



A Sample Type II Environmental Review (EN) Application

Staff Tip: This sample document is provided to you as an example intended to help guide you in preparing your Type II EN application. This sample document contains helpful tips under the "Staff Tips" paragraphs. This sample document is based on an actual application submitted to the City, but it has been modified for this purpose. The unique characteristics of a site should be carefully considered. For example, in this case, the most feasible way to build on the site was a narrow house structure located at the front of the property.

Prepared for the Property Owner
Prepared by a Planning Consultant

Request: The applicant requests an Environmental Review to establish a dwelling on a vacant property on the west side of NW Luray Terrace.

SITE INFORMATION

Zoning: R-7c, R-7p [Single-Dwelling Residential (R7) with the Environmental Conservation (c) and Environmental Protection (p) Overlay Zones].

Plan District: Northwest Hills Plan District and the Balch Creek Watershed Subdistrict

R#: R#55150-0030

Quarter Section: 2925

Site Size: 9,800 square feet

PROPOSAL & REASON FOR REQUEST

The purpose of this request is to obtain approval to construct a single-family dwelling on a vacant property through an Environmental Review. The building footprint, deck and carport on the main floor will be 13' wide by 73' long, for a total footprint of 933 square feet (See attached Proposed Development Site Plan). The dwelling will be placed on a stepped, walled, concrete foundation, and include an upper floor roof deck on its north end, and a main floor carport on its south end. The front facade of the home will be built on the property line, which abuts the street, to keep the dwelling as far away from the p zone as possible.

The proposed house is entirely within the Resource Area of the c zone. The proposal requires Environmental Review (EN) because the temporary disturbance area for the construction of the single-family home is within 5 feet of the p zone. Therefore, the proposal does not meet Standard B of Section 33.430.140, General Development Standards.

The attached site plans are submitted as required: the Existing Conditions Site Plan, the Proposed Development Site Plan, the Construction Management Site Plan, and the Mitigation Plan. These plans will illustrate compliance with the approval criteria.

SITE AND ADJACENT ZONING & LAND USES

The site is a vacant property situated on the west side of NW Luray Terrace. The site is zoned R-7c and R-7p as are the majority of lots north and south of the subject site on the west side of NW Luray Terrace. Lots on the east side of NW Luray Terrace are zoned R-7. All of the land west of the subject site is zoned OSfp. Single-family homes are situated on the east side of NW Luray Terrace, across the street from the subject site. The surrounding area is a mixture of large, older single-family homes. NW Luray Terrace is the through street in the immediate area. Most local streets surrounding the subject site provide internal circulation within neighborhoods or are short dead end streets. NW Luray Terrace is a 24' wide paved street in a 40' wide ROW. The common development pattern across the street from the subject site is long narrow building footprints built close to the street, because of steep topography and the narrow street width. The subject development will be typical of the above-mentioned development pattern in the neighborhood.

ENVIRONMENTAL RESOURCES

The subject property is part of the Northwest Hills Plan District, specifically within the Balch Creek Watershed Subdistrict. The subject property is identified as part of Resource Site 76 of the *Balch Creek Watershed Protection Plan*. The 91-acre Resource Site 76 has a site assessment score of 102. It is a site of the highest significance. The site is classified as Mixed First and Second Growth Conifer Forest. The types of resources found at Resource Site 76 include wildlife habitat, rare flora and plant communities, historic, open space, scenic, recreational, and educational. The forest is of the highest quality and represents a rare late successional community. It contains a variety of shade tolerant herbs and shrubs including cascara. Recreation, open space, and scenic resources are also of the highest quality. NW Cornell Road is within the Scenic Resource Zone ("s" on the zoning map) and has a scenic corridor designation. Approximately 1/3rd of the subject property is within the "s" zone, but the proposed development does not encroach into that area.

Staff Tip: Staff Tip: You can obtain copies of Resource Site information from the Development Services Center. The Resource Site information is based on studies done in eight separate areas of the City. The studies detail the resources and functional values of these areas. This information should be included in the Environmental Review application. It is also helpful to list the plants that are common on the property.

This site is vegetated with an upland mixed deciduous-coniferous forest dominated by an overstory of mature big leaf maple, Douglas fir, and Western red cedar. Trees have small to large diameter at breast height (dbh) ranging from 9-in. (cedar) to 25-in (Douglas fir). Canopy closure is at an average of 80% at full leaf throughout the site.

The shrub layer includes vine maple, elderberry sp., snowberry, Indian plum, salal, Oregon hazel, small-fruited rose, low Oregon grape, and thimbleberry. Also in the shrub layer are seedlings of cascara, American holly, and seedlings/saplings of Western red cedar and Douglas fir. The shrub layer is very dense. Herbaceous vegetation within the forest includes native plants of piggyback, bleeding heart, pathfinder, sword fern, Henderson's sedge, vanilla leaf, wood violet, large leaf avens. Vines include English ivy that is a dominant ground cover in the eastern half of the site, and trailing blackberry. At the roadside edge of NW Luray Terrace, non-native plants dominate and include English ivy, clematis, horsetail, dock, vinca minor, cut leaf geranium, among other weedy species. These non-natives are typical of introduced plants used in landscaping and were likely brought to the site.

Dead wood habitat exists on the site as downed logs, snags, and stumps. No nest cavities were observed during the initial survey. There are no streams, seeps, springs, or drainage contours on the site. The site is connected to other natural resource areas by the continuation of the forest to the west into Macleay Park and to the south.

The impact evaluation includes an identification, by characteristics and quantity, of the resources and functional values found on the site. The enclosed drawings document the 1,146 square feet of permanent vegetation removal and 1,421 square feet of temporary disturbance area that are the subject of this Type II Environmental Review.

Wildlife observed during the field survey includes the chestnut backed chickadee, hummingbird sp, Stellers jay, dark-eyed junco with fledglings, song sparrow, and American robin. It should

be noted that a one time visit to the site is insufficient to determine all the wildlife species that may use the site.

Habitat value for the site is moderately high based upon the following habitat characteristics and conditions: general dominance of native plant species; species and structural plant diversity; connection to other natural resources and habitats; and recent and older disturbance caused by natural infiltration and dumping of yard debris composed of invasive non-native plants; a relatively low presence of dead wood habitat which is important for a variety of wildlife; the lack of a water resource on-site (although Balch Creek is nearby, it is located on the other side of NW Cornell Road), and noise disturbance from traffic on NW Cornell Road and adjacent homes. The lower habitat values are located mostly within the right-of-way setback from the curb at NW Luray Terrace where yard debris dumping has formed a dominating stand of weedy non-native plants within the c zone and where roadway disturbance occurs.

Staff Tip: It is not necessary to prepare a separate natural resource inventory report by a consultant. If a separate report is created, staff recommends incorporating that information into the narrative addressing the EN review approval criteria.

Section 33.430.210-280 ENVIRONMENTAL REVIEW

33.430.240.B.1-3 Impact Evaluation

The applicant proposes to develop one single-family residence on the subject ownership. The site area is 9,800 square feet, and the combined area of permanent and temporary disturbance entirely within the Resource Area of the c zone will be 2,567 square feet (i.e. step-wall foundation, driveway area, stormwater planter, utilities, and all temporary disturbance area around the structure needed for construction). The permanent disturbance area will be 1,146 square feet, and consists of the building footprint, stormwater planter and driveway area (see attached Proposed Conditions and Construction Management Site Plans). Eight trees will be removed to accommodate the development.

Staff Tip: It is important to provide a realistic disturbance area - both temporary and permanent area - surrounding the proposed development. The disturbance area should allow you to maneuver construction equipment around the proposed development while minimizing disturbance. During construction you must limit your disturbance to what is ultimately approved as disturbance area through the EN, or request to expand it through an additional Environmental Review.

Section 33.430.250 Approval Criteria

According to Section 33.430.250, when Environmental Review is required because a proposal does not meet one or more of the development standards of Section 33.430.140 through .170, then the approval criteria will only be applied to that aspect of the proposal that does not meet the development standards. The proposal meets all of the above mentioned standards as set forth in Section 33.430.140 except B, which is that the disturbance area is within 5 feet of the Resource Area of the p zone.

33.430.250.E Other Development in the Environmental Conservation Overlay Zone

33.430.250.E.1 Proposed development minimizes the loss of resources and functional values, consistent with allowing those uses generally permitted or allowed in the base zone without a land use review.

Staff Tip: This criterion includes review of the proposed house, driveway, and the vegetative planter used for stormwater disposal.

All R-7 lots and lots of record meeting Section 33.110.212, "When primary structures are allowed" are permitted one, single-family dwelling unit. Therefore, the owners are proposing development that is generally permitted in the base zone, without a land use review. The applicant is proposing to construct a single-family dwelling on the subject site, within the confines of the Resource Area of the c zone. The building, deck and carport footprint will be 13' wide by 73' long, for a total footprint of 933 square feet. The dwelling will be placed on a stepped walled concrete foundation, and include a deck on its north end, and a carport on its south end. The front facade of the home will be built on the property line, to keep the dwelling as far away from the p zone as possible. Therefore, the owner is proposing a dwelling design typical for steeply sloped parcels in the West Hills. The building footprint is designed to minimize encroachment into the natural resource area.

Staff Tip: The method and treatment of stormwater you select for the proposed development must be verified as an appropriate stormwater management system with the Bureau of Environmental Services (BES) and the Site Development Section of BDS.

Consistent with the idea that encroachment into environmental areas should be first avoided then minimized and mitigated for, the City's policy is to discourage development within the c zone when land is available outside of the c zone. The Code criteria, if strictly interpreted, would force the placement of the proposed new residence within the ROW of NW Luray Terrace. The outer limit of the c zone is parallel to the centerline of NW Luray Terrace, and NW Luray Terrace is 40' wide, therefore, 20' of the 25' wide Transition Area is within the ROW of NW Luray Terrace. A house cannot be 5' wide; therefore it is physically impossible to locate a dwelling within the 25' deep Transition Area because it would place the dwelling in the street.

There are very few floor plans that can accommodate a 13' end wall width, because 13' of home width translates to 12' or less of interior width. (i.e., two, interior walls 6" wide) The building designer spent considerable effort in designing a single-family home that fits the site. In essence, the floor plan and footprint mimics an attached dwelling unit/ townhouse design because that is the only type of interior room layout that can function on a narrow footprint. Therefore, the owner has sacrificed a more open floor plan of a single-family dwelling layout for a more compact footprint that pulls the dwelling as far away from the p zone as possible.

There is a public sewer line in the street. The proposed dwelling will be built up to the ROW of NW Luray Terrace, as shown on the attached Proposed Development Site Plan. Therefore, a direct connection from the basement to the public line is the only feasible sanitary sewer connection at this location. The BDS recommended method of stormwater disposal is the method of stormwater disposal shown on the enclosed site plan. The proposed vegetative planter pipes are within the disturbance area and connect to the public stormwater system in

the street. Therefore, the vegetative planter pipes meet standards. However, the vegetative planter itself does not meet standards. Therefore, the vegetative planter is reviewed under this criterion with the house and driveway.

Because the site is entirely within the c zone, and specific site conditions, there is no other alternative but to place the dwelling, the driveway, and the utilities as shown.

33.430.250.E.2 Proposed development locations, designs, and construction methods are less detrimental to identified resources and functional values than other practicable and significantly different alternatives.

Staff Tip: This approval criterion focuses on describing options for the location, design, and construction methods for the proposed development. It is useful to label the options as #1, #2, and #3. It is helpful to describe the amount of temporary and permanent disturbance area for each option, and to identify the number, type, and size of trees that are proposed to be removed for each option. In this case, the applicant discusses the site constraints and how these constraints limit how a home can be constructed, rather than discussing a specific house plan as options #1, #2, and #3. The applicant provides extensive details on the site constraints.

The proposed development consists of the proposed house, the driveway, and the utilities.

The townhouse-like footprint is the only dwelling configuration that can work on such a narrow footprint. A 13' wide footprint is a common width for a attached dwelling unit, (townhouse), that can provide room for a carport, adequately sized rooms, corridors and living space and still meet building and fire codes. The owner has sacrificed an open floor plan typical of a single-family dwelling for a more compact footprint that pulls the dwelling as far away from the p zone as possible. Although it is not impossible to build a 13' wide house, it severely limits any options for interior room layout.

There are no practical alternatives to expanding the building footprint outwards and towards the p zone. Therefore, the only alternatives would be to shorten the building length and/ or increase the building height to maintain a similar amount of livable interior space. The dwelling length could be shortened to 35', which is approximately 1/2 of its current 65' lower floor length. Shortening the length would reduce the amount of impacted c zone Resource Area, but would create its own set of problems. The biggest impact would be the loss of livable floor space on the upper, main and ground floors. As shown on the enclosed floor plans, a 35' long footprint would remove part of the master bedroom, the entire great room, (living room), and part of the kitchen on the main floor, and a bedroom and bathroom on the lower floor. Therefore, the 1,963 square foot home, (which is already the size of a townhouse), would lose 484 square feet of livable space (i.e. total livable floor space of 1,479 square feet). The reduced floor plan size would reduce the dwelling down to the size of a large apartment.

The alternative floor plan increases one side yard setback from 5' to 40', but it only increases Resource Area not within the permanent disturbance area by 455 square feet. In balance, the proposed alternative does not justify a wholesale removal of living area within an already narrow building footprint, because the area to be saved is already in a disturbed condition. That is, the land area closest to NW Luray Terrace contains a predominance of non-native plant species and lacks the natural character of the remaining site, as described under Section 33.430.240. Therefore, the reduction in floor space will do little to lessen the dwelling's impact on the adjacent natural resource. The stairwell configuration must remain as shown to provide

code-complying access to all floors and to the outside. The dwelling would be required to provide a minimum of one off-street parking space, so the carport must remain as shown.

Increasing the building height to make up for the loss of floor space would require the addition of a third story, which would increase the building height by 8' to 9'. The owner wanted to keep the building height as low as possible, to minimize the visual impact of the dwelling, and to minimize the immediate neighbor's loss of a view into the wooded areas along the west side of NW Luray Terrace. Currently, the proposed home will be 17' above the road grade, and an additional story would increase the building height to 25' to 26' above the road grade. Once again, the proposed height increase alternative is not justified, because the area to be saved is already in a disturbed condition and there is no reason to create dwelling that would have a greater visual impact on the neighborhood. There are no other dwellings in the immediate area that have been restricted to the extent described above.

The long, narrow footprint proposed is a radical departure from the open and rectangular floor plan that is typical for a single-family home. Based on the alternative building footprint described above, the proposed building footprint is the only practicable building design. The building footprint limits encroachment only to the natural resource area of the c zone and does not encroach into the p zone. The proposed house design is a long rectangular footprint that is shaped to fit between the within the narrow confines of the c zone and the ROW line of NW Luray Terrace.

As suggested by BDS Site Development Staff, all stormwater from the proposed residence and driveway will filter through the vegetative planter and that will send the stormwater through an underground drain line system to NW Luray Terrace. The vegetative planter will be located south of the end wall of the proposed dwelling. The planter will be outside of the house disturbance area, but within the proposed perimeter sediment fence. The vegetative planter dimensions will be 5' wide x 10' long and a 2' wide trench will be dug for the drainpipe. (See also the attached Proposed Development Site Plan.)

Therefore, the applicant has proposed an alternative design for development that has the least impact on protected resources in the c zone in compliance with Section 33.430.210.

33.430.250.E.3 There will be no significant detrimental impact on resources and functional values in areas designated to be left undisturbed.

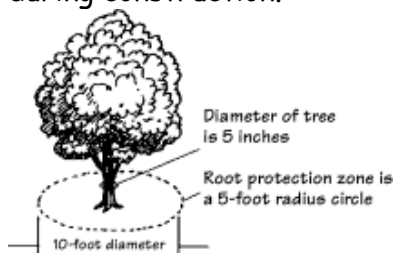
Staff Tip: This criterion focuses on the impacts related to the preferred option and should discuss the methods used to protect areas of the site that will not be disturbed. Therefore, the location and type of erosion control methods and tree protection measures such as the silt fence, construction fencing, biobags, root protection zone and so forth, should be described here. The ingress and egress for the construction should be described, and the location of the stockpile should be described. The information that is described should be illustrated on the Construction Management Site Plan.

The undisturbed vegetation is east of the proposed dwelling. As stated previously, in the impact evaluation, the impacts of the proposed development will be concentrated in the narrow area of disturbance that parallels NW Luray Terrace. The Mitigation Plan will return the temporary disturbance area to a native state, and enhance the existing plantings within the p zoned area of the site.

Construction activities relevant to this criteria will include: excavation for the foundation wall footings and walls, installation of underground utilities and vegetative planter, constructing forms, pouring concrete, foundation wall installation, backfilling and rough grading around the base of the foundation. Once the first floor decking is in place, the majority of work will occur on the elevated platform created by the first floor. Once building permits have been issued, the construction activities can begin. When construction activities are completed, the entire disturbed area will be seeded with a grass seed mixture that is designed for erosion control purposes.

The building contractor will place silt fences around the perimeters of the construction disturbance area, and along the northern and southern property lines as shown on the Construction Management Site Plan prior to the commencement of construction activities. To the extent practical, all existing vegetation outside the limit of disturbance will be protected. The sediment fence will remain in place until all the above mentioned construction activities are completed. Any trees within the disturbed area will be flagged and have a temporary construction fence installed around the tree base to protect the root system and bark. The root protection zone is a circular area around the tree that is based on the diameter of the tree. Each of the protected trees will have a tree protection zone appropriate for their size. For example, a 15 ft. tree will have a 15 ft. radius of root protection zone.

Staff Tip: The standard root protection zone is a circular area around a tree that is based on the diameter of the tree: one foot radius of circular area for each one inch of tree diameter (Section 33.930.140). To deviate from the requirement, you must provide an arborist's report that states how the trees that will be preserved will be protected during construction.



According to the owner, equipment will be staged within the ROW of NW Luray Terrace between the curb and the edge of ROW (see the attached Construction Management Site Plan). Applicable permits for working in the ROW will be obtained from the Portland Department of Transportation. A wide rock driveway will provide for on-site parking area of construction vehicles. The owner will ensure that saturated soils will be allowed to drain before leaving the site. Any damage to the silt fences and/or disturbance to hay bales will be repaired within the same working day that the damage occurs.

33.430.250.E.4 The Mitigation Plan demonstrates that all significant detrimental impacts on resources and functional values will be compensated for.

Staff Tip: This approval criterion discusses the applicant's proposed Mitigation Plan and how the Mitigation Plan will revegetate the area so that impacts from the proposed development, which have been described in the findings from the previous criteria, are mitigated appropriately.

The enclosed site plans illustrate the 1,146 sq. ft. of permanent disturbance area, (i.e. dwelling and driveway) and 1,421 sq. ft. of temporary disturbance area. The plans also show the removal of eight trees. The Mitigation Plan serves two purposes. First, the plan will mitigate for the loss of resource that will be permanently removed by the home location. Secondly, the Mitigation Plan calls for removal of invasive species and plantings of native trees and shrubs within the c and p zoned area, creating natural resource areas where there were non-native plantings, and enhancing those areas that already contain native plantings. The proposed plantings will be selected from the *Portland Plant List*. The proposed home construction will have minimal, long-term impact on the resource, based on the combination of the proposed construction methods described in Section 33.430.250.E.3, and the Mitigation Plan. The proposed Mitigation Plan will be installed and maintained under the regulations outlined in Section 33.248.040.A-D (Landscaping and Screening).

The mitigation measures are described as follows:

- 1) Removal of non-native plants within the home site outside of the building footprint; and
- 2) Planting of native trees and shrubs within the p zone forest; and
- 3) Placement of some of the removed trees into open areas to provide future dead wood habitat which is currently lacking on-site; and
- 4) Planting of native trees and or shrubs within the home site, where practicable.

Trees Removed	Number & Kind Required of Replacement Trees & Shrubs	Size of Replacement Plants	Spacing of Plants
5 trees 6-12 in. range Western red cedar (#1, #2, #5, #6, #7)	10 Western red cedar	Tree seedlings at least 1-in caliper	Shrubs will be planted 3 plants for every 10 sq. ft.
1 tree 6-12 in. range grand fir (#8)	2 grand fir trees	Tree seedlings at least 1-in. caliper	Trees will be planted a minimum 10 ft. on center.
1 tree 25-in. Western red cedar (#3)	5 Douglas fir trees and 9 shrubs (4 vine maples and 5 salal)	Tree seedlings at least a 1-in caliper and shrubs in at least a 2-gallon container	
1 tree 21-in. Western red cedar (#4)	3 Western hemlock and 6 shrubs (3 evergreen huckleberry and 3 spring-flowering currant)	Tree seedlings at least a 1-in caliper and shrubs in at least a 2-gallon container	

All plants will be selected from the *Portland Plant List*.

The total number of trees to be cut down (some will be placed elsewhere on the site) is eight trees with a total diameter of 102 inches. The number of trees to be planted is 20 and the number of shrubs to be planted is 15 (see the attached Mitigation Plan). The number of replacement trees and shrubs is based upon Table 430-2, Tree Replacement, in Chapter 430. Removal of invasive plants will occur in the mitigation area.

Monitoring: The property owner will be responsible for the monitoring and maintenance of the Mitigation Plan. The property owner will inspect the plantings at six months and at one year after the initial planting, to check for the survival and vigor of the plantings. Any dead or dying plants will be replaced in kind. The property owner will check the plantings one-year after the end of the first growing season just described, and check again for the survival and vigor of the plantings. Any dead or dying plants will be replaced in kind. Generally after two years, all plants should be well established and not require any further monitoring and/or maintenance.

The City requires the applicant to submit Monitoring and Maintenance Reports within a certain timeframe after issuance of the decision. The Monitoring and Maintenance Reports must include the information below.

- Identify the person doing the monitoring and maintenance and submitting the reports.
- A description of when the site was seeded and what seed mix was used.
- The number and type of trees that have been installed and if any died. If less than 100% of the trees that were planted are surviving at the time of each annual count, replacement of dead trees is required. The required number of trees to survive is 100% (replacement must occur within one planting season).
- The number and type of shrubs installed and if any have died. If less than 80% of the mitigation planting area is covered with shrubs or groundcovers at the time of an annual count, shrubs and groundcovers shall be planted to reach 80% cover (replacement must occur within one planting season).
- A list of replacement plants that were installed.
- Photographs of the mitigation area and a site plan, in conformance with approved Exhibit C.4, Mitigation Plan, showing the location and direction of photos.
- A description of the method and frequency for the watering of trees, shrubs, and groundcovers for the first two summers after planting.
- An estimate of percent cover of invasive species (English ivy, Himalayan blackberry, reed canarygrass, teasel, clematis) within 10 feet of all the plantings. Invasive species must be kept to a maximum of 20 percent cover during the monitoring period.

Staff Tip: The number of years that the site must be monitored and that a report must be submitted to BDS may vary depending on the type of Environmental Review submitted (Type I, II, or III).

Staff Tip: Following your review, you will be required to verify the plants have been installed as required.

33.430.250.E.5

The proposed mitigation will occur adjacent to the existing dwelling and within the p zoned area west of the dwelling, therefore, the remediation/ mitigation will occur within the same watershed of the proposed use.

33.430.250.E.6

The applicant is a consultant. The property owner who owns the subject site will adhere to the environmental regulations and can ensure the success of the mitigation program.

Section 33.563 Northwest Hills Plan District

Staff Tip: Sometimes subject properties are within a Plan District or a Natural Resources Management Plan area. In such cases, additional narrative must be provided to address the applicable criteria and identify any standards that are not being met with the proposed development.

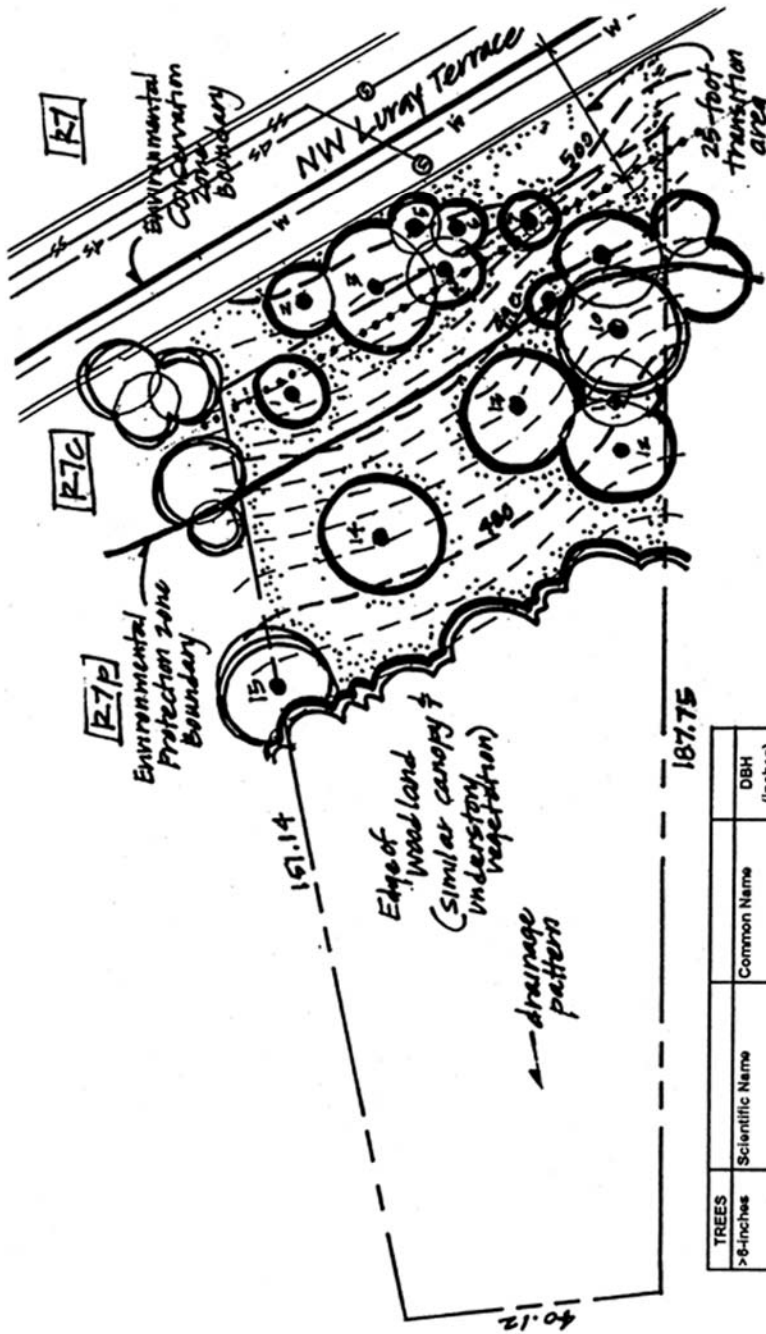
Introduction

According to the Northwest Hills Plan District Map 563-1, the subject site is located in the Balch Creek Watershed Subdistrict of the Northwest Hills Plan District. The following responses to the applicable code standards demonstrate that the proposal complies with those standards.

Balch Creek Subdistrict

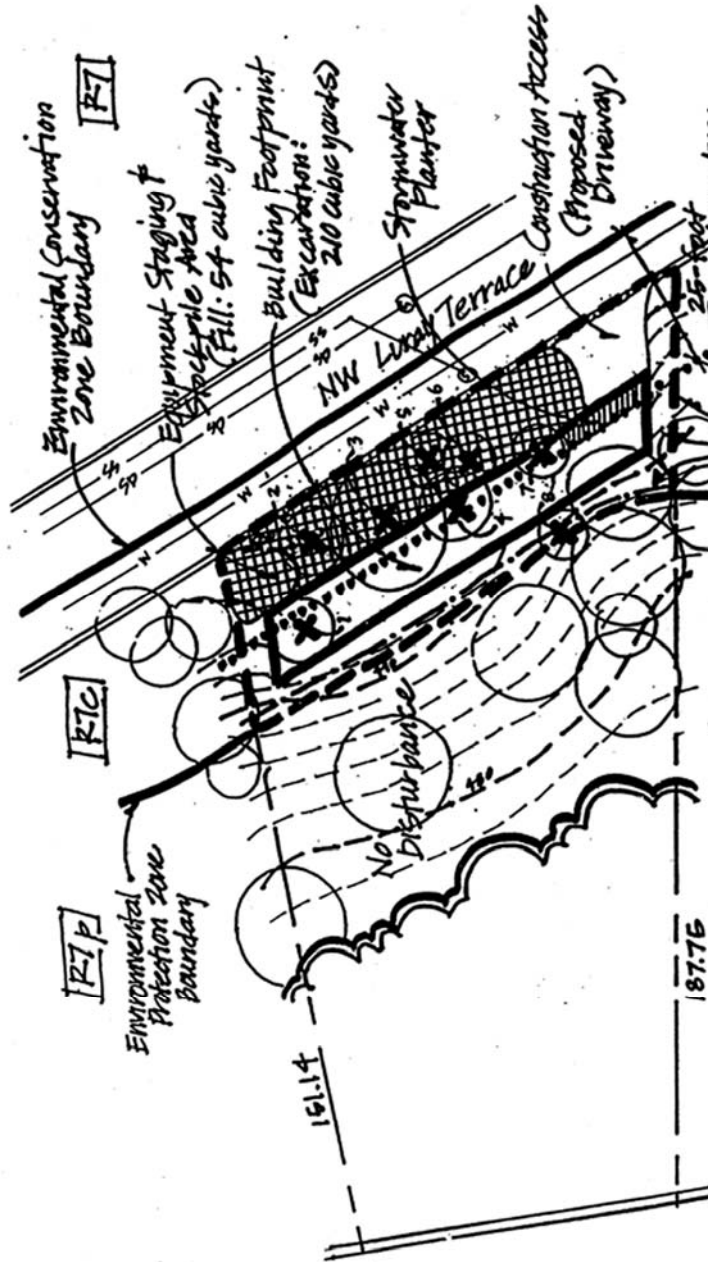
33.563.120

According to this code section, an Environmental Review application will be approved if the review body finds that the location, quantity, and quality of forest and contiguous forest cover will be sufficient to provide habitat for deer and elk and to provide for the passage of deer and elk between Forest Park and Pittock Acres Park. As stated above, only 10% of the site will be occupied with a dwelling, and the remainder of the site will remain as part of the existing forested canopy that stretches from this site westward into MacLeay Park. Therefore, a minimal amount of land area will be used for a residential dwelling. The proposed dwelling will be situated right at the property line along NW Luray Terrace, and only 40'-50' away from other existing dwellings along the street. It is unlikely that the addition of a single dwelling in an established residential neighborhood would alter whatever existing pattern of wildlife movement occurs in this area. Based on the above-mentioned facts, the proposal complies with this standard.



TREES >8-inches	Scientific Name	Common Name	DBH (inches)
1	<i>Thuja plicata</i>	Western Red Cedar	10
2	<i>Thuja plicata</i>	Western Red Cedar	11
3	<i>Thuja plicata</i>	Western Red Cedar	25
4	<i>Thuja plicata</i>	Western Red Cedar	21
5	<i>Thuja plicata</i>	Western Red Cedar	9
6	<i>Thuja plicata</i>	Western Red Cedar	8
7	<i>Thuja plicata</i>	Western Red Cedar	11
8	<i>Abies grandis</i>	Grand Fir	7
9	<i>Pseudotsuga menziesii</i>	Douglas Fir	24
10	<i>Acer macrophyllum</i>	Big Leaf Maple	21
11	<i>Thuja plicata</i>	Western Red Cedar	8
12	<i>Pseudotsuga menziesii</i>	Douglas Fir	23
13	<i>Pseudotsuga menziesii</i>	Douglas Fir	25
14	<i>Pseudotsuga menziesii</i>	Douglas Fir	25
15	<i>Acer macrophyllum</i>	Big Leaf Maple	16

EXISTING CONDITIONS
925 NW Lurray Terrace
Scale 1" = 30'
North



Temporary Construction Fencing is to be installed around perimeter of Disturbance Area

Existing contours to be tied into new retaining wall around perimeter of house

Silt Fencing for Erosion Control

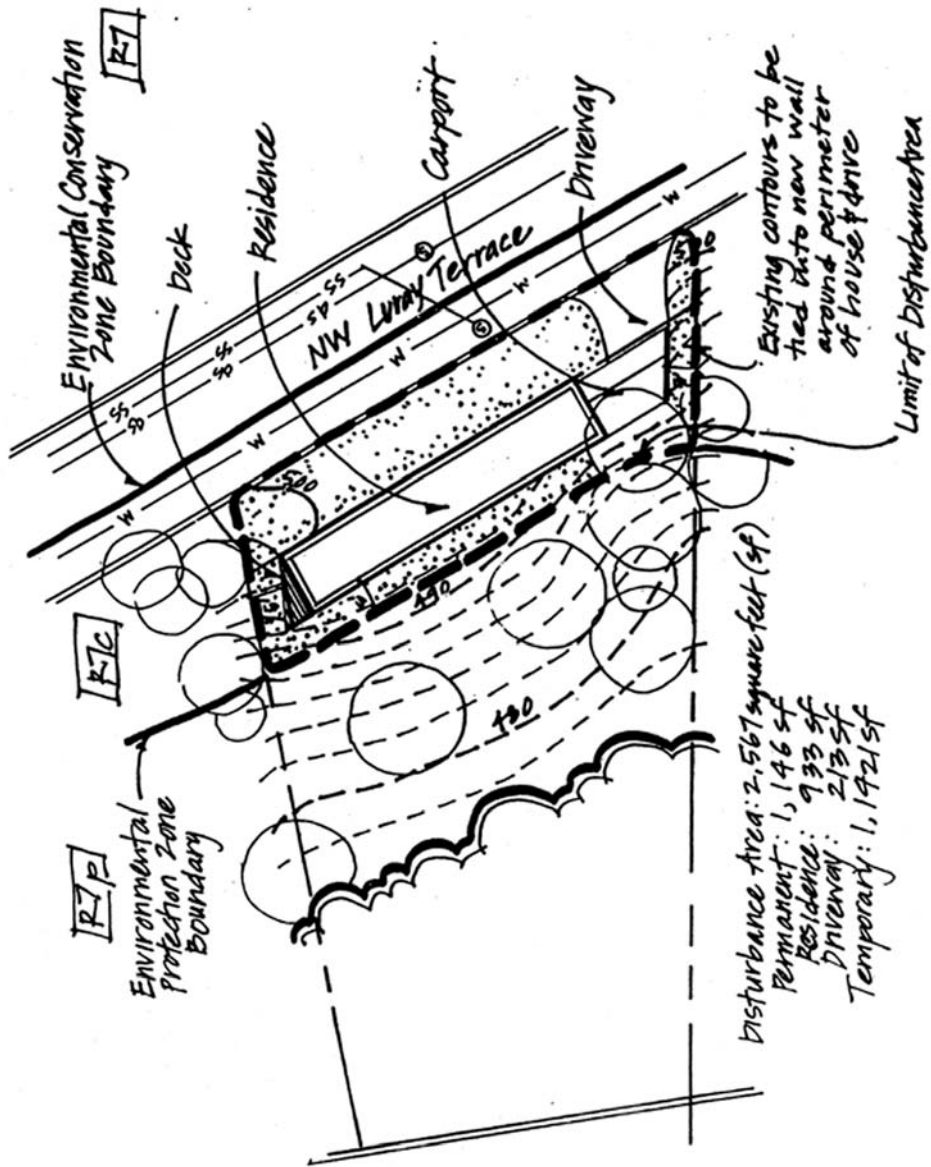
TREES TO BE REMOVED	Scientific Name	Common Name	DBH (Inches)
1	Thuja plicata	Western Red Cedar	10
2	Thuja plicata	Western Red Cedar	11
3	Thuja plicata	Western Red Cedar	25
4	Thuja plicata	Western Red Cedar	21
5	Thuja plicata	Western Red Cedar	9
6	Thuja plicata	Western Red Cedar	8
7	Thuja plicata	Western Red Cedar	11
8	Abies grandis	Grand Fir	7

CONSTRUCTION MANAGEMENT

925 NW Lurray Terrace

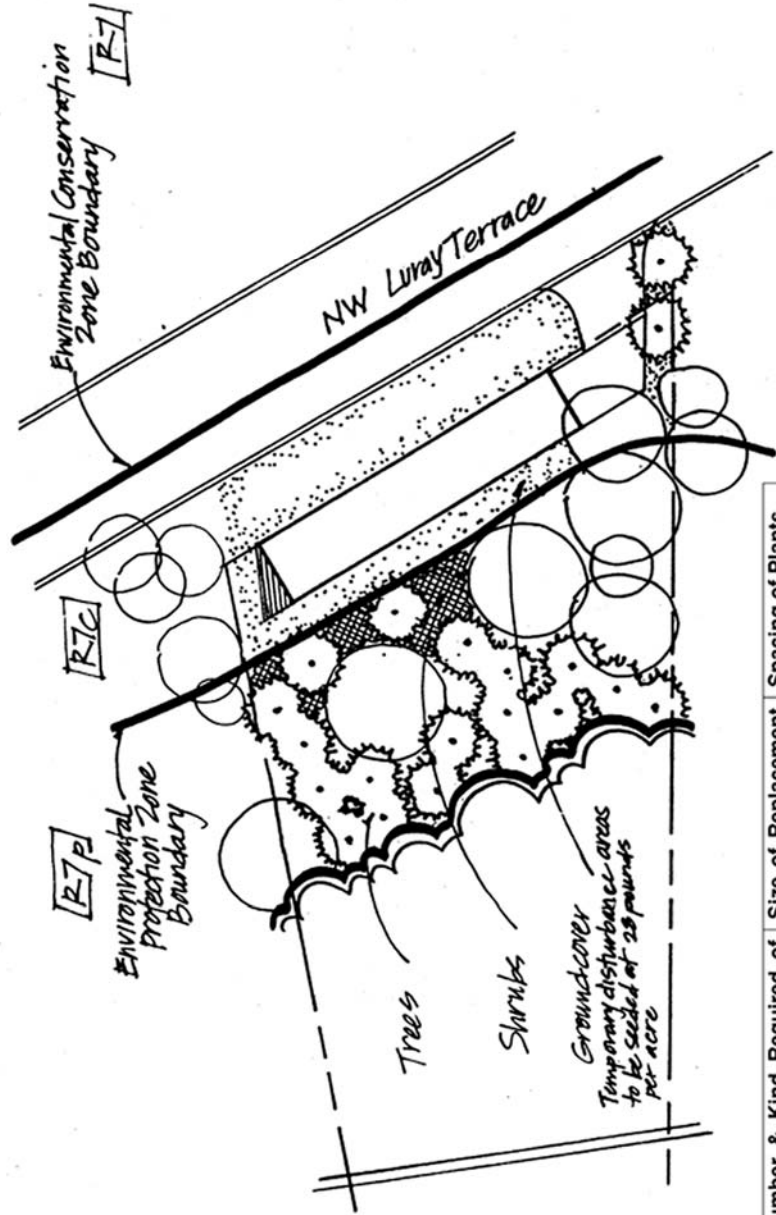
Scale 1" = 30'

north



PROPOSED DEVELOPMENT
 925 NW Lurray Terrace
 Scale 1" = 30'
 North

Agency
Comments



Trees Removed	Number & Kind Required of Replacement Trees & Shrubs	Size of Replacement Plants	Spacing of Plants
5 trees 6-12 in. range Western red cedar (#1, #2, #5, #6, #7)	10 Western red cedar	Tree seedlings at least 1-in caliper	Shrubs will be planted 3 plants for every 10 sq. ft.
1 tree 6-12 in. range grand fir (#8)	2 grand fir trees	Tree seedlings at least 1-in. caliper	Trees will be planted a minimum 10 ft. on center.
1 tree 25-in. Western red cedar (#3)	5 Douglas fir trees and 9 shrubs (4 vine maples and 5 salal)	Tree seedlings at least a 1-in caliper and shrubs in at least a 2-gallon container	
1 tree 21-in. Western red cedar (#4)	3 Western hemlock and 6 shrubs (3 evergreen huckleberry and 3 spring-flowering currant)	Tree seedlings at least a 1-in caliper and shrubs in at least a 2-gallon container	

All plants will be selected from the Portland Plant List.

MITIGATION PLAN

925 NW Luray Terrace

0 5 10 20 30 40 50 60

Scale 1" = 30'

north