAC+	30	✓				
Sambucus racemosa	FACU	45	✓				

Percent of dominant species that are OBL, FACW, FAC: 67
Criteria met? Yes

SOILS

Map Unit Name: Chitwood-Hebo Complex, 0-5% Slopes — Drainage class: somewhat poorly drained & poorly drained
Taxonomy: Aquandic Dystrudepts & Typic Humaquepts — On hydric soils list? Chitwood - No, Hebo-Yes

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
0-5 in.		7.5YR 2.5/2	none (high organics)	silty clay	fine granular
5-16 in.		10YR 4/2 to 2/2	7.5YR 5/8 common, fine, distinct	loam	coarse angular blocky

Hydric Soil Indicators

	Histosol		Concretions / Nodules (w/in 3";>2 mm)
	Histic Epipedon		High organics near surface (sandy soils)
	Sulfidic Odor		Organic pan (in sandy soils)
	Reducing Conditions (tests positive)		Hydric soils list and profile matches
	Gleyed		Other:
	Redox features within 10 inches		

Criteria met? Yes *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

	Recorded data available		Aerial Photographs	Stream gauge
✓	No recorded data available		Other	

Depth of Inundation: dry — Depth to free water (saturation): dry — Time:
Depth to Seepage: dry — Depth to free water (saturation): — Time:

	Inundated		Oxidized root channels
	Saturated w/in 12 inches		Water-stained leaves
	Water marks		Local soil survey data
	Drift lines		FAC – Neutral Test
	Sediment patterns		Other
✓	Drainage patterns		

Criteria met? Yes Late season delineation

Wetland? Yes Staff: Nancy Rorick, Loverna Wilson, and Dennis O'Connor
Comments:

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP5	Date & Time	6/29/05
Recent Weather	Sunny and warm	Plant Community	coastal woodland
Plot Location	West boundary of site, east of SP4		

Has the soil, vegetation or hydrology been significantly disturbed? No

VEGETATION

Trees		% Cover	60	Herbs		% Cover	10
Species	Status	Percent	Dom	Species	Status	Percent	Dom
Alnus rubra	FAC	50	✓	*Blechnum spicant*	FAC+	5	
				Carex obnupta	OBL	5	
				Claytonia sibirica	FACW	T	
				Juncus effusus	FACW+	T	
				Athyrium filix-femina	FAC	T	
Sapling / Shrub		% Cover	80				
Rubus discolor	FACU	60	✓				
Sambucus racemosa	FACU	20	✓				

Percent of dominant species that are OBL, FACW, FAC: 33
Criteria met? No

SOILS

Map Unit Name: Chitwood-Hebo Complex, 0-5% Slopes Drainage class: somewhat poorly drained & poorly drained
Taxonomy: Aquandic Dystrudepts & Typic Humaquepts On hydric soils list? Chitwood - No, Hebo-Yes

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
0-4 in.		10YR 2/2	none	silt loam	fine, sub-angular blocky
4-16 in.		10YR 3/3	7.5YR 5/8 few, fine and faint	loam	fine angular blocky

Hydric Soil Indicators

___	Histosol	___	Concretions / Nodules (w/in 3";>2 mm)
___	Histic Epipedon	___	High organics near surface (sandy soils)
___	Sulfidic Odor	___	Organic pan (in sandy soils)
___	Reducing Conditions (tests positive)	___	Hydric soils list and profile matches
___	Gleyed	___	Other: ___
___	Redox features within 10 inches		___

Criteria met? No *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

___	Recorded data available	___	Aerial Photographs	___	Stream gauge
___	No recorded data available	___	Other		

Depth of Inundation dry Depth to free water (saturation) ___ Time ___
Depth to Seepage dry Depth to free water (saturation) ___ Time ___

___	Inundated	___	Oxidized root channels
___	Saturated w/in 12 inches	___	Water-stained leaves
___	Water marks	___	Local soil survey data
___	Drift lines	___	FAC – Neutral Test
___	Sediment patterns	___	Other ___
___	Drainage patterns		___

Criteria met? No

Wetland? No Staff: Nancy Rorick, Dennis O'Connor, and Loverna Wilson
Comments: ___

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP6	Date & Time	7/1/05
Recent Weather	Sunny and warm	Plant Community	coastal woodland
Plot Location	Paired with SP7		

Has the soil, vegetation or hydrology been significantly disturbed? No

VEGETATION

Trees		% Cover	50	Herbs		% Cover	45
Species	Status	Percent	Dom	Species	Status	Percent	Dom
Tsuga heterophylla	FACU-	20	✓	*Lysichiton americanum*	OBL	25	✓
Alnus rubra	FAC	30	✓	*Stachys cooleyae*	FACW	5	
				Maianthemum dilatatum	FAC	10	
				Vancouveria hexandra	NL	5	
				Blechnum spicant	FAC+	T	
Sapling / Shrub		% Cover	40	*Athyrium filix-femina*	FAC	T	
Rubus spectabilis	FAC	40	✓				

Percent of dominant species that are OBL, FACW, FAC: 75%
Criteria met? Yes

SOILS

Map Unit Name: Chitwood-Knappa silt loams, 0-7% slopes — Drainage class: somewhat poorly drained & well drained
Taxonomy: Aquandic Dystrudepts and Andic Dystrudepts — On hydric soils list? No

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
0-6 in.	O	7.5YR 2.5/2	none	organics	fine granular
6-10 in.		10YR 4/2	7.5YR 3/4 common, fine, distinct	silt loam	
10-16 in.		2.5Y 5/3	7.5YR 5/8 common, fine, distinct	shale fragments	weathered bedrock

Hydric Soil Indicators

	Histosol		Concretions / Nodules (w/in 3";>2 mm)
	Histic Epipedon		High organics near surface (sandy soils)
	Sulfidic Odor		Organic pan (in sandy soils)
	Reducing Conditions (tests positive)		Hydric soils list and profile matches
	Gleyed		Other:
	Redox features within 10 inches		

Criteria met? Yes *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

	Recorded data available		Aerial Photographs		Stream gauge
✓	No recorded data available		Other		

Depth of Inundation: dry — Depth to free water (saturation): — Time:
Depth to Seepage: dry — Depth to free water (saturation): — Time:

	Inundated		Oxidized root channels
	Saturated w/in 12 inches		Water-stained leaves
	Water marks		Local soil survey data
	Drift lines		FAC – Neutral Test
	Sediment patterns		Other
✓	Drainage patterns		

Criteria met? Yes Indirect indicators (late season evaluation).

Wetland? Yes Staff: Nancy Rorick and Laura Miller
Comments:

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP7	Date & Time	7/1/05
Recent Weather	Sunny and warm	Plant Community	Coastal woodland
Plot Location	paired with SP6		

Has the soil, vegetation or hydrology been significantly disturbed? No

VEGETATION

Trees		% Cover	80	Herbs		% Cover	95
Species	Status	Percent	Dom	Species	Status	Percent	Dom
Alnus rubra	FAC	20	✓	*Blechnum spicant*	FAC+	20	✓
Tsuga heterophylla	FACU-	60	✓	*Claytonia sibirica*	FACW	5	
				Athyrium filix-femina	FAC	35	✓
				Stachys cooleyae	FACW	T	
				Gaultheria shallon	FACU	30	✓
Sapling / Shrub		% Cover	80	*Vancouveria hexandra*	NL	5	
Rubus spectabilis	FAC	55	✓				
Sambucus racemosa	FACU	20	✓				
Vaccinium parvifolium	FACU	5					

Percent of dominant species that are OBL, FACW, FAC: 57%
Criteria met? Yes

SOILS

Map Unit Name: Chitwood-Knappa silt loams, 0-7% slopes
Drainage class: somewhat poorly drained & well drained
Taxonomy: Aquandic Dystrudepts and Andic Dystrudepts
On hydric soils list? No

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
+3-0 in.	duff	5YR 2.5/1		duff	
0-9 in.		10YR 4/3	7.5YR 4/4 common, fine, and faint	silty clay	fine granular

Note: Bedrock (highly weathered shale) at a depth of nine inches.

Hydric Soil Indicators

	Histosol		Concretions / Nodules (w/in 3";>2 mm)
	Histic Epipedon		High organics near surface (sandy soils)
	Sulfidic Odor		Organic pan (in sandy soils)
	Reducing Conditions (tests positive)		Hydric soils list and profile matches
	Gleyed		Other:
	Redox features within 10 inches		

Criteria met? No *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

	Recorded data available		Aerial Photographs		Stream gauge
✓	No recorded data available		Other		

Depth of Inundation: dry — Depth to free water (saturation): — Time:
Depth to Seepage: dry — Depth to free water (saturation): — Time:

	Inundated		Oxidized root channels
	Saturated w/in 12 inches		Water-stained leaves
	Water marks		Local soil survey data
	Drift lines		FAC – Neutral Test
	Sediment patterns		Other
	Drainage patterns		

Criteria met? No

Wetland? No Staff: Nancy Rorick and Laura Miller
Comments: Distinct drop in topography between SP5 and SP6

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP8	Date & Time	7/1/05
Recent Weather	Sunny and warm	Plant Community	
Plot Location	Western wetland line, paired with SP9		

Has the soil, vegetation or hydrology been significantly disturbed? No

VEGETATION

Trees		% Cover	90	Herbs		% Cover	0
Species	Status	Percent	Dom	Species	Status	Percent	Dom
Picea sitchensis	FAC	30	✓	none			
Alnus rubra	FAC	30	✓				
Tsuga heterophylla	FACU-	30	✓				
Sapling / Shrub		% Cover	50				
Rubus spectabilis	FAC	50	✓				
Sambucus racemosa	FACU	20	✓				
Gaultheria shallon	FACU	T					

Percent of dominant species that are OBL, FACW, FAC: 60
Criteria met? Yes

SOILS

Map Unit Name: Chitwood-Hebo Complex, 0-5% Slopes Drainage class: somewhat poorly drained & poorly drained
Taxonomy: Aquandic Dystrudepts & Typic Humaquepts On hydric soils list? Chitwood - No, Hebo-Yes

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
+7-0 in.	duff				
0-15 in.		2.5YR 2.5/2	none	silt loam	fine granular
15-16 in.		10YR 3/2	7.5YR 5/8	silty clay loam	subangular blocky

Hydric Soil Indicators

	Histosol		Concretions / Nodules (w/in 3";>2 mm)
	Histic Epipedon		High organics near surface (sandy soils)
	Sulfidic Odor		Organic pan (in sandy soils)
	Reducing Conditions (tests positive)		Hydric soils list and profile matches
	Gleyed		Other:
	Redox features within 10 inches		

Criteria met? No *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

	Recorded data available		Aerial Photographs	Stream gauge
✓	No recorded data available		Other	

Depth of Inundation dry Depth to free water (saturation) Time
Depth to Seepage dry Depth to free water (saturation) Time

	Inundated		Oxidized root channels
	Saturated w/in 12 inches		Water-stained leaves
	Water marks		Local soil survey data
	Drift lines		FAC – Neutral Test
	Sediment patterns		Other
	Drainage patterns		

Criteria met? No Moss covered, no drainage patterns.

Wetland? No Staff: Laura Miller and Nancy Rorick
Comments:

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP9	Date & Time	7/1/05
Recent Weather	Sunny and warm	Plant Community	coastal woodland
Plot Location	Paired with SP8		

Has the soil, vegetation or hydrology been significantly disturbed? No

VEGETATION

Trees		% Cover	75	Herbs		% Cover	31
Species	Status	Percent	Dom	Species	Status	Percent	Dom
Picea sitchensis	FAC	30	✓	*Lysichiton americanum*	OBL	25	✓
Tsuga heterophylla	FACU-	15		*Athyrium filix-femina*	FAC	3	
Alnus rubra	FAC	30	✓	*Blechnum spicant*	FAC+	3	
Sapling / Shrub		% Cover	60				
Rubus spectabilis	FAC	30	✓				
Sambucus racemosa	FACU	30	✓				

Percent of dominant species that are OBL, FACW, FAC: 80
Criteria met? Yes

SOILS

Map Unit Name: Chitwood-Hebo Complex, 0-5% Slopes Drainage class: somewhat poorly drained & poorly drained
Taxonomy: Aquandic Dystrudepts & Typic Humaquepts On hydric soils list? Chitwood - No, Hebo-Yes

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
+1-0 in.	duff				
0-5 in.		10YR 3/1	none	silt loam	fine, subangl. blcky
5-12 in.		2.5Y 5/3	7.5YR 4/5 common, fine, distinct	silt loam	
12-16 in.		10YR 4/4	2.5YR 4/8 medium, common and prominent	clay loam	gritty

Note: Shale fragments from 12 to 16 inches.

Hydric Soil Indicators

	Histosol		Concretions / Nodules (w/in 3";>2 mm)
	Histic Epipedon		High organics near surface (sandy soils)
	Sulfidic Odor		Organic pan (in sandy soils)
	Reducing Conditions (tests positive)		Hydric soils list and profile matches
	Gleyed	✓	Other: Low chroma matrix
	Redox features within 10 inches		

Criteria met? Yes *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

	Recorded data available		Aerial Photographs		Stream gauge
	No recorded data available		Other		

Depth of Inundation ____ Depth to free water (saturation) ____ Time ____
Depth to Seepage ____ Depth to free water (saturation) ____ Time ____

	Inundated		Oxidized root channels
	Saturated w/in 12 inches		Water-stained leaves
	Water marks		Local soil survey data
	Drift lines		FAC – Neutral Test
	Sediment patterns		Other
✓	Drainage patterns		

Criteria met? Yes Drainage patterns, moist soil, and no moss.

Wetland? ____ Staff: ____
Comments: ____

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP10	Date & Time	7-2-05
Recent Weather	Sunny and warm	Plant Community	Coastal woodland
Plot Location	paired with SP11		

Has the soil, vegetation or hydrology been significantly disturbed? No

VEGETATION

Trees		% Cover	70	Herbs		% Cover	65
Species	Status	Percent	Dom	Species	Status	Percent	Dom
Alnus rubra	FAC	50	✓	*Lysichiton americanum*	OBL	60	✓
Picea sitchensis	FAC	20	✓	*Claytonia sibirica*	FACW	5	
Sapling / Shrub		% Cover	90				
Rubus spectabilis	FAC	70	✓				
Sambucus racemosa	FACU	20	✓				

Percent of dominant species that are OBL, FACW, FAC: 80%
Criteria met? Yes

SOILS

Map Unit Name: Chitwood-Knappa silt loams, 0-7% slopes Drainage class: somewhat poorly drained & well drained
Taxonomy: Aquandic Dystrudepts and Andic Dystrudepts On hydric soils list? No

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
+1-0 in.	duff				
0-2 in.		10YR 2/2	10YR 3/6 common and fine	silt loam	
2-6 in.		10YR 4/2	10YR 5/6 common and fine	silt loam	
6-12 in		10YR 5/1	2.5Y 5/6 common and medium	silty clay loam	
12-18 in.		2.5Y 5/2	2.5Y 5/6 and 10YR 5/6	silty clay loam	

Note: many rock fragments in soil

Hydric Soil Indicators

	Histosol		Concretions / Nodules (w/in 3";>2 mm)
	Histic Epipedon		High organics near surface (sandy soils)
	Sulfidic Odor		Organic pan (in sandy soils)
	Reducing Conditions (tests positive)		Hydric soils list and profile matches
	Gleyed		Other:
✓	Redox features within 10 inches		

Criteria met? Yes *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

	Recorded data available		Aerial Photographs	Stream gauge
✓	No recorded data available		Other	

Depth of Inundation ____ Depth to free water (saturation) ____ Time ____
Depth to Seepage 18 in. Depth to free water (saturation) ____ Time ____

	Inundated	✓	Oxidized root channels
	Saturated w/in 12 inches		Water-stained leaves
	Water marks		Local soil survey data
	Drift lines		FAC – Neutral Test
	Sediment patterns		Other
	Drainage patterns		

Criteria met? Yes soil very moist, late season wetland delineation

Wetland? Yes Staff: Laura Miller and Nancy Rorick
Comments:

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP11	Date & Time	7/1/05
Recent Weather	Sunny and warm	Plant Community	coastal woodland
Plot Location	Paired with SP10		

Has the soil, vegetation or hydrology been significantly disturbed? No

VEGETATION

Trees		% Cover	70	Herbs		% Cover	50
Species	Status	Percent	Dom	Species	Status	Percent	Dom
Picea sitchensis	FAC	20	✓	*Polystichum munitum*	FACU	40	✓
Alnus rubra	FAC	40	✓	*Stachys cooleyae*	FACW	10	
Tsuga heterophylla	FACU-	10					
Sapling / Shrub		% Cover	70				
Rubus spectabilis	FAC	35	✓				
Sambucus racemosa	FACU	35	✓				
Vaccinium ovatum	NL	5					

Percent of dominant species that are OBL, FACW, FAC: 60%
Criteria met? Yes

SOILS

Map Unit Name: Chitwood-Knappa silt loams, 0-7% slopes Drainage class: somewhat poorly drained & well drained
Taxonomy: Aquandic Dystrudepts and Andic Dystrudepts On hydric soils list? No

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
0-11 in.		10YR 3/3	none	silt loam	with cobbles

Hydric Soil Indicators

	Histosol		Concretions / Nodules (w/in 3";>2 mm)
	Histic Epipedon		High organics near surface (sandy soils)
	Sulfidic Odor		Organic pan (in sandy soils)
	Reducing Conditions (tests positive)		Hydric soils list and profile matches
	Gleyed		Other:
	Redox features within 10 inches		

Criteria met? No *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

	Recorded data available		Aerial Photographs	Stream gauge
✓	No recorded data available		Other	

Depth of Inundation dry Depth to free water (saturation) Time
Depth to Seepage dry Depth to free water (saturation) Time

	Inundated		Oxidized root channels
	Saturated w/in 12 inches		Water-stained leaves
	Water marks		Local soil survey data
	Drift lines		FAC – Neutral Test
	Sediment patterns		Other
	Drainage patterns		

Criteria met? No

Wetland? No Staff: Laura Miller and Nancy Rorick
Comments:

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP12	Date & Time	7/2/05
Recent Weather	Sunny and warm	Plant Community	coastal wetland
Plot Location	Paired with SP13		

Has the soil, vegetation or hydrology been significantly disturbed? No

VEGETATION

Trees		% Cover		Herbs		% Cover	
Species	Status	Percent	Dom	Species	Status	Percent	Dom
Alnus rubra	FAC	30	✓	*Polystichum munitum*	FACU	25	✓
Tsuga heterophylla	FACU-	25	✓	*Athyrium filix-femina*	FAC	5	
Picea sitchensis	FAC	5		*Blechnum spicant*	FAC+	25	✓
Sapling / Shrub		% Cover					
Rubus spectabilis	FAC	80	✓				
Sambucus racemosa	FACU	10					

Percent of dominant species that are OBL, FACW, FAC: 60%
Criteria met? Yes

SOILS

Map Unit Name: Chitwood-Knappa silt loams, 0-7% slopes Drainage class: somewhat poorly drained & well drained
Taxonomy: Aquandic Dystrudepts and Andic Dystrudepts On hydric soils list? No

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
0-14 in.		10YR 3/2	none	silt loam	
14-16 in.		10YR 2/2	7.5YR 4/6 few and fine	silty clay loam	

Hydric Soil Indicators

	Histosol		Concretions / Nodules (w/in 3";>2 mm)
	Histic Epipedon		High organics near surface (sandy soils)
	Sulfidic Odor		Organic pan (in sandy soils)
	Reducing Conditions (tests positive)		Hydric soils list and profile matches
	Gleyed		Other:
No	Redox features within 10 inches		

Criteria met? No *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

	Recorded data available		Aerial Photographs	Stream gauge
✓	No recorded data available		Other	

Depth of Inundation dry Depth to free water (saturation) Time
Depth to Seepage dry Depth to free water (saturation) Time

	Inundated		Oxidized root channels
	Saturated w/in 12 inches		Water-stained leaves
	Water marks		Local soil survey data
	Drift lines		FAC – Neutral Test
	Sediment patterns		Other
	Drainage patterns		

Criteria met? No No indirect indicators.

Wetland? No Staff: Laura Miller and Nancy Rorick
Comments:

Appendix A

WETLAND DETERMINATION DATA SHEET: Onsite Method
Rorick Environmental Services, 503-668-8660

Project Location	Rockaway Beach	County, State	Tillamook, Oregon
Applicant	Troy Johns	T, R, S	T2N, R10W, SE ¼ of Sec. 29
Transect / Plot	SP13	Date & Time	7/2/05
Recent Weather	Sunny and warm	Plant Community	coastal woodland
Plot Location	Paired SP12		

Has the soil, vegetation or hydrology been significantly disturbed? No

VEGETATION

Trees		% Cover	70	Herbs		% Cover	60
Species	Status	Percent	Dom	Species	Status	Percent	Dom
Alnus rubra	FAC	30	✓	*Lysichiton americanum*	OBL	60	✓
Tsuga heterophylla	FACU-	20	✓				
Picea sitchensis	FAC	20	✓	bare ground	40%		
Sapling / Shrub		% Cover	70				
Rubus spectabilis	FAC	70	✓				

Percent of dominant species that are OBL, FACW, FAC: 80%
Criteria met? Yes

SOILS

Map Unit Name: Chitwood-Knappa silt loams, 0-7% slopes Drainage class: somewhat poorly drained & well drained
Taxonomy: Aquandic Dystrudepts and Andic Dystrudepts On hydric soils list? No

Depth	Horizon	Matrix Color	Redox Concentrations / Depletions*	Texture	Structure
0-2 in.		10YR 2/1	none	silt loam	contains organics
2-14 in.		7.5YR 3/1	5YR 3/4 common, fine to medium	silt loam	
14-16 in.		10YR 2/2	5YR 3/4 common, fine	silt loam	

Hydric Soil Indicators

	Histosol		Concretions / Nodules (w/in 3";>2 mm)
	Histic Epipedon		High organics near surface (sandy soils)
✓	Sulfidic Odor		Organic pan (in sandy soils)
	Reducing Conditions (tests positive)		Hydric soils list and profile matches
	Gleyed		Other:
	Redox features within 10 inches		

Criteria met? Yes *abundance / size / contrast / color / location (matrix or pores)

HYDROLOGY

	Recorded data available		Aerial Photographs		Stream gauge
	No recorded data available		Other		

Depth of Inundation: none Depth to free water (saturation): none Time:
Depth to Seepage: 14 inches Depth to free water (saturation): Time:

	Inundated	✓	Oxidized root channels
	Saturated w/in 12 inches		Water-stained leaves
	Water marks		Local soil survey data
	Drift lines		FAC – Neutral Test
	Sediment patterns		Other
	Drainage patterns		

Criteria met? Yes

Wetland? Yes Staff: Laura Miller and Nancy Rorick
Comments:

APPENDIX E

US Army Corps
Of Engineers (Portland District)

Joint Permit Application Form

RECEIVED
MAY 26 2010
DEPARTMENT OF STATE LANDS
DATE STAMP

AGENCIES WILL ASSIGN NUMBERS

Corps Action ID Number **2009-357** Oregon Department of State Lands No **41607-RF**

SEND ONE SIGNED COPY OF YOUR APPLICATION TO EACH AGENCY

US Army Corps of Engineers:
District Engineer
ATTN: CENWP-OD-GPPO
Box 2946
Portland, OR 97208-2946
503-808-4373

AND

DSL - West of the Cascades:
State of Oregon
Department of State Lands
775 Summer Street, Suite 100
Salem, OR 97301-1279
503-378-3805

OR

DSL - East of the Cascades:
State of Oregon
Department of State Lands
1645 NE Forbes Road, Suite 112
Bend, Oregon 97701
541-388-6112

AND

Send DSL Application Fees to:
State of Oregon
Department of State Lands
PO Box 4395, Unit 18
Portland, OR 97208-4395
(Attach a copy of the first page of the application)

(1) APPLICANT INFORMATION

Name and Address	Troy Johns 14801 NE 13th Circle Vancouver, WA 98684	Business Phone # Home Phone # Fax # Email	360-600-4425 troyajohns@gmail.com
Authorized Agent Name and Address Check one Consultant [X] Contractor [ ]	Nancy L. Rorick Rorick Environmental Services 37552 SE Rachael Drive Sandy, OR 97055	Business Phone # Home Phone # Fax # Email	503-449-4372 nrorick@yahoo.com
Property Owner Name and Address If different from above[1]		Business Phone # Home Phone # Fax # Email	

(2) PROJECT LOCATION

Street, Road or Other Descriptive Location	Legal Description (attach *tax lot map**)			
	Township	Range	Section	Quarter/Quarter
East of Lake Lytle in northern Rockaway Beach, at the south ends of NE Tillamook and NE Necarney Avenue.	2N	10W	29	SW ¼ of the SE ¼

In or near (City or Town)	County	Tax Map #	Tax Lot #[2]
Rockaway Beach	Tillamook	T2N R10W, 2N 10 29DC	5201
Wetland/Waterway (pick one)	River Mile (if known)	Latitude (in DD.DDDD format)	Longitude (in DD.DDDD format)
Wetland	n/a	45° 37.499,0' N	123° 55.991,5' W

Directions to the site	From Highway 101 turn east on 12th Street, cross Lake Lytle and turn right (south) on either NE Tillamook Avenue or Necarney Avenue.

[1] If applicant is not the property owner, permission to conduct the work must be attached.
[2] Attach a copy of all tax maps with the project area highlighted.
** Italicized areas are not required by the Corps for a complete application, but may be necessary prior to final permit decision by the Corps.*

(3) PROPOSED PROJECT INFORMATION

Type: Fill [X] Excavation (removal) [X] In-Water Structure [ ] Maintain/Repair an Existing Structure [ ]

Brief Description:

Fill

Riprap [ ] Rock [ ] Gravel [X] Organics [ ] Sand [X] Silt [X] Clay [X] Other: [ ]

Wetlands	Permanent (cy)	Temporary (cy)	Total cubic yards for project (including outside OHW/wetlands)	2,115 cy
	287	0		
	Impact Area in Acres	Dimensions (feet)		
	0.17	L' W' H'		
Waters below OHW	Permanent (cy)	Temporary (cy)	Total cubic yards for project (including outside OHW/wetlands)	
	0	0		
	Impact Area in Acres	Dimensions (feet)		
	0	L' W' H'		

Removal

Wetlands	Permanent (cy)	Temporary (cy)	Total cubic yards for project (including outside OHW/wetlands)	7,789 cy
	4	0		
	Impact Area in Acres	Dimensions (feet)		
	.005	L' W' H'		
Waters below OHW	Permanent (cy)	Temporary (cy)	Total cubic yards for project (including outside OHW/wetlands)	
	0	0		
	Impact Area in Acres	Dimensions (feet)		
	0	L' W' H'		

Total acres of construction related ground disturbance (If 1 acre or more a 1200-C permit may be required from DEQ)

Is the disposal area upland? Yes [X] No [ ] Impervious surface created? 0<1 acre [ ] 0>1 acre? [X]

	Yes	No
Are you aware of any state or federally listed species on the project site?		X
Are you aware of any Cultural/Historic Resources on the project site?		X
Is the project site within a national Wild & Scenic River?		X
*Is the project site within a State Scenic State Scenic Waterway?**		X

If yes, please explain in the project description (in block 4)

(4) PROPOSED PROJECT PURPOSE AND DESCRIPTION

Purpose and Need:

*Provide a description of the public, social, economic, or environmental benefits of the project along with any supporting formal actions of a public body (e.g. city or county government), as appropriate.**

A. Statement of Project Purpose for Lake Lytle Estates

The project purpose is to construct and market 85 economically-viable, moderately-priced ($250,000 per unit) LEED Platinum Certified homes at the Lake Lytle Estates subdivision in Rockaway Beach, Oregon. The homes and subdivision are planned and constructed in a manner consistent with the City of Rockaway Beach's Comprehensive Plan and other local development requirements. The proposed homes will be single-level, moderately-sized in the1350 to 1600 square-foot range with the possible exception of 6 lots that are sized to accommodate homes in the 1600 to 1900 square-foot range. The homes will be sustainable and marketed to middle-income retirees, single families and second-home owners.

** Italicized areas are not required by the Corps for a complete application, but may be necessary prior to final permit decision by the Corps.*

B. Statement of Project Need for Lake Lytle Estates

The current housing market on the Oregon coast and elsewhere in the state is slow and particularly so for lots without constructed housing. However, the market remains viable for homes that are moderately priced (half the cost of many available units) and environmentally sustainable. The target markets for these types of homes are middle-income retirees, single-family residents and second-home owners. This is the market niche targeted by the applicant.

This document provides support for the statements made above. In addition, accompanying this summary are three news articles. One is from the Oregonian, commenting on the baby boomer market in the Portland Metro Area. One is from Oregon Coast Properties, a broker-associated website. And the third is "Oregon coast real estate", from a website provided by the Oregon Coast Real Estate Multiple Listing Service. All of these articles highlight the demands for the very type of housing that the developers of Lake Lytle Estates propose.

C. Applicant Information

Troy Johns is the permit applicant. Mr. Johns and his business partner, Robert W. Schmeling, will develop the lots on the property. The two men jointly own and manage Sustainable Oregon Construction, LLC (SOC); the company that will build and market the houses in the Lytle Estates. SOC is a real estate investment company based in Vancouver, Washington at 1004 W. 13th Street Vancouver, WA. SOC is committed to LEED Certified "green" buildings on the Oregon Coast. The company has over 60 years of member experience in real estate investing and development in Clark County Washington.

D. Information Supporting Applicant's Statements of Purpose and Need

1. Market Demand for Housing

SOC is proposing to provide homes that are in the mid-price range (around $250,000), LEED certified, and mostly sized at less than 1600 square feet. The intent of the project is to fulfill a demonstrated need in Rockaway Beach for modern, attractive homes that are affordable. Most homes currently available in the area are either higher-priced large homes (often $500,000 per unit or more) or older, less attractive homes in need of repair. LEED certification will also provide a market advantage for Lake Lytle Estates: currently there are only three LEED certified homes on the Oregon Coast and those are located in Lincoln City and are substantially more expensive than the homes proposes for Lake Lytle Estates (LEED Projects and Cases Studies 2009).

The applicant proposes to overcome the current slow housing market by building homes for which there is a documented demand. Hence, the Lake Lytle Estates proposal will address the demand forecasted in the local comprehensive plan. The purpose of this development is not simply to add to the surplus of lots for sale on the Oregon coast but actually to build and market homes on the lots. In other words, the purpose is to sell constructed homes and not simply market lots requiring substantially more investment before becoming usable properties. The selected market for such homes is primarily retiring and downsizing baby boomers.

A great deal has been said in the media about problems with the housing market. On the Oregon coast, most new homes and properties are upper-end (that is, they come with a large price tag and large physical footprint). Many pre-development properties were bought at an acreage-based price that presumed the creation of lots selling in the $125,000-$175,000 range, or higher, for the eventual construction of homes selling from $500,000-$1,500,000. It is properties priced in these ranges in the Pacific Northwest that have been hit the hardest by the downturn in housing. The sale of housing (not lots) has picked up in the last 3-5 months. However, the sales that are occurring are homes priced at under $250,000. Lots simply are not selling in any great number, primarily because the prices asked for existing, finished lots have the high cost of raw land that were built into the lots by property purchases contracted prior to the downturn. Homes on these lots are

encumbered by the same pre-downturn raw land prices. The absorption of these lots and higher-priced houses will be slow as the economy slowly recovers.

Lake Lytle Estate will not compete with the existing new-home and vacant-lot inventory on the Oregon Coast. Lake Lytle Estate will take aim at the demand for small, lower-priced new homes (not lots) that are being purchased primarily by down-sizing and retiring baby boomers. There is a dearth of subdivisions with new homes aiming at this market anywhere on the Oregon Coast. Homes and lots available presently in this area are predominantly aimed at the portion of the market seeking larger, luxury oriented summer-homes (often referred to as "McMansions"). The real demand on the coast is for something else more down-to-earth and more in line with the kind of housing styles that are planned for Lake Lytle Estates. Again, the homes will be provided by the very same principals who have developed the lots.

The project is divided into four phases (figures 6 and 7). Construction of the first phase is projected to begin in the summer of 2010. The first phase of construction will include the area identified as Phase 1 on the map (figures 6 and 7), the installation of all roads and utilities, and the construction of the wetland mitigation site. The remaining phases will be developed as justified by market demand.

2. Business Strategy

SOC positioned itself, before the downturn that started in 2006, by leaving the market early and concentrating on baby boomers desired locations. As one third of the population retires over the next 10 years, they intend to relocate to "vacation destinations", such as Rockaway Beach located within two hours of family and friends in Portland and Salem. In addition to the importance of the project's location, SOC also intends to bring LEED Certified Platinum homes under 1600 square feet to the market for under $250,000.

3. Competitive Edge

There are many areas where SOC has a competitive edge over other developers marketing lots purchased and developed during the past real estate "bubble". A few of these areas are listed below.

- Lake Lytle Estates was first purchased in 2003 for $500,000. Similar property would have gone for ten times this amount in subsequent years. Construction costs per lot at Lake Lytle Estates are around $18,000. This makes our lot costs around $22,000 per lot. With lot prices this low, SOC can spend 30% more on the structure to gain LEED Platinum certification, while maintaining home prices under $250,000.

- SOC installs double drain pipe, dimpled drain mat and drain rock around foundation of home to insure there is less than .04% settling to protect the Hydronic, zonal in floor heating system. This is key to "green" building allowing heated water to be pumped through the floor.

- Insulated Concrete Forms (ICF) are used to provide maximum strength and resistance to damage caused by water or insects. The foam concrete forms also provide significant insulation value. All the walls in the home are made of 12 inch thick concrete. There is only a hand full of homes built to this standard on the entire Oregon Coast.

- SOC uses a high performance breathable building wrap and integrated double layered flashing system from Fortifier Building Systems. This system is unmatched anywhere in the state of Oregon.

- 1/2-inch thick fiber cement lap siding with a 50-year warrantee and cellular PVC trim boards with a 30-year warrantee mean savings. Sustainable may mean energy savings, but it also means durability. Durability is another important part of getting LEED certification.

- One of the most wasteful parts of a home's exterior is the deck and porch systems. SOC uses only reinforced concrete posts and trec decking systems. Once again, durability is important in areas that see a lot of precipitation.

- Tax credits provided to buyers for this type of home are as high as $25,000.

4. Competition

While there are many homes on the market, there are no new homes as close to the beach, near a lake, with anywhere near our quality for under $250,000. SOC does not feel it has any type of competitor besides older homes that are much farther from the beach. The nearest competitor is The Villages at Cascade Head (VCH) in Lincoln city. Because VCH builds LEED Certified homes about the same size as SOC's units starting at $599,000, they would not be competition unless their prices are cut in half.

5. Market Trends

Several trends have been reported supporting the beginnings of a turn around in the Oregon real estates market. They include:

- Baby boomer retirement within two hours of the Portland and Salem metro areas
- Demand for LEED certification homes from buyers
- Tax credits for sustainable architecture
- Low interest rates
- Lower rate federal bonus rates for LEED certified homes
- The growing need for one-level houses among the older home buying community

6. Market Growth

The real estate market has seen little to no growth since late 2007. Many communities sit idle with no sales because the seller owes more on the property than he/she can sell them for. Most of these projects will see short sales by the seller in order to move the product. A short sell is when the mortgage holder (with the consent of the lender) sells a property for less than is owed. This will have a negative effect going forward on house prices. This short sale price will set the new bar for the market going forward. Where the market was selling at nearly $350 per square foot, the new price per square foot is currently around $305 per square foot for a non LEED certified home. Rockaway is highly connected to the Salem/Portland markets. As these markets pick up, so will the Oregon Coast but SOC expects the price per square foot in Rockaway to drop to near $200.

7. Market Needs

- LEED Platinum certified homes for under $250,000
- Single storied homes for older and retired buyers
- Affordable homes for retirees , families and second home owners

8. Market Segmentation

SOC has segmented our target market for this community as middle to upper-income families and retirees with a household income of $80,000 per year and up. Most homes in this community will be under $250,000 allowing a house payment at under 21% of income.

9. Market Analysis

The current housing market is poor. Year over year and month over month, sales have slumped and home prices have dropped. The only bright spot is the home market under $250,000. As the market rebounds and retirees from Portland and Salem are increasingly able to sell their homes they will buy in "vacation destinations" such as Rockaway.

10. Marketing Strategy

SOC will concentrate on the Salem/Portland markets advertising in publications of interest to baby boomers such as urban newspapers and localities frequented by baby boomers such as golf courses. SOC will also use the Regional Multiple Listing Service in the Portland / Salem areas and on the coast.

11. Cost Breakdown and Pricing Strategy

Purchase price:	$500,000
Construction costs:	$1,500,000
Lot cost sub total:	$22,727
Home construction cost:	$175,000
Total cost to build home with lot	$197,727
Profit per house	**$52,273**

Prices vary depending on lot size and location but includes house plans, construction and other costs. The table below shows pricing based on the size of the house. This table also shows that SOC can profitably construct houses within the projected market price in Rockaway Beach of less than $200 per square foot.

Size	Market Price	Price per square foot
1350 sq foot	$235,000	$174
1425 sq foot	$235,000	$166
1455 sq foot	$239,000	$164
1550 sq foot	$246,000	$159
1600 sq foot	$246,000	$153

E. Public Benefits From the Lake Lytle Estates Project

1. Tax Revenues

The current tax revenue provided by tax lot 5201 to the county is $1,209 per tax year (Tillamook County Tax Assessor 2009). Assuming tax revenue of $1,100 per residence (amount based on adjacent properties) the amount of county property taxes for a total of 85 lots would increase the annual tax revenue to $92,400.

2. Contribution to the Local Economy

The total development cost of the property is $3.1 million. The land development would provide 1,000 man-hours of work at a wage of $35 per hour. The construction of each house would provide 600 man-hours of labor, and construction costs will be around $130,000 per house. The addition of this number of jobs in the Rockaway Beach area will help stimulate local economic growth.

F. Compatibility with State Land-Use Laws

All construction proposed within the state of Oregon must be constructed in a manner consistent with the local comprehensive plan and land use regulations. Although compliance with local land use does not require issuance of a state removal-fill permit, such compliance is required to enable DSL to issue a permit. Oregon's land use process ensures that the policy choices of the elected officials are set out in the local comprehensive plan and are implemented by the comprehensive plan policies and other land use requirements. Such policy choices include determining where and how development can occur. That is, within their authorized planning jurisdiction, the elected officials determine which lands are suitable for use as commercial, residential and industrial development and how such development will be conducted and the intensity of such developments. As shown below, the proposed project is consistent with the local land use laws.

The proposed project is located within the City of Rockaway Beach's Urban Growth Boundary (UGB) and is zoned Residential / Resort. The development is consistent with the State of Oregon's land use planning goals and the City of Rockaway's Comprehensive Plan (2007).

The project was designed with 85 lots to meet State and City land use requirements for lands located within the UGB. Statewide Planning Goal 14 specifies the following for lands located within the UGB (Oregon Department of Land Conservation and Development 2009).

- **Goal 14:** "Land within urban growth boundaries *shall be considered available for urban development* consistent with plans for the provision of urban facilities and services."

  Response: The project is located entirely within the UGB of Rockaway Beach.

- **Goal 14:** "The size of the parcels of urbanizable land that are converted to urban land should be of adequate dimension so as to *maximize the utility of the land resource and enable the logical and efficient extension of services to such parcels."*

  Response: The project has a density of 7.59 dwellings per acre (after subtracting for roads and open space). This maximizes the available land for housing while impacting only 0.17 acres of wetland. The high density housing makes efficient use of roads and utilities. A lower dwelling-unit density would require more road construction and increase the total acreage of land developed for residential use.

- **Goal 14:** "Comprehensive plans and implementing measures for land inside urban growth boundaries should encourage the *efficient use of land and the development of livable communities."*

  Response: The project by being a higher density development makes efficient use of the upland property on the site while avoiding wetland impacts. The proposed project will be a livable community that features mid-priced LEED certified homes.

G. Compatibility with the City of Rockaway Beach's Comprehensive Plan

The City's Comprehensive plan follows Goal 14 in requiring high density and cluster development to preserve open space. The project meets the following stated goals from the City's Comprehensive plan.

- The Comprehensive Plan identifies a need for mid-income level homes (p. 37). The houses in the proposed development will be less than 2,000 square feet in size and priced around $250,000.

- The Comprehensive Plan identifies a need for the development of parks in the vicinity of Lake Lytle: "Land that becomes available for public ownership through tax foreclosure or other means shall be

considered for potential park, open space or recreation use, especially in the areas around Lake Lytle and Crescent." The western portion of the property (tax lot 5203, 16.7 acres) will be made available for donation as open space to the City or a group interested in land conservation.

- The Comprehensive Plan promotes the conservation of open space. In addition to setting aside areas of open space in separate tax lots, the wetlands will be protected by a five-foot easement at the back of all lots to serve as a walking path. The wetlands will be marked by a simple rope fence that separates the residential lots from the wetlands. Signs will be posted that promote the value and preservation of wetlands.

- The Comprehensive Plan encourages cluster development, particularly in the Lake Lytle Area (pages 12 and 14). Cluster development is the concentration of high density development in a small area to reduce the development footprint and to promote the preservation of open space. The proposed project has a density of 7.59 units per acre and provides for the preservation of 4.04 acres of open space within the project boundary. All open space will be contained within tax lots separate from the residential lots.

- The Comprehensive Plan promotes energy conservation (p. 13). LEED certification provides for at least a 30% reduction in energy costs over conventionally constructed homes.

- The Comprehensive Plan (p. 36) identifies a projected need for 175 to 600 new housing units over the next 20 years. The project will provide 85 housing units.

- The Comprehensive Plan (p. 10) identifies a need to "enhance the City's attractiveness as a retirement community." The project will provide attract, mid-income level housing in a planned development that will be attractive to senior citizens as well as those seeking a second home.

- The Comprehensive Plan (p. 38) states: "Housing development shall be located within the urban growth boundary established in this plan to insure that efficient, logical extensions of urban services such as sewerage, water, roads and fire and police protection will adequately serve new development." The project engineer has worked with the City to develop a road layout that allows for a logical extension the existing road layout. This layout provides for traffic circulation and easy access for emergency vehicles. The project is also consistent with the need identified by City Staff for a connector street running north south through Rockaway Beach other than Highway 101.

- The project is located outside of Special Area (SA) Zone Wetlands Associated with Lake Lytle. SA Zone Wetlands are wetlands defined by the City as those needing extra protection. The location of the SA Zone Wetland relative to the proposed project is shown on figure 5 prepared by the project engineer from HLB-Otak. Jay Sennewald, Rockaway Beach City Planner, has concurred with HLB-Otak's determination that the proposed project is located outside of the SA zone wetland. (page 25, City of Rockaway Beach Comprehensive Plan).

H. References

City of Rockaway Beach Comprehensive Plan, 2007, available online at: http://www.rockawaybeachor.us .

Oregon Department of Land Conservation and Development, 2009, http://www.oregon.gov/LCD/goals.shtml .

Tillamook County Tax Assessor, 2009, http://www.co.tillamook.or.us/

United States Green Building Council: LEED for Homes, 2009, available online at: www.usgbc.org/LEED/homes .

United States Green Building Council: LEED Projects and Case Studies, 2009, http://www.usgbc.org/LEED/Project/RegisteredProjectList.aspx

Project Description:

Please describe in detail the proposed removal and fill activities, including the following information:

- Volumes and acreages of all fill and removal activities in waterway or wetland separately
- Permanent and temporary impacts
- Types of materials (e.g., gravel, silt, clay, etc.)
- How the project will be accomplished (i.e., describe construction methods, equipment, site access)
- *Describe any changes that the project may make to the hydraulic and hydrologic characteristics (e.g., general direction of stream and surface water flow, estimated winter and summer flow volumes.) of the waters of the state, and an explanation of measures taken to avoid or minimize any adverse effects of those changes.*

The applicant is proposing to construct an 85-lot, residential subdivision on 18.85 acres (tax lot 5201) of land east of Lake Lytle in Rockaway Beach. The applicant also owns tax lot 5203 (16.7 acres) west of the project site. The property is zoned R-R. The project will involve the construction of 3,750 feet of road. The subdivision will be connected to city sewer and water.

Table 1 Site information.

Legal location	T2N, R10W, SE ¼ of Sec. 29
Tax map	Tax lot 5201 on tax map T2N R10W
Latitude / Longitude	45° 37.499,0' N, 123° 55.991,5' W
USGS Quadrangles	Garibaldi (1985) and Nehalem (1985)
Zoning	R-R (residential / resort)

Table 2 Project site summary.

	Area
Rights-of-Way	3.61 acres
Phase I Lots	3.10 acres
Phase II Lots	3.26 acres
Phase III Lots	3.58 acres
Phase IV Lots	1.26 acres
Open Space Tracts	4.04 acres
Site Total	18.85 acres

The table below summarizes the permanent wetland impacts. There are no temporary wetland impacts. The fill materials include sand, silt clay and gravel. The construction entrance will be from Necarny Street and the staging area is shown on figure 9. The site will be graded during the summer of 2010. The equipment used to prepare the site for development will consist of backhoes, bulldozers and excavators that are typically used for this type of work.

Table 3 Summary of project impacts.

Fill in wetlands	
Fill volume within wetlands	287 cy
Fill volume within uplands	1,828 cy
Total fill volume for the entire project	2,115 cy
Fill area within wetlands	7,553 sf
Fill area within uplands	90,585 sf
Fill area for the entire project	97,033 sf

Removal from wetlands	
Excavation volume within wetlands	4 cy
Excavation volume within uplands	7,785 cy
Total excavation volume for the entire project	7,789 cy
Removal area within wetlands	216 sf
Removal area within uplands	110,765 sf
Total removal area	110,549 sf

There are two wetland swales associated with seasonal streams that cross the project site from east to west. The western entrance (Tillamook Avenue) crosses both of these swales. The middle entrance (Francis Street) crosses between two wetland areas that are part of the northern most swale. The eastern entrance (Necarney Avenue) crosses the southern swale; the northern swale does not extend this far to the east. Other than these road crossings and a few very small depressional wetlands, the project has been designed to avoid all wetlands associated with the streams. Figure 8 is a schematic of the fish passable box culvert that will be used at all stream crossings.

The stormwater plan prepared by HLB-Otak utilizes vegetated bioswales to remove sediments and contaminants typically associated with residential development. Water from the site will discharge to Lake Lytle. The storm-water plan does not include a detention component due to the proximity of the Pacific Ocean. Water from the project drains into Lake Lytle, Lake Lytle drains into Crescent Lake, and Crescent Lake discharges, through a short stream crossing under Hwy 101, to the Pacific Ocean.

▪ Is any of the work already complete?	Yes		No	X		If yes, please describe the completed work.

In addition, for fish habitat or wetland restoration or enhancement activities, complete the information requested in supplemental Fish Habitat or Wetland Restoration and Enhancement form.

Project Drawings

State the number of project drawing sheets included with this application:

A complete application must include a location map, site plan, cross-section drawings and recent aerial photo as follows and as applicable to the project:

1. Project location map.
2. Topographic map.
3a. Tax map 2N 10.
3b. Tax map 2N 10 29DC.
3c. Updated tax map prepared by HLB-Otak.
4. Aerial photograph.
5. SA Zone Wetland.
6. HGM class of existing wetlands, wetland impacts and proposed compensatory wetland mitigation.
7. Cowardian class of existing wetlands, wetland impacts and proposed compensatory wetland mitigation.
8. Fish passable culvert
9a and 9b. Grading plan.
10a and 10b. Lot layout.
11a -11h. Cross sections. Cross section wetland C.
12. Wetland mitigation grading plan east mitigation area
13. Wetland mitigation grading plan west mitigation area
14. Cross sections of east and west mitigation sites.
15a - 15d. Erosion control notes.
A1. Alternative site locations
A2. Alternative site location 1.
A3. Alternative site location 2.
A4. Alternative site location 3.
A5. Alternative site location 4.
A6. Alternative lot layout 1.

A7. Alternative lot layout 2.
A8. Alternative lot layout 3.
A9. Alternative lot layout 4.

Will any construction debris, runoff, etc., enter a wetland or waterway? Yes ☐ No ☒

If yes, describe the type of discharge and show the discharge location on the site plan.

n /a

Estimated project start date:	May 2010	Estimated project completion date:	November 2010

(5) PROJECT IMPACTS AND ALTERNATIVES

Alternatives Analysis:

Describe alternative sites and project designs that were considered to avoid or minimize impacts to the waterway or wetland. (Include alternative design(s) with less impact and reasons why the alternative(s) were not chosen. Reference OAR 141-085-0025 (3(j)) and 141-085-0029 (4through 6) for more information).*

David Jones of Pete Anderson Realty, Inc. in Rockaway Beach provided a list of four currently available alternative properties in the Rockaway Beach criteria that met the following criteria: vacant land, greater than one acre, and zoned residential.

Table 4 Alternative site locations.

Alternative #	Location	Tax Map	Tax Lots	Size (acres)
1	Garibaldi	1N1021AB	1500 and 1503	1.77
2	Rockaway Beach near Crescent Lake	2N1029AC	100	1.4
3	Wheeler (Brighton)	2N1009BB	101	2.33
4	Bay City	1S1002CC	2500, 2501, 2502, 2503, 2504, 2506, 2507	1.72
Preferred alternative	Lake Lytle Estates in Rockaway	2N 10 2N 10 29DC	5201 4200	18.85

Alternative Site 1 (Garibaldi)

Alternative site 1 is a 1.77-acre parcel located on a hill slope at the north end of Garibaldi. Available maps suggest that wetlands are not present on this alternative site. The National Wetland Inventory map (USFWS) does not show wetlands on the property nor are the mapped soils, the Templeton-Klootchie complex, listed as hydric soils.

The site's location on a 30% slope limits its building potential. The NRCS rates the soils as very limited for roads due to the steep slopes and low soil strength, and as very limited for excavation due to steep slopes and the tendency of cut banks to cave. In addition, landslide hazards maps prepared by Hofmeister et al. (2002) show

that this site is at risk for landslides. The site contains areas rated as "very high hazard" and it is a potential deposition zone for landslide debris.

Data for alternative site 1		
Soils	29D Templeton-Klootchie complex, 5-30% slopes (south half of site)	Not hydric
	29E Templeton-Klootchie complex, 30-60% slopes (north half of site)	Not hydric
National Wetland Inventory	No wetlands	
Utilities	All are available	
Zoning	R1	
Location	Within the City Limits of Garibaldi	

Alternative Site 2 (Rockaway Beach near Crescent Lake)

Alternative site 2 is a 1.4-acre site located on a hillslope east of Crescent Lake in Rockaway Beach. Available maps indicate that the site does not contain wetlands. The soil mapped on the site, the Klootchie – Necanium complex, is not a hydric soil (NRCS 2006). The NWI shows no wetlands on the property (USFWS). There is a well on the site, but the property does not have sewer, electricity or city water. The lack of a sewer is a concern. The NRCS rates the site's soil as "very limited" for septic tank absorption fields due to steep slopes and slow water movement, and as very limited for the construction of local roads and shallow excavations due to slopes of up to 60% and low soil strength. NRCS ratings also indicate cut banks on shallow excavations are subject to caving. Hofmeister et al. (2002) show that Alternative Site 2 is in a Land Slide Hazard Zone due to slopes of 50% to 60% and that the property is located in an "extremely high hazard transition zone." The transition zone is the area of the landslide between the source area (upslope) and the deposition area (downslope).

Data for alternative site 2		
Soils	20E Klootchie - Necanium complex, 30-60% slopes	Not hydric
National Wetland Inventory	No wetlands	
Utilities	Well on site; no sewer, electricity or city water.	
Zoning	R2	
Location	Outside of the City Limits of Rockaway Beach, but within the Urban Growth Boundary.	

Alternative Site 3 (Brighton)

Alternative site 3 is a 2.33-acre property off of Highway 101 in Brighton, an unincorporated area north of Rockaway Beach. The site has steep slopes of 25% to 30%. Alternative Site 3 does not appear to have any wetlands. The NWI does not show any wetlands on the property and the mapped soil (the Templeton-Klootchie) is not listed by the NRCS as hydric (NRCS 2006). The property does not have sewer. Installing a septic system would be problematic because the NRCS rates the mapped soils as very limited for septic tank absorption fields due to the slope, slow water movement and shallow depth to bedrock. The Brighton site is located outside of the landslide hazard zone (Hofmeister, et al, 2002).

Data for alternative site 3		
Soils	29D Templeton-Klootchie complex, 5-30% slopes	Not hydric
National Wetland Inventory	No wetland	
Utilities	Well on site; no sewer	
Zoning	RR	
Location	Unincorporated Tillamook County.	

Alternative Site 4 (Bay City)

The 1.72-acre site is located within the City Limits of Bay City on the west side of Highway 101. The NWI does not show any wetland on the property. However, the soils map indicates that hydric soils may be present. The Hebo portion of the mapped soil, the Ginger Hebo complex, is listed by the NRCS as a hydric soil. The nearly level site lies at an elevation of 18 feet. The entire site is located within tsunami hazard zone mapped by Oregon Department of Geology and Mineral Industries (Priest, 1995).

Data for alternative site 4		
Soils	96B Ginger-Hebo Complex, 0 to 5% slopes	Hebo is a hydric soil.
National Wetland Inventory	No wetlands on site.	
Utilities	Water and sewer available	
Zoning	Moderate intensity	
Location	Within the City Limits of Bay City	

Preferred Alternative

The preferred alternative is the proposed Lake Lytle Estates property. The 18.85-acre project site is located in Rockaway Beach east of Lake Lytle. The site is preferred because.

(1) **Available Utilities** – The preferred alternative has electricity, sewer and city water. Site 2 lacks sewer, electricity and City water; and site 3 lacks city sewer. The lack of sewer is a detriment for sites 2 and 3 as the mapped soil units are rated "very limited" for septic drain fields.

(2) **Site Size** – The applicant is proposing to construct an 85-lot subdivision on 18.85 acres. The largest of the other available properties is 2.33 acres. This would greatly reduce the size of the proposed development.

(4) **Landslide Hazards** – Properties 1 and 2 are in high hazard zones for landslides. The proposed project site is preferred over properties 1 and 2 because it has a much lower landslide risk. The eastern portion of the property is rated as a "low hazard depositional zone." Sites 1 and 2 are rated as having "very high" and "extremely" hazard zones.

(5) **Tsunami Risk** - Alternative Site 4 is located within the tsunami hazard zone. The preferred alternative is located outside of the hazard zone.

The proposed project site is the preferred alternative because it has all the utilities, lacks steep slopes, has a much lower risk for landslide hazards, and is located outside of the tsunami risk zone. It is also large enough to support the larger scale development that the applicant is proposing.

Alternative Site Layouts

In the previous submittal of the permit application, the project team evaluated three alternative lot layouts for the Lake Lytle Estates project. Both the DSL and the City staff had concerns with the preferred alternative 3 (figure A8). Therefore, the project team developed alternative 4 to address these concerns (figure A9).

The final design conforms to the City of Rockaway Beach's Comprehensive Plan, City Code, and recommendations of City staff. The project is designed with the following constraints.

- The road widths are specified in City code. The two collector streets, Necarney Avenue and NE Tillamook Avenue, have a specified width of 50 feet. The rest of the streets within the project area are residential streets and they have a specified width of 40 feet.
- The City required that Necarney Avenue span the length of the project site and stub out at the south property line. The City's requirement to connect the development to the existing street network will provide for safe and efficient access and egress for residents and emergency vehicles.
- All development was to be located outside of the SA zone wetlands (figure 5).
- The City's Comprehensive Plan (p. 35) recommends a density of around 8 dwelling units per acre.
- The Oregon Department of State Lands required that all wetlands located within residential tax lots be considered as impacted wetlands.

	Wetland Impact (acres)
Alternative 1	0.23
Alternative 2	0.23
Alternative 2	0.23
Alternative 4	0.23

Alternative 1(figure A6)

This was the preferred alternative in the original submission. This option had several tax lots that contained wetland within the lot boundaries. The total wetland impact for this alternative was 0.23 acres.

Alternative 2 *(figure A7)*

The project engineer altered the tax lot boundaries to minimize the amount of wetland contained in the tax lots. This reduced the wetland impact to 0.21 acres.

Alternative 3 *(figure A8)*

This was the preferred alternative in the second submission. The project engineer reduced the wetland impact to 0.17 acres by removing Francis Street and substituting narrow driveways to provide lot access. This reduced the wetland impact to 0.17 acres. However, the City and DSL both objected to this alternative. The City wanted Francis Street to connect Tillamook Avenue to provide better access for emergency vehicles. The DSL objected to alternative 3 because both Necarney Street and Tillamook Avenue stubbed out to the property to the south. The DSL believed that having two entrances to the property to the south would result in unnecessary wetland impact.

Preferred Alternative 4 (figure A9)

In response to the City's objection, the project engineer restored Francis Street to the design. The City granted a variance to narrow a 150-foot length of Francis Street from 30 to 20 feet to reduce wetland impact. Alternative 4 has the same amount of wetland impact (0.17 acres) as Alternative 3.

Alternative 4 addresses the DSL concerns about the two access points to the property to the south. The project team negotiated with City Staff to remove the south access point from Tillamook Avenue. Therefore, the only proposed access to the south is Necarney Street. The City would like Necarney Street to eventually serve as an alternative north-south access route to Highway 101. As an added option, the stub out from Necarney Street has an extra 10 feet of ROW on either side of the road (figure 9b). This extra width will enable the alignment of Necarney Street to veer slightly east or west as needed to avoid or reduce wetland impact.

The wetland impacts will be mitigated on site by the creation of 13,320 square feet (0.30 acres) of wetland. This is worth 8,820 square feet (0.20 acres) of wetland mitigation credit under the DSL's ratio of 1.5:1 for wetland creation credits.

Fewer lots

The DSL requested that the applicant address the option of having fewer tax lots. This would make minimal changes to the wetland impact because 4,213 square feet, 60%, of the wetland impact is due to the construction of Tillamook Avenue and Necarney Streets. Reducing the number of lots would also decrease the dwelling-unit density. This is contrary to the City of Rockaway Beach's Comprehensive Plan which recommends 8 dwelling units per acre (after subtracting for roads and open space). Higher density development has the effect of reducing the amount of land that is converted to residential use and streets. Concentrating residential areas reduces pressure to expand the UGB to accommodate growth, thus protecting land outside the UGB from development. Under the preferred alternative four, 4.04 acres of open space will be preserved within the project boundaries and the western 16.7 acres of the applicant's property (tax lot 5203 on figure 3C) will remain undeveloped.

References

Hofmeister, R. Jon, et al., (2002) Hazard Map of Potential Rapidly Moving Landslides in Western Oregon GIS Layer for Local Governments in Implementation of Senate Bill 12 (1999) Oregon Department of Geology and Mineral Industries Interpretive Map Series IMS-22. The maps are available online at: http://www.coastalatlas.net/index.php?option=com_wrapper&Itemid=28

NRCS, 2006, Hydric Soils List - All Components (OR), Tillamook County, Oregon, available online: http://www.or.nrcs.usda.gov/pnw_soil/or_data.html

NRCS, Soil Survey of Tillamook County Area Oregon, available online: http://www.or.nrcs.usda.gov/pnw_soil/or_data.html

Priest, George R., 1995, Tsunami Hazard Map of the Garibaldi Quadrangle Tillamook County Oregon, Open File Report 0-95-17, Oregon Department of Geology and Mineral Industries, available online: http://www.oregongeology.com/sub/earthquakes/Coastal/Tsumapsbycity.HTM

Rockway Beach, 1992, Rockaway Beach Comprehensive Plan.

U.S. Fish and Wildlife Services, National Wetland Inventory Map, available online: http://wetlandsfws.er.usgs.gov/NWI/download.html

Measures to Minimize Impacts

Describe what measures you will use (before and after construction) to minimize impacts to the waterway or wetland. These may include but are not limited to the following:

- *For projects with ground disturbance include an erosion control plan or description of other best management practices (BMP's) as appropriate. (For more information on erosion control practices see DEQ's Oregon Sediment and Erosion Control Manual)*
- *For work in waterways where fish or flowing water are likely to be present, discuss how the work area will be isolated from the flowing water.*
- *If native migratory fish are present (or were historically present) and you are installing, replacing or abandoning a culvert or other potential obstruction to fish passage, complete and attach a statement of how the Fish Passage Requirements, set by the Oregon Department of Fish and Wildlife will be met.*

The sediment and erosion control plan is shown on figures 15a through 15d. The following is a list of the BMP's from the sediment and erosion control plan.

1. Hold a pre-construction meeting of project construction personnel that includes the inspector to discuss erosion and sediment control measures and construction limits.
2. The ESCP must be kept onsite and all erosion and sediment control measure shown on the plan be installed in such a manner to ensure that sediment or sediment laden water that enters or is likely to enter surface water or conveyance systems leading to surface water, roadway, ore other properties does not occur.
3. The implementation of the ESCP and construction, maintenance, replacement , and upgrading of the erosion and sediment control measures is the responsibility of the permit registrant until all construction is completed and approved by the local development agency and vegetation/landscaping is established. The permit registrant shall be responsible for maintenance after the lots are approved until the lots are sold and the 1200 c permit is terminated.
4. The permit registrant must be responsible for proper installation and maintenance of all erosion and sediment control measures.
5. Erosion and sediment control measures including perimeter sediment control must be in place before vegetation is disturbed and must remain in place and be maintained, repaired and promptly implemented follow procedures established for the duration of construction, including protection for active storm drain inlets and catch basins and appropriate non-storm water pollution controls.
6. Begin land clearing, excavation, trenching, cutting or grading and earthwork-surface rough after installing applicable sediment, erosion prevention and runoff control measure not in the direct path of the work.
7. Apply temporary and/or permanent soil stabilization measures immediately on all disturbed areas as grading progresses and for all roadways including gravel roadways.
8. Wet weather BMPs: construction activities must avoid or minimize excavation and creation of bare ground on slope greater than 5 percent from October 1 through May 31 each year.
9. Wet weather BMPs: temporary stabilization of the site must be installed at the end of the shift before a holiday or weekend or at the end of each workday if rainfall is forecast in the next 24 hours and each weekend and holiday.
10. Identify, mark and protect (by fencing or other means) critical riparian areas and vegetation including important trees and associated rooting zones and vegetation areas to be preserved , especially in perimeter areas, preserve existing vegetation and re-vegetate open areas when practicable before and after grading or construction.
11. Provide permanent erosion prevent measure on al exposed areas to prevent from becoming a source of erosion and remove all temporary control measures unless local ordinances require otherwise, as areas are stabilized.

12. All temporary sediment controls must remain in place until permanent vegetation or other permanent cover of exposed soil is established. Identify the type of vegetative seed mix used.
13. Sediment controls must be installed and maintained along with the site perimeter on all down gradient sides of construction site and at all active and operational internal storm drain inlets at all time during construction.
14. Prior to any land disturbing activities each site must have graveled, paved, or constructed entrances, exits and parking areas with exit tire wash to reduce tracking of sediment on public or private roads.
15. When trucking saturated soils form the site, either watertight trucks must be used or loads must be drained on-site until dripping has been reduced to minimize spillage on the roads.
16. Temporary stabilization or covering of soil stockpiles and protection of stockpiled located away from construction activity must occur at the end of each workday or other BMPs, such as diversion of uncontaminated flows and installation of sediment fences around the stockpiles, must be implemented to prevent turbid discharges to surface waters.
17. BMPs that will be used to prevent or minimize stormwater from being exposed to pollutants from spills: no discharge of concrete truck wash water, vehicle and equipment cleaning, vehicle and equipment fueling, maintenance, and storage, other cleaning and maintenance activities, and waste handling activities. These pollutants include fuel, hydraulic fluid, and other oils from vehicles and machinery, as well as debris, leftover paints, solvents and glues from construction operations.
18. Any use of toxic or other hazardous materials must include proper storage, application, and disposal.
19. Solid waste and hazardous materials management follow project written spill prevention and response procedures; regular maintenance schedule for vehicles and machinery; and material delivery and storage controls, training and signage, material use, covered storage areas for waste and supplies.
20. The permittee must properly manage hazardous waste, used oils, contaminated soils, concrete waste, sanitary waste, liquid waste, or other toxic substance discovered or generated during construction and meet all state and federal regulations and approvals.
21. The ECSP measures shown on the plan are minimum requirements for anticipated site conditions. During the construction period, these measures must be upgraded as needed to comply with all applicable local, state, and federal and erosion control regulations. Changes to the ESCP must also be submitted in the form of an action plan to DEQ or its agent for approval.
22. Significant amounts of sediment, which leaves the site, must be cleaned up within 24 hours and placed back on the site and stabilized or properly disposed. The cause of sediment release must be found and prevented from causing a recurrence of the discharge within the same 24 hours. Any in-stream clean up of sediment shall be performed according to the Oregon Department of State Lands time frame.
23. Vacuuming or dry sweeping must be used to clean-up released sediment and must not be intentionally washed into storm sewers, drainage ways, or water bodies.
24. The application rate of fertilizers used to reestablish vegetation must follow manufacturer's recommendations to minimize nutrient release to surface waters. Time-release fertilizers should be used with care within any waterway riparian zone.
25. Sediment must be removed from behind a sediment fence when it has reached a height of 1/3 the height of the fence aboveground and before fence removal.
26. The sediment must be removed from behind bio bags and other barriers if it has reach a height of two inches and before BMP removal.
27. Removal of trapped sediment in a sediment basin or sediment trap or catch basins must occur when the sediment retention capacity has been reduced by fifty percent and at completion of the project.

28. DEQ must approve of any treatment system and operation plan that may be necessary to treat contaminated construction dewatering or sediment and turbidity in stormwater runoff.

29. Should all construction activities cease for thirty days or more, the entire site must be temporarily stabilized using vegetation or a heavy mulch layer, temporary seeding, or other method.

30. Should construction activities cease for fifteen days or more on any significant portion of a construction site temporary stabilization is required for that portion of the site with straw, compost, or other trackified covering that prevents soil or wind erosion until work resumes on that portion of the site.

31. Daily inspections when rainfall and runoff occurs of the BMPs and discharge outfalls must be inspected by the project ECSP inspector. These inspections and observations must be recorded in a log that is available on site.

32. BMPs must be inspected before, during, and after significant storm events.

33. All ESCP controls and practices must be inspected visually once to ensure that BMPs are in working order prior to the site becoming inactive or in anticipation of site inaccessibility and must be inspected visually once every two weeks during inactive periods greater than seven consecutive calendar days.

34. If practical, inspections must occur daily at a relevant and accessible discharge point or downstream location during periods which the site is inaccessible due to inclement weather.

Description of resources in project area

Ocean ☐ Estuary ☐ River ☐ Lake ☐ Stream ☐ Freshwater Wetland ☒

Describe the existing **physical and biological characteristics** of the wetland/waterway site by area and type of resource (Use separate sheets and photos, if necessary).

For wetlands, include, as applicable:

- *Cowardin and Hydrogeomorphic(HGM) wetland class(s)**
- *Dominant plant species by layer (herb, shrub, tree)**
- Whether the wetland is freshwater or tidal
- *Assessment of the functional attributes of the wetland to be impacted**
- Identify any vernal pools, bogs, fens, mature forested wetland, seasonal mudflats, or native wet prairies in or near the project area.)

For waterways, include a description of, as applicable:

- *Channel and bank conditions**
- *Type and condition of riparian vegetation**
- *Channel morphology (i.e., structure and shape)**
- *Stream substrate**
- Fish and wildlife (type, abundance, period of use, significance of site)
- *General hydrological conditions (e.g. stream flow, seasonal fluctuations)**

Rorick Environmental Services (RES) submitted a wetland delineation report to the Oregon Department of State Lands on date. The wetland delineation (WD # 08-0188) was verified by DSL on June 10, 2008.

RES delineated 4.968 acres of jurisdictional, freshwater wetland within the wetland delineation study area, of which 4.926 acres are on property owned by Troy Johns and 0.042 acres are within the ROW of NE Tillamook Avenue. The wetland delineation study area included tax lot 5201, the eastern portion of tax lot 5203, and the NE Tillamook Avenue ROW (figure 3a). The project area (tax lot 5201 and the NE Tillamook Avenue ROW) contains 2.23 acres of wetland.

Summary of wetland delineation results (from WD# 08-0188). Note: the wetland delineation study area is larger than the project area.

Wetland	Acres	Cowardin Class	HGM Class
A	3.899	PFO	Slope / Flats
B	0.302	PFO	Slope / Flats
C	0.088	PFO	Depressional
D	0.023	PFO	Depressional
E	0.004	PFO	Depressional
F	0.072	PFO	Depressional
G	0.004	PFO	Depressional
H	0.491	PFO	Slope / Flats
I	0.013	PFO	Depressional
J	0.004	PFO	Depressional
K	0.001	PFO	Depressional
L	0.006	PFO	Depressional
M	0.002	PFO	Depressional
N	0.004	PFO	Depressional
O	0.004	PFO	Depressional
P	0.005	PFO	Depressional
O	0.046	PFO	Slope / Flats
Total	**4.968**		

Figure 6 shows that wetland delineation study area contains 13 depressional wetlands (0.23 acres) and four slope/flat wetlands (4.738 acres). The depressional wetlands range in size from 27 to 10,698 square feet. These wetlands are located in shallow basins that receive runoff from adjacent uplands, direct precipitation and experience a seasonally high water table. The slope/flat wetlands are supported by ephemeral stream flow, runoff from the adjacent uplands, and a seasonally high water table. The largest slope/flat wetland (wetland A) extends offsite to the west where it connects to Lake Lytle.

All of the wetlands on the site belong to the PFOC (palustrine forested seasonally flooded) Cowardin class (figure 7). The dominant plant species growing in the wetlands are red alder, Sitka spruce, skunk cabbage, lady fern, deer fern, slough sedge, and salmonberry.

RES completed a Hydrogeomorphic (HGM) Functional Assessment of the project site using the judgmental method developed by the Oregon Department of State Lands (Adamus and Field 2001). OAR 141-085-0685 (3) requires that the Oregon Rapid Wetland Assessment Protocol (ORWAP) be used to evaluate wetlands for projects with greater than 0.20 acres of wetland impact. The proposed project would result in 0.17 acres of wetland, therefore ORWAP was not used.

Function	Functional Capacity Score	Gains or Losses
Water Storage and Delay	0.8	Maintained
Sediment Stabilization and Phosphorous Retention	0.9	Maintained
Nitrogen Removal	0.8	Maintained
Primary Production	1.0	Maintained
Invertebrate Habitat Support	1.0	Maintained
Amphibian and Turtle Habitat	0.9	Impacted by increase in amount of paved surfaces
Breeding Waterbird Support	0.9	Maintained, not a primary function of existing site
Winter and Migratory Waterbird Support	0.9	Maintained, not a primary function of existing site
Songbird Habitat Support	0.9	Decrease due to development of residential lots and roads
Support of Characteristic Vegetation	1.0	Decrease due to the conversion of woodland to residential use

Water Storage and Delay – Functional Capacity Score 0.8

Existing Condition

The site rates high for water storage and delay because it is seasonally inundated and drains slowly after rain events.

Effect of Construction of the Subdivision

Water storage and delay is not an important function of the site's wetlands due to their low position in the watershed close to the Pacific Ocean. Runoff from the site discharges to Lake Lytle which drains into Crescent Lake and from there into the Pacific Ocean.

Effect of Compensatory Wetland Mitigation

Construction of the wetland mitigation site will maintain or improve water storage and delay because the amount of wetland creation exceeds the amount of wetland impact by 0.13 acres. In addition, the created wetlands will be constructed so that they have a rough surface that encourages water retention through the formation of puddles.

Sediment Stabilization and Phosphorous Retention – Functional Capacity Score 0.9

Existing Condition

The site scored high for sediment stabilization and phosphorous retention because of the soil texture (silt loam and silty clay loam), the high amount of vegetative ground cover, and undisturbed soils.

Effect of Construction of the Subdivision

The sediment and erosion control plan is designed to prevent sediment from leaving the site during construction (see block 5 of the permit application). After construction, the storm-water facilities will pre-treat storm water for pollutants and sediment before it discharges to the wetland. Therefore, the construction of the subdivision is not expected to alter this function.

Effect of Compensatory Wetland Mitigation

The construction of the wetland mitigation site will moderately improve stabilization and phosphorous retention due to a net gain in wetland area of 0.13 acres. The wetland mitigation will be modeled after the existing wetlands so they will have features that promote this function: abundant vegetative cover, shallow pools, and finely textured soil.

Nitrogen Removal – Functional Capacity Score 0.8

Existing Condition

The site's wetlands rated relatively high for nitrogen removal due to mature soil microbial processes, lack of soil disturbance and site microtopograhy.

Effect of Construction of the Subdivision

The construction of the mitigation site is not expected to have any effect on nitrogen removal because the amount of wetland impact (0.17 acres) is small in comparison to the amount of wetlands that will be preserved: 2.06 acres within the project area and approximately 16.7 acres (tax lot 5203) of wetland adjacent to Lake Lytle.

Effect of Compensatory Wetland Mitigation

Construction of the wetland mitigation site is expected to maintain or slightly improve nitrogen removal because the amount of wetland created exceeds the amount of wetland impact by 0.13 acres.

Primary Production – Functional Capacity Score 1.0

Existing Condition

The site scored high for primary production because of the well distributed and diverse plant forms on the site, the lack of soil disturbance, and a relatively undeveloped contributing watershed.

Effect of Construction of the Subdivision

The construction of the project will diminish this score slightly due to an increase in paved area in the adjoining upland.

Effect of Compensatory Wetland Mitigation

The implementation of the mitigation plan will contribute to primary production because the created wetlands will be planted with a diverse plant community modeled after the site's existing wetlands.

Invertebrate Habitat Support – Functional Capacity Score 1.0

Existing Condition

The score for invertebrate habitat support is high due to the presence of nearby surface water during most of the year, cover in the form of aquatic plants and woody debris, the interspersion of pools within the vegetated areas, the apparent high water quality, undisturbed soils, and adjacent wetlands.

Effect of Construction of the Subdivision

Construction of the subdivision will affect habitat support for invertebrates due to impacts to 0.17 acres of wetland. This is 8 percent of the of the total wetland acreage within the project area boundary. Including the approximately 16.7 acres of wetland in tax lot 5203, the impact is only 0.9 percent of the site's wetlands.

Effect of Compensatory Wetland Mitigation

The wetland mitigation site will compensate for the wetland impacts by the creation of 0.3 acres of wetland that will be planted with a diverse community of wetland vegetation.

Amphibian and Turtle Habitat – Functional Capacity Score 0.8

Existing Condition

The score of amphibian and turtle habitat is high due to the duration of shallow surface water, the presence of woody debris, the interspersion of pools in the vegetated areas, the presence of basking sites, apparent high water quality, the undisturbed state of the soils, and the accumulation of an organic layer.

Effect of Construction of the Subdivision

The implementation of the project will increase the area of paved and covered surfaces in the upland which will reduce this score.

Effect of Compensatory Wetland Mitigation

The wetland mitigation will offset the impacts due to creation of 0.3 acres of wetland. In addition, 2.06 acres of wetland within the project area and 16.7 acres of existing wetland in tax lot 5203 will remain undeveloped.

Breeding Waterbird Support – Functional Capacity Score 0.6

Existing Condition

Site factors that are disincentives to waterbirds include the lack of many acres of nearby wetland and large pools of water. Factors that favor waterbirds are the presence native vegetation, undisturbed soils, and apparent high water quality.

Effect of Construction of the Subdivision

Implementation of the subdivision will increase human visitation to the site which would slightly lower the score.

Effect of Compensatory Wetland Mitigation

It is not expected that the wetland mitigation would improve this function as the wetland mitigation does not involve the creation of pools or other habitat features that favor breeding waterbirds.

Winter and Migratory Waterbird Support – Functional Capacity Score 0.7

Existing Condition

The factors that support winter and migratory waterbirds are water quality, lack of disturbed soils, and the presence of native vegetation. Factors that are a disincentive to water birds are the lack of extensive surface water and large areas of inundation.

Effect of Construction of the Subdivision

Construction of the subdivision will increase human visitation to the site which may discourage waterbird use.

Effect of Compensatory Wetland Mitigation

The construction of the mitigation site will not alter the site's capacity to support waterbirds. The wetland mitigation does not involve the creation of large inundated areas that favor waterbirds.

Songbird Habitat Support –Functional Capacity Score 1.0

Existing Conditions

The site rates high for songbird habitat support because it contains nearby year-round surface water, native vegetation, the under cover shrub layer is extensive, tree cover and surrounding woodland.

Effect of Construction of the Subdivision

Construction of the subdivision will slightly decrease this function as 14.81 acres of woodland will be converted to suburban land use.

Effect of Compensatory Wetland Mitigation

The construction of the wetland mitigation site will compensate for impacts to forested wetland through the creation of 0.3 acres of forested wetland.

Support of Characteristic Vegetation – Functional Capacity Score 1.0

Existing Conditions

The site's wetlands rate high for support of characteristic native vegetation due to the abundant and diverse native vegetation.

Effect of Construction of the Subdivision

Construction of the subdivision will reduce this function because 14.81 acres of woodland will be converted to residential use. However, 2.03 acres of wetland in the project area and 16.7 acres of wetland on tax lot 5203 will remain undeveloped.

Effect of Compensatory Wetland Mitigation

The compensatory wetland mitigation site will contribute to this function as the CWM sites will be planted with native species modeled after the existing wetland.

*Describe the existing **navigation, fishing and recreational** use of the waterway or wetland.**

The wetlands on the project site are not used for navigation, fish or recreational use. However, Lake Lytle, located west of the site, is used for both recreational boating and fishing.

Site Restoration/Rehabilitation

- *For temporary disturbance of soils and/or vegetation in waterways, wetlands or riparian areas, please discuss how you will restore the site after construction including any monitoring, if necessary**

No temporary impacts are proposed.

Mitigation

*Describe the reasonably expected adverse effects of the development of this project and how the effects will be mitigated.**

- *For permanent impact to wetlands, complete and attach a Compensatory Wetland Mitigation (CWM) Plan. (See OAR 141-085-0121 to OAR 141-085-0176 for plan requirements)**
- *For permanent impact to waterways or riparian areas, complete and attach a Compensatory Mitigation (CM) plan (See OAR 141-085-0115 for plan requirements)**
- *For permanent impact to estuarine wetlands, you must submit an Estuarine Resource Replacement Plan. (See OAR 141-085-0240 to OAR 141-085-0257 for plan requirements)**

The Compensatory Wetland Mitigation plan is contained in attachment A.

Mitigation Location Information (Fill out only when mitigation is proposed or required)

Proposed mitigation (Check all that apply):		*Type of mitigation:*	
	X *Onsite Mitigation*	X	*Wetland Mitigation*
	Offsite Mitigation		*Mitigation for impacts to other waters*
	Mitigation Bank		*Mitigation for impacts to navigation, fishing, or recreation*
	Payment to Provide		

Street, Road or Other Descriptive Location	*Legal Description (attach tax lot map*)*			
	Quarter/Quarter	*Section*	*Township*	*Range*
The project site is located east of Lake Lytle in Rockaway Beach. From Highway 101 turn east onto NE 12th Street. To reach the west mitigation site turn south on Tillamook . To reach the east mitigation site, turn south on Francis Street.	SW ¼ of the SE ¼	29	2N	10W

In or near (City or Town)	*County*	*Tax Map #*	*Tax Lot #*[3]
Rockaway Beach	Tillamook	T2N R10W	5201
Wetland/Waterway (pick one)	*River Mile (if known)*	*Latitude (in DD.DDDD format)*	*Longitude (in DD.DDDD format)*
wetland	n/a	45° 37.499,0' N	123° 55.991,5' W
Name of waterway/watershed/HUC		*Name of mitigation bank (if applicable)*	
4th field: 17100203 Wilson Trask Nestuca		n/a	

(6) ADDITIONAL INFORMATION

Adjoining Property Owners and Their Address and Phone Numbers *(if more than 5, attach printed labels*)*

Thomas W Boyd
PO Box 763
Rockaway Beach, OR 97136

Donald W & Charlotte Beaton
6025 N Burrage St
Portland, OR 97217

John M Berman
1081 Francis St
Rockaway Beach OR 97136

Raymond E & Shirley M Cain
20786 SW Zurich CT
Aloha, OR 97007

Larry J & Linda L Nelson
1044 Smith St
Rockaway Beach, OR 97136

Alvin Harn
1111 Charlotte St
Rockaway Beach, OR 97136

Larry G Nuckols
6730 NW Bert Dr
Forest Grove, OR 97116

George Paulson
PO Box 884
Rockaway Beach, OR 97136

Michael B & Bridget H Crickmer
PO Box 184
Rockaway Beach, OR 97136

Merwyn K & Gloria A Aakre
4951 Netarts HWY W
Tillamook, OR 97141

Mark A Vandehey
19200 S Leland Rd
Oregon City, OR 97045

Sally Vanebo
PO BOX 1137
Manzanita, OR 97130

Fay Boyer
1043 N Smith
Rockaway Beach, OR 97136

Connie Provencher
1074 Smith St
Rockaway Beach, OR 97136

Annebelle R Dwyer
1016 Smith St
Rockaway Beach, OR 97136

Doris G Phelps
PO Box 535
Rockaway Beach, OR 97136

Thomas Nelson
2600 NE Hyde St
Hillsboro, OR 97124

Rosalia A Bean
PO Box 245
Nehalem, OR 97131

Lake Lytle II
7175 SW Beveland Rd
Suite 210
Tigard, OR 97223

John A Reid
13903 NE Rose Pky
Portland, OR 97230

Patricia J Miles
PO Box 298
Rockaway Beach, OR 97136

[3] Attach a copy of all tax maps with the project area highlighted.

** Italicized areas are not required by the Corps for a complete application, but may be necessary prior to final permit decision by the Corps.*

Has the proposed activity or any related activity received the attention of the Corps of Engineers or the Department of State Lands in the past, e.g., wetland delineation, violation, permit, lease request, etc.?

Yes [X] No [ ]

If yes, what identification number(s) were assigned by the respective agencies:

Corps #		State of Oregon #	WD#08-0188

Has a wetland delineation been completed for this site? *Yes* [X] *No* [ ]

*If yes by whom?**	*Rorick Environmental Services*

Has the wetland delineation been approved by DSL or the COE? *Yes* [X] *No* [ ]

*If yes, attach a concurrence letter. **

** Italicized areas are not required by the Corps for a complete application, but may be necessary prior to final permit decision by the Corps.*

(7) CITY/COUNTY PLANNING DEPARTMENT AFFIDAVIT
*(TO BE COMPLETED BY LOCAL PLANNING OFFICIAL) **

I have reviewed the project outlined in this application and have determined that:

- [ ] This project is not regulated by the comprehensive plan and land use regulations.
- [ ] This project is consistent with the comprehensive plan and land use regulations.
- [x] This project will be consistent with the comprehensive plan and land use regulations when the following local approval(s) are obtained.
  - [ ] Conditional Use Approval
  - [ ] Development Permit
  - [x] Other SUBDIVISION

This project is not consistent with the comprehensive plan. Consistency requires a

- [ ] Plan Amendment
- [ ] Zone Change
- [ ] Other

An application has [x] has not [ ] been filed for local approvals checked above.

Local planning official name (print)	Signature	Title	City / County	Date
JAY C. SENNEWALD		CITY PLANNER	ROCKAWAY BEACH	6/24/09

Comments:

(8) COASTAL ZONE CERTIFICATION *

If the proposed activity described in your permit application is within the Oregon coastal zone, the following certification is required before your application can be processed. A public notice will be issued with the certification statement, which will be forwarded to the Oregon Department of Land Conservation and Development for its concurrence or objection. For additional information on the Oregon Coastal Zone Management Program, contact the department at 635 Capitol Street NE, Suite 150, Salem, Oregon 97301 or call 503-373-0050.

CERTIFICATION STATEMENT

I certify that, to the best of my knowledge and belief, the proposed activity described in this application complies with the approved Oregon Coastal Zone Management Program and will be completed in a manner consistent with the program.

Print /Type Name	Title
Applicant Signature	Date

** Italicized areas are not required by the Corps for a complete application, but may be necessary prior to final permit decision by the Corps.*

(7) CITY/COUNTY PLANNING DEPARTMENT AFFIDAVIT
*(TO BE COMPLETED BY LOCAL PLANNING OFFICIAL) **

I have reviewed the project outlined in this application and have determined that:

- ☐ This project is not regulated by the comprehensive plan and land use regulations.
- ☐ This project is consistent with the comprehensive plan and land use regulations.
- ☐ This project will be consistent with the comprehensive plan and land use regulations when the following local approval(s) are obtained.
  - ☐ Conditional Use Approval
  - ☐ Development Permit
  - ☐ Other

This project is not consistent with the comprehensive plan. Consistency requires a

- ☐ Plan Amendment
- ☐ Zone Change
- ☐ Other

An application has ☐ has not ☐ been filed for local approvals checked above.

Local planning official name (print)	Signature	Title	City / County	Date

Comments:

(8) COASTAL ZONE CERTIFICATION *

If the proposed activity described in your permit application is within the Oregon coastal zone, the following certification is required before your application can be processed. A public notice will be issued with the certification statement, which will be forwarded to the Oregon Department of Land Conservation and Development for its concurrence or objection. For additional information on the Oregon Coastal Zone Management Program, contact the department at 635 Capitol Street NE, Suite 150, Salem, Oregon 97301 or call 503-373-0050.

CERTIFICATION STATEMENT

I certify that, to the best of my knowledge and belief, the proposed activity described in this application complies with the approved Oregon Coastal Zone Management Program and will be completed in a manner consistent with the program.

Print /Type Name	Title
Trey Johns Bob Schmeling	Owners
Applicant Signature	Date JUN 23 2009

* *Italicized areas are not required by the Corps for a complete application, but may be necessary prior to final permit decision by the Corps.*

(9) SIGNATURES FOR JOINT APPLICATION

Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and, to the best of my knowledge and belief, this information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. By signing this application I consent to allow Corps or Dept. of State Lands staff to enter into the above-described property to inspect the project location and to determine compliance with an authorization, if granted. I herby authorize the person identified in the authorized agent block below to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

I understand that the granting of other permits by local, county, state or federal agencies does not release me from the requirement of obtaining the permits requested before commencing the project. *I understand that payment of the required state processing fee does not guarantee permit issuance. The fee for the state application must accompany the application for completeness.*

Amount enclosed	re-submittal

Print /Type Name	Title	Print /Type Name	Title
Roy Johns & Bob Schmeling	owners	Nancy C Rorick	Hydrogeologist
Applicant Signature	Date Jun 23 2009	**Authorized Agent Signature**	Date 6/23/09

Landowner signatures: *For projects and /or mitigation work proposed on land not owned by the applicant, including state-owned submerged and submersible lands, please provide signatures below. A signature by the Department of State Lands for activities proposed on state-owned submerged/submersible lands only grants the applicant consent to apply for authorization to conduct removal/fill activities on such lands. This signature for activities on state-owned submerged and submersible lands grants no other authority, express or implied.*

Print /Type Name	Title	Print /Type Name	Title
Property Owner Signature	Date	*Mitigation Property Owner Signature*	Date

* *Italicized areas are not required by the Corps for a complete application, but may be necessary prior to final permit decision by the Corps.*

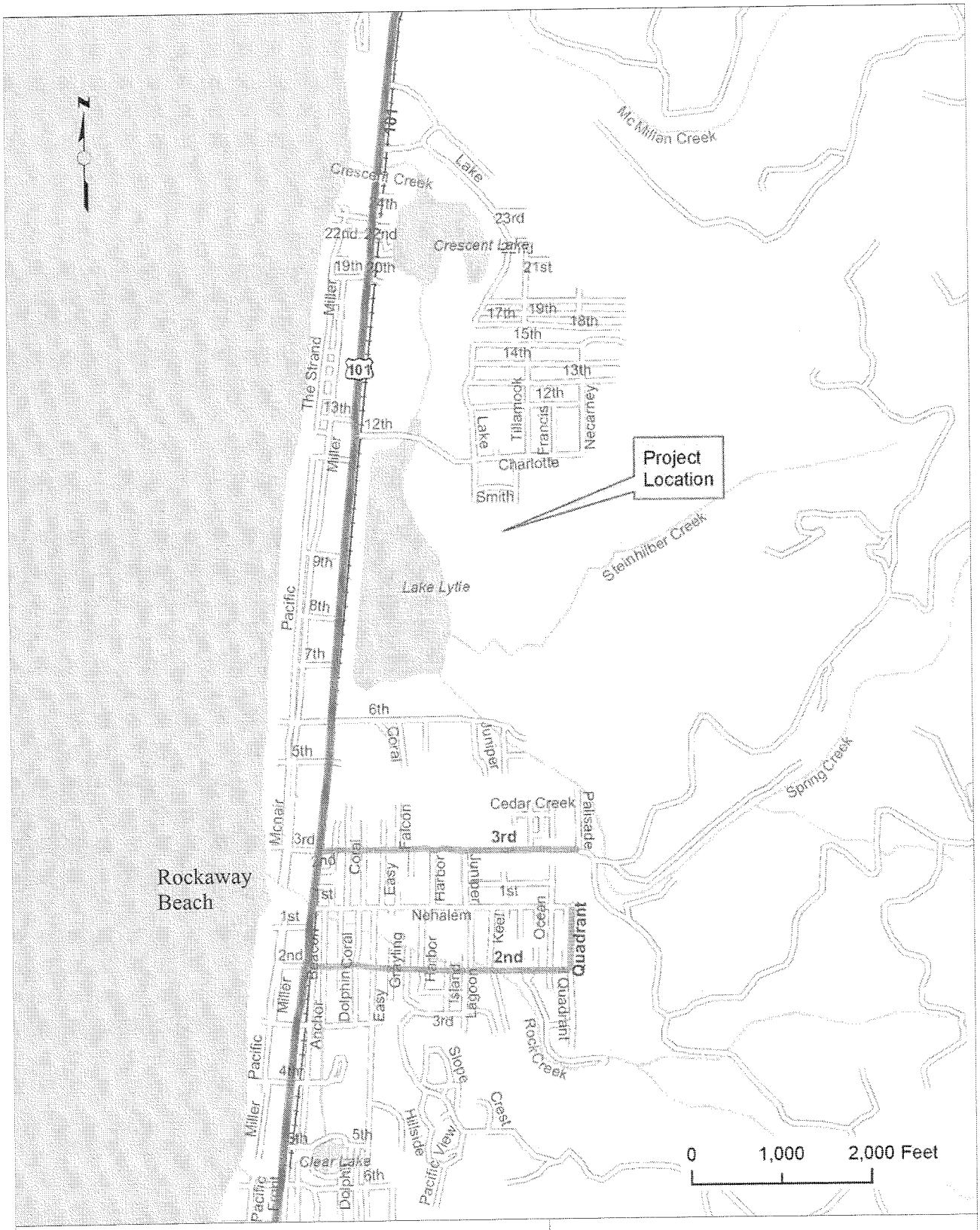


Figure 1 Project location map.

Lake Lytle Estates Permit Application

Rorick Environmental Services
503-668-8660

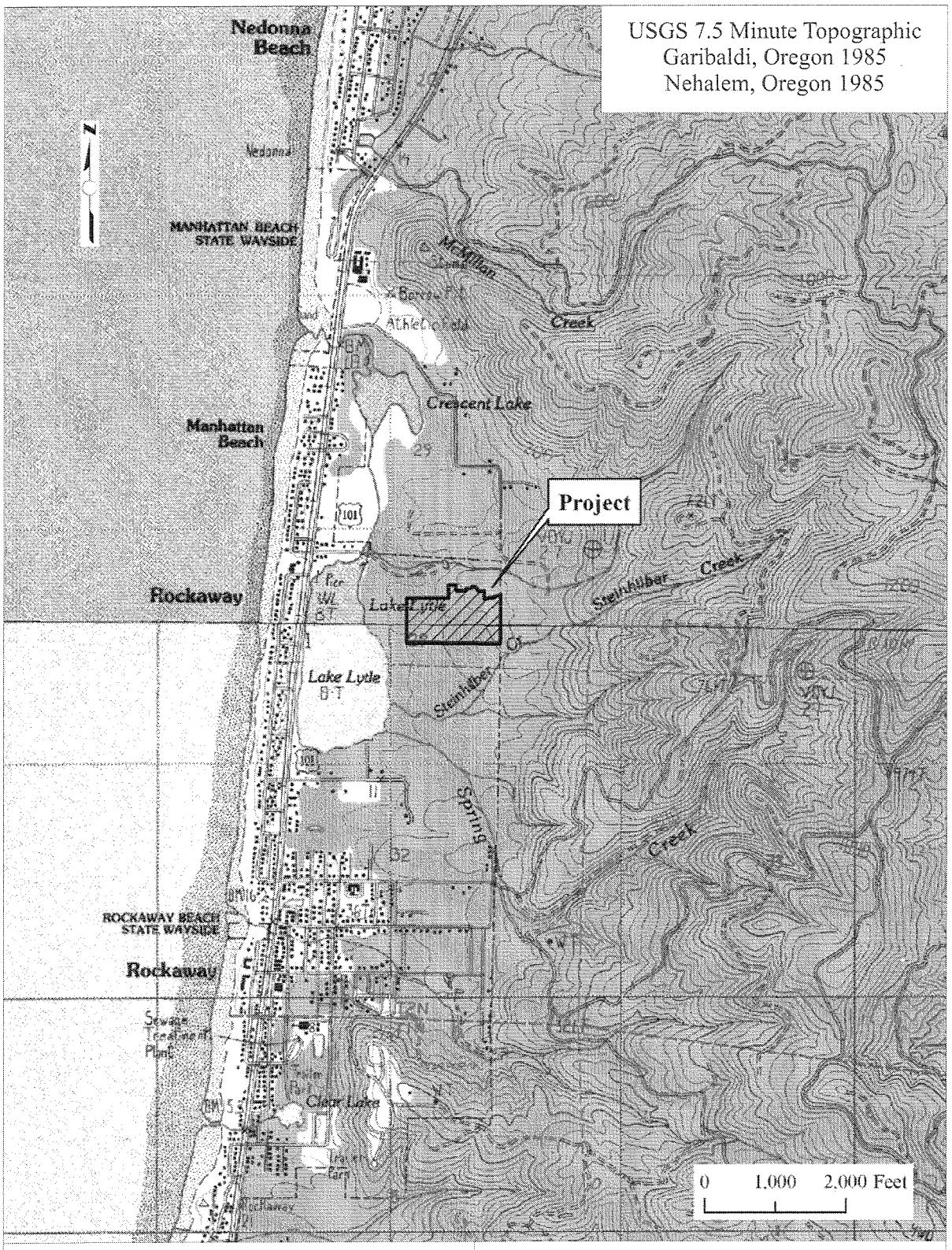


Figure 2 Topographic map.

Lake Lytle Estates Permit Application

Rorick Environmental Services
503-668-8660

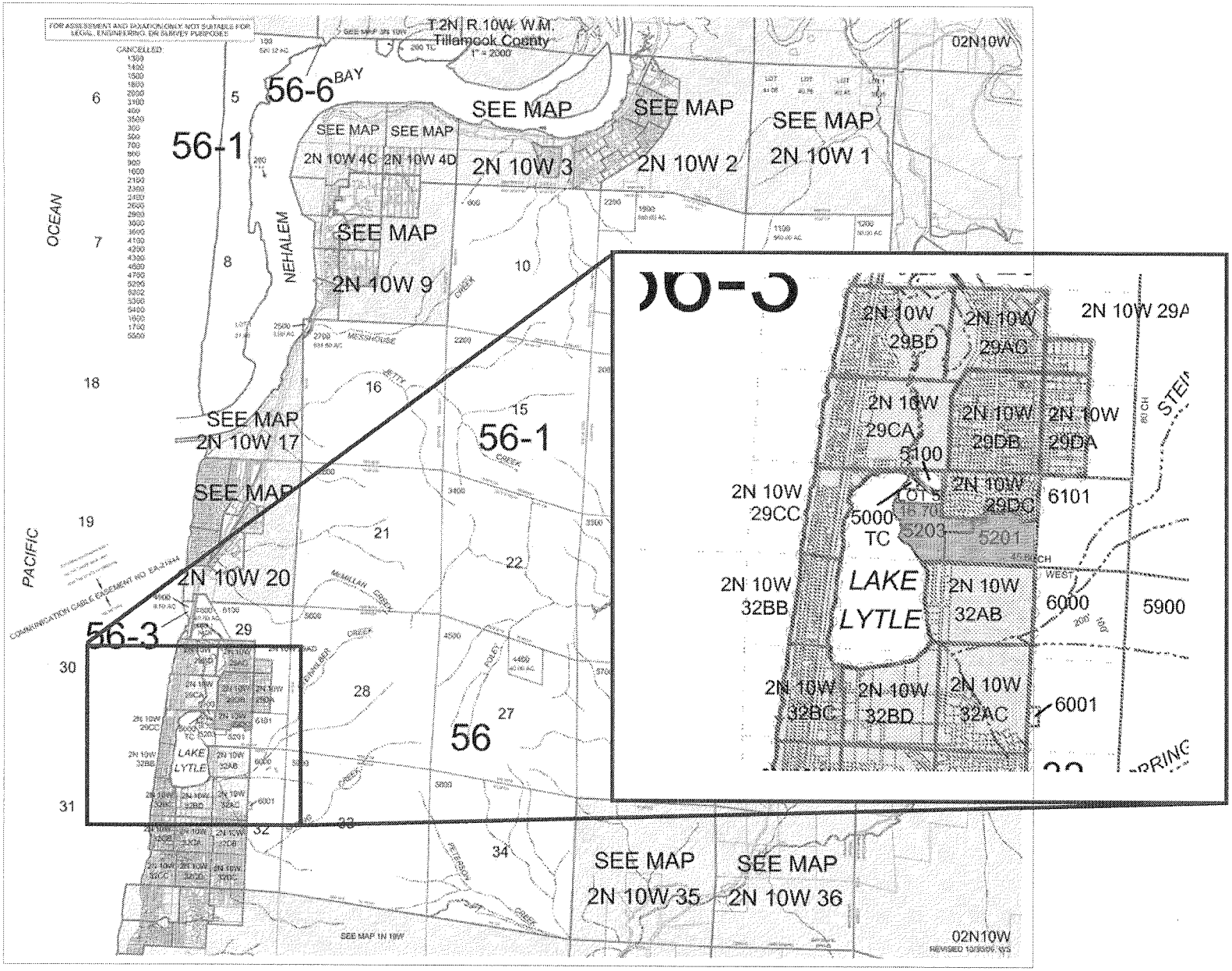


Figure 3A Tax map 2N 10W.

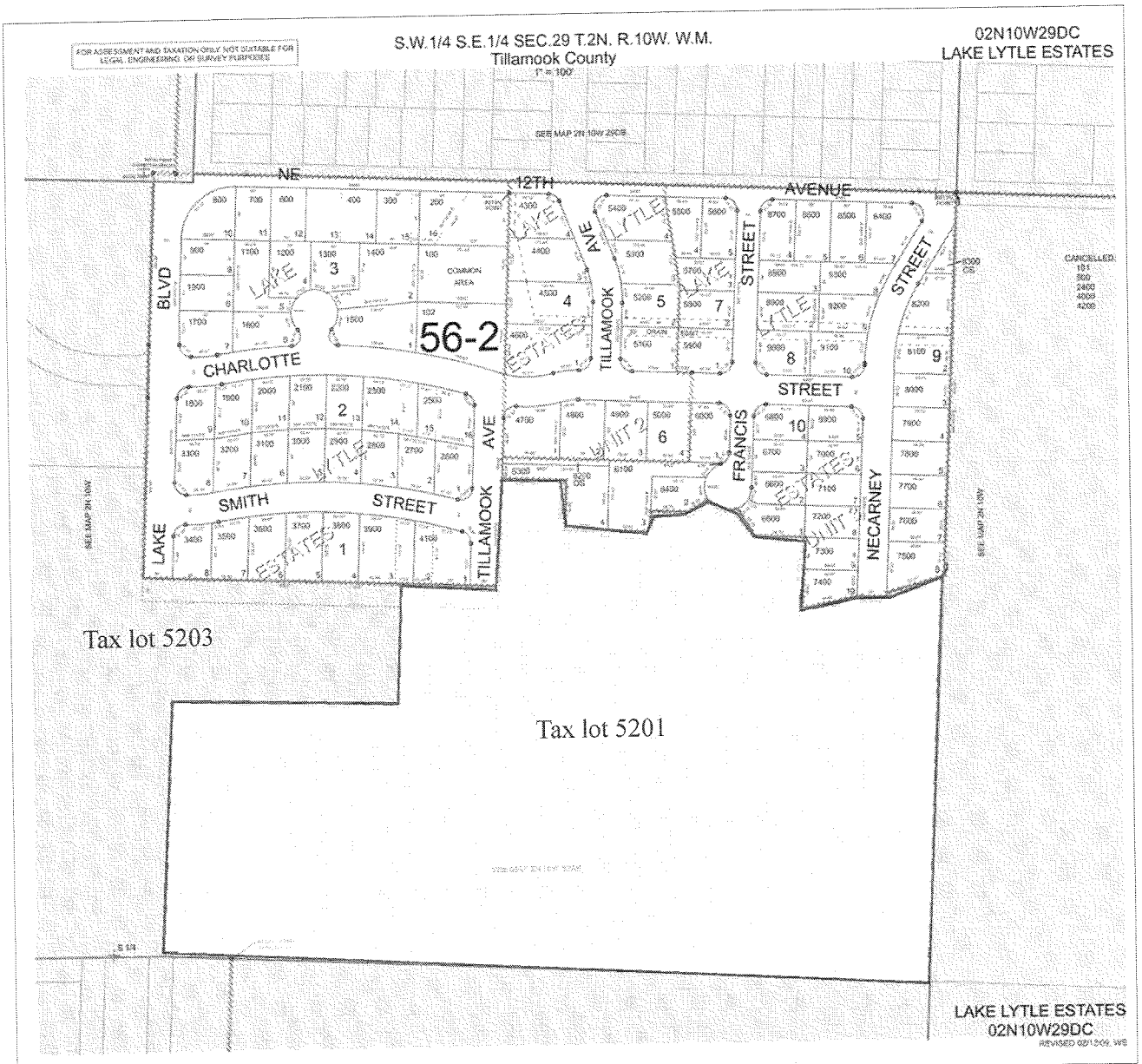


Figure 3B Tax map 2N 10W 29DC.

Lake Lytle Estates
Removal Fill Application
Rorick Environmental Services

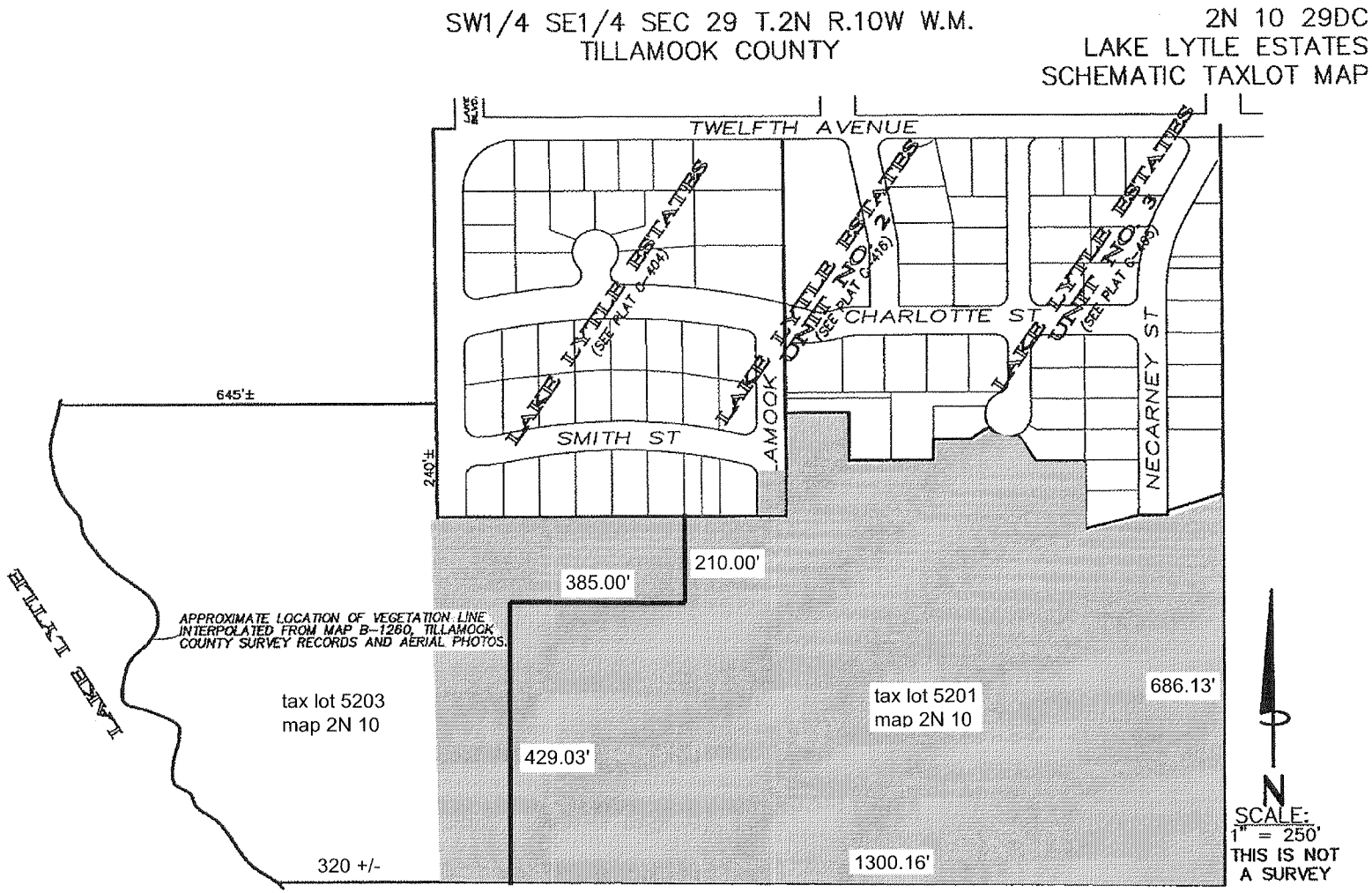


Figure 3C Updated tax map prepared by HLB - Otak.

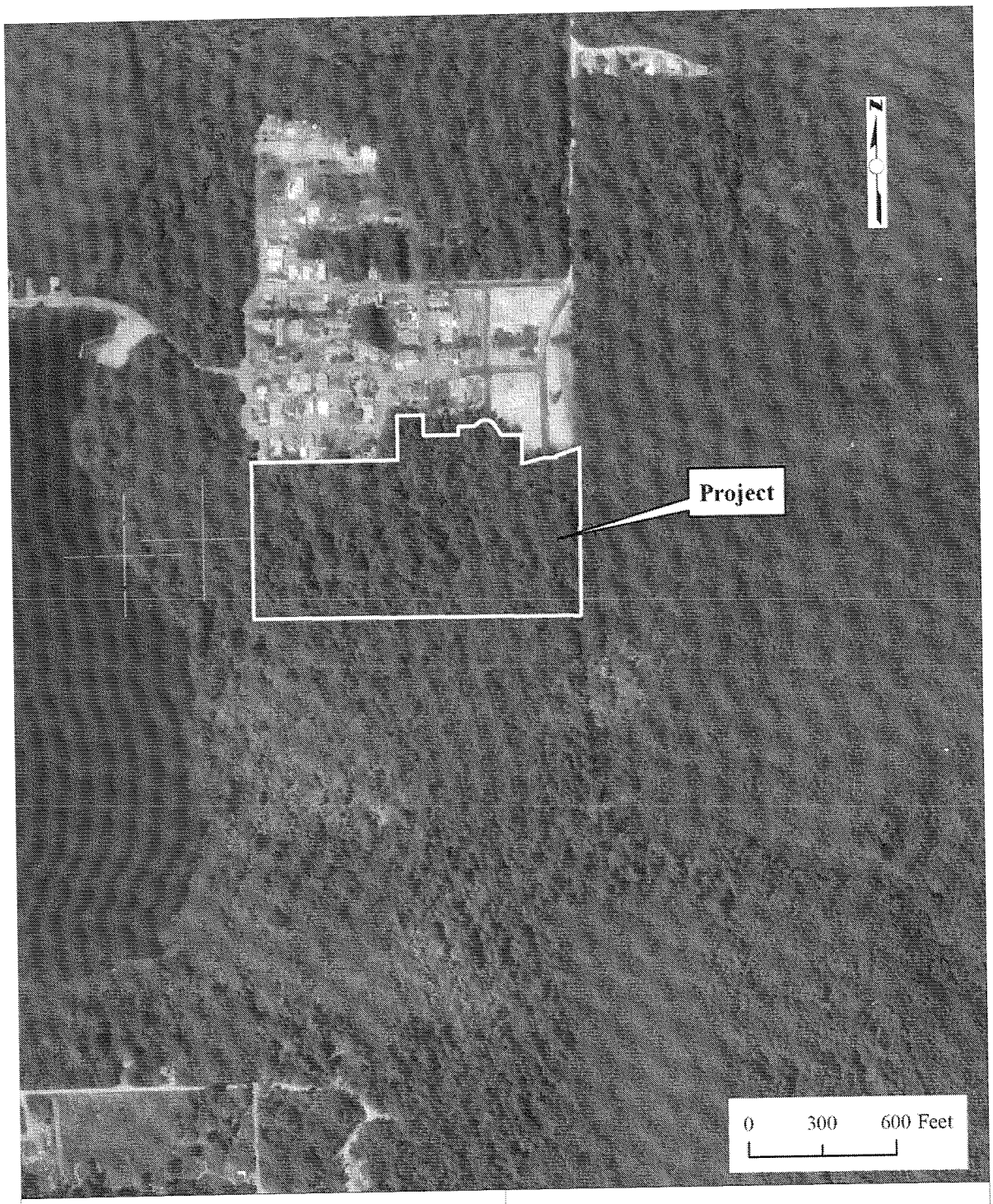


Figure 4 Aerial photograph (2000).

Lake Lytle Estates Permit Application

Rorick Environmental Services
503-668-8660

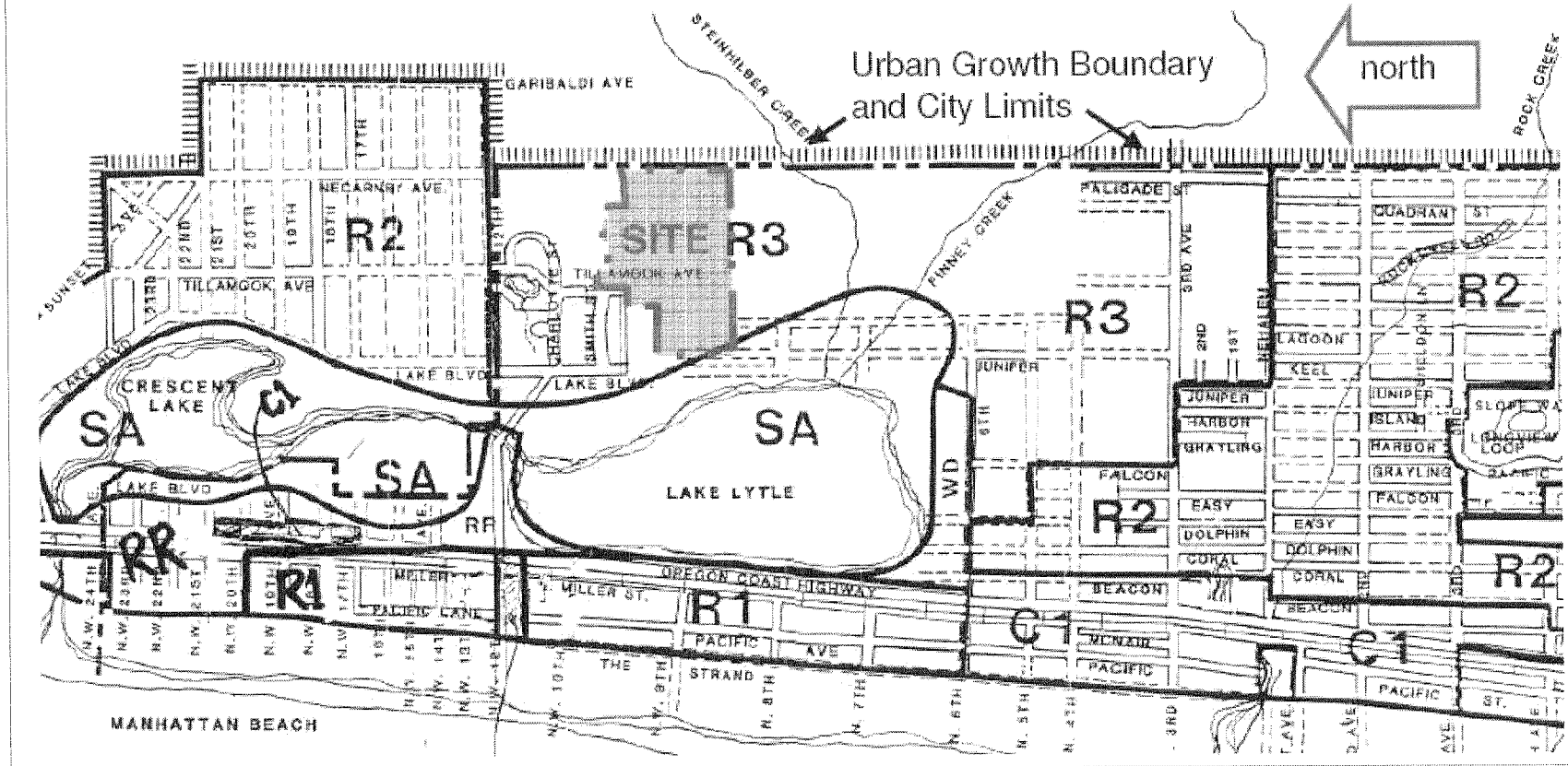


Figure 5 SA Zone wetland relative to the project site.

Lake Lytle Estates Permit Application
Rorick Environmental Services

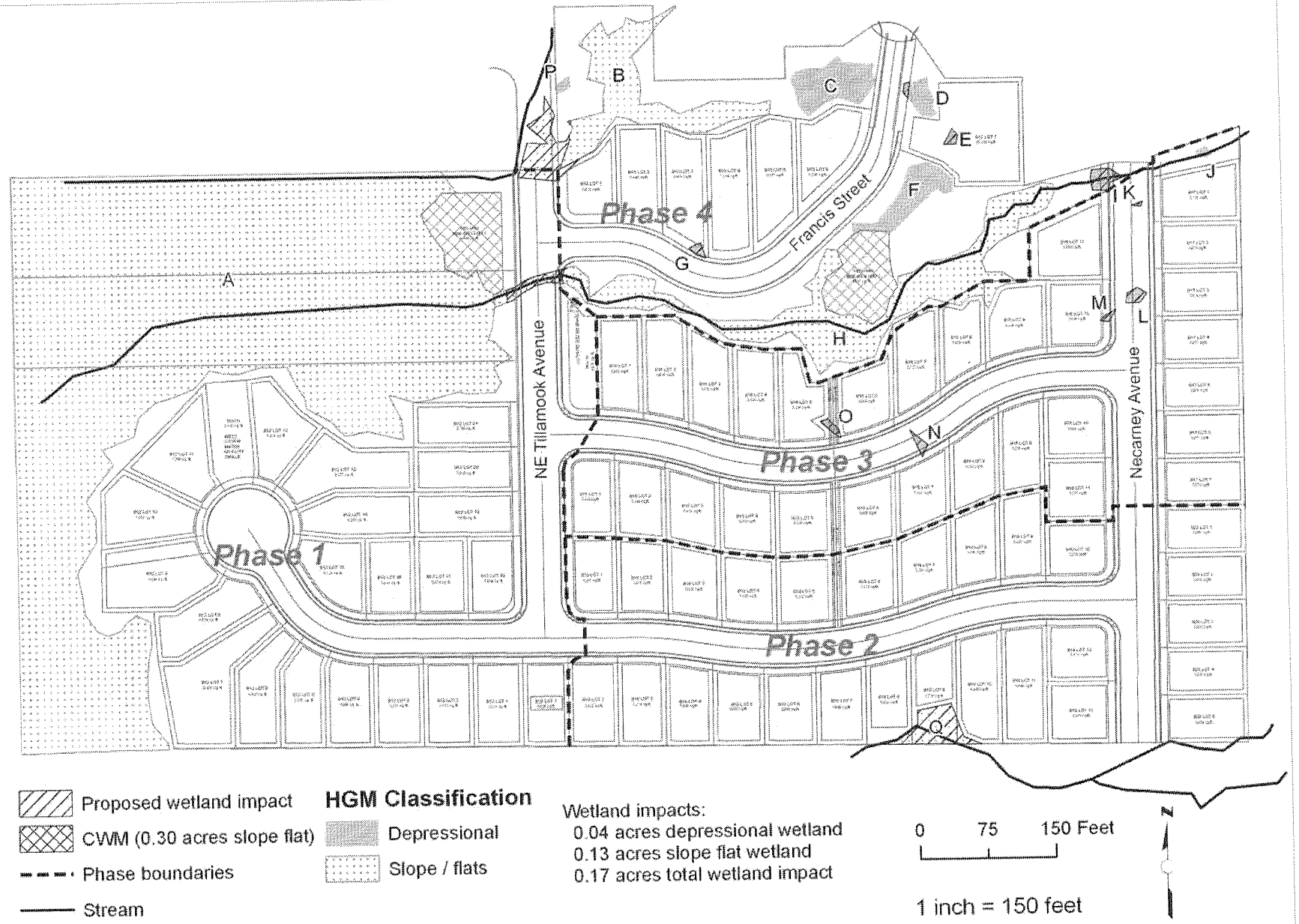


Figure 6 HGM class of existing wetlands, wetland impacts and proposed compensatory wetland mitigation.

Lake Lytle Estates
Removal Fill Application
Rorick Environmental Services

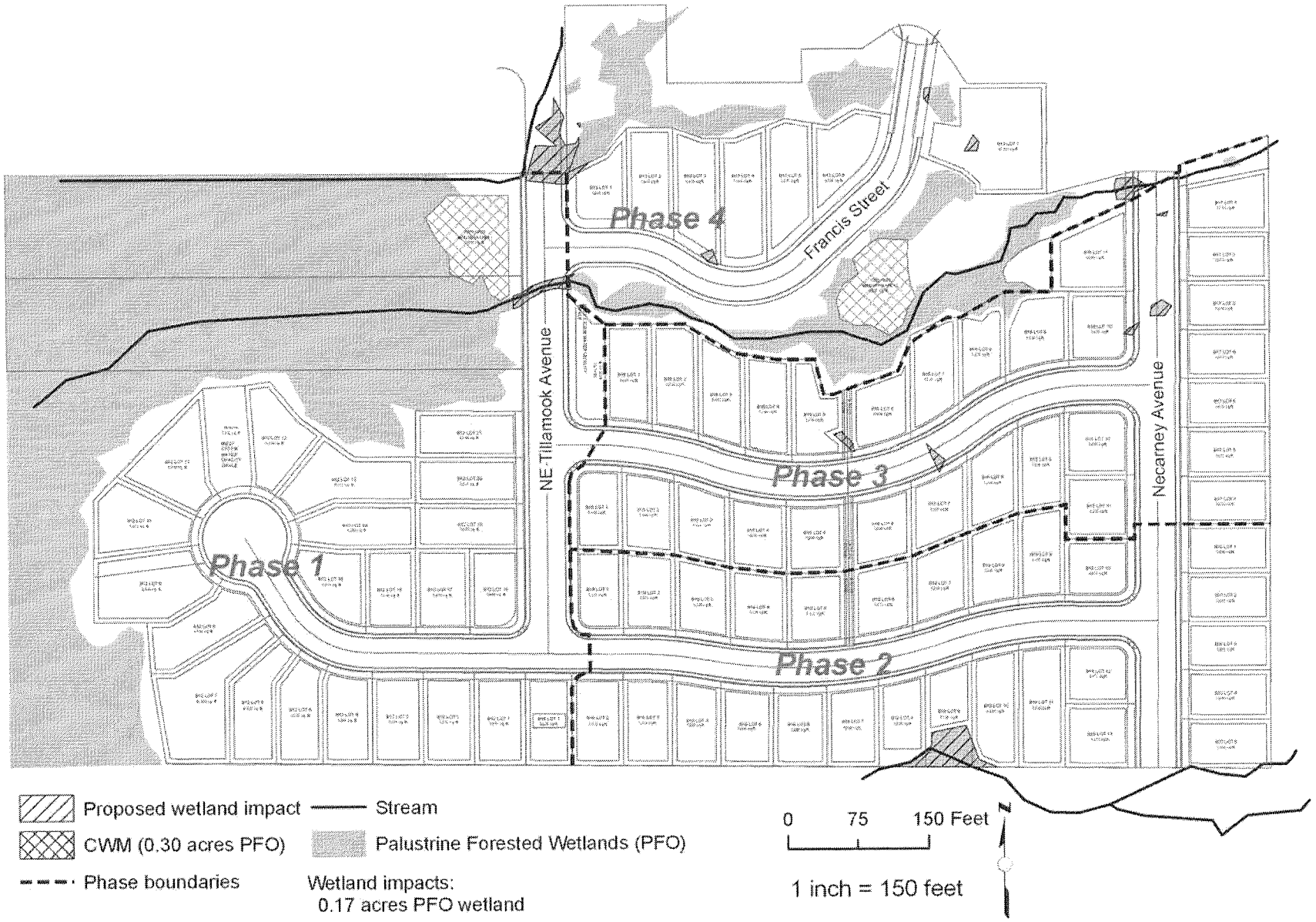


Figure 7 Cowardin class of existing wetlands, wetland impacts and proposed compensatory wetland mitigation.

Lake Lytle Estates
Removal Fill Application
Rorick Environmental Services

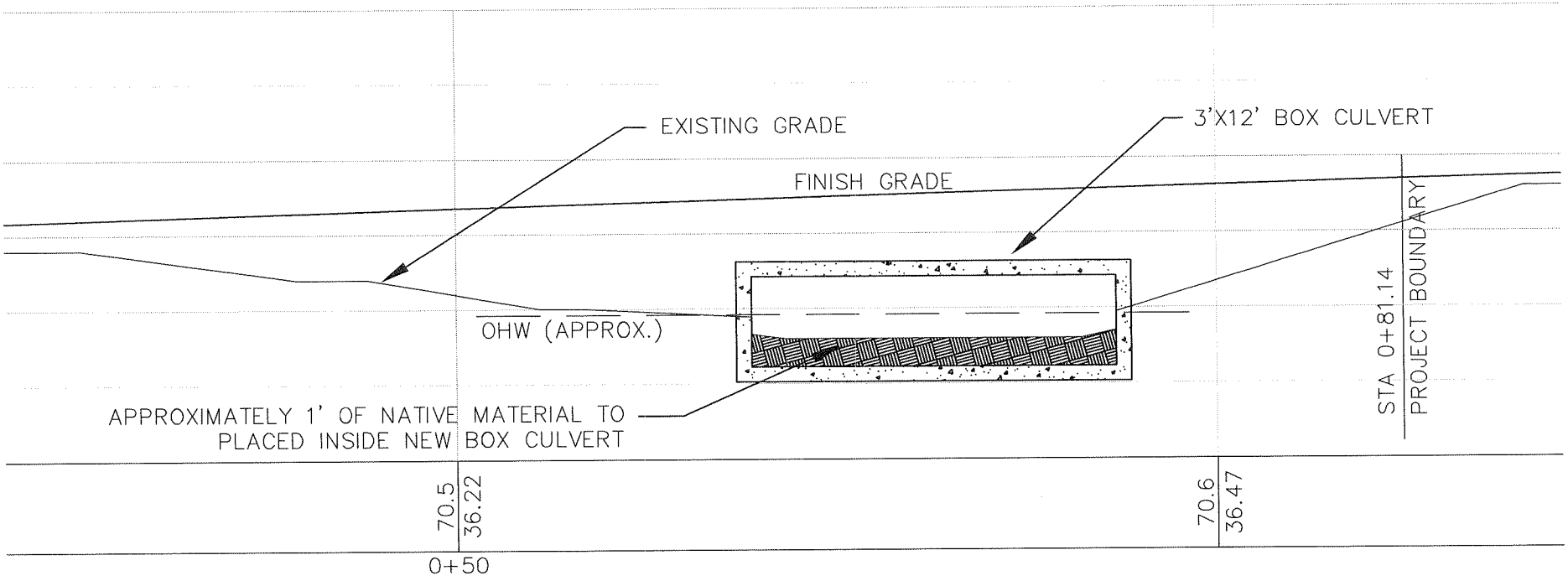
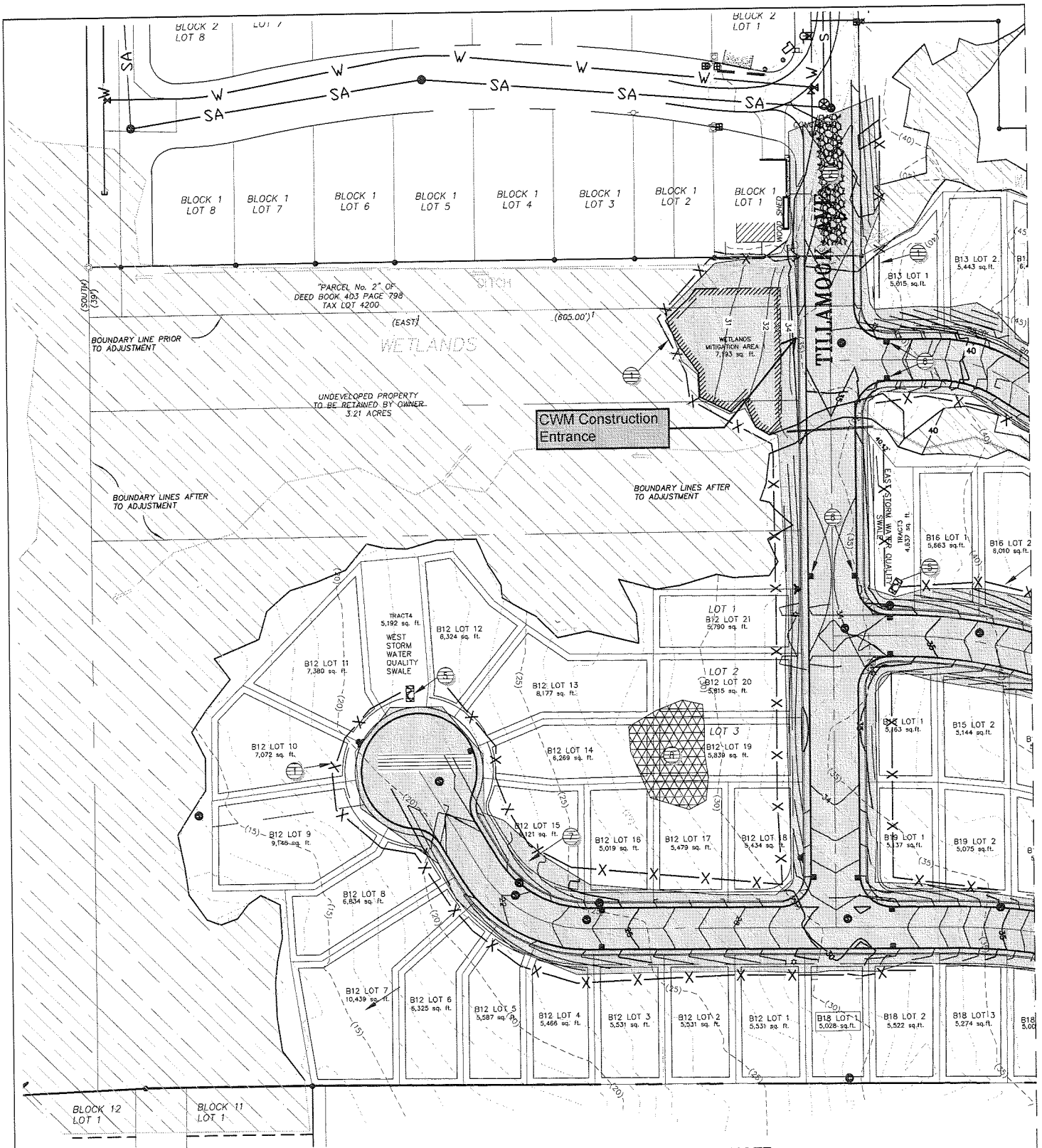


Figure 8 Fish passable culvert.

Lake Lytle Estates
Removal-Fill Application
drawing prepared by
HLB Otak



CONSTRUCTION NOTES

1. INSTALL SEDIMENT FENCE (TYP), SEE DETAIL 1 SHEET EC3
2. INSTALL CONSTRUCTION ENTRANCE, SEE DETAIL 2 SHEET EC3
4. CONSTRUCT CONCRETE CHUTE CLEANING AREA, APPROX. SIZE 4 FT. X 4 FT. AND 1.5 FT. DEEP.
5. ROCK ENERGY DISSIPATER, SEE DETAIL 4 SHEET EC3
6. INSTALL CATCH BASIN INSERT BAG IN AREA DRAIN INLET, SEE DETAIL 3 SHEET EC3
7. COMPOST BLANKET AND HYDROSEED CUT/ FILL SLOPES, SEE DETAIL 5 SHEET EC3
8. SOIL STOCKPILE AREA, SEE DETAIL 6 SHEET EC3

NOTE

1. CONTRACTOR MUST ENSURE THAT VEGETATION IS NOT DISTURBED OUTSIDE OF GRADING LIMITS.
2. CONCRETE WASHOUT SHOULD NOT BE ALLOWED TO OVERFLOW, IF ADDITIONAL WASHOUT AREA IS REQUIRED THE LOCATION MUST BE APPROVED BY ENGINEER.

Figure 9A Grading plan.

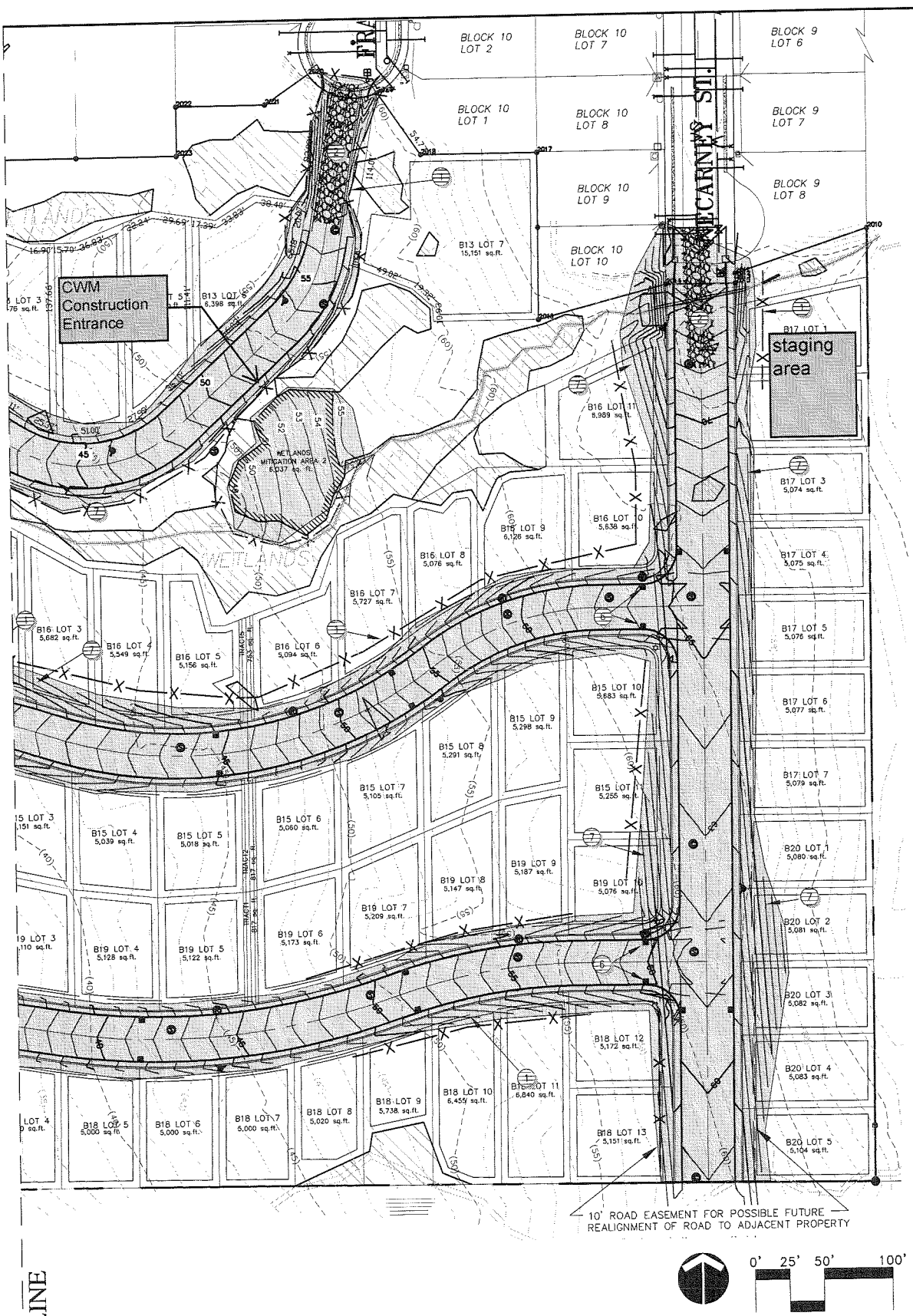


Figure 9B Grading plan.

NO.	DATE	BY	REVISION COMMENTS

Design	Drawn	Checked	Date	Initial Issue Date:
RCS	RCS	RCS		JUNE 6, 2008

TROY JOHNS
LAKE LYTLE ESTATES UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OREGON
TENTATIVE GRADING & EROSION PLAN

June 6, 2008

HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

62703 P703-P4
Project No. Drawing No.

EC2
Sheet No.

TENTATIVE DEVELOPME

LAKE LYTLE ESTATES

ROCKAWAY BEACH

APPLICANT

Name: TROY JOHNS
Address: 12432 NE 20TH STREET
VANCOUVER, WA 98684
Phone: (503) 904-9144
(360) 600-4425

LAND OWNER

Name: ROBERT SCHMELING (1/2) & TROY JOHNS (1/2)
Address: 1621 84TH COURT
VANCOUVER, WA 98664

CIVIL ENGINEER

Name: HLB OTAK, INC.
Contact: RICHARD STELZIG, P.E.
Address: 4253-A HWY 101 NORTH
GEARHART, OR 97138
Phone: (503) 738-3425
Fax: (503) 738-7455

WETLANDS CONSULTANT

Name: RORIK ENVIRONMENTAL SERVICES
Contact: NANCY RORIK, REGISTERED GEOLOGIST
Address: 37552 SE RACHAEL DRIVE
SANDY, OR 97055
Phone: (503) 668-8660

GOVERNING JURISDICTION

Name: CITY OF ROCKAWAY BEACH
Address: PO BOX 5
ROCKAWAY BEACH, OR 97136
Phone: (503) 355-2291
Fax: (503) 355-8221

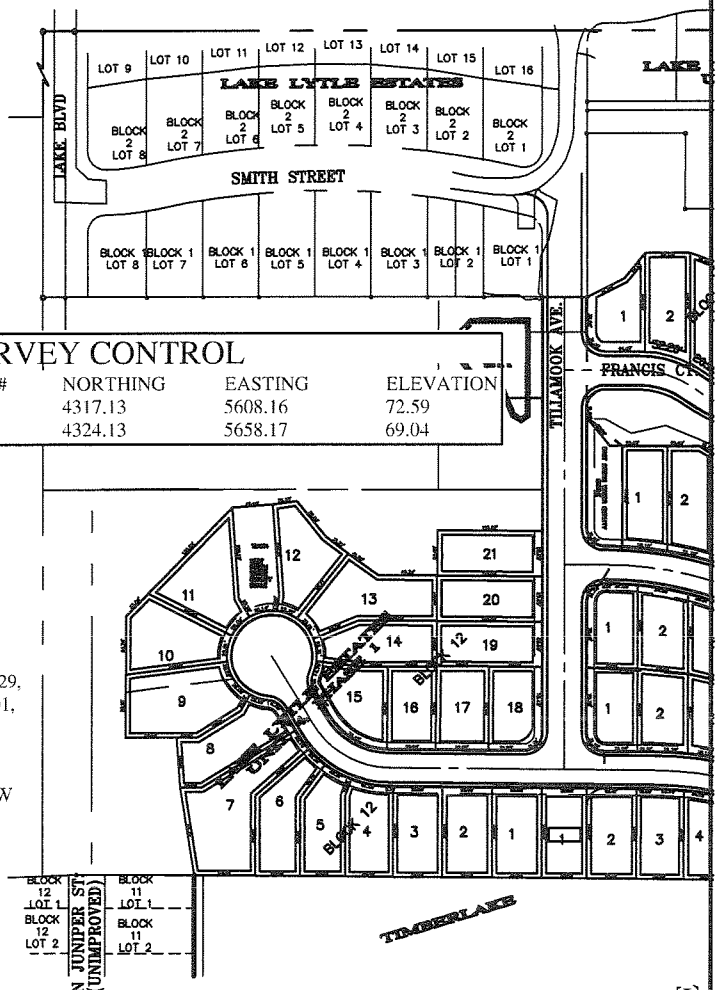
PROJECT DATA

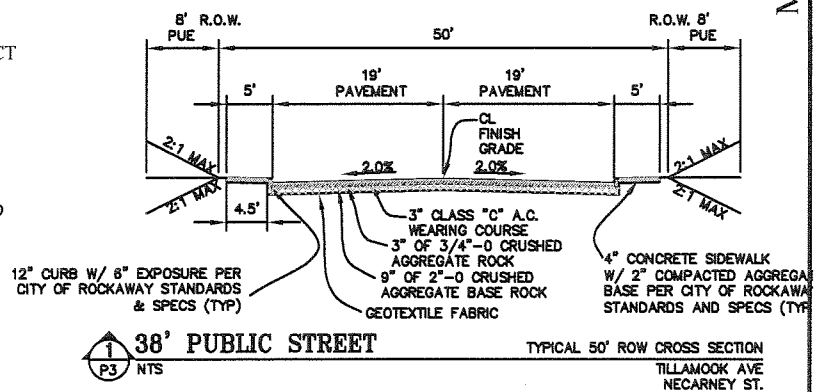
TAX MAP AND LOT	PORTION OF SW 1/4 SE 1/4 AND SE 1/4 SW 1/4, SEC. 29, T2N, R10W, WILLAMETTE MERIDIAN, TAX LOT 5201, MAP 2N 10 AND TAX LOT 4200, MAP 2N 10 29DC (TAX LOT 4200 IS A 39' STRIP OF LAND, 605' LONG LOCATED ON THE SOUTH SIDE OF BLOCK 1, LAKE LYTLE ESTATES, EXTENDING FROM THE WEST R/W LINE OF LAKE BLVD. TO THE EAST R/W LINE OF TILLAMOOK AVENUE)
LOT SIZE RANGE:	5,000 - 10,439 SF
TOTAL LOTS:	86
GROSS AREA:	18.90 acres
DENSITY:	4.62 lots per acre
CURRENT ZONING:	R-3
ADJOINING ZONES:	R-3 TO NORTH, R-R TO SOUTH, R-3 TO EAST, SA TO WEST
PROPOSED USE:	SINGLE FAMILY RESIDENCE
PRESENT USE:	VACANT
ACCESS:	FRANCIS STREET, LAKE BLVD, TILLAMOOK AVE & NECARNEY ST.
DOMESTIC WATER:	CITY OF ROCKAWAY BEACH
SEWAGE DISPOSAL:	CITY OF ROCKAWAY BEACH
POWER:	TILLAMOOK PEOPLE'S UTILITY DISTRICT
FIRE PROTECTION:	CITY OF ROCKAWAY BEACH
GAS:	N/A
CABLE TELEVISION:	CHARTER COMMUNICATIONS
PHONE:	EMBARQ

ALL LOTS ARE SUBJECT TO ALL EASEMENTS, RESTRICTIONS, AND RIGHTS-OF-WAY OF RECORD AND THOSE COMMON AND APPARENT ON THE LAND.
EACH LOT SHALL HAVE SEPARATE WATER, SEWER, AND UTILITY SERVICES.

SURVEY CONTROL

PNT #	NORTHING	EASTING	ELEVATION
80	4317.13	5608.16	72.59
83	4324.13	5658.17	69.04





1 P3 38' PUBLIC STREET NTS

TYPICAL 50' ROW CROSS SECTION
TILLAMOOK AVE
NECARNEY ST.

Figure 10A Project layout.

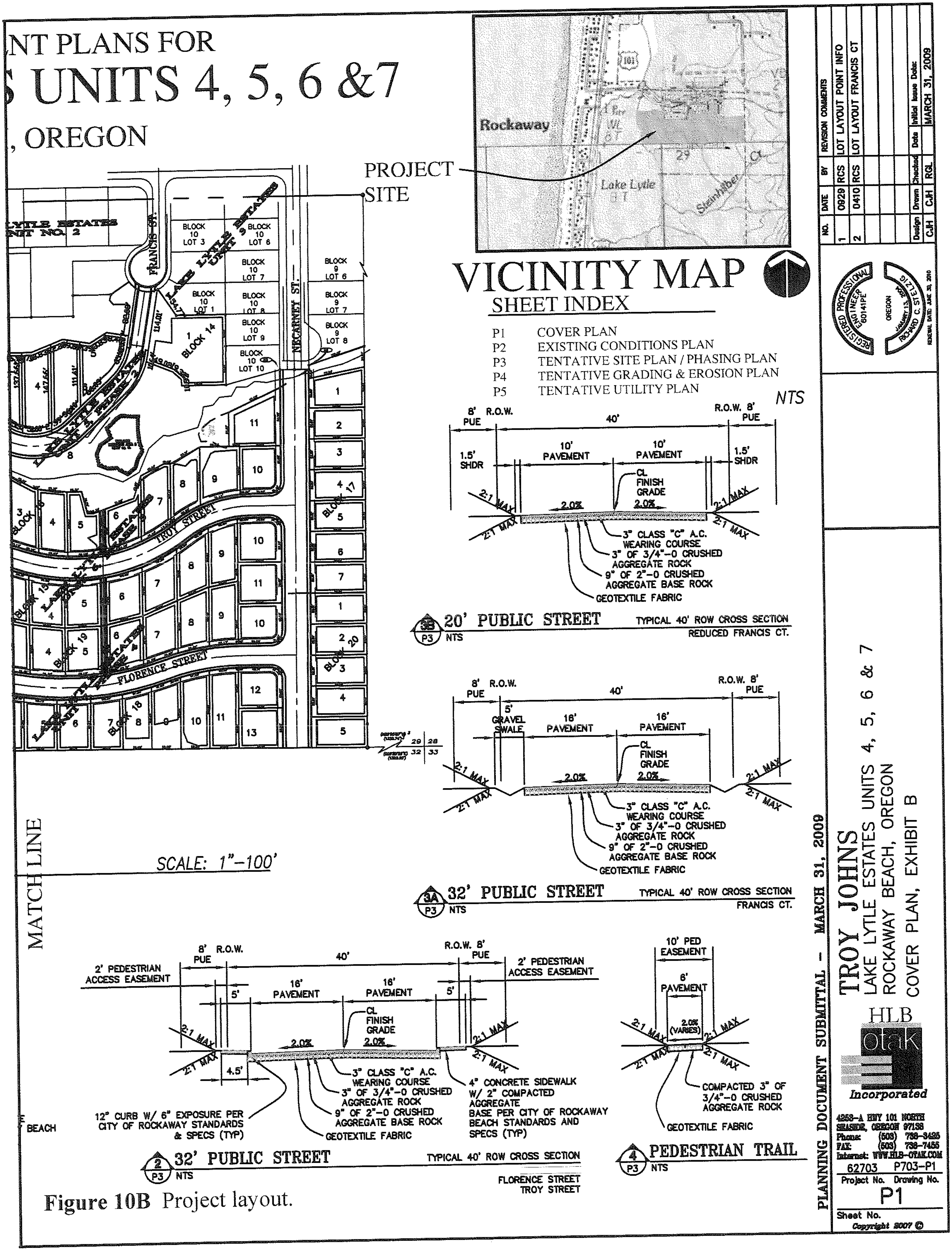
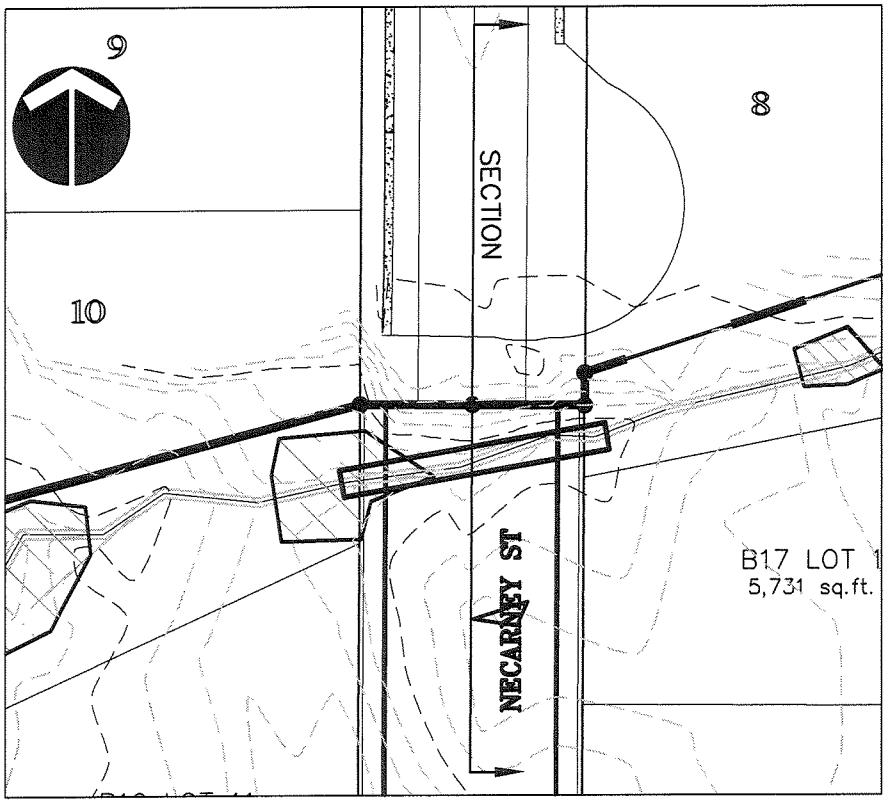


Figure 10B Project layout.



SCALE: 1"=40'

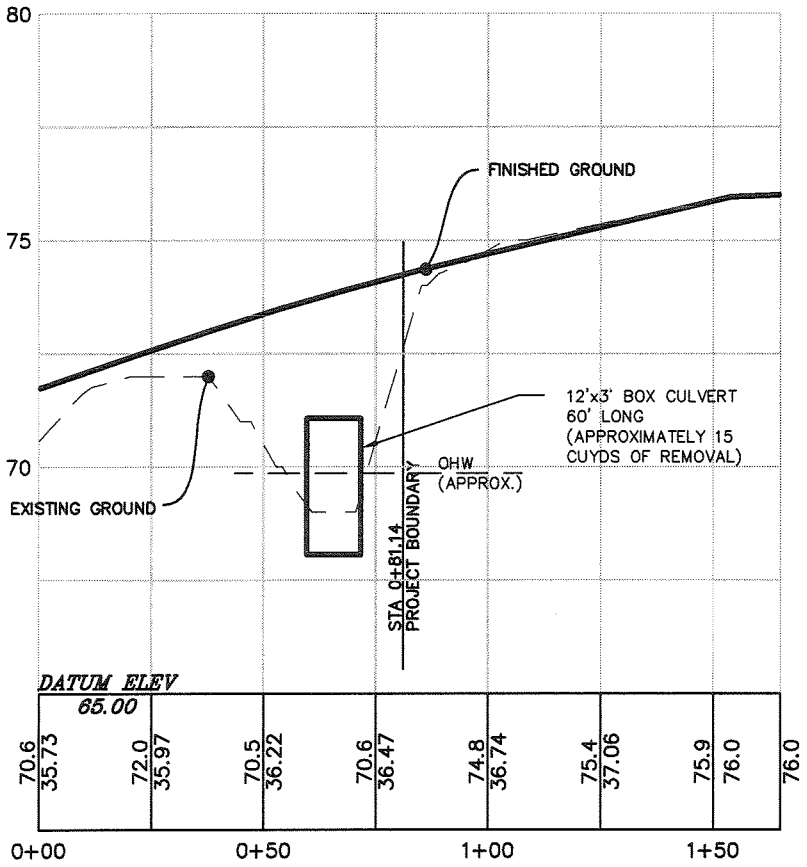


Figure 11a Cross section. See figure 8 for detailed schematic of culvert.

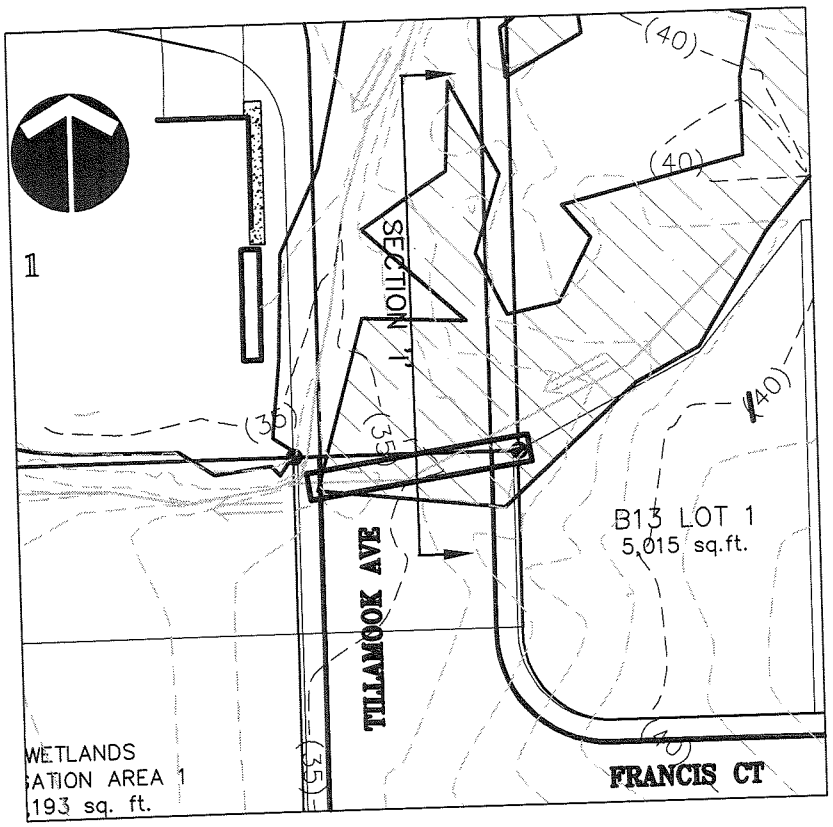
H: SCALE: 1"=40'
V: SCALE: 1"=4'

HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

LAKE LYTLE ESTATES
UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OR

WETLAND NECARNEY

Date: FEB. 25, 2009
Drawn: CJH Checked: RL
Project No.: 62703
File No.: WETLAND XSEC
E-U



SCALE: 1"=40'

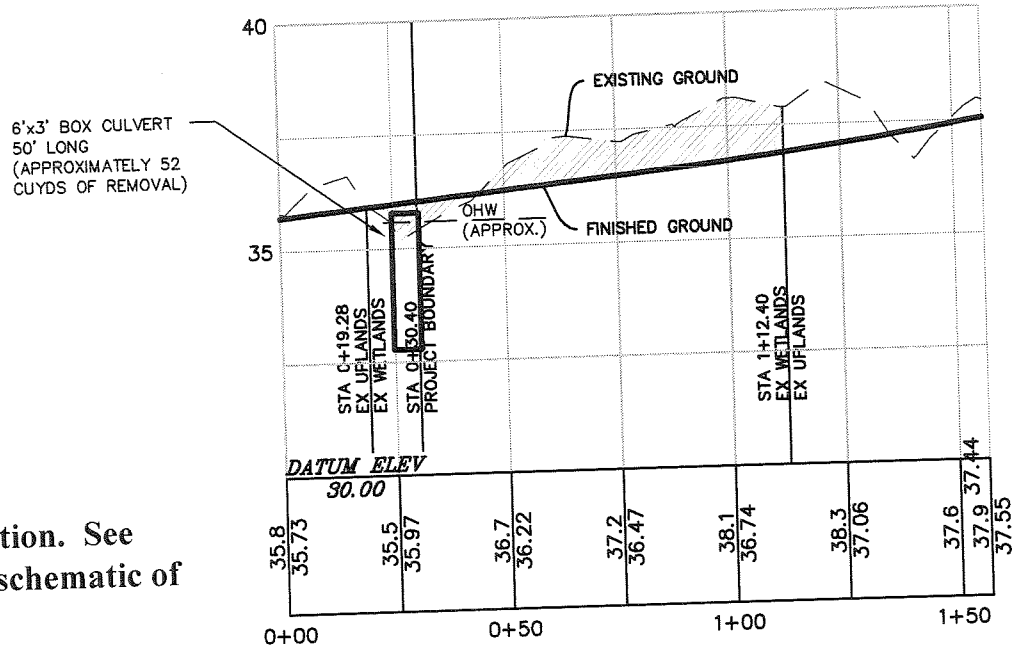


Figure 11b Cross section. See figure 8 for detailed schematic of culvert.

H: SCALE: 1"=40'
V: SCALE: 1"=4'

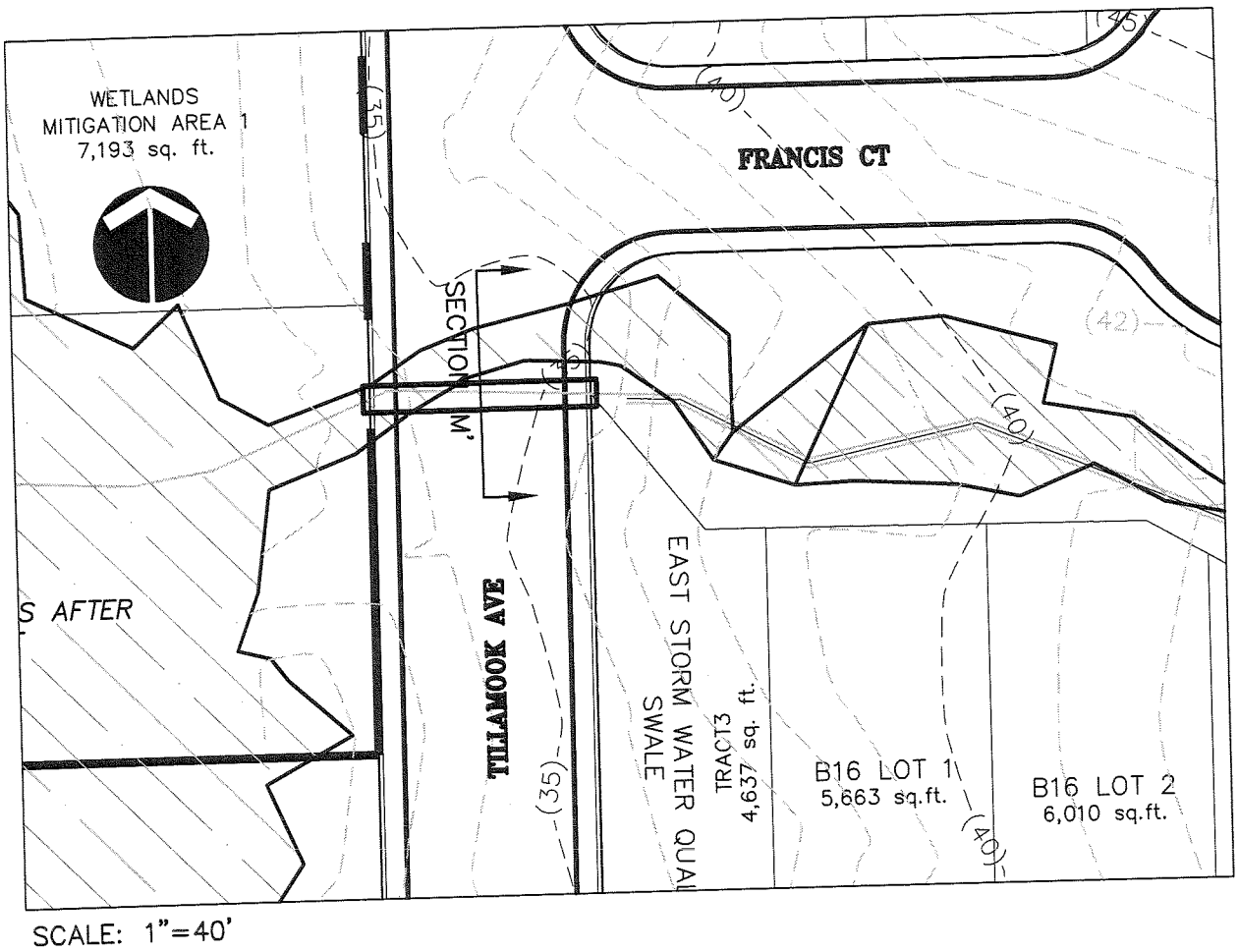
HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

LAKE LYTLE ESTATES
UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OR

WETLAND 1

Date: FEB. 25, 2009
Drawn: CJH Checked: RL
Project No.: 62703
File No.: WETLAND XSEC

E-1



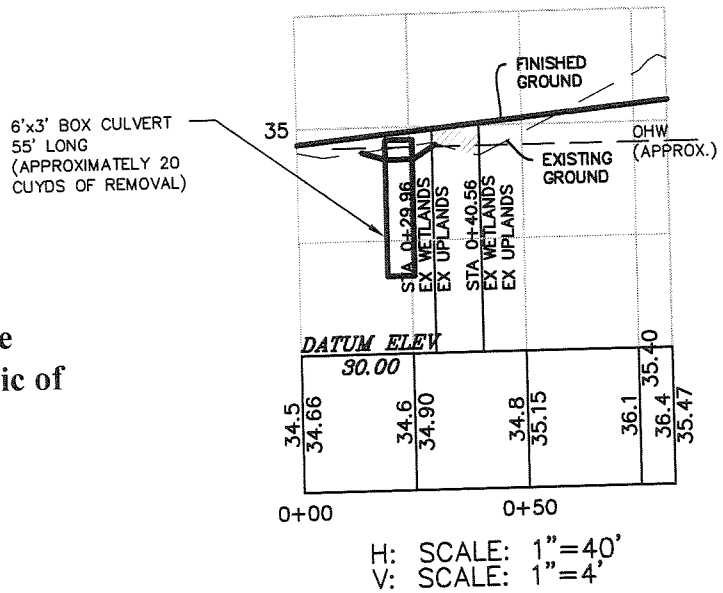


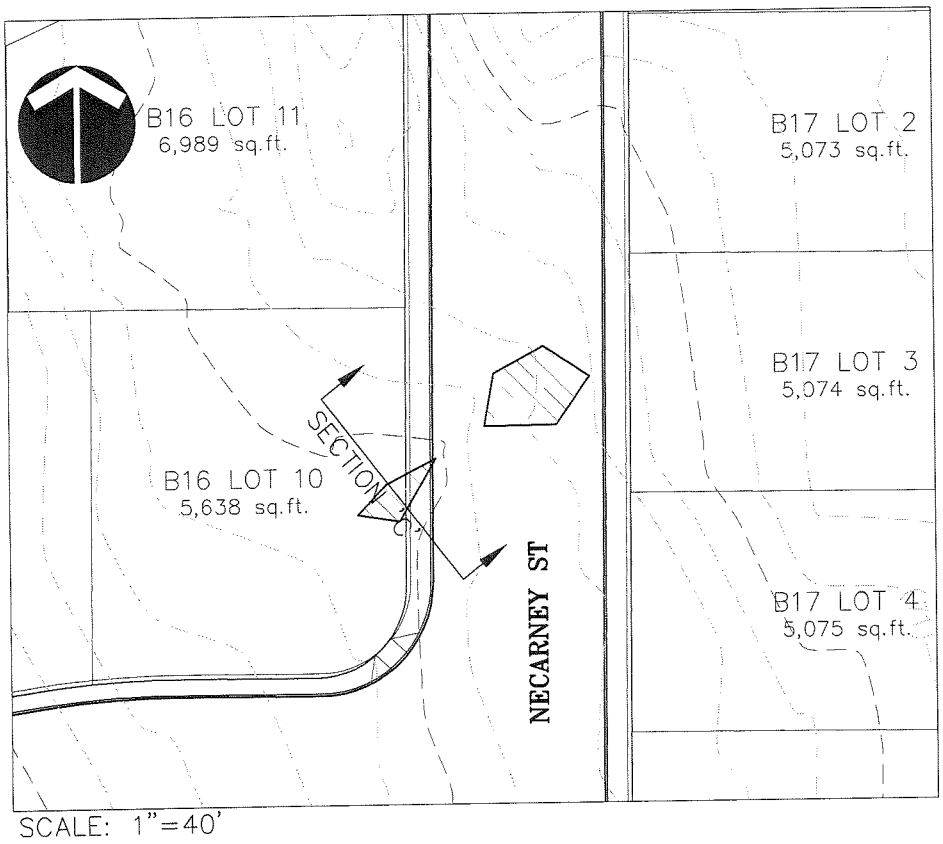
Figure 11c Cross section. See figure 8 for detailed schematic of culvert.

HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

LAKE LYTLE ESTATES
UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OR

WETLAND M

Date: FEB. 25, 2009
Drawn: CJH Checked: RL
Project No.: 62703
File No.: WETLAND XSEC
E-M



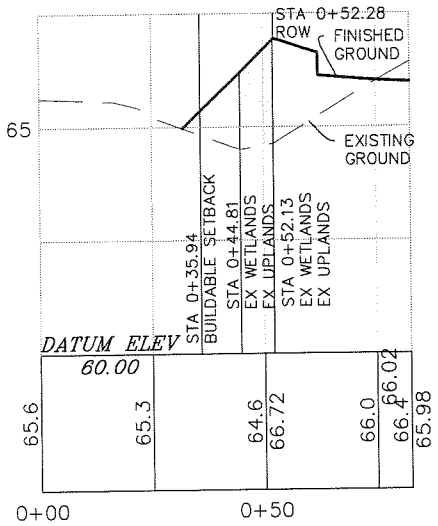


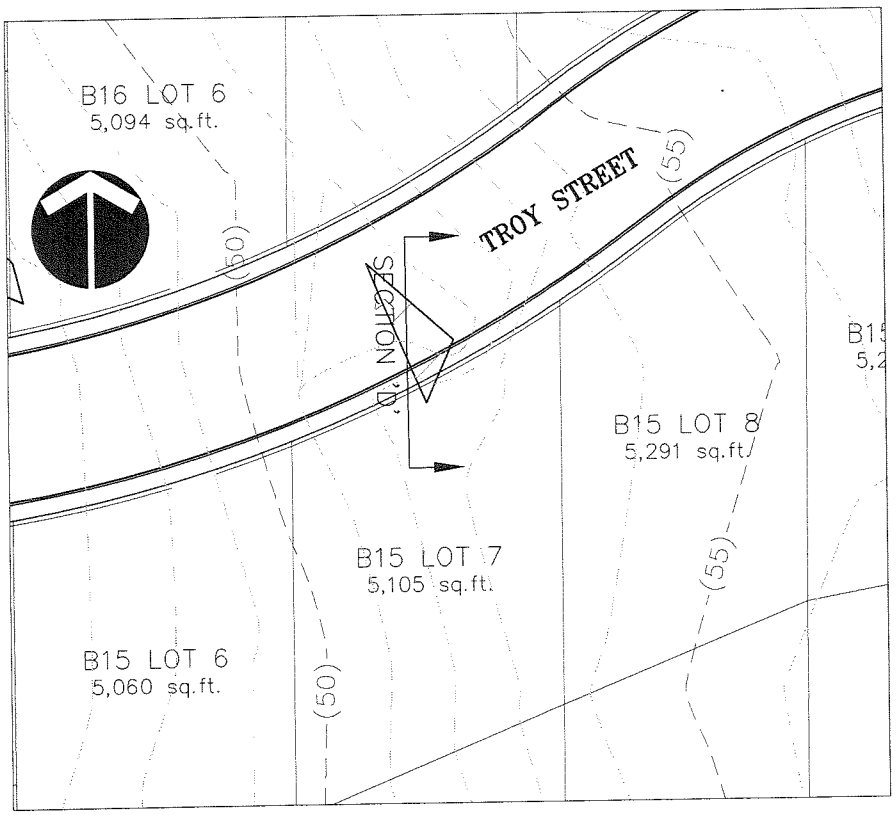
Figure 11d Cross section.

HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

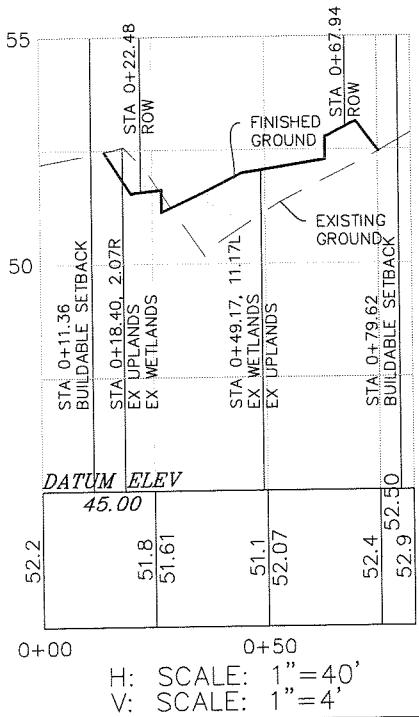
LAKE LYTLE ESTATES
UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OR

WETLAND C

Date: MAY 12, 2008
Drawn: CJH Checked: RL
Project No.: 62703
File No.: WETLAND XSEC
E-C



SCALE: 1"=40'



H: SCALE: 1"=40'
V: SCALE: 1"=4'

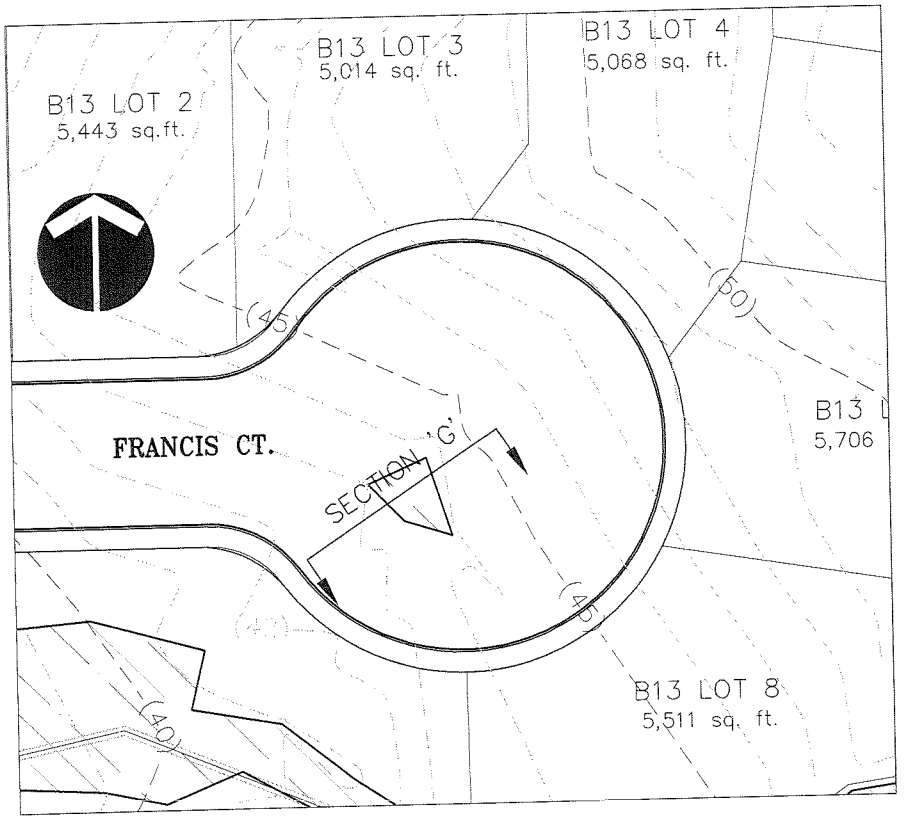
Figure 11e Cross section.

HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

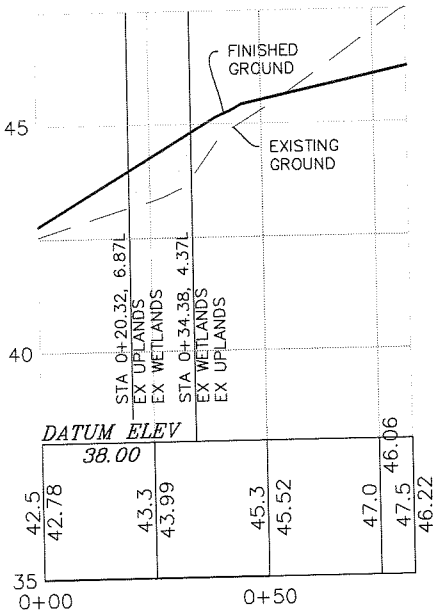
LAKE LYTLE ESTATES
UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OR

WETLAND D

Date: MAY 12, 2008
Drawn: CJH Checked: RL
Project No.: 62703
File No.: WETLAND XSEC
E-D



SCALE: 1"=40'



H: SCALE: 1"=40'
V: SCALE: 1"=4'

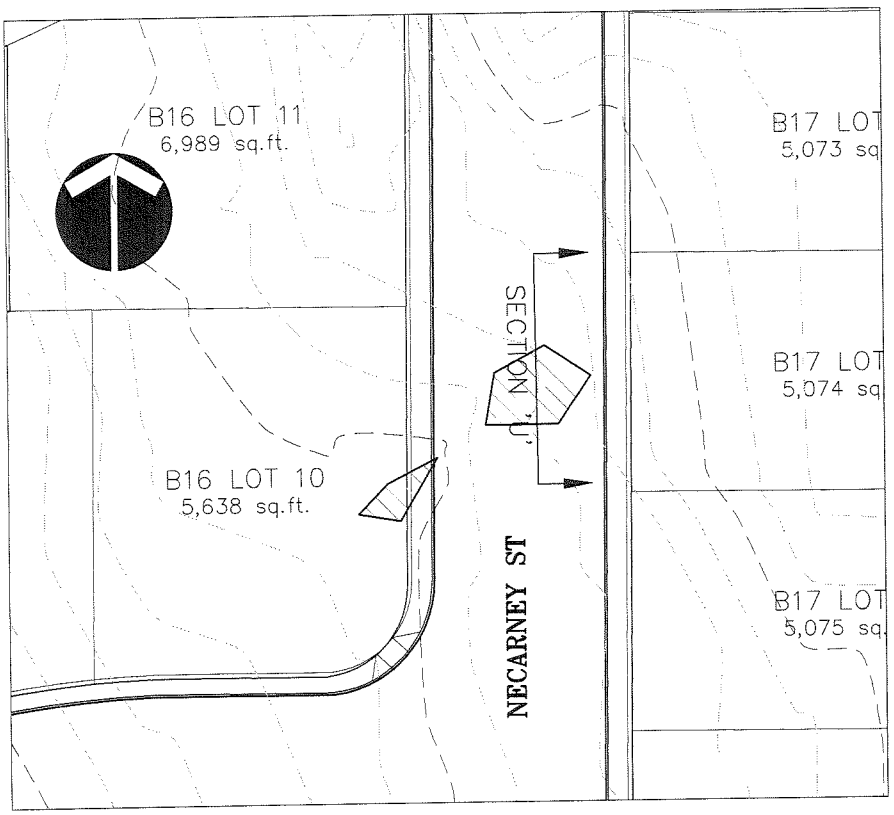
Figure 11f Cross section.

HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

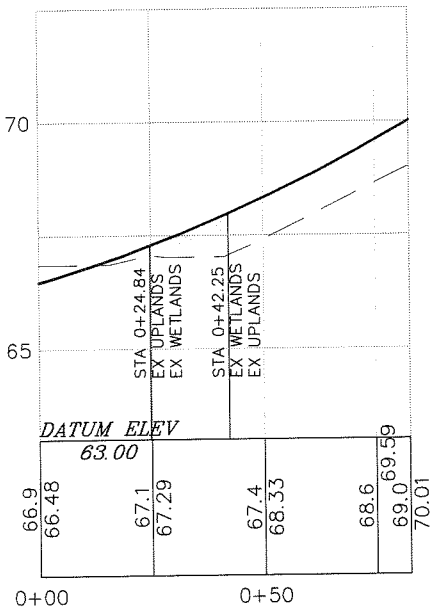
LAKE LYTLE ESTATES
UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OR

WETLAND G

Date: MAY 12, 2008
Drawn: CJH Checked: RL
Project No.: 62703
File No.: WETLAND XSEC
E-G



SCALE: 1"=40'



H: SCALE: 1"=40'
V: SCALE: 1"=4'

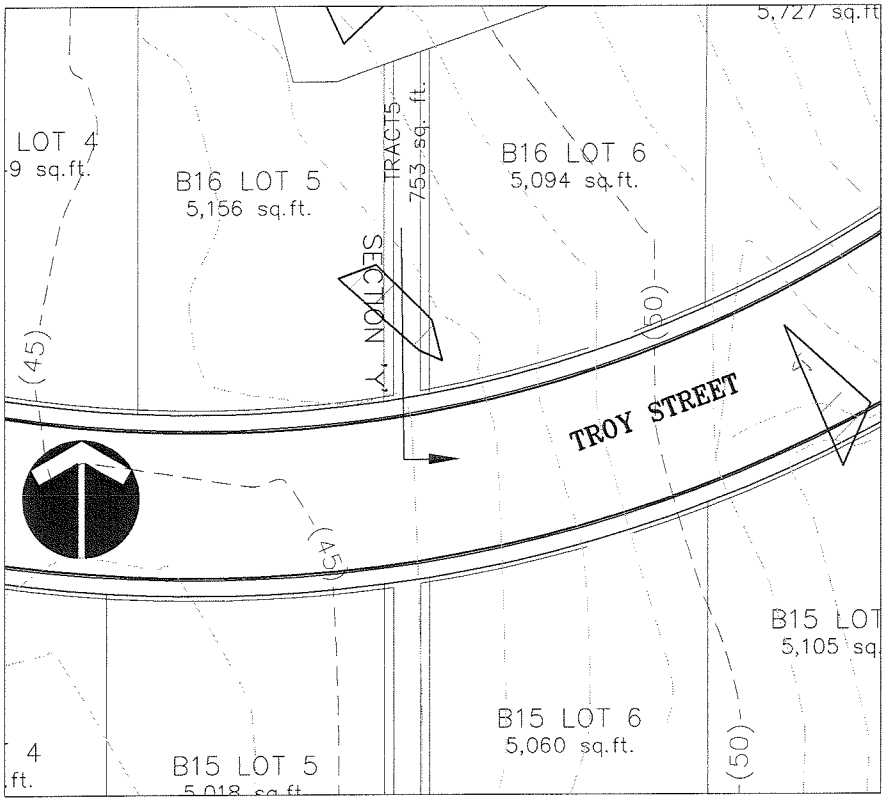
Figure 11g Cross section.

HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

LAKE LYTLE ESTATES
UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OR

WETLAND U

Date: MAY 12, 2008
Drawn: CJH Checked: RL
Project No.: 62703
File No.: WETLAND XSEC
E-U



SCALE: 1"=40'

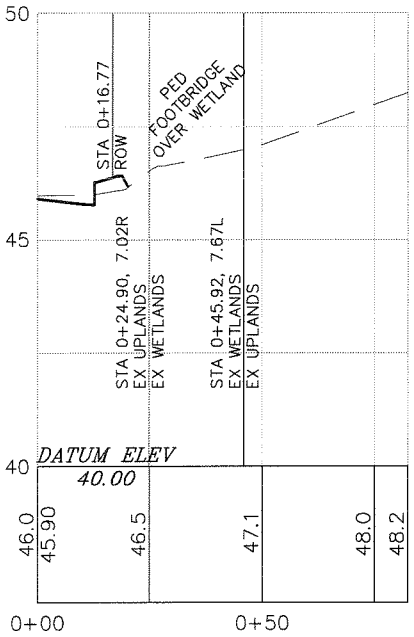


Figure 11h Cross section.

H: SCALE: 1"=40'
V: SCALE: 1"=4'

HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

LAKE LYTLE ESTATES
UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OR

WETLAND Y

Date: MAY 12, 2008
Drawn: CJH Checked: RL
Project No.: 62703
File No.: WETLAND XSEC
E-Y

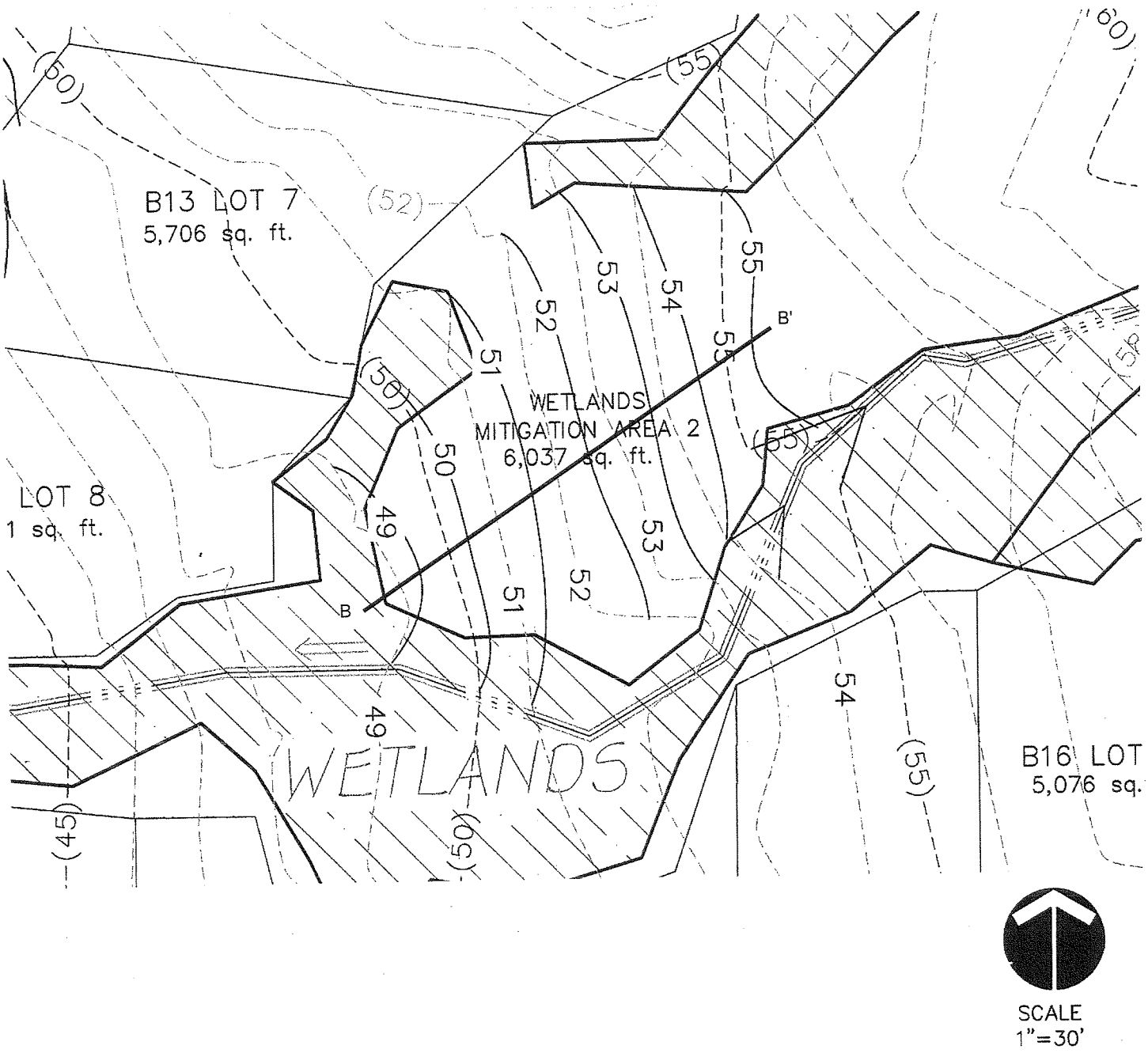


Figure 12 Wetland mitigation grading plan east mitigation area.

HLB otak Incorporated

160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

LAKE LYTLE ESTATES
UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OR

TENTATIVE EAST WETLAND MITIGATION PLAN

Date: MAY 12, 2008
Drawn: CJH Checked: RL
Project No.: 62703
File No.: P703-E4
E4.3

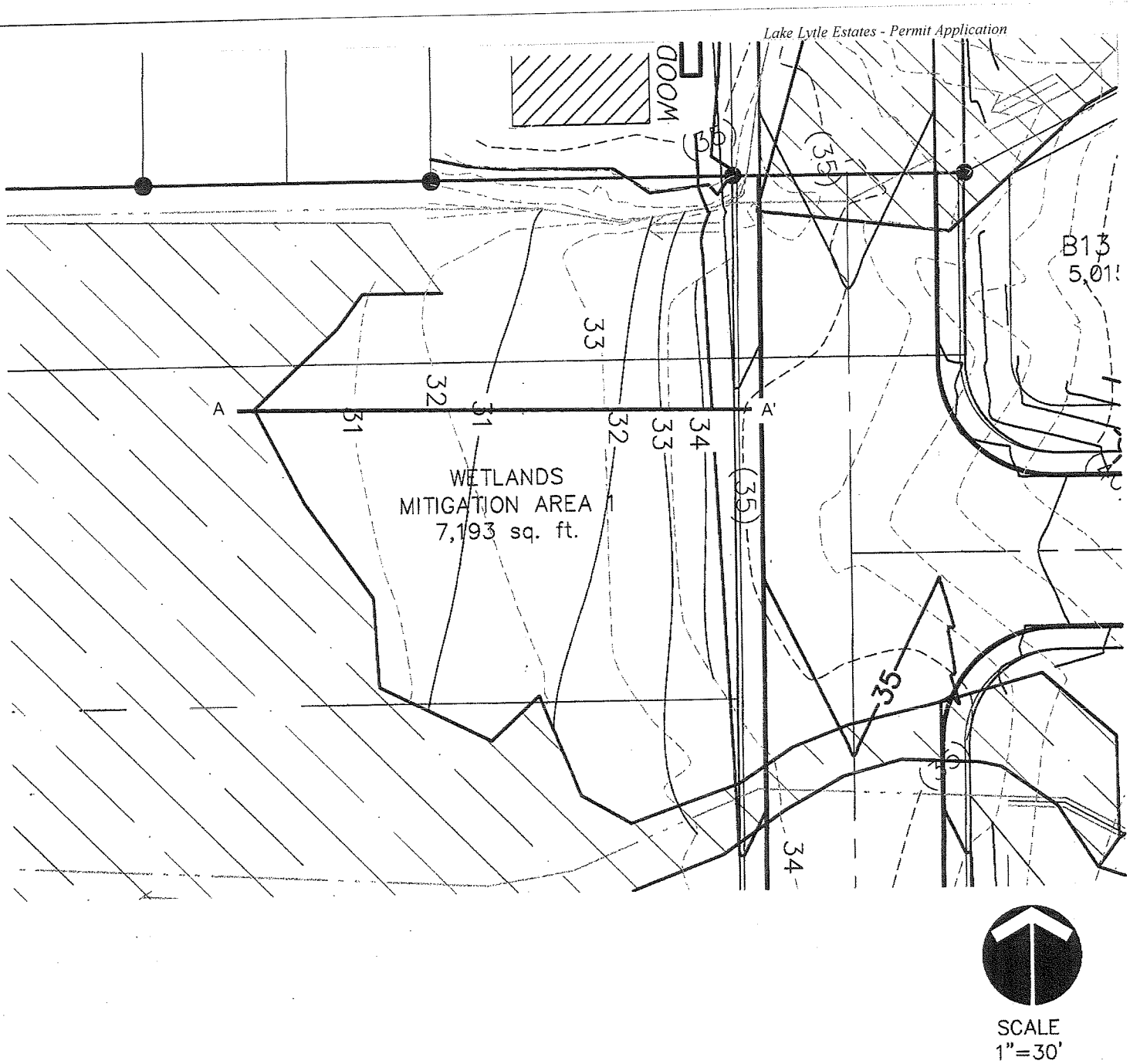


Figure 13 Wetland mitigation grading plan west mitigation area.

HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

LAKE LYTLE ESTATES
UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OR

TENTATIVE WEST WETLAND MITIGATION PLAN

Date: MAY 12, 2008
Drawn: CJH Checked: RL
Project No.: 62703
File No.: P703-E4
E4.2

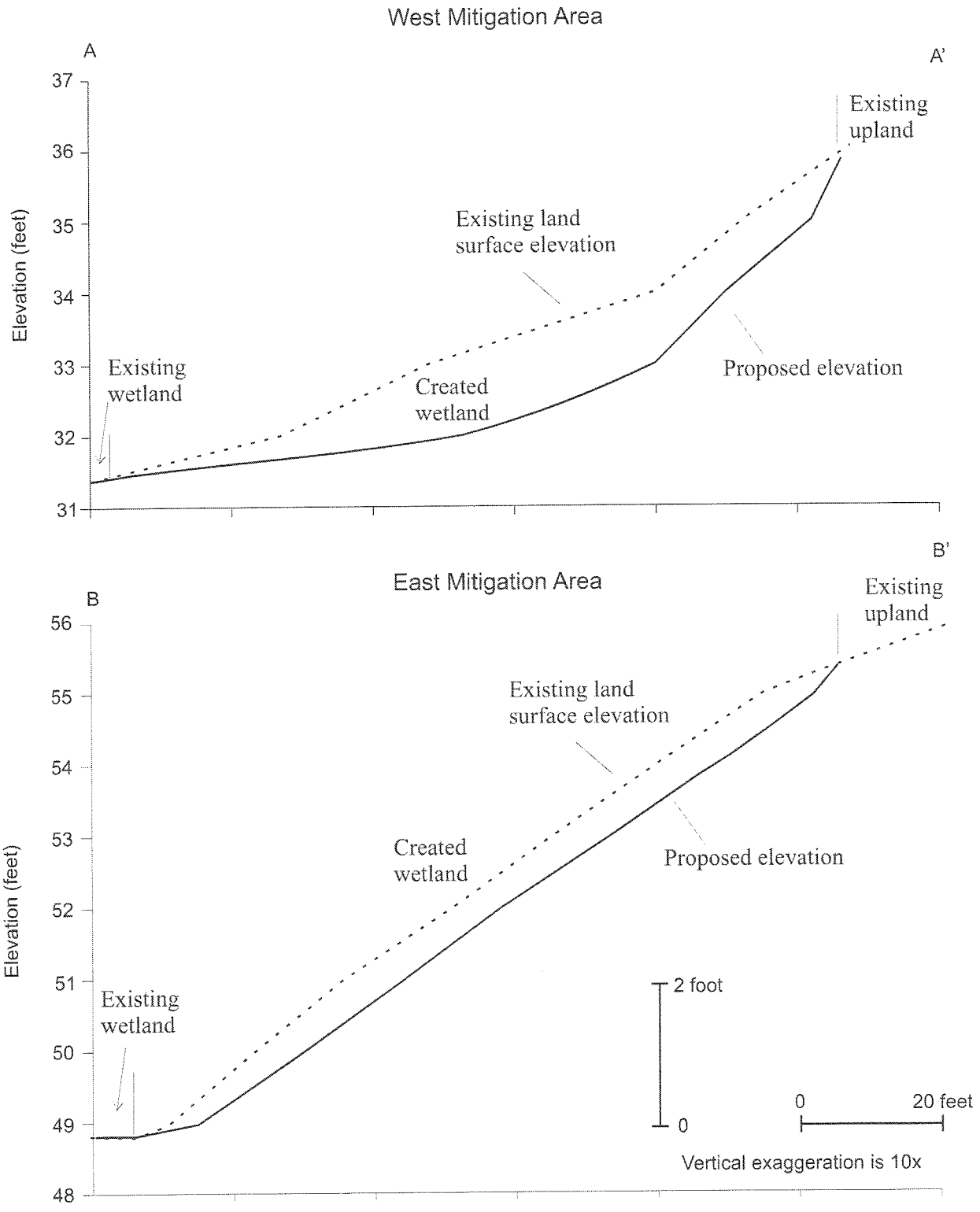


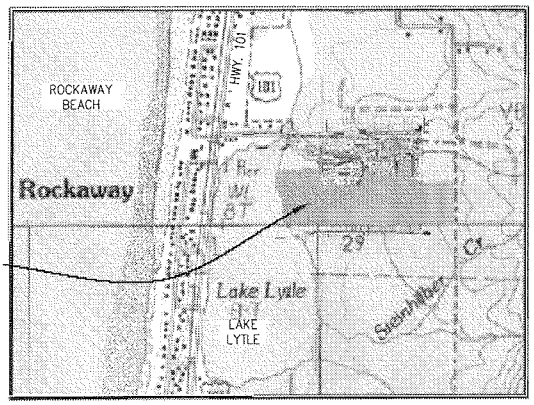
Figure 14 Cross sections of the east and west wetland mitigation sites. Cross section lines are shown on figures 12 and 13.

Lake Lytle Estates Permit Application

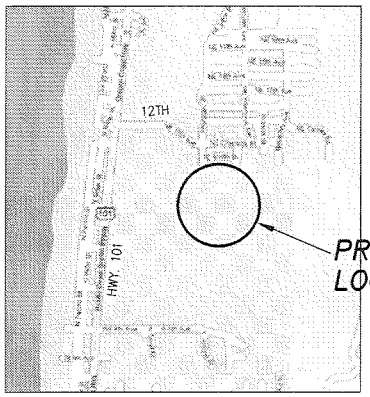
Rorick Environmental Services
503-668-8660

E LYTLE ESTATES UNITS 4,5,6 & 7

EROSION AND SEDIMENT CONTROL PLAN



VICINITY MAP
NO SCALE



LOCATION MAP
NO SCALE

MATCH LINE

SITE AREAS

TOTAL SITE AREA: 18.85 ACRES

TOTAL CONSTRUCTION AREA: 5.6 ACRES

AREA DISTURBED FOR INFRASTRUCTURE CONSTRUCTION PHASE: 5.3 ACRES

JURISDICTIONAL AUTHORITY

THIS ESC PLAN IS PREPARED FOR 1200-C PERMIT APPROVAL UNDER THE CLEAN WATER ACT, PER OREGON DEQ, STORM WATER DIVISION AND THE CITY OF ROCKAWAY BEACH.

SHEET INDEX

NO.	DATE	BY	REVISION COMMENTS

Design	Drawn	Checked	Date
RCS	RCS	RCS	Initial Issue Date: JUNE 6, 2008

TROY JOHNS
LAKE LYTLE ESTATES UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OREGON
COVER SHEET AND GENERAL INFORMATION

June 6, 2008

HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

62703 P703-P4
Project No. Drawing No.

EC1
Sheet No.

Figure 15a Erosion control.

LAKE

GENERAL NOTES

1. ATTENTION CONTRACTORS: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 1-800-332-2344. AT LEAST TWO (2) BUSINESS DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OREGON UTILITY NOTIFICATION CENTER OF THE DATE AND LOCATION OF THE PROPOSED CONSTRUCTION, AND THE TYPE OF WORK TO BE PERFORMED.

2. ALL EXISTING FACILITIES TO BE MAINTAINED IN-PLACE BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR DIRECTED. CONTRACTOR TO LEAVE EXISTING FACILITIES IN AN EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE ENGINEER.

3. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY. CONTACT UTILITY COMPANIES FOR PREMARKING. POTHOLE ALL UTILITY CROSSINGS BEFORE CONSTRUCTION TO PREVENT GRADE AND ALIGNMENT CONFLICTS.

4. ALL CONSTRUCTION SHALL BE COMPLETED ACCORDING TO THE REQUIREMENTS OF THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT BY GEOTECH SOLUTIONS INC. DATED APRIL 09, 2007. CONTRACTOR SHALL OBTAIN GEOTECHNICAL ENGINEER'S APPROVAL PRIOR TO START OF ANY EARTHWORK.

5. CONTRACTOR SHALL RESTORE ALL SURFACES TO MATCH EXISTING AND ADJACENT GRADES.

SOIL TYPES

SCS ID	CLASSIFICATION	WIND ERODIBILITY RATING	WATER ERODIBILTY RATING
17B	CHITWOOD-HEBO COMPLEX	6	0.28
59B	CHITWOOD-KNAPPA MEDIAL SILT LOAMS	6	0.28

TABLE SOURCE:
UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE WEBSITE: http://websoilsurvey.nrcs.usda.gov/app/.

LEGEND

- EXISTING MAJOR CONTOUR (10 FT. INTERVAL)
- EXISTING MINOR CONTOUR (2 FT. INTERVAL)
- NEW MAJOR CONTOUR
- NEW MINOR CONTOUR
- STREAM TRIBUTARY
- BOUNDARY LINE
- LOT LINE
- EDGE OF PAVEMENT
- WETLAND BOUNDARY
- PROPOSED EROSION FENCE
- FLOW DIRECTION
- SOIL STOCKPILE AREA
- GRADING LIMITS

EROSION CONTROL NOTES

MATERIALS

1. SEDIMENT FENCE SYSTEM SHALL BE THE "ENVIROFENCE" SEDIMENT FENCE SYSTEM MANUFACTURED BY AMOCO, INC., OR APPROVED EQUAL. THE HEIGHT OF A SEDIMENT FENCE SHALL NOT EXCEED 30 INCHES (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE).

CONSTRUCTION

2. GENERAL- ALL EROSION CONTROL PRODUCTS AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON THE PLANS. ALL EROSION CONTROL MEASURES SHALL BE LEFT IN PLACE UNTIL ALL RESEEDING EFFORTS ARE COMPLETED AND VEGETATION HAS TAKEN ROOT, OR AS DIRECTED BY THE ENGINEER.

3. SEDIMENT FENCES - THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHERE JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY SEALED. POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 24 INCHES). A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6" (WIDE) X 6" (DEEP) ALONG THE LINE OF POSTS AND DOWN-SLOPE FROM THE BARRIER. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC. SEDIMENT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE DOWN-SLOPE AREA HAS BEEN PERMANENTLY SEEDED AND STABILIZED. SEE DETAIL 1, THIS SHEET

4. MAINTENANCE OF SEDIMENT FENCES - SEDIMENT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL BY THE CONTRACTOR. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY BY THE CONTRACTOR. SHOULD THE FABRIC ON A SEDIMENT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY 1/3 THE HEIGHT OF THE BARRIER.

5. REMOVAL OF EROSION CONTROL STRUCTURES - ANY MATERIAL REMAINING IN PLACE AFTER THE FENCE OR BARRIER IS NO LONGER REQUIRED SHALL BE GRADED TO CONFORM TO THE EXISTING GRADE AND RE-SEEDED.

GENERAL

6. SOIL CONSERVATION OR GEOTECHNICAL REPORTS SHALL BE USED WHERE AVAILABLE TO DETERMINE SOIL TYPES AND ANY SPECIFIC EROSION CONTROL MEASURES FOR THAT SOIL TYPE. SEE "SOIL TYPES" TABLE, SHEET EC1.

7. APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

8. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.

9. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE SEDIMENT AND SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.

10. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.

11. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED EVERY TWO WEEKS OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.

12. WHENEVER PRACTICAL, CLEARING AND GRADING SHALL BE DONE IN A PHASED MANNER TO PREVENT EXPOSED OR INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION.

13. ALL STOCKPILED ORGANIC MATERIALS/SOILS NOT SUBJECT TO IMMEDIATE USE, SHALL BE COVERED WITH PVC SHEETING AND THIS COVERING SECURED WITH ROPES AND SANDBAGS, SEE DETAIL 6, SHEET EC3

14. THE ENGINEER AND THE CITY WILL RETAIN THE AUTHORITY TO INSPECT AND MODIFY ANY CONSTRUCTION ACTIVITY CAUSING EROSION OR SEDIMENTATION. HOWEVER, ANY MODIFICATION TO THIS EROSION/SEDIMENTATION CONTROL PLAN BY THE DEVELOPER/CONTRACTOR WILL REQUIRE APPROVAL BY THE ENGINEER.

STORM WATER MANAGEMENT PLAN

PRIOR TO ANY SIGNIFICANT EXCAVATION

1. INSTALL BEST MANAGEMENT PRACTICE (BMP) FOR EROSION PREVENTION
2. INSTALL CONSTRUCTION ENTRANCE
3. MAINTAIN AS MUCH EXISTING VEGETATION AS POSSIBLE

DURING CONSTRUCTION

1. IF THE CONSTRUCTION ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT, ALTERNATIVE MEASURES TO KEEP STREETS FREE OF SEDIMENT MUST BE USED. THESE INCLUDE STREET VACUUM SWEEPING AND PLACING SEDIMENT IN DESIGNATED STOCKPILE, INCREASING THE DIMENSIONS OF THE ENTRANCE AND/OR INSTALLATION OF A WHEEL WASH.
2. REMOVE ANY SOIL THAT LEAVES THE SITE AND ENTERS DOWNSTREAM DRAINAGE SYSTEM
3. THE CONTRACTOR SHALL MAINTAIN ALL EROSION, SEDIMENT AND POLLUTANT CONTROL MEASURES, TEMPORARY AND PERMANENT, IN PROPER FUNCTIONING ORDER. WITHIN 24 HOURS FOLLOWING A STORM OR HIGH WIND EVENT, THE CONTRACTOR MUST ADJUST, REPAIR AND REPLACE EROSION, SEDIMENT AND POLLUTANT CONTROL MEASURES TO ENSURE THAT THE MEASURES ARE FUNCTIONING PROPERLY.
4. ALL STOCKPILED MATERIALS SHALL BE PROTECTED WITH TEMPORARY SOIL STABILIZATION MEASURES SUCH AS PLASTIC SHEETING SECURED WITH TIE DOWNS AND SAND BAGS.

UPON COMPLETION OF EXCAVATION

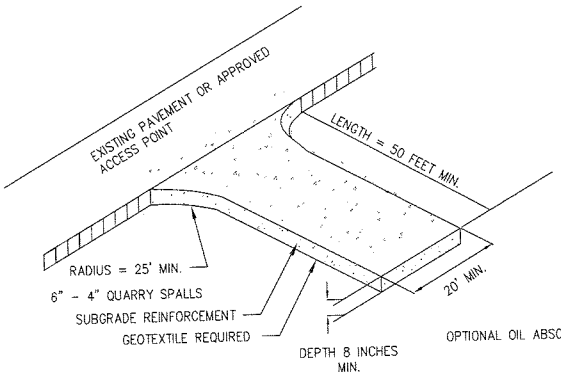
RE-SEED ALL DISTURBED SOILS. SEED SHALL BE FROM BLUE TAG STOCK AND FROM THE LATEST CROP AVAILABLE. THE FOLLOWING MIXTURES ARE APPROPRIATE FOR THE OREGON NORTH COAST:

SOIL CONSERVATION MIX:		
HYBRID RYE	3 LBS/ACRE	9%
TALL FESCUE	18 LBS/ACRE	52%
CREEPING RED FESCUE	8 LBS/ACRE	24%
BENT GRASS	1 LBS/ACRE	3%
BIG TREFOIL	4 LBS/ACRE	12%

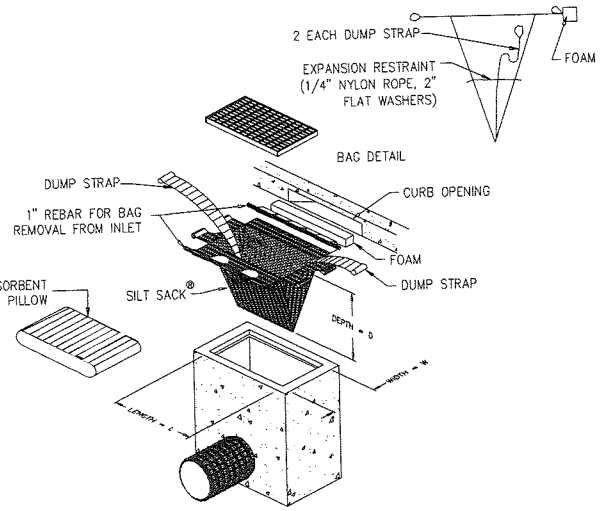
WETLAND/ SWALE SEED MIX:		
AMERICAN SLOUGH GRASS	0.6 LBS/ACRE	2%
TUFFTED HAIRGRASS	3.6 LBS/ACRE	12%
BLUE WILD RYE	13.8 LBS/ACRE	46%
RED FESCUE	11.4 LBS/ACRE	38%
WESTERN MANNAGRASS	0.6 LBS/ACRE	2%

MATCH LINE

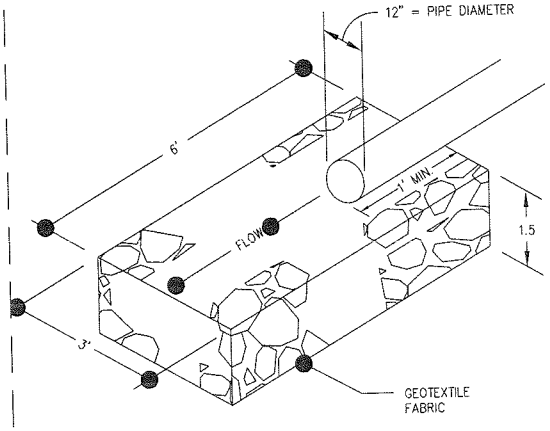
Figure 15b Erosion control.



2 EC3 **CONSTRUCTION ENTRANCE DETAIL**
NOT TO SCALE



3 EC3 **CATCH BASIN INSERT BAG DETAIL**
NOT TO SCALE

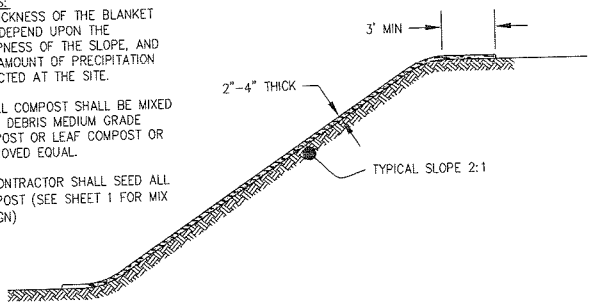


NOTES:

1. RIP RAP SHALL BE CLASS 50
2. ROCK SLOPE PROTECTION TOP OF ROCK TO BE FLUSH WITH EXISTING GROUND
3. TOP OF ROCK SLOPE TO CONFORM TO SLOPE OF NATURAL GROUND SLOPE
4. RIP RAP SHALL BE HAND PLACED

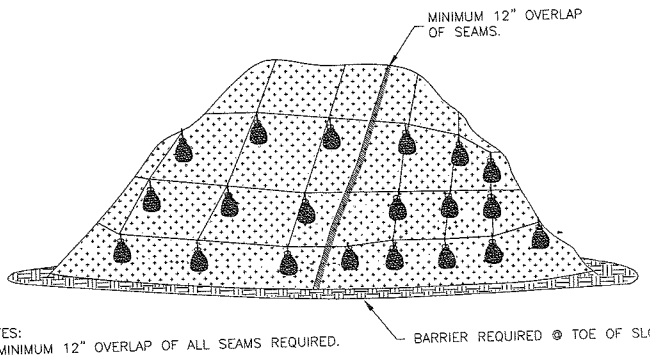
4 EC3 **ROCK ENERGY DISSIPATOR DETAIL**
NOT TO SCALE

NOTES:
1. THICKNESS OF THE BLANKET WILL DEPEND UPON THE STEEPNESS OF THE SLOPE, AND THE AMOUNT OF PRECIPITATION EXPECTED AT THE SITE.
2. ALL COMPOST SHALL BE MIXED YARD DEBRIS MEDIUM GRADE COMPOST OR LEAF COMPOST OR APPROVED EQUAL.
3. CONTRACTOR SHALL SEED ALL COMPOST (SEE SHEET 1 FOR MIX DESIGN)



3 EC3 **COMPOST BLANKET DETAIL**
NOT TO SCALE

MATCH LINE



NOTES:
1. MINIMUM 12" OVERLAP OF ALL SEAMS REQUIRED.
2. BARRIER REQUIRED @ TOE OF STOCK PILE.
3. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10' GRID SPACING IN ALL DIRECTIONS.

6 EC3 **STOCKPILE PROTECTION**
NOT TO SCALE

Figure 15c Erosion control.

NO.	DATE	BY	REVISION COMMENTS	Date
Design	Drawn	Checked	Initial Issue Date:	
RCS	RCS	RCS	JUNE 6, 2008	

TROY JOHNS
LAKE LYTLE ESTATES UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OREGON
NOTES AND DETAILS

June 6, 2008

HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

62703 P703-P4
Project No. Drawing No.
EC3
Sheet No.

1. HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (SCHEDULE A.5.B.I.(3))

2. THE ESCP MUST BE KEPT ONSITE AND ALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN MUST BE INSTALLED IN SUCH A MANNER TO ENSURE THAT SEDIMENT OR SEDIMENT LADEN WATER THAT ENTERS OR IS LIKELY TO ENTER SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATER, ROADWAY, OR OTHER PROPERTIES DOES NOT OCCUR. (SCHEDULE A.3.A.) AND (SCHEDULE B.3.B.)

3. THE IMPLEMENTATION OF THE ESCP AND CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THE EROSION AND SEDIMENT CONTROL MEASURES IS THE RESPONSIBILITY OF THE PERMIT REGISTRANT UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED BY THE LOCAL DEVELOPMENT AGENCY AND VEGETATION/LANDSCAPING IS ESTABLISHED. THE PERMIT REGISTRANT SHALL BE RESPONSIBLE FOR MAINTENANCE AFTER THE LOTS ARE APPROVED, UNTIL THE LOTS ARE SOLD AND THE 1200-C PERMIT IS TERMINATED. (SCHEDULE A.4.A.) AND (SCHEDULE D.3.)

4. THE PERMIT REGISTRANT MUST BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES, IN ACCORDANCE WITH LOCAL, STATE, OR FEDERAL REGULATIONS. (SCHEDULE A.5.A.) AND (SCHEDULE A. 6.A.)

5. EROSION AND SEDIMENT CONTROL MEASURES INCLUDING PERIMETER SEDIMENT CONTROL MUST BE IN PLACE BEFORE VEGETATION IS DISTURBED AND MUST REMAIN IN PLACE AND BE MAINTAINED, REPAIRED, AND PROMPTLY IMPLEMENTED FOLLOWING PROCEDURES ESTABLISHED FOR THE DURATION OF CONSTRUCTION, INCLUDING PROTECTION FOR ACTIVE STORM DRAIN INLETS AND CATCH BASINS AND APPROPRIATE NON-STORM WATER POLLUTION CONTROLS. (SCHEDULE A.5.B.II.(2)), (SCHEDULE A.5.B.II.(7)), (SCHEDULE A.7.D.I.(2)) & (SCHEDULE A.7.F.)

6. BEGIN LAND CLEARING, EXCAVATION, TRENCHING, CUTTING OR GRADING AND EARTHWORK-SURFACE ROUGHING AFTER INSTALLING APPLICABLE SEDIMENT, EROSION PREVENTION AND RUNOFF CONTROL MEASURES NOT IN THE DIRECT PATH OF WORK. (SCHEDULE A.5.B.II.(5)(A)), (SCHEDULE A.7.C.I.(1)) AND (SCHEDULE A.7.C.II.(1))

7. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES AND FOR ALL ROADWAYS INCLUDING GRAVEL ROADWAYS. (SCHEDULE A.5.B.II.(5).(B), (SCHEDULE A.5.B.II.(5)(C) & SCHEDULE A.5.B.II.(6).)

8. WET WEATHER BMPS: CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND ON SLOPES GREATER THAN FIVE (5) PERCENT FROM OCTOBER 1 THROUGH MAY 31 EACH YEAR. (SCHEDULE A.7.A.I.)

9. WET WEATHER BMPS: TEMPORARY STABILIZATION OF THE SITE MUST BE INSTALLED AT THE END OF THE SHIFT BEFORE A HOLIDAY OR WEEKEND OR AT THE END OF EACH WORKDAY IF RAINFALL IS FORECAST IN THE NEXT 24 HOURS AND EACH WEEKEND AND HOLIDAY. (SCHEDULE A.7.A.II.)

10. IDENTIFY, MARK, AND PROTECT (BY FENCING OFF OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. PRESERVE EXISTING VEGETATION AND RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. (SCHEDULE A.5.B.I.(1) & (2)) AND (SCHEDULE A.7.C.III.(1))

11. PROVIDE PERMANENT EROSION PREVENTION MEASURES ON ALL EXPOSED AREAS TO PREVENT FROM BECOMING A SOURCE OF EROSION AND REMOVE ALL TEMPORARY CONTROL MEASURES, UNLESS LOCAL ORDINANCES REQUIRE OTHERWISE, AS AREAS ARE STABILIZED. (SCHEDULE A.5.B.II.(8)) AND (SCHEDULE A.7.C.II.(2))

12. ALL TEMPORARY SEDIMENT CONTROLS MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SCHEDULE A.7.C.III.(3)) & (SCHEDULE A.7.C.III.(4))

13. SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ALONG THE SITE PERIMETER ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE AND AT ALL ACTIVE AND OPERATIONAL INTERNAL STORM DRAIN INLETS AT ALL TIMES DURING CONSTRUCTION. (SCHEDULE A.7.D.I.(1) - (2))

14. PRIOR TO ANY LAND DISTURBING ACTIVITIES EACH SITE MUST HAVE GRAVELED, PAVED, OR CONSTRUCTED ENTRANCES, EXITS AND PARKING AREAS WITH EXIT TIRE WASH TO REDUCE THE TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS. (SCHEDULE A.7.D.III.(1))

15. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER WATERTIGHT TRUCKS MUST BE USED OR LOADS MUST BE DRAINED ON-SITE UNTIL DRIPPING HAS BEEN REDUCED TO MINIMIZE SPILLAGE ON ROADS. (SCHEDULE A.7.D.III(3))

16. TEMPORARY STABILIZATION OR COVERING OF SOIL STOCKPILES AND PROTECTION OF STOCKPILE LOCATED AWAY FROM CONSTRUCTION ACTIVITY MUST OCCUR AT THE END OF EACH WORKDAY OR OTHER BMPS, SUCH AS DIVERSION OF UNCONTAMINATED FLOWS AND INSTALLATION OF SEDIMENT FENCES AROUND STOCKPILES, MUST BE IMPLEMENTED TO PREVENT TURBID DISCHARGES TO SURFACE WATERS. (SCHEDULE A.7.E.I.(1)) & (SCHEDULE A.7.E.II.(1) - (3))

17. BMPS THAT WILL BE USED TO PREVENT OR MINIMIZE STORM WATER FROM BEING EXPOSED TO POLLUTANTS FROM SPILLS, NO DISCHARGE OF CONCRETE TRUCK WASH WATER, VEHICLE AND EQUIPMENT CLEANING, VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE, OTHER CLEANING AND MAINTENANCE ACTIVITIES, AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, LEFTOVER PAINTS, SOLVENTS, AND GLUES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.E.I.(2))

18. ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL. (SCHEDULE A.7.E.III.(2))

19. SOLID WASTE AND HAZARDOUS MATERIALS MANAGEMENT. FOLLOW PROJECT WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES; REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY; AND MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, MATERIAL USE, COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SCHEDULE A.7.E.III(3))

20. THE PERMITTEE MUST PROPERLY MANAGE HAZARDOUS WASTES, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING CONSTRUCTION AND MEET ALL STATE AND FEDERAL REGULATIONS AND APPROVALS. (SCHEDULE A.7.E.III.(4))

21. THE ESCP MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES MUST BE UPGRADED AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS. CHANGES TO THE ESCP MUST ALSO BE SUBMITTED IN THE FORM OF AN ACTION PLAN TO DEQ OR ITS AGENT FOR APPROVAL. (SCHEDULE A.7.F.)

22. SIGNIFICANT AMOUNTS OF SEDIMENT, WHICH LEAVES THE SITE, MUST BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE AND STABILIZED OR PROPERLY DISPOSED. THE CAUSE OF THE SEDIMENT RELEASE MUST BE FOUND AND PREVENTED FROM CAUSING A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIME FRAME. (SCHEDULE A.7.F.I.(1))

23. VACUUMING OR DRY SWEEPING MUST BE USED TO CLEAN-UP RELEASED SEDIMENT AND MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES. (SCHEDULE A.7.F.I.(2))

24. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. TIME-RELEASE FERTILIZERS SHOULD BE USED WITH CARE WITHIN ANY WATERWAY RIPARIAN ZONE. (SCHEDULE A.7.F.I.(3))

25. SEDIMENT MUST BE REMOVED FROM BEHIND A SEDIMENT FENCE WHEN IT HAS REACHED A HEIGHT OF 1/3 THE HEIGHT OF THE FENCE ABOVEGROUND AND BEFORE FENCE REMOVAL. (SCHEDULE A.7.F.II.(1))

26. SEDIMENT MUST BE REMOVED FROM BEHIND BIO BAGS AND OTHER BARRIERS IT HAS REACHED A HEIGHT OF TWO (2) INCHES AND BEFORE BMP REMOVAL. (SCHEDULE A.7.F.II.(2))

27. REMOVAL OF TRAPPED SEDIMENT IN A SEDIMENT BASIN OR SEDIMENT TRAP OR CATCH BASINS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50)% AND AT COMPLETION OF PROJECT. (SCHEDULE A.7.F.II.(3) & (4))

28. DEQ MUST APPROVE OF ANY TREATMENT SYSTEM AND OPERATIONAL PLAN THAT MAY BE NECESSARY TO TREAT CONTAMINATED CONSTRUCTION DEWATERING OR SEDIMENT AND TURBIDITY IN STORM WATER RUNOFF. (SCHEDULE A.7.F.III.)

29. SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR THIRTY DAYS OR MORE, THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD. (SCHEDULE A.8.A.)

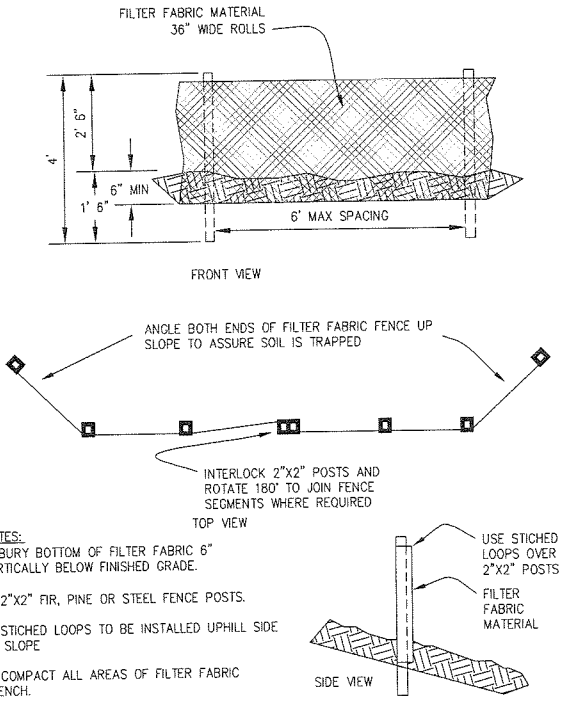
30. SHOULD CONSTRUCTION ACTIVITIES CEASE FOR FIFTEEN (15) DAYS OR MORE ON ANY SIGNIFICANT PORTION OF A CONSTRUCTION SITE TEMPORARY STABILIZATION IS REQUIRED FOR THAT PORTION OF THE SITE WITH STRAW, COMPOST, OR OTHER TACKIFIED COVERING THAT PREVENT SOIL OR WIND EROSION UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.8.B.)

31. DAILY INSPECTIONS WHEN RAINFALL AND RUNOFF OCCURS OF THE BMPS AND DISCHARGE OUTFALLS MUST BE THE PROJECT ESCP INSPECTOR. THESE INSPECTIONS AND OBSERVATIONS MUST BE RECORDED IN A LOG THAT IS AVAILABLE ON SITE. (SCHEDULE A.6.B.I.) & (SCHEDULE B.1.B(1))

32. BMPS MUST BE INSPECTED BEFORE, DURING, AND AFTER SIGNIFICANT STORM EVENTS. (SCHEDULE A.7.F.)

33. ALL ESCP CONTROLS AND PRACTICES MUST BE INSPECTED VISUALLY ONCE TO ENSURE THAT BMPS ARE IN WORKING ORDER PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY AND MUST BE INSPECTED VISUALLY ONCE EVERY TWO (2) WEEKS DURING INACTIVE PERIODS GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS. (SCHEDULE B.1.B.(2)-(3))

34. IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION DURING PERIODS WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER. (SCHEDULE B.1.B.(4))



NOTES:
1. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
2. 2"X2" FIR, PINE OR STEEL FENCE POSTS.
3. STICHED LOOPS TO BE INSTALLED UPHILL SIDE OF SLOPE
4. COMPACT ALL AREAS OF FILTER FABRIC TRENCH.

1 / EC3 **SEDIMENT FENCE INSTALLATION**
NOT TO SCALE

MATCH LINE

Figure 15d Erosion control.

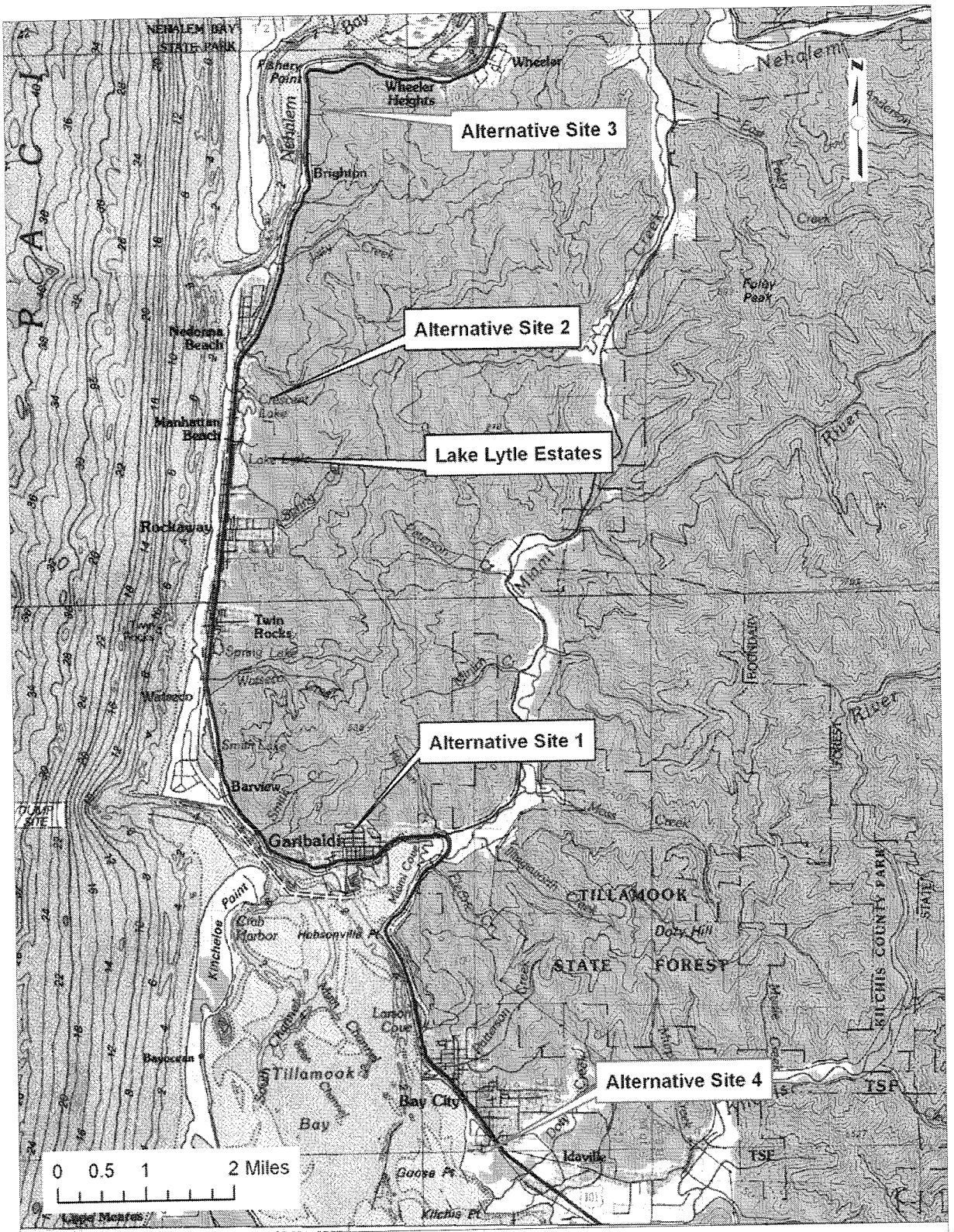


Figure A1 Alternative site locations.

Lake Lytle Estates
Removal Fill Application
prepared by
Rorick Environmental Services

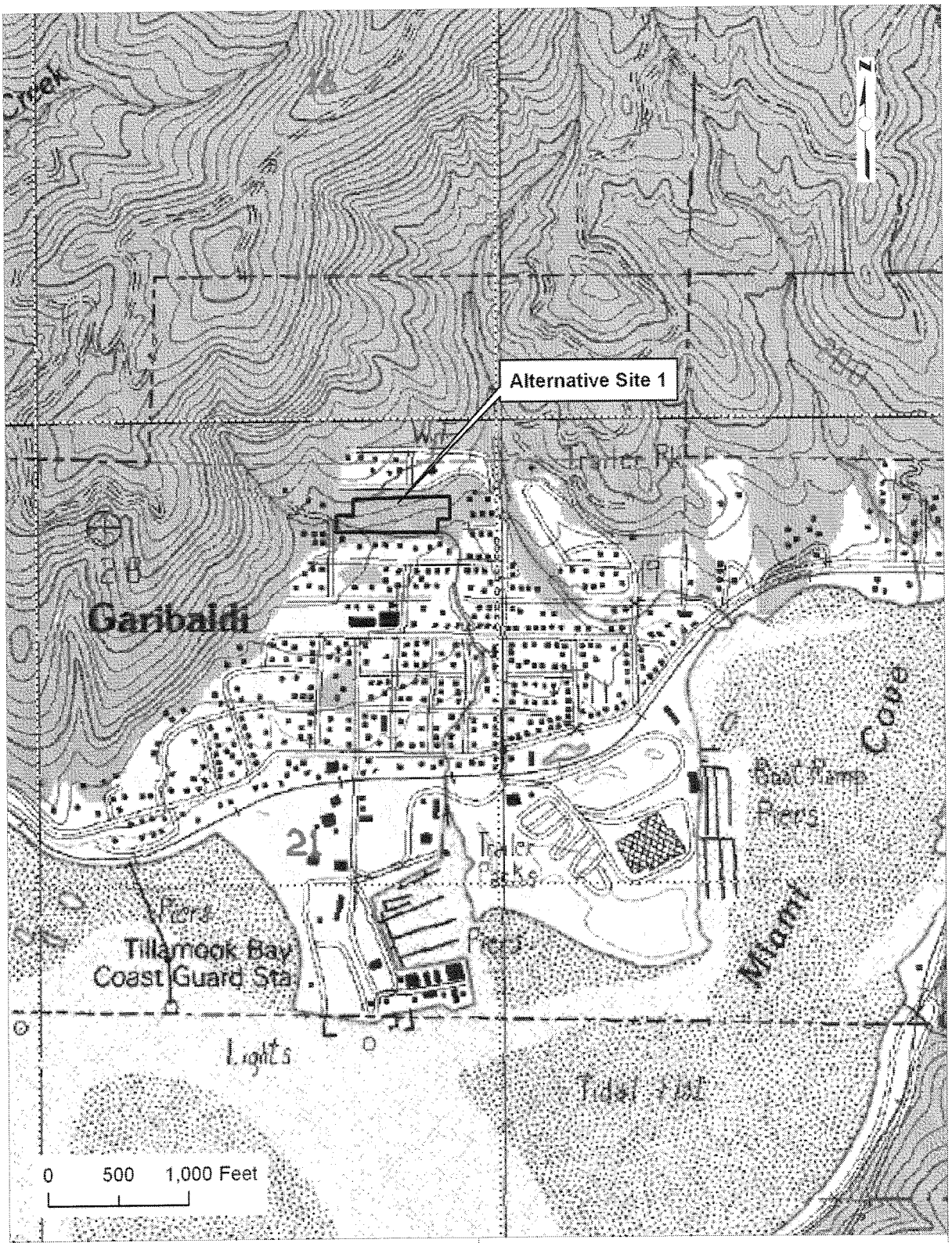


Figure A2 Alternative site 1.

Lake Lytle Estates
Removal Fill Application
prepared by
Rorick Environmental Services

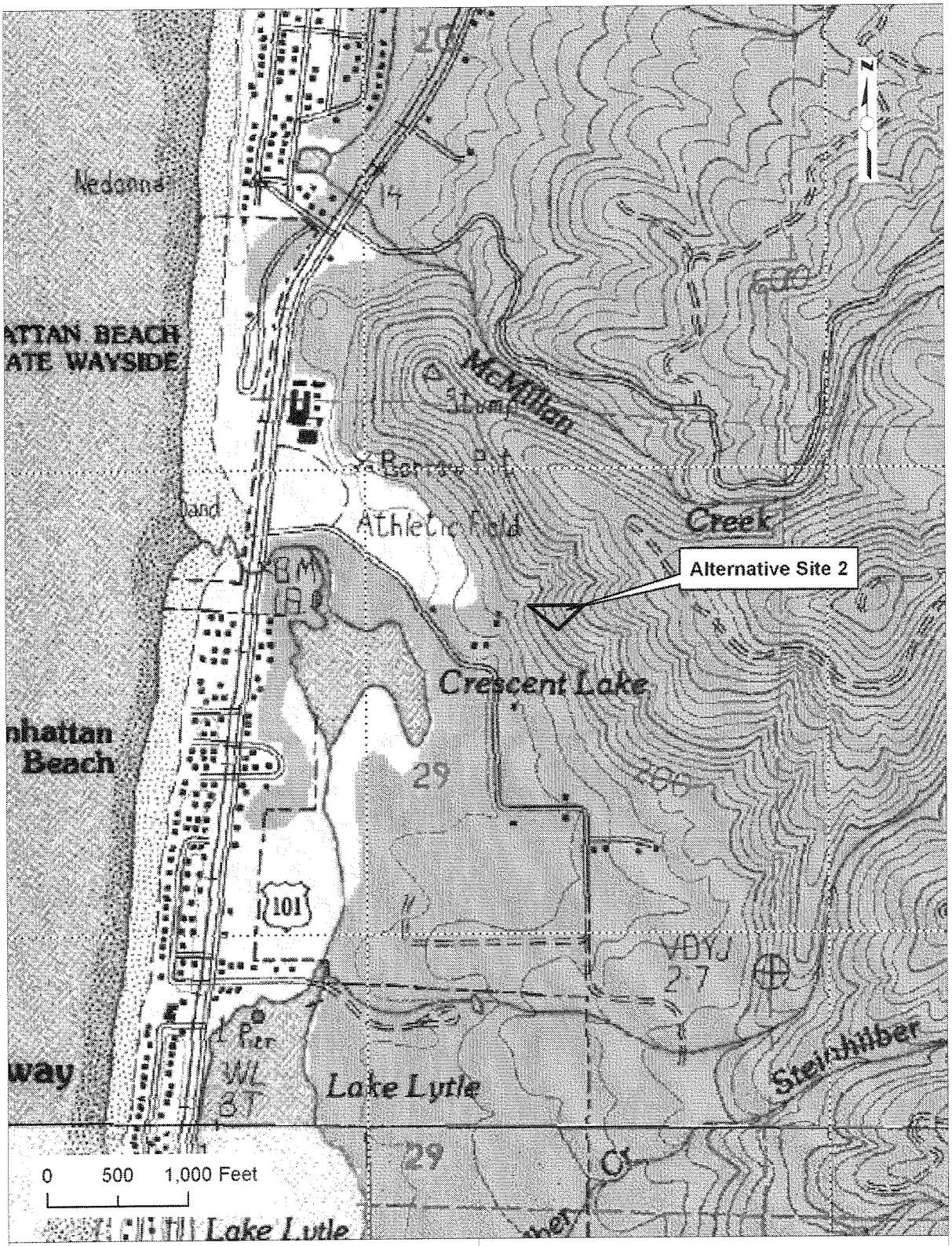


Figure A3 Alternative site 2.

Lake Lytle Estates
Removal Fill Application
prepared by
Rorick Environmental Services

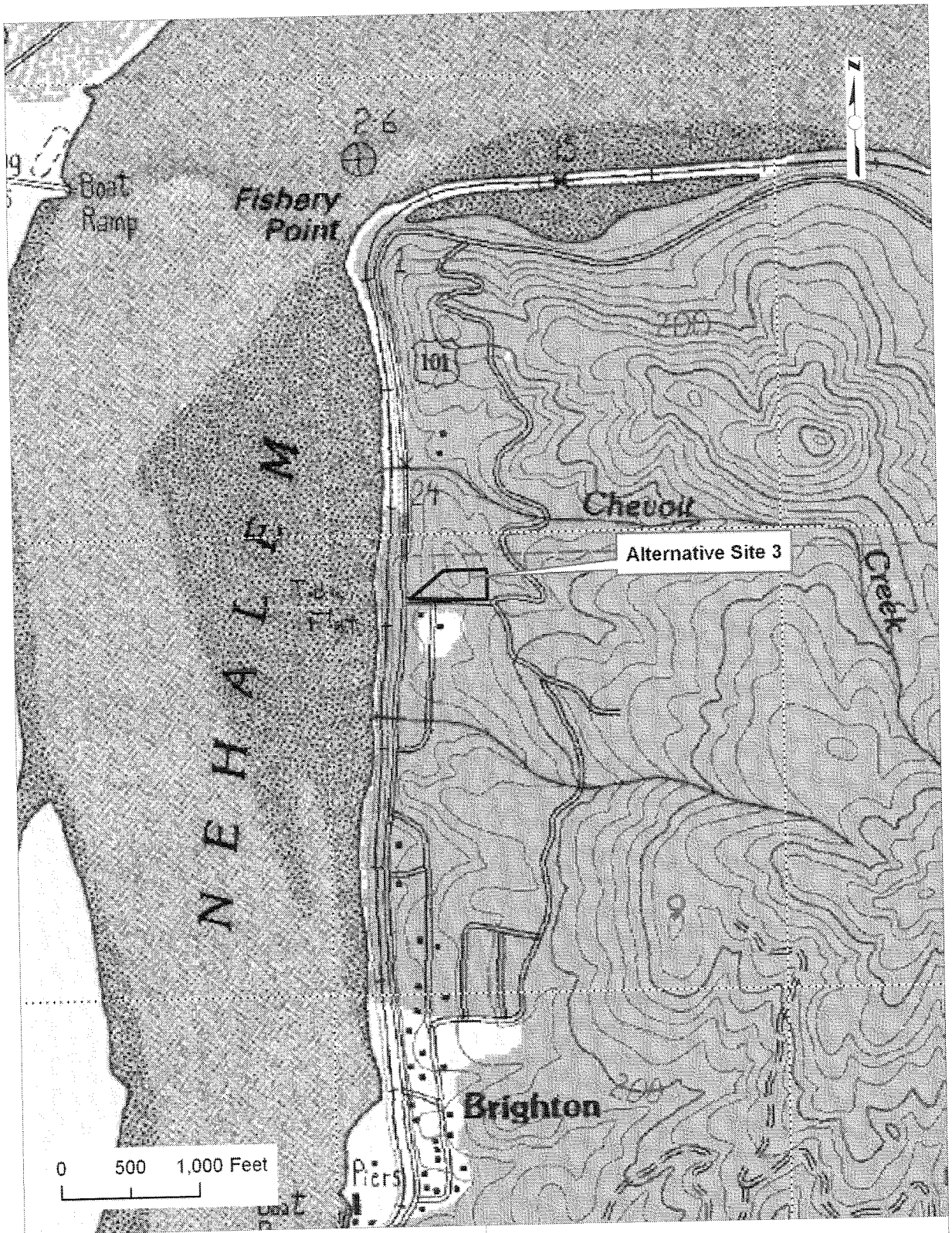


Figure A4 Alternative site 3.

Lake Lytle Estates
Removal Fill Application
prepared by
Rorick Environmental Services

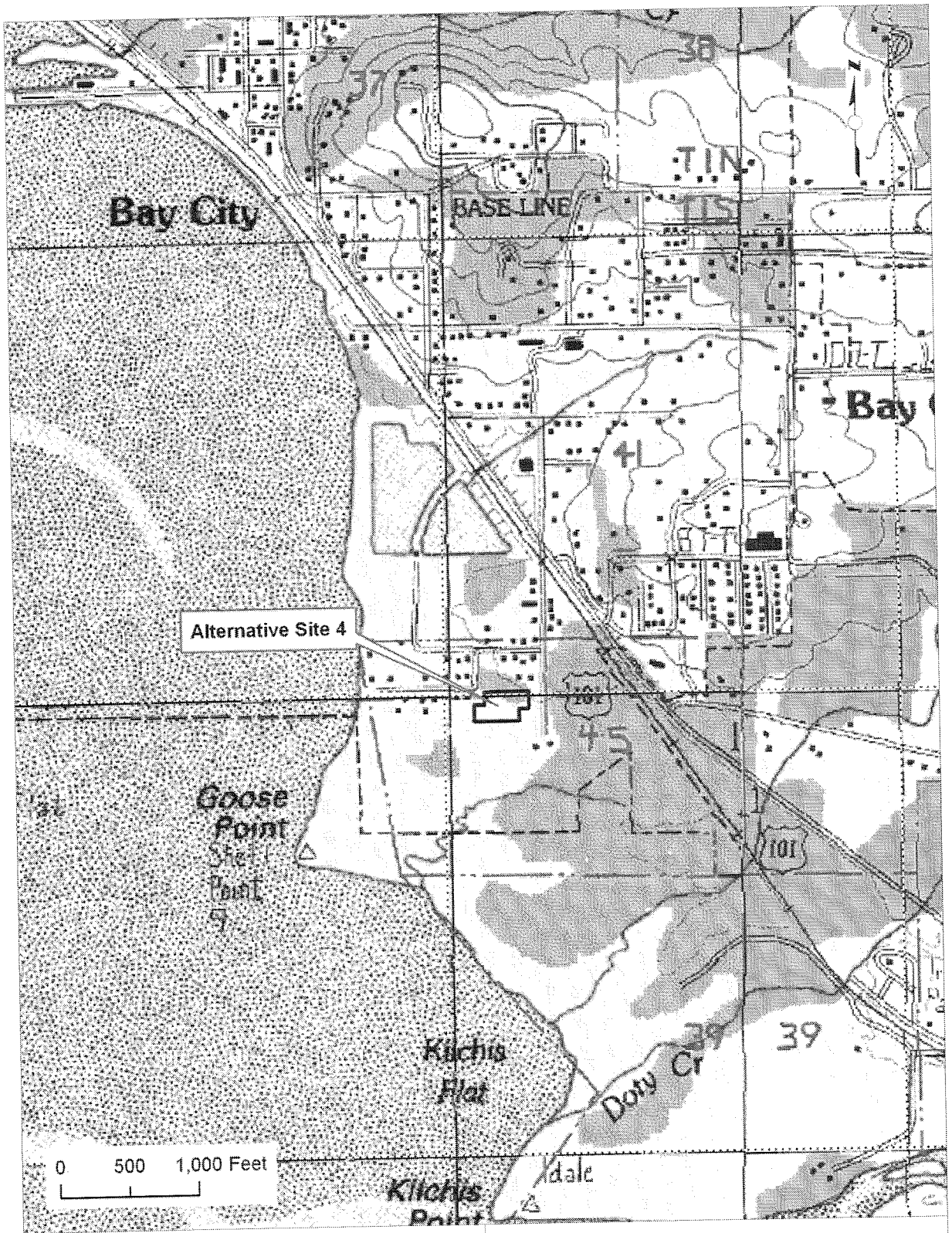


Figure A5 Alternative site 4.

Lake Lytle Estates
Removal Fill Application
prepared by
Rorick Environmental Services

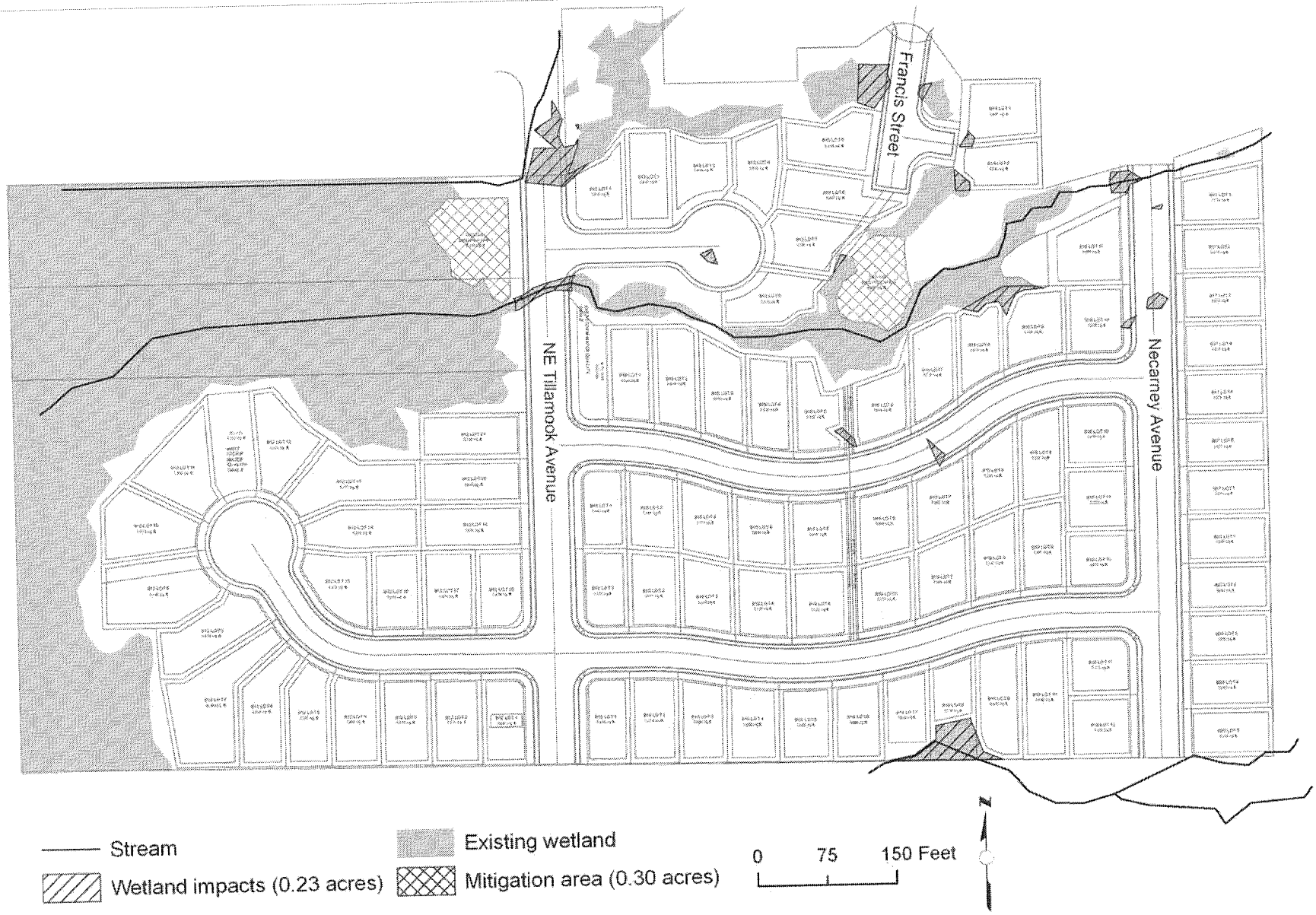


Figure A6 Alternative lot layout 1.

Lake Lytle Estates
Removal Fill Application
Rorick Environmental Services

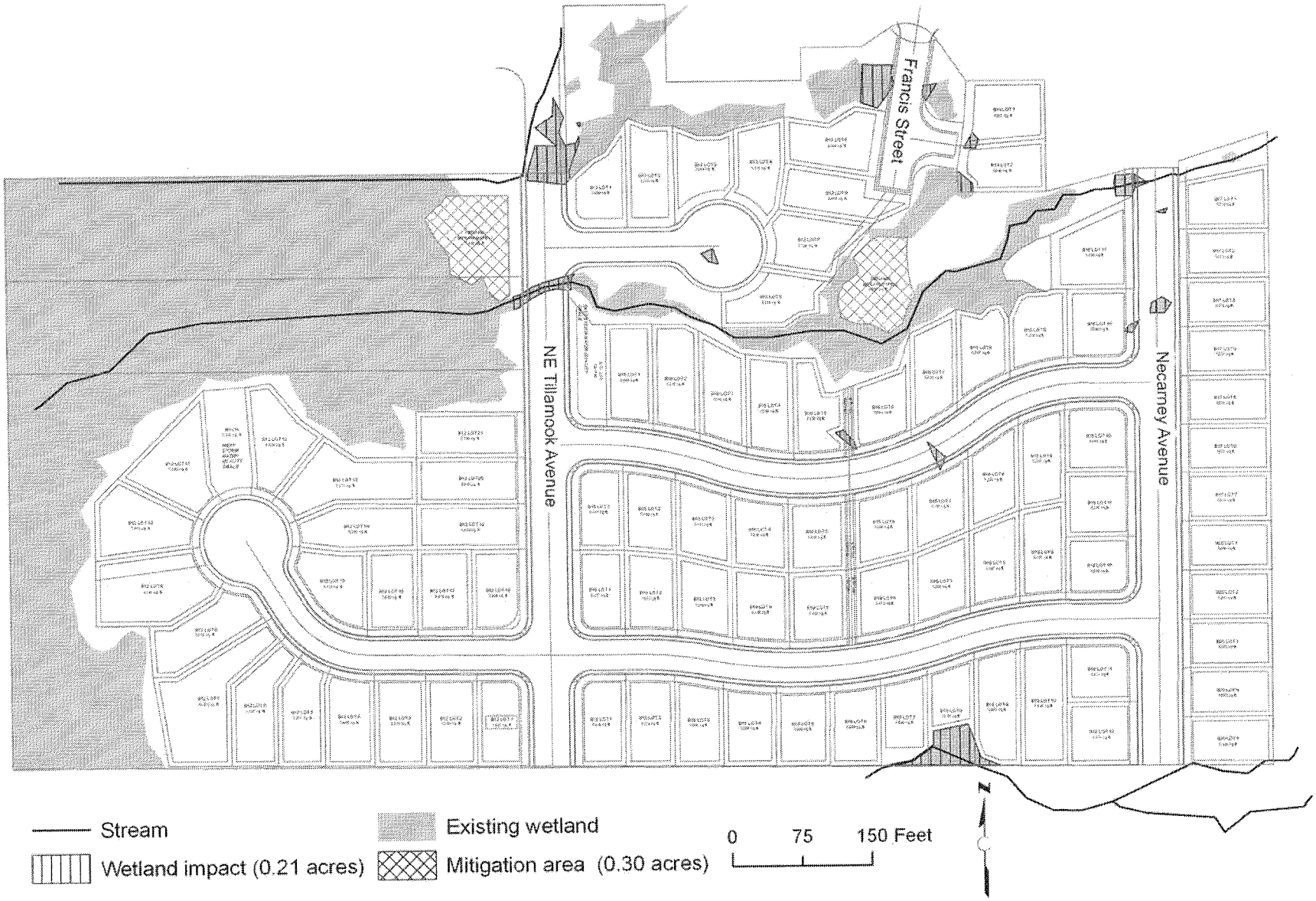


Figure A7 Alternative lot layout 2.

Lake Lytle Estates
Removal Fill Application
Rorick Environmental Services

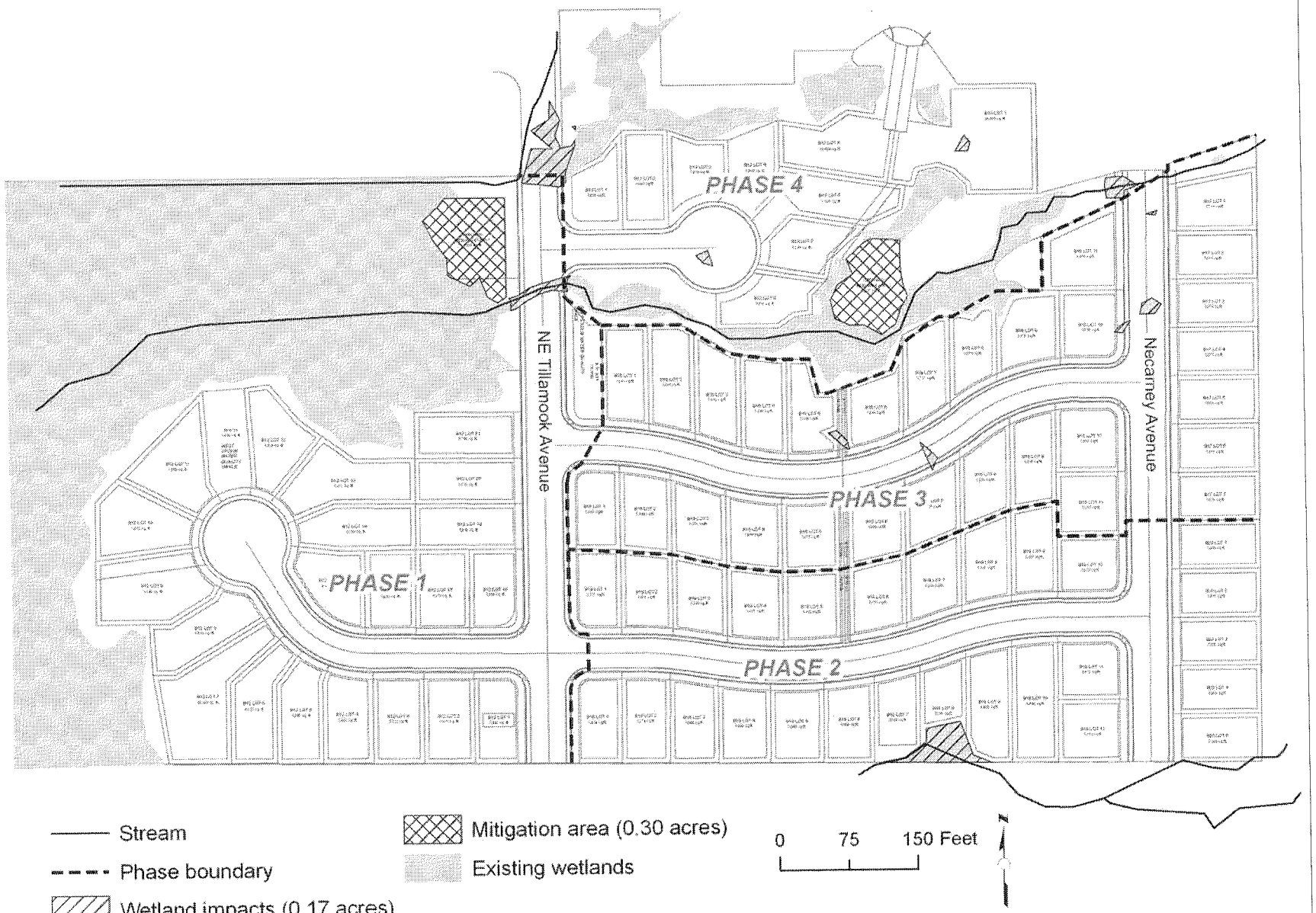


Figure A8 Alternative lot layout 3.

Lake Lytle Estates
Removal Fill Application
Rorick Environmental Services

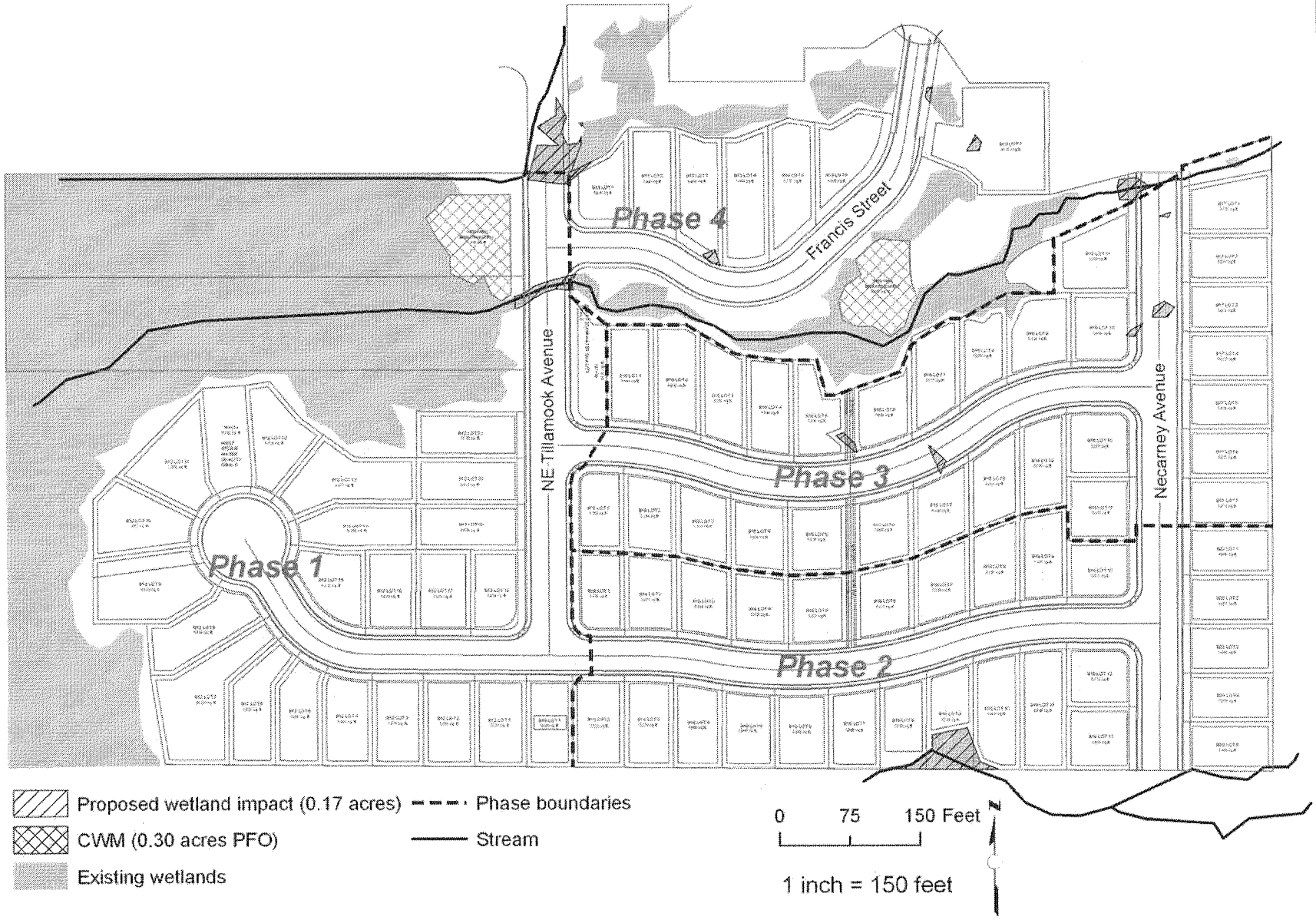
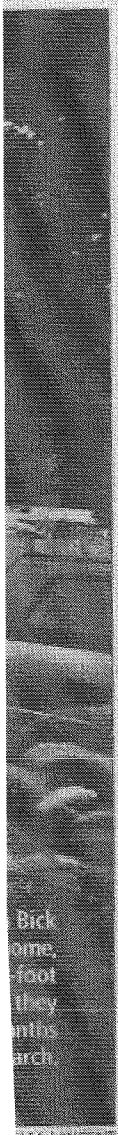


Figure A9 Alternative lot layout 4.

Lake Lytle Estates
Removal Fill Application
Rorick Environmental Services

ENT



V M. VINCENT

Bick
ome,
foot
they
ntos
arch.

er

k said.
house

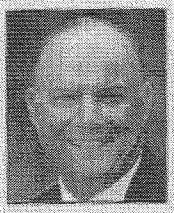
intage
, was
said.
we'd

k-
, it was
from
ght

hour
ng on
Bicks.

turn to
ge H7

Real Life



By TOM KELLY

Over-55 buyers passing on McMansions

The move-down market is really moving across — and it's keeping its money closer to home.

Homebuyers age 55 and over are seeking homes approximately the same size as their present home and, unlike six years ago, they no longer prefer to pay cash. In 2002, 60 percent of builders reported that buyers paid cash, while only 23 percent of builders in 2008 described their customers as cash buyers.

Fixed-rate loans dominate a new 55-plus buying market study with adjustable-rate mortgages running neck-and-neck in popularity with reverse mortgages.

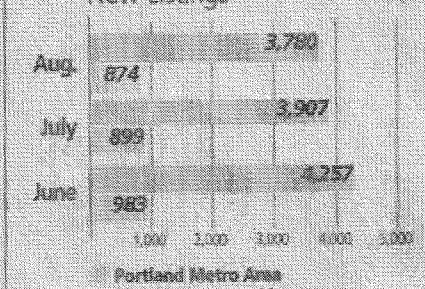
The down payment information was part of a new national study conducted by the National Association of Home Builders and MetLife Mature Market Institute, a research subsidiary of MetLife Inc., the huge insurance provider.

Nearly half of builders (46 percent)

Please turn to Kelly, Page H2

Quarterly Report

New listings



Portland Metro Area
Clark County, Washington

Sources: Regional Multiple Listing Service

Chart represents the number of new residential listings as reported to RMLS™, the Portland metro area multiple listing service, for the period ending Aug. 31, 2008.

Kelly: Glamour spending down

■ Continued from Page H1

reported that 55-plus homebuyers are buying homes in their communities that are about the same value as their previous home; 31 percent reported buyers are buying homes that are less than the value of their previous home; and 23 percent of builders reported that 55-plus crowd is buying homes that are more than the value of their previous home.

"The McMansion Revolution is over," said Steven Bomberger, a member of NAHB's 55-Plus Housing Council. "There's not as much spending on glamour glitz."

In each of the past six NAHB 55-plus surveys, the size of the home requested by buyers continued to be about the size of their previous home. This year's data showed the most popular size at 1,900 square feet — and 79 percent wanted that space on one floor, up from 17 percent in 1970.

"The demand for a single-story home increases as the age of the respondent increases," said David Crowe, NAHB's chief economist.

The median price respondents expect to pay for their next home is $189,426, which is less than the median price of $198,119 paid by those respondents who bought a home within the last three years. This compares to their current home, which has an average market value of $267,401.

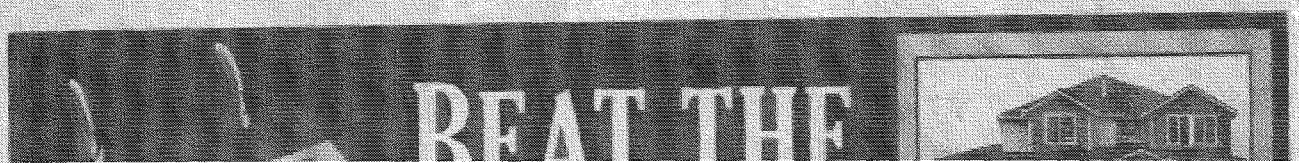
Previous studies have clearly shown that a majority of older homeowners choose to age in place and the most recent NAHB data echo those desires. Nearly two-thirds of the respondents (63 percent) plan to age in their current home, while 12 percent plan to buy another home. The remaining 26 percent are not sure.

John Migliaccio , director of research for MetLife Mature Market Institute, said the biggest disconnect regarding what builders are providing and what buyers are willing to pay for has to do with green building and universal design. Builders seem to be doing a very good job of including more amenities such as lever-handle/door knobs, wider doors and hallways, separate shower and bath, but consumer preferences do not reflect an equal appreciation.

"It continues to be an education process," Migliaccio said. "Buyers simply don't know what they don't have."

For example, only 12 percent of respondents said they would pay more for an environmentally friendly home. They are willing to pay an average amount of $6,732 (median $4,000) if it would save $1,000 annually in utility costs. While another 23 percent said they are concerned about the environment, it does not drive their decision to purchase.

Columnist Tom Kelly can be reached at tomkelly.com.



Welcome to Romantic Oregon Coast Vacations

wish you were here! :)

Home
What's New
About Me
Search This Site
News and Events
Specials & Deals
The Major Cities
Best Beaches
Things To Do
Arts And Crafts
Places To Stay
Finding Real Estate
Weddings
Honeymoon Spots
Camping The Coast
Fishing The Coast
Best Places To Eat
Birding The Coast
Fresh Seafood
Biking The Coast
Oregon Lighthouses
Coast Ghosts
Discount Travel
Getting There
Coastal Weather
What To Bring
Winter Fun
Oregon Coast Maps
Guide Books
Oregon Coast Books
Oregon Coast Gems
Advertise With Us
My Newsletter
Contact Me
YOUR Stories
Privacy

Oregon Coast Properties

Vacations are great, but temporary. Ever consider your own Oregon Coast properties?

Finding Oregon Coast property for sale on a piece of your own land along the sandy beaches would be divine. Not only that, but it's a great investment. The demand for Oregon Coast vacation homes for sale, land for sale, condos, and other real estate is great. The costs are nothing to sneeze at, but I guess it all depends on what kind of price tag you would put on your own little piece of nirvana.

There are two primary types of Oregon Coast property you'll be considering: vacation property or residential property. The demand is greater on the North coast than any other portion for both kinds. Beachfront homes can easily range from $850,000 to $1,000,000.

All Oregon Coast real estate is moving extremely well, it's just that the homes in the Northern section seem to be going quicker and appreciating better. Of course, you are always going to be paying more for something right on the beach as opposed to something further inland. You should be able to pick up an average home in town for around $180,000. Something fancy on the beach, though, could possibly run you four or five time that much.

Oceanfront property offers a great return with prices rising faster than inflation and showing no signs of falling. It all comes down to demand for something along the Oregon Coast to call your very own. Only about half of the coast land is privately owned, with the rest of what is buildable already being developed. Oregon Coast homes for sale are getting hard to come by. Nonetheless, older homes are being renovated and people are placing their own houses on smaller slivers of land, just to get a piece of the pie. The fact is, the Oregon Coast is a fantastic place to live and people are clamoring to get there on a permanent basis.

Although the narcotic effect of wanting coastal properties is always present (and as close to the beach as possible), there are some serious considerations that you need to make before you take the plunge.

A couple things to ask yourself if you are looking at vacation property: Is there is enough recreational actives in the area to help it retain it's value? Experts say that's an important thing to look for. Also, make sure you count the cost and look at the realities of maintaining your vacation home. Will you be doing it yourself or will you look at a second party to do it?

When it comes to any beachfront home that you plan to live in full-time, know that the ocean can be brutal at times, dealing out a good deal of erosion. The last thing you would want is to see your beautiful new home sink into the waters. You may consider hiring an

engineer to look into it for you. The land is an important thing to think about as you decide your home's placement. A firm foundation is essential in the planning stages. Always build a few extra yards from the ocean than what you were thinking. Better safe than sorry. ;)

Your oceanfront home will be built on one of three general categories of land:

- **Basalt**
- **Sedimentary soils**, such as sandstone and near-stone formations
- **Sand**

Basalt is the best you can get for your property. It does erode, but the rate at which it happens is hardly even a consideration. The worst you'll have to worry about if building on Basalt is how the salt will effect your windows and exposed metal, as well as winter storms.

The sedimentary soils are sturdier than sand, but, as is with all land sitting near the ocean, erosion is always going to be a fact. It's just how fast it's going to happen.

Sand is the other end of the Basalt spectrum. Although it can be an excellent source of stability, the amount of erosion is once again a factor. Building further inland will always be safer, regardless of the type of land you decide to build on.

Riprap is something that many people want to use to keep the erosion at bay and harden the shore. Riprap is a permanent cover of rock used to stabilize the land and reduce water erosion. Although it gives piece-of-mind to the homeowner, riprap can cause it's own issues. If you expect that you will eventually have a need to install riprap to preserve your oceanfront home, you will need to contact the Oregon State Parks for a approval and a permit. If the property you plan to purchase was totally underdeveloped before January 1st of 1997, don't bother trying to get a permit from them. Oregon legislation forbids them from issuing one. You may want to consider having a geologist look at any land before you decide on it. That will help you avoid any problems in the future.

An example of riprap

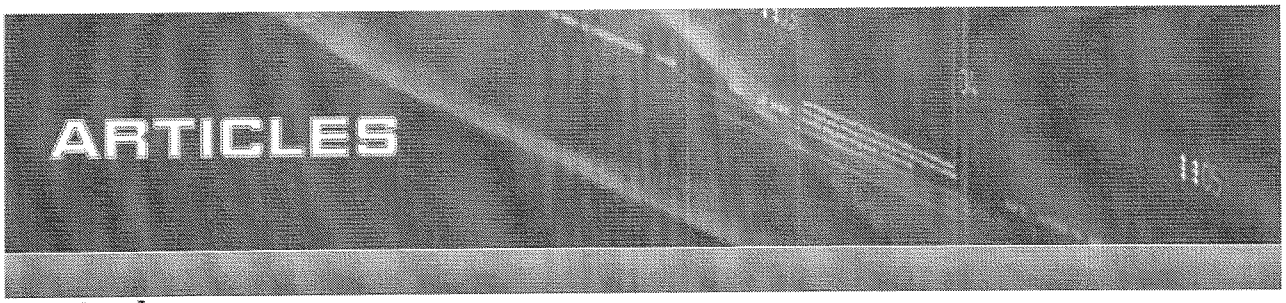
The Oregon Coast boasts a number of good builder associations to help you wade through the contractors and subcontractors available to help you break ground on your new piece of land. One good website to check for builder associations in Oregon is at www.contractorfind.com/assoc/or.htm. You can also check with the chamber of commerce for your area or contact the Oregon Building Industry Association at (503) 378-9066 or on the Internet at www.obia.net.

Any contractor you end up hiring, check to make sure that they have a valid and current registration number with the State of Oregon. This permit will offer you some (but not comprehensive) financial protection, just in case something should go wrong. There is a 24-hour contractor inquiry line you can call. The number is (503) 378-4610.

It may sound like a lot to do, but buying a home anywhere is a major deal. Don't let a few necessary hurtles and expenses discourage you from making your dream of having some Oregon Coast property a reality. Once you get all the formalities out of the way and your dream home built, waking to the sounds and sights of the Oregon Coast every morning will pay you back over and over again.


An Oregon Coast home can be yours!

<< From Oregon Coast Properties back to Real Estate
<< From Oregon Coast Property back home to Romantic Oregon Coast Vacations



Oregon coast real estate

The Oregon Coast a region of the state of Oregon in United States. The *Oregon Coast* forms the western border of the state, and stretches approximately 583 km from the Columbia river in the north of Oregon.. The Oregon Coast includes the entire coast line of Oregon.

Everyone dreams for a home. The latest dream is to own a dream home with materials that is environment friendly, furnishing home with energy saving appliances, avoiding wastage and using natural resources to the maximum possible. *Oregon Coast* homes fulfill these dreams as natural way out. The rivers and valleys and greens spread all round help people achieve their desires better.

Oregon Coast Real Estate is becoming quite popular for many who live both inside and outside of the state. Real Estate along several sections of these coastlines is more and more difficult to have.

The *Oregon Coast* has beautiful vacation areas. These make it a perfect home for settlers. Several properties have views of rivers, lakes, sand dunes and trails. In the close proximity there are amazing state parks. The coastal terrain is a beautiful combination of sandy beaches and towering rock cliffs.

Property prices have recently seen strong growth, and with the limited supply, this is of no surprise. One can search for residential properties, Condos, multi-family or plots of land. The entire coastal belt is divided into Northern, Central, and southern Oregon coastal real estate. Through several websites on real estates one can search these areas for details of properties.

In Oregon one can find many rental properties such as: Beach house rentals, Apartments for rent, Oregon Coast Vacation rental homes, Cabins for rent, Cottages for rent, Condos and real estate for rent, Rental rooms, Single-family homes, duplexes and multiplexes, Houses/homes for rent. Rental homes and houses for rent are also growing slowly for many other industries such as Moving Companies, Home Insurance Companies and Furniture and Furnishing industries.

Real estate and homes are still priced reasonably here in a city. The city is very friendly and became very popular for its pleasant climate, culture and livability. Eugene offers real estate costs that are lower than many other areas. The mortgage rate ruling at Eugene is 5.25% for 10 year fixed, 4.92% for 15 year fixed, 5.26% for 5 year adjustable and 4.92% for I year adjustable. The average price of a house at East Eugene with 5 bedrooms and 7 baths is sold around 200,000. In southwest Eugene the average price of a house with 4 bedrooms and 5 bathrooms cost around $300,000. A lower priced house at around $180,000 can also be available in south west of Eugene with 4 beds and 4 baths. At Fairy Bridge Street still lower priced house at around $120,000 with 4 beds and baths can also be available.

On national scale inventory levels of unsold housing plummeted by twelve percent, and have fallen below six months in several large metropolitan markets. Sales in the western states increased nearly fourteen percent last month and were thirty-two percent higher than the year before. In the south, sales were up by seven percent, and in the mid-west by four percent. Only the northeast states saw a decline in December a little over one percent. Nationwide, foreclosures and short sales accounted for about forty-five percent of December's transactions, but

in some parts of California and Florida the percentage was much higher. In comparison Oregon is still charming and worth buying properties. Demand is high and supply falling.

Real Estate is one of the most valuable investments any one makes in his entire life. The real estate may be good home, or a duplex. Professional can help in finding a suitable house in suitable locality with necessary amenities, good neighbor, good infrastructure and other facilities. A good tenant if the house is for rent can be found by truly professional brokers. The first time home buyer should be conversant about the city to locate sellers of properties in the real estate market. The buyer should evaluate homes according to the budget only.

There are brokers and professional *real estate* agents to help in negotiations and make a deal for the selected house. They can be the real guide to select the house of the choice out of big listings with information on the homes vacant, neighborhood, zones utilities and nearby development plans.

Other Articles

- These rates have been rising since...
- The median price at which an average...
- A series of negotiations can be...

Attachment A
Compensatory Wetland Mitigation Plan

Lake Lytle Estates

Rockaway Beach, Oregon
Tillamook County

Prepared for:

Troy Johns
14801 NE 13th Circle
Vancouver, WA 98684

Submitted by:

Nancy Rorick
Rorick Environmental Services
37552 SE Rachael Drive
Sandy, OR 97055
503-449-4372
nancy@rorickenvironmental.com

May 2010

Table of Contents

Figures

Tables

Section 1: Compensatory Wetland Mitigation Plan Overview

Ecological goals and objectives

The goal of the Compensatory Wetland Mitigation (CWM) is to compensate for impacts to 7553 square feet (0.17 acres) of jurisdiction wetland. The Oregon Department of State Lands (DSL) grants wetland creation credits at a ratio of 1.5:1. Therefore, the project will have successfully satisfied the permitting requirements when 0.26 acres of functioning palustrine forested wetland are created.

The 0.17 acres of wetland proposed for impact is palustrine forested wetland, of which 24% belongs to the HGM depressional class and 76% to the slope/flat class (figures 5 and 6).

Table 1 Wetland impact by HGM and Cowardin Class.

HGM Class	Cowardin Class	Area (sq ft)
Depressional	PFO	1742
Slope / Flats	PFO	5811
Total		7553 sq ft 0.17 acres

The ecological objective is to create 0.30 acres of palustrine forested / slope flat wetland. The desired plant community for the mitigation site is modeled after existing forested wetland on the project site. The project's wetland mitigation consists of an east and a west wetland mitigation area. The total area of the two mitigation sites is 0.30 acres. The DSL credit ratio for wetland creation is 1.5 to 1. Under this credit ratio the wetland mitigation plan will provide 0.20 wetland mitigation credits. The permitting requirements will be satisfied if 0.17 wetland mitigation credits are obtained from the wetland creation.

The applicant owns both tax lots 5201 and 5203, the development will occur on tax lot 5201 (figures 3a, 3b and 3c). On tax lot 5201, 2.23 acres of wetland will be preserved. Tax lot 5203 borders Lake Lytle and nearly all of the approximately 16.7-acre lot is wetland. This tax lot will be made available for donation to the City or interested land conservation group.

CWM concept in general terms

The CWM consists of two wetland mitigation sites (figures 7 and 8): the east wetland mitigation site (0.13 acres) and the west mitigation site (0.16 acres). Both sites are designed so that they will have the same hydrologic regime as the adjacent wetlands.

The east wetland mitigation site is located between two jurisdictional wetlands that contain seasonal streams. The site will be excavated down to the same elevation as the adjacent wetlands. This will provide hydrology to the wetland by: (1) allowing surface-water inflow from the adjacent wetland; and (2) lowering the land surface so that it intersects the water table.

The west wetland mitigation site is located in upland adjacent to the large wetland that connects to Lake Lytle. East of the mitigation is a small ditch that flows to the south. Again, wetland creation will be achieved by excavating down to the same elevation as the adjacent wetlands, so that it will receive surface-water inflow from the adjacent ditch and intercept the local high water table.

The proposed new wetlands are modeled after the adjacent existing wetlands. They will be palustrine forested wetlands. The planting list for the wetlands is based on the plants that are growing in the adjacent wetlands. The wetland creation areas will be graded so that they have an irregular surface. This will allow for pooling to provide for amphibian habitat. In addition, woody debris will be placed on the mitigation sites to provide additional habitat support.

Summary of CWM Acreage by Method and HGM and Coward Class / Sub Class

The wetland mitigation will consist of the creation of 0.30 acres of palustrine forested seasonally flood wetland that belong to the slope/flats HGM class.

Table 2 Proposed wetland mitigation credits.

Wetland Mitigation Area	Area (sq ft)	Credit Ratio	Credit	Cowardin	HGM
West mitigation area	7,193	Creation 1.5 to 1	4,795	PFOC	Slope / flats
East mitigation area	6,037	Creation 1.5 to 1	4,025	PFOC	Slope / flats
Total	13,230 sq ft 0.30 acres		8,820 sq ft 0.20 credits		

Meets Ratios

The proposed wetland mitigation meets the DSL's wetland creation ratio of 1.5 to 1. The proposed wetland creation area is 0.30 acres which will provide 0.20 wetland mitigation credits. The amount of mitigation credit (0.20) exceeds the 0.17 acres of proposed wetland fill.

Summary of Net Gains and Losses of Functions and Values

There will be no net loss in the amount of jurisdictional wetland due to the creation of the compensatory wetland mitigation site. A loss in net function is not expected once the success criteria are met. There are few weeds on the site, so the incursion of non-native species can be addressed through minimal maintenance. The mitigation site is designed to mimic the habitat qualities of the impacted wetland by containing woody debris, micro topography and native vegetation.

Due to the conversion of 14.81 acres of upland forest to residential subdivision there will be a loss to those functions that require the support of upland habitat. These include song bird habitat, characteristic vegetation, and amphibian and turtle habitat.

Reference Site Location and Description or Reference Data

The reference wetlands for this project are the existing wetlands at the project site. These wetlands are relatively undisturbed and contain native vegetation adapted to site conditions. The species in the planting plan all grow in the existing wetlands.
The referenced site is a palustrine forested wetland dominated by red alder, Sitka spruce, salmonberry, slough sedge and skunk cabbage.

Section 2: Compensatory Wetland Mitigation Site Information

Lake Lytle Estates is a proposed 85-lot subdivision located east of Lake Lytle and south of NE Smith Street in Rockaway Beach, Oregon (figures 1 –4). Troy Johns, the property owner, is proposing to develop the site for residential use. The surrounding land use consists of residential subdivision to the north, forested areas to the west, south and east, and Lake Lytle, also to the west.

Table 3 Summary of the project area.

	Area
Rights-of-Way	3.61 acres
Phase I Lots	3.10 acres
Phase II Lots	3.26 acres
Phase III Lots	3.58 acres
Phase IV Lots	1.26 acres
Open Space Tracts	4.04 acres
Site Total	18.85 acres

Table 4 Project information.

Applicant and property owner	Troy Johns 14801 NE 13th Circle Vancouver, WA 98684 360-600-4425
Legal location	T2N, R10W, SE ¼ of Sec. 29
Tax map	Tax lot 5201 on tax map T2N R10W
Latitude / Longitude	45° 37.499,0' N, 123° 55.991,5' W
USGS Quadrangles	Garibaldi (1985) and Nehalem (1985)
Zoning	Residential / Resort

Section 3: Description of How the CWM Addresses the Principal Objectives

Replaces Lost Functions and Values

Existing functions impacted are those related to the conversion of adjacent upland from existing forest to residential subdivision: habitat for song birds, amphibians and turtles. Creation of the wetland mitigation will offset some of these impacts. Tax lot 5203 west

of the project site is owned by the applicant. Nearly all of this 16.7-acre tax lot is wetland, its preservation will also help maintain these functions. The tax lot will be made available for donation to the City or a land conservation group.

In-Kind Replacement

The wetland mitigation will be in kind. The proposed created wetlands belong to the slope/flat HGM class and are palustrine forested (figures 5 and 6).

Provides Local Replacement for Locally Important Functions and Values Lost

The CWM will be on site so replacement will be local. The CWM sites are modeled after adjacent wetlands and will have the same hydrologic regime, plant communities, and habitat features (i.e. woody debris) as the wetlands proposed for impact.

CWM is Self-Sustaining and Minimizes Maintenance Needs

The CWM does not have hydrologic structures such as a weir. Water flow into the CWM will be gravity fed from adjacent wetlands and thus self-sustaining. The mitigation site will be planted with native vegetation modeled after adjacent wetlands. To the extent possible, cuttings will be obtained onsite to insure that the plants in the CWM are adapted to site conditions. It is the consultant's experience with three CWM sites in Rockaway Beach that weeds are a minimal problem and that a CWM will be successful if the hydrology is functioning correctly.

Considerations for Locating Site Ecological Suitability

Construction of the new wetlands will involve the expansion of the existing wetlands. This allows the existing wetlands to be used as a guide in determining the excavation depth which, in turn, insures that the hydrologic regime of the existing wetlands will be duplicated in the created wetlands. The two mitigation sites will receive surface-water inflow and will be influenced by the existing high water table on the site. Having the same hydrologic regime facilitates the duplication of the native wetland plant community in the created wetland.

Minimizes Temporal Loss

Construction of the CWM will occur during the same construction season in which the wetlands are impacted.

Section 4: CWM Baseline Information

Wetland Delineation or Determination if Needed

Rorick Environmental Services (RES) submitted a wetland delineation report to the Oregon Department of State Lands on June 10, 2008. The wetland delineation (WD# 08-0188) was verified by DSL on June 10, 2008. The wetland delineation study area included all of tax lot 5201, a portion of tax lot 5203, and a 0.11-acre portion of the NE Tillamook Avenue ROW.

HGM and Cowardin class of any wetlands present at CWM site

RES delineated 4.968 acres of jurisdictional, freshwater wetland within the wetland delineation study area, of which 4.926 acres are on property owned by Troy Johns and 0.042 acres are within the ROW of NE Tillamook Avenue. The wetland delineation study area included tax lot 5201, the eastern portion of tax lot 5203, and the NE Tillamook Avenue ROW (figure 3a). The project area (tax lot 5201 and the NE Tillamook Avenue ROW) contains 2.23 acres of wetland.

Table 5 Summary of wetland delineation results (from WD# 08-0188). Note: the wetland delineation study area is larger than the project area.

Wetland	Acres	Cowardin Class	HGM Class
A	3.899 +	PFO	Slope / Flats
B	0.302	PFO	Slope / Flats
C	0.088	PFO	Depressional
D	0.023	PFO	Depressional
E	0.004	PFO	Depressional
F	0.072	PFO	Depressional
G	0.004	PFO	Depressional
H	0.491	PFO	Slope / Flats
I	0.013	PFO	Depressional
J	0.004	PFO	Depressional
K	0.001	PFO	Depressional
L	0.006	PFO	Depressional
M	0.002	PFO	Depressional
N	0.004	PFO	Depressional
O	0.004	PFO	Depressional
P	0.005	PFO	Depressional
Q	0.046	PFO	Slope / Flats
Total	**4.968 +**		

Water Source, Duration, Frequency of Inundation or Saturation, and Depth

Figure 5 shows that within the wetland delineation study area the wetlands consist of 13 depressional wetlands (0.23 acres) and four slope/flat wetlands (4.738 acres). The depressional wetlands range in size from 27 to 10,698 square feet. These wetlands are located in shallow basins that receive runoff from adjacent uplands, direct precipitation, and experience a seasonally high water table. The slope/flat wetlands are supported by ephemeral stream flow, runoff from the adjacent uplands, and a seasonally high water table. The largest slope/flat wetland (wetland A) extends offsite to the west where it connects to Lake Lytle.

The proposed water sources for the two CWM sites will be surface-water inflow from adjacent streams on the east mitigation site and an existing ditch on the west mitigation site. The two wetland mitigation sites will also be excavated so that they intercept the water table. The created wetlands are designed to have the same hydrologic regime as

the adjacent wetlands. These wetlands will be wet during the rainy season, through the fall, winter and spring, and will dry up in mid to late summer. Direct precipitation is also expected to be an important water source: the average annual rainfall in the area is about 90 inches.

Necessary Water Rights

The water master for Tillamook County told the project consultant that a water right was not necessary for construction of the wetland mitigation site.

Water features within 500' of CWM site

The water features within 500 feet of the site include (figure 2):

- Lake Lytle 360 feet west of the site;
- wetlands associated with Lake Lytle;
- Steinhilber Creek, a first order stream located 190 feet south of the SE corner of the site;
- an unnamed, first-order stream located 300 feet north of the project site; and
- wetlands similar to those on the project site wetlands are located on the property to the south.

Existing Plant Communities

All of the wetlands on the site belong to the PFOC (palustrine forested seasonally flooded) Cowardin class (figure 6). The dominant plant species growing in the wetlands are red alder, Sitka spruce, skunk cabbage, lady fern, deer fern, slough sedge, and salmonberry. There are no exotic species within the interior of the project site. However there are non-native pasture grasses and Himalayan blackberry growing along the northern edge of the property.

CWM Site Constraints

The wetland mitigation site constraints are the possible incursion of weeds. Most of the site is covered with native coastal vegetation. There are, however, non-native weeds growing along the north edge of the site adjacent to the existing development. The condition of the mitigation sites will be assessed each year during the annual monitoring. If needed, the non-native plants will be removed.

Section 5: Functions and Values Assessment

RES completed a Hydrogeomorphic (HGM) Functional Assessment of the project site using the judgmental method developed by the Oregon Department of State Lands (Adamus and Field 2001). OAR 141-085-0685 (3) requires that the Oregon Rapid Wetland Assessment Protocol (ORWAP) be used to evaluate wetlands for projects with greater than 0.20 acres of wetland impact. The proposed project would result in 0.17 acres of wetland, therefore ORWAP was not used.

Water Storage and Delay – Functional Capacity Score 0.8

Existing Condition

The site rates high for water storage and delay because it is seasonally inundated and drains slowly after rain events.

Effect of Construction of the Subdivision

Water storage and delay is not an important function of the site's wetlands due to their low position in the watershed close to the Pacific Ocean. Runoff from the site discharges to Lake Lytle which drains into Crescent Lake and from there into the Pacific Ocean.

Effect of Compensatory Wetland Mitigation

Construction of the wetland mitigation site will maintain or improve water storage and delay because the amount of wetland creation exceeds the amount of wetland impact by 0.13 acres. In addition, the created wetlands will be constructed so that they have a rough surface that encourages water retention through the formation of puddles.

Sediment Stabilization and Phosphorous Retention – Functional Capacity Score 0.9

Existing Condition

The site scored high for sediment stabilization and phosphorous retention because of the soil texture (silt loam and silty clay loam), the high amount of vegetative ground cover, and undisturbed soils.

Effect of Construction of the Subdivision

The sediment and erosion control plan is designed to prevent sediment from leaving the site during construction (see block 5 of the permit application). After construction, the storm-water facilities will pre-treat storm water for pollutants and sediment before it discharges to the wetland. Therefore, the construction of the subdivision is not expected to alter this function.

Effect of Compensatory Wetland Mitigation

The construction of the wetland mitigation site will moderately improve stabilization and phosphorous retention due to a net gain in wetland area of 0.13 acres. The wetland mitigation will be modeled after the existing wetlands so they will have features that promote this function: abundant vegetative cover, shallow pools, and finely textured soil.

Nitrogen Removal – Functional Capacity Score 0.8

Existing Condition

The site's wetlands rated relatively high for nitrogen removal due to mature soil microbial processes, lack of soil disturbance and site microtopograhy.

Effect of Construction of the Subdivision

The construction of the mitigation site is not expected to have any effect on nitrogen removal because the amount of wetland impact (0.17 acres) is small in comparison to the amount of wetlands that will be preserved: 2.06 acres within the project area and approximately 16.7 acres (tax lot 5203) of wetland adjacent to Lake Lytle.

Effect of Compensatory Wetland Mitigation

Construction of the wetland mitigation site is expected to maintain or slightly improve nitrogen removal because the amount of wetland created exceeds the amount of wetland impact by 0.13 acres.

Primary Production – Functional Capacity Score 1.0

Existing Condition

The site scored high for primary production because of the well distributed and diverse plant forms on the site, the lack of soil disturbance, and a relatively undeveloped contributing watershed.

Effect of Construction of the Subdivision

The construction of the project will diminish this score slightly due to an increase in paved area in the adjoining upland.

Effect of Compensatory Wetland Mitigation

The implementation of the mitigation plan will contribute to primary production because the created wetlands will be planted with a diverse plant community modeled after the site's existing wetlands.

Invertebrate Habitat Support – Functional Capacity Score 1.0

Existing Condition

The score for invertebrate habitat support is high due to the presence of nearby surface water during most of the year, cover in the form of aquatic plants and woody debris, the interspersion of pools within the vegetated areas, the apparent high water quality, undisturbed soils, and adjacent wetlands.

Effect of Construction of the Subdivision

Construction of the subdivision will affect habitat support for invertebrates due to impacts to 0.17 acres of wetland. This is 8 percent of the of the total wetland acreage within the project area boundary. Including the approximately 16.7 acres of wetland in tax lot 5203, the impact is only 0.9 percent of the site's wetlands.

Effect of Compensatory Wetland Mitigation

The wetland mitigation site will compensate for the wetland impacts by the creation of 0.3 acres of wetland that will be planted with a diverse community of wetland vegetation.

Amphibian and Turtle Habitat – Functional Capacity Score 0.8

Existing Condition

The score of amphibian and turtle habitat is high due to the duration of shallow surface water, the presence of woody debris, the interspersion of pools in the vegetated areas, the presence of basking sites, apparent high water quality, the undisturbed state of the soils, and the accumulation of an organic layer.

Effect of Construction of the Subdivision

The implementation of the project will increase the area of paved and covered surfaces in the upland which will reduce this score.

Effect of Compensatory Wetland Mitigation

The wetland mitigation will offset the impacts due to creation of 0.3 acres of wetland. In addition, 2.06 acres of wetland within the project area and 16.7 acres of existing wetland in tax lot 5203 will remain undeveloped.

Breeding Waterbird Support – Functional Capacity Score 0.6

Existing Condition

Site factors that are disincentives to waterbirds include the lack of many acres of nearby wetland and large pools of water. Factors that favor waterbirds are the presence native vegetation, undisturbed soils, and apparent high water quality.

Effect of Construction of the Subdivision

Implementation of the subdivision will increase human visitation to the site which would slightly lower the score.

Effect of Compensatory Wetland Mitigation

It is not expected that the wetland mitigation would improve this function as the wetland mitigation does not involve the creation of pools or other habitat features that favor breeding waterbirds.

Winter and Migratory Waterbird Support – Functional Capacity Score 0.7

Existing Condition

The factors that support winter and migratory waterbirds are water quality, lack of disturbed soils, and the presence of native vegetation. Factors that are a disincentive to water birds are the lack of extensive surface water and large areas of inundation.

Effect of Construction of the Subdivision

Construction of the subdivision will increase human visitation to the site which may discourage waterbird use.

Effect of Compensatory Wetland Mitigation

The construction of the mitigation site will not alter the site's capacity to support waterbirds. The wetland mitigation does not involve the creation of large inundated areas that favor waterbirds.

Songbird Habitat Support –Functional Capacity Score 1.0

Existing Conditions

The site rates high for songbird habitat support because it contains nearby year-round surface water, native vegetation, the under cover shrub layer is extensive, tree cover and surrounding woodland.

Effect of Construction of the Subdivision

Construction of the subdivision will slightly decrease this function as 14.81 acres of woodland will be converted to suburban land use.

Effect of Compensatory Wetland Mitigation

The construction of the wetland mitigation site will compensate for impacts to forested wetland through the creation of 0.3 acres of forested wetland.

Support of Characteristic Vegetation – Functional Capacity Score 1.0

Existing Conditions

The site's wetlands rate high for support of characteristic native vegetation due to the abundant and diverse native vegetation.

Effect of Construction of the Subdivision

Construction of the subdivision will reduce this function because 14.81 acres of woodland will be converted to residential use. However, 2.03 acres of wetland in the project area and 16.7 acres of wetland on tax lot 5203 will remain undeveloped.

Effect of Compensatory Wetland Mitigation

The compensatory wetland mitigation site will contribute to this function as the CWM sites will be planted with native species modeled after the existing wetland.

Table 6 Summary of HGM Judgmental Method Functional Capacity Scores for the existing wetlands and expected gains or losses.

Function	Functional Capacity Score	Gains or Losses
Water Storage and Delay	0.8	Maintained
Sediment Stabilization and Phosphorous Retention	0.9	Maintained
Nitrogen Removal	0.8	Maintained
Primary Production	1.0	Maintained

Function	Functional Capacity Score	Gains or Losses
Invertebrate Habitat Support	1.0	Maintained
Amphibian and Turtle Habitat	0.8	Impacted by increase in amount of paved surfaces
Breeding Waterbird Support	0.8	Maintained, not a primary function of existing site
Winter and Migratory Waterbird Support	0.7	Maintained, not a primary function of existing site
Songbird Habitat Support	1.0	Decrease due to development of residential lots and roads
Support of Characteristic Vegetation	1.0	Decrease due to the conversion of woodland to residential use

Existing Functions at the Impact Site Expected to be Adversely Affected

Existing functions impacted are those related to the conversion of adjacent upland from existing forest to residential subdivision: habitat for song birds, amphibians and turtles. Creation of the wetland mitigation will offset some of these impacts. The preservation of the large wetland to the west will also help maintain these functions.

Net Gain or Loss of Specific Functions as a Result of CWM

Due to the conversion of 14.81 acres of upland forest to residential subdivision there will be a loss to those functions that require the support of upland habitat. These include song bird habitat, characteristic vegetation, and amphibian and turtle habitat.

Acres of the CWM Wetland Proposed for Impact Relative to the Total Area of the Wetland

The proposed project will impact 8 percent of the wetlands within the project area. Including the approximately 16.7 acres of wetland on tax lot 5203, the wetland impact is 0.9 percent of the site's wetlands.

Section 6: Construction Plans

Site plan with project boundaries, existing wetlands, restoration, creation and enhancement areas

Figure 4 shows the site layout. Figures 5 and 6 show the HGM and Cowardin classifications of the proposed wetland impacts and creation areas.

Grading plan with existing and proposed contours and cross section locations

The grading plan (figures 8 and 9) shows the existing and proposed contours of the wetland mitigation, and figure 9 shows cross sections of the mitigation sites.

Description of Construction Methods Including Access and Equipment

Access to the site will be from the existing streets (Tillamook Avenue, Francis Street and Necarney Street). The wetland mitigation site will be constructed with a back hoe or excavator. Achieving the correct grade and soil preparation is essential to the success of the wetland mitigation site. A qualified wetland professional, therefore, will need to stake the wetland elevations and be onsite during the excavation to monitor the excavation depth.

During construction, the contractor will stockpile soil removed from wetlands proposed for impact. This soil will then be placed in the wetland creation area after excavation. The contractor will also stockpile woody debris removed from the construction site for distribution in the wetland mitigation areas. The woody debris will be distributed under the direction of the wetland professional.

Construction Schedule

The CWM will be constructed during the summer when construction of the development begins. Planting will be done in the fall following construction of the mitigation site.

Schematic of any water control structures

No water-control structures are proposed for the project.

Cross sections

Cross sections of the mitigation site are shown on figures 10 and 11.

Planting plan with species, size, number, spacing and installation methods, implementation schedule and construction sequence

Tables 6 and 7 contain the planting plans for the west and east wetland mitigation sites. The vegetation will be installed in the fall after the mitigation sites have been constructed. Figures 10 and 11 are planting plan schematics for the wetland mitigation areas.

Table 7 Planting plan for the west wetland mitigation area.

Size	Species	Density/rate	Plant type/seed	Quantity
7,193 sq. ft.	*Alnus rubra* (red alder) FAC	15' on center	1 gallon	8
	Picea sitchensis (Sitka spruce) FAC	20' on center	1 gallon	3
	Athyrium filix-femina (lady fern) FAC	3' on center	1gallon	10
	Tolmiea menziesii (youth on age) FAC	3' on center	bare-root seedling/plug	100
	Lysichiton americanum (skunk cabbage) OBL	6' on center	bulb	15
	Carex obnupta (slough sedge)	3' on center	plug	120

Size	Species	Density/rate	Plant type/seed	Quantity
	OBL			
	Oenanthe sarmentosa (water parsley) OBL	3' on center	bare-root seedling/1 gal.	8
	Rubus spectabilis (salmon berry) FAC+	8' on center	1 gallon	5
	*Salix hookerana (*Hooker's willow)	8' on center	vegetative cutting	4
Total				273

Table 8 Planting plan for the east mitigation area.

Size	Species	Density/rate	Plant type/seed	Quantity
6,037 sq. ft.	*Alnus rubra* (red alder) FAC	15' on center	1 gallon	4
	Picea sitchensis (Sitka spruce) FAC	20' on center	1 gallon	5
	Athyrium filix-femina (lady fern) FAC	3' on center	1gallon	20
	Tolmiea menziesii (youth on age) FAC	2' on center	bare-root seedling	80
	Lysichiton americanum (skunk cabbage) OBL	8' on center	bulb	20
	Carex obnupta (slough sedge) OBL	3' on center	plug	100
	Oenanthe sarmentosa (water parsley) OBL	3' on center	bare-root seedling	7
	Rubus spectabilis (salmon berry) FAC+	8' on center	1 gallon	7
	*Salix hookerana (*Hooker's willow)	8' on center	vegetative cutting	5
Total				236

Section 7: Monitoring Plan

Performance Standards

The compensatory wetland mitigation criteria will have been met if 0.26 acres of upland are successfully converted to wetland. This will provide of 0.17 mitigation credits to offset 0.17 acres of wetland impact.

The following are the performance criteria for the CWM.

1. The cover of native herbaceous species is at least 60%.

2. The cover of invasive herbaceous species is no more than 10%. After the site has matured to the stage when desirable canopy species reach 50% cover, the cover of invasive understory species may increase but may not exceed 30%.
3. The cover of invasive shrub or tree species is no more than 10%.
4. The DSL's *Routine Performance Standards for Vegetation* recommends that bare substrate represent no more than 20% cover. The existing wetlands on the site, which are in good condition and have native cover, do not meet this standard. The bare substrate as inferred from the wetland delineation data sheets ranges from 0 to 90%. The high amount of bare substrate is likely due to the heavy shade canopy. The consultant cannot predict if this will be a problem for the CWM after grading and adjacent tree removal to clear space for the subdivision. Therefore, the consultant recommends that the Agencies allow the permit holder to re-negotiate this criterion if it can be shown that the bare substrate in excess of 20% is due to shade.
5. By Year 3 and thereafter, there are at least 6 different native species. To qualify, a species must have at least 5% average cover in the habitat class, and occur in at least 10% of the plots sampled.
6. Prevalence Index total for all strata is <3.0.
7. The density of woody vegetation is at least 1,600 native plants (shrubs) and/or stems (trees) per acre (native species volunteering on the site may be included, dead plants/stems do not count).
8. Establishment of wetland hydrology, which will be determined by measuring the depth to soil saturation in the spring and examining soils for signs of increased wetness, such as live, oxidized root channels, and by checking the depth to saturation. The U.S. Army Corps of Engineers (Corps) has established the criterion for wetland hydrology as saturation to within a foot of the land surface for 5% or more of the growing season (Wetland Delineation Manual, 1987).
9. As-built plans are submitted within 90 days of final grading.

Section 7: Monitoring Plan

Schedule and Timetable

The work on the mitigation sites will be completed during the same summer that work on the development begins. Within 90 days of the completion of grading of the CWM, the applicant will submit an as-built grading plan to the agencies. The as-built plan will include spot-survey elevations to confirm that the project was graded to design. The site will be monitored annually in June or July for five years. The first year's monitoring will be completed the year following construction of the CWM. Annual monitoring reports will be submitted to the agencies.

Methods

Vegetation monitoring will follow the methods described in DSL's *Routine Monitoring Guidance for Vegetation* (2009). Success of the site will be judge by comparing the monitoring plot data to the performance criteria.

Other monitoring components will include:

- Regularly photographing the site from fixed photo points to document site process.
- Checking for damage to plants (herbivory, girdling, fungus, disease, leaf dieback, mowing or mechanical damage, flood/storm damage, and poor planting technique).

The consultant will determine whether the CWM meets the wetland hydrology criterion of saturation to within 12 inches of the land surface for at least 5% of the growing season (Environment Laboratory 1987). The consultant will look for signs of inundation by digging soil pits to test for soil saturation, and by noting any evidence of inundation. The consultant will also look for signs of developing hydric soils.

Contingencies

If the wetland creation area fails to meet the vegetation, hydrology, and/or soils requirements for jurisdictional wetlands, the applicant will take corrective actions under the direction of a qualified wetland professional. Areas may require weed removal and replanting, and wetland depths may require adjustment through additional excavation.

Section 8: Protection and Security Instruments

Protection Instrument Draft Required Prior to Issuance

Appendix B contains a draft deed restriction.

Description of Proposed Final Security Instrument

The DSL's current direction for the calculation of a wetland mitigation performance bond is to assume that the cost of wetland mitigation is $83,000 per acre. The proposed wetland impact is 0.17 acres; therefore the bond amount would be $14,110. The DSL has the discretion of waiving the performance bond for projects that have less than 0.20 acres of wetland impact.

Long Term Maintenance Plan

The homeowners association will assume long-term ownership of the CWM. The long-term maintenance actions are expected to be minimal due to the small size of the mitigation site, the lack of non-native species in the area, and the observed success of other CWM sites in Rockaway Beach. Expected maintenance activities would include weed control, maintenance of fences and signs, vandalism repair, and trash removal. Funding will be provided for maintenance of the CWM through the homeowners association fees.

Section 9: References

Adamus, Paul R., 2001, Guidebook for Hydrogeomorphic (HGM) based Assessment of Oregon Wetland and Riparian Sites: Statewide Classification and Profiles, Oregon Division of State Lands, Salem, Oregon, 162p.

Environmental Laboratory, 1987, Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss.

Mueller-Dombois, Dieter and Heinz Ellenberg, 1974, Aims and Methods of Vegetation Ecology, John Wiley & Sons, New York, pp 45-56.

United States Fish and Wildlife Service, 1995, National Wetland Inventory, Tillamook Head Quadrangle, available on line at: http://www.nwi.fws.gov/

United States Geological Survey, 1973, Tillamook Head, Oregon – Clatsop County, 7.5-Minute Series (Topographic), map scale 1:24,000.

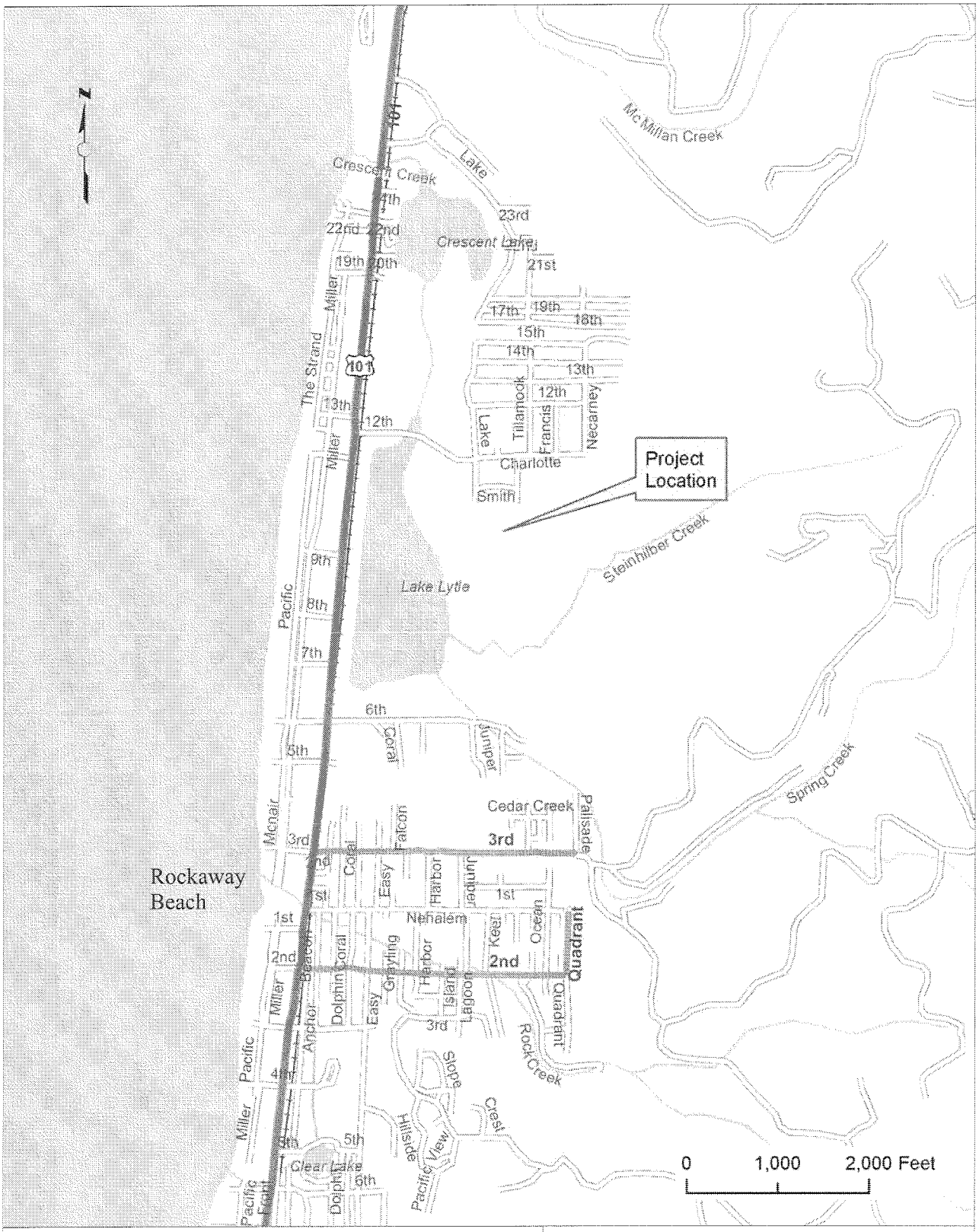


Figure 1 Project location map.

Lake Lytle Estates
Compensatory Wetland Mitigation Plan
Rorick Environmental Services
503-668-8660

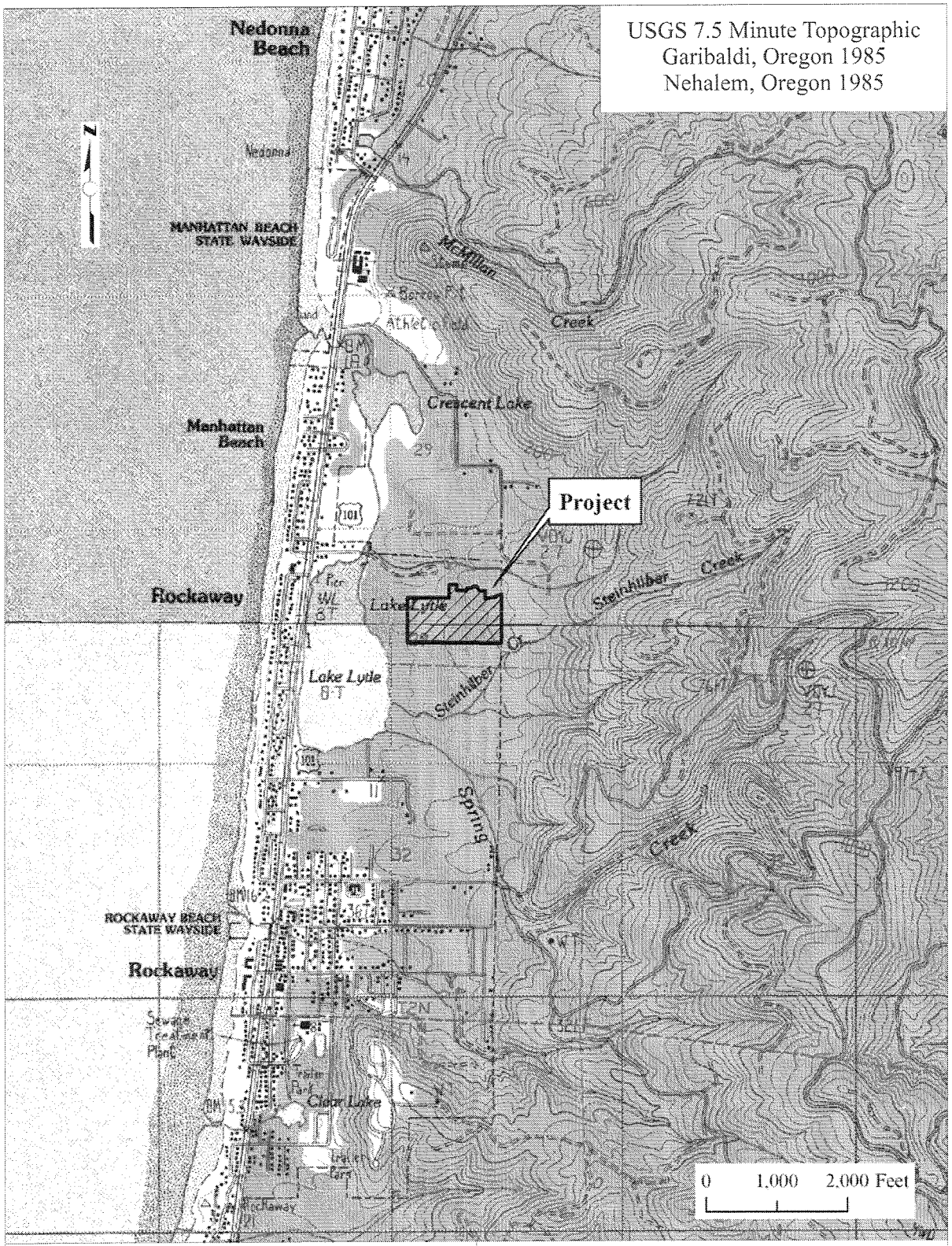


Figure 2 Topographic map.

Lake Lytle Estates
Compensatory Wetland Mitigation Plan
Rorick Environmental Services
503-668-8660

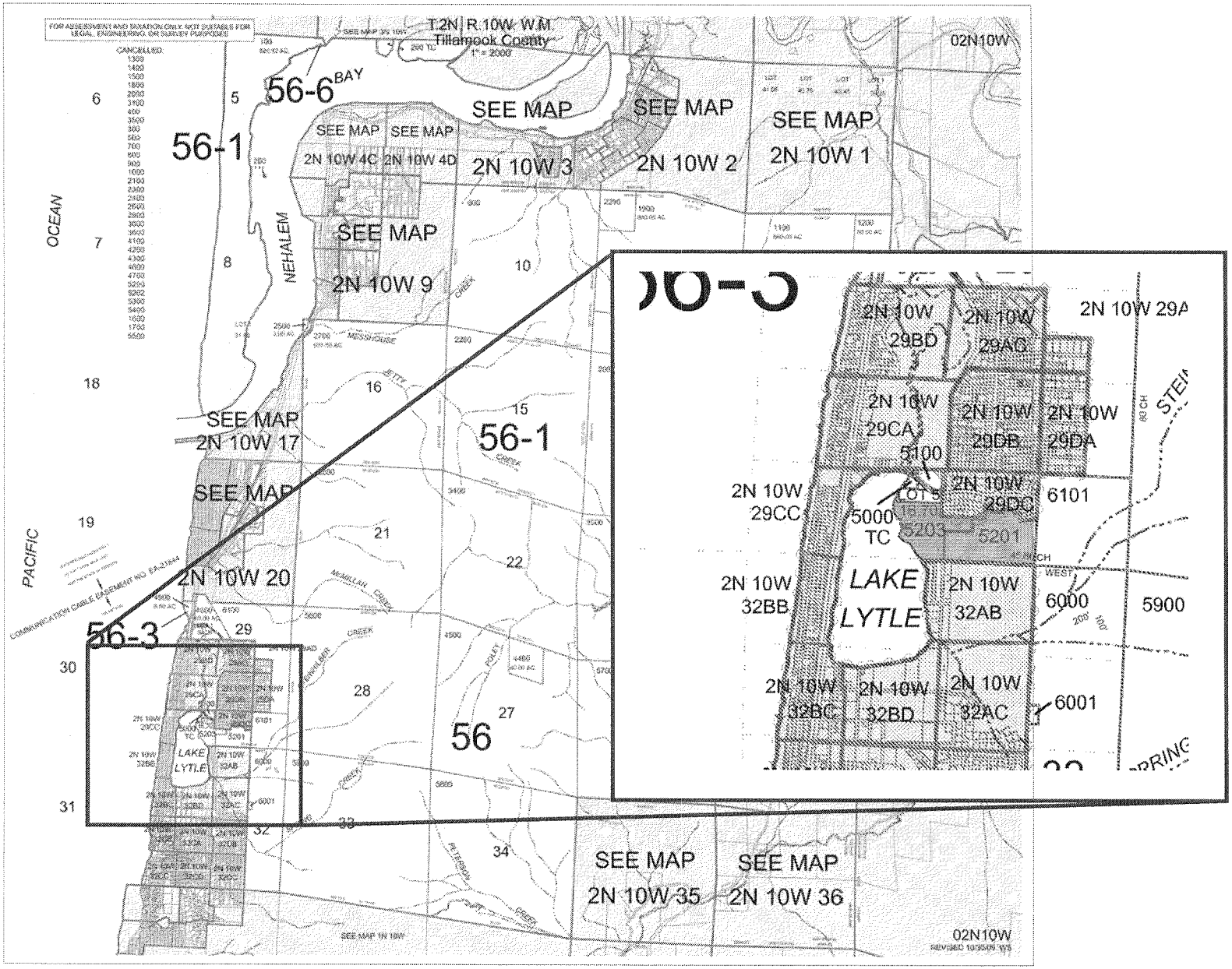


Figure 3A Tax map 2N 10W.

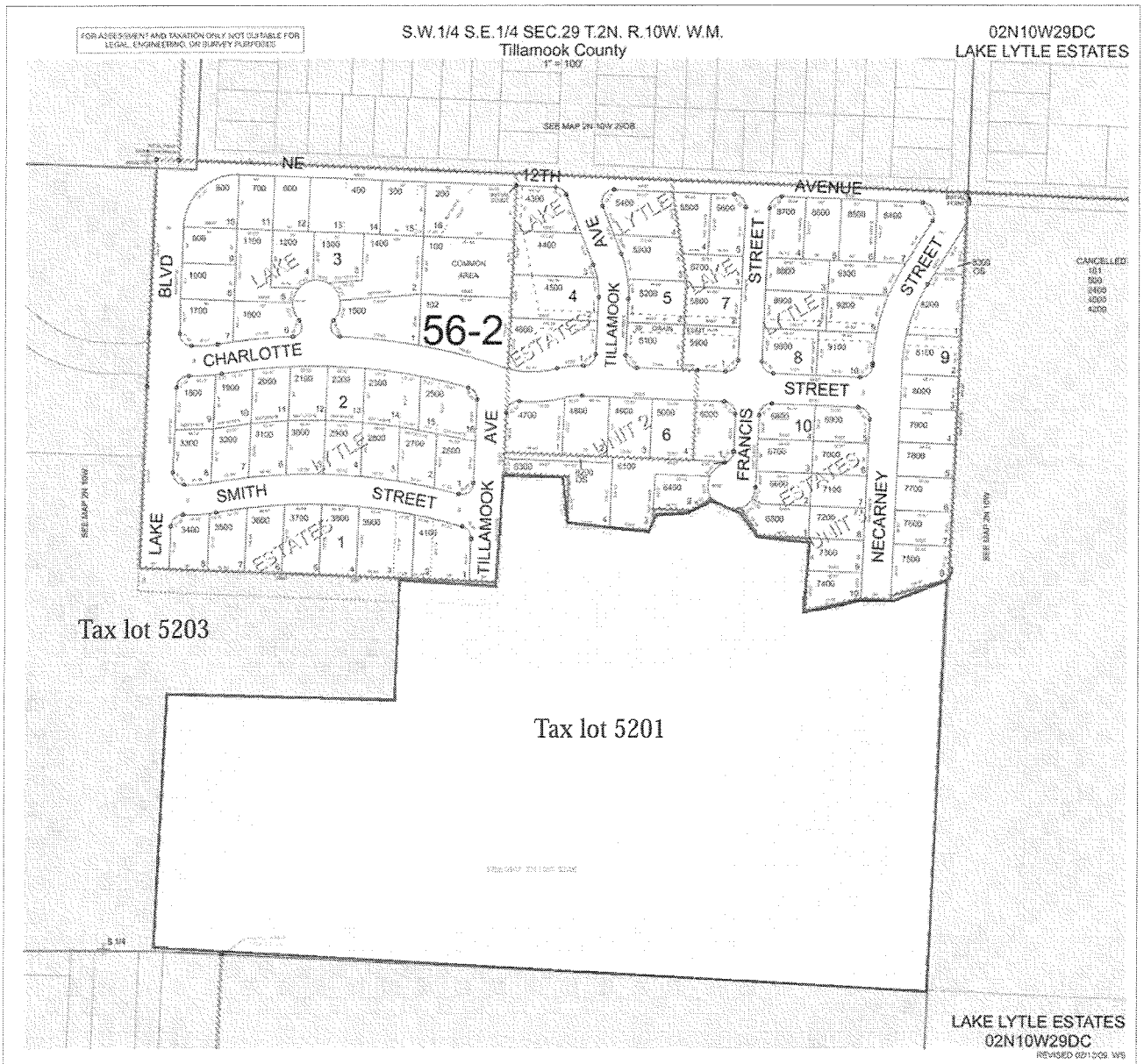
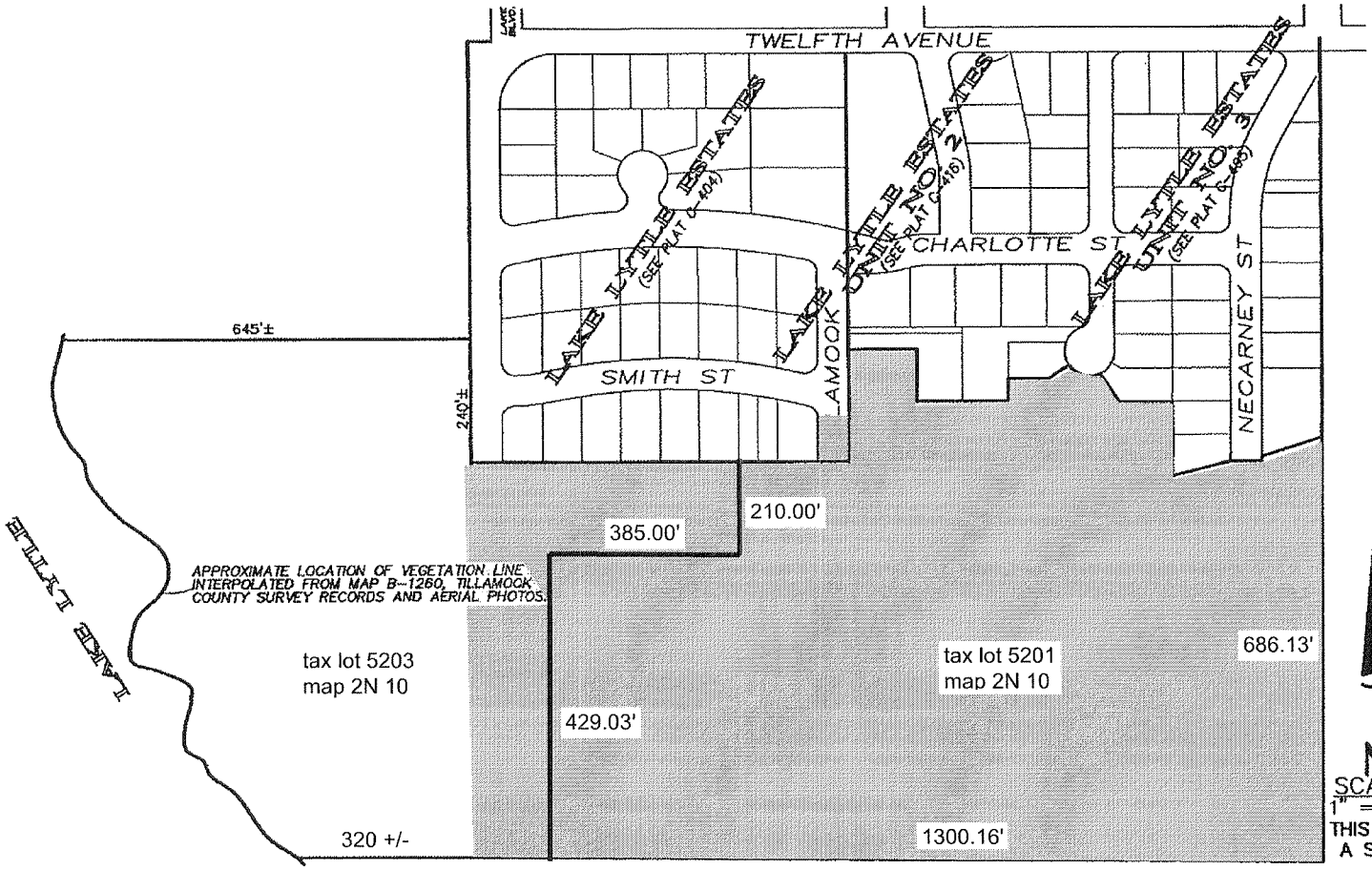


Figure 3B Tax map 2N 10W 29DC.

Lake Lytle Estates
Mitigation Plan
Rorick Environmental Services

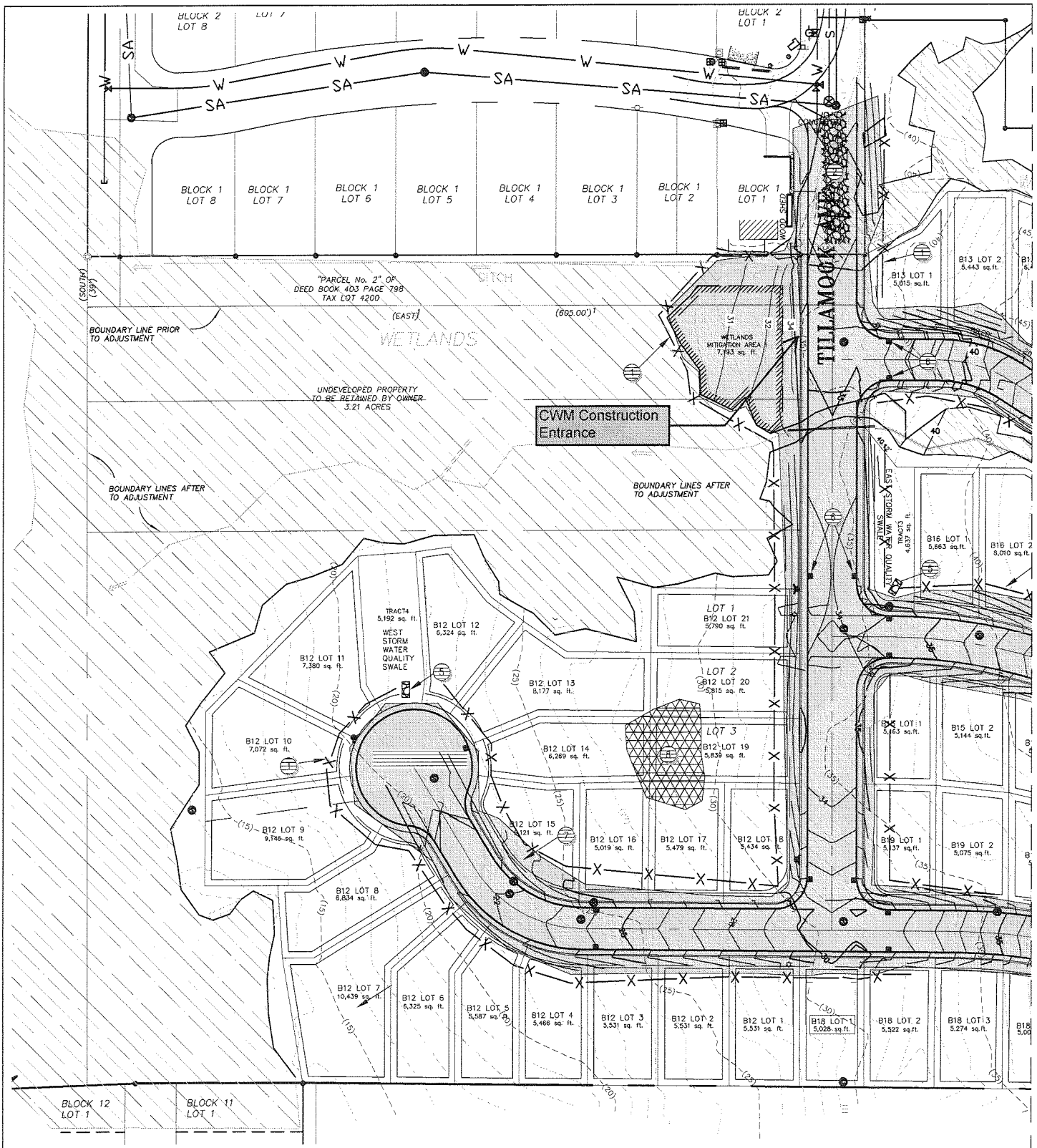
SW1/4 SE1/4 SEC 29 T.2N R.10W W.M.
TILLAMOOK COUNTY

2N 10 29DC
LAKE LYTLE ESTATES
SCHEMATIC TAXLOT MAP



Wetland delineation study area

Figure 3C Updated tax map prepared by HLB - Otak.



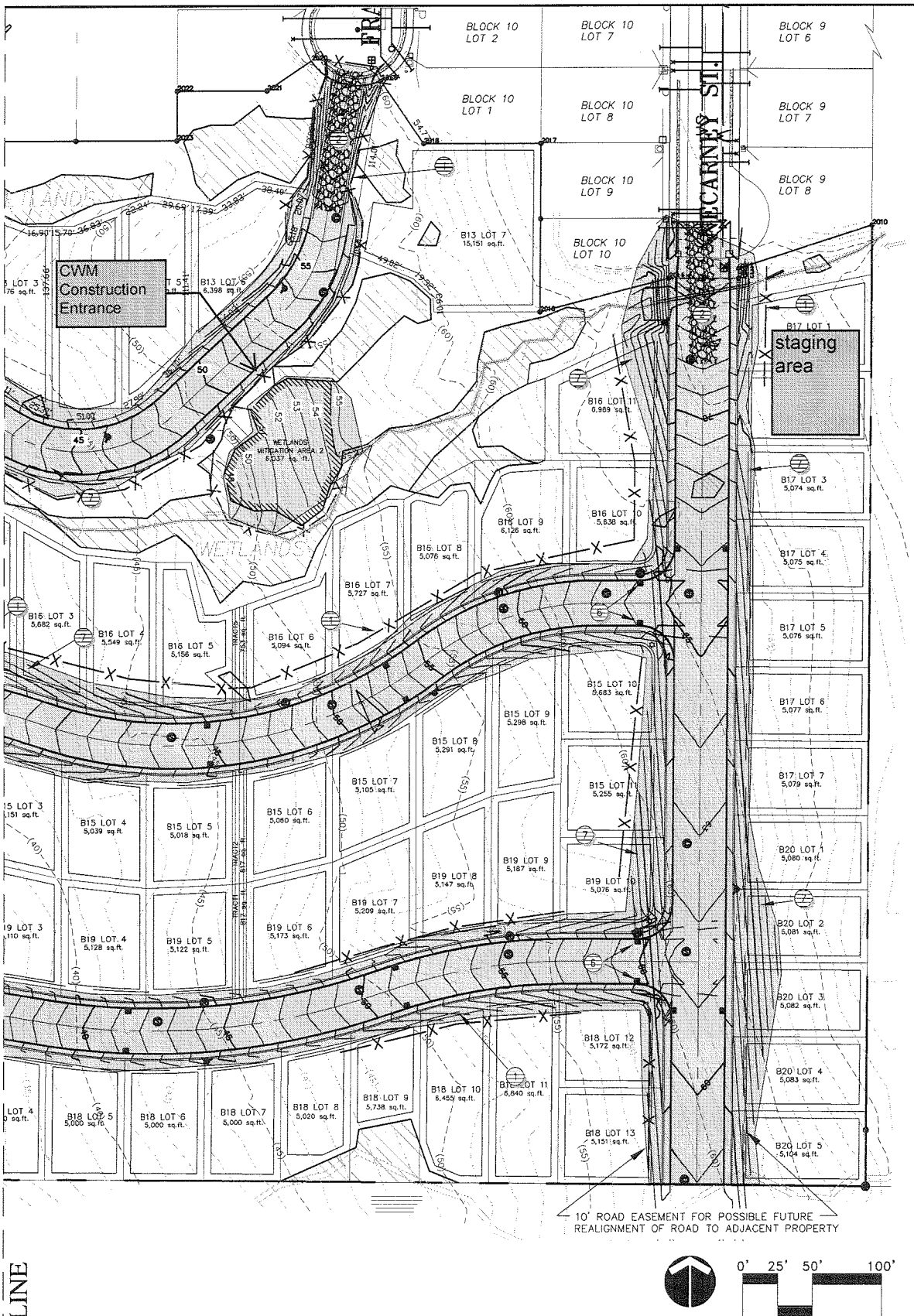
CONSTRUCTION NOTES

1. INSTALL SEDIMENT FENCE (TYP), SEE DETAIL 1 SHEET EC3
2. INSTALL CONSTRUCTION ENTRANCE, SEE DETAIL 2 SHEET EC3
4. CONSTRUCT CONCRETE CHUTE CLEANING AREA, APPROX. SIZE 4 FT. X 4 FT. AND 1.5 FT. DEEP.
5. ROCK ENERGY DISSIPATER, SEE DETAIL 4 SHEET EC3
6. INSTALL CATCH BASIN INSERT BAG IN AREA DRAIN INLET, SEE DETAIL 3 SHEET EC3
7. COMPOST BLANKET AND HYDROSEED CUT/ FILL SLOPES, SEE DETAIL 5 SHEET EC3
8. SOIL STOCKPILE AREA, SEE DETAIL 6 SHEET EC3

NOTE

1. CONTRACTOR MUST ENSURE THAT VEGETATION IS NOT DISTURBED OUTSIDE OF GRADING LIMITS.
2. CONCRETE WASHOUT SHOULD NOT BE ALLOWED TO OVERFLOW, IF ADDITIONAL WASHOUT AREA IS REQUIRED THE LOCATION MUST BE APPROVED BY ENGINEER.

Figure 4A Grading plan.



MATCH LINE

Figure 4B Grading plan.

NO.	DATE	BY	REVISION COMMENTS
Design	Drawn	Checked	Date
RCS	RCS	RCS	JUNE 6, 2008

TROY JOHNS
LAKE LYTLE ESTATES UNITS 4, 5, 6 & 7
ROCKAWAY BEACH, OREGON
TENTATIVE GRADING & EROSION PLAN

June 6, 2008

HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

62703 P703-P4
Project No. Drawing No.

EC2
Sheet No.

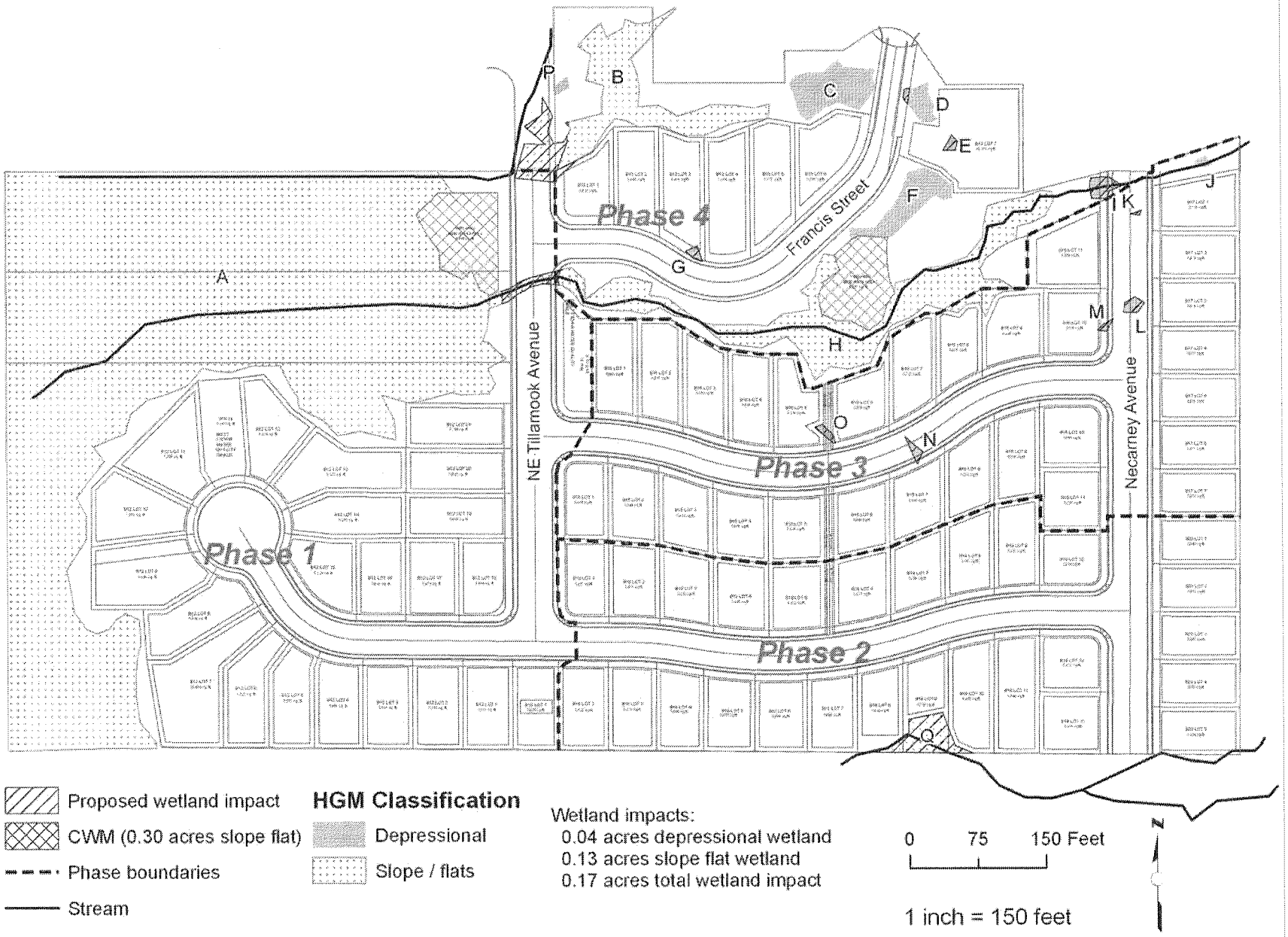


Figure 5 HGM class of existing wetlands, wetland impacts and proposed compensatory wetland mitigation.

Lake Lytle Estates
Compensatory Wetland Mitigation
Rorick Environmental Services

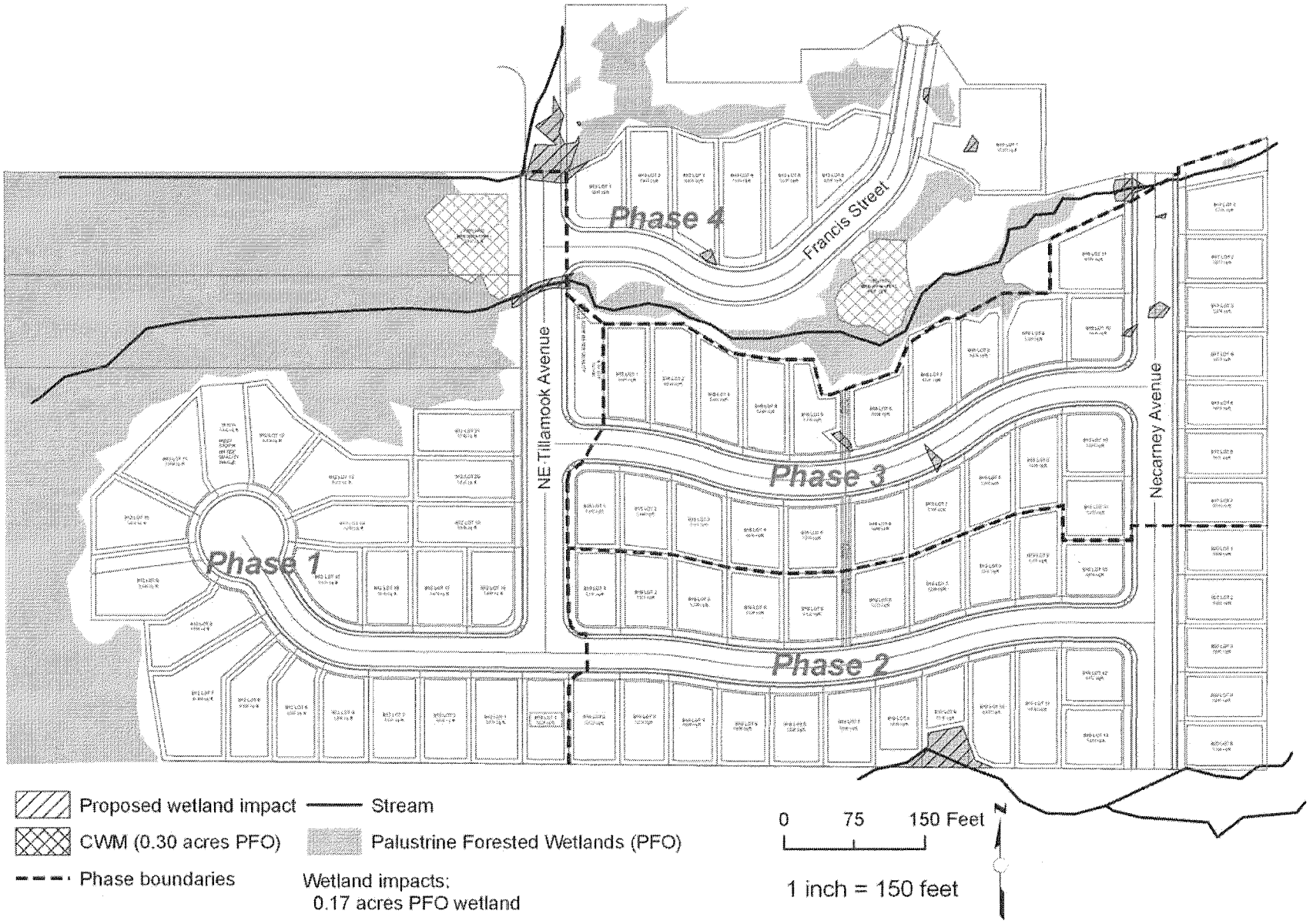
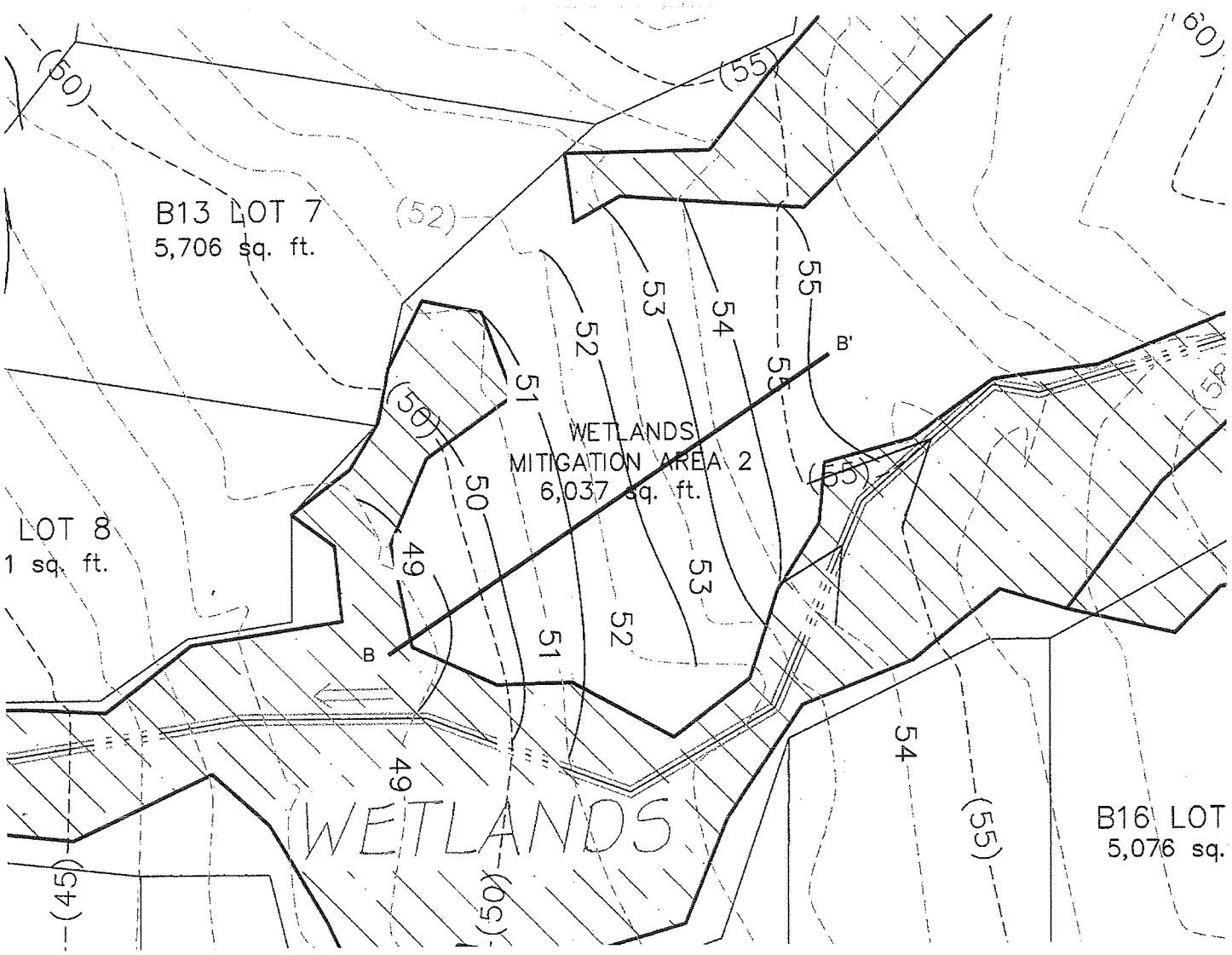


Figure 6 Cowardin class of existing wetlands, wetland impacts and proposed compensatory wetland mitigation.

Lake Lytle Estates
Compensatory Wetland Mitigation
Rorick Environmental Services



SCALE
1"=30'

HLB otak Incorporated

160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

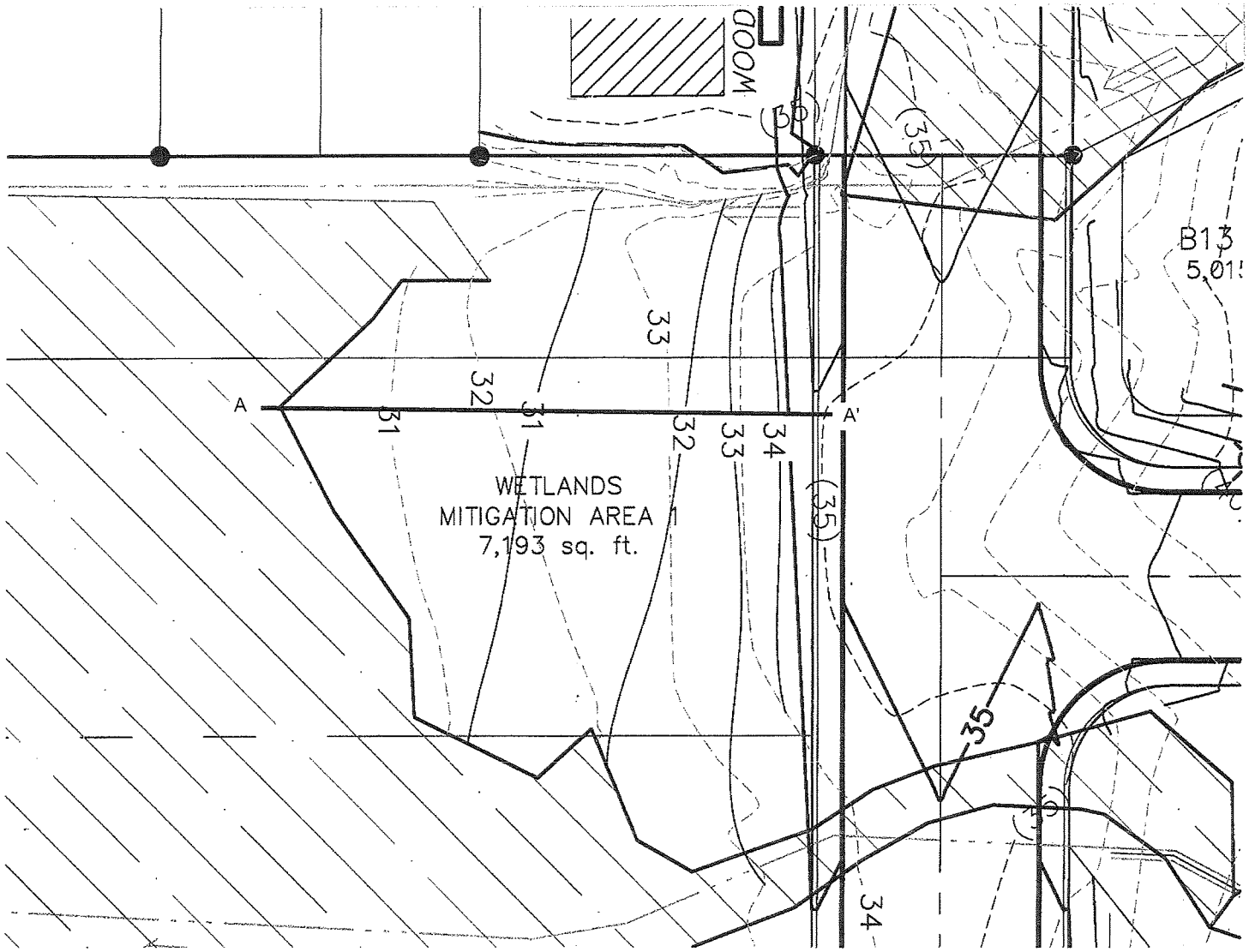
LAKE LYTLE ESTATES
UNITS 4, 5, 6 & 7

ROCKAWAY BEACH, OR

Date: MAY 12, 2008
Drawn: CJH Checked: RL
Project No.: 62703
File No.: P703-E4

E4.3

Figure 9 Wetland mitigation grading plan east mitigation area.



HLB otak Incorporated
160 LANEDA AVE.
MANZANITA, OREGON 97130
Phone: (503) 368-5394
FAX: (503) 368-5847
Internet: WWW.HLB-OTAK.COM

LAKE LYTLE ESTATES
UNITS 4, 5, 6 & 7

ROCKAWAY BEACH, OR

Date: MAY 12, 2008
Drawn: CJH Checked: RL
Project No.: 62703
File No.: P703-E4

E4.2

Figure 10 Wetland mitigation grading plan west mitigation area.

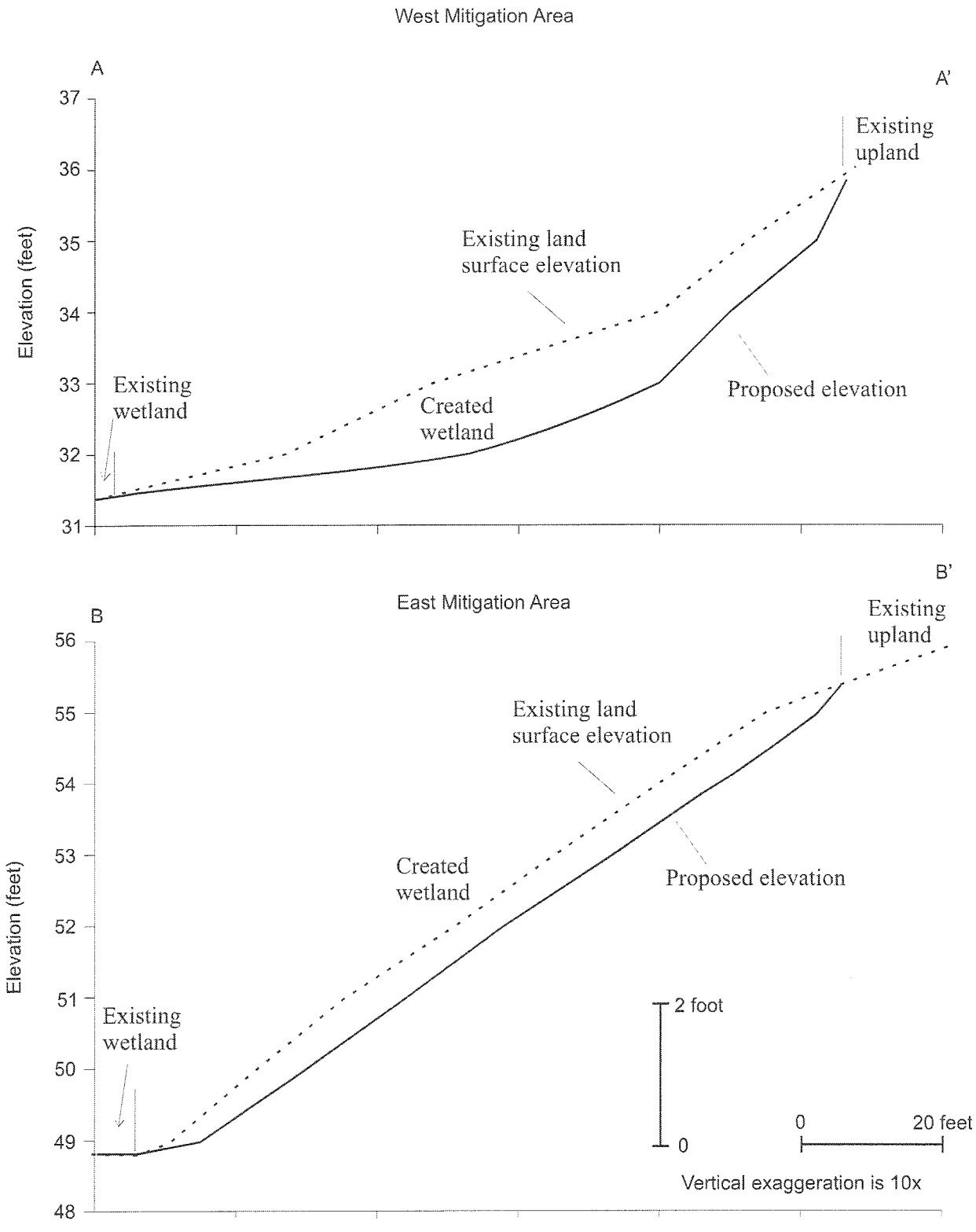
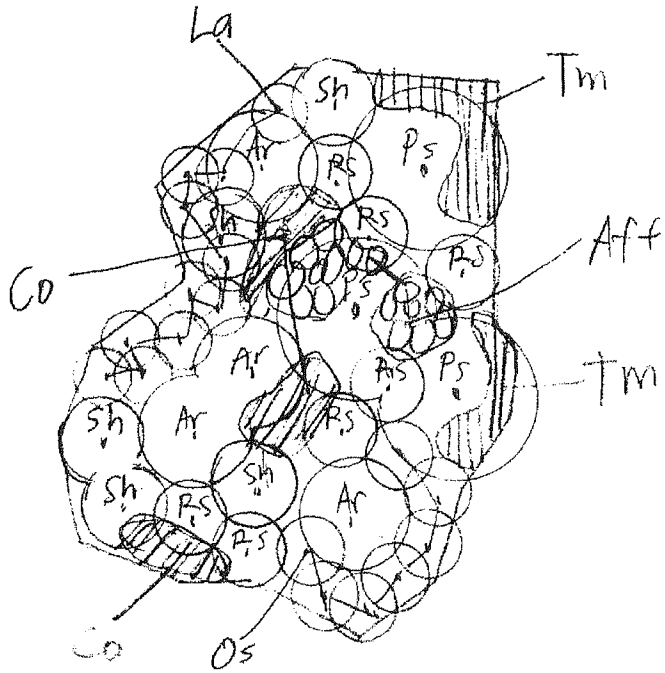


Figure 9 Cross sections of the east and west wetland mitigation sites. Cross section lines are shown on figures 7 and 8.



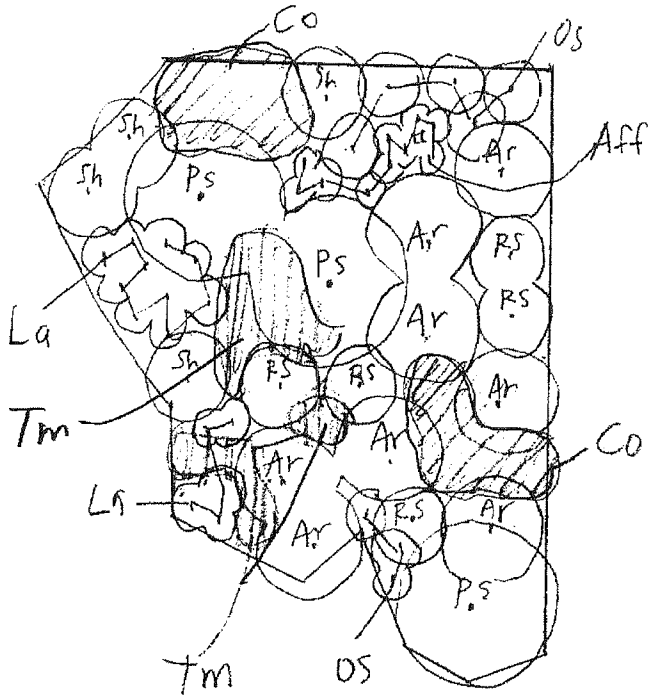
Ar - *Alnus rubra* (red alder) FAC
PS - *Picea sitchensis* (Sitka spruce) FAC
Aff - *Athyrium filix-femina* (lady fern) FAC
Tm - *Tolmiea menziesii* (youth on age) FAC
La - *Lysichiton americanum* (skunk cabbage) OBL
Co - *Carex obnupta* (slough sedge) OBL
Os - *Oenanthe sarmentosa* (water parsley) OBL
Rs - *Rubus spectabilis* (salmon berry) FAC+
Sh - *Salix hookerana* (Hooker's willow) FACW-

Scale
1" = 30'-0"

EAST WETLAND MITIGATION
PLANTING PLAN

Planting plan prepared by
Habitat Concepts

Figure 10 Planting schematic for the east wetland mitigation site.



Ar - *Alnus rubra* (red alder) FAC
PS - *Picea sitchensis* (Sitka spruce) FAC
Aff - *Athyrium filix-femina* (lady fern) FAC
Tm - *Tolmiea menziesii* (youth on age) FAC
La - *Lysichiton americanum* (skunk cabbage) OBL
Co - *Carex obnupta* (slough sedge) OBL
Os - *Oenanthe sarmentosa* (water parsley) OBL
Rs - *Rubus spectabilis* (salmon berry) FAC+
Sh - *Salix hookerana* (Hooker's willow) FACW-

WEST WETLAND MITIGATION
PLANTING PLAN

SCALE
1"=30'-0"

Planting plan prepared by
Habitat Concepts

Figure 11 Planting schematic for the west wetland mitigation site.

Lake Lytle Estates
Compensatory Wetland Mitigation Plan
Rorick Environmental Services
503-668-8660

Attachment B
Wetland Delineation Concurrence Letter
Draft Deed Restriction

Lake Lytle Estates

Rockaway Beach, Oregon
Tillamook County

Prepared for:

Troy Johns
14801 NE 14th Circle
Vancouver, WA 98684

Submitted by:

Nancy Rorick
Rorick Environmental Services
37552 SE Rachael Drive
Sandy, OR 97055
503-449-4372
nancy@rorickenvironmental.com

May 2010

Oregon
Theodore R. Kulongoski, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 378-3805
FAX (503) 378-4844
www.oregonstatelands.us.

June 10, 2008

Troy Johns
12432 NE 20th Street
Vancouver, WA 98684

Re: Wetland Delineation Report for Lake Lytle Estates residential subdivision, off NE 12th Street, Rockaway Beach, Tillamook County; T 2N R 10W S 29DC Tax Lot 4200; T 2N R 10W Tax Lot 5201; Rockaway Beach Local Wetlands Inventory wetlands UNK-1, R-UNU-1 & Lytle; WD #08-0188

Dear Mr. Johns:

The Department of State Lands has reviewed the wetland delineation report prepared by Rorick Environmental Services for the site referenced above. Based upon the information presented in the report and additional information submitted upon request, we concur with the wetland and waterway boundaries as mapped in Figure 6 (revised June 10, 2008) of the report. Please replace all copies of the preliminary wetland map with this final Department-approved map. Within the study area, 17 wetlands (totaling approximately 4.968 acres) associated with Lake Lytle and contributing drainages were identified. The wetlands are subject to the permit requirements of the state Removal-Fill Law. The ephemeral streams that drain to Lake Lytle are assumed to be regulated by the state since the report did not provide the necessary information to assess if they meet the definition of an intermittent stream, per OAR 141-085- 0010(107). Additional information could be submitted if reconsideration on the regulatory status of the streams is desired. A state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in the wetlands or below the ordinary high water line (OHWL) of a waterway (or the 2 year recurrence interval flood elevation if OHWL cannot be determined).

This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. The Army Corps of Engineers will review the report and make a determination of jurisdiction for purposes of the Clean Water Act at the time that a permit application is submitted. We recommend that you attach a copy of this concurrence letter to both copies of any subsequent joint permit application to speed application review.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter, unless new information necessitates a revision. Circumstances under which the Department may change a determination and procedures for renewal of an expired determination are found in OAR 141-090-0045 (available on our web site or upon request). The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within 60 calendar days of the date of this letter.

Thank you for having the site evaluated. Please phone me at 503-986-5321 if you have any questions.

Sincerely,

Anna Buckley
Wetland Specialist

Approved by
Janet C. Morlan, PWS
Wetlands Program Manager

Enclosures

cc: Nancy Rorick, Rorick Environmental Services
Sabrina Norberg, Rockaway Beach Planning Department
Kathryn Harris, Corps of Engineers
Joy Vaughan, DSL

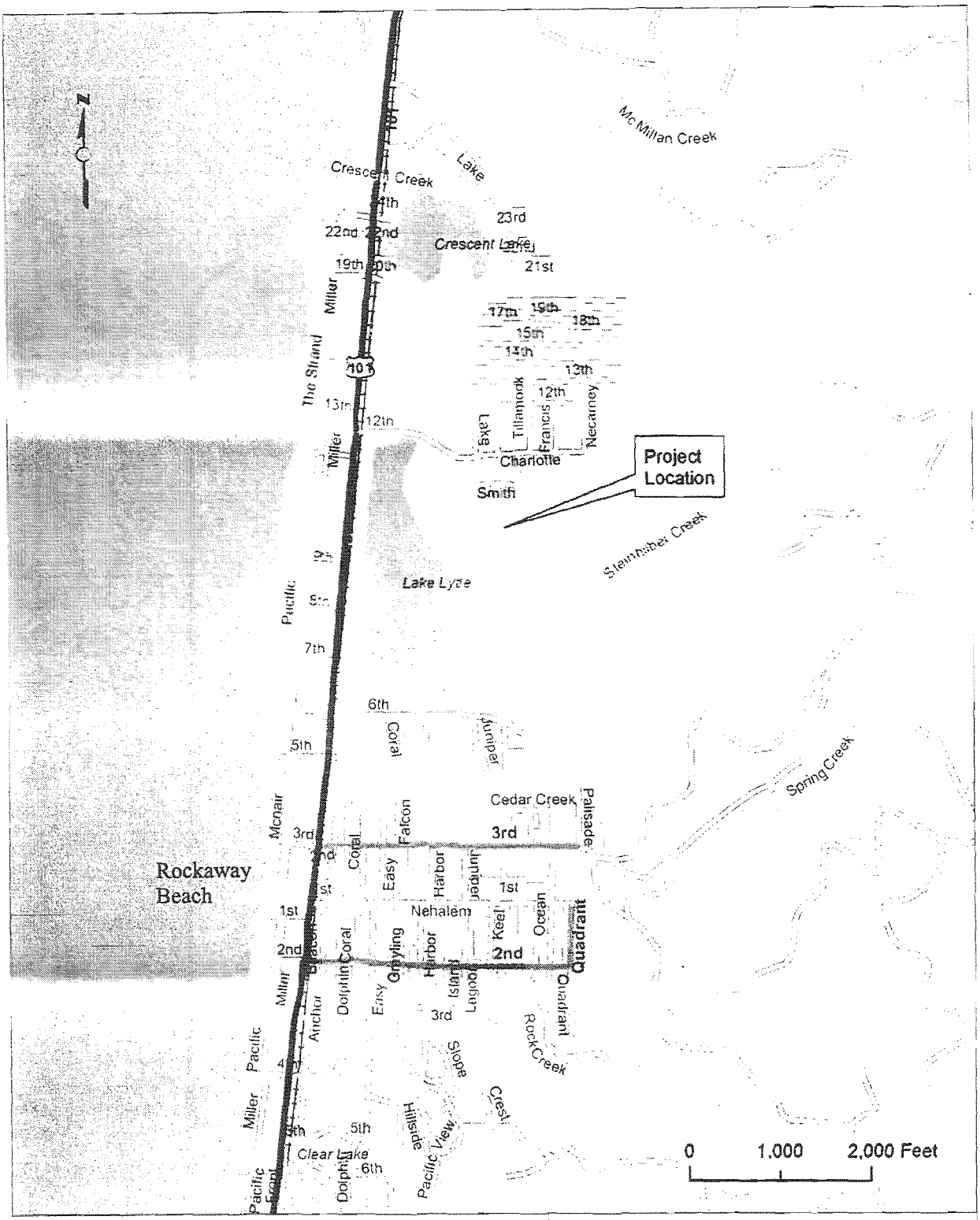
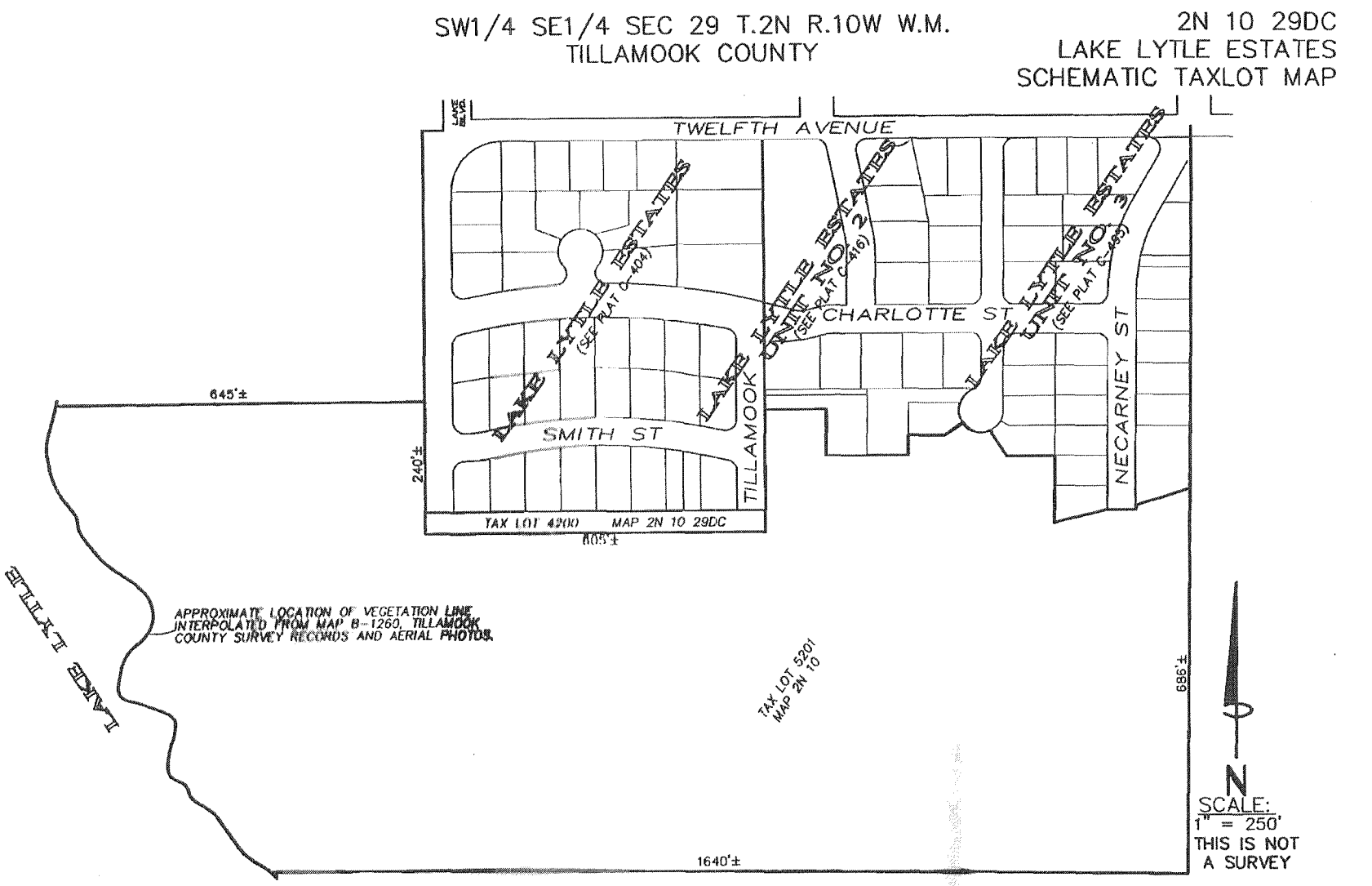


Figure 1A Project location map.

Lake Lytle Estates Wetland Delineation

Rorick Environmental Services
503-668-8660



Project study area

Figure 2C Updated tax map prepared by HLB - Otak

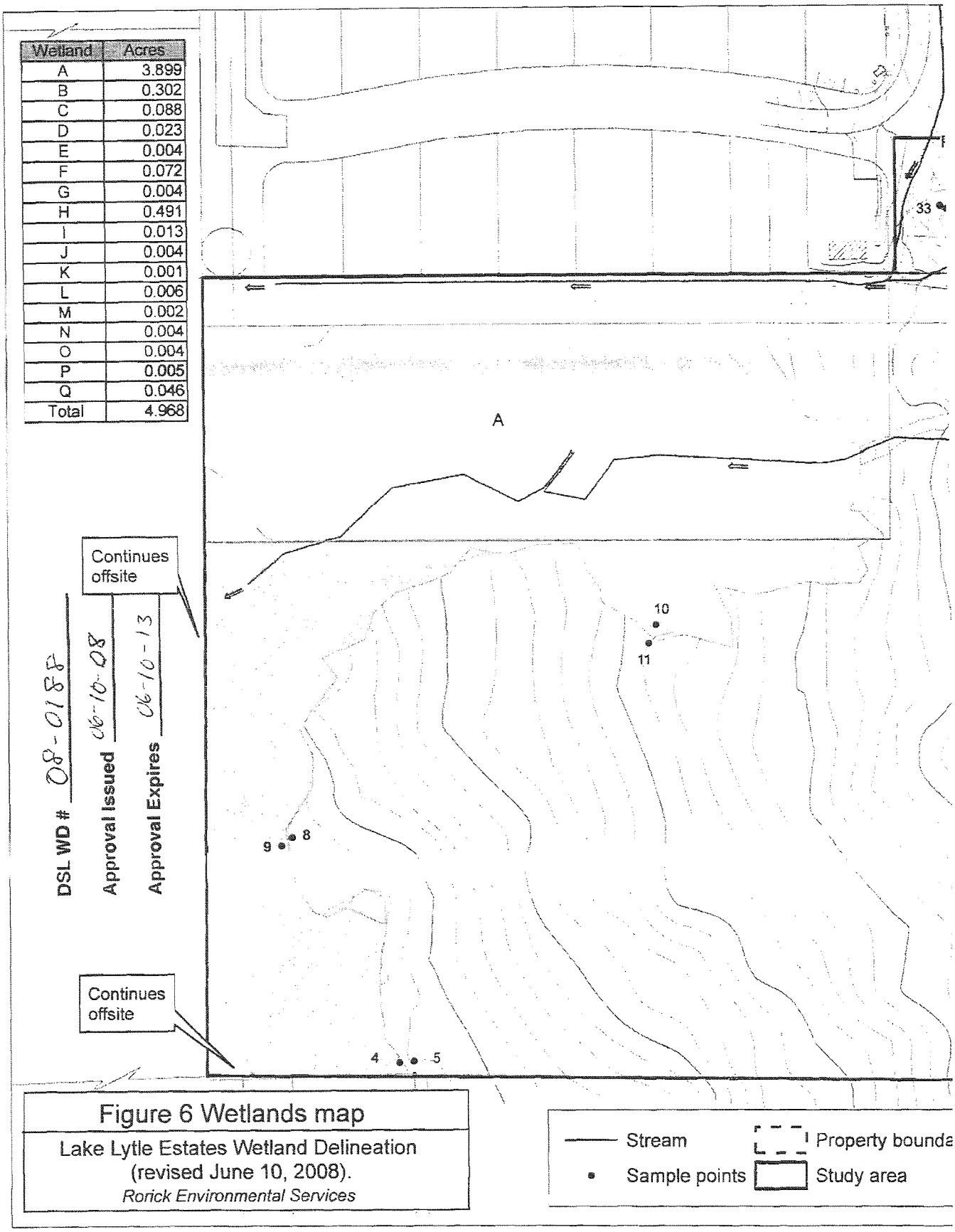
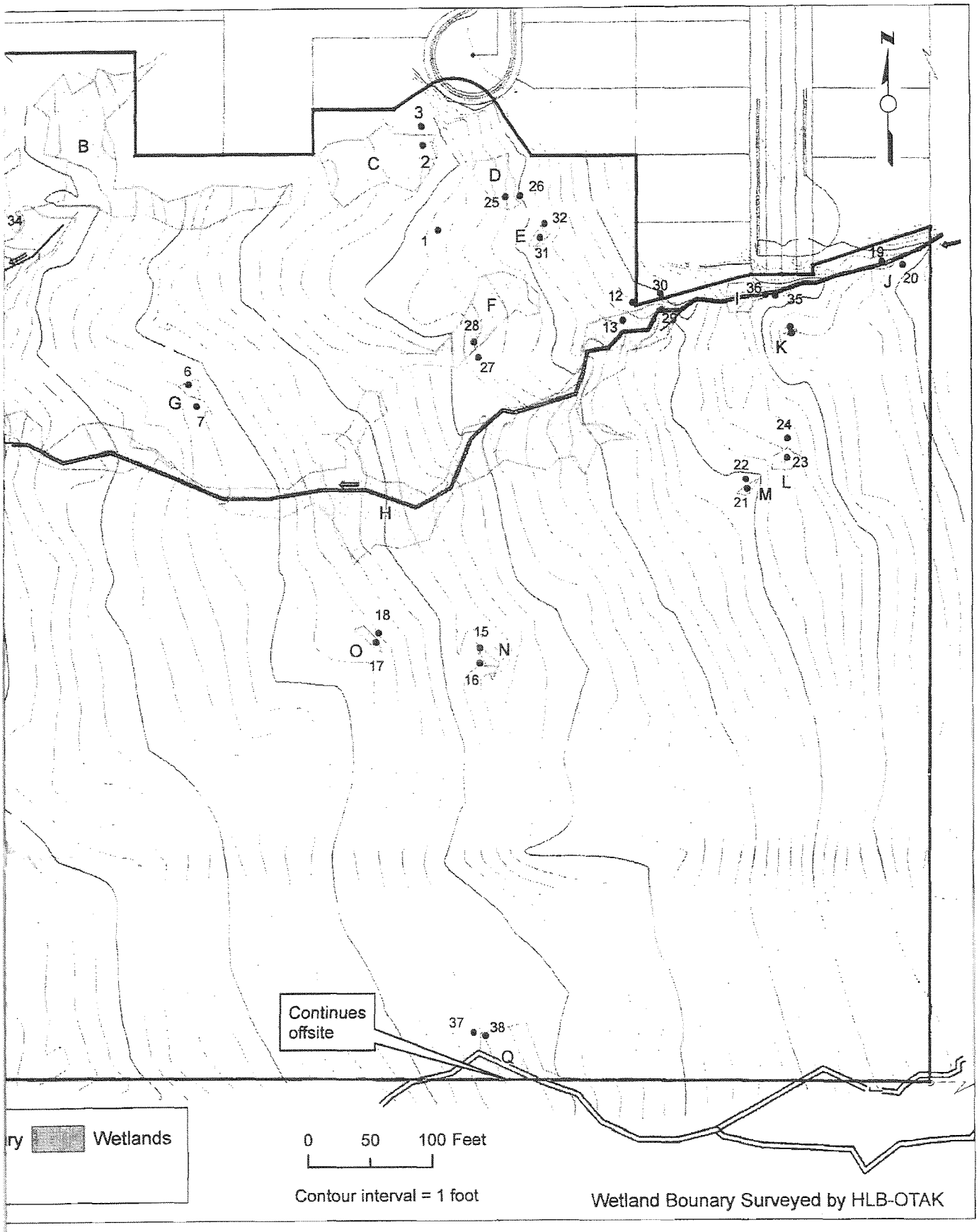


Figure 6 Wetlands map

Lake Lytle Estates Wetland Delineation
(revised June 10, 2008).
Rorick Environmental Services


N
B
C
D
E
F
G
H
I
J
K
L
M
N
O
Q
1
2
3
6
7
12
13
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
34
35
36
Continues offsite
Wetlands
0 50 100 Feet
Contour interval = 1 foot
Wetland Bounary Surveyed by HLB-OTAK

Draft

DECLARATION OF COVENANTS AND RESTRICTIONS FOR THE Lake Lytle Estates

THIS DECLARATION made this _____ day of _____, 20 , by Troy Johns (*applicant name*), ("Declarant").

RECITALS

1. WHEREAS, Declarant is the owner of the real property described in Exhibit "A" attached hereto and by this reference incorporated herein as the "Property", and desires to {create restore, *enhance or preserve*} thereon wetlands to be maintained in accordance with the Permit Number approved by the Oregon Department of State Lands ("Department");

2. WHEREAS, Declarant desires to provide for the preservation and enhancement of the wetland values of the Property and for the maintenance and management of the Property and improvements thereon, and to this end desires to subject the Property to the covenants, restrictions, easements and other encumbrances hereinafter set forth, each and all of which is and are for the benefit of the Property.

NOW, THEREFORE, the Declarant declares that the Property shall be held, transferred, sold, conveyed and occupied subject to the covenants, restrictions, easements and other encumbrances hereinafter set forth in this Declaration. These restrictions cannot be released unless authorized by the Department.

ARTICLE 1
DEFINITIONS

1.1 "Declaration" shall mean the covenants, restrictions, and all other provisions set forth in the Declaration of Covenants and Restrictions.

1.2 "Declarant" shall mean and refer to _____ (*applicant name*), its successors or assigns.

1.3 "Removal fill permit" shall mean the final document approved by the Department that formally establishes the wetland *mitigation and/or preservation area* and stipulates the terms and conditions of its construction, operation and long-term management.

1.4 "Property" shall mean and refer to all real property subject to this Declaration, as more particularly set forth in Exhibit "A".(an exhibit of conservation area must be attached}

ARTICLE 2
PROPERTY SUBJECT TO THIS DECLARATION

The real property which is and shall be held, transferred, sold, conveyed and occupied subject to this Declaration is located in _____County, Oregon and is more particularly described in Exhibit "A". (*Exhibit "A" should be a survey and legal description.)

ARTICLE 3
GENERAL PLAN OF DEVELOPMENT

Declarant currently manages the site for the purpose of wetland mitigation or preservation. Current management is in accordance with Permit Number _____.

ARTICLE 4
USE RESTRICTIONS AND MANAGEMENT RESPONSIBILITIES

The Property shall be used and managed for wetland mitigation or preservation purposes in accordance with Permit Number _____. Declarant and all users of the Property are subject to any and all easements, covenants and restrictions of record affecting the Property.

* *(Insert Covenants here. List, by number, all of the reserved rights and things not allowed in the conservation area. See following examples)*

1. There shall be no removal, destruction, cutting, trimming, mowing, alteration or spraying with biocides of desirable native vegetation in the Compensatory Wetland Mitigation Site as shown on Exhibit A, nor any disturbance or change in the natural habitat of the Compensatory Wetland Mitigation Site. This restriction does not apply to activities related to the construction and maintenance of the Compensatory Wetland Mitigation Site.
2. There shall be no agricultural, commercial, or industrial activity undertaken or allowed in the Property; nor shall any right of passage across or upon the Property be allowed or granted if that right of passage is used in conjunction with agricultural, commercial or industrial activity.
3. No domestic animals shall be allowed on the Property.

4. There shall be no filling, excavating, dredging, mining or drilling; no removal of topsoil, sand, gravel, rock minerals or other materials, nor any dumping of ashes, trash, garbage, or of any other material, and no changing of the topography of the land of the Property in any manner.
5. There shall be no construction or placing of buildings, mobile homes, advertising signs, billboards, or other advertising material, or other structures on the Property.

ARTICLE 5

RESOLUTION OF DOCUMENT CONFLICTS

In the event of any conflict between this Declaration and Permit Number _____, the permit shall control.

IN WITNESS WHEREOF, the undersigned being Declarant herein, has executed this instrument this _____ day of _____, 20_____.

Your firms name
_____County, Oregon

By: _____

Title: _____

STATE OF OREGON)
) ss:
County of_____)

This instrument was acknowledged before me on _____(*date*) by _____(*name of person*) as _____ _____(*title*) of Your firms name of _____County, Oregon.

_____
Signature of Notarial Officer

My Commission Expires: _____

Rorick Environmental Services

37552 SE Rachel Drive
Sandy, OR 97055
503-449-4372
nancy@rorickenvironmental.com

May 21, 2010

Anita Huffman
Oregon Department of State Lands
775 Summer Street, Suite 100
Salem, OR 97301-1279

Re: Lake Lytle Estates Removal-Fill Application DSL # 41607 and Corps # 2009-357

Dear Ms. Huffman:

Enclosed is the re-submittal of the Lake Lytle Estates Removal Fill Application. This re-submittal addresses DSL concerns form the July 24, 2009 completeness review letter.

- The purpose and need statement has been expanded to identify the target market for the housing development and addresses concerns regarding the marketability of the houses under current economic conditions.
- The road layout has been altered so that there is only one access point to the property to the south.
- The wetland impact on lot 5, figure EC-2, Wetland Q was rechecked in the field and corrected by the wetland consultant and project engineer.
- Francis Street has been redrawn as required by the City.
- The property west of the project site (tax lot 5203) will be made available for donation. So far no municipality or conservation group has expressed an interest in acquiring the property.

The re-submittal exceeded the 120 deadline given to us in the completeness review letter. I have attached an email from Joy Vaughan extending that deadline. Therefore, no permit fees are required.

Please let me know if you have any questions regarding the project.

Sincerely,

Nancy L. Rorick
Hydrogeologist, RG, CWRE

CC: Troy Johns
Dominic Yballe, U.S. Army Corps of Engineers
Jay Sennewald, City of Rockaway Beach
Collin Stelzig, HLB-Otak

Subject: RE: Lake Lytle Estates update
From: "VAUGHAN Joy" <joy.vaughan@state.or.us>
Date: Tue, 17 Nov 2009 07:35:04 -0800
To: "Nancy Rorick" <nancy@rorickenvironmental.com>
CC: "VAUGHAN Joy" <joy.vaughan@state.or.us>, "James L Sellers" <jsellers@sellerslawoffice.com>, "WARNER-DICKASON Lori" <lori.warner-dickason@state.or.us>, "Troy Johns" <troyajohns@gmail.com>

Hi Nancy,

Thanks for your email.

The permit application for Mr. Johns will remain active. Let me know if you'd like to set up a meeting in Rockaway to discuss the alternative road alignment.

Enjoy your week.

Joy

-----Original Message-----
From: Nancy Rorick [mailto:nancy@rorickenvironmental.com]
Sent: Monday, November 16, 2009 4:24 PM
To: VAUGHAN Joy
Cc: WARNER-DICKASON Lori; Troy Johns; James L Sellers
Subject: Lake Lytle Estates update

Dear Joy,

We have completed the revised draft purpose and need statement. However, Troy has been delayed in completing his review of the document due to the flu. Once he completes his review, I will send it on to you. We are also still working on the alternative stub-out locations. Troy has spoken to the City about setting up a meeting in the near future to discuss the stub-out locations.

Fiday is our 120-day deadline to re-submit the permit application. In your September 18th email to Jim Sellers, you mentioned that the project can remain active past the deadline if the applicant requests. I would like to request on Troy's behalf that the project remain active. Once Troy has recovered from the flu, we will be able to get back to with a date on when we plan to re-submit the application.

Thank you,
Nancy

--
Nancy Rorick, RG, CWRE
Rorick Environmental Services
37552 SE Rachael Drive
Sandy, OR 97055

503-668-8660
Cell: 503-449-4372

Lake Lytle Estates Joint Removal-Fill Permit Application (May 21, 2010)

Contents

APPENDIX F

Protected Wetland Area

In cooperation between the homeowners association, the local government, and state and federal agencies, these common open space areas have been set aside for protection to conserve wildlife habitat and provide flood control.

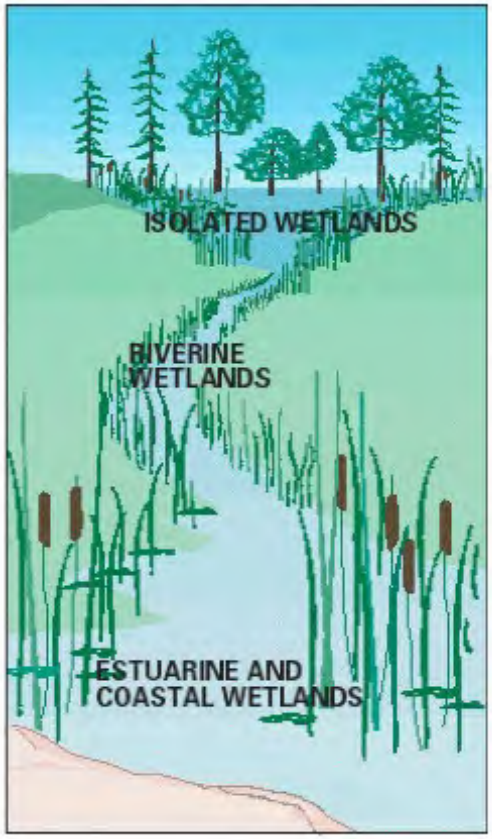
All activities involving alteration in a wetland or aquatic area may require local, state or federal permits.

The City of Rockaway Beach (SA Zone) Special Wetland Area Ordinance describes the low intensity uses permitted.

Thank you for protecting this sensitive environment.

WETLANDS PROGRAM
OREGON DEPARTMENT OF STATE LANDS

Wetland



CHARACTERISTICS AND FUNCTIONS OF WETLANDS

Isolated Wetlands
1. Waterfowl feeding and nesting habitat
2. Habitat for both upland and wetland species of wildlife
3. Floodwater retention area
4. Sediment and nutrient retention area
5. Area of special scenic beauty

Riverine Wetlands
1. See "isolated wetlands" above
2. Sediment control, stabilization of river banks
3. Flood conveyance area

Estuarine and Coastal Wetlands
1. See "isolated wetlands" above
2. Fish and shellfish habitat and spawning areas
3. Nutrient source for marine fisheries
4. Protection from erosion and storm surges

APPENDIX G

Rockaway Beach, Oregon
Planning Commission

Case File: SUB-23-01
Findings, Conclusions, and Final Order

Exhibit “B”

CITY OF ROCKAWAY BEACH
PLANNING COMMISSION ACTION

SUPPLEMENTAL #2 STAFF REPORT

Case File #SUB-23-01
Hearing Date: October 19, 2023

PLEASE NOTE THE SUPPLEMENTARY PORTIONS OF THE STAFF REPORT ARE IN RED FOR CLARITY.

APPLICANT: Troy Johns

AGENT FOR APPLICANT: OTAK Engineering

REQUEST: The Applicant is requesting approval of an 85-lot subdivision of vacant land to be named Lake Lytle Estates Phases IV-VII, on land zoned R-3 (Lower Density Residential). Details of the request are included on the submitted application materials and are available for inspection at Rockaway Beach City Hall.

A. REPORT OF FACTS

1. Property Location: The property is located to the south of the existing Lake Lytle Estates Subdivision Phases I-III, east of Lake Lytle in Rockaway Beach, and is further identified on Tillamook County Assessor's Map # 2N10W Lot #5201. Access to the property is proposed via existing Tillamook, Frances, and Necarney Streets at their south terminus at the subject property.

2. Lot Size: approximately 18.9 acres.

3. Zoning Designation: R3 (Lower Density Residential Zoning).

4. Surrounding Land Use: Adjacent to the north is the existing Lake Lytle Estates Subdivision Phases I-III. To the east is industrial forest land outside of the Rockaway Beach city limits. To the south is undeveloped land zoned R-R (Residential Resort), and the existing Timberlake Subdivision further to the south. West of the subject property is undeveloped land zoned S-A (Special Area Wetlands) adjacent to Lake Lytle.

5. Existing Structures: None.

6. Utilities: The following utilities are proposed to serve the subject property:
    a. Sewer: City of Rockaway Beach
    b. Water: City of Rockaway Beach
    c. Electricity: Tillamook P.U.D.

7. Development Constraints: The property contains wetlands that have been delineated by a professional wetlands consultant, and the Oregon Department of State Lands has given agency concurrence with the delineation. The Applicant's proposal includes impacts to portions of the wetlands for street and utility construction, and the Applicant understands that permits from DSL and the U.S. Army Corps of

Engineers are required before any disturbance or impacts to the wetlands takes place. If the request is approved, the Applicant will be required to obtain and provide copies of necessary permits from these agencies prior to initiating construction.

In addition, a portion of the subject property is located within the 100-year floodplain as identified on the Flood Insurance Rate Map Panel Number 410201-110C. The proposed lots will all be located outside of the 100-year floodplain.

B. EVALUATION OF THE REQUEST

1. General Description of the Proposal: The Applicant proposed to develop a new subdivision containing 85 lots between 5,000 and 15,151 square feet in size, to be developed in four phases as illustrated on the submitted development plan and in the application Burden of Proof document.

   Access to the subdivision would be from existing Tillamook, Necarney, and Frances Streets in the existing Lake Lytle Estates subdivision. As proposed, the new lots in the subdivision would be served by public streets with improvements that include paved streets, curbs, gutters, and sidewalks, with open space elements that contain and protect wetlands on the subject property. Various details of the applicant's request are contained in the submitted application materials and remain available for inspection at City Hall.

   The application materials include a document entitled Burden of Proof, which identifies the substantive criteria from the Rockaway Beach Zoning and Subdivision Ordinances, with written responses in attempts to demonstrate the applicable criteria for tentative plan approval are met. In general, staff concurs with the Applicant and suggest that the Planning Commission carefully examine the Burden of Proof document to become familiar with the details of the proposal and to consider the Applicant's responses to the substantive criteria.

2. Background: In 2010 the Applicant submitted Subdivision Application #SUB-10-08 for the creation of Lake Lytle Estates Phases IV-VII. The City of Rockaway Beach Planning Commission approved this tentative subdivision plat approval. The approval was extended yearly until the maximum 10-year extension period was met and the approval period expired.

3. Agency Comments:

   a. City of Rockaway Beach Public Works Department: Concerned that both water and sewer are not being addressed, even at this tentative stage. There is a possibility that water flow may not meet fire flow requirements. Major infrastructure improvements will likely be necessary.

   b. City of Rockaway Beach Engineer: See attached letter from HBH Engineering which identifies issues that will need to be addressed through the more formal engineering review if this request is approved.

4. Ordinance Standards: The following substantive criteria apply to this request. To facilitate review, staff comments are in *italicized font*.

   Rockaway Beach Zoning Ordinance Section 3.090. Lower Density Residential Zone (R-3). In the R-3 zone the following regulations shall apply:

   3. Standards. In an R-3 zone, the following standards shall apply:

      a. Minimum lot size in an R-3 zone shall be 5,000 square feet where sanitary sewer service is available, or will be made available, except as provided in (h) below; otherwise, minimum lot size shall be 7,000 square feet.

         Each proposed lot will be a minimum of 5,000 square feet in size, and provided with sanitary sewer service, therefore this standard is met.

      b. Density limits for this area shall be 9 dwellings per acre, except as provided in (h) below.

         As proposed, the development's net density excluding streets and tracts will be 7.56 dwelling units per acre, therefore this standard is met.

      c. Minimum lot width is 50 feet, except that for lots between 3,500 and 4,999 square feet, the minimum lot width shall be 35 feet.

         The application identifies the dimensions of each proposed lot. As proposed, each lot will meet or exceed this standard for lot width.

      d. Minimum lot depth is 70 feet, except for lots between 3,500 and 4,999 square feet, the minimum lot depth shall be 60 feet.

         The application indicates that each lot will meet or exceed this standard for lot depth.

      e. Minimum front yard setback shall be 10 feet from the street right-of-way.

         The Applicant has submitted a preliminary development plan that outlines the setbacks for each proposed lot. However, this standard is typically reviewed for conformance and applied at the time a building permit is requested.

      f. Minimum setback on all other sides shall be 5 feet from the lot line.

         This standard is typically reviewed for conformance and applied at the time a building permit is requested.

      g. The maximum building height shall be 20 feet on the oceanfront and 24 feet elsewhere, except east of Highway 101 it shall be 29 feet.

This standard is typically reviewed for conformance and applied at the time a building permit is requested.

h. Where a proposed use is to be a Planned Unit Development involving residential structures, the Planning Commission may authorize an additional two dwelling units per acre if the development is properly designed. Aesthetic, geologic and environmental factors shall be taken into account. The Planning Commission may require an engineering, geologic, or structural analysis where it appears that steep slopes or wetlands are to be used for construction purposes rather than open space. The Planning Commission may attach any reasonable conditions it sees fit in the course of the Planned Unit Development process.

The proposed subdivision is not a Planned Unit Development, therefore this standard is not applicable.

i. The requirements of Section 4.041, Shorelands Development Criteria, shall be met where uses are to be located within 50 feet of a lake within the Rockaway Beach Urban Growth Boundary.

No development is proposed within 50 feet of Lake Lytle, therefore this standard is not applicable.

j. A minimum of 30% of the lot will be maintained in natural vegetation or landscaping.

This standard is typically reviewed for conformance and applied at the time a building permit is requested.

Rockaway Beach Zoning Ordinance Section 3.080. Special Area Wetlands (SA). In the SA zone the following regulations shall apply:

1. Purpose. The purpose of the SA Zone is to conserve significant freshwater wetlands and the shoreland and aquatic environment of Rockaway Beach's lakes. Low intensity uses which do not result in major alterations are appropriate in the zone. High intensity recreation, related to boating is appropriate on the lakes.

2. Uses Permitted Outright. In an SA zone, the following uses are permitted outright:

   a. Low intensity recreation;

   b. Passive restoration measures;

   c. Vegetative shoreline stabilization;

d. Individual dock limited to a maximum of 200 square feet for recreation or fishing use, plus necessary piling;

e. Submerged cable, sewer line, water line or other pipeline.

f. Storm water outfall.

The subject property contains approximately18.9 acres and includes Special Area Wetlands. However, the Special Area Wetlands is limited to the western most portion of the parent property adjacent to Lake Lytle. The area proposed to be developed with lots and street infrastructure avoids the SA wetlands entirely, except for a necessary sewer line that the Applicant states will be bored (submerged) in accordance with uses permitted outright in the SA zone.

Proposed impact to other wetlands on the property that are not SA zoned are described in the application details (Burden of Proof, p. 11). With the exception of 7,553 square feet of wetlands mostly located in existing and proposed rights of way and driveway access, no wetland fill is proposed.

The Applicant has begun the process of application to the Oregon Department of State Lands and the Army Corps of Engineers for necessary permits for the proposed wetlands impacts.

Rockaway Beach Zoning Ordinance Section 3.092. Flood Hazard Overlay Zone (FHO).

Purpose and objectives: It is the purpose of this Flood Hazard Overlay Zone to regulate the use of those areas subject to periodic flooding, to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions. In advancing these principles and the general purposes of the Rockaway Beach Comprehensive Plan and Zoning Ordinance, all new construction and substantial improvements in the Flood Hazard Overlay Zone shall ensure that the specific objectives of this zone are met.

1. To combine with the present zoning requirements certain restrictions made necessary for the known flood hazard areas to promote the general health, welfare and safety of the City.

2. To prevent the establishment of certain structures and land uses in areas unsuitable for human habitation because of the danger of flooding, unsanitary conditions, or other hazards.

3. To minimize the need for rescue and relief efforts associated with flooding.

4. To help maintain a stable tax base by providing for sound use and development in flood-prone areas and to minimize prolonged business interruptions.

5. To minimize damage to public facilities and utilities located in flood hazard areas.

6. To ensure that potential home and business buyers are notified that property is in a flood area.

7. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

As proposed, all of the proposed 85 lots will be located outside of the identified 100-year floodplain and therefore homes located on the lots will be at a minimal risk of flood damage.

Rockaway Beach Zoning Ordinance Section 3.094. General Provisions.

1. Lands To Which This Ordinance Applies. This ordinance shall apply to all areas of special flood hazards (Flood Hazard Overlay Zone) in combination with present zoning requirements within the jurisdiction of the City of Rockaway Beach.

2. Basis For Establishing The Areas Of Special Flood Hazard. The areas of special flood hazard identified by the Federal Insurance Administrator through a scientific and engineering report entitled 'The Flood Insurance Study for the Tillamook County, Oregon and incorporated areas dated September 28, 2018, with accompanying Flood Insurance Rate Maps and any revision thereto is hereby adopted by reference and declared to be a part of this Ordinance. The Flood Insurance Study is on file at Rockaway Beach City Hall.

3. Compliance. No structure or land shall hereafter be located, extended, converted or altered without full compliance with the terms of this ordinance and other applicable regulations.

4. Warning and Disclaimer of Liability. The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. The ordinance shall not create liability on the part of the City of Rockaway Beach, or any officer or employee thereof, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

The application materials indicate that all but the southwest corner of the subdivision site is located outside of the A-2 Flood Hazard Zone as depicted on the Flood Insurance Rate Map (FIRM) published by FEMA. The A-2 Flood Zone designation establishes a base flood elevation of 12 feet above mean sea level (msl), meaning that all land above 12 feet msl is not subject to the regulations of the Flood Hazard Overly Zone. The application states that a detailed topographic survey of the property has been prepared that illustrates specific areas of the development that are at or below an elevation of 12 feet msl. Figures 6 and 7 in the application materials illustrate the location of the regulatory floodplain in relation to the proposed development.

Rockaway Beach Zoning Ordinance Section 3.095. Administration.

1. Establishment of Development Permit. A Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 3.094(2). The permit shall be for all structures including manufactured homes, as set forth in the "definitions" and for all developments including fill and other activities, also as set forth in the "definitions". Application for a Development Permit shall be made to the City and shall specifically include the following information:

    a. Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures.

    The Applicant is not proposing to construct any buildings within the FHO Zone, therefore these standards do not apply.

    b. Elevation in relation to mean sea level to which any structure has been floodproofed.

    The Applicant is not proposing to construct any buildings within the FHO Zone, therefore these standards do not apply.

    c. Certification by an appropriately qualified registered professional engineer or architect that the floodproofing method for any non-residential structure meets the floodproofing criteria in Section 3.096(6) (b).

    The Applicant is not proposing to construct any buildings within the FHO Zone, therefore these standards do not apply.

    d. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

    The Applicant is not proposing to alter or relocate any watercourse.

    e. An engineered or City approved stormwater drainage site plan designed to prevent the increase of adverse impacts caused by development in the flood zone.

    If the request is approved, this standard can be applied as a condition of approval. The drainage plan will be reviewed with the overall development plans by the City Engineer.

2. Duties and Responsibilities. The duties of the City shall include, but not be limited to permit review:

    a. Review of all development permits to determine that the permit requirements of this ordinance have been satisfied.

If the request is approved, then the necessary development permits will be reviewed by the City to ensure that this standard is met.

b. Review all development permits to require that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.

If the request is approved, then the necessary permits from federal, state or local government agencies will be required by the City to ensure that this standard is met.

c. Review all development permits in the area of special flood hazard to determine if the proposed development adversely affects the flood carrying capacity of the area.

If the request is approved, then a detailed drainage plan will be required by the City to ensure that this standard is met.

5. Alterations of Watercourses. The City shall:

a. Notify adjacent communities, the Department of Land Conservation and Development, and other appropriate federal and state agencies prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

The proposal does not include the alteration or relocation of any watercourse.

b. Require that an engineered stormwater drainage plan and maintenance plan is provided within the altered or relocated portion of said watercourse, so that the flood carrying capacity is not diminished.

If the request is approved, this standard can be applied as a condition of approval.

Rockaway Beach Zoning Ordinance Section 3.096. Provisions for Flood Hazard Reduction.

General Standards: In the Flood Hazard Overlay Zone (FHO) the following provisions are requires:

1. Anchoring.

a. All new construction and substantial improvement shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

The Applicant is not proposing to construct any buildings within the FHO Zone, therefore these standards do not apply.

b. All manufactured dwellings must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques). A certificate signed by a registered architect or engineer which certifies that the anchoring system is in conformance with FEMA regulations shall be submitted prior to final inspection approval.

The Applicant is not proposing to construct any manufactured dwellings within the FHO Zone, therefore these standards do not apply.

3. Utilities.

a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

If approved, the required Engineering Review by the City will ensure that this standard is met.

b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters; and

No on-site waste disposal (septic) systems are proposed that could potentially result in discharge into floodwaters. Necessary engineering review by the City of proposed public sewer lines will ensure that this standard is met.

c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with the Oregon Department of Environmental Quality.

No on-site waste disposal (septic) systems are proposed, therefore this standard is not applicable.

4. Subdivision Proposals.

a. All subdivision proposals shall provide engineered plans consistent with the need to minimize flood damage.

As proposed, all of the proposed 85 lots will be located outside of the identified 100-year floodplain and therefore homes located on the lots will be at a minimal risk of flood damage. The submittal of engineered plans, including the provision of a

stormwater drainage plan will be required as a condition of approval if the Applicant's request is granted.

b. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

If approved, the required engineering review by the City will ensure that this standard is met.

c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

As mentioned above, an engineered stormwater drainage plan will be required as a condition of approval if the request is granted.

Rockaway Beach Subdivision Ordinance Article 13.

THE ROCKAWAY BEACH SUBDIVISION ORDINANCE, IN ITS ENTIRETY, IS ATTACHED TO THIS REPORT AS "EXHIBIT A", AND IS INCORPORATED INTO THIS STAFF REPORT BY REFERENCE. BECAUSE MUCH OF THE SUBDIVISION ORDINANCE LANGUAGE FOCUSES ON PROCEDURE (PUBLIC HEARING AND NOTICE), FORM OF PLAT (TYPICALLY APPLIED AS CONDITIONS OF APPROVAL), AND PARTITIONS THAT DIFFER FROM SUBDIVISIONS, STAFF HAVE IDENTIFIED THE SUBSTANTIVE CRITERIA FROM ARTICLE 13 IN THE SECTION BELOW, TO FACILITATE REVIEW BY THE PLANNING COMMISSION.

Section 2. Purpose. The purpose of this ordinance is to enact subdivision and land partitioning regulations for the City which will provide for better living conditions within new land divisions; assure necessary streets, open space, utilities and public areas and provide for their installation or improvement; enhance and secure property values in land divisions and adjacent land; simplify and make land descriptions more certain and in general to promote the health, safety, convenience and general welfare of the people of Rockaway Beach.

The Planning Commission should carefully consider the request and determine if the proposed subdivision will be consistent with the purpose of the Subdivision Ordinance.

Section 32. Principles of Acceptability. A land division, whether by a subdivision, creation of a street, or a partitioning, shall conform to any development plans, shall take into consideration any preliminary plans made in anticipation thereof, and shall conform to the design standards established by this ordinance. The City Engineer shall prepare and submit to the City Council specifications to supplement the standards of this ordinance, based on standard engineering practices, concerning streets, drainage facilities, sidewalks, sewer and water systems.

If approved, the requirements of the City and conditions of the tentative plat approval will be addressed during the development stage.

Section 33. Streets.

1. The location, width and grade of streets shall be considered in their relation to existing and planned streets, to topographical conditions, to public convenience and safety, and to the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. Where location is not shown in a development plan, the arrangement of streets shall either:

    a. Provide for the continuation or appropriate projection of existing principal streets in surrounding areas; or

    b. Conform to a plan for the neighborhood approved or adopted by the Planning Commission to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical.

    Staff and the City Engineer have reviewed the preliminary development plans for the streets within Lake Lytle Estates IV-VII and their connections with existing City streets, and found that the proposed street system is generally acceptable for adequate circulation, width, grades, intersection angles, etc., considering existing streets and presence of wetlands and their preservation to the extend possible.

2. Street Widths. Street widths shall conform with City standards, except where it can be shown by the land divider, to the satisfaction of the Planning Commission, that the topography or the small number of lots or parcels served and the probable future traffic development are such as to unquestionably justify a narrower width. Increased widths may be required where streets are to serve commercial property, or where probable traffic conditions warrant. Approval or determination of street and area classification shall be made by the Planning Commission taking into consideration the zoning designations imposed by the Comprehensive Plan and the Development Code, the present use and development of the property in the area, the logical and reasonable prospective development of the area based upon public needs and trends, and the public safety and welfare.

    As indicated above, the proposed street width is consistent with minimum City standards and provides adequate width for parking, sidewalks, and other necessary improvements.

    The short section of street along Frances Street that narrows from the rest of the proposed streets has been proposed by the Applicant in order to avoid wetlands impacts. As noted in the Applicant's Burden of Proof, this section of Frances

Street narrows from 32 feet to 20 feet to reduce wetland impacts. Due to probable traffic volumes, the number of lots served and reduction to wetland impacts, the reduction of street width is appropriate.

3. Alignment. As far as is practical, streets other than minor streets shall be in alignment with existing streets by continuations of the center lines thereof. Staggered street alignment resulting in 'T' intersections shall, wherever practical, leave a minimum distance of 200 feet between the center lines of streets having approximately the same direction, and in no case, shall be less than 150 feet.

   The proposed alignment include direct extensions of existing streets, Tillamook Avenue and Necarney Street, the latter of which will continue through the site to serve future abutting development to the south. The proposed development meets the distance requirements for this section.

4. Future Street Extension. Where necessary to give access to, or permit a satisfactory future division of adjoining land, streets shall extend to the boundary of the subdivision or partition, and the resulting dead-end streets may be approved without a turnaround. Reserve strips including street plugs may be required to preserve the objectives of street extensions.

   As noted above, Necarney Street is proposed to continue through the site to serve future abutting development to the south. The Applicant's Burden of Proof states that Tillamook Avenue will not serve as a future street extension due to opposition from DSL.

5. Intersection Angles. Streets shall intersect at angles as practical except where topography requires a lesser angle, but in no case shall the acute angle be less than 60 degrees unless there is a special intersection design. An arterial or collector street intersecting with another street shall have at least 100 feet of tangent adjacent to the intersection unless topography requires a lesser distance. Other streets, except alleys, shall have at least 50 feet of tangent adjacent to the intersection unless topography requires a lesser distance. Intersections which contain an acute angle of less than 80 degrees or which include an arterial street shall have a minimum corner radius sufficient to allow for a roadway radius of 20 feet and maintain a uniform width between the roadway and the right-of-way line. Ordinarily, the intersection of more than two streets at any one point will not be approved.

   All intersections are at near-right angles.

6. Existing Streets. Whenever existing streets adjacent to or within a tract are of inadequate width, additional right-of-way shall be provided at the time of the land division.

No existing streets have inadequate width, therefore this standard is not applicable.

7. Reserved Strips. No reserved strips controlling the access to public ways will be approved unless the strips are necessary for the protection of the public welfare, and in these cases they may be required. The control and disposal of the land comprising the strips shall be placed within the jurisdiction of the City under conditions approved by the Planning Commission.

   No reserved strips are proposed, therefore this standard is not applicable.

8. Half Streets. Half streets shall be prohibited except they may be approved where essential to the reasonable development of the subdivision or partitions when in conformity with the other requirements of these regulations, and when the Planning Commission finds it will be practical to require the dedication of the other half when the adjoining property is divided. Whenever a half street is adjacent to a tract to be divided, the other half of the street shall be platted within the tract. Reserve strips may be required to preserve the objectives of half streets.

   No half streets are proposed, therefore this standard is not applicable.

9. Cul-de-Sac. A cul-de-sac shall be as short as possible and shall have a maximum length of 400 feet and serve building sites for not more than 18 dwelling units. A cul-de-sac shall terminate with a circular turnaround.

   The Applicant's Burden of Proof document states that no cul-de-sacs are proposed. However, staff identified the need for a response to this criterion since a cul-de-sac is proposed at the west end of Florence Street. This cul-de-sac is approximately 385 feet in length and serves 16 homes.

10. Alleys. When any lots or parcels are proposed for commercial or industrial usage, alleys of at least 20 feet in width may be required at the rear thereof with adequate ingress and egress for truck traffic unless alternative commitments for off-street service truck facilities without alleys are approved. Intersecting alleys shall not be permitted.

    No alleys are proposed, therefore this standard is not applicable.

11. Grades and Curves. Grades shall not exceed 6% on arterials, 10% on collector streets, or 12% on other streets. Center line radii of curves shall not be less than 300 feet on major arterials, 200 feet on secondary arterials, or 100 feet on other streets, and shall be to an even 10 feet. Where existing conditions, particularly the topography, make it otherwise impracticable to provide buildable sites, the

Planning Commission may accept steeper grades and sharper curves. In flat areas, allowance shall be made for finished street grades having a minimum slope, preferably, of at least .5%.

Francis Street is approximately 6.5% grade, which is the steepest in the proposed development. All other streets have a grade of less than 6%.

12. Marginal Access Streets. Where a land division abuts or contains an existing or proposed arterial street, the Planning Commission may require marginal access streets, reverse frontage lots with suitable depth, screen planting contained in a non-access reservation along the rear or side property line, or other treatment necessary for adequate protection of residential properties and to afford separation of through and local traffic.

No arterial streets are proposed and the site does not abut any arterial street, therefore this standard is not applicable.

13. Street Names. All street names shall be approved by the Planning Commission for conformance with the established pattern and to avoid duplication and confusion.

Tillamook Avenue and Necarney Street, which extend into the proposed development shall retain the same names in this development. There are no other streets in Rockaway Beach named Francis Court, Troy Street, and Florence Street.

14. Private Streets. The design and improvement of any private street shall be subject to all requirements prescribed by this ordinance for public streets. The land divider shall provide for the permanent maintenance of any street required for access to property in a private street subdivision or a major partition.

The Applicant's Burden of Proof addresses these standards. Staff concur with the Applicant in response to each of these criteria. A through review of design drawings by the City Engineer will ensure that the final design is in conformance with the above standards.

Section 34. Utility Easements. Easements for sewer, drainage, water mains, public utility installations, including overhead or underground systems, and other like public purposes shall be dedicated, reserved or granted by the land divider in widths not less than five (5) feet on each side of the rear lot or parcel lines, alongside lot or parcel lines and in planting strips wherever necessary, provided that easements of width, such as for anchorage, may be allowed when the purposes of easements may be accomplished by easements of lesser width as approved by the City.

The Applicant's Burden of Proof addresses this standard on page 36.

Section 35. Building Sites.

1. Size and Shape. The size, width, shape and orientation of building sites shall be consistent with the residential lot size provisions of the Development Code with the following exceptions.

    a. In areas that will not be served by a public sewer, minimum lot and parcel sizes shall permit compliance with the requirements of the Department of Environmental Quality and shall take into consideration problems of sewage disposal, particularly problems of soil structure and water table as related to sewage disposal by septic tank.

    Public sewer will serve this subdivision, therefore this standard is not applicable.

    b. Where property is zoned and planned for business or industrial use, other widths and areas may be permitted at the discretion of the Planning Commission. Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for the off-street service and parking facilities required by the type of use and development contemplated.

    The subject property is located in the R-3 Zone. Standards for lot size, setbacks, and other dimensional standards are identified above in this report. The submitted plans indicate that each lot will be provided an adequate building site in accordance with this standard.

2. Access. Each lot and parcel shall abut upon a street other than an alley for a width of at least 25 feet.

    The submitted plan indicates that this standard will be met.

3. Through Lots and Parcels. Through lots and parcels shall be avoided except where they are essential to provide separation of residential development from major traffic arteries or adjacent non-residential activities or to overcome specific disadvantages of topography and orientation. A planting screen easement at least ten (10) feet wide and across which there shall be no right of access may be required along the line of building sites abutting such a traffic artery or other incompatible use.

    No through lots or parcels are proposed.

4. Lot and Parcel Side Lines. The lines of lots and parcels, as far as is practicable, shall run at right angles to the street upon which they face, except that on curved streets they shall be radial to the curve.

   The Applicant's submitted plans indicate that this standard will be met to the extent possible.

Section 36. Blocks.

1. General. The length, width and shape of blocks shall take into account the need for adequate building site size and street width and shall recognize the limitations of the topography.

   The submitted plans indicate that each lot will be provided an adequate building site in accordance with this standard.

2. Size. No block shall be more than 1,000 feet in length between street corner lines unless it is adjacent to an arterial street or unless the topography or the location of adjoining streets justifies an exception. The recommended minimum length of blocks along an arterial street is 1,800 feet. A block shall have sufficient width to provide for two tiers of building sites unless topography or the location of adjoining streets justifies an exception.

   Block size is limited by the location of existing streets, wetlands and the Rockaway Beach City limits, as detailed in the Applicant's Burden of Proof.

3. Walkways. The applicant may be required to dedicate and improve ten (10) foot walkways across blocks over 600 feet in length or to provide access to school, park, or other public areas.

   The Applicant's Burden of Proof states that the east-west blocks between Tillamook Avenue and Necarney Street are slightly more than 600 feet. A pedestrian path is proposed midblock to connect Florence and Troy Streets, extending north of Troy Street to the common open space tract.

Section 37. Large Building Sites. In dividing tracts into large lots or parcels which at some future time are likely to be redivided, the Planning Commission may require that the blocks be of such size and shape, be so divided into building sites and contain such site restrictions as will provide for extension and opening of streets at intervals which will permit a subsequent division of any tract into lots or parcels of smaller size.

No developable tracts or large building sites are proposed, therefore this standard is not applicable.

Section 38. Water Courses. The land divider shall, subject to riparian rights, dedicate a right-of-way for storm drainage purposes, conforming substantially with the lines of any natural water course or channel, stream or creek that traverses the subdivision or partitions, or, at the option of the land divider, provide, by dedication, further and sufficient easements or construction, or both to dispose of the surface and storm waters.

The Applicant's Burden of Proof states that the majority of wetlands are located in common open space tracts and will remain unaltered. The remaining 3,100 square feet of wetlands are located on private lots and will be protected through CC&Rs.

Section 39. Land for Public Purposes.

1. The Planning Commission may require the reservation for public acquisition, at a cost not to exceed acreage values in the area prior to subdivision, or appropriate areas within the subdivision for a period not to exceed one year providing the City has an interest or has been advised of interest on the part of the State Highway Commission, school district or other public agency to acquire a portion of the area within the proposed subdivision for a public purpose, including substantial assurance that positive steps will be taken in the reasonable future for the acquisition.

2. The Planning Commission may require the dedication of suitable areas for the parks and playgrounds that will be required for the use of the population which is intended to occupy the subdivision.

   No parks or playgrounds are proposed. The Applicant's Burden of Proof states that 20 percent of the site is common open space for the benefit of the community, which are environmentally sensitive wetlands.

Section 40. Unsuitable Land. The Planning Commission may refuse to approve a subdivision or partition when the only practical use which can be made of the property proposed to be subdivided or partitioned is a use prohibited by this code or law, or if the property is deemed unhealthful or unfit for human habitation or occupancy by the County or State health authorities, or, if the property is deemed unhealthful or unfit for human habitation or occupancy by the county or state health authorities.

No development is proposed in the SA Zone. The proposed use in the R3 Zone is detached single-family residences.

Section 41. Land Subject to Inundation. If any portion of land proposed for development is subject to overflow, inundation or flood hazard by, or collection of, storm waters, an adequate system of storm drains, levees, dikes and pumping systems shall be provided.

The portion of the site in the Flood Hazard Overlay Zone is proposed as open space tract which will remain undisturbed. The Applicant's Burden of Proof states that all streets and lots will be above the Base Flood Elevation (BFE), therefore all homes will be built above the BFE as required by City standards. A series of catch basins will collect stormwater runoff, which will be directed through a pipe system to swales for treatment, before being discharged into the adjacent wetlands. The onsite stormwater detention systems will be built to City standards.

Section 42. Proposed Name of Subdivision. No tentative subdivision plat or subdivision plan or subdivision shall be approved which bears a name approved by the County Surveyor or County Assessor, which is the same as similar to or pronounced the same as the name of any other subdivision in Tillamook County unless the land platted is contiguous to and platted by the same party that platted the subdivision bearing that name, or unless the party files and records the consent of the party that platted the contiguous subdivision bearing that name. All subdivision plats must continue the lot numbers and if used, the block numbers of the subdivision plat of the same name last filed.

If the subdivision is approved, staff recommends that a condition of approval that the final subdivision name as identified on the plat will be one that has gained approval by the Tillamook County Surveyor.

Section 43. Improvement Standards and Approval In addition to other requirements, all improvements shall conform to the requirements of this ordinance and any other improvement standards or specifications adopted by the City, and shall be installed in accordance with the following procedure:

1. Improvement work shall not be commenced until plans have been checked for adequacy and approved by the City. To the extent necessary for the evaluation of the proposal, the plans may be required before approval of the preliminary plat of a subdivision or partition. All plans shall be prepared in accordance with requirements of the City.

2. Improvement work shall not be commenced until the City has been notified in advance, and if work has been discontinued for any reason, it shall not be resumed until the City has been notified.

3. All required improvements shall be constructed under the inspection, and to the satisfaction, of the City. The City may require changes in typical section and details if unusual conditions arise during construction to warrant such change in the interests of the City.

4. All underground utilities, sanitary sewers and storm drains installed in streets shall be constructed prior to the surfacing of such streets. Stubs for service connections for all underground utilities and sanitary sewers shall be placed to such length as

will obviate the necessity for disturbing the street improvements when service connections are made.

5. A map showing all public improvements as built shall be filed with the City Recorder upon completion of the improvements.

If the subdivision is approved, improvements as identified above will be required as conditions of approval. Review of the design details by the City Engineer and necessary City inspections will ensure that all improvements conform to applicable standards and specifications of the City.

Section 44. Improvement Requirements. Improvements to be installed at the expense of the subdivider or applicant and at the time of subdivision or partition:

1. Streets. Public streets, including alleys, within the subdivision and public streets adjacent but only partially within the subdivision shall be improved. Upon completion of the street improvement, monuments shall be re- established and protected in monument boxes at every public street intersection and all points of curvature and points of tangency on their center lines.

2. Structures. Structures specified as necessary by the City, for drainage, access and public safety shall be installed.
3. Sidewalks. Sidewalks shall be installed along both sides of each street and in pedestrian ways unless a variance has been granted by the Planning Commission.

4. Sewers. Sanitary sewer facilities connecting with the existing City sewer system and storm water sewers, of design, layout and location approved by the City, shall be installed.

5. Water. Water mains and fire hydrants of design, layout and locations approved by the City shall be installed.

6. Railroad Crossings. Provision shall be made for all railroad crossings necessary to provide access to or including the preparation of all documents necessary for application to the Oregon State Public Utilities Commissioner for the establishment and improvement of such crossing. The cost of such railroad crossing improvement including, but not limited to, the construction of signals, and other protective devices required by the Public Utilities Commissioner, shall, except for that portion payable by the railroad company, be borne by the subdivider or applicant.

7. Underground Utilities. This provision shall apply only to utility lines to be installed to provide service within the area to subdivided. Utility lines, including, but not limited to, electricity, communications, street lighting and cable television, shall

be required to be placed underground. Appurtenances and associated equipment such as surface- mounted transformers, pedestal-mounted terminal boxes and meter cabinets may be placed above the ground. The Planning Commission may waive the requirements of this section if topographical, soil, or other conditions make such underground installations unreasonable or impractical. The applicant shall make all necessary arrangements with the serving utility or agency for underground installations provided hereunder; all such installations shall be made in accordance with the tariff provisions of the utility, as prescribed by the State Public Utilities Commissioner.

8. Street Lighting. Street lighting of an approved type shall be installed on all streets at locations approved by the City.

9. Street Trees. Street trees may be required by the City.

10. Street Name Signs. All streets shall be legibly marked with street name signs, not less than two (2) in number at each intersection, according to specifications furnished by the City.

11. Improvement of Easements. Whenever the safety of adjoining property may demand, any easement for drainage or flood control purposes shall be improved in a manner approved by the City.

12. Off-Site Street Improvements. All off-site street improvements, where required shall conform to the standards of the City.

    As indicated above, the City Engineer will provided a through review of an approved subdivision's design details for all required improvements, to ensure that these standards have been satisfied.

C. STAFF SUMMARY

The Applicant has requested approval of a substantial subdivision containing 85 lots. As proposed, the subdivision would contain full street improvements including curbs, gutters, and sidewalks on both sides of the street, and with paved street surfacing in accordance with City specifications. The application contains responses to the appliable criteria of the Rockaway Beach Zoning and Subdivision Ordinances, in the submitted Burden of Proof document, with details of street design also included in larger format prints that are available for inspection at City Hall.

Staff have solicited comments from other affected agencies and stakeholders, and those comments have been included in the record. Most notably, the City Engineer has identified several necessary improvements to existing City facilities including water and sewer services, stressing the importance of providing adequate water supply to meet fire flow requirements.

In general, necessary public infrastructure improvements that are triggered by a proposed development must be provided by the developer of the project. If approved, conditions of approval related to infrastructure improvements can be attached, which must be met prior to final plat approval.

Staff have identified the substantive criteria for review of the request by the Planning Commission, and included the criteria in this report, along with comments where appropriate. However, at the public hearing any party may provide testimony addressing these criteria or other criteria the party believes is applicable to the request.

D. CONCLUSION

The Planning Commission should carefully consider the request, including all oral and written testimony on record and presented at the public hearing, including comments from the City Engineer, government agencies, and other interested parties. After considering testimony as it relates to this applicable criteria, the Planning Commission will need to make a decision on the request.

If the Commission determines that the proposal for the new 85 lot subdivision meets the standards of the Rockaway Beach Zoning and Subdivision Ordinances, it can make a motion to approve the request, including a statement that generally reflects the facts and rationale relied upon to reach the decision. The motion should also direct staff to prepare findings, conclusions, and a final order to implement the decision.

A motion to deny the request should set forth the general facts and rationale for the decision and direct staff to prepare the final order.

A decision to approve or deny the request will be subject to a 15-day appeal period that will begin after written findings to support the decision have been signed by the Planning Commission Chair.

E. STAFF RECOMMENDATION

Approval, with conditions as identified below.

In the event of an approval, staff offer the following conditions for the Commissioner's consideration:

1. Approval is based upon the submitted plan. Any substantial change in the approved plan shall be submitted to the City of Rockaway Beach as a new application for a subdivision.

2. Tentative approval of the subdivision shall be for a period of one year. The Planning Commission, upon written request by the Applicant, may grant an extension of the tentative plan approval for a period of one year. Failure to obtain a time extension or final plat approval prior to expiration of the tentative plan shall render the tentative plan approval void. Such yearly time extensions will be necessary until all four phases of the development have been granted final plat approval.

3. The Applicant shall provide documentation that the proposed subdivision name has been approved and reserved by the Tillamook County Surveyor.

4. The Applicant shall provide an Engineer's Estimate to the City of Rockaway Beach for the public improvements required for each phase for bonding and for factoring the plan review fee by the City Engineer.

5. The Applicant shall provide updated preliminary plat plans, and all additional plat plans, with scales and north arrow to each sheet for review by the City Engineer.

6. The Applicant shall provide updated preliminary plat plans, and all additional plat plans, with existing waterline sizes for review by the City Engineer.

7. The Applicant shall provide a topographic survey stamped by a professional license surveyor.

8. The Applicant shall provide a phasing plan for review by the City Engineer for each phase, depicting how pedestrian circulation, traffic circulation and utility extensions will be provided.

9. The Applicant shall submit detailed engineered plans for review by the City Engineer, that demonstrate that City standards for access, street improvements, sewer and water services, fire flow, storm water drainage, and other improvements deemed necessary as determined by the City Engineer have been satisfied. The cost for plan review by the City Engineer shall be the responsibility of the Applicant/Developer.

10. The Applicant shall provide a traffic study for the subdivision and NE 12th Avenue.

11. The Applicant shall provide a study of the impacts to the NE 12th Avenue bridge and analysis of the bridge structural capacity.

12. The Applicant shall provide the City Engineer with a preliminary profile of the streets, including the extensions for 200 feet past the project on all streets. The Applicant shall include vertical curves and large culverts in the profile for review.

13. The Applicant shall extend the Tillamook Avenue full street improvements to the southern edge of the property.

14. The Applicant shall extend the Necarney Street improvements to the north end of the existing cul-de-sac and show the culvert size on the north end. The Applicant shall provide easements for utility extensions east of Necarney Street into the UGB.

15. The Applicant shall place street barricades at the end of the phases and southern end of Necarney Street.

16. The Applicant shall use curbs and gutters on street sections per City standards. The Applicant shall follow ODOT design for pavement callouts per City standards.

17. The Applicant shall provide the City Engineer with pipe inverts for the storm crossing at the north end of Tillamook Avenue and for Necarney Street crossing.

18. The Applicant shall extend the pavement north to Charlotte Street and show the culvert size on the north end. The City Engineer will review existing pavement from Charlotte Street south to the site to determine its ability to handle traffic.

19. The Applicant shall add stationing to all roads and identify between what stations the road sections will be used at and supply this information to the City Engineer for review.

20. The Applicant shall provide easements for any sidewalks on public street sections that expand outside of the right-of-way.

21. The Applicant shall provide the City Engineer with sewer inverts, rim elevations, and existing ground shots across the wetlands for review. The sewer line shall be in a casing. The sewer bore option will require a public sewer easement. The Applicant shall provide Department of State Lands and U.S. Army Corps of Engineers approval for this sewer bore.

22. The Applicant shall provide the City Engineer with preliminary profiles with slopes for all gravity sewers.

23. The Applicant shall provide an all-weather access to all sewer manholes located in the easement or right-of-way.

24. The Applicant shall extend the maintenance road and easement beyond the sewer manhole at least 5 feet.

25. The Applicant shall construct a new Lake Lytle Pump Station and force main to 6th Street prior to the first phase. The Applicant shall submit a pre-design report to the City Engineer for review and approval.

26. The Applicant will provide preliminary sewer inverts at manholes. The Applicant will provide sewer stubs on Florence Street as determined by the City Engineer.

27. The Applicant shall provide concurrence from Department of State Lands and U.S. Army Corps of Engineers for the wetland in the common space and obtain permits prior to approval of the construction drawings. The approval from Department of States Lands must be current (no more than 2 years old).

28. The Applicant shall provide a geotechnical report covering roadway construction, including wet weather sections and fills on the lot.

29. The Applicant shall ensure all lots are numbered sequentially throughout the subdivision and provided verification from the County Surveyor.

30. The Applicant shall hold a pre-design conference with the City Engineer prior to beginning the final design to ensure utility line locations conform to City standards and confirm mainline locations.

31. The Applicant shall provide a public utility easement at the north end, west side of Tillamook Avenue. The Applicant shall provide evidence to the City Engineer that all public utility easements will not impact stormwater quality swale.

32. On the 32-foot public street section of Francis Court, the Applicant shall reduce the swale width to 4 feet so that it is entirely in the right-of-way, ensure the maximum depth of the swale is 6 inches, and construct the swale to City standards.

33. The Applicant shall modify the easement description on the 32-foot public street section for Florence Street and Troy Street to include utility/road construction.

34. The Applicant will provide the City Engineer with a survey or the roadway, extensions and drainage areas. This survey must extend into the wetlands and into the existing roadways.

35. The Applicant shall provide a storm drainage study, including basin map and flow rates.

36. The Applicant shall provide details for roof drainage piping for lots 19 through 21, block 12, and all lots on the west side of Necarney Street to the City Engineer for review.

37. The Applicant shall provide a cross section and plan view of the proposed swales, including tract 3 and 4. The Applicant shall provide the City Engineer with the outlet elevation to the wetlands.

38. The Applicant shall provide the City Engineer with detailed information for how the creek/ditch at the south end of Nacarney Street, which crosses under the sidewalk and through Block 20, Lot 5, will impact to the roadway, utilities and lots.

39. The Applicant shall submit evidence that all necessary permits and approval from the U.S. Army Corps of Engineers and Oregon Department of State Lands have been obtained for impacts to wetlands in accordance with the approval plan.

40. The Applicant shall submit evidence of approval from the State Fire Marshall for all fire hydrant locations, street widths, and applicable Fire Code requirements.

41. The Applicant shall provide evidence that a 1200C Permit has been obtained from the Oregon Department of Environmental Quality for erosion control prior to grading and construction of the development.

42. The Applicant shall provide the City Engineer with a street lighting plan to ensure lighting is provided on pedestrian paths.

43. The Applicant shall construct sidewalks and directional ADA ramps on all public frontage areas. The Applicant shall provide the City Engineer with information on the construction materials of the pavement section of the pedestrian path to ensure compliance with City standards, increase the rock section of the path to 6 inches and ensure positive drainage away from the trail.

44. Prior to final plat approval, the Applicant shall be responsible for providing and installing all improvements including sewer, water, street and sidewalks, stormwater management facilities, street lights, street name signs, and street trees in accordance with Subdivision Ordinance Section 44 entitled Improvements Required, and in accordance with the City Engineer approved plans.

45. The Applicant shall be responsible for all costs necessary for off-site public infrastructure improvements that are triggered by the proposed new subdivision.

46. The applicant shall establish a homeowner's association for the development, and all open space within the development shall be owned and maintained by the homeowner's association. The required homeowner's association shall be responsible for any and all necessary stormwater maintenance facilities that serve the development. The required homeowner's association shall be responsible for maintaining the pedestrian paths within the development. The required homeowner's association shall be responsible for maintaining the storm water quality tracts.

47. The Applicant shall record a deed restriction or other covenant applicable to each lot in the subdivision, in a form acceptable to the State of Oregon Fish and Wildlife Department, that indemnifies ODFW for any damage or inconvenience to persons, real property, or personal property caused by big game and furbearing animals.