

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE: Adoption of Ordinance No. 422, a preliminary formal subdivision for 18 zero-lot-line lots and 1 critical area tract located at 1160 N 198th Street

DEPARTMENT: Planning and Development Services

PRESENTED BY: Joseph W. Tovar, FAICP, Director
Glen Pickus, AICP, Planner II

ISSUE STATEMENT:

The issue before Council is an application for a preliminary formal subdivision that would create 18 zero-lot-line lots and 1 critical area tract located at 1160 N 198th Street.

The Planning Commission unanimously recommends that Council approve the preliminary formal subdivision as recommended by staff and detailed in Exhibit B.

Shoreline Municipal Code (SMC) 20.30.060 requires preliminary formal subdivision applications to be processed as a quasi-judicial or "Type-C" action and an open record public hearing. The Planning Commission conducted an open record hearing on March 16, 2006. Council review of Type-C actions must be based on the written record and no new testimony may be heard.

The applicant, Prescott Homes, proposes to subdivide two existing parcels into 18 building lots and one critical area tract. The property is located on the northern shore of Echo Lake. See Exhibit A for an aerial view of the site, the proposed site plan and plat map, and the type of buildings the applicant envisions constructing on the site.

Eighteen zero-lot-line townhomes grouped into four buildings are proposed. The proposed surface water management facilities incorporate Low Impact Development BMPs (Best Management Practices) as provided for in the 2005 King County Surface Water Design Manual. Those BMPs include pervious pavement and rain gardens to reduce/eliminate runoff and to improve water quality.

The proposed critical area tract next to Echo Lake includes a Type II wetland with a 50-foot buffer. This application became vested on Nov. 17, 2005 when it was determined to be complete. Therefore, the project was reviewed using the critical area regulations in effect at that time and not the recently adopted new critical area regulations. The previous regulations required a 100-foot buffer, but allowed for a 50-foot buffer if the proposed use is considered to be low impact or if wetland and buffer enhancement are implemented. The proposed use is low impact as defined in SMC 20.80.330(D)(1). Also, wetland and wetland buffer enhancement are proposed which meet the requirements of SMC 20.80.330(D)(2). The enhancement includes removal of invasive

plants to be replaced with native plants appropriate for wetlands and wetland buffers, installation of bird and bat boxes, and partial removal of an existing concrete bulkhead to improve the connectivity between the wetland and Echo Lake.

The Comprehensive Plan designates the site as High Density Residential to provide a transition area between high intensity commercial uses and lower intensity residential uses. The proposal serves that purpose and also provides infill development in support of the Comprehensive Plan's goal to accommodate growth that is compatible with the surrounding environment.

At the public hearing, the Planning Commission heard from applicant representatives and several area residents. The Commission's discussion included the effectiveness and maintenance of the low impact development BMPs and the lack of a children's play area. The Commission was supportive of the innovative use of the low impact design BMPs and let stand staff's interpretation of SMC 20.50.160(B) and the exception rule for play areas.

ALTERNATIVES ANALYZED:

The following options are within the discretion of the Council and have been analyzed by staff:

- The Council could approve the preliminary formal subdivision with conditions recommended by the Planning Commission and staff by adopting Ordinance No. 422, included as Exhibit C.
- The Council could approve the preliminary formal subdivision, but amend the Planning Commission's Findings of Fact, Conclusions and Conditions, included as Exhibit C.
- The Council could amend the Planning Commission's Findings of Fact and Conclusions and deny the preliminary formal subdivision.

FINANCIAL IMPACTS:

There are no direct financial impacts to the City.

RECOMMENDATION:

The Planning Commission and staff recommend the Council adopt Ordinance No. 422, included as Exhibit C, thereby approving the preliminary formal subdivision with conditions for 18 building lots and one critical area tract located at 1160 N 198th Street.

Approved By: City Manager  City Attorney 

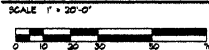
EXHIBITS:

- Exhibit A: Vicinity Map, Site Plan, Plat Map and Conceptual Building Elevations
Exhibit B: Planning Commission Staff Report, March 16, 2006
Exhibit C: Ordinance 422 and Planning Commission Findings, Conclusions, and Recommendation
Exhibit D: Draft Planning Commission minutes for meeting of March 16, 2006

Exhibit A: Vicinity Map



SHORELINE TOWNHOMES



QUINER:

LANDSCAPE ARCHITECT:
Wetmore Design Group, Inc.
2328 East Madison Street
Seattle, WA 98112
206-322-1732
Contact: Michael Kleer

ARCHITECT:

CIVIL ENGINEER:
DAVIDO CONSULTING C
5804 Roosevelt Way N
Seattle, WA 98108
206-573-0024
Contact: Nathan Davis

ENVIRONMENTAL CONSULTANT

SURVEY
GEODATUM, INC.
77575 SE 64th Pl, Ste 266
Issaquah, WA 98027
425-837-8083
Contact: Thomas Woldendorp

A-O

A-1 FIRE LANE PLAN
 A-2 PRELIMINARY LONG PLAT / EXISTING TOPOGRAPHY
 A-3 PRELIMINARY LONG PLAT / BOUNDARY AND LOT LINES
 A-4 PRELIMINARY LONG PLAT / INGRESS/EGRESS/PEDESTRIAN AND UTILITY EASEMENTS
 C-01 CIVIL COVER SHEET
 C-02 CIVIL SITE PLAN
 C-03 TRUCK PLAN
 C-04 FINISHED GRADING PLAN
 C-05 PAVEMENT PLAN
 C-06 WATER PLAN
 C-07 SEWER PLAN
 C-08 UTILITY PLAN
 C-09 PROFILES AND DETAILS
 C-10 CIVIL DETAILS
 C-11 CIVIL DETAILS
 C-12 CIVIL DETAILS
 L-01 LANDSCAPE
 L-02 WETLAND / BUFFER PLANTING PLAN
 L-03 WETLAND / BUFFER PLANTING DETAILS
 L-04 WETLAND / BUFFER PLANTING NOTES

STANDARD	ZONE R-4B
BASE DENSITY 6.4/s	48 du/s AREA 43,830 SF 1.3 ac
MAX DENSITY PROPOSED DENSITY	12 du/s 16 du/s
MIN LOT WIDTH (except "frontal")	30'
MIN LOT AREA (except "frontal")	2500 SF
MIN FRONT SETBACK	10' NEAREST PROPERTY LINE
MIN REAR SETBACK	5'
MIN SIDE SETBACK	5'
BASE HEIGHT	35' MAX at pitched roof R-40S ALLOWING R-40S
MAX BLDG COVERAGE	100%
PROPOSED BULKHEAD CONFORMANCE	20R 10/24 4 SF
MAX PERCENT SURFACE PAVING	40%
PROPOSED INTERV. SURFACING	SEE CIVIL DRAWINGS
OPEN SPACE	170 SQ YARD MIN 30% OF LOT AREA 30% OF LOT AREA
RECYD PARKING	2 PER UNIT
2BR AND 3BR UNITS	3 PER UNIT
PROPOSED PARKING	30 RESIDENT STALLS 3 GUEST STALLS

ADDRESS:

SCOPE OF WORK:
Construct (1) new townhome buildings w/
attached garages on two vacant lots.
Proposed are (1) 3 Unit Building, (1) 4 Unit
Building, (1) 5 Unit Building and (1) 6 Unit
Building. See Civil, Landscaping and Wetland
drawings for scope of other proposed
improvements.

LEGAL DESCRIPTION

SEE SURVEY

TAX PARCEL NUMBER:
2227300071 & 2227300070

OCCUPANCY:

R-3
CONSTRUCTION TYPE:
V-B w/ (2) 1-Hour rated Party Walls

CODES:

2003 International Residential Code (IRC),
2008 Washington Energy Code and all
applicable provisions of prevailing local, state,
and federal codes and ordinances, including
appropriate licensing laws including any local
amendments.

NOTE:

TRASH CONTAINERS TO BE STORED IN GARAGE
THERE ARE NO WINDOWS IN THE GARAGE
NO YARD LIGHTS TO DIRECTLY ILLUMINATE
OTHER PROPERTIES, SHIELD AS REQ'D

REFER TO CIVIL DRAWINGS FOR ALL WATER
MAINS, VALVES, FIRE HYDRANT AND
FRONTAGE IMPROVEMENTS

REFER TO

REFER TO SURVEY FOR LEGAL DESCRIPTION
ALL RECORDED EASEMENTS EXISTING SITE
FEATURES

0 1 mile

7209 Greenwood Avenue North
Seattle, Washington 98103
206-752-2911
Fax 752-6624

CLIENT & APPLICANT:
Prescott Homes, Inc.
10813 NE 38th Place, #17
Kirkland, WA 98033
(425) 822-2829

SITE PLAN

[illegible]

A-0

SE 1/4 SEC. 6 ,TWP. 26N ,RGE. 4E ,W.M.

DRAFTER: MCG
DESIGNER: MCG
PROJ. ENGR./SURV.: TNW
DATE: 10-25-05
PROJECT NO.: 2005-25
SHEET PP2 OF 2

EXHIBIT A – Conceptual Elevations



EXHIBIT A – Conceptual Elevations

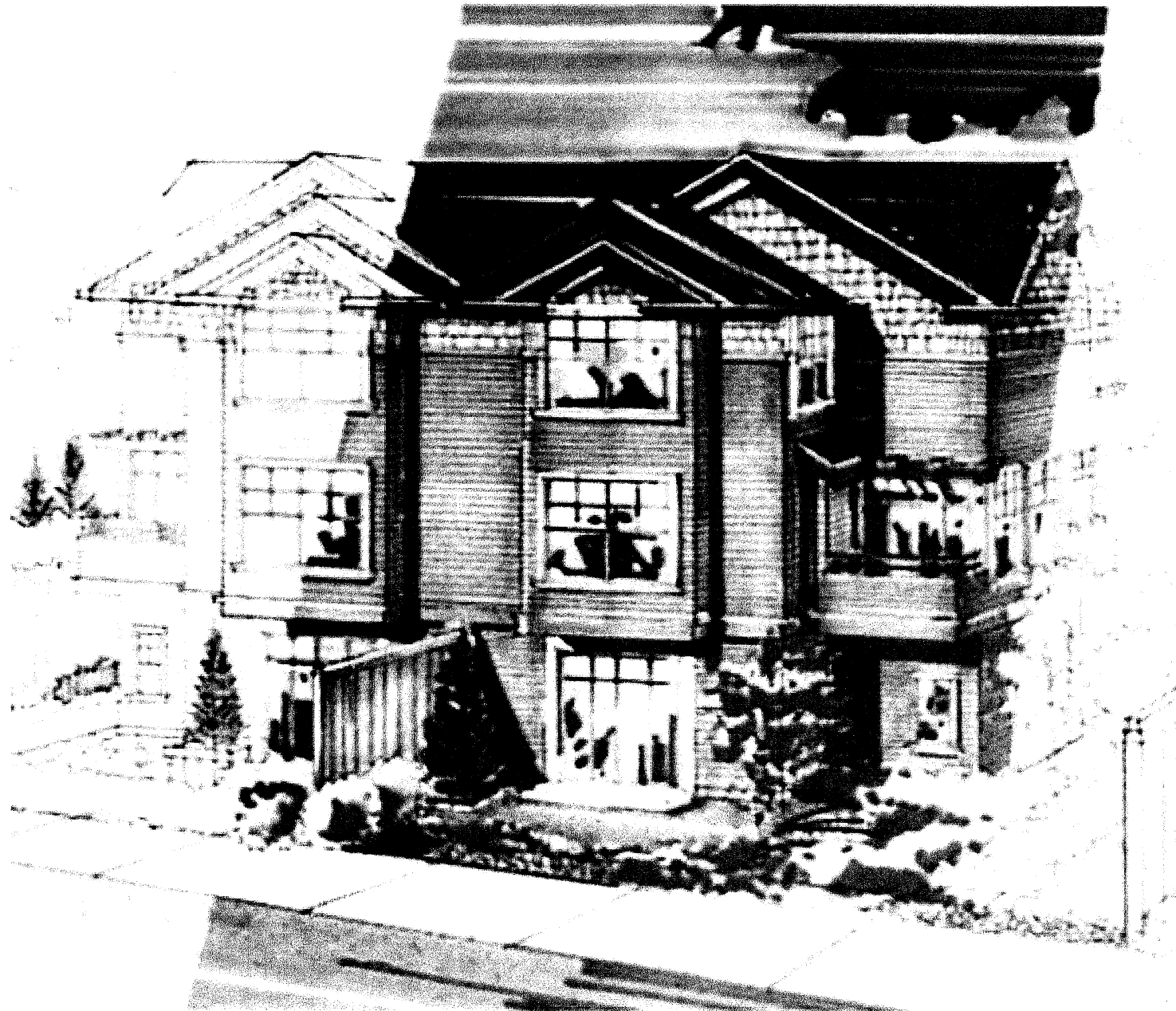


EXHIBIT A – Conceptual Elevations



Planning Commission Meeting Date: March 16, 2006**Agenda Item: 7.i**

**PLANNING COMMISSION AGENDA ITEM
CITY OF SHORELINE, WASHINGTON**

AGENDA TITLE: Preliminary Formal Subdivision Review for Shoreline Townhomes DEPARTMENT: Planning and Development Services PRESENTED BY: Glen Pickus, AICP, Planner II
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A. PROPOSAL

The proposed Preliminary Formal Subdivision (File No. 201478) would create 18 zero-lot-line lots and a critical area tract (wetland and its buffer) on two contiguous parcels at 1160 N 198th St. (**Attachment A**). The development would consist of 18 townhome units in 4 buildings (**Attachment B**). The applicant is proposing a Wetland and Buffer Enhancement Plan (**Attachment C**) to allow for the establishment of minimum wetland buffer widths. Onsite improvements would include typical water, sanitary sewer, and other utilities. Out of the ordinary is the proposed surface water management plan which employs Low Impact Design as provided for in the 2005 King County Surface Water Management Manual. Primary elements of Low Impact Design are the use of pervious pavement and rain gardens to limit, control and treat stormwater runoff.

Under SMC 20.30.060 Preliminary Formal Subdivisions are a quasi-judicial Type C decision in which the Planning Commission is required to hold an open-record public hearing to consider the application and public testimony then make a recommendation for approval, approval with conditions or denial to the City Council which is the decision-making authority for Preliminary Formal Subdivisions.

B. FINDINGS OF FACT**1. PROJECT SITE CHARACTERISTICS**

- 1.1 The project site consists of two contiguous lots (Tax Parcel Nos. 2227300070 & 2227300071) totaling approximately 49,531 square feet (1.1 acres).
- 1.2 The site is currently vacant, although a single family residence was located on the site until it was demolished in 1995. Remaining on site are a 500-gallon underground home heating oil tank and concrete slabs and walkways.
- 1.3 The site is located on the north shoreline of Echo Lake. It is generally flat, sloping gently to the southeast, towards the lake, with slopes less than 2%. The southeast corner of the site contains a Type II wetland adjacent to the lake. The wetland is approximately 1,600 square feet in area.
- 1.4 One significant tree (to be retained) is located on the site, within the proposed wetland buffer.

2. NEIGHBORHOOD CHARACTERISTICS

- 2.1 The project site is located in the Echo Lake Neighborhood, south of N 200th Street and east of Aurora Avenue N.

- 2.2 Adjacent to the site are multi-family residential developments to the east, west and south and an office building to the north. Echo Lake Park and a portion of the Interurban Trail are approximately 360 feet east of the site. The Aurora Village Transit Center and retail shopping center are located about 350 feet north of the site. West of the site up to Aurora Avenue N are some single family residences and commercial buildings.
- 2.3 N 198th Street is classified as a local street. Aurora Avenue N is a principal arterial. N 200th Street is a collector arterial. N 199th Street is a private street.

3. COMPREHENSIVE PLAN LAND USE DESIGNATION AND POLICY SUPPORT

- 3.1 The Comprehensive Plan land use designation for the site is High Density Residential. Policy LU14 in the Comprehensive Plan envisions High Density residential areas as transition areas between high intensity uses and lower intensity residential uses. All residential uses are permitted in High Density Residential areas.
- 3.2 LU23: "Ensure that land is designated to accommodate a variety of types and styles of housing units adequate to meet the needs of Shoreline citizens."
- 3.3 H1: "Encourage a variety of residential design alternatives that increase housing opportunities in a manner that is compatible with the character of existing residential and commercial development throughout the city."
- 3.4 H6: "Encourage infill development on vacant or underutilized sites to be compatible with existing housing types."

4. REGULATORY AUTHORITY

- 4.1 Shoreline Municipal Code (SMC) 20.30.060 requires Preliminary Formal Subdivisions to be processed as a quasi-judicial or "Type-C" action. Type-C actions require an open record public hearing and review by the Planning Commission, which then forwards a recommendation to the City Council for final approval.
- 4.2 Applicable regulatory controls set forth in the SMC include:
 - SMC 20.30 – Procedures and Administration
(Subdivisions – SMC 20.30.360-480)
 - SMC 20.40 – Zoning and Use Provisions
 - SMC 20.50 – General Development Standards
(Multi-family Design Standards – SMC 20.50.120-210)
 - SMC 20.60 – Adequacy of Public Facilities
 - SMC 20.70 – Engineering and Utilities Development Standards
 - SMC 20.80 – Critical Areas (Wetlands – SMC 20.80.310-350)
- 4.3 Revised Code of Washington (RCW) 36.70B.040 Determination of Consistency
- 4.4 RCW 58.17.110 Approval/Dis approval of Subdivisions

5. PROCEDURAL HISTORY

- 5.1 Preapplication meetings were held on June 21, 2005 and Sept. 9, 2005.
- 5.2 A Neighborhood Meeting was held on July 27, 2005.
- 5.3 A third party review of the applicant's wetland delineation report (**Attachment D**) by the City's consultant, The Watershed Company, was completed Oct. 18, 2005 (**Attachment E**). The review agreed with and supported the report.

- 5.4 Preliminary Formal Subdivision (File No. 201478) and Site Development Permit (File No. 108437) applications and a State Environmental Policy Act (SEPA) checklist were received on Nov. 8, 2005 (**Attachment F**).
- 5.5 The applications were determined to be complete on Nov. 17, 2005.
- 5.6 A Notice of Application for the proposal was issued on Nov. 23, 2005, with the public comment period ending Dec. 7, 2005. Because the site was not posted with the Notice of Application in a timely manner, a Revised Notice of Application was issued on Dec. 1, 2005, with the public comment period ending Dec. 15, 2005 (**Attachment G**).
- 5.7 A deviation from the provisions of the City-adopted 1998 King County Surface Water Design Manual (as provided for by the manual's general adjustment process) to allow implementation of the 2005 King County Surface Water Design Manual (KCSWDM) stormwater management flow control Best Management Practices was approved on Feb. 1, 2006 (**Attachment H**).
- 5.8 A SEPA threshold Mitigated Determination of Nonsignificance (MDNS) for the proposal was issued on Feb. 7, 2006 (**Attachment I**) with the administrative appeal and comment period ending on Feb. 21, 2006. No comments or appeals were received.
- 5.9 A Notice of Public Hearing was issued on Feb. 28, 2006 for the Planning Commission open record public hearing on March 16, 2006 (**Attachment J**).

6. PUBLIC COMMENT AND STAFF RESPONSE

- 6.1 **Public Comment** – A total of seven comment letters and e-mails were received.
- 6.2 **Staff Response regarding project name** – Three of the comment letters (**Attachment K**) objected to the original name for the project, Echo Lake Townhomes. Staff requested the applicant change the name of the project. The project is now named Shoreline Townhomes.
- 6.3 **Staff Response regarding impact on Echo Lake** – Three letters (**Attachment L**) commented on potential negative impacts of the project on Echo Lake's water quality and wildlife habitat. With wetland and buffer enhancement and construction of stormwater management flow control BMPs, the quality of surface water flowing from the site into Echo Lake will be improved over existing conditions. The hydrology of the wetland will be improved with the partial removal of an existing concrete wall separating the wetland from the lake and installation of dispersion trenches.

The concern that erosion into the lake would be increased by removing the existing concrete wall at the edge of the lake was addressed by modifying that proposal to include removal of only the portion of the wall above the mean high water mark, which will allow a hydraulic connection between the wetland and the lake while still stabilizing the shoreline.

Concerns about increased erosion caused by the concentration of pedestrian activities near the lake were addressed by modifying the wetland enhancement plan to include a raised boardwalk and viewing platform near the lake and fencing, signage, and increased plantings of rose and snowberry plants along pedestrian paths to encourage pedestrians to off the ground near the wetland and lake.

Wildlife habitat opportunities will be increased with removal of invasive non-native plants, planting of native plants, and installation of bird and bat boxes in the wetland buffer.

- 6.4 **Staff response regarding pervious concrete maintenance** – One of the letters referred to in 6.3 above also commented on the need to properly maintain the proposed pervious concrete roadway. The staff recommended conditions of approval include the establishment of a homeowner's association responsible for the maintenance of common facilities, including the pervious concrete and rain gardens. Another proposed condition requires recording a declaration of covenant and grant of easement, as required by the KCSWDM, with maintenance provisions for the rain gardens and porous concrete.
- 6.5 **Staff response regarding pedestrian access** – The letter referred to in 6.4 above also commented on the need for sufficient and safe pedestrian routes to nearby commercial and transit services. Adequate pedestrian paths are included in the proposal not only on site but also along the access easement that connects the site to N 198th Street. A staff-recommended condition of approval to implement all of the recommendations in the Traffic Impact Assessment prepared by Transportation Engineering NorthWest would improve off-site pedestrian safety.
- 6.6 **Staff response regarding King County request** – King County Wastewater Treatment Division requested copies of sewer extension plans. Staff contacted personnel in the Wastewater Treatment Division to clarify the request. During those discussions it was determined the sewer main crossing the site was not being modified so it was unnecessary to submit sewer extension plans (**Attachment M**).

7. ZONING DESIGNATION, MAXIMUM DENSITY AND PERMITTED USES

- 7.1 The project site is zoned Residential – 48 units per acre (R-48), which would allow up to 55 dwelling units to be constructed on the site.
- 7.2 The proposed density is 15.8 dwelling units per acre.
- 7.3 Under SMC 20.40.120 townhomes are a permitted use in the R-48 Zoning District.

8. PRELIMINARY SUBDIVISION REVIEW CRITERIA (SMC 20.30.410)

The following criteria were used to review the proposed subdivision:

8.1 Environmental (SMC 20.30.410A)

Criteria: *Where environmental resources exist, the proposal shall be designed to fully implement the goals, policies, procedures and standards of SMC 20.80, Critical Areas, and Subchapter 5 of SMC 20.50, Tree Conservation, Land Clearing and Site Grading Standards.*

Staff Analysis: A Type II wetland is located on the site. The proposal complies with the standards established in the critical areas chapter SMC 20.80.200. See further analysis under **Section 12.2** below. The project must comply with tree conservation, land clearing and site grading standards specified in SMC Chapter 20.50, Subchapter 5.

Criteria: *The proposal shall be designed to minimize grading by using shared driveways and by relating street, house site and lot placement to the existing topography.*

Staff Analysis: With the type of structures proposed, placement of access over existing utility easements, and the relatively flat site, grading will be minimized.

Criteria: *Where conditions exist which could be hazardous to the future residents of the land to be divided, or to nearby residents or property, a subdivision of the hazardous land shall be denied unless the condition can be permanently corrected.*

Staff Analysis: There are no existing natural hazardous conditions on the site. An abandoned home heating oil storage tank and contaminated soil on the site as described in the Aug. 22, 2005 Environmental Site Assessment by Earth Solutions NW (**Attachment O**) will be removed in conformance with relevant regulations prior to construction per Mitigation Measure #6 of the SEPA threshold MDNS (**Attachment I**).

Criteria: *The proposal shall be designed to minimize off-site impacts, especially upon drainage and views.*

Staff Analysis: The project was reviewed by Public Works and does not require additional stormwater drainage conditions. The project must comply with all surface water management requirements set forth in the KCSWDM. See further analysis in **Section 11.1** below. The project must comply with all height restrictions as specified in SMC Chapter 20.50 which will minimize the impact, if any, on off-site views.

8.2 **Lot and Street Layout** (SMC 20.30.410B)

Criteria: *Lots shall be designed to contain a usable building area to ensure the lot is developed consistent with the standards of the SMC and does not create nonconforming structures, uses or lots.*

Staff Analysis: The proposal meets design standards for zero-lot-line development as set forth in SMC Chapter 20.50. All lots will be buildable with a zero-lot-line townhouse dwelling unit. No nonconforming structures, uses or lots will be created.

Criteria: *Lots shall not front on primary or secondary highways unless there is no other feasible access.*

Staff Analysis: None of the site fronts on any public streets. Access to N 198th St., which is not a primary or secondary highway, is provided via a "Non-Exclusive Access and Utilities Easement" (King County Recording No. 20060106000015) across private property southwest of the site.

Criteria: *Each lot shall meet the applicable dimensional requirements of the SMC.*

Staff Analysis: This proposal meets the applicable dimensional requirements specified for zero-lot-line development as set forth in SMC Chapter 20.50. See further analysis in **Section 9.1** below.

Criteria: *Pedestrian walks or bicycle paths shall be provided to serve schools, parks, public facilities, shorelines and streams where street access is not adequate.*

Staff Analysis: Adequate pedestrian walks are provided within the project site. Existing public pedestrian walks and bicycle paths outside of the site are adequate to serve the additional impacts generated by the project. Improvements to the pedestrian access across private land to N 198th Street will be required per the recommendations of the Traffic Impact Analysis by Transportation Engineering Northwest, Inc. (**Attachment N**).

8.3 **Dedications** (SMC 20.30.410C)

Criteria: *The City Council may require dedication of land in the proposed subdivision for public use.*

Criteria: Only the City Council may approve a dedication of park land. The Council may request a review and written recommendation from the Planning Commission.

Criteria: Any approval of a subdivision shall be conditioned on appropriate dedication of land for streets, including those on the official street map and the preliminary plat.

Criteria: Dedications to the City of Shoreline for the required right-of-way, stormwater facilities, open space, and easements and tracts may be required as a condition of approval.

Staff Analysis: No dedications are required for this proposal. See further analysis in **Section 11.2** below.

8.4 Improvements (SMC 20.30.410D)

Criteria: Improvements which may be required include, but are not limited to, streets, curbs, pedestrian walks and bicycle paths, critical area enhancements, sidewalks, street landscaping, water lines, sewage systems, drainage systems and underground utilities.

Staff Analysis: This project will comply with the all requirements specified in the City of Shoreline Development Code and Engineering Development Guide. See further analysis in **Sections 9, 10, 11** and **12** below.

Criteria: Improvements shall comply with the development standards of Chapter 20.60 SMC, Adequacy of Public Facilities.

Staff Analysis: This proposal complies with the development standards of Chapter 20.60 SMC, Adequacy of Public Facilities. See further analysis in **Section 11** below.

9. SITE DEVELOPMENT STANDARDS (SMC 20.50)

9.1 Densities and Dimensions in the R-48 Zone (SMC 20.50.020)

Standard	Regulation	Proposed
Base Density	48 du/acre	16 du/acre
Min. Density	8 du/acre	16 du/acre
Min. lot width	30 ft. ⁽²⁾	18-44 ft.
Min. lot area	2,500 sq. ft. ⁽²⁾	1,423 – 4,535 sq. ft.
Min. front yard setback	10 ft.	18 ft. - west
Min. rear yard setback	5 ft.	38 ft. - east
Min. side yard setback	5 ft.	25 ft. - north 6 ft. - south
Base height	50 ft. with pitched roof ⁽⁹⁾	n.a.
Max. building coverage	70%	18.2%
Max. impervious surface	90%	55%

Exceptions

(2) These standards may be modified to allow zero lot line developments.

(9) For development on R-48 lots abutting R-12, R-24, R-48, O, NB, CB, NCBD, RB, I, and CZ zoned lots the maximum height allowed is 50 feet and may be increased to a maximum of 60 feet with the approval of a conditional use permit.

- 9.2 **Open Space** (SMC 20.50.160) Multifamily developments must provide on-site common recreational open space of at least 170 square feet for each dwelling unit of three or more bedrooms. Exception 20.50.160(A)(2) allows private yards, patios, balconies or roof decks to be credited towards the total recreation space requirement when the City determines that such areas are located, designed and improved in a manner which provides suitable recreational opportunities. Private yards or patios must have a minimum area of 100 square feet and a minimum dimension of 10 feet. The proposal provides each dwelling unit with a patio area at least 170 square feet in area with dimensions at least 10 feet by 17 feet, creating suitable recreational opportunities. Community pathways and gathering areas along with the wetland buffer enhancement plan's boardwalk and viewing platform add to the project's total area of common recreational open space.

Multifamily developments shall provide tot/children play areas within the recreation space on-site except when facilities are available within one-quarter mile that are developed as public parks and are accessible without crossing arterial streets. Play areas are not required for this project as Echo Lake Park is located less than one-quarter mile from the project and is accessible by pedestrians without having to cross any streets.

- 9.3 **Significant Tree Removal** (SMC 20.50.290-370) The site contains one significant tree. That tree is located within the wetland buffer area and will be retained. This complies with the requirement that at least 20% of the significant trees be retained. As no significant trees are to be removed, there are no replanting requirements.

- 9.4 **Parking and Access** (SMC 20.50.380-440) Townhouse developments must provide two off-street parking spaces per dwelling unit (SMC 20.50.390A). The proposal provides each dwelling unit with a one-car garage and a driveway at least 20 feet long to provide a second parking space. In addition, four guest parking spaces are proposed.

Access may cross required yard setbacks provided no more than 10% of the setback area is displaced (SMC 20.50.420). Less than 10% of the setback area is proposed to be displaced by access. Direct access from the street right-of-way to parking areas is subject to SMC 20.60 and the Shoreline Engineering Development Guide.

Pedestrian access should be:

- separate from vehicular traffic where possible; or
- well marked to clearly distinguish it as a pedestrian priority zone; and
- be at least five feet wide (SMC 20.50.430).

All proposed pedestrian access is at least five feet wide and delineated with either a paving material different from that used by vehicle access or by painted lines.

- 9.5 **Landscaping** (SMC 20.50.450-520) Type II landscaping, a filtered screen functioning as a partial visual separator to soften the appearance of parking areas and building elevations, consisting of trees generally interspersed throughout the landscaped strip and spaced to create a continuous canopy with a mix of deciduous and evergreen trees, shrubs and ground cover is required within the yard setback area for multifamily developments adjacent to multifamily and commercial zoning, except where the setback area is displaced by access or

parking. The approved Feb. 27, 2006 Weisman Design Group landscaping plan (**Attachment P**) complies with these requirements.

10. ADEQUACY OF PUBLIC FACILITIES (SMC 20.60)

- 10.1 **Water Supply** – Seattle Public Utilities has issued a Water Availability Certificates (**Attachment Q**) for the proposal.
- 10.2 **Sewer Service** – Ronald Wastewater District has issued a Certificate of Sewer Availability (**Attachment R**) for the proposal.
- 10.3 **Fire Protection** – The Shoreline Fire Department has reviewed and approved the plans for site access and fire hydrant proximity to the site (**Attachment S**).
- 10.4 **Traffic Capacity** – The project will generate an estimated 9 “P.M. Peak Hour Trips,” which is below 20 P.M. Peak Hour Trips, the threshold trigger to require traffic facility improvements as set forth in SMC 20.60.140(A) (See Traffic Impact Analysis, Transportation Engineering Northwest, Oct. 27, 2005, **Attachment N.**)

11. ENGINEERING AND UTILITY DEVELOPMENT STANDARDS (SMC 20.70)

- 11.1 **Storm Water Management** – The City of Shoreline Public Works Department has approved the Road and Storm Drain Plan for the proposal.
- 11.2 **Right-of-Way Dedication** – No right-of-way dedication is required as the project does not front any right-of-way and will not have a significant impact on the use of the right-of-way.
- 11.3 **Utility Undergrounding** – SMC 20.70.470(A)(3) requires the undergrounding of utilities when new residential lots are created.
- 11.4 **Frontage Improvements** – The project does not front on any right-of-way. Although there may be a site distance deficiency at the intersection of N 198th St. and Aurora Ave. N, none of those deficiencies can be improved by work within the right-of-way. No frontage improvements are required.

12. WETLAND REGULATIONS (SMC 20.80.310-350)

- 12.1 **Wetland classification** (SMC 20.80.320) – The wetland on the site has been classified as a Type II wetland (see **Attachment C**, Wetland Delineation Report, Adolfson Associates, Inc., Oct. 2005) and confirmed by a third party (see **Attachment D**, The Watershed Company letter, Oct. 18, 2005).
- 12.2 **Required buffer areas** (SMC 20.80.330) – Type II wetlands require a minimum buffer width of 50 feet and a maximum buffer width of 100 feet. The maximum buffer width is required unless the proposed development:
 - is considered low impact; or
 - if wetland and buffer enhancement are implemented.

The proposal to use the minimum buffer width is allowed because it is both considered low impact and wetland and buffer enhancement are part of the proposal.

This proposal is low impact as:

- the proposed use does not involve usage or storage of chemicals;
- passive-use areas are located adjacent to the buffer; and
- the wetland and its buffer are incorporated into the site design in a manner which eliminates the risk of adverse impact on the critical area.

Wetland and buffer enhancement are achieved with the:

- Construction of bat and bird boxes to enhance wildlife habitat with structures likely to be used by wildlife.
- Removal of invasive non-native species followed by planting of native vegetation, which will increase the value of wildlife habitat and improve water quality.

Low impact uses and activities (pedestrian path, boardwalk and viewing platform) are proposed within the buffer. Those uses are consistent with the purpose and function of the wetland buffer and do not detract from the integrity of the buffer. A viewing platform is to be located at the edge of the buffer next to the wetland to proactively mitigate potential erosion and other negative impacts caused by overuse of areas by pedestrians.

The wetland and its associated buffer will be preserved by being placed in a separate tract on which development is prohibited. The location and limitations associated with the tract will be shown on the face of the recorded final plat.

C. CONCLUSIONS

RCW 36.70B.040 Determination of Consistency, requires a proposed project shall be reviewed for consistency with a local government's development regulations during project review by consideration of:

- Type of land use;
- The level of development, such as units per acre or other measures of density;
- Infrastructure, including public facilities and services needed to serve the development; and
- The characteristics of the development, such as development standards.

RCW 58.17.110 Approval/Disapproval of Subdivisions, requires proposed subdivisions to:

- Make appropriate provisions for the public health, safety, and general welfare; and
- Serve the public use and interest for open spaces, drainage ways, streets, other public ways, potable water supplies, sanitary wastes, parks and recreation, and all other relevant facts.

Based on the above Findings of Fact and with the proposed conditions listed in **Attachment U**, staff concludes the Preliminary Formal Subdivision of Shoreline Townhomes has:

- Met the requirements of the City of Shoreline Development Standards, 2005 Comprehensive Plan, and Municipal Code
- Made appropriate provisions for the public health, safety, and general welfare
- Serves the public use and interest

D. STAFF PRELIMINARY RECOMMENDATION

Staff's preliminary recommendation to the Planning Commission is to forward to the City Council a recommendation of **APPROVAL** with conditions as described in **Attachment U** for the Shoreline Townhomes Preliminary Formal Subdivision application.

E. PLANNING COMMISSION ROLE AND OPTIONS

The Planning Commission's recommendation options to the City Council are:

1. Recommend approval with conditions, based on the staff Findings of Fact and Conclusions.
2. Recommend approval without conditions or conditions different from the staff recommended conditions, based on new Findings of Fact and Conclusions as amended by the Planning Commission.
3. Recommend denial of the application, based on new Findings of Fact and Conclusions as amended by the Planning Commission.

F. ATTACHMENTS

- Attachment A: Vicinity Map
- Attachment B: Site Plan and Plat Map (boundaries, lot lines, easements)
- Attachment C: Wetland and Buffer Enhancement Plan, Adolfson Associates, Inc., February 2006
- Attachment D: Wetland Delineation Report, Adolfson Associates, Inc., October 2005
- Attachment E: Third Party Review of Wetland Delineation Report, The Watershed Company, Oct. 18, 2005
- Attachment F: SEPA Checklist, Adolfson Associates, Inc., October 2005
- Attachment G: Notice of Application, Nov. 23, 2005 and Revised Notice of Application, Dec. 1, 2005
- Attachment H: Memo approving deviation from 1998 King County Stormwater Design Manual, Feb. 1, 2006
- Attachment I: SEPA Threshold MDNS, Feb. 7, 2006
- Attachment J: Notice of Public Hearing, Feb. 28, 2006
- Attachment K: Public Comments regarding subdivision name
- Attachment L: Public Comments regarding impact on Echo Lake area water quality, wildlife habitat, and pedestrian safety
- Attachment M: King County Wastewater Treatment Division comment letter, Dec. 6, 2005, and staff response, Dec. 15, 2005
- Attachment N: Traffic Impact Assessment, Transportation Engineering Northwest, Oct. 27, 2005
- Attachment O: Environmental Site Assessment Report (without appendices), Earth Solutions, NW, Aug. 22, 2005
- Attachment P: Landscape Plan, Weisman Design Group, Oct. 25, 2005
- Attachment Q: Seattle Public Utilities Water Availability Certificate (revised), Feb. 10, 2006
- Attachment R: Ronald Wastewater District Sewer Availability Certificate, Oct. 24, 2005
- Attachment S: Fire Lane Plan
- Attachment T: Draft CC&Rs
- Attachment U: Preliminary Staff Recommended Conditions of Approval

ATTACHMENT A:

VICINITY MAP

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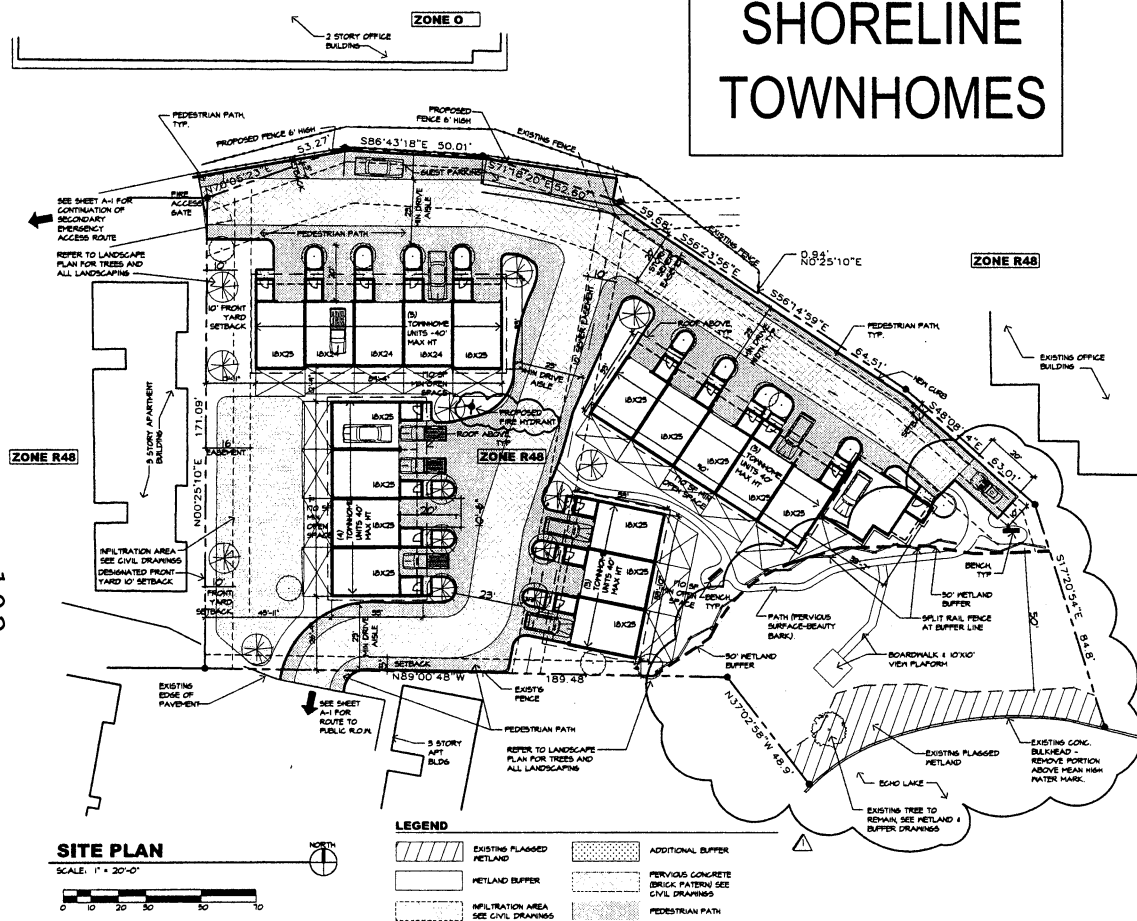


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ATTACHMENT B:

SITE/DEVELOPMENT PLANS

SHORELINE TOWNHOMES



SITE PLAN
SCALE: 1" = 30'-0"

Project Team

OWNER:	ARCHITECT:	ENVIRONMENTAL CONSULTANT:
Prescott Homes, Inc. 10613 NE 38th Place, Ste. 17 Kirkland, WA 98033 425-822-2829 Contact: Greg Kappers	CB ANDERSON ARCHITECTS 1209 Greenwood Ave. North Seattle, WA 98105 206-522-2911 Contact: Craig Anderson Bart Sanderson	ADOLFSON ASSOCIATES, INC. 5309 Shiloh Ave NW Seattle, WA 98107 206-189-5658 Contact: Donna Frothingham
LANDSCAPE ARCHITECT:	CIVIL ENGINEER:	SURVEY:
Wetland Design Group, Inc. 2329 East Madison Street Seattle, WA 98102 206-337-1732 Contact: Michael Kiser	DAVIDO CONSULTING GROUP, INC. 8804 Roosevelt Way NE. Seattle, WA 98115 206-523-0024 Contact: Nathan Davis	GEODATUM, INC. 27525 SE 64th Pl, Ste 266 Burien, WA 98148 425-837-8803 Contact: Thomas Woldendorp

Drawing Index

A-0	ARCHITECTURAL SITE PLAN & PROJECT DATA
A-1	FIRE LANE PLAN
S-1	PRELIMINARY LONG PLAT / EXISTING TOPOGRAPHY
PP-1	PRELIMINARY LONG PLAT / BOUNDARY AND LOT LINES
PP-2	PRELIMINARY LONG PLAT / INGRESS/EGRESS/PEDESTRIAN AND UTILITY EASEMENT
CO-1	CIVIL COVER SHEET
CO-2	CIVIL SITE PLAN
CO-3	AREAS SERVING PLAN
CO-4A	TECH. PLAN
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CO-5	PRIVACY PLAN
CO-6	WATER PLAN
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CO-9	PROFILES AND DETAILS
CO-10	CIVIL DETAILS
CO-11	CIVIL DETAILS
CO-12	CIVIL DETAILS
CO-13	LANDSCAPE PLAN
FIGURE 2	WETLAND & BUFFER PLANTING PLAN
FIGURE 3	WETLAND & BUFFER PLANTING DETAILS
FIGURE 4	WETLAND & BUFFER PLANTING NOTES

Project Data

STANDARDS	ZONE: R4B
BASE DENSITY	40 d.u./a. 40/43,360 SF 1.8 d.u./a.
MAX. DENSITY	12 d.u./a.
PROPOSED DENSITY	8 d.u./a.
MIN. LOT WIDTH	50'
MIN. LOT AREA	2500 SF
MIN. FRONT SETBACK	10'
MIN. REAR SETBACK	5'
MIN. SIDE SETBACK	5'
BASE HEIGHT	35' (40' w/ finished roof) (R-4B ABUTTING R-4B, C)
MAX. BLDG. COVERAGE	10%
PROPOSED COVERAGE	30% (10,004 SF)
MAX. IMPERV. SURFACE	40%
PROPOSED IMPERV. SURFACE	SEE CIVIL DRAWINGS
OPEN SPACE	170 SF/408 UNITS 80 SF/2 UNITS 100 SF/200 UNITS
REAR PARKING	2 PER UNIT
20R AND 20R UNITS	56 RESIDENT STALLS 4 GUEST STALLS

ADDRESS:
Echo Lake Townhomes
1160 N 198th Street
Shoreline, WA 98133

SCOPE OF WORK:
Construct (18) new townhome buildings w/ attached garages on two vacant lots. Proposed are (1) 3 Unit Building, (1) 4 Unit Building, (1) 5 Unit Building and (1) 6 Unit Building. See Civil, Landscaping and wetland drawings for scope of other proposed improvements.

LEGAL DESCRIPTION:
SEE SURVEY

TAX PARCEL NUMBER:
2221300011 & 2221300010

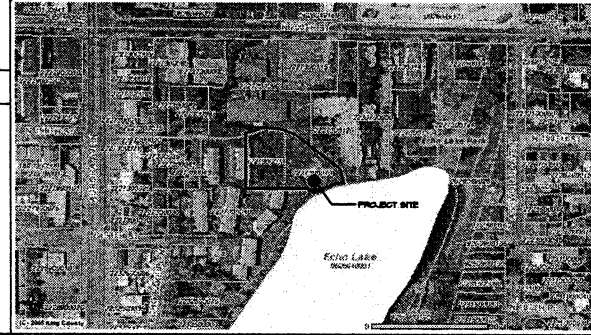
OCCUPANCY:
R-3

CONSTRUCTION TYPE:
V-B w/ (2) 1-Hour rated Party Walls

CODES:
2003 International Residential Code (IRC),
2003 Washington Energy Code and all applicable provisions of prevailing local, state, and federal codes and ordinances, including appropriate licensing laws including any local amendments.

NOTE:
TRASH CONTAINERS TO BE STORED IN GARAGE
THERE ARE NO WINDOWS IN THE GARAGE
NO TARD LIGHTS TO DIRECTLY ILLUMINATE OTHER PROPERTIES, SHIELD AS REQ'D
REFER TO CIVIL DRAWINGS FOR ALL WATER MAINS, VALVES, FIRE HYDRANT AND FRONTAGE IMPROVEMENTS
REFER TO LANDSCAPE PLAN FOR PLANTING CALLOUTS
REFER TO SURVEY FOR LEGAL DESCRIPTION, ALL RECORDED EASEMENTS EXISTING SITE FEATURES

Vicinity Map



CB ANDERSON ARCHITECTS

7209 Greenwood Avenue North
Seattle, Washington 98103
206-782-2911
Fax 782-0624

CLIENT & APPLICANT:
Prescott Homes, Inc.
10613 NE 38th Place, #17
Kirkland, WA 98033
(425) 822-2829

SITE PLAN

Shoreline Townhomes
1160 N 198th Street
Shoreline, WA 98133

REVISIONS:

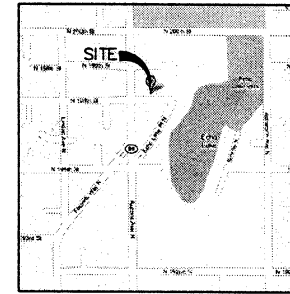
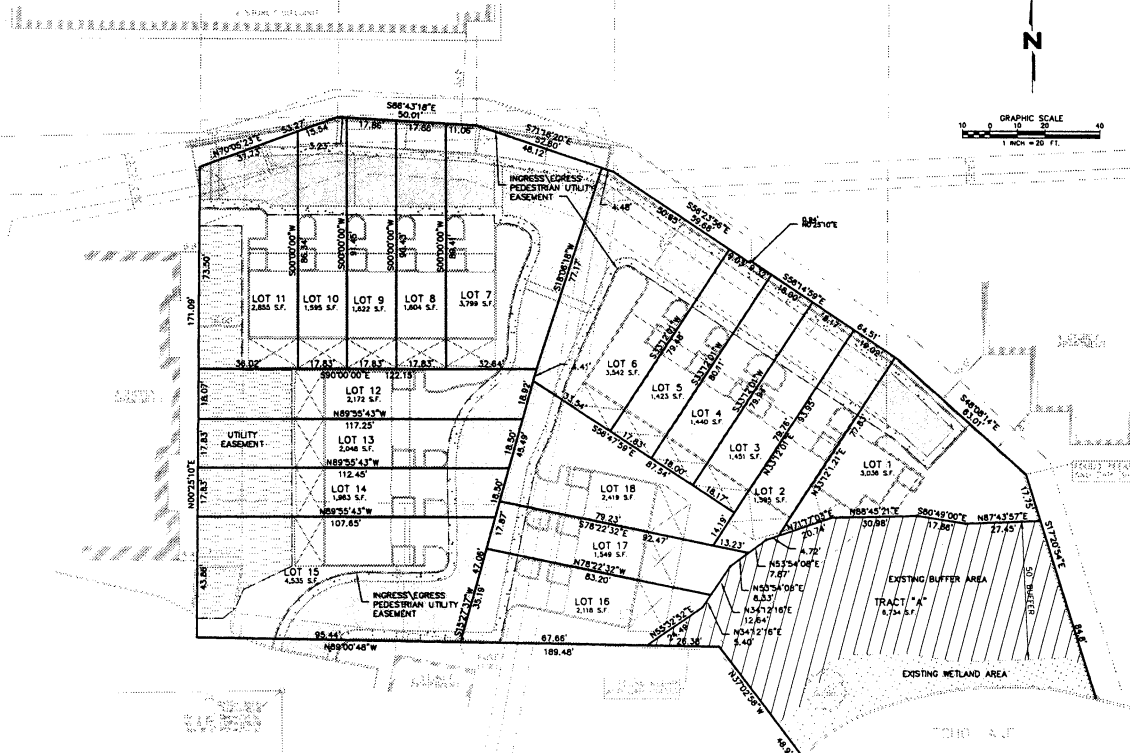
1	28 Feb 2006
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DRAWN BY: NBS
SCALE: 1" = 30'-0"
DATE: 25 October 05
JOB NUMBER: 806.0
SHEET NUMBER: A-0

NOT FOR CONSTRUCTION UNLESS CITY APPROVAL STAMP APPEARS ON THIS SHEET
COPYRIGHT © ANDERSON ARCHITECTS. ALL RIGHTS RESERVED. NOT TO BE REPRODUCED WITHOUT PERMISSION. ORIGINAL SHEET SIZE 24" x 36"

SHORELINE TOWNHOMES

SE 1/4 SEC. 6 ,TWP. 26N ,RGE. 4E ,W.M.



VICINITY MAP
NTS

LEGAL DESCRIPTION

THE NORTH 50 FEET OF LOT 14 AND ALL OF LOT 15, ECHO LAKE PARK ADDITION, ACCORDING TO THE PLAT THEREOF AS RECORDED IN VOLUME 23 OF PLATS ON PAGE 8, RECORDS OF KING COUNTY, WASHINGTON; TOGETHER WITH THAT PORTION OF VACATED LAKE AVENUE ADJOINING, WHICH UPON VACATION REVERTED THEREBY BY OPERATION OF LAW, IF ANY LYING TOGETHER WITH THAT PORTION OF LOT 26 OF SAID ADDITION, IF ANY LYING SOUTHEASTERNLY OF THE FOLLOWING DESCRIBED LINE, COMMENCING AT THE NORTHWEST CORNER OF THE EAST HALF OF TRACT 25, ECHO LAKE PARK ADDITION, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 23 OF PLATS, PAGE 8, IN KING COUNTY WASHINGTON; THENCE S89°25'43"W, ALONG THE WEST LINE OF THE EAST HALF OF SAID TRACT 25, A DISTANCE OF 329.89 FEET TO AN INTERSECTION WITH THE NORTHWESTERLY PROLONGATION OF THE NORTHEASTERLY FACE OF AN EXISTING CONCRETE BLOCK WALL, SAID INTERSECTION BEING THE TRUE POINT OF BEGINNING OF THE BOUNDARY LINE HEREIN DESCRIBED; THENCE S57°32'04"E, ALONG SAID NORTHWESTERLY PROLONGATION AND THE NORTHEASTERLY FACE OF SAID EXISTING CONCRETE BLOCK WALL, A DISTANCE OF 84.78 FEET TO AN ANGLE POINT IN SAID CONCRETE BLOCK WALL; THENCE S49°29'48"E AND CONTINUING ALONG THE NORTHEASTERLY FACE OF SAID EXISTING CONCRETE BLOCK WALL TO AN INTERSECTION WITH THE NORTH MARGIN OF VACATED LAKE AVENUE; THENCE CONTINUING S18°54'35"E, ALONG THE EASTERLY FACE OF SAID EXISTING CONCRETE BLOCK WALL, TO AN INTERSECTION OF ADJO LAKE AND THE TERMINUS OF THE BOUNDARY LINE HEREIN DESCRIBED; TOGETHER WITH A RIGHT-OF-WAY OVER A STRIP OF LAND 20 FEET IN WIDTH, THE CENTERLINE OF WHICH STRIP FOLLOWS THE SOUTHERLY LINE OF LOTS 3 AND 16 THROUGH 26, INCLUSIVE OF SAID ADDITION; EXCEPT ANY PORTION LYING WITHIN THE ABOVE DESCRIBED MAIN TRACT.

BASIS OF BEARINGS

UNRECORDED SURVEY BY CHENOWETH & ASSOCIATES
DATED AUGUST, 1987, JOB NO. L587118

ACCEPTED BEARINGS ON THE FACE OF THIS SURVEY BASED ON FOUND MONUMENTS.

GENERAL NOTES

- THIS EXHIBIT IS BASED ON THE CHICAGO TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE, ORDER NO. 1186587, DATED MAY 20, 2005 AT 8:00 A.M.
- INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND NIKON NPL 352 TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
- THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN SEPTEMBER 2005 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
- UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.

Geodatum
INC.
30411-CL-111-111-111-111-111
22235 SE 6th N 6366
8429 87 7603



DATE	REVISION	DESCRIPTION
7-28-06	1	DTT OF SHORELINE COMMENTS

SHORELINE TOWNHOMES
PRELIMINARY LONG PLAT
BOUNDARY & LOT LINES
1160 N. 198TH ST.
SHORELINE, WA 98133

PRESCOTT HOMES INC.

DRAFTER: MCG
DESIGNER: MCG
PROJ. ENGR./SURV.: TNW
DATE: 10-25-05
PROJECT NO.: 2005-259

CALL 48 HOURS
BEFORE YOU DIG
1-800-424-5555

SHEET PP1 of 2

SE 1/4 SEC. 6 ,TWP. 26N ,RGE. 4E ,W.M.

THIS EXHIBIT IS BASED ON THE CHICAGO TITLE INSURANCE
COMPANY COMMITMENT FOR TITLE INSURANCE, ORDER NO. 1168587,
DATED MAY 20, 2005 AT 8:00 A.M.

INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND NIKON NPL
TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED
STANDARDS SET BY WAC 332-130-090.

THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY
MADE IN SEPTEMBER 2005 AND CAN ONLY BE CONSIDERED AS INDICATING THE
GENERAL CONDITIONS EXISTING AT THAT TIME.

UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.

START (POB): M. 5051.102 E. 562.951
THENCE N 70°25'23" E FOR 53.27 FEET; THENCE S 80°43'16" E FOR 50.01 FEET;
THENCE S 71°58'20" E FOR 52.80 FEET; THENCE S 56°11'09" E FOR 122.68 FEET;
THENCE S 48°08'14" E FOR 55.53 FEET; THENCE S 44°19'50" W FOR 22.47 FEET;
THENCE N 48°52'54" W FOR 45.03 FEET; THENCE N 58°44'24" W FOR 114.45 FEET;
TO THE BEGINNING OF A HORIZONTAL CURVE
THE RADIUS POINT OF WHICH BEARS S 33°23'23" W, 4.68 FEET;
THENCE SOUTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF
82°55'35" FOR 7.58 FEET.
NORTH 44.54 FEET; THENCE S 138°08'31" W FOR 5.13 FEET;

[illegible][illegible]

**DORELINE TOWNHOMES
PRELIMINARY LONG PLAT
S/S/ PEDESTRIAN & UTILITY EASEMENT
1160 N. 198TH ST.
SHORELINE, WA 98133**

SHO
P
INGRESS/EGRESS

© 2005, CLOUTIER, INC. ALL RIGHTS RESERVED

PRESCOTT HOMES INC.

DRAFTER: MCG
DESIGNER: MCG
PROJ. ENGR./SURV.: TNW
DATE: 10-25-05
PROJECT NO.: 2005-259
SHEET PP2 OF 2

START (POB): N: 5029.781 E: 5523.795
 THENCE S 89°50'30" E FOR 15.32 FEET;
 THENCE SOUTH FOR 52.64 FEET;
 THENCE EAST FOR 16.10 FEET;
 THENCE SOUTH FOR 71.12 FEET;
 THENCE S 04°10'20" W FOR 16.81 FEET;
 THENCE S 23°23'31" W FOR 7.27 FEET;
 THENCE S 49°13'19" W FOR 5.78 FEET;
 THENCE N 80°57'28" W FOR 5.54 FEET;
 THENCE N 02°51'01" E FOR 142.78 FEET
 TO THE POINT OF BEGINNING.
 CONTAINING AN AREA OF 3665 SQUARE FEET OR 0.083 ACRES.

GRAPHIC SCALE

10 0 10 20

A horizontal scale bar with four segments. The first segment is labeled '10', the second '0', the third '10', and the fourth '20'. The segments are separated by vertical lines. The bar is black with white markings and numbers.

THENCE, N 01° 04' 30" E, FOR A DISTANCE OF 2.72 FEET TO A POINT ON A LINE.
THENCE, S 48° 05' 14" E, FOR A DISTANCE OF 8.84 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
SAY CURVE TURNING TO THE LEFT THROUGH AN ANGLE OF 34° 13' 41" 40", HAVING A RADIUS OF 20.50 FEET, AND WHOSE LONG CHORD BEARS S 65° 42' 21" E, FOR A DISTANCE OF 12.24 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
THENCE, S 63° 04' 13" E, FOR A DISTANCE OF 11.62 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
SAY CURVE TURNING TO THE RIGHT THROUGH AN ANGLE OF 48° 11' 18", HAVING A RADIUS OF 43.50 FEET, AND WHOSE LONG CHORD BEARS S 58° 58' 17" E, FOR A DISTANCE OF 24.15 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
THENCE, S 58° 53' 26" E, FOR A DISTANCE OF 3.00 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
SAY CURVE TURNING TO THE RIGHT THROUGH AN ANGLE OF 21° 27" 07", HAVING A RADIUS OF 29.52 FEET, AND WHOSE LONG CHORD BEARS S 23° 07' 34" E, FOR A DISTANCE OF 14.92 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
SAY CURVE TURNING TO THE LEFT THROUGH AN ANGLE OF 48° 11' 18", HAVING A RADIUS OF 43.50 FEET, AND WHOSE LONG CHORD BEARS S 44° 05' 27" E, FOR A DISTANCE OF 8.85 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL LINE.
THENCE, N 84° 56' 13" E, FOR A DISTANCE OF 6.53 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
SAY CURVE TURNING TO THE RIGHT THROUGH AN ANGLE OF 28° 28' 18", HAVING A RADIUS OF 42.50 FEET, AND WHOSE LONG CHORD BEARS N 88° 13' 22" E, FOR A DISTANCE OF 6.28 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
THENCE, S 86° 33' 20" E, FOR A DISTANCE OF 2.77 FEET TO THE BEGINNING OF A CURVE.
SAY CURVE TURNING TO THE LEFT THROUGH AN ANGLE OF 33° 42' 29" 37", HAVING A RADIUS OF 12.50 FEET, AND WHOSE LONG CHORD BEARS N 75° 34' 24" E, FOR A DISTANCE OF 7.86 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL LINE.
THENCE, N 57° 45' 18" E, FOR A DISTANCE OF 1.79 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
SAY CURVE TURNING TO THE RIGHT THROUGH AN ANGLE OF 23° 58' 41" 8", HAVING A RADIUS OF 35.50 FEET, AND WHOSE LONG CHORD BEARS N 68° 43' 20" E, FOR A DISTANCE OF 14.75 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL LINE.
THENCE, N 81° 41' 50" E, FOR A DISTANCE OF 7.90 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
THENCE, N 84° 04' 50" E, FOR A DISTANCE OF 27.01 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
SAY CURVE TURNING TO THE LEFT THROUGH 28° 28' 18", HAVING A RADIUS OF 3.94 FEET, AND WHOSE LONG CHORD BEARS N 87° 38' 18" E, FOR A DISTANCE OF 1.79 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
SAY CURVE TURNING TO THE LEFT THROUGH AN ANGLE OF 137° 50' 02" 07", HAVING A RADIUS OF 13.58 FEET, AND WHOSE LONG CHORD BEARS N 04° 48' 31" E, FOR A DISTANCE OF 22.73 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL LINE.
THENCE, N 44° 18' 36" E, FOR A DISTANCE OF 3.33 FEET TO A POINT ON A LINE.
THENCE, S 48° 08' 14" E, FOR A DISTANCE OF 17.77 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
SAY CURVE TURNING TO THE LEFT THROUGH AN ANGLE OF 150° 15' 20" 40", HAVING A RADIUS OF 2.88 FEET, AND WHOSE LONG CHORD BEARS S 25° 18' 04" E, FOR A DISTANCE OF 5.45 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
THENCE, N 84° 45' 05" E, FOR A DISTANCE OF 4.58 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.

SAD CURVE TURNING TO THE RIGHT THROUGH AN ANGLE OF $57^{\circ} 45' 21.8''$, HAVING A RADIUS OF 6.40 FEET, AND WHOSE LONG CHORD BEARS $S 72^{\circ} 14' 38.1''$ W FOR A DISTANCE OF 2.00 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.

THENCE, $S 49^{\circ} 14' 23.0''$ E FOR A DISTANCE OF 0.38 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.

SAD CURVE TURNING TO THE RIGHT THROUGH AN ANGLE OF $136^{\circ} 45' 30.0''$, HAVING A RADIUS OF 2.80 FEET, AND WHOSE LONG CHORD BEARS $S 19^{\circ} 07' 33.0''$ W FOR A DISTANCE OF 4.83 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.

THENCE, $S 67^{\circ} 30' 57.0''$ W FOR A DISTANCE OF 4.42 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.

SAD CURVE TURNING TO THE RIGHT THROUGH AN ANGLE OF $35^{\circ} 28' 04.8''$, HAVING A RADIUS OF 8.00 FEET, AND WHOSE LONG CHORD BEARS $N 74^{\circ} 45' 02.1''$ W FOR A DISTANCE OF 3.86 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.

THENCE, $S 57^{\circ} 01' 02.1''$ W FOR A DISTANCE OF 3.35 FEET TO THE BEGINNING OF A CURVE.

SAD CURVE TURNING TO THE LEFT THROUGH AN ANGLE OF $84^{\circ} 04' 48.0''$, HAVING A RADIUS OF 2.00 FEET, AND WHOSE LONG CHORD BEARS $S 75^{\circ} 58' 38.5''$ W FOR A DISTANCE OF 3.84 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.

THENCE, $S 28^{\circ} 18' 17.8''$ W FOR A DISTANCE OF 0.86 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.

SAD CURVE TURNING TO THE RIGHT THROUGH AN ANGLE OF $58^{\circ} 05' 24.4''$, HAVING A RADIUS OF 12.00 FEET, AND WHOSE LONG CHORD BEARS $S 56^{\circ} 20' 24.4''$ W FOR A DISTANCE OF 11.38 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.

THENCE, $S 84^{\circ} 21' 42.7''$ W FOR A DISTANCE OF 2.33 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.

THENCE, $S 07^{\circ} 26' 02.4''$ E FOR A DISTANCE OF 0.83 FEET TO A POINT ON A LINE.

THENCE, $S 15^{\circ} 00' 00.0''$ W FOR A DISTANCE OF 12.40 FEET TO A POINT ON A LINE.

THENCE, $S 45^{\circ} 00' 00.0''$ W FOR A DISTANCE OF 18.00 FEET TO A POINT ON A LINE.

THENCE, $S 44^{\circ} 56' 40.0''$ E FOR A DISTANCE OF 4.77 FEET TO A POINT ON A LINE.

THENCE, $S 45^{\circ} 00' 00.0''$ W FOR A DISTANCE OF 10.00 FEET TO A POINT ON A LINE.

THENCE, $N 44^{\circ} 58' 00.0''$ E FOR A DISTANCE OF 10.00 FEET TO A POINT ON A LINE.

THENCE, $N 45^{\circ} 00' 00.0''$ E FOR A DISTANCE OF 10.00 FEET TO A POINT ON A LINE.

THENCE, $S 44^{\circ} 56' 40.0''$ E FOR A DISTANCE OF 2.23 FEET TO A POINT ON A LINE.

THENCE, $S 45^{\circ} 00' 00.0''$ E FOR A DISTANCE OF 18.00 FEET TO A POINT ON A LINE.

THENCE, $N 45^{\circ} 00' 00.0''$ E FOR A DISTANCE OF 18.00 FEET TO A POINT ON A LINE.

THENCE, $N 07^{\circ} 26' 02.4''$ W FOR A DISTANCE OF 5.04 FEET TO A POINT ON A LINE.

THENCE, $S 81^{\circ} 41' 59.8''$ W FOR A DISTANCE OF 0.41 FEET TO THE BEGINNING OF A CURVE.

SAD CURVE TURNING TO THE LEFT THROUGH AN ANGLE OF $53^{\circ} 56' 41.8''$, HAVING A RADIUS OF 33.00 FEET, AND WHOSE LONG CHORD BEARS $S 89^{\circ} 43' 31.0''$ W FOR A DISTANCE OF 14.88 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.

THENCE, $S 57^{\circ} 45' 21.8''$ W FOR A DISTANCE OF 1.79 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.

FROM THE POINT OF BEGINNING, THENCE N 30° 58' 44.4" E FOR A DISTANCE OF 3.72 FEET TO A POINT ON A LINE.
Said curve turning to the right through an angle of 33° 42' 39.3", HAVING A RADIUS OF 15.00 FEET, AND WHOSE LONG CHORD BEARS S 75° 30' 24.8" W FOR A DISTANCE OF 8.20 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
THENCE N 38° 32' 26.6" W FOR A DISTANCE OF 2.77 FEET TO THE BEGINNING OF A CURVE.
Said curve turning to the left through an angle of 08° 28' 11.6", HAVING A RADIUS OF 40.00 FEET, AND WHOSE LONG CHORD BEARS S 89° 13' 30.3" W FOR A DISTANCE OF 5.81 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
THENCE S 84° 58' 21.7" W FOR A DISTANCE OF 4.53 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
Said curve turning to the right through an angle of 61° 00' 48.7", HAVING A RADIUS OF 7.00 FEET, AND WHOSE LONG CHORD BEARS N 84° 27' 12.7" W FOR A DISTANCE OF 1.13 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
THENCE S 32° 34' 48.7" W FOR A DISTANCE OF 0.25 FEET TO THE BEGINNING OF A CURVE.
Said curve turning to the left through an angle of 122° 35' 04.5", HAVING A RADIUS OF 2.40 FEET, AND WHOSE LONG CHORD BEARS S 84° 47' 38.1" W FOR A DISTANCE OF 4.21 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
THENCE S 32° 50' 05.8" W FOR A DISTANCE OF 0.43 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
Said curve turning to the right through an angle of 11° 17.2", HAVING A RADIUS OF 2.84 FEET, AND WHOSE LONG CHORD BEARS S 55° 57' 41.1" W FOR A DISTANCE OF 2.80 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
Said curve turning to the right through an angle of 188° 07' 51.8", HAVING A RADIUS OF 4.11 FEET, AND WHOSE LONG CHORD BEARS N 08° 38' 58.7" W FOR A DISTANCE OF 0.15 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
THENCE N 74° 40' 48.6" W FOR A DISTANCE OF 3.75 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
Said curve turning to the left through an angle of 111° 33' 42.7", HAVING A RADIUS OF 2.67 FEET, AND WHOSE LONG CHORD BEARS N 18° 57' 55.3" W FOR A DISTANCE OF 4.47 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
THENCE N 50° 56' 36.4" W FOR A DISTANCE OF 4.56 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
Said curve turning to the left through an angle of 46° 11' 38.6", HAVING A RADIUS OF 41.00 FEET, AND WHOSE LONG CHORD BEARS N 58° 58' 34.7" W FOR A DISTANCE OF 32.18 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL LINE.
THENCE S 67° 04' 13.0" W FOR A DISTANCE OF 11.82 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE.
Said curve turning to the right through an angle of 34° 43' 48.7", HAVING A RADIUS OF 33.00 FEET, AND WHOSE LONG CHORD BEARS N 65° 42' 21.7" W FOR A DISTANCE OF 13.73 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL CURVE.
THENCE N 48° 28' 29.1" W FOR A DISTANCE OF 5.83 FEET TO THE POINT OF BEGINNING.

CONTAINING 87.33 SQUARE FEET

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ATTACHMENT C:

WETLAND & BUFFER ENHANCEMENT PLAN

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**SHORELINE TOWNHOMES
WETLAND AND BUFFER
ENHANCEMENT PLAN**

PREPARED FOR

**PRESCOTT HOMES
10613 NE 38TH PLACE, #17
KIRKLAND, WASHINGTON 98033**

FEBRUARY 2006

PREPARED BY:

**Adolfson Associates, Inc.
5309 Shilshole Ave NW, Ste 200
Seattle, Washington 98107
206.789.9658**



EXECUTIVE SUMMARY

At the request of the Prescott Homes, Adolfson Associates, Inc. (Adolfson) prepared this enhancement plan for the proposed Shoreline Townhomes project, located at 1145 North 199th Street in Shoreline, Washington (Figure 1). This enhancement plan has been prepared based on requirements in the Shoreline Municipal Code (SMC) Chapter 20.80 – Critical Areas.

Prescott Homes is proposing to construct 18 townhomes on an approximately 1.1-acre site immediately northwest of Echo Lake in the City of Shoreline. The site consists of two parcels (2227300070 and 2227300071) that are currently undeveloped.

Adolfson identified one wetland on the property, which occurs as a palustrine emergent lake-fringe wetland (Adolfson 2005). This wetland is a Type II wetland in the City of Shoreline because it is associated with Echo Lake. The wetland and wetland buffer on the site have been degraded by previous land use activities, and the dominant plant species are primarily non-native. Under current conditions, the on-site wetland and wetland buffer provide little value as wildlife habitat. In addition, the existing bulkhead disrupts the connectivity between the lake and the adjacent wetland.

As part of the proposed project, the wetland buffer will be reduced from 100 feet to 50 feet and enhanced as allowed under SMC 20.80.330.B and SMC 20.80.330.D.2. The primary goal of the enhancement plan is to increase the habitat value of the on-site portion of the Type II wetland and associated buffer for fish and wildlife. Another goal includes increasing the aesthetic value of wetland and wetland buffer for residents in the vicinity of the townhomes project. Finally, the dispersal trenches have been located in the wetland buffer to ensure that the wetland continues to receive water once the site is developed (SMC 20.80.330.G).

This enhancement plan identifies how the on-site wetland and wetland buffer will be enhanced to comply with SMC 20.80.330.D.2, and presents a planting plan with planting specifications.

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1.0 PROJECT AUTHORIZATION

At the request of the Prescott Homes, Adolfson Associates, Inc. (Adolfson) prepared this enhancement plan for the proposed Shoreline Townhomes project, located at 1145 North 199th Street in Shoreline, Washington (Figure 1). This enhancement plan has been prepared based on requirements in the Shoreline Municipal Code (SMC) Chapter 20.80 – Critical Areas.

2.0 PROJECT DESCRIPTION

Prescott Homes is proposing to construct 18 townhomes on an approximately 1.1-acre site immediately northwest of Echo Lake in the City of Shoreline. The site consists of two parcels (2227300070 and 2227300071) that are currently undeveloped. Once the townhomes are constructed, vehicular access will be from North 198th Street and through an existing apartment complex that Prescott Homes is in the process of converting to condominiums. The drainage design incorporates low impact development.

As part of the proposed project, the wetland buffer will be reduced from 100 feet to 50 feet as allowed under SMC 20.80.330.B and SMC 20.80.330.D.2 and as described in this enhancement plan. An approximately three-foot-wide trail of beauty bark will be constructed in the outer edge of the wetland buffer as allowed under SMC 20.80.330.F. A boardwalk and platform will also be constructed within the wetland buffer to provide views of the lake. The intent of the boardwalk and platform is to limit pedestrian access to the wetland buffer, thereby reducing the potential for pedestrian intrusions into the planted wetland and wetland buffer areas. To maintain wetland hydrology, dispersion trenches will be constructed in the buffer as per SMC 20.80.330.G.

3.0 EXISTING CONDITIONS

Current access to the two parcels is from North 199th Street, a one-lane road that ends in the north-central portion of the site. There are no structures on the property, but cement walkways are present in the east-central portion of the site. The areas immediately north, west, and south of the site have been developed for residential and commercial uses, and the site is near the intersection of North 200th Street and Aurora Avenue.

The site is relatively flat, but slopes down from the west to Echo Lake. A cement bulkhead was previously constructed along the shoreline. Just beyond the bulkhead, discarded debris has been dumped into the lake. Much of the vegetation on the site consists of non-native shrubs and herbaceous plant species such as knotweed, Himalayan blackberry, Scot's broom, thistle, and Robert geranium. Some trees occur on the property. Along the western property line, red alder, big-leaf maple, horse chestnut, and black cottonwood are present and one large, non-native tree is present in the southeastern portion of the site. Several young native trees, such as Douglas-fir and red alder, are present on the eastern portion of the site.

Adolfson identified one wetland on the property, which occurs as a palustrine emergent lake-fringe wetland (Adolfson 2005). This wetland is a Type II wetland in the City of Shoreline because it is associated with Echo Lake. The wetland and wetland buffer on the site have been

degraded by previous land use activities, and the dominant plant species are primarily of non-native. Under current conditions, the on-site wetland and wetland buffer provide little value as wildlife habitat, and the aesthetic value is limited by debris left by people who have used the site. In addition, the existing bulkhead disrupts the connectivity between the lake and the adjacent wetland. This wetland is described in greater detail in the wetland delineation report prepared for the project.

4.0 BUFFER REDUCTION

The proposed project avoids wetland impacts. This enhancement plan has been prepared because the Prescott Homes is proposing to reduce the wetland buffer from the maximum buffer width of 100 feet to the minimum buffer width 50 feet for Type II wetlands (SMC 20.80.330.B). SMC 20.80.330.D.2 states that buffers can be reduced if:

2. *Wetland and buffer enhancement is implemented. This includes but is not limited to the following:*
 - a. *Enhancement of fish and wildlife habitat by incorporating structures that are likely to be used by wildlife, including wood duck houses, bat boxes, nesting platforms, snags, rootwads/stumps, birdhouses, and heron nesting areas.*
 - b. *Planting native vegetation that would increase value for fish and wildlife habitat, improve water quality, or provide aesthetic/recreational value.*

This enhancement plan is intended to show compliance with Code requirements for buffer reduction and enhancement.

5.0 ENHANCEMENT GOALS AND OBJECTIVES

The primary goal is to enhance the on-site portion of the Type II wetland and the associated 50-foot-wide reduced buffer as habitat for fish and wildlife. Enhancement includes removing non-native vegetation, removing the cement walkways that currently exist in much of the buffer, planting native species, and installing bird and bat boxes. The native plant species to be installed will provide habitat for wildlife and increase the overall habitat value of the area. Enhancement also includes removal of that portion of the existing concrete bulkhead that is above the mean high water mark. Removal of this portion of the bulkhead is intended to restore the connection between Echo Lake and the wetland. Another enhancement action intended to improve habitat for fish in the lake will be the removal of discarded debris in the lake within approximately 20 feet of the existing bulkhead.

A second goal includes increasing the aesthetic value of wetland and wetland buffer for residents in the vicinity of the townhomes project. For this reason, a pedestrian trail, boardwalk, and platform are proposed within the wetland buffer (Figure 2). Low impact uses, such as trails, are allowed in buffers under SMC 20.80.330.F. The pedestrian trail will be located in the outer edge of the wetland buffer, and the boardwalk and viewing platform will be designed to reduce the potential for human intrusion into the wetland. The boardwalk and platform will be constructed of non-deteriorating plastic-wood decking that will allow precipitation to infiltrate into the soils

below the structure. Enhancement also includes removing the impervious cement walkways that currently occur in much of the buffer.

A third goal is to maintain wetland hydrology after construction. This will be accomplished by placing the stormwater dispersal trenches in the wetland buffer is to ensure that the wetland continues to receive water once the site is developed. SMC 20.80.330.H allows stormwater facilities in the buffer if it will enhance the buffer and protect the wetland. Planting around the dispersal trenches will provide cover so that, over time, the structures are not obvious.

6.0 ENHANCEMENT

The proposed project avoids impacts to wetlands. The on-site wetland and wetland buffer will be enhanced for the proposed buffer reduction (Figure 2). As required under SMC 20.80.050.B, the wetland and wetland buffer will be placed in a separate critical areas tract to provide permanent protection.

6.1 Minimization

Impacts to the reduced wetland buffers will be minimized to the extent possible. The trail is limited to three feet in width and the viewing platform to 100 square feet. The area to be graded is the minimum necessary to install the dispersal trenches (Figure 2). Other measures to be implemented that will minimize impacts during construction include:

- A pre-construction meeting will be held on-site with the construction contractor and the project biologist to discuss the construction sequence.
- The limits of the construction area will be marked with orange barrier fencing. This type of barrier reduces the potential for heavy equipment to damage vegetation and soil outside the construction area.
- The temporary erosion and sedimentation control measures and best management practices (BMPs) established for this project will be used. This includes the use of silt fences, sediment rolls, and/or straw bales to prevent suspended particles from leaving the construction zone. The contractor will be responsible for inspection of all erosion control measures and will repair any damage to the erosion control structures, as required.
- The staging areas and stockpile sites will be located outside the wetlands and wetland buffers.
- The portion of the existing concrete bulkhead that is above the mean high water mark will be removed in such a way to avoid incidental backspill into the lake.
- The erosion control measures will be maintained until bare soils have been successfully vegetated and approved by a professional biologist.

6.2 Planting Plan

Wetland. Non-native shrubs and herbaceous vegetation will be removed from the wetland, and will be re-vegetated as shown on the planting plan (Figure 2). Table 1 lists the plant species to

be planted in the enhanced wetland. All of these plants are native to the area and will enhance the vegetative structure and diversity of the wetland. Trees and shrubs will be planted in the wetland with herbaceous vegetation planted along the wetland edge. A large non-native, deciduous tree that currently occurs in the wetland will be retained as it provides cover to the southern portion of the wetland and contributes organic matter to the wetland and lake.

Table 1. Planting List for Wetland

Scientific Name	Common Name	Layer	Quantity
<i>Malus fusca</i>	Western crabapple	tree	8
<i>Cornus stolonifera</i>	red-osier dogwood	tree	19
<i>Salix lasiandra</i>	Pacific willow	tree	10
<i>Rubus spectabilis</i>	salmonberry	shrub	12
<i>Carex lenticularis</i>	shore sedge	herbaceous	12
<i>Carex obnupta</i>	slough sedge	herbaceous	12
<i>Scirpus microcarpus</i>	small-fruited bulrush	herbaceous	12

Wetland Buffer. Non-native vegetation will be removed from the wetland buffer, most of which is non-native shrubs and herbaceous species. The plants to be used in re-planting the buffer are shown in Table 2, all of which are native to the area. The buffer areas to be re-planted are shown on Figure 2. The buffer plantings listed in Table 2 will increase the vegetative structure and diversity of the buffer and increase the overall habitat value of the wetland/wetland buffer/lake system. The rose and snowberry plants will be installed along the edge of the pedestrian trail, boardwalk, and platform. Over time, these plants will discourage pedestrians from going off the trail.

Table 2. Planting List for Wetland Buffer

Scientific Name	Common Name	Layer	Quantity
<i>Thuja plicata</i>	Western red cedar	tree	6
<i>Acer circinatum</i>	vine maple	shrub	28
<i>Corylus cornuta</i>	hazelnut	shrub	28
<i>Rosa gymnocarpa</i>	bald-hip rose	shrub	35
<i>Symphoricarpos albus</i>	snowberry	shrub	38
<i>Physocarpus capitatus</i>	Pacific ninebark	shrub	30
<i>Sambucus racemosa</i>	red elderberry	shrub	38
<i>Ribes sanguineum</i>	red-flowering currant	Shrub	38

Any areas that are disturbed will be seeded with a seed mix of *Alopecurus geniculatus* (water foxtail), *Agrostis stolonifera* (redtop), and *Festuca rubra* (red fescue) to stabilize soils and decrease the potential for non-native species to become established. The seed mix will be applied as stated on Figure 2.

Plants shown in Tables 1 and 2 will be installed between late October and early March, and will be installed based on details and notes presented on Figures 3 and 4. Plant substitutions are not

allowed unless approved by the project biologist and the City of Shoreline. Mulch will be placed to a depth of at least four inches around each installed plant.

6.3 Grading/Soils

To locate the dispersal trenches as far from the wetland as possible, approximately five to eight feet of buffer at the trench outlet (for the south trench) must be graded down to an elevation of 398 feet. The area to be graded for trench installation should be over-excavated by a depth of nine inches (as shown on Figure 2) to allow for nine inches of topsoil to be replaced. Topsoil from the site should be used in the over excavated area. The final grade adjacent to the trench should be to elevation 398.

The cement walkways currently on the site will be removed as part of buffer enhancement. Any compacted subgrade materials that may be present under the cement areas should be removed as well. Topsoil from the site should be backfilled into those areas where cement and subgrade materials are to be removed. Final grade of backfilled topsoil in these areas should match existing grades.

6.4 Habitat Features

To increase the habitat value of the enhanced wetland and wetland buffer, bird boxes and bat boxes will be installed. The location of these habitat features is shown on Figure 2. One bat box will be located in the southern portion of the wetland buffer. A cluster of two swallow boxes will be attached to a post, which will be installed in the central portion of the wetland buffer. In addition, two bird boxes with small holes will be installed to attract songbirds such as chickadees and wrens. One of these bird boxes will be located in the southwestern portion of the wetland and the other will be placed in the northwestern portion of the wetland buffer. The holes in the bird boxes will be sized to exclude starlings.

7.0 PERFORMANCE STANDARDS

Performance standards have been established to meet the enhancement goals. For this project, the restoration effort will be considered successful if the wetland buffer meets the following criteria:

- Installed plant survival of 100 percent through the first growing season;
- At least 80 percent survival of installed plants during the second through fifth monitoring years;
- At least 80 percent cover of planted species by Year 5; and
- Percent cover of non-native species less than 15 percent in each of the five monitoring years.

8.0 CONSTRUCTION PHASE

This enhancement plan will be implemented prior to or concurrent with site development. Plant installation will be between October and March. Project biologists will conduct periodic site

visits during construction and installation to verify that the plants are being installed as planned, and that sediment control devices are functioning properly. Once the plants have been installed and approved by the City, the landscape architect or project biologist will provide the City with an as-built, which will be used to determine plant survival during monitoring.

9.0 MONITORING

Monitoring will be conducted by a qualified biologist. Monitoring of the wetland and buffer enhancement areas will begin when construction is complete and will continue annually for five years post-construction. Specifically, monitoring will be conducted as follows:

- Upon completion of the wetland and buffer enhancement plantings;
- Approximately 30 days after plants have been installed;
- Twice annually during Monitoring Years 1 and 2, once early in the growing season (April) and later in the growing season (August); and
- Once annually during Monitoring Years 3 through 5, with monitoring data to be collected later in the growing season (August).

The main objective for mitigation monitoring is to document the level of success in meeting the performance standards. Survival data will be based on the as-built provided by the landscape contractor after the plants have been installed. Permanent sampling points will be established in the enhanced wetland and buffer to assess the success of the mitigation project and obtain percent cover data. In addition, permanent photo-points will be established that show an overview of the enhanced wetland and wetland buffer as well as vegetation conditions at the sampling points.

9.1 Data Collection

The following will be recorded each time the site is monitored:

- Survival rates of planted vegetation;
- General plant health assessment;
- Percent cover of planted vegetation;
- Percent cover of non-native species; and
- Photographs showing general overview of restored areas and monitoring points.

In addition, any wildlife that is observed using the replanted buffers will be noted.

9.2 Reporting

Monitoring reports will document the success in meeting the performance standards. The reports will recommend maintenance and plant species replacements, as necessary. Photographs will be included in the annual monitoring reports. Monitoring reports will be submitted by Prescott Homes to the City of Shoreline annually for five years no later than September 30 of each year.

To comply with SMC 20.80.350.G.3.d, monitoring reports will be prepared:

- Upon completion of the initial enhancement plantings;
- Within 30 days after plants are installed;
- Twice annually during Monitoring Years 1 and 2 (early spring and mid-summer); and
- Once annually during Monitoring Years 3 through 5 (mid-summer).

Monitoring reports will be finalized and submitted within 30 days of completing the monitoring. For early spring monitoring, the reports will be submitted by May 31 and mid-summer reports will be submitted by September 30.

9.3 Maintenance

Maintenance of the replanted wetland buffers will begin after completion of the project and continue for five years. The landscape contractor will be responsible for plant survival for a period of one year. After that, maintenance will be performed by a qualified professional contracted by Prescott Homes. Maintenance could include, but may not be limited to:

- Installing supplemental plantings as needed;
- Watering, as needed, to ensure that the planted areas receive at least one inch of water per week during the first year after plants are installed;
- Watering or providing irrigation during the second and third growing seasons if conditions are unseasonably dry;
- Manually removing non-native or invasive plant species if the percent cover exceeds 15 percent (herbicides shall not be used to control non-natives);
- Providing fencing around plants (where needed) to prevent animal damage; and
- Providing fencing to prevent vandalism or damage caused by humans.

10.0 PERFORMANCE BOND

The City of Shoreline will require a performance bond to ensure that enhancement of the wetland and wetland buffer are implemented as presented in this report. According to SMC 20.80.350.G.2, the performance bond shall equal 125 percent of the cost of the mitigation project for a minimum of five years. The bond may be reduced in proportion to the work successfully completed over the period of the bond.

11.0 CONTINGENCY PLAN

If any portion of the restoration effort is not successful, a contingency plan will be implemented. Such plans are prepared on a case-by-case basis to remedy any aspects of the effort that are not meeting the performance standards. The plan, if required, would be developed in cooperation with the Prescott Homes and the City of Shoreline.

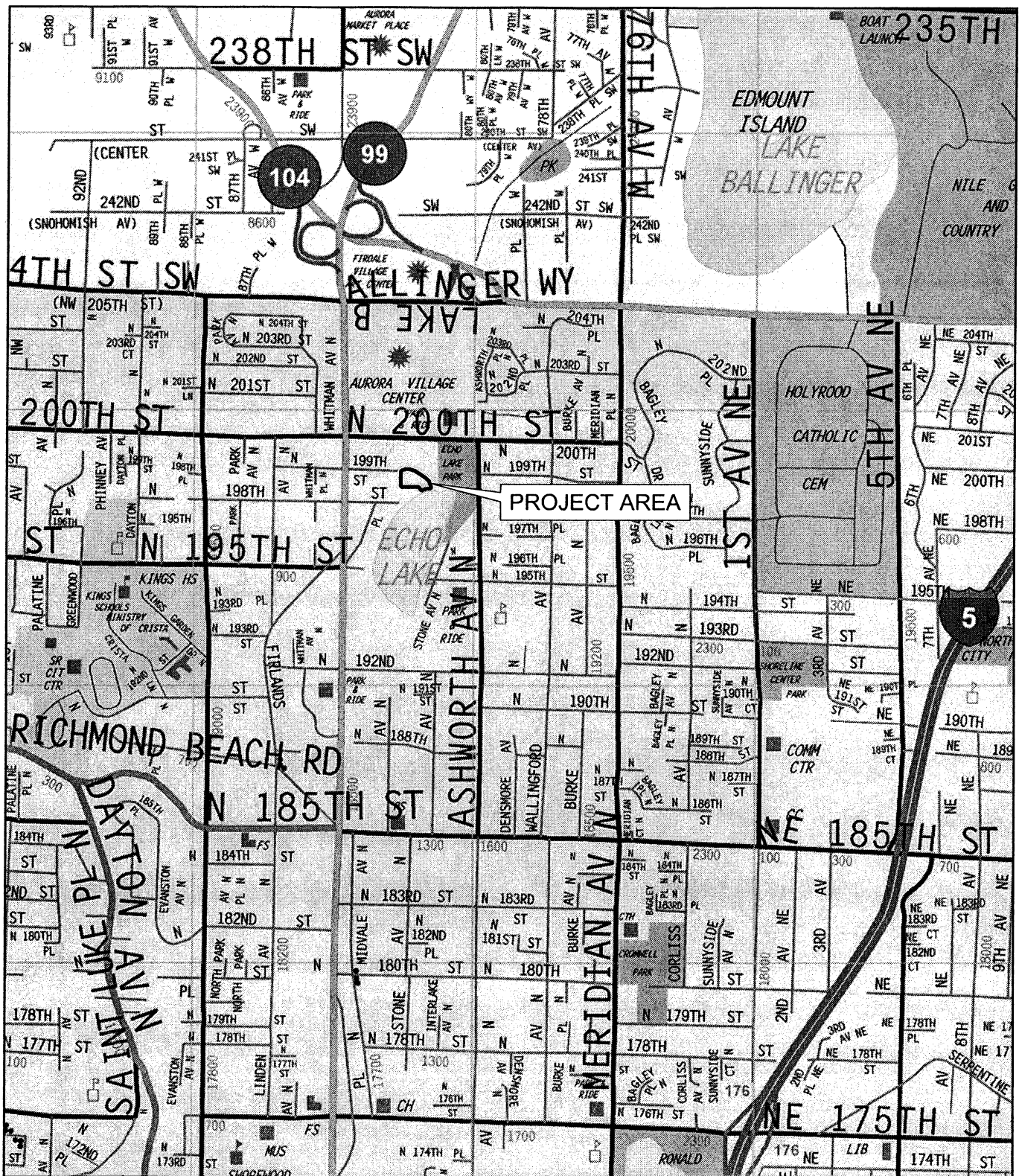
12.0 LIMITATIONS

Within the limitations of schedule, budget, and scope-of-work, we warrant that this work was conducted in accordance with generally accepted environmental science practices, including the technical guidelines and criteria in effect at the time this work was performed. The information provided in this report represents the authors' best professional judgment, based upon information provided by the project proponent in addition to that obtained during the course of conducting this work. No other warranty, expressed or implied, is made.

REFERENCES

Adolfson Associates, Inc. 2005. *Echo Lake Townhomes Wetland Delineation Report*. Prepared for Prescott Homes.

FIGURES



File name: Fig01_vicinity.ai
 Created/last edited by: JAB
 Date last updated: 02/22/06
 Reference: 25096



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 SOURCE: Thomas Bros. Maps, 2004.

FIGURE 1
 VICINITY MAP
 SHORELINE TOWNHOMES
 SHORELINE, WASHINGTON

PLANTING SCHEDULE

SCIENTIFIC NAME	COMMON NAME	QTY	SIZE	SPACING/NOTES
-----------------	-------------	-----	------	---------------

	EMERGENT WETLAND EDGE			
	Carex lasiocarpa	Shore Sedge	12 10" PLUGS	3' O.C.
	Carex diandra	Slough Sedge	12 10" PLUGS	3' O.C.
	Scirpus microcarpus	Small-fruited Bulrush	12 10" PLUGS	3' O.C.
	WETLAND ENHANCEMENT PLANTS			
	Cornus stolonifera	Redtwig Dogwood	19 1 GAL.	5' O.C.
	Malus fusca	Oregon Crabapple	8 2 GAL.	5' O.C.
	Rubus spectabilis	Salmonberry	12 1 GAL.	5' O.C.
	Salix lasioandra	Pacific Willow	10 1.5, 0.75-1.25" DIAM. X 18" LONG	3' O.C. (Group of 3 stakes 18" O.C.)
	BUFFER CREATION/ENHANCEMENT PLANTS			
	Acer circinnatum	Vine Maple	28 2 GAL.	5' O.C.
	Corylus cornuta	Hazelnut	28 2 GAL.	9' O.C.
	Physocarpus capitatus	Pacific Ninebark	30 1 GAL.	5' O.C.
	Ribes sanguineum	Red-flowering Currant	38 1 GAL.	5' O.C.
	Sambucus racemosa	Red Elderberry	40 2 GAL.	5' O.C.
	Rosa gymnocarpa	Baldhip Rose	35 1 GAL.	5' O.C.
	Symphoricarpos albus	Snowberry	38 2 GAL.	5' O.C.
	Thuja plicata	Western Redcedar	6 2 GAL.	9' O.C.
	DENSE PATHWAY BUFFER PLANTS			
	Ribes sanguineum	Red-flowering Currant	60 1 GAL.	3' O.C.
	Rosa gymnocarpa	Baldhip Rose	86 1 GAL.	3' O.C.

Seed Mix
Seed all areas of disturbed soil with the following mix:

Alopecurus geniculatus	Water Foxtail	60%
Agrostis stolonifera	Redtop	30%
Festuca rubra	Red Fescue	10%

Application rate: 45 lbs./acre

	EMERGENT WETLAND EDGE
	WETLAND ENHANCEMENT AREA
	BUFFER ENHANCEMENT AREA
	DENSE PATHWAY BUFFER AREA

	BAT BOX
	SWALLOW BOX
	SONGBIRD BOX
	WETLAND SIGN

PEDESTRIAN PATH

50' BUFFER LINE
DISPERSION TRENCH (TYP)

WETLAND BOUNDARY

EXISTING TREE
HARDENED SHORELINE
(TO BE REMOVED)

SPLIT RAIL FENCE
AT BUFFER LINE

WETLAND SIGN
MOUNTED ON FENCE
@ 50' O.C. (TYP)

BOARDWALK AND PLATFORM

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ADOLPHSON
ASSOCIATES, INC.
Environmental Solutions
5308 5th Avenue, NW
Seattle, WA 98107
P: (206) 788-9555
F: (206) 788-9554

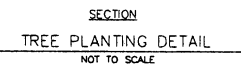
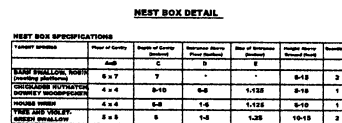
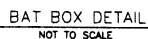
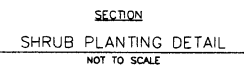
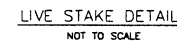
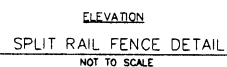
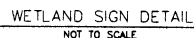


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FIGURE 2 - PLANTING PLAN
SHORELINE TOWNHOMES
SHORELINE, WASHINGTON
PRESCOTT HOMES



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FIGURE 3 - PLANTING DETAILS
SHORELINE TOWNHOMES
SHORELINE, WASHINGTON
PRESCOTT HOMES

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NOTES

GENERAL

REFER TO ADOLFSON ASSOCIATES, INC. REPORT FOR DETAILED DESCRIPTIONS OF IMPACTS, PROPOSED MITIGATION, AND MONITORING METHODS.

WETLAND PROTECTION METHODS

BEST MANAGEMENT PRACTICES (BMP) SHALL BE EMPLOYED PRIOR TO AND DURING CONSTRUCTION AND SHALL INCLUDE: PRECONSTRUCTION MEETING WITH THE GENERAL CONTRACTOR, THE GRADING CONTRACTOR, THE LANDSCAPE CONTRACTOR'S ON-SITE FOREMAN, CITY OF SHORELINE PERSONNEL, AND PROJECT BIOLOGIST/LANDSCAPE ARCHITECT TO EXPLAIN THE GENERAL CONCEPT, PLANTING AND/OR CONSTRUCTION INSTRUCTIONS. OTHER ATTENDEES MAY INCLUDE REPRESENTATIVES FROM THE PROJECT OWNER, AND THE PROJECT SURVEYOR.

NO HEAVY EQUIPMENT SHALL CROSS WETLAND AREAS. ALL CLEARING AND BROWSHING IN WETLANDS SHALL BE DONE BY HAND. CLEARLY MARKING WITH BRIGHT FENCING THE LIMITS OF CLEARING AND GRADING. CONFINING ALL BACKHOES, TOOLS, MATERIALS, CONSTRUCTION ACTIVITY AND DEBRIS TO THE CONSTRUCTION AREAS. PLANTING ALL EXPOSED SOIL WITH NATIVE VEGETATION AND/OR SPECIFIED SEEDING WITHIN 14 DAYS AFTER GRADING ACTIVITIES. MAINTAINING EROSION CONTROL MEASURES UNTIL THE AREA HAS BEEN SUCCESSFULLY PLANTED AND INSPECTED. SITE CONSTRUCTION IS COMPLETED, AND THE CITY OF SHORELINE HAS ISSUED "FINAL APPROVAL" OF THE MITIGATION AREA.

STAKING/MARKING MITIGATION AREA
1. LIMITS OF CLEARING, GRADING, AND MITIGATION PLANTING AREAS MUST BE CLEARLY MARKED BY SURVEYING PRIOR TO AND DURING a) SITE CLEARING AND GRADING ACTIVITIES, AND b) ENHANCEMENT PLANTINGS.
2. THE ENHANCEMENT AREA SHALL BE LOCATED BY A PROFESSIONAL SURVEYOR TO ENSURE PROPER SIZE, WIDTH, LOCATION AND ELEVATION OF ALL MITIGATION FEATURES.

SITE PREPARATION

1. REMOVE NON-NATIVE SPECIES (SEE MAINTENANCE ACTIVITIES BELOW) FROM ALL PROPOSED PLANTING AREAS.
2. OVER-EXCAVATE 4" MINIMUM AND LOOSELY COMPACTED SUBGRADE 8-12".
3. INSTALL 1" SALVAGED OR-SITE TOPSOIL. REPLACED SOILS SHALL CONTAIN AT LEAST 30% ORGANIC MATTER BY BULK DENSITY. SOIL IMPROVEMENTS NEEDED TO BE APPROVED BY PROJECT BIOLOGIST. MECHANICALLY TILL WITH SUBSOIL NO DEEPER THAN 6" AT A TIME.
4. FINISHED GRADE SHALL MATCH EXISTING GRADE EXCEPT AT THE OUTLET OF THE SOUTH INFILTRAL TRENCH, WHERE FINISHED GRADE SHALL BE 306.

MAINTENANCE

IN ORDER TO ACHIEVE PERFORMANCE STANDARDS, THE PERMITTEE SHALL HAVE THE ENHANCEMENT AREA MAINTAINED FOR THE DURATION OF THE MONITORING PERIOD, FIVE (5) YEARS. PROVIDE AT LEAST ONE MAINTENANCE VISIT PER GROWING SEASON THROUGHOUT FIVE YEAR WITH ADDITIONAL VISITS AS DEEMED NECESSARY BY PROJECT BIOLOGIST. REMOVAL OF ALL NON-NATIVE SPECIES SUCH AS HIMALAYAN AND EVERGREEN BLACKBERRY, KNOTWEED AND SCOT'S BROOK VOLUNTARIER RED ALDER AND BLACK COTTONWOOD REBRASSAPALINES WITHIN THE MITIGATION AREA WILL BE THINER TO A MINIMUM OF 13-FOOT CENTERS AND BLACK COTTONWOOD REBRASSAPALINES WITHIN THE MITIGATION AREA WILL BE THINER TO A MINIMUM OF 13-FOOT CENTERS THROUGHOUT THE MONITORING PERIOD. REMOVE ALL NON-NATIVE VEGETATION DEBRIS. WATER IF PLANTS APPEAR EXCESSIVELY DRY. WATER ALL PROPOSED PLANTING AREA AT A RATE OF AT LEAST 1" INCH OF WATER PER WEEK WITHOUT RAINFALL FROM JUNE 15 THROUGH SEPTEMBER 15 FOR AT LEAST THE FIRST TWO YEARS OF THE FIVE YEAR MONITORING PERIOD.

SUCCESS CRITERIA

1. 100% SURVIVAL OF ALL PLANTED TREES AND SHRUBS AFTER THE FIRST YEAR, AND AT LEAST 80% NATIVE VEGETATIVE COVER THEREAFTER.
2. AT LEAST 80% COVER BY YEAR FIVE.
3. ALL DEBRIS SUCH AS TRUNKS AND LIMBS SHALL BE REMOVED ANNUALLY. NON-NATIVE PLANT SPECIES COVER SHALL NOT EXCEED FIFTY PERCENT.
4. IF FAILURE TO MEET THE SUCCESS CRITERIA DURING THE MONITORING PERIOD RESULTS IN ADDITIONAL MITIGATION WORK, THE ADDITIONAL WORK SHALL BE PERFORMED WITHIN FOUR (4) MONTHS OF THE DATE OF THIS MONITORING REPORT THAT NOTED THE FAILURE.

MONITORING

1. MONITORING SCHEDULE (ADJUST YEAR ACCORDING TO ACTUAL CONSTRUCTION SCHEDULE):
1ST MONITORING SITE VISIT 2ND MONITORING SITE VISIT
1ST YEAR MONITORING VISITS 2ND YEAR MONITORING VISITS
3RD YEAR MONITORING VISITS 4TH YEAR MONITORING VISITS
5TH YEAR MONITORING VISITS
2. MONITORING PROTOCOL
1ST YEAR: ESTABLISH PERMANENT MONITORING PLOT AND PHOTO POINT LOCATIONS THROUGHOUT MITIGATION AREA.
2ND THRU 5TH YEAR: DETERMINE SURVIVAL AND/OR PERCENT COVER/COMPOSITION BY SPECIES, RECOMMEND MAINTENANCE OR CONTINGENCY ACTIVITIES.
3. MONITORING REPORT
FOLLOWING EACH YEAR'S MONITORING VISIT, PROVIDE A REPORT DETAILING THE FINDINGS OF THE VISIT. REPORT SHALL INCLUDE INFORMATION CONCERNING SURVIVAL AND CONDITION OF THE INSTALLED PLANTS, RECUSSION OF INVASIVE WEEDS COVER, PHOTOGRAPHS FROM ESTABLISHED PHOTO POINTS, AND ANY RECOMMENDATIONS FOR MAINTENANCE AND REPAIRS. THIS REPORT SHOULD BE SUBMITTED TO THE CITY OF SHORELINE AND TO THE RESPONSIBLE PARTY OR OWNER BY DATES SPECIFIED IN SECTION 8.3 OF THIS REPORT. THE RESPONSIBLE PARTY OR OWNER SHOULD ADDRESS ALL MAINTENANCE AND REPAIR RECOMMENDATIONS WITHIN 4 MONTHS OF RECEIVING EACH MONITORING REPORT, AND SHOULD FORWARD A MEMO TO THE CITY DETAILING ANY ACTIONS THAT WERE TAKEN.

CONTINGENCY PLANS

APPROPRIATE CONTINGENCY PLANS WILL BE DEVELOPED AS NECESSARY DURING THE 5-YEAR MONITORING PERIOD TO CORRECT PROBLEMS IDENTIFIED DURING MONITORING. IF NECESSARY, REPLANTING WILL BE CONDUCTED AFTER THE REASON FOR FAILURE HAS BEEN DETERMINED (E.G., POOR PLANTING STOCK, MOISTURE REGIME, HERBIVORY, DISEASE, DROUGHT/SHADE CONDITIONS, HYDROLOGIC CONDITIONS, VALIDATING PLANT COMPETITION, ETC.). IT WILL BE THE RESPONSIBILITY OF PRESCOTT HOMES TO HAVE THE PLANTS REINSTALLED AFTER THE 1-YEAR CONTRACTOR GUARANTEE PERIOD.

ALL CONTINGENCY PLANS WILL BE SUBMITTED TO THE CITY OF SHORELINE FOR APPROVAL PRIOR TO IMPLEMENTATION.

RECORD DRAWINGS

AN AS-BUILT DRAWING WILL BE PROVIDED IMMEDIATELY AFTER COMPLETION OF PLANTING AND WILL INCLUDE A DIRECT COUNT OF PLANT SPECIES IN EACH PLANTING ZONE, AS WELL AS THE ESTABLISHMENT OF PERMANENT PHOTO POINTS. THE AS-BUILT DRAWING SHOULD BE SUBMITTED TO THE CITY OF SHORELINE WITHIN 30 DAYS OF INSTALLATION AND BEFORE THE ACCEPTANCE OF THE MITIGATION INSTALLATION.

PLANTING

ORIGIN
1. PLANT MATERIALS SHALL BE NATIVE PLANTS, NURSERY GROWN IN THE FURTEST SOUND AREA OF WASHINGTON.

HANDLING
1. PLANTS SHALL BE HANDLED SO AS TO AVOID ALL DAMAGE, INCLUDING BREAKING, BRUISING, ROOT DAMAGE, SUNBURN, DRYING, FREEZING OR OTHER INJURY. PLANTS MUST BE COVERED DURING TRANSPORT. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE IN A MANNER THAT COULD DAMAGE BRANCHES. PROTECT PLANTS FROM SHADE AND WET SOIL IN THE TIME BETWEEN DELIVERY AND INSTALLATION. DO NOT LIFT CONTAINER STOCK BY TRUNKS, STEMS, OR TOPS. DO NOT REMOVE FROM CONTAINERS UNTIL READY TO PLANT. WATER ALL PLANTS AS NECESSARY TO KEEP MOISTURE LEVELS APPROPRIATE TO THE SPECIES. HORIZONTAL REQUIREMENTS. PLANTS SHALL NOT BE ALLOWED TO DRY OUT. ALL PLANTS SHALL BE WATERED THOROUGHLY IMMEDIATELY UPON INSTALLATION. SOAK ALL CONTAINERIZED PLANTS THOROUGHLY PRIOR TO INSTALLATION. PLANTS WHOSE ROOTS HAVE DRIED OUT FROM EXPOSURE WILL NOT BE ACCEPTED AT INSTALLATION INSPECTION.

DAMAGED PLANTS
1. BARRENED DRIED OUT, OR OTHERWISE MISHANDLED PLANTS WILL BE REJECTED AT INSTALLATION INSPECTION. ALL REJECTED PLANTS SHALL BE IMMEDIATELY REMOVED FROM THE SITE.

PLANT NAMES
1. PLANT NAMES SHALL COMPLY WITH THOSE GENERALLY ACCEPTED IN THE NATIVE PLANT NURSERY TRADE. ANY QUESTION REGARDING PLANT SPECIES OR VARIETY SHALL BE REFERRED TO THE PROJECT BIOLOGIST OR LANDSCAPE ARCHITECT.

PLANT SUBSTITUTIONS
1. PLANT SUBSTITUTIONS ARE NOT PERMITTED WITHOUT THE PERMISSION OF THE PROJECT BIOLOGIST OR LANDSCAPE ARCHITECT. SAME SPECIES SUBSTITUTIONS OF LARGER SIZE DO NOT REQUIRE SPECIAL PERMISSION. HOWEVER, SMALL PLANTS OFTEN EXPERIENCE LESS TRANSPLANT SHOCK AND ADAPT MORE QUICKLY TO SITE CONDITIONS, RESULTING IN A HIGHER SUCCESS RATE. AS SUCH, SMALLER PLANTS WILL BE APPROVED AS SUBSTITUTIONS BASED ON CERTAIN SITE-SPECIFIC CONDITIONS (THES NOT LESS THAN 1 GALLON SIZE HOWEVER).

QUALITY AND CONDITION
1. PLANTS SHALL BE NORMAL IN PATTERN OF GROWTH, HEALTHY, WELL BRANCHED, VIGOROUS, WITH WELL-DEVELOPED ROOT SYSTEMS, AND FREE OF PESTS AND DISEASES. DAMAGED, DISEASED, PEST-INFESTED, ISOLATED, BRUISED, DRIED OUT, BURNED, BROKEN, OR DEFECTIVE PLANTS WILL BE REJECTED. PLANTS WITH PRUNING WOUNDS OVER 1" IN DIAMETER WILL BE REJECTED.

ROOTS
1. ALL PLANTS SHALL BE CONTAINERIZED OR BALLED AND BURLAPPED, UNLESS EXPLICITLY AUTHORIZED BY THE PROJECT BIOLOGIST OR LANDSCAPE ARCHITECT. ROOTBOUND PLANTS OR BALL PLANTS WITH DAMAGED, CRACKED OR LOOSE ROOTBALLS (MAJOR DAMAGE) WILL BE REJECTED. IMMEDIATELY BEFORE INSTALLATION, PLANTS WITH MAJOR ROOT DAMAGE (SOME BROKEN AND/OR TWISTED ROOTS) MUST BE ROOT-PRUNED. MATTER OR CIRCLING ROOTS OF CONTAINERIZED PLANTINGS MUST BE PRUNED OR STRAIGHTENED. AND THE SIDES OF THE ROOT BALL MUST BE ROUGHENED FROM TOP TO BOTTOM TO A DEPTH OF APPROXIMATELY HALF AN INCH IN TWO TO FOUR PLACES.

TIMING
1. PLANTINGS SHALL BE INSTALLED IN THE FALL-WINTER SEASON TO ENSURE ADEQUATE MOISTURE DURING PLANT ESTABLISHMENT.

PLANTING SPECIFICATIONS
1. THIS PLANTING PLAN IS DESIGNED TO REPLICATE NATURAL PLANT COMMUNITIES IN SPECIES COMPOSITION AND ARRANGEMENT. EVEN SPACING AND STRAIGHT-ROW PLANTING ARE NOT DESIRED WITH THE EXCEPTION OF PLANTING ALONG THE TRAIL THROUGH THE BUFFER.
2. ACTUAL PLANTING LOCATION TO BE DETERMINED BY FIELD CONDITIONS.
3. ALL PLANT MATERIAL SHALL BE HEALTHY, NURSERY-GROWN-ONLY STOCK. WEAK OR DAMAGED PLANTS WILL BE REJECTED BY THE PROJECT BIOLOGIST OR LANDSCAPE ARCHITECT.
4. DEPENDING ON THE AVAILABILITY OF NATURAL RAINFALL, THE LANDSCAPE CONTRACTOR MAY NEED TO PROVIDE SUPPLEMENTAL WATERING TO ENSURE PLANT SURVIVAL.
5. PLANT PROCUREMENT, TRANSPORT, STORAGE, HANDLING, PLANTING TECHNIQUES, CARE OF EXISTING SOIL AND VEGETATION, AND WATERING ARE TO BE DETERMINED FOR LANDSCAPE INDUSTRY STANDARDS.
6. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE 100% PLANT SURVIVAL FOR ONE YEAR AFTER PROVISIONAL ACCEPTANCE BY KING COUNTY. ALL DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR AND GUARANTEED THROUGH THE FOLLOWING YEAR. PRIOR TO PLANT INSTALLATION, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE PROJECT BIOLOGIST OR LANDSCAPE ARCHITECT OF ANY CONDITIONS THAT ARE JUDGED TO IMPAIR PLANT SURVIVAL. ALTERNATIVES WILL BE APPROVED BY THE PROJECT BIOLOGIST OR LANDSCAPE ARCHITECT PRIOR TO PLANT SUBSTITUTION.

PERCENT COVER
1. AT THE END OF PLANTING: 100% WITH GRASS SEED GERMINATED. ANY NON-MULCHED OR BARE AREA GREATER THAN 1 SQUARE FOOT SHALL BE RESEEDS ON PLANTS.

STAKING

ROOT SHRUBS AND TREES DO NOT REQUIRE ANY STAKING. IF THE PLANT CAN STAND ALONE WITHOUT STAKING IN A MODERATE WIND, DO NOT USE A STAKE. HOWEVER, IF THE PLANT NEEDS SUPPORT, THEN USE A STAKE WITH STAPLING OR WRAPPING PLACES AS LOW AS POSSIBLE ON THE TRUNK TO LOOSELY BRACE THE TREE WITH TWO STAKES (SEE PLANTING DETAIL). DO NOT BRACE THE PLANT TIGHTLY OR TOO HIGH ON THE STEM. IF THE PLANT IS UNABLE TO SWAY, IT WILL FURTHER LOSE THE ABILITY TO SUPPORT ITSELF. IF PLANTS FALL OVER FOR ANY REASON, THEY WILL BE REPLANTED OR REPLACED AS NECESSARY. DO NOT USE WIRE IN A RUBBER HOSE FOR STAPLING AS IT EXERTS TOO MUCH PRESSURE ON THE BARK. AS SOON AS SUPPORTING THE PLANT BECOMES UNNECESSARY, REMOVE THE STAKES. ALL STAKES MUST BE REMOVED WITHIN TWO (2) YEARS OF INSTALLATION.

MULCHING

1. ALL TREES, SHRUBS, GROUNDCOVERS AND EMBERGENTS TO RECEIVE 4" OF FULLY ASSED CEDAR GROVE COMPOST OR EQUAL (TO BE APPROVED BY PROJECT BIOLOGIST OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION) TO ASSIST PLANT SURVIVAL. (SEE DETAIL THIS SHEET). COMPOST SHALL BE KEPT WELL AWAY (AT LEAST 2") FROM THE TRUNKS AND STEMS OF ALL PLANTS. NO BARK PRODUCTS OR SANDWICH WILL BE PERMITTED. MULCH SHALL BE FREE OF WEED SEEDS.

SEEDING

1. HYDROSEED OR HAND SEED ALL AREAS OF DISTURBED SOIL WITHIN THE MITIGATION AND TRAIL RESTORATION AREAS EXCLUDING MULCHED PLANT PITS. SEE THE PLANT SCHEDULES FOR SEED MIX AND APPLICATION RATES. HYDROSEED TO INCLUDE TACKIFIER, MULCH AND FERTILIZER COMPONENTS. PROJECT BIOLOGIST TO APPROVE FINAL MIX.
2. THINNING SEEDING SHALL NOT TAKE PLACE UNTIL MULCH HAS BEEN APPLIED. CONTRACTOR SHALL INSURE THAT AREAS TO RECEIVE SEED ARE CLEAR OF DEBRIS AND THAT FINAL GRADERS ARE CORRECT. SEEDING SHALL BE PERFORMED AFTER OTHER PLANT INSTALLATION IS COMPLETE. SEEDING IS THE FINAL STEP OF THE INITIAL INSTALLATION. SITE SHALL BE CLOSED TO ALL VEHICLES AND FOOT TRAFFIC SHALL BE MINIMIZED AFTER SEEDING IS COMPLETE. SEEDING SHALL TAKE PLACE WHEN THE GROUND IS FROZEN OR IN WET WEATHER. SEEDS SHALL BE HAND BROADCAST OR BY MECHANICAL HAND POWERED SPREADER, WITH AN EVEN DISTRIBUTION AS FEASIBLE. AREAS WITHIN TOP OF STEMS OF INSTALLED PLANTS SHALL NOT BE SEEDS.
3. PERCENT WEED SEED SHALL BE 5.00% BY WEIGHT MAXIMUM. CONTRACTOR SHALL PROVIDE TO THE PROJECT BIOLOGIST OR LANDSCAPE ARCHITECT A COPY OF SEED ANALYSIS TAG, PROOF OF PROVENANCE, AND SUPPLIER GUARANTEE OF CONTENTS AND PURITY.

TEMPORARY EROSION AND SEDIMENTATION CONTROL (TESC)

PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES, SILT FENCING SHALL BE PLACED AROUND THE PERIMETER AREAS OF PROPOSED DISTURBANCE. THIS CONTROL MEASURE WILL FUNCTION TO PREVENT SILTATION WITHIN THE WETLANDS, STREAMS, AND RIVERS. ALL SEDIMENTATION CONTROL STRUCTURES SHALL BE KEPT IN PLACE AND FUNCTIONING UNTIL GROUND VEGETATION IS FIRMLY ESTABLISHED. REFER TO THE SITE ENGINEER'S TESC PLAN FOR ALL DETAILS.

HERBICIDES/PESTICIDES

CHEMICAL CONTROLS SHALL NOT BE USED IN THE MITIGATION/RESTORATION AREA, SENSITIVE AREAS, OR THEIR BUFFERS. HOWEVER, LIMITED USE OF HERBICIDES MAY BE APPROVED DEPENDING ON SITE-SPECIFIC CONDITIONS, ONLY IF APPROVED BY CITY OF SHORELINE STAFF.



ADOLFSON ASSOCIATES, INC.
Environmental Solutions
5306 SRNehole Ave. NW
Seattle, WA 98107
P: (206) 788-9858
F: (206) 788-9884

NOT TO SCALE

MAP DATA ARE THE PROPERTY OF THE SOURCES LISTED BELOW.
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SOURCE: C3 Aerials/Archives February, 2006

File name: 25096_MitConcept.dwg
Date: 10/31/05 mbe
Revised: 2/22/06 mbe

FIGURE 4 - PLANTING NOTES
SHORELINE TOWNHOMES
SHORELINE, WASHINGTON
PRESCOTT HOMES

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ATTACHMENT D:

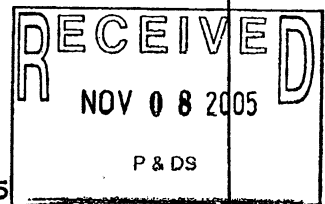
WETLAND DELINEATION REPORT

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**ECHO LAKE TOWNHOMES
WETLAND DELINEATION**

PREPARED FOR:

**PRESCOTT HOMES, INC.
10613 NE 38TH PLACE #17
KIRKLAND, WA 98033**



OCTOBER 2005

PREPARED BY:

**Adolfson Associates, Inc.
5309 Shilshole Ave NW, Ste 200
Seattle, Washington 98107
206.789.9658**



201478

EXECUTIVE SUMMARY

At the request of Prescott Homes Inc. (Prescott Homes), Adolfson Associates, Inc. (Adolfson) delineated wetlands and prepared this technical report for the proposed Echo Lake Townhomes project on two parcels (#2227300070 and #2227300071) located in the City of Shoreline, King County, Washington. The study area is located within Section 4, Township 25 North, Range 5 East. All rights-of-entry to the subject property were granted by Prescott Homes. The boundaries of the study area were established based on information provided by Prescott Homes.

Adolfson biologists Donna Frostholt and Janice Martin conducted a site visit on August 3, 2005. Access to the site is via North 199th Street, a one-lane roadway. The site is bounded by North 199th Street, offices and apartments to the north, Echo Lake to the southeast and condominiums to the southwest. There are no structures on-site. However, there are building foundations located near the eastern portion of the site, and geotechnical studies had recently been completed. A large approximate 10-foot high, 100 square-foot debris pile full of unearthed stumps and branches was found at the northwest corner of the site near the entrance. Walking trails are present on the site and lead to the lake. There is a cement bulkhead between the site and Echo Lake.

One wetland was identified on-site. Wetland A is a palustrine emergent, lake-fringe wetland associated with Echo Lake. Wetland A is a Type II wetland because it is associated with Echo Lake, and is hydrologically connected to lake fringe wetlands to the east, south and southwest of Echo Lake (personal communication, Matt Torpey, City Planner, August 19, 2005).

According to the City of Shoreline Municipal Code (SMC), critical areas are defined under Chapter 20.80 the City's Critical Areas Ordinance. The City is in the process of updating their Critical Areas Code and regulatory implications for this site may change. The new Critical Areas Code is anticipated to be adopted by December 2005 (personal communication, Matt Torpey, City Planner, August 19, 2005).

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1.0 PROJECT AUTHORIZATION AND SCOPE OF WORK

At the request of Prescott Homes Inc. (Prescott Homes), Adolfson Associates, Inc. (Adolfson) delineated wetlands and prepared this technical report for the proposed Echo Lake Townhomes project on two parcels (#2227300070 and #2227300071) located in the City of Shoreline, King County, Washington. The study area is located within Section 4, Township 25 North, Range 5 East. All rights-of-entry to the subject property were granted by Prescott Homes. The boundaries of the study area were established based on information provided by Prescott Homes.

The Scope of Work for this project included wetlands determinations and delineations on two parcels, and preparation of this technical report. A brief discussion of regulatory implications and permitting considerations is also included in this report.

2.0 SITE DESCRIPTION

The Echo Lake Townhomes site, an approximately 1.1-acre site composed of two parcels (#2227300070 and #2227300071), is located in the City of Shoreline, Washington, Section 4, Township 25 North, Range 5 East. The site is bounded by North 199th Street, offices and apartments to the north, Echo Lake to the southeast and condominiums to the southwest (Figure 1).

There were no structures on-site. There are building foundations located near the eastern portion of the site, and geotechnical testing had recently been completed. A large approximate 10-foot high, 100 square-foot debris pile of unearthed stumps and branches was found at the northwest corner of the site near the entrance. A few walking trails occur on the site and lead to the lake. There is a cement bulkhead between the site and Echo Lake. The site slopes upwards from Echo Lake to the west towards Highway 99.

3.0 WETLAND DEFINITION AND REGULATIONS

Wetlands are formally defined by the Corps of Engineers (Corps) (Federal Register 1982), the Environmental Protection Agency (EPA) (Federal Register 1986), the Washington Shoreline Management Act (SMA) (1971) and the Washington State Growth Management Act (GMA) (1992) as "... those areas that are inundated or saturated by surface or groundwater 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. Wetlands generally include swamps, marshes, bogs, and similar areas" (Federal Register, 1982, 1986). In addition, the SMA and the GMA definitions add: "Wetlands do not include those artificial wetlands intentionally created from non-wetland site, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990 that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those

artificially created wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands”.

Numerous federal, state, and local regulations govern development and other activities in or near wetlands; at each level, there are typically several agencies charged with such powers. Specific regulatory implications concerning the subject property are summarized within this report.

4.0 METHODS

Two levels of investigation were conducted for the analysis of wetlands on the subject property: a review of existing information and an on-site investigation.

4.1 Review of Existing Information

A review of existing literature, maps, and other materials was conducted to identify wetlands or site characteristics indicative of wetlands on the subject property. Note that these sources can only indicate the likelihood of the presence of wetlands; actual wetland determinations must be based upon data obtained from field investigations.

Several documents were available for this review:

- *U.S. Geological Survey 1:24,000 Topographic Map*, Edmonds East quadrangle. 1987 updated 1994.
- *National Wetland Inventory*, Edmonds East quadrangle. (U.S. Fish and Wildlife Service, 1987 updated 1999).
- *Hydric Soils of the State of Washington*. (Natural Resources Conservation Service, 2001).
- *McAlee Creek and Lyon Creek Basins Characterization Report*. May 2004. Tetra Tech / KCM.
- *King County Sensitive Areas Map Folio*. (1990).
- *A Catalog of Washington Streams and Salmon Utilization Volume 1 Puget Sound* (Williams et. al, 1975).
- *Echo Lake Site Soils Report*. Terra Associates. February 1989.
- *Preliminary site soils infiltration information email*. Scott Riegel of Earth Solutions. August 25, 2005.

4.2 On-site Investigation

Methods defined in the *Washington State Wetlands Identification and Delineation Manual* (Washington State Department of Ecology, 1997), a manual consistent with the *Corps of*

Engineers Wetlands Delineation Manual ("1987 Manual") (Environmental Laboratory, 1987) were used to determine the presence and extent of wetlands on the subject property. Washington state and all local governments must use the state delineation manual to implement the SMA and/or the local regulations adopted pursuant to the GMA. The methodology outlined in the manual is based upon three essential characteristics of wetlands: (1) hydrophytic vegetation; (2) hydric soils; and (3) wetland hydrology. Field indicators of these three characteristics must all be present in order to make a positive wetland determination (unless problem areas or atypical situations are encountered).

The "routine on-site determination method" was used to determine the wetland boundaries. The routine method is used for areas equal to or less than five acres in size, or for larger areas with relatively homogeneous vegetative, soil, and hydrologic properties.

Formal data plots were established in areas of relatively homogeneous vegetation, where information regarding each of the three wetland parameters (vegetation, soils, and hydrology) was recorded. Dominant herbs and saplings/shrubs within a five-foot radius, and dominant trees and woody vines within a 30-foot radius from the data plot center were recorded on the data form (Washington State Department of Ecology, 1997). This information was used to distinguish wetlands from non-wetlands. If wetlands were determined to be present on the subject property, the wetland boundaries were delineated. Wetland boundaries were identified with sequentially-numbered colored flagging imprinted with the words "WETLAND DELINEATION." Data plot locations were marked with colored flagging.

5.0 WETLAND CHARACTERISTICS

5.1 Hydrology

Water must be present in order for wetlands to exist; however, it need not be present throughout the entire year. Wetland hydrology is considered to be present when there is permanent or periodic inundation or soil saturation for more than 12.5 percent of the growing season (typically two weeks in lowland Pacific Northwest areas). Areas which are inundated or saturated for between 5 and 12.5 percent of the growing season in most years, may or may not be wetlands. Areas inundated or saturated for less than 5 percent of the growing season are non-wetlands (Ecology 1997).

Indicators of wetland hydrology include observation of ponding or soil saturation, water marks, drift lines, drainage patterns, sediment deposits, oxidized rhizospheres, water-stained leaves, and local soil survey data. Where positive indicators of wetland hydrology are observed, it is assumed that wetland hydrology occurs for a sufficient period of the growing season to meet the wetland criteria, as described by Ecology (1997).

5.2 Soils

Hydric soils are indicative of wetlands. Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile (Federal Register, 1994). The NRCS, in cooperation with the National Technical Committee for Hydric Soils, has compiled lists of hydric soils (NRCS, 2001). These lists identify soil series mapped by the NRCS that meet hydric soil criteria. It is common, however, for a map unit of non-wetland (non-hydric) soil to have inclusions of hydric soil, and vice versa. Therefore, field examination of soil conditions is important to determine if hydric soil conditions exist. The NRCS has developed a guide for identifying field indicators of hydric soils (NRCS, 1998). This list of hydric soil indicators is considered to be dynamic; revisions are anticipated to occur on a regular basis as a result of ongoing studies of hydric soils. Due to anaerobic conditions, hydric soils exhibit certain characteristics, collectively known as "redoximorphic features," that can be observed in the field (Vepraskas, 1999). Redoximorphic features include: high organic content, accumulation of sulfidic material (rotten egg odor), greenish- or bluish-gray color (gley formation), spots or blotches of different color interspersed with the dominant (or matrix) color (mottling), and dark soil colors (low soil chroma) (USDA, NRCS, 1998; Vepraskas, 1999). Soil colors are described both by common color name (for example, "dark brown") and by a numerical description of their hue, value, and chroma (for example, 10YR 2/2) as identified on a Munsell soil color chart (Munsell Color, 2000). Soil color is determined from a moist soil sample.

5.3 Vegetation

Plants must be specially adapted for life under saturated or anaerobic conditions to grow in wetlands. The U.S. Fish and Wildlife Service (USFWS) has determined the estimated probability of each plant species' occurrence in wetlands and has accordingly assigned a "wetland indicator status" (WIS) to each species (USFWS, 1997). Plants are categorized as obligate (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), upland (UPL), not listed (NL), or no indicator status (NI). Definitions for each indicator status are listed in the Glossary (Appendix A). Species with an indicator status of OBL, FACW, or FAC are considered adapted for life in saturated or anaerobic soil conditions. Such species are referred to as "hydrophytic" vegetation. A (+) or (-) sign following the WIS signifies greater or lesser likelihood, respectively, of being found in wetland conditions.

Areas of relatively homogeneous vegetative composition can be characterized by "dominant" species (see Glossary in Appendix A). The indicator status of the dominant species within each vegetative strata is used to determine if the plant community may be characterized as hydrophytic. The vegetation of an area is considered to be hydrophytic if greater than 50% of the dominant plant cover is comprised of species having an indicator status of OBL, FACW, or FAC.

Common plant names are used throughout this text. The common and taxonomic (scientific) names and wetland indicator status for each plant noted is presented in Appendix B. Scientific nomenclature of all plant species encountered follows that of Hitchcock and Cronquist (1973).

Where the taxonomic names of plant species have been recently changed, former names (synonymies) are included in Appendix B.

6.0 FINDINGS

The following sections describe the results of the field investigation conducted by Donna Frostholt and Janice Martin on the Echo Lake Townhomes site on August 3, 2005. These sections describe the wetland found on the site, upland habitats, and observations of wildlife. Four data plots were established within relatively uniform areas of vegetation on the site. Data sheets, which correspond to formal data plots, are provided in Appendix C.

6.1 Existing Information

A wetland inventory report prepared by Tetra Tech/KCM (2002) identified approximately 0.2 acre of lake fringe wetland along the east, south and southwestern edges of Echo Lake. The existing wetland on the subject property was not identified in the Tetra Tech/KCM report (2002) entitled *McAleer Creek and Lyon Creek Basins Characterization Report* (Figure 2).

The National Wetlands Inventory (NWI) indicates that all of Echo Lake is wetland (Figure 3). The USGS topographic map (Figure 4) shows the topography of the subject property and surrounding areas.

6.2 Wetlands Determinations

One wetland was identified on the subject property. This wetland is associated with Echo Lake. The following describes the wetland and the upland habitats found on the site. Figure 5 shows the location of the wetland on the Echo Lake Townhomes property. GeoDatum professionally surveyed the wetland boundaries.

6.2.1 Wetland A

Location and Geomorphic Setting. Wetland A is a palustrine emergent wetland located near the southeast corner of the subject property along the shoreline of Echo Lake. There is a bulkhead separating the wetland from the Lake. It is likely that the wetland extends both north and south of the subject property. Wetland A is characterized by Data Plot A-1.

Hydrology. At the time of the site visit, the soils in the wetland were damp to the soil surface, and the water depth of the Lake immediately adjacent to the bulkhead was eight inches. Based on our observations, it was assumed that soils would be saturated to the surface early in the growing season in years of normal precipitation. For this reason, we have assumed that the wetland hydrology parameter has been met.

Soils. The soil observed at Data Plot A-1 was a blackish-brown (2.5Y 3/1) silt loam from the soil surface to 12 inches in depth. From 12 to 14 inches in depth the soil was a dark grey (2.5Y 4/1) sand.

Vegetation. Wetland A is a palustrine emergent wetland that consists of such herbaceous plant species as spreading bentgrass, velvet grass, yellow flag, creeping buttercup, toad rush, and soft rush. Trees, some of which are partially rooted outside of the wetland, provide cover to some of the wetland.

6.3 Upland Description

Upland vegetation on the Echo Lake Townhomes site consists of a number of weedy species such as velvet grass, Himalayan blackberry, bull thistle and Robert's herb. Native trees, such as Douglas-fir, and non-native ornamentals are present in the upland areas. There were no signs of wetland hydrology in the upland areas.

6.4 Wildlife Observations

Wildlife use of the site included mallard, black-capped chick-a-dee, American robin, barn swallow, and bullfrog. Other species of birds, mammals, reptiles and or amphibians in addition to those observed are expected to use habitat on the project site. For example nocturnal species may be present that were not active during the site visit or other species may only be highly visible in this area during certain seasons.

6.5 Off-site Wetlands

Echo Lake has been documented to have lake fringe wetlands along the east, south and southwestern shorelines of the Lake. There is a possibility that more wetland areas exist nearby due to the hydrological connection to the lake. The proximity of these wetlands can provide habitat corridors and connections for wildlife to refuge, food and other habitats.

7.0 REGULATORY IMPLICATIONS

Wetlands are regulated at the local, state, and federal level. Agencies with jurisdiction include the City of Shoreline, U.S. Army Corps of Engineers, and Washington State Department of Ecology (Ecology). Regulatory implications associated with development in wetlands include, but may not be limited to, those discussed in this section. All applicable permits should be obtained prior to developing or otherwise altering wetlands.

7.1 Local Regulations

The City of Shoreline regulates wetlands and lakes in the City's Code under subchapter 4 (SMC 20.80 – Critical Area). According to SMC 20.80.060, all critical area tracts shall be clearly marked with permanent field markings. Any alteration or impact to the functions or values of critical areas must be in accordance with the standards set forth in SMC 20.80.080 and SMC 20.80.350. Required wetland buffers within the Echo Lake Townhome project area shall be in accordance with SMC 20.80.330 which provides a minimum and maximum buffer widths. According to SMC the maximum buffer widths for Wetland A is 100 feet and the minimum buffer width is 50 feet.

The City is in the process of updating their Critical Areas Code and regulatory implications for this site may change. The new Critical Areas Code may be adopted by December, 2005 (personal communication, Matt Torpey, City Planner, August 19, 2005).

7.2 State Regulations

Section 401 of the Federal Clean Water Act directs each state to certify that proposed in-water activities will not adversely affect water quality or violate state aquatic protection laws. Ecology is responsible for administering the state certification program. The state certification process is usually triggered through a Section 404 permit application. The response from Ecology may be approval, approval with conditions, denial, or a request for delay due to lack of information. A Section 401 Water Quality Certification is required for any project permitted under Section 404 of the Clean Water Act (see Federal Regulations below). Any conditions attached to the 401 Certification become part of the Section 404 permit.

7.3 Federal Regulations

The U.S. Army Corps of Engineers regulates discharges of dredged or fill materials into waters of the United States, including wetlands under Section 404 of the Clean Water Act. The purpose of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." A Section 404 permit may be required if a proposed project involves filling wetlands. The Corps has established two types of permit programs under Section 404: nationwide and individual. Nationwide permits are issued when a proposed activity will have minimal adverse impacts to wetlands. All other projects are permitted under the individual permitting process. The Corps determines which permitting process is used for a proposed project. The Corps will require that wetland impacts be avoided or minimized to the extent practicable, and mitigation will likely be required for unavoidable wetland impacts.

8.0 LIMITATIONS

It should be recognized that the delineation of wetland boundaries is an inexact science; wetland professionals may disagree on the precise location of wetland boundaries. The final determination of wetland boundaries is the responsibility of the resource agencies that regulate

activities in and around wetlands. Accordingly, all wetland delineations performed for this study, as well as the conclusions drawn in this report, should be reviewed by the appropriate regulatory agencies prior to any detailed site planning or construction activities. Further, wetlands are by definition transition areas; wetland boundaries may change with time. We therefore recommend that this wetlands study be verified with the appropriate regulatory agencies as soon as practical.

Within the limitations of schedule, budget, and scope-of-work, we warrant that this study was conducted in accordance with generally accepted environmental science practices, including the technical guidelines and criteria in effect at the time this study was performed, as outlined in the Methods section. The results and conclusions of this report represent the authors' best professional judgment, based upon information provided by the project proponent in addition to that obtained during the course of this study. No other warranty, expressed or implied, is made.

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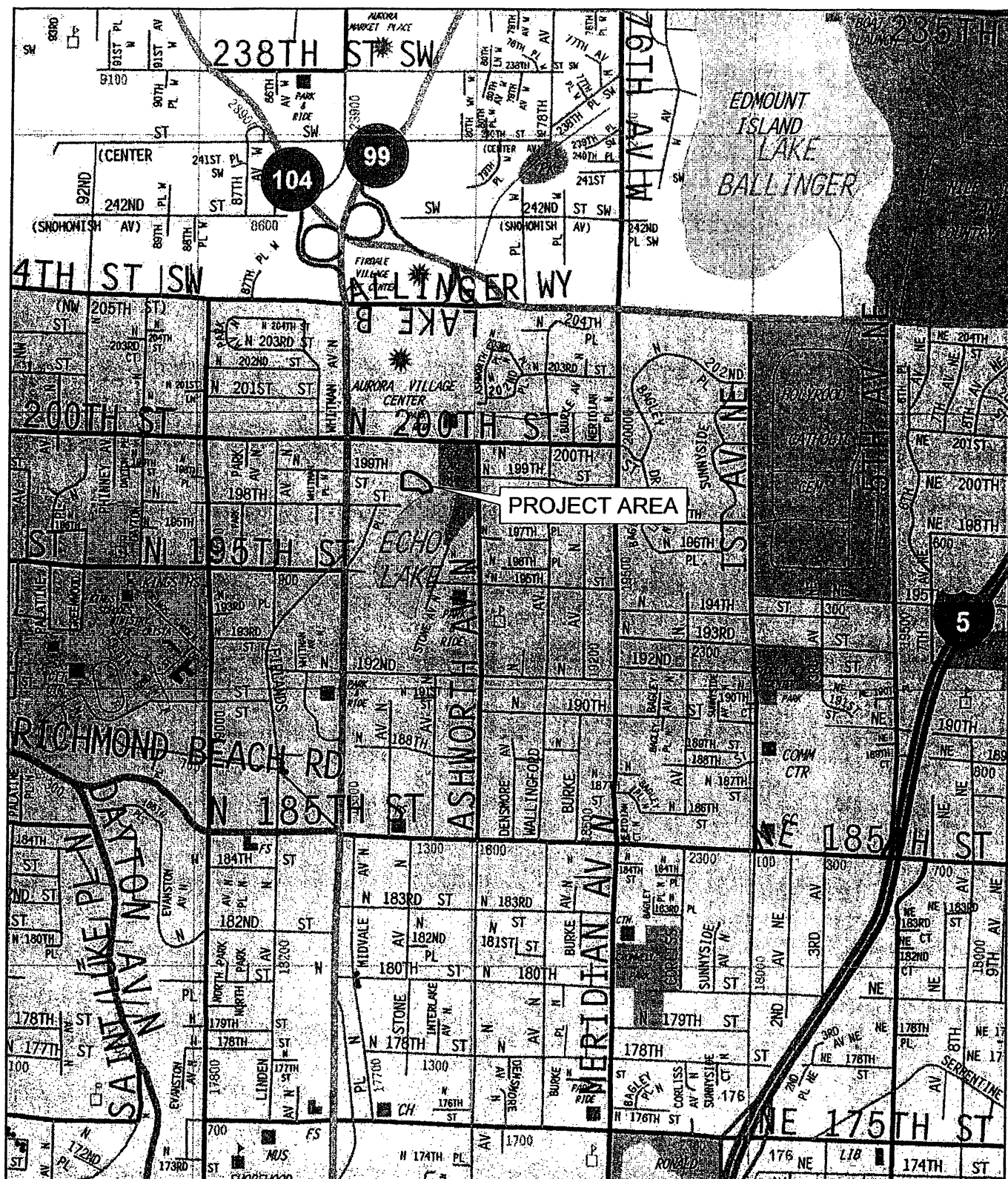
Washington State Department of Ecology . 1997. *Washington State Wetlands Identification and Delineation Manual*. Washington State Department of Ecology, Publication No. 96-94.

Washington State Department of Ecology. 1994. *Wetlands Regulations Guidebook*. Washington State Department of Ecology, Publication No. 88-5.

Personal Communications

Matt Torpey, City of Shoreline Planner, Planner II, telephone communication on August 19, 2005.

FIGURES



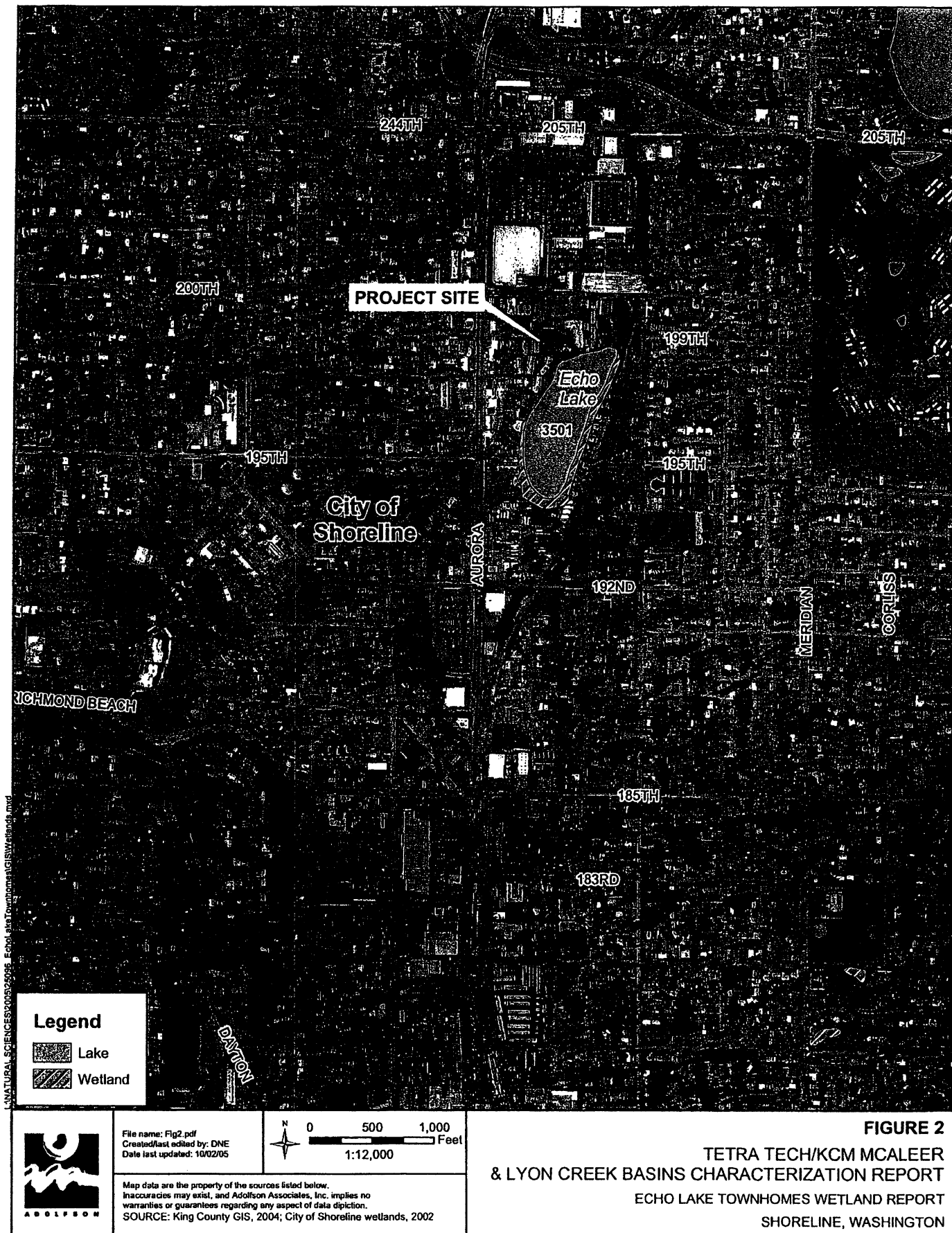
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 Date last updated: 10/03/05
 Reference: 25096

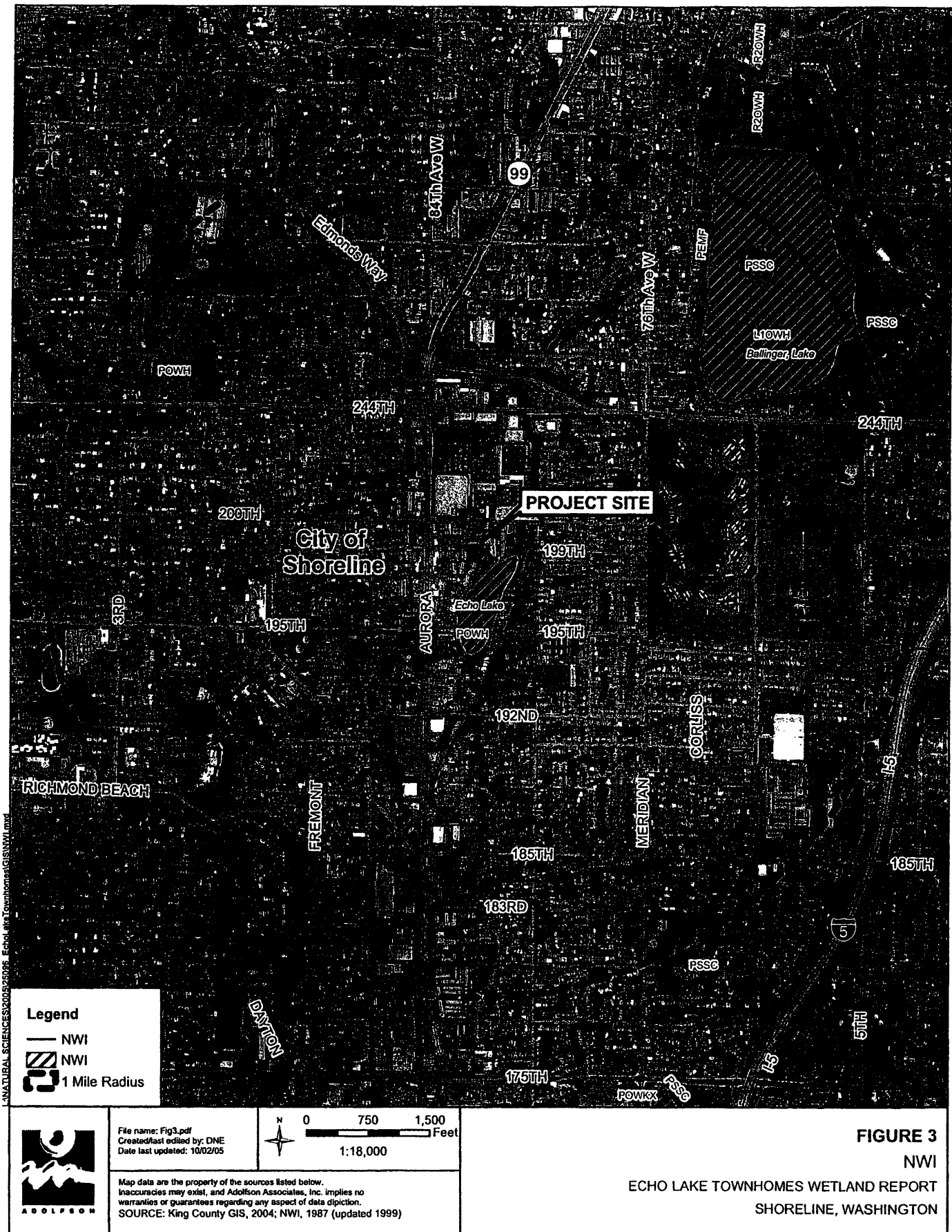


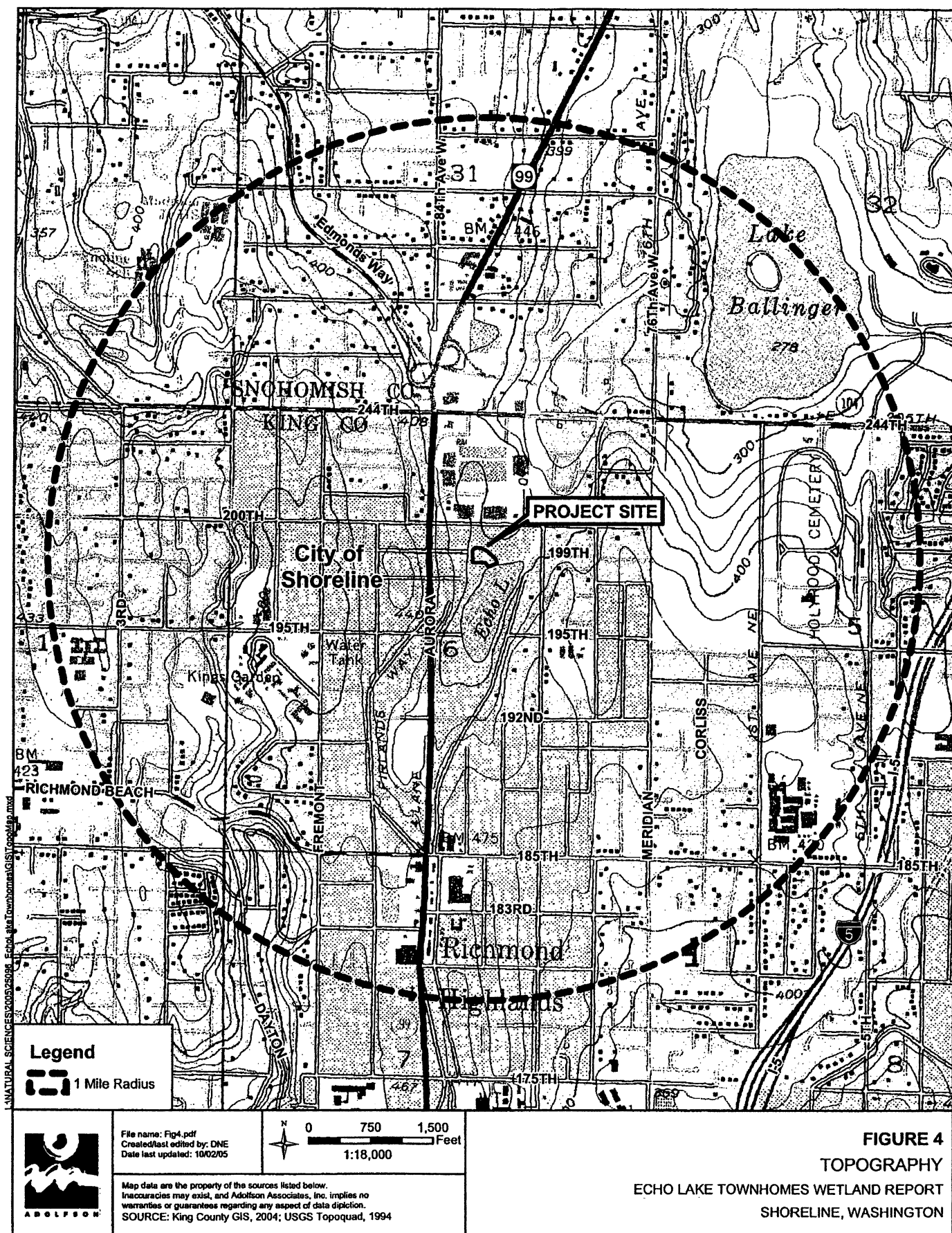
NOT TO SCALE

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 Inaccuracies may exist, and Adoffson Associates, Inc. implies no warranties or
 guarantees regarding any aspect of data depiction.
 SOURCE: Thomas Bros. Maps, 2004.

FIGURE 1
VICINITY MAP
 ECHO LAKE TOWNHOMES
 SHORELINE, WASHINGTON



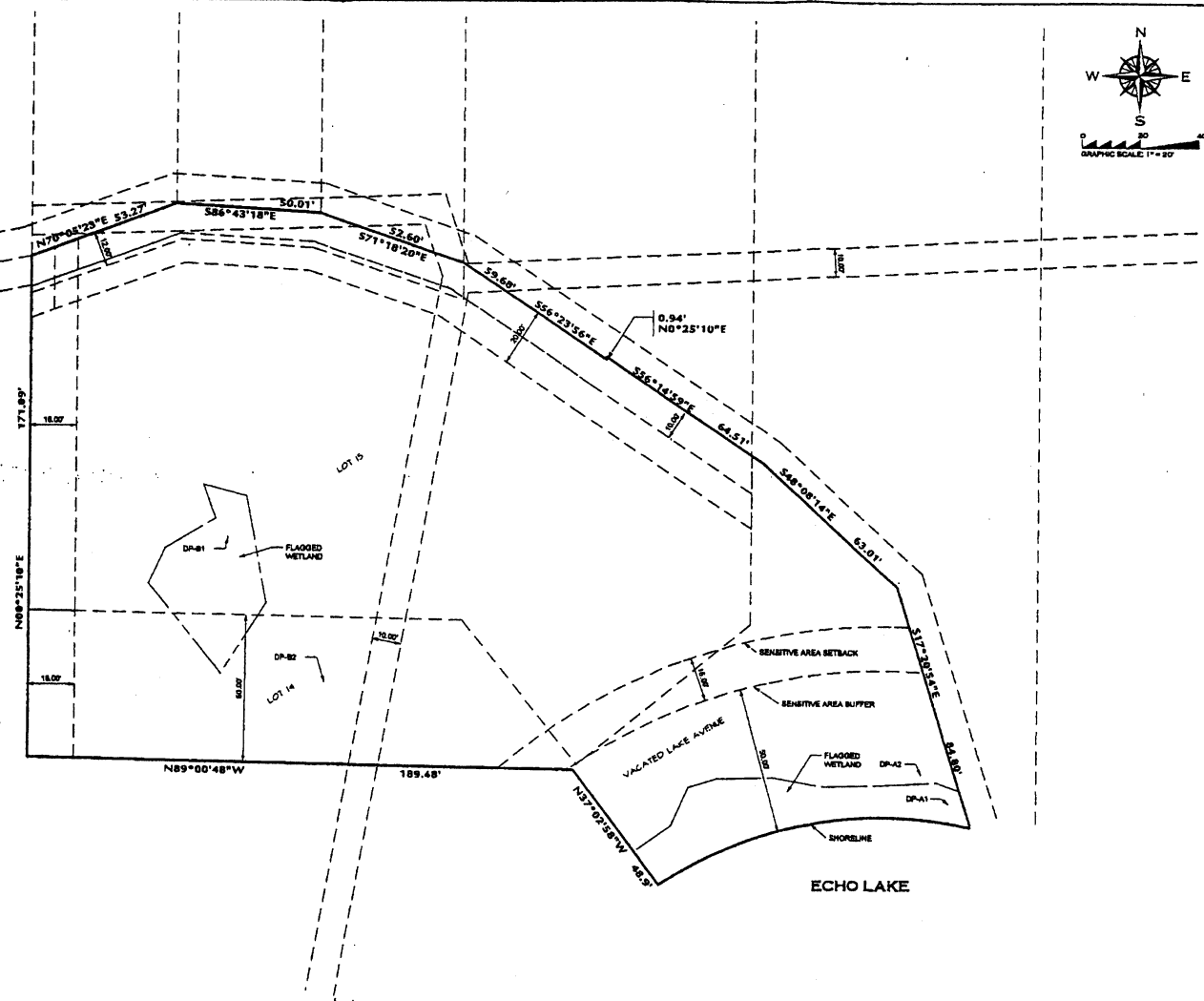




GENERAL NOTES

1. THIS EXHIBIT IS BASED ON THE CHICAGO TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE, ORDER NO. 1186587, DATED MAY 20, 2005 AT 8:00 A.M.
2. THE INFORMATION ON THIS MAP DOES NOT REPRESENT THE RESULTS OF A SURVEY. UTILITY LOCATIONS ARE BASED ON AN UNRECORDED SURVEY BY CHENOWETH & ASSOCIATES, DATED AUGUST, 1987, AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

- SCHEDULE B, EASEMENT 1, PER AF: 1310588; RIGHT-OF-WAY
- SCHEDULE B, EASEMENT 2, PER AF: 1882085; WATERLINE, DRIVEWAY & UTILITIES
- SCHEDULE B, EASEMENT 3, PER AF: 1882086; DRIVEWAY & UTILITIES
- SCHEDULE B, EASEMENT 4, PER AF: 3613510; WATERMAIN
- SCHEDULE B, EASEMENT 5, PER AF: 445421; 8" DRAIN
- SCHEDULE B, EASEMENT 6, PER AF: 445421; SET PROPERTY ASIDE AS BEACH PROPERTY
- SCHEDULE B, EASEMENT 7, PER AF: 5127368; SEWER
- SCHEDULE B, EASEMENT 8, PER AF: 5152884; SEWER
- SCHEDULE B, EASEMENT 9, PER AF: 5152885; SEWER, (DOES NOT AFFECT SUBJECT PARCEL)
- SCHEDULE B, EASEMENT 10, PER AF: 5152890; SEWER, (DOES NOT AFFECT SUBJECT PARCEL)
- SCHEDULE B, EASEMENT 11, PER AF: 5152881; SEWER
- SCHEDULE B, EASEMENT 12, PER AF: 7108210382; SEWER (DOES NOT AFFECT SUBJECT PARCEL)
- SCHEDULE B, EASEMENT 13, PER AF: 9709110090; DEBRIS REMOVAL, (TEMPORARY EASEMENT)



File name: Fg05_wetlands
 Created last edited by: JAS
 Date last updated: 08/24/05
 Reference #: 25096

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 Information may vary. The publisher assumes no responsibility for
 questions regarding any aspect of data collection.
 SOURCE: GeoDatum, Inc. Survey



FIGURE 5

SURVEYED WETLAND BOUNDARIES
 ECHO LAKE TWONHOMES WETLAND DELINEATION REPORT
 SHORELINE, WASHINGTON

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ATTACHMENT E:

THIRD PARTY REVIEW OF
WETLAND DELINEATION
REPORT

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The Watershed Company

October 18, 2005

Kim Lehmberg
City of Shoreline
17544 Midvale Ave
Shoreline, WA 98133-4921

Re: Echo Lake Wetland Delineation Review

Dear Kim:

Thank you for the opportunity to review the wetland delineation study conducted on the property located at 1150 N 198th Street in the City of Shoreline. Comments in this letter are based on review of the October 2005 report entitled *Echo Lake Townhomes Wetland Delineation* prepared for Prescott Homes, Inc. by Adolfson Associates; the October 4, 2005 letter from Donna Frostholm of Adolfson Associates to the City of Shoreline; and on my October 14, 2005 site visit.

The scope of this review is limited to two areas flagged by Adolfson Associates on the property and does not address any other critical areas that might exist on the site. We offer the following review comments:

1. Existing flags marking the boundary of Wetland A (as labeled on Figure 5 in the *Echo Lake Townhomes Wetland Delineation Report*) were accurate. Flags 5 through 7 were missing, and the area where they had been located appeared to be recently cleared of woody vegetation (mostly Himalayan blackberry) to create access to the shoreline of Echo Lake. Flags 2 and 8 were attached to vegetation that appeared to have been moved during mowing; I could not reliably pinpoint their original location, but they were generally in line with the wetland boundary.
2. The October 2005 report rates Wetland A as Type II per a conversation with Matt Torpey, City of Shoreline Planner, on August 19, 2005, based on its association with Echo Lake and hydrological connection to other lake fringe wetlands. We confirmed this rating with Kim Lehmberg, City of Shoreline Planner, on October 18, 2005.
3. The area labeled Wetland B on Figure 5 in the *Echo Lake Townhomes Wetland Delineation Report* does not meet wetland criteria. Much of the flagged area had been disturbed for geotechnical studies. Regenerating vegetation was present at the time of my site visit and was composed of upland species, including red alder and black cottonwood seedlings, Himalayan blackberry, vine maple, English ivy, clover, bindweed, hawkweed, bracken fern, and grasses. Soils in "Wetland B" were olive brown (2.5Y 4/3), very sandy gravelly loam to approximately 18 inches, and dark yellowish brown (10YR 7/4) sandy loam to at least 22 inches below that. There was no saturation or other evidence of wetland hydrology in this area at the time of my site visit.

K. Lehmberg
October 18, 2005
Page 2 of 2

Regarding the boundary of Wetland A, we agree with the results given in the October 2005 wetland delineation report. Although several flags are missing, the wetland boundary appears to be generally linear between the remaining flags. Regarding the area flagged and referred to as Wetland B, we agree with the October 4, 2005 letter that the area does not meet wetland parameters. We do not believe that an addition delineation or report is warranted.

This concludes our review comments for this project at this time. Please feel free to call with any questions about this information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Suzanne Tomassi', with a long horizontal flourish extending to the right.

Suzanne Tomassi
Wildlife and Wetland Biologist

ATTACHMENT F:

SEPA CHECKLIST

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ECHO LAKE TOWNHOMES

SEPA CHECKLIST

PREPARED FOR:

**PRESCOTT HOMES, INC
10613 NE 38TH PLACE #17
KIRKLAND, WA 98033**

OCTOBER 2005

PREPARED BY:

**Adolfson Associates, Inc.
5309 Shilshole Ave NW, Ste 200
Seattle, Washington 98107
206.789.9658**



201478

INTRODUCTION

Prescott Homes is proposing to construct 18 townhomes on an approximately 1.1-acre site immediately northwest of Echo Lake in the City of Shoreline (Figures 1 and 2). The site consists of two parcels (2227300070 and 2227300071) that are currently undeveloped (Figure 3). Land use in the vicinity includes commercial buildings, apartment buildings, high use arterial roads, and open space associated with Echo Lake (Figure 4).

The townhome units would be located in four separate structures of three to six units each. The development will also include a 23-foot wide drive lane accessing the proposed buildings, guest parking spaces, fencing on property boundaries, and a pedestrian pathway leading to a common area. The existing concrete bulkhead at the Echo Lake shoreline will also be removed.

Primary access to the project site is proposed via extension of an existing private access roadway located in the northwest section of the existing Echo Lake Waterfront Condominiums site, which accesses North 198th Street. Emergency vehicle access would be provided directly from North 199th Street, located on the northwest corner of the project site. A gate would be installed at the emergency vehicle access driveway to prevent general access to the development (Figure 5).

This State Environmental Policy Act (SEPA) Environmental Checklist has been prepared to address the environmental impacts resulting from the proposed Echo Lake Townhomes.

ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Name of the proposed project: Echo Lake Townhomes

2. Name of Applicant:

Prescott Homes, Inc.

3. Address and telephone number of applicant and contact person:

Greg Kappers
10613 NE 38th Place #17
Kirkland, WA 98033
(425) 822-2829

4. Date checklist prepared: October 24, 2005

5. Agency requesting checklist:

City of Shoreline
Department of Community Development Services

6. Proposed timing or schedule (including phasing, if applicable):

The general project schedule includes construction starting in Spring 2006 with completion in late 2006/early 2007.

7. Plans for future additions, expansion, or further activity related to or connected with this proposal:

None proposed at this time.

8. Environmental information that has been prepared, or will be prepared, directly related to this project:

The following studies related to the Echo Lake Townhomes have been conducted to date:

Wetland Delineation, Echo Lake Townhomes, 2005. Prepared by Adolfson Associates, Inc.

Wetland and Buffer Enhancement Plan, Echo Lake Townhomes, 2005. Prepared by Adolfson Associates, Inc.

Phase I Environmental Report Expanded Phase I Report Echo Lake Property, 2005. Prepared by Earth Solutions NW LLC.

Infiltration Evaluation Echo Lake Townhome Development, 2005. Prepared by Earth Solutions NW LLC.

Technical Information Report (Full Drainage Review) Echo Lake Townhomes, 2005. Prepared by Davido Consulting Group, Inc.

Traffic Impact Assessment Echo Lake Townhomes, 2005. Prepared by Transportation Engineering NorthWest, LLC.

- 9. Applications that are pending for governmental approvals or other proposals directly affecting the property covered by the proposal:**

None.

- 10. List of governmental approvals or permits that will be needed for the proposal:**

City of Shoreline Preliminary and Final Plat Approval
City of Shoreline Site Development Permit
City of Shoreline Building Permits
City of Shoreline Critical Areas Review
Washington Department of Fish and Wildlife Hydraulic Project Approval

- 11. Brief, complete description of the proposal, including the proposed uses and the size of the project and site:**

Prescott Homes is proposing to construct 18 townhomes on an approximately 1.1-acre site immediately northwest of Echo Lake in the City of Shoreline (Figures 1 and 2). The site consists of two parcels (2227300070 and 2227300071) that are currently undeveloped (Figure 3). Land use in the vicinity includes commercial buildings, apartment buildings, high use arterial roads, and open space associated with Echo Lake (Figure 4).

The townhome units would be located in four separate structures of three to six units each. The development will also include a 23-foot wide drive lane accessing the proposed buildings, guest parking spaces, fencing on property boundaries, open space and landscaped areas, and a pedestrian pathway leading to a common area. The development proposal includes reducing the wetland buffers for the Type II wetland from 100 feet to 50 feet. Enhancement of the existing wetland and the wetland buffer will be conducted as part of the buffer reduction. The existing concrete bulkhead at the Echo Lake shoreline will also be removed.

Primary access to the project site is proposed via extension of an existing private access roadway located in the northwest section of the existing Echo Lake Waterfront Condominiums site, which accesses North 198th Street. Emergency vehicle access would be provided directly from North 199th Street, located on the northwest corner of the project site. A gate would be installed at the emergency vehicle access driveway to prevent general access to the development (Figure 5).

Construction is planned for early to mid-2006 to early 2007. Construction activities will include the demolition of existing concrete building pads, vegetation clearing, grading, filling, building construction, and paving. Backhoes, trucks, compactors, loaders, small graders, and paving equipment will be used to prepare the area. Best Management Practices (BMPs) include the use of stabilized construction entrance, inlet protection, seeding, mulching, and silt fencing and will be used to prevent erosion and sedimentation into surface waters, drainage systems, and adjacent properties.

Low impact development measures are proposed for stormwater quality and control. The primary water quality and flow control measure for on-site runoff is permeable pavement with infiltration beds in the access road. A biofiltration swale and rain garden is proposed for 199th Street runoff (see Attachment A – Plan Sheets).

A *Wetland Delineation Report* (Adolfson Associates, 2005a) and a *Wetland and Buffer Enhancement Plan* (Adolfson Associates, 2005b) have been prepared to describe critical areas located on the site and proposed enhancement of the wetland and wetland buffer. These reports are submitted with this checklist.

12. Location of the proposal, including street address, if any, and section, township, and range; legal description; site plan; vicinity map; and topographical map, if reasonably available:

The project site is a 1.1-acre area composed of two parcels (#22273000071 and #222730070) on the northwest shore of Echo Lake. The site is located at 1145 N 199th Street (Figure 1).

The proposed project is located in Section 4, Township 25 North, Range 5 East, W.M., in Shoreline, Washington.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (underline):

Flat, rolling, hilly, steep slopes, mountainous, other

The majority of the site is level with gentle sloping to the southeastern portion of the site.

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slopes (approximately 3 percent) are found near the shoreline of Echo Lake.

c. What general types of soils are found on the site (for example clay, sand, gravel, peat, muck)? Specify the classification of agricultural soils and note any prime farmland.

The Infiltration Evaluation Report prepared by Earth Solutions NW LLC (2005) found that the site is underlain primarily by native soils consisting of a loose layer of topsoil transitioning to medium dense to dense silty sand and silty sand with gravel (Earth Solutions NW LLC, 2005). This description is consistent with soils information obtained from the Generalized Geologic Map of Seattle and Suburban Areas (Galster et al., 1991), which identifies soils in the project area as Vashon till (Qvt). The King County Soil Survey does not provide soil information for this site.

No portion of the site is farmed or considered prime farmland.

d. Are there any surface indications or a history of unstable soils in the immediate vicinity? If so, describe.

There is no evidence of unstable soils at the project site or in the immediate vicinity.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate the source of the fill.

Site grading activities are expected to consist of clearing, grubbing and stripping; excavation for building foundations; backfilling around footings, behind walls and beneath floor slabs; and sub-grade preparations for slab-on-grade floors and pavement areas. Grading for road construction will also occur.

It is estimated that approximately 1,000 cubic yards of grading and approximately 2,700 cubic yards of fill material will be required. The existing site soil may be used as structural fill provided the soil is free of organics and other deleterious material. Approximately 1,700 cubic yards of import fill is anticipated to be required.

f. Could erosion occur as a result of clearing, construction, or use?

In general, soils on slopes steeper than 40 percent have high erosion potential and soils on slopes inclined between 15 and 40 percent have medium to high erosion potential (depending on the character of the soil). The maximum site slope is approximately three percent; therefore, no appreciable erosion is likely to occur during and after construction. Construction erosion and sedimentation control measures consistent with City of Shoreline requirements will be implemented during construction and are described below under 1(h).

g. About what percent of the site will be covered with impervious surfaces after project construction (for example buildings or asphalt)?

The townhomes, roadways, and parking areas would represent approximately 27,175 square feet (0.62 acre) of impervious surface area on the site (approximately 51 percent of the project site).

h. Describe the proposed measures to reduce or control erosion, or other impacts to the earth, if any.

The City of Shoreline has adopted the 1998 *King County Surface Water Design Manual* (KCSWDM) by reference with exceptions in the KCSWDM addendum in the *City of Shoreline Engineering Development Guide*. During construction, all applicable City of Shoreline and King County Surface Water Design Standards Best Management Practices (BMPs) for erosion and sedimentation control (ESC) will be implemented. Erosion and sedimentation control facilities will be constructed prior to or in conjunction with all clearing and grading so as to ensure that the transport of sediment to surface waters, drainage systems, and adjacent properties is minimized. The ESC measures will include:

- Installing a perimeter silt fence;
- Constructing a stabilized construction entrance;
- Providing inlet protection at all catch basins;
- Inspecting and maintaining ESC facilities to ensure continued proper functioning;
- Removing the cement bulkhead such that incidental backfill does not occur;

- Stabilizing any areas of exposed soils that will not be disturbed for two days during the wet season or seven days during the dry season with the appropriate ESC methods (e.g., seeding, mulching, covering); and
- Upgrading ESC measures as needed for unexpected storm events and modified to account for changing site conditions (e.g., relocation of silt fences).

2. Air

- a. What types of emissions to the air would result from the proposal (e.g. dust, automobile, odors, industrial, wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known.**

During construction, dust, odors, and emissions from heavy machinery, trucks, and other vehicles traveling to and operating on the site would be anticipated for a period slightly less than one year.

Following construction, the anticipated use of the site would moderately increase the automobiles traveling on local roads to and from the townhome development. The increase in traffic would increase the amount of automobile emissions compared to existing conditions. An estimated total of 110 daily, weekday a.m. and p.m. peak hour vehicular trips would be generated at full occupancy. This increase in vehicular trips would result in a negligible increase in emissions because this represents a small percentage of traffic on surrounding roads.

Wood burning fireplaces will not be incorporated into the design of the units. Therefore, there will be no wood smoke emissions post-construction.

- b. Are there any off-site sources of emissions or odors that may affect your proposal? If so, generally describe.**

No off-site sources of emissions or odors have been identified that would affect the proposed development.

- c. Describe proposed measures to reduce or control emissions or other impacts to air, if any.**

Contractors are expected to use known, available, and reasonable measures to meet the Puget Sound Clean Air Agency's requirements. Appropriate best management practices (BMP's) are expected to be employed to reduce surface and air movement of dust during grading, demolition, and construction activities. Mitigation measures may include:

- Impervious surfaces on the site should be swept, vacuumed, or otherwise maintained to suppress dust.
- Temporary ground covers, sprinkling the project site with water, or use of temporary stabilization practices upon completion of grading.
- Wheel-cleaning stations could be provided to ensure construction vehicle wheels and undercarriages do not carry excess dirt from the site onto adjacent roadways.
- Construction would be planned to minimize exposing areas of earth for extended periods.

3. Water

a. Surface:

- 1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, and wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

Surface water features in the vicinity include Echo Lake and one palustrine emergent wetland (Wetland A) located near the southeast edge of the site along the Echo Lake shoreline. Echo Lake is an approximately 12-acre lake, with a maximum depth of approximately 30 feet.

Adolfson biologists confirmed the location of Wetland A during a wetland delineation in 2005. The results of the study are included in the *Wetland Delineation Report Echo Lake Townhomes* (Adolfson Associates, 2005a). Wetland A is characterized in detail in the report.

- 2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

The proposed project will occur within 200 feet of Echo Lake and the onsite wetland, but has been designed to avoid impacts to the lake and adjacent wetland. Construction erosion and sedimentation control (ESC) measures would be used to provide the least amount of disturbance to Echo Lake, the wetland, and the wetland buffer during the construction.

An existing, approximately 90-foot long concrete bulkhead located at the Echo Lake shoreline would be removed as part of this proposal. Construction equipment will operate from land and work will be conducted in a manner to prevent materials from entering the lake.

3. **Estimate the amount of fill and dredge material that could be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill materials.**

The proposal will not require any dredge or fill activities in surface water or wetlands in the project area. The bulkhead will be removed but will be taken out in a manner that avoids incidental backfill of substrate. This area will be planted with emergent plants to stabilize soils.

4. **Will the proposal require surface water withdrawals or diversion? Give general description, purpose, and approximate quantities, if known.**

The proposal will not require any surface water withdrawals or diversions.

5. **Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.**

According to the King County GIS center's 100-year floodplain maps, the proposed project site does not lie within a 100-year floodplain (King County, 2005). The sources for the data include FEMA preliminary and final flood insurance maps (FIRMs) and King County flood boundary work maps.

b. Ground

1. **Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.**

An infiltration evaluation was performed for the proposed stormwater infiltration system at the site (Earth Solutions NW LLC, 2005). Infiltration rates were deemed to be suitable at the site to a depth. By design, infiltration trenches involve water discharge to the ground, which may reach groundwater. The proposed stormwater flow control and water quality treatment [described in c(1)] provide the necessary water quality treatment prior to infiltration to the ground as stipulated by the 2005 King County Surface Water Design Standards for Low Impact Development.

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any. Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) is expected to serve.**

The project would not result in the discharge of any waste material to ground water. Stormwater facilities and sanitary sewer service will be provided as part of the proposed development.

c. Water Runoff (including stormwater)

- 1. Describe the source of runoff (including stormwater) and method of collection and disposal, if any (including quantities if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

EXISTING DRAINAGE AND STORMWATER MANAGEMENT

The existing 1.1-acre project site is an undeveloped, vacated residential lot with 5,048 square feet (0.12 acre) of impervious surface. Currently, stormwater from the site infiltrates and/or evaporates and any runoff sheet flows through existing vegetation towards Echo Lake.

PROPOSED DRAINAGE AND STORMWATER MANAGEMENT

A Technical Information Report (TIR) detailing proposed stormwater management for the site has been prepared (Davido Consulting Group, Inc., 2005) and is submitted with this SEPA Checklist. The TIR contains descriptions and summaries of the analyses and designs for project stormwater facilities, including water quality treatment and flow control.

Low impact development (LID) flow control and water quality facilities are proposed for the onsite and offsite stormwater runoff based on Appendix C of the 2005 *King County Surface Water Design Manual* (KCSWDM) and the LID Technical Guidance Manual for Puget Sound. City staff has provided direction to utilize Appendix C of the 2005 KCSWDM for LID. The LID approach minimizes runoff flow paths on impervious surfaces and integrates filtration and infiltration facilities with small-scale stormwater controls (versus conventional large-scale structural facilities).

Stormwater runoff from most of the townhome roofs will be routed to rain gardens or discharged to an infiltration bed under the access road. Roof runoff from some of the townhome roofs will be routed to a dispersion trench in the wetland enhancement area to help irrigate the enhancement plantings. The access road and parking area stormwater runoff will be routed to permeable pavement providing infiltration and filtration of stormwater before percolating into an infiltration bed under the permeable pavement. The roadway infiltration bed was designed for all of the site impervious surface runoff plus tributary pervious surfaces using the 100-year event.

Runoff from North 199th St will be collected in a catch basin with an oil spill control device installed on the outlet pipe leading to a biofiltration swale flowing into a rain garden located in the western portion of the site. The rain garden for the North 199th Street runoff was designed for the 1.10-year event plus additional pond volume to provide a factor of safety over the 6-month event. Overflow systems in the access road infiltration bed and North 199th Street rain garden will route any overflow to dispersion trenches located in the wetland buffer enhancement area.

The proposed access road permeable pavement and gravel infiltration bed system together with spill control devices installed in the overflow catch basins will provide the necessary water quality treatment for the onsite runoff. The permeable pavement system is designed so that concentrated flows do not develop thereby reducing the chances of clogging the permeable pavement by solids or pollutants (i.e. oil). The infiltration bed will provide further filtration of the stormwater. Any overflow routed to the dispersion trenches in the wetland buffer enhancement area will receive filtration through the dispersion trench and landscaping.

The proposed rain garden and gravel infiltration bed system together with the biofiltration swale and spill control device installed in the North 199th Street runoff collection catch basin will provide the necessary water quality treatment for the North 199th Street runoff. The biofiltration swale, which flows into the rain garden, was designed in accordance with the KCSWDM to treat the 6-month flow with conveyance capacity for higher flows (i.e., 100-year flow). The rain garden will provide additional treatment in the amended soils prior to infiltration in the infiltration bed.

The proposed stormwater facility provides factors of safety and redundancies for the flow control and treatment of the onsite and North 199th Street runoff. These factors of safety and redundancies are described in the TIR submitted with this SEPA Checklist (Davido Consulting Group, Inc., 2005).

2. Could waste materials enter ground or surface waters? If so, generally describe.

The project would not result in the discharge of waste material to ground or surface waters. The townhome development would be connected to the sanitary sewer system and permanent stormwater facilities would be provided as described above.

d. Describe proposed measures to reduce or control surface, ground, and runoff water impacts, if any.

Provided that all construction and design standards described in Section 3.c.1 are implemented as part of the proposed project, no impacts to surface or ground water quality are anticipated.

As described above, during construction all applicable City of Shoreline and King County Surface Water Design Standards BMPs would be implemented. The City of Shoreline has adopted the King County 1998 Surface Water Design Manual (KCSWDM) by reference with exceptions in the KCSWDM addendum in the City of Shoreline Engineering Development Guide. City staff has also provided direction to utilize Appendix C of the 2005 KCSWDM for Low Impact Development (LID).

4. Plants

The following information has been largely summarized from the *Wetland Delineation Report Echo Lakes Townhomes* (Adolfson Associates, 2005a). Additional information has been incorporated from a site visit by Adolfson Associates staff in October 2005.

Much of the vegetation on the site consists of non-native shrubs and herbaceous plant species such as knotweed, Himalayan blackberry, scotch broom, thistle, and Robert geranium. Some trees occur on the property. Along the western property line, red alder, big-leaf maple, horse chestnut, and black cottonwood are present and one large, non-native tree is present in the southeastern portion of the site. Several young native trees, such as Douglas-fir and red alder, are present on the eastern portion of the site.

a. Types of vegetation found on site:

Deciduous trees: black cottonwood, willow, red alder, big-leaf maple, horse chestnut, non-native ornamentals

Evergreen trees: Douglas fir, shore pine

Shrubs: Himalayan blackberry, Scot's broom, honey locust, English ivy

Grass: bentgrass, velvet grass, ryegrass, orchard grass, reed canarygrass along with thistle, knotweed, and bracken fern.

Pasture: none

Wet Soil Plants: creeping buttercup, toad rush, soft rush

Water Plants: yellow iris

b. What kind and amount of vegetation will be removed or altered?

Grading and construction for the proposed development will affect approximately 0.80 acre of vegetation on the site. Development would require removal of mostly non-native shrubs and herbaceous species.

- c. **List threatened or endangered species or critical habitat known to be on or near the site.**

The Washington Natural Heritage Program (WNHP) identified no rare plants in the project vicinity (WDNR, 2005). Site reconnaissance did not indicate habitat for any endangered species.

- d. **Describe proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on site.**

Vegetated rain gardens with native plants are proposed for each townhome unit (Figure 2).

As part of the *Wetland and Buffer Enhancement Plan* (Adolfson Associates, 2005b), non-native shrubs and herbaceous vegetation will be removed from Wetland A, and will be re-vegetated with plants that are native to the area. Trees and shrubs will be planted in the wetland with emergent (herbaceous) vegetation planted along the wetland edge. A large non-native, deciduous tree that currently occurs in the wetland will be retained as it provides cover to the southern portion of the wetland and contributes organic matter to the wetland and lake.

Non-native vegetation will also be removed from the wetland buffer, most of which are shrub and herbaceous species, and re-vegetated with native plants. The native plants will increase the structural diversity and plant species diversity in the buffer. Rose and snowberry plants will be installed along the edge of the pedestrian trail. Over time, these plants will discourage pedestrians from going off the trail.

5. **Animals**

- a. **Underline any birds and animals which have been observed on or near the site or are known to be on or near the site:**

Fish: bass, salmon, trout, herring, shellfish, other

Adolfson biologists found no fish at the project site.

Amphibians: frogs, salamanders, other

Adolfson biologists observed one bullfrog during an August 2005 site visit. No other amphibians were identified during the site visits.

Reptiles: lizards, snakes, turtles, other

Adolfson biologists observed no reptiles at the project site.

Birds: hawks, heron, eagle, songbirds, ducks, other

Adolfson biologist observed a mallard, black-capped chick-a-dee, American robin, and barn swallow during an August 2005 site visit.

Mammals: deer, bear, elk, beaver (mountain beaver evidence), other

Mammals were not observed during site visits conducted by Adolfson biologists. However, wildlife that typically occurs in urban areas are likely to use the site, including deer, raccoon, opossums, and small mammals.

b. List any threatened or endangered species or critical habitat near the site.

Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species lists consider certain habitat types to be priority habitats. WDFW has identified Echo Lake as a priority wetland habitat. No priority species are identified at or in the general vicinity of the project site (WDFW, 2005).

c. Is the site part of a migratory route? If so, explain.

The project site is located within the Pacific Flyway, which is a flight corridor for migrating waterfowl and other avian fauna. The Pacific Flyway covers the entire Puget Sound region, and extends south from Alaska to Mexico and South America.

d. Proposed measures to preserve or enhance wildlife, if any.

Native plant species will be installed in the wetland and wetland buffer to increase the overall habitat value of the area to wildlife. To further increase the habitat value of the enhanced wetland and wetland buffer, bird boxes and bat boxes will be installed. One bat box will be located in the southern portion of the wetland buffer. A cluster of two swallow boxes will be attached to a post, which will be installed in the central portion of the wetland buffer. In addition, two bird boxes with small holes will be installed to attract songbirds such as chickadees and wrens. One of these bird boxes will be located in the southwestern portion of the wetland and the other will be placed in the northwestern portion of the wetland buffer.

6. Energy and Natural Resources

- a. **What kinds of energy (electric, natural gas, oil, wood, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

Development of the townhome site would require electrical power for lighting the new buildings, as well as safety lighting around parking areas and walkways approaching the buildings. The townhomes would also require natural gas for heating. Puget Sound Energy would provide both.

- b. **Would the project affect the potential use of solar energy by adjacent properties? If so, explain.**

The proposed development would not affect the use of solar energy by adjacent properties because the maximum height of the townhouse buildings (40 feet at roofline) would not be taller than adjacent buildings. The proposed facility would comply with height restrictions established by City of Shoreline.

- c. **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.**

Energy conservation features are being developed as building design plans progress. All buildings will be insulated per current building and energy codes. Impacts to energy resources are not anticipated as a result of the proposed development

7. Environmental Health

- a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spills, or hazardous waste that could occur as a result of this proposal? If so, describe.**

The project site is not listed on the State Environmental List, National Priorities List (NPL), Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List, or Leaking Underground Storage Tank (LUST) List. Several nearby properties are located on the CERCLIS List and LUST List. Of these, one site is located on Aurora Avenue North, less than 0.125 mile from the project site. According to the Washington State Department of Ecology database, remediation at this site has been completed (Earth Solutions NW LLC, 2005).

A Phase 1 Environmental Site Assessment was conducted by Earth Solutions NW LLC (2005) on the project site. One underground storage tank for home heating oil was found on the site. No evidence of product release was found. Prior to project construction, the tank will be removed in accordance with Washington State Department of Ecology regulatory guidelines. A diesel fuel leak from an abandoned flat-bed truck and a chemical release from an

abandoned 55-gallon drum were also found on the site. Based on an analytical evaluation of the soils, total petroleum hydrocarbon compounds from the diesel leak were below cleanup action levels. Low levels of contaminants of concern were found at the location of the 55-gallon drum. These impacted soils will require management as regulated waste. The Phase 1 Environmental Assessment recommends an initial excavation of five to ten yards of soil in the vicinity of the 55-gallon drum, and disposal to an acceptable hazardous waste site (Earth Solutions NW LLC, 2005).

No significant risk of exposure to environmental health hazards would occur as a result of the development. All facilities would be provided with appropriate overhead sprinklers, and a fire alarm system that complies with the International Fire Code.

1. Describe special emergency services that might be required.

No special emergency services would likely be required. Typical emergency services such as fire, police, and emergency medical response may be required for emergencies developing as a result of residential use.

2. Describe proposed measures to reduce or control environmental health hazards.

Disposal of regulated wastes according to Ecology's regulations would reduce risks to acceptable levels.

b. Noise

1. What types of noise exist in the area which may affect your project (for example: traffic, equipment operation, other)?

Due to site topography, vegetation, and surrounding land uses the only source of noise that may affect the project is vehicular traffic along Aurora Avenue.

2. What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)?

Short-term noise impacts could result from construction vehicles and equipment during daylight hours. Residents in adjacent apartment houses and business occupants are the likely receptors. According to the Shoreline Municipal Code (SMC 9.05.010), development activity and operation of heavy machinery would be limited to 7 a.m. to 10 p.m. on weekdays and 9 a.m. to 10 p.m. on weekends. No development activity or operation of heavy machinery would occur outside of these times, except

if permitted by the director of community development and only in cases where the activity would not interfere with any residential use permitted in the zone in which it is located.

Long-term noise impacts to residents of the Echo Lake Condominiums and other adjacent properties could result from increased traffic of vehicles traveling to the townhome site.

3. Describe proposed measures to reduce or control noise impacts, if any.

Construction activities will be restricted to hours designated by the Shoreline Municipal Code for Noise Control. If construction activities exceed permitted noise levels, the City would instruct the contractor to implement measures to reduce noise impacts to comply with the Shoreline Municipal Code, which may include additional muffling of equipment.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

The site is currently undeveloped. There are concrete building pads located near the eastern portion of the site, remnants of past residential use.

The site is bounded on the north by a commercial office complex, on the northeast by a multi-unit apartment complex, on the southeast by Echo Lake, on the south by a condominium complex, and on the west by a multi-unit townhome complex.

b. Has the site been used for agriculture? If so, describe.

The site has not been used for agriculture in the recent past based on evidence of past use as a single-family residence site.

c. Describe any structures on the site.

There are no structures currently on the proposed site. Any pre-existing structures have been removed, leaving the original concrete building pads in the eastern half of the site. There is a cement bulkhead at the shoreline edge that will be removed to increase the connectivity between the lake and the wetland habitats on the site.

d. Will any structures be demolished? If so, what?

No structure will be demolished.

e. What is the current zoning classification of the site?

The site is currently zoned R-48; Residential (48/units/acre).

f. What is the current comprehensive plan designation of the site?

According to the City of Shoreline Comprehensive Plan Map, the site is designated as High Density Residential.

g. If applicable, what is the current shoreline master program designation of the site?

Not Applicable. Echo Lake is not a designated shoreline of the state.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

According to the Shoreline Municipal Code (SMC) Chapter 20.80 – Critical Areas, the only Growth Management Act (GMA) defined critical (sensitive) area within the site proposed for the Echo Lake Townhomes is the wetland complex described as Wetland A. A description of the wetlands and sensitive areas is included in the *Wetland Delineation Report Echo Lake Townhomes* (Adolfson, 2005). This palustrine emergent lake-fringe wetland is a Type II wetland in the City of Shoreline because it is associated with Echo Lake.

As part of the proposed project, the wetland buffer will be reduced from 100 feet to 50 feet as allowed under SMC 20.80.330.B and SMC 20.80.330.D.2. An enhancement plan has been prepared to show compliance with Code requirements for buffer reduction. An approximately three-foot wide trail will be constructed in the outer edge of the wetland buffer as allowed under SMC 20.80.330.F. As mitigation for the pedestrian trail in the buffer, an additional area beyond the 50-foot reduced buffer will be enhanced. To maintain wetland hydrology, dispersion trenches will be constructed in the buffer as per SMC 20.80.330.G.

i. Approximately how many people would reside or work in the completed project?

Approximately 18 to 36 people would reside in the completed townhomes.

j. Approximately how many people would the completed project displace?

No people would be displaced as a result of the project.

k. Describe proposed measures to avoid or reduce displacement impacts, if any.

Not applicable.

- 1. Describe proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.**

The development of the Echo Lakes Townhomes is compatible with the projected land use under the City of Shoreline Comprehensive Plan (2004). The plan identifies the proposed site for use as high density residential.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

The proposed development would result in the construction of 18 middle-income housing townhome units. The townhomes would be divided among four separate structures within the project area.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

No units would be eliminated; the project site is currently a vacant lot.

- c. Describe proposed measures to reduce or control housing impacts, if any.**

No impacts to housing are anticipated; therefore mitigation measures are not warranted.

10. Aesthetics

- a. What is the tallest height of any of the proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?**

The townhome units will each have a base height of 35 feet. Pitched roofs that will be incorporated into the design of the townhomes will extend 5 feet in height, resulting in the townhomes reaching 40 feet in height.

- b. What views in the immediate vicinity would be altered or obstructed?**

No views in the immediate vicinity would be adversely altered or obstructed. The currently vacant lot separates surrounding land uses from nearby Echo Lake; however, as demonstrated in Figure 3, adjacent property owners' views of the lake are currently obstructed by dense shoreline vegetation, some of which will be removed as part of the proposed project and re-planted to provide some views of the lake from the common areas.

c. Describe proposed measures to reduce aesthetic impacts, if any.

Landscaping will be incorporated in the design of development. The wetland buffer will be enhanced with native vegetation as describe under 4(d).

11. Light and Glare

a. What type of light and glare will the proposal produce? What time of day would it mainly occur?

Light and glare that would emanate from the development would be typical of residential structures. Lighting would originate from the interior and exterior of the individual townhomes. Headlights from automobiles accessing the new development during hours of darkness would also be a source of lighting that could be detected from adjacent property owners. Communal access drive lighting is not proposed as part of this project.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Light and glare from the project would not be considered a safety hazard and it would interfere with views because it will be consistent with applicable lighting standards for residential units in Shoreline.

c. What existing off-site sources of light or glare may affect your proposal?

No off-site sources of light or glare would interfere with the proposed development.

d. Describe the proposed measures to reduce or control light and glare impacts, if any.

Light and glare as a result of the proposed project is not anticipated to cause adverse impacts to neighboring properties; therefore mitigation measures are not warranted.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Echo Lake Park is located approximately 350 feet east of the project site, on the northeast corner of Echo Lake. Echo Lake Park is a 0.9-acre passive use park that includes a restroom, fishing area, and picnic area. Two separate two- to three-story buildings separate the park from the project site.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The project would not displace any existing recreational uses.

- c. Describe proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant.**

Construction activities are not expected to adversely affect users enjoyment of nearby Echo Lake Park; therefore, no mitigation measures are warranted. The proposed project does not include any provisions for new recreational opportunities.

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on or eligible for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**

No places or object listed or eligible for national, state, or local preservation registers are located on or next to the site.

- b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.**

No landmarks or evidence of historic, archaeological, scientific, or cultural importance are known to be on or next to the site. The site has been previously disturbed by past residential use.

- c. Describe proposed measures to reduce or control impacts, if any.**

No measures are required.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

Aurora Avenue North, located approximately one block west of the site, is the major arterial that provides access to the proposed development from North 198th Street and North 199th Street. North 198th Street east of Aurora Avenue is a two-lane unchannelized roadway with up to 22 feet of travel pavement serving one single-family residential home and two commercial buildings. The roadway dead-ends into the Echo Lake Waterfront Condominiums. North 199th Street is a two-lane unchannelized roadway with up to 17 feet of pavement. The roadway serves five single-family homes, a commercial building, and provides pedestrian access to an apartment/condominium complex. The roadway dead-ends at the project site.

Primary site access to the project site is proposed via extension of the existing private access roadway located in the northwest section of the existing Echo Lake Waterfront Condominiums site, which accesses North 198th Street directly (Figure 5). Emergency-only access would connect to the eastern dead end of North 199th Street. This access roadway would be gated to restrict non-emergency vehicular travel from utilizing this route.

- b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

The site is not directly served by public transit; however, King County Metro (Routes 301, 342, 358, and 373) provides bus service at a transit stop located along Aurora Avenue North located approximately one block west of the project site. The Aurora Village Transit Center park-and-ride lot is located on N 200th Street in the vicinity of Ashworth Avenue N and serves King County Metro Routes 301, 303, 331, 342, 346, 358, and 373 and Community Transit Routes 100, 101, 118, 130, and 131. All transit stops are located less than ¼-mile walking distance of the project site.

- c. How many parking spaces would the completed project have? How many would the project eliminate?**

The individual townhomes would each have a parking garage and private driveway that will accommodate up to two motor vehicles. No parking spaces would be eliminated. Approximately four guest parking stalls would be constructed as part of the proposed development.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe.**

The proposed project will not require any new roads or streets, or improvements to existing roads or streets.

- e. **Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The project use will not occur in or in the immediate vicinity of water, rail, or air transportation.

- f. **How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

Trip generation rates compiled by the Institute of Transportation Engineers (ITE) *Trip Generation*, 7th Edition, 2003, were used to estimate daily traffic, a.m., and p.m. peak hour traffic that would be generated by the proposed action (Transportation Engineering NW LLC, 2005). An estimated total of 110 daily, 8 a.m. peak hour (1 entering and 7 existing), and 9 p.m. peak hour (6 entering and 3 exiting) vehicular trips would be generated at full occupancy of the townhome units.

- g. **Describe proposed measures to reduce or control transportation impacts, if any.**

The City of Shoreline has expressed concern with vehicular and pedestrian traffic impacts on North 199th Street due to existing and proposed traffic control treatments in the project vicinity, which make it difficult for vehicles to utilize North 199th Street. As a result, this project proposes to restrict the use of the existing site driveway on North 199th Street to emergency vehicle access only. Increased traffic that would be generated by the proposed project would be discouraged to use North 199th Street by provided a "No Right Turn" illustration and "Exit to North 198th Street" with an arrow for southbound movements from the primary site driveway. Additional speed bumps to stop potential cut-through traffic within the existing Echo Lake Waterfront Condominiums site.

15. Public Services

- a. **Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally explain.**

The project would not result in the need for additional public services because the area is already served by fire, police, etc., and the site is zoned for high-density residential use.

- b. **Describe proposed measures to reduce or control direct impacts on public services.**

None required.

16. Utilities

a. Underline utilities currently available at the site:

Electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic systems, other (stormwater drainage)

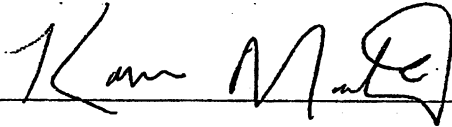
b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity, which might be needed.

The proposed project will require the extension of existing utilities and public services currently available at the site including electricity, natural gas, water, refuse service, telephone, and sanitary sewer. Stormwater detention would be provided on-site through the use of low impact development measures as described in Section 3(c)(1).

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____



Date Submitted: _____

November 1, 2005

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ATTACHMENT G:

**NOTICE OF APPLICATION &
REVISED NOTICE OF
APPLICATION**

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Planning and Development Services

17544 Midvale Avenue N., Shoreline, WA 98133-4921
(206) 546-1811 ♦ Fax (206) 546-8761

NOTICE OF APPLICATION

Preliminary Formal Subdivision of Echo Lake Townhomes

See reverse side for site plan.

Date of Notice: November 23, 2005

PROJECT INFORMATION

PROJECT DESCRIPTION:	18-unit attached townhome subdivision
APPLICANT/AUTHORIZED AGENT:	Prescott Homes, Inc. (Greg Kappers)
PROPERTY OWNER:	Frontier Investment Company, Inc. (Rob Hill)
APPLICATION FILE NUMBERS:	201478/108437
REQUIRED ACTIONS/PERMITS:	Preliminary Formal Subdivision approval/Site Development Permit
PROJECT LOCATION:	1160 N 198 th Street
PARCEL NUMBERS:	2227300070 & 2227300071
COMPREHENSIVE PLAN DESIGNATION:	High Density Residential
CURRENT ZONING:	R-48; Residential; 48 units/acre
APPLICATION DATE:	November 8, 2005
COMPLETE APPLICATION DATE:	November 17, 2005
EFFECTIVE DATE OF NOTICE:	November 23, 2005
END OF PUBLIC COMMENT PERIOD:	December 7, 2005

PROJECT REVIEW

The Department of Planning and Development Services has reviewed the proposed project for probable significant adverse environmental impacts. This proposal is subject to SEPA rules contained in WAC Chapter 197-11. No SEPA threshold determination has been made. As a result of the project review, the City may incorporate or require mitigation measures regardless of whether an Environmental Impact Statement is prepared. Issuance of this Notice of Application does not constitute approval of the project for construction.

An environmental checklist; site, civil construction, landscape and wetland/buffer enhancement plans; infiltration evaluation, full drainage review, and wetland delineation reports; and other submittal items are available for viewing at the City of Shoreline Department of Planning and Development Services, located at 1110 N. 175th St., Suite # 107.

This project will require preliminary formal subdivision approval, issuance of a site development permit, final formal subdivision approval, and building permits with associated mechanical and fire protection permits. Preliminary determination of the development regulations that will be used for project mitigation and consistency include, but are not limited to: the *Shoreline Municipal Code*, *Shoreline's Comprehensive Plan*, *International Building Code*, *International Fire Code*, and *King County Surface Water Design Manual*. Issuance of this Notice of Application does not constitute approval of the project for construction.

PUBLIC COMMENT

You are encouraged to submit written comments on this project to the Department of Planning and Development Services, 17544 Midvale Ave. N, Shoreline, WA 98133-4921. Written comments become part of the public record and must be received at the above address before 5:00 p.m. on Wednesday, December 7, 2005. Upon request, a copy of the subsequent final decision on the project may be obtained.

For questions or comments, please contact Glen Pickus, Planner II, at 206-546-1249, gpickus@ci.shoreline.wa.us, or write to the above address.

The City's SEPA determination for this project may be appealed within 14 calendar days following the effective date of the determination. If an appeal is filed, the City will schedule an open record public hearing to be conducted by the Hearing Examiner. Appeals, including a \$380.00 fee, must be filed in writing with the City Clerk's Office located at 17544 Midvale Avenue N.

The City's decision on the preliminary formal subdivision application may be appealed to Superior Court within 21 calendar days following the effective date of the Notice of Decision.



Planning and Development Services

17544 Midvale Avenue N., Shoreline, WA 98133-4921
(206) 546-1811 ♦ Fax (206) 546-8761

REVISED NOTICE OF APPLICATION – new dates; project unchanged *Preliminary Formal Subdivision of Echo Lake Townhomes*

See reverse side for site plan.

Date of Notice: December 1, 2005

PROJECT INFORMATION

PROJECT DESCRIPTION:	18-unit attached townhome subdivision.
APPLICANT/AUTHORIZED AGENT:	Prescott Homes, Inc. (Greg Kappers)
PROPERTY OWNER:	Frontier Investment Company, Inc. (Rob Hill)
APPLICATION FILE NUMBERS:	201478/108437
REQUIRED ACTIONS/PERMITS:	Preliminary Formal Subdivision approval/Site Development Permit
PROJECT LOCATION:	1160 N 198 th Street
PARCEL NUMBERS:	2227300070 & 2227300071
COMPREHENSIVE PLAN DESIGNATION:	High Density Residential
CURRENT ZONING:	R-48; Residential; 48 units/acre
APPLICATION DATE:	November 8, 2005
COMPLETE APPLICATION DATE:	November 17, 2005
EFFECTIVE DATE OF NOTICE:	December 1, 2005
END OF PUBLIC COMMENT PERIOD:	December 15, 2005

PROJECT REVIEW

The Department of Planning and Development Services has reviewed the proposed project for probable significant adverse environmental impacts. This proposal is subject to SEPA rules contained in WAC Chapter 197-11. No SEPA threshold determination has been made. As a result of the project review, the City may incorporate or require mitigation measures regardless of whether an Environmental Impact Statement is prepared. Issuance of this Notice of Application does not constitute approval of the project for construction.

An environmental checklist; site, civil construction, landscape and wetland/buffer enhancement plans; infiltration evaluation, full drainage review, and wetland delineation reports; and other submittal items are available for viewing at the City of Shoreline Department of Planning and Development Services, located at 1110 N. 175th St., Suite # 107.

This project will require preliminary formal subdivision approval, issuance of a site development permit, final formal subdivision approval, and building permits with associated mechanical and fire protection permits. Preliminary determination of the development regulations that will be used for project mitigation and consistency include, but are not limited to: the *Shoreline Municipal Code*, *Shoreline's Comprehensive Plan*, *International Building Code*, *International Fire Code*, and *King County Surface Water Design Manual*. Issuance of this Notice of Application does not constitute approval of the project for construction.

PUBLIC COMMENT

You are encouraged to submit written comments on this project to the Department of Planning and Development Services, 17544 Midvale Ave. N, Shoreline, WA 98133-4921. Written comments become part of the public record and must be received at the above address before 5:00 p.m. on Thursday, December 15, 2005. Upon request, a copy of the subsequent final decision on the project may be obtained.

For questions or comments, please contact Glen Pickus, Planner II, at 206-546-1249, gpickus@ci.shoreline.wa.us, or write to the above address.

The City's SEPA determination for this project may be appealed within 14 calendar days following the effective date of the determination. If an appeal is filed, the City will schedule an open record public hearing to be conducted by the Hearing Examiner. Appeals, including a \$380.00 fee, must be filed in writing with the City Clerk's Office located at 17544 Midvale Avenue N.

The City's decision on the preliminary formal subdivision application may be appealed to Superior Court within 21 calendar days following the effective date of the Notice of Decision.

ATTACHMENT H:

**SURFACE WATER DESIGN
MANUAL DEVIATION APPROVAL
MEMO**

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Memorandum

DATE: February 1, 2006
TO: Glen Pickus
FROM: Jeff Forry *JF*
RE: Drainage Review – 1160 N 198th St (201478 and 108437)

As you are aware, the City of Shoreline, using the general adjustment process outlined in the King County Surface Water Design Manual (KCSWDM), has allowed the referenced proposal to deviate from the provisions of the 1998 KCSWDM and apply the BMP's for "Low Impact Development" delineated in the 2005 KCSWDM. We have reviewed the design concepts with Jerry Shuster, Water and Environmental Services Manager. Based on Melanie Arnold's (contract plan reviewer) review and the specific system design requirements for water quality and flow control BMP implementation (i.e. rain garden, pervious pavement, level spreaders, and bio-swales) it has been determined that the system as designed is generally consistent with the provisions of the Shoreline Municipal Code for surface water and stormwater management.

Some additional information will be necessary to complete the review process including a declaration of covenant as provided for in the 2005 editions of the King County Surface Water Design Manual and information detailing how the "199th Ave drainage basin" is connected to the catch basin at the northwest corner of the property. These details should include the specific method of spill control.

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ATTACHMENT I:

MDNS

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Planning and Development Services

17544 Midvale Avenue N.
Shoreline, WA 98133-4921
(206) 546-1811 ♦ Fax (206) 546-8761

SEPA THRESHOLD DETERMINATION MITIGATED DETERMINATION OF NONSIGNIFICANCE (MDNS) Preliminary Formal Subdivision of Shoreline Townhomes (formerly known as Echo Lake Townhomes)

PROJECT INFORMATION

Date of Issuance:	February 7, 2006
Proposed Project Description:	18-unit attached townhome subdivision comprised of 4 buildings on a site with a Type II wetland.
APPLICANT/AUTHORIZED AGENT:	Prescott Homes, Inc. (Greg Kappers)
PROPERTY OWNER:	Frontier Investment Company, Inc. (Rob Hill)
APPLICATION FILE NUMBERS:	201478/108437
Location:	1160 N 198 th Street
Parcel Numbers:	2227300070 & 2227300071
Comprehensive Plan Land Use Designation:	High Density Residential
Zoning:	R-48; Residential; 48 units/acre
COMMENT PERIOD DEADLINE:	5:00 p.m. Tuesday, February 21, 2006

THRESHOLD DETERMINATION: Mitigated Determination of Nonsignificance (MDNS)

The City of Shoreline has determined that the proposal, as modified by the required mitigation measures and the requirements of the Shoreline Development Code, will not have a probable significant adverse impact on the environment and that an environmental impact statement is not required under RCW 43.21C.030(2)(c). This decision was made after visits to the project site, review of the environmental checklist, wetland delineation, wetland and buffer enhancement plan, drainage review, site plan, civil construction plans, landscaping plan, and other information on file with the City. This information is available for review to the public upon request at no charge.

This project will require preliminary plat approval by the City Council, issuance of a site development permit and building permits with associated mechanical and fire protection permits. A Notice of Application for the preliminary formal subdivision was issued on November 23, 2005 and a Revised Notice of Application was issued December 1, 2005. Issuance of this Threshold Determination does not constitute preliminary subdivision or permit approval.

MITIGATION MEASURES REQUIRED UNDER SEPA SUBSTANTIVE AUTHORITY The following conditions are required to clarify and change the proposal in accordance with WAC 197-11-350:

1. Prior to permit issuance a HPA permit from the State of Washington Department of Fish and Wildlife shall be obtained for work to be done within Echo Lake. The work shall include removal of the portion of an existing concrete bulkhead above the mean highwater mark and recently deposited debris within 20 feet of the shoreline.
2. The October 2005 Echo Lake Townhomes Wetland and Buffer Enhancement Plan prepared by Adolfsen Associates, Inc. shall be revised, submitted and approved by the City, to include:
 - Facilities, such as non sight-obscuring fences and signage, to discourage and/or limit pedestrian access to the wetland and buffer area.

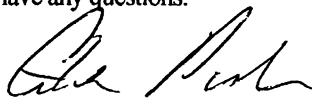
- Signs to be placed no more than 50 feet apart along the edge of the wetland buffer stating, "This area has been identified as a wetland and wetland buffer by the City of Shoreline. Access is prohibited. Activities, including clearing and grading, removal of vegetation, pruning, cutting of trees or shrubs, planting of nonnative species, and other alterations may be prohibited. Please contact the City of Shoreline Department of Planning & Development Services (206) 546-1811 for further information."
 - A boardwalk through the buffer area to a viewing platform located within the buffer adjacent to the delineated wetland area, to restrict the inevitable pedestrian intrusions into the buffer to a set path and gathering area.
3. Prior to occupancy the revised wetland and buffer enhancement plan shall be implemented.
 4. Monitoring of the wetland and its buffer by a qualified biologist in compliance with SMC 20.80.350 shall be implemented including submitting monitoring reports:
 - Upon completion of the wetland and buffer enhancement plan;
 - 30 days after planting;
 - Twice annually for the early growing season (no later than May 31) and the end of the growing season (no later than September 30) during Monitoring Years 1 and 2.
 - Once annually for the end of the growing season (no later than September 30) during Monitoring Years 3-5.
 5. Low Impact Development design, in compliance with the 2005 King County Surface Water Design Manual, substantially in conformance with civil construction plans submitted Nov. 8, 2005, shall be constructed.
 6. Remediation as described in the August 22, 2005 Environmental Site Assessment of the subject site by Earth Solutions NW, LLC, shall be completed prior to building permit issuance. Remediation required shall include:
 - Decommission/removal by a licensed professional in a manner in conformance with relevant regulatory requirements of the 500-gallon underground storage tank on the site; and
 - A Phase II investigative remediation including, but not limited to, removal of impacted soils – approximately 5-10 cubic yards of soil in the area where a 55-gallon drum was found – followed by confirmation sampling to ensure no contaminated soils remains. The impacted soils shall be disposed of at a permitted facility. A report conforming to the State of Washington Department of Ecology procedures shall be sent to the City of Shoreline.

Note: the City may also require minor modifications to the project proposal to comply with specific standards contained in the Shoreline Municipal Code, including Chapter 20.80 - Critical Areas.

The SEPA mitigation measures required for this project are based on the policies in the Shoreline Comprehensive Plan, SEPA policies, and regulations in the Shoreline Municipal Code as provided under SMC 20.30.670. Please see the Shoreline Comprehensive Plan (e.g. Policies LU87, LU91, LU111, LU115, LU117, LU120, LU121, AND LU124), RCW 43.21C.020, and SMC Chapter 20.80 for more information about the sources of SEPA Substantive Authority. SEPA conditions supplement the existing requirements of the Shoreline Municipal Code. Please note that additional project conditions will be required based on the application of code standards to this project, e.g. critical areas and enhanced buffers shall be placed in a separate tract on which development is prohibited or similarly preserved through a permanent protective mechanism acceptable to the City.

PUBLIC COMMENT AND APPEAL INFORMATION

The City will not act on this proposal until the end of the SEPA comment/appeal period. Written comments on the SEPA Threshold Determination must be received by 5:00 p.m. Tuesday, February 21, 2006. Please send written comments to Glen Pickus, Project Manager, at 17544 Midvale Avenue North, Shoreline, WA 98133-4921. Issuance of the Threshold Determination does not constitute approval of the project. This project will require an open record public hearing before the Planning Commission and a decision by the City Council at a public meeting. The threshold determination may be appealed by a party with standing within 14 calendar days following the effective date of this determination. If an appeal is filed, the City will schedule an open record public hearing to be conducted by the Hearing Examiner. Appeals, including a \$390.00 fee, must be filed in writing with the City Clerk's Office located at 17544 Midvale Ave. N. Please contact Glen Pickus, Planner II, at (206) 546-1249 or gpickus@ci.shoreline.wa.us if you have any questions.



Glen Pickus, Planner II, Dept. of Planning & Development Services, City of Shoreline

2-6-06

Date

ATTACHMENT J:

NOTICE OF PUBLIC HEARING

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Planning and Development Services

17544 Midvale Avenue N., Shoreline, WA 98133-4921
(206) 546-1811 ♦ Fax (206) 546-8761

NOTICE OF PUBLIC HEARING

Preliminary Formal Subdivision of Shoreline Townhomes

Date of Notice: February 28, 2006

PROJECT INFORMATION

PROJECT ACTION:	Preliminary Formal Subdivision
PROJECT DESCRIPTION:	18-unit attached townhome subdivision
APPLICANT/AUTHORIZED AGENT:	Prescott Homes, Inc. (Greg Kappers)
PROPERTY OWNER:	Frontier Investment Company, Inc. (Rob Hill)
APPLICATION FILE NUMBERS:	201478/108437
REQUIRED ACTIONS/PERMITS:	Preliminary Formal Subdivision approval/Site Development Permit
PROJECT LOCATION:	1160 N 198 th Street
PARCEL NUMBERS:	2227300070 & 2227300071
COMPREHENSIVE PLAN DESIGNATION:	High Density Residential
CURRENT ZONING:	R-48; Residential - 48 units/acre
APPLICATION DATE:	November 8, 2005
COMPLETE APPLICATION DATE:	November 17, 2005
DATE OF NOTICE OF APPLICATION:	December 1, 2005
DATE OF SEPA THRESHOLD MITIGATED DETERMINATION OF NONSIGNIFICANCE:	February 7, 2006
EFFECTIVE DATE OF NOTICE OF PUBLIC HEARING:	February 28, 2006
OPEN RECORD HEARING DATE:	March 16, 2006

PROJECT REVIEW

The Planning & Development Services Department has conducted an evaluation of the project proposal in accordance with the Shoreline Municipal Code. Issuance of this Notice of Public Hearing does not constitute approval of this project proposal for construction. The project will require issuance of a site development permit, right-of-way use permit, and ancillary permits. Additional conditions based on public comments and further staff review may be required for incorporation into the project proposal.

Information related to this application is available at the Planning & Development Services Department for review. Development regulations that will be used for project mitigation and consistency include, but are not limited to: the *Shoreline Municipal Code*, *City of Shoreline Comprehensive Plan*, *International Fire Code*, and *2005 King County Surface Water Design Manual*.

ENVIRONMENTAL REVIEW

Per **WAC 197-11-350** a Mitigated Determination of Nonsignificance is being utilized for this action. The City of Shoreline issued a MDNS for the proposal on Feb. 7, 2006, of which a copy may be obtained on request. The City of Shoreline has determined the proposal, as modified by the required mitigation measures and the requirements of the Shoreline Development Code, will not have a probable significant adverse impact on the environment and that an environmental impact statement is not required under RCW 43.21C.030(2)(c).

PUBLIC HEARING

The City of Shoreline Planning Commission will hold an open record Public Hearing **7:00 p.m. Thursday, March 16, 2006**, to consider public comments regarding the proposal and forward a recommendation to the City Council. The hearing will take place in the **Mt. Rainier Room, Shoreline Conference Center, 18560 First Avenue NE, Shoreline, Washington**. All interested persons are encouraged to attend this Public Hearing and provide written and oral comments.

Questions or More Information: Please contact Glen Pickus, Planner II, City of Shoreline Planning and Development Services at (206) 546-1249 or gpickus@ci.shoreline.wa.us.

Any person requiring a disability accommodation should contact the City Clerk at (206) 546-8919 in advance for more information. For TTY telephone service call 546-0457. Each request will be considered individually according to the type of request, the availability of resources, and the financial ability of the City to provide the requested services or equipment.

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