

NOTICE OF DECISION

PLANNING DIVISION
555 LIBERTY ST. SE, RM 305
SALEM, OREGON 97301
PHONE: 503-588-6173
FAX: 503-588-6005



*Si necesita ayuda para comprender esta información, por favor llame
503-588-6173*

DECISION OF THE PLANNING ADMINISTRATOR

TREE REGULATION VARIANCE CASE NO.: TRV24-04

APPLICATION NO.: 24-112234-PLN

NOTICE OF DECISION DATE: October 17, 2024

REQUEST: A Tree Variance to remove two significant trees, one 45-inch and one 64-inch dbh (diameter at breast height) Giant Sequoia, and to encroach into more than 30 percent of the critical root zone of two other significant trees, one 37-inch and one 42-inch dbh Giant Sequoia, in order to develop a new four-family dwelling on a vacant lot. The subject property is 0.23-acres in size, zoned RS (Single Family Residential) and located at 1390 Overlook Avenue NW (Polk County Assessor's Map and Tax Lot 073W22BB / 1401).

APPLICANT: Celtic Homes, LLC

LOCATION: 1390 Overlook Ave NW, Salem OR 97304

CRITERIA: Salem Revised Code (SRC) Chapter 808.045(d)(1)

FINDINGS: The findings are in the attached Decision dated October 17, 2024

DECISION: The **Planning Administrator APPROVED** Tree Variance Case No. TRV24-04 subject to the following conditions of approval:

Condition 1: The tree protection measures recommended in the arborist's report shall be adhered to during construction, including arborist oversight of the excavation of the storm drain and utilities within the critical root zones of Trees 1 through 7 on the attached site plan.

Condition 2: All other tree protection measures of SRC 808.046 shall be followed during construction.

The rights granted by the attached decision must be exercised, or an extension granted, by November 2, 2026, or this approval shall be null and void.

Application Deemed Complete:	<u>September 27, 2024</u>
Notice of Decision Mailing Date:	<u>October 17, 2024</u>
Decision Effective Date:	<u>November 2, 2024</u>
State Mandate Date:	<u>January 25, 2025</u>

Case Manager: Peter Domine, Planner II, pdomine@cityofsalem.net, 503-540-2311

This decision is final unless written appeal and associated fee (if applicable) from an aggrieved party is filed with the City of Salem Planning Division, Room 320, 555 Liberty Street SE, Salem OR 97301, or by email at planning@cityofsalem.net, no later than 5:00 p.m., Friday, November 1, 2024. Any person who presented evidence

or testimony at the hearing may appeal the decision. The notice of appeal must contain the information required by SRC 300.1020 and must state where the decision failed to conform to the provisions of the applicable code section, SRC Chapter 808. The appeal fee must be paid at the time of filing. If the appeal is untimely and/or lacks the proper fee, the appeal will be rejected. The Hearings Officer will review the appeal at a public hearing. After the hearing, the Hearings Officer may amend, rescind, or affirm the action, or refer the matter to staff for additional information.

The complete case file, including findings, conclusions and conditions of approval, if any, is available for review by contacting the case manager, or at the Planning Desk in the Permit Application Center, Room 305, City Hall, 555 Liberty Street SE, during regular business hours.

<http://www.cityofsalem.net/planning>

BEFORE THE PLANNING ADMINISTRATOR OF THE CITY OF SALEM

DECISION

IN THE MATTER OF APPROVAL OF) FINDINGS & ORDER
TREE REGULATION VARIANCE)
CASE NO. TRV24-04)
1390 OVERLOOK AVE NW) OCTOBER 17, 2024

In the matter of the applications for a Tree Regulation Variance submitted by the applicant, Celtic Homes, LLC, the Planning Administrator, having received and reviewed evidence and the application materials, makes the following findings and adopts the following order as set forth herein.

REQUEST

Summary: A Tree Variance to remove two significant trees.

Request: A Tree Variance to remove two significant trees, one 45-inch and one 64-inch dbh (diameter at breast height) Giant Sequoia, and to encroach into more than 30 percent of the critical root zone of two other significant trees, one 37-inch and one 42-inch dbh Giant Sequoia, in order to develop a new four-family dwelling on a vacant lot. The subject property is 0.23-acres in size, zoned RS (Single Family Residential) and located at 1390 Overlook Avenue NW (Polk County Assessor’s Map and Tax Lot 073W22BB / 1401).

A vicinity map illustrating the location of the property is attached hereto and made a part of this staff report (**Attachment A**).

PROCEDURAL FINDINGS

1. Background

On June 12, 2024, an application for a Tree Regulation Variance was filed for the subject property. After additional information was requested and received, the application was deemed complete for processing on September 27, 2024. The 120-day state mandated decision deadline for this consolidated application is January 25, 2024.

The applicant’s proposed development plans and arborist report addressing the approval criteria is included as **Attachment B** and **Attachment C**.

SUBSTANTIVE FINDINGS

2. Summary of Record

The following items are submitted to the record and are available: 1) all materials and testimony submitted by the applicant, including any applicable professional studies such as traffic impact analysis, geologic assessments, stormwater reports, and; 2) materials, testimony, and comments from public agencies, City Departments, neighborhood associations, and the public. All application materials are available on the City’s online Permit Application Center at <https://permits.cityofsalem.net>. You may use the search function without registering and enter the permit number listed here: 24 112234.

3. Neighborhood Association and Public Comments

The subject property is located within the boundaries of the West Salem Neighborhood Association.

Applicant Neighborhood Association Contact: SRC 300.310 requires an applicant to contact the neighborhood association(s) whose boundaries include, and are adjacent to, property subject to specific land use application requests. Pursuant to SRC 300.310(b)(1), neighborhood association contact is not required for the requested land use application (Tree Regulation Variance).

Neighborhood Association Comment: Notice of the application was provided to the neighborhood association pursuant to SRC 300.520(b)(1)(B)(v), which requires notice to be sent to any City-recognized neighborhood association whose boundaries include, or are adjacent to, the subject property. As of the date of this staff report, no comment has been received from the Neighborhood Association.

Homeowner's Association: The subject property is not located within a homeowner's association.

Public Comment: Notice was also provided, pursuant to SRC 300.520(b)(1)(B)(iii), (iv), (vi), & (vii), to the address of the subject property and all property owners and tenants within 250 feet of the subject property. As of the date of completion of this staff report, no comments were received from the public indicating concerns with the proposal.

4. City Department Comments

Development Services: Reviewed the proposal and indicated no concerns.

Building and Safety: Reviewed the proposal and indicated no concerns.

Fire Department: Reviewed the proposal and indicated no concerns.

5. Public Agency Comments

No Public or Private Agency comments were received.

DECISION CRITERIA FINDINGS

6. Analysis of Tree Regulation Variance Approval Criteria

Salem Revised Code (SRC) 808.045(d) sets forth the following criteria that must be met before approval can be granted to a request for a Tree Regulation Variance. In this case, the applicant has requested to address the hardship criterion in SRC 808.045(d)(1).

SRC 808.045(d)(1)(a): There are special conditions that apply to the property which create unreasonable hardships or practical difficulties which can be most effectively relieved by a variance.

Finding: The applicant has submitted building permits for a proposed quadplex for property located at 1390 Overlook Avenue NW (**Attachment A**). The applicant's proposed site plan indicates there are numerous trees on the property, including four trees with a dbh (diameter-at-breast-height) of 30 inches or greater located within the project area of the proposed dwelling (**Attachment B**). The proposed construction will encroach into the critical root zone of two of the trees, labeled Tree 4 (a 37-inch DBH Giant Sequoia) and Tree 7 (a 42-inch Giant Sequoia), and two trees are proposed for removal, labeled Tree 10 (a 45-inch Giant Sequoia) and Tree 17 (a 64-inch Giant Sequoia).

Per SRC 808.015, the trees are considered Significant Trees and may not be removed except with a tree removal permit under SRC 808.030 or a tree variance under SRC 808.045. Per SRC 808.005, tree removal means "to cut down a tree or remove 30 percent or more of the crown, trunk, or root system of a tree; or to damage it so as to cause the tree to decline or die. The term removal includes, but is not limited to, topping, damage inflicted upon a root system by application of toxic substances, operation of equipment and vehicles, storage of materials, change of natural grade due to unapproved excavation or filling, or unapproved alteration of natural physical conditions." Because of the locations of the trees on the site, there are practical difficulties to develop the property, and the applicant has requested a Tree Variance under SRC 808.045 to deviate from the requirements of this chapter to allow construction within more than 30 percent of the critical root zone of the two trees and to remove the two others.

The applicant has submitted a report from a licensed arborist (**Attachment C**) which indicates the proposed construction of storm drain lines and a rain garden will encroach into more than 30 percent of the critical root zone of Tree 4 and Tree 7. Per SRC 808.005, the critical root zone is defined as "the circular area beneath a trees established to protect the tree's trunk, roots, branches, and soil to ensure the health and stability of the tree. The critical root zone measures one-foot in radius for every one-inch of DBH of the tree." Because the trees are protected under SRC 808.015, tree protection measures under SRC 808.046 are required. Per SRC 808.046, protection measures are required around the entire critical root zone of protected trees, with the exceptions pursuant to SRC 808.046(a)(3) where "up to a maximum of 30 percent of the critical root zone of a tree may be disturbed in order to accommodate development of [a] property when a report from an arborist is submitted documenting that such disturbance will not compromise the long-term health and stability of the tree and all recommendations included in the report to minimize any impacts to the tree are followed."

Due to the 37-foot and 42-foot critical root zones of Tree 4 and Tree 7, respectively, as well as the configuration of the lot and buildable area, the protection measures create a practical difficulty for the otherwise reasonable development of the property. The development plans indicate stormwater and utilities, including a rain garden, are to be installed within the critical root zones. The arborist's report indicates it is infeasible to install the necessary infrastructure without encroaching into some of the critical root zones of the trees, and that it is possible to bore through some areas without permanently damaging the trees and still preserving them.

Regarding Tree 10 and Tree 17, the two trees are located where the only feasible access to the property could be located. The subject property is a corner lot on Orchard Heights Road NW, classified as a Major Arterial, and Overlook Avenue NW, which is classified as a Local Street in the Salem Transportation System Plan. Per SRC 804.035(c)(2), when located on a corner of a major arterial street and a local street, the permitted driveway access shall be

taken from the lower street classification. Because Tree 10 and Tree 17 are located in the middle of the lot adjacent to the Overlook Ave streetside, the trees create a practical hardship for permitting access to the site. If the trees were retained, they would limit access and any construction would still encroach into their critical root zones, which encompass the vast majority of the buildable lot area.

The arborist's report indicates all other tree protection measures under SRC 808.046 will be adhered to, including supervision of root pruning for the boring of the utility lines through the critical root zones of Tree 4 and Tree 7. To ensure the arborist's recommendations and other protection measures for the preservation of the tree are followed, the following conditions shall apply:

Condition 1: The tree protection measures recommended in the arborist's report shall be adhered to during construction, including arborist oversight of the excavation of the storm drain and utilities within the critical root zones of Trees 1 through 7 on the attached site plan.

Condition 2: All other tree protection measures of SRC 808.046 shall be followed during construction.

Given the details outlined in the arborist's report, the conditions of the property and locations of the trees create unreasonable hardships or practical difficulties which can be most effectively relieved by a variance. This criterion is met.

SRC 808.045(d)(1)(b): The proposed variance is the minimum necessary to allow the otherwise lawful proposed development of activity.

Finding: As described in the findings above and as conditioned, the applicant's proposal to construct within more than 30 percent of the critical root zone of Tree 4 and Tree 7 and for the removal of Tree 10 and Tree 17 on the attached site plan is the minimum necessary to allow for the otherwise lawful development of the subject property. This criterion is met.

7. Conclusion

Based upon review of SRC Chapter 808, the applicable standards of the Salem Revised Code, the findings contained herein, and due consideration of comments received, the application complies with the requirements for an affirmative decision.

IT IS HEREBY ORDERED

Tree Regulation Variance Case No. TRV24-04 is hereby **APPROVED** subject to SRC Chapter 808, the applicable standards of the Salem Revised Code, and conditions of approval.

Condition 1: The tree protection measures recommended in the arborist's report shall be adhered to during construction, including arborist oversight of the excavation of the storm drain and utilities within the critical root zones of Trees 1 through 7 on the attached site plan.

Condition 2: All other tree protection measures of SRC 808.046 shall be followed during construction.

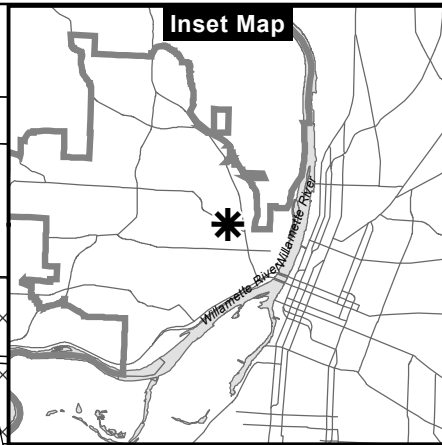
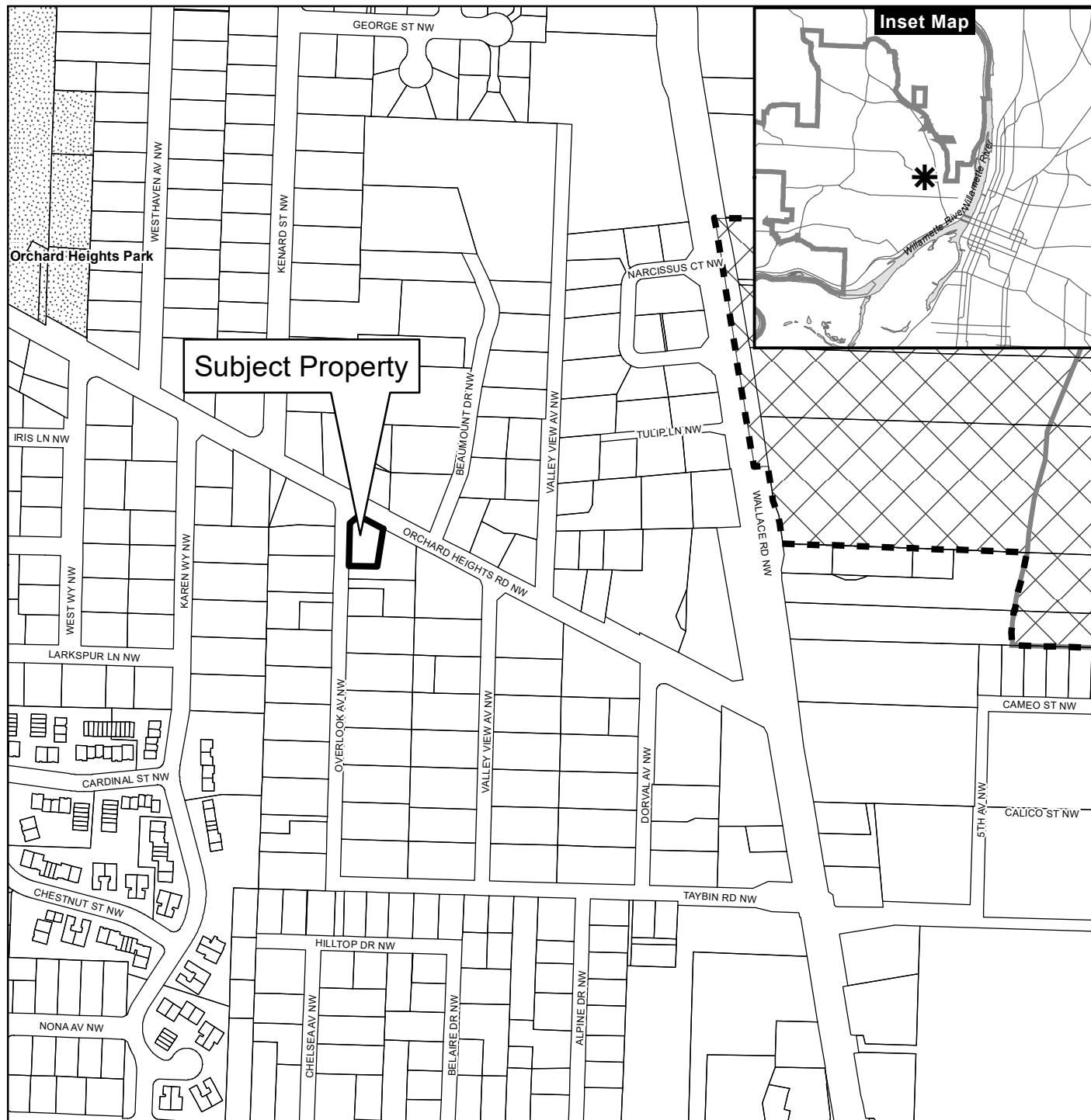


Peter Domine, Planner II, on behalf of
Lisa Anderson-Ogilvie, AICP
Planning Administrator








Attachments: A. Vicinity Map
B. Site Plan
C. Arborist Report

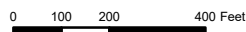
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Docs\TRV24-04.pjd.docx

Vicinity Map 1390 Overlook Ave NW



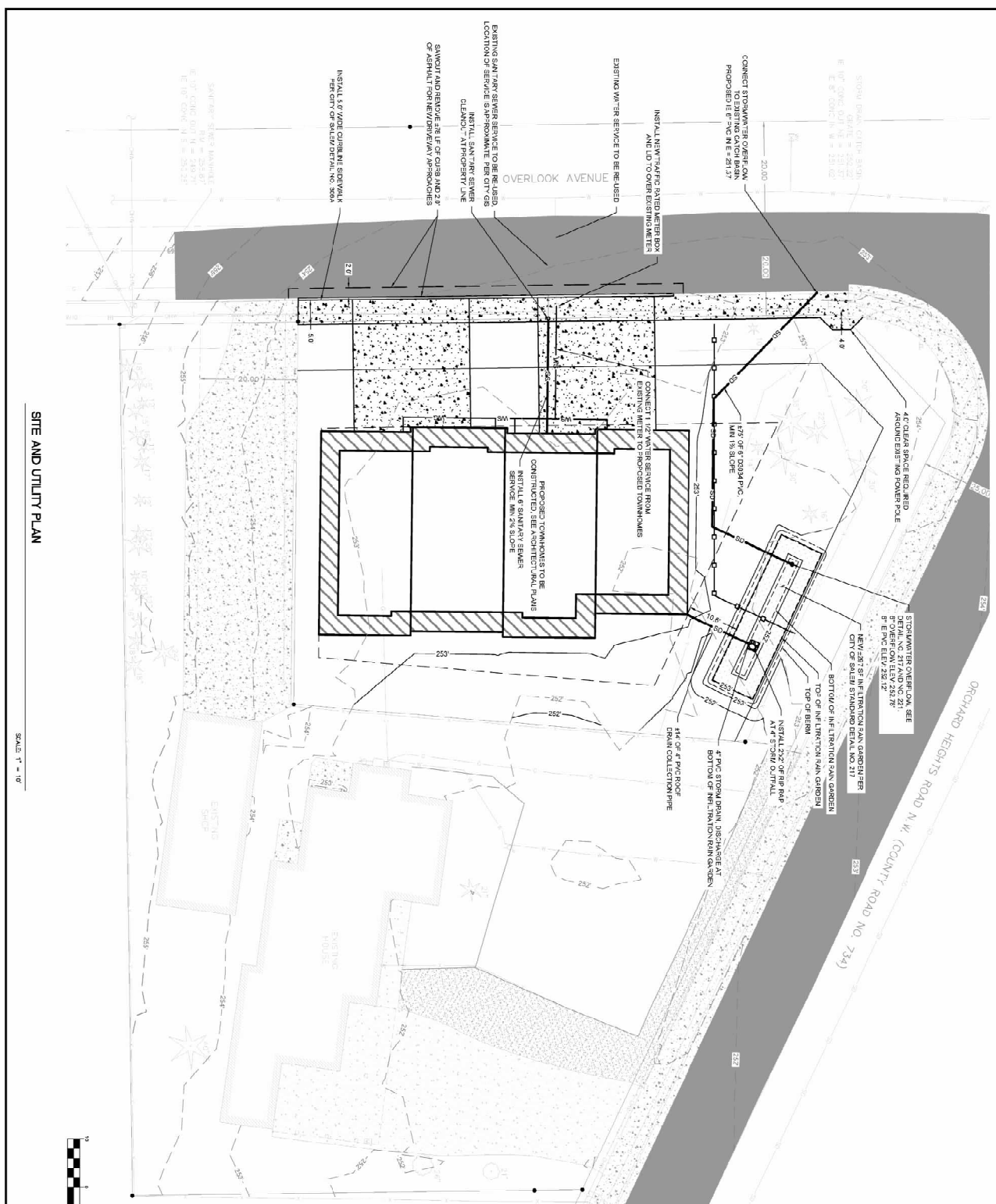
Legend

-  Taxlots
-  Urban Growth Boundary
-  City Limits
-  Outside Salem City Limits
-  Historic District
-  Schools
-  Parks



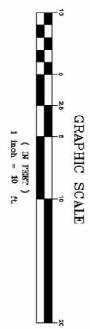
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PROJECT NO. 2021-0114



SITE AND UTILITY PLAN

SCALE: 1" = 10'



STORMWATER DESCRIPTION
 STORMWATER FOR THE PROPOSED TOWNHOMES HAS BEEN DESIGNED USING THE SWALE METHOD OF SALEM'S STORMWATER DESIGN HANDBOOK FOR RESIDENTIAL PROJECTS. THE SUBJECT TOWNHOMES WILL BE MANAGED USING A STORMWATER INFILTRATION GARDEN TOWNHOMES.

REV.	DATE	DESCRIPTION	BY

JASON FLORES
 PO BOX 20025 KIEZER, OR 97307

1390 OVERLOOK AVE PARTITION
1390 OVERLOOK AVE NW SALEM, OR

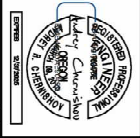
SITE AND UTILITY PLAN

Date: 12/13/2023
 Sheet No: 3 of 7

H B H CONSULTING ENGINEERS

501 E First Street
 Newberg, Oregon 97132
 503/554-9553 ■ fax 503/537-9554
 email: mail@hbh-engineers.com

Designed By: Cragg Drawn By: LHS Checked By: AKC Submitted No: 1





Todd Prager & Associates_{LLC}

MEMORANDUM

DATE: August 28, 2024

TO: Jason Flores (Celtic Homes)

FROM: Christine Johnson, ASCA Registered Consulting Arborist® #823

RE: Tree Protection and Removal Plan for 1390 Overlook Avenue NW

Summary

Four townhomes are proposed at 1390 Overlook Avenue NW in Salem, Oregon. There are 16 non-exempt trees on the property and near the limits of development. Nine (9) non-exempt trees are proposed for removal, two of which are significant. Seven (7) non-exempt trees will be preserved and protected with tree protection fencing. Tree removal does not exceed 75 percent and does not require additional mitigation trees. A tree variance is requested for the removal of two significant trees and greater than 30 percent encroachment into the critical root zones of two significant trees.

Background

The site is located at 1390 Overlook Avenue NW. The property is zoned residential (RS). Trees over 10-inches in diameter (DBH) exist on the property, requiring compliance with Section 808 (Preservation of Trees and Vegetation) of the Salem Development Code. Heritage trees do not exist on the property. The property is in Marion County. There are no ash (*Fraxinus spp.*) trees on the property, therefore there are no applicable insect pest quarantines or control area orders related to this project.¹ This tree protection plan is associated with land use application 24-112234-PLN.

Assignment

The scope of work requested of our firm was:

1. Conduct one site visit to tag and inventory up to 20 trees at the 1390 Overlook Avenue NW project site. Inventory to include the tree number, species, DBH, health and structural conditions of the trees, and pertinent comments.
2. Prepare a tree conservation plan in accordance with Salem Code Chapter 808 – Preservation of Trees and Vegetation.
3. Provide findings that address the tree variance criteria in accordance with Salem Code Section 808.045 for any tree removals or root zone impacts that require a variance.

Tree Inventory

The tree inventory was completed on July 9, 2024. There are 18 trees within the project limits, two of which are exempt due to size (trees 12 and 16). The following information was collected for each

¹“Quarantines and Control Areas,” Oregon Department of Agriculture, accessed July 31, 2024, <https://www.oregon.gov/oda/programs/IPPM/Pages/Quarantines.aspx>.

tree: tree number, common name, scientific name, DBH (diameter at breast height), approximate crown radius, health condition, structural condition, significant tree² status, pertinent comments, treatment, area of critical root zone³, area of encroachment, and percent encroachment (Attachment 1). The tree numbers in the inventory in Attachment 1 correspond to the tree numbers on the existing conditions plan, demolition plan, and tree protection plan in Attachments 2 and 3.

Tree Preservation and Removal

Seven (7) of the 16 non-exempt trees will be preserved and protected (trees 1 through 7). This is a preservation rate of 44 percent. Over 30 percent of the non-exempt trees are proposed for preservation consistent with Section 808.035.(d).(1).(D) of the Salem Development Code. However, two significant trees are proposed for removal and over 30 percent critical root zone encroachment of two significant trees is proposed. Findings for the required tree variance criteria are provided in the next section of this report.

Tree Variance Findings (808.045)

A tree variance is required for trees 4, 7, 10, and 17. A variance is required for trees 4 and 7 to disturb more than 30 percent of their critical root zones. A variance is required to remove trees 10 and 17 because they are significant trees.

Trees 4 and 7

The percent encroachment for significant trees 4 and 7 is greater than 30 percent and requires a tree variance. Tree 4 is a 37-inch DBH giant Sequoia (*Sequoiadendron giganteum*) and tree 7 is a 42-inch DBH giant Sequoia. Giant sequoia has a moderate tolerance to construction impacts.⁴ The proposed development encroaches 44 and 37 percent of the critical root zones of trees 4 and 7 respectively. A storm drain and infiltration rain garden to the east and south of the trees are required with development. It is my understanding that the storm drain cannot shift further south from the trees due to setback requirements from the building foundation. However, the storm drain can likely be bored and thereby would have minimal root and ground disturbance to the south of the trees. Tree preservation is preferred over tree removal because of the trees' significant status and because they are a part of a group of trees that is desired to be retained.

If boring the storm line is not possible, it *may* be possible to route the storm drain to the south and then west, around the proposed townhomes. This would require 1) a new catch basin on Overlook Avenue NW, and 2) potentially an underground pump if the system cannot be gravity fed. The storm drain is currently proposed at a 3-foot maximum depth and is gravity fed to a catch basin on Overlook Avenue NW. However, rerouting the storm drain would not be a practical alternative if boring the line underneath the tree root zones is possible since boring would have minimal tree impacts.

² Section 808.005. “*Significant tree* means: (a) A rare, threatened, or endangered tree of any size, as defined or designated under state or federal law and included in the tree and vegetation technical manual; (b) An Oregon white oak (*Quercus garryana*) with a dbh of 20 inches or greater; and (c) Any other tree with a dbh of 30 inches or greater, but excluding: (1) Tree of heaven (*Ailanthus altissima*); (2) Empress tree (*Paulownia tomentosa*); (3) Black cottonwood (*Populus trichocarpa*); and (4) Black locust (*Robinia pseudoacacia*).

³ Section 808.005. “*Critical root zone* means the circular area beneath a tree established to protect the tree's trunk, roots, branches, and soil to ensure the health and stability of the tree. The critical root zone measures one-foot in radius for every one-inch of dbh of the tree or, as an alternative for non-significant trees, may be specifically determined by an arborist.”

⁴ Matheny, N. Clark, J.R. 1998. *Trees and Development*. International Society of Arboriculture, p. 177.

Trees 10 and 17

There are two significant trees proposed for removal: tree 10, a 45-inch two stemmed giant Sequoia, and tree 17, a 64-inch DBH giant Sequoia (Figure 1). The removal of these two significant trees is necessary for development due to site limitations, required development setbacks, and required infrastructure improvements. Giant Sequoia is known to have a fibrous and sprawling root system that can displace foundations. Significant setbacks would be necessary to protect the tree root systems from construction damage, and protect the proposed buildings, hardscape, and infrastructure from root damage.

A typical minimum tree protection zone allows encroachments no closer than a radius from a tree of 0.5 feet per inch of DBH if no more than 25 percent of the root protection zone area (estimated at one foot radius per inch of DBH) is impacted. Figure 1 illustrates this concept. This minimum tree protection zone is widely accepted in the Willamette Valley to provide adequate protection for trees to be retained while allowing a degree of impacts to their root systems for construction. These encroachments may be adjusted on a case-by-case basis in the professional judgement of the arborist using factors such as tree health, species, root distribution, whether the tree will be impacted on multiple sides, the specific development proposed, and other factors.

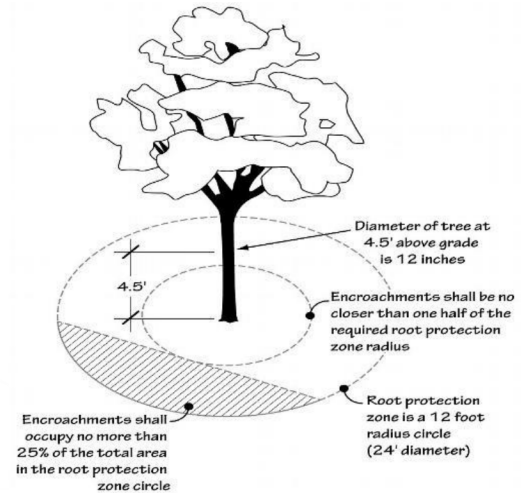


Figure 1: Typical minimum tree protection zone

There is published research which indicates an extreme minimum setback of three times (3x) the DBH⁵ may be adequate when impacts are limited to one side of a tree. However, a setback of 0.5 feet per inch of DBH is more typical⁶ and is utilized by our firm to factor in a margin of safety for maintaining the structural stability of mature trees.

ISA Best Management Practices for Managing Trees During Construction⁷ state that for most species, when roots are cut closer than one-and-a-half times (1.5x) the DBH distance from the trunk, a serious reduction in stability can occur.

Table 1 below compares the typical minimum, typical extreme minimum, and ISA stability minimum setbacks for trees 10 and 17 with the proposed encroachments. The building, utilities, and hardscape are encroaching on trees 10 and 17 within their typical extreme minimum setbacks of 3x and within their ISA stability minimum setbacks of 1.5x. The proposed townhouses are at the setback lines and cannot shift further from trees 10 and 17. Access to the site is required to be taken from Overlook Avenue where the trees are located. Therefore, retention of trees 10 and 17 is not practical.

⁵ Smiley, E.T., B.R. Fraedrich, and N. Hendrickson. 2002. *Tree Risk Management*. Charlotte, N.C: Bartlett Tree Research Laboratories.

⁶ Costello, L.R., and K.S. Jones. 2003. *Reducing Infrastructure Damage by Tree Roots: A Compendium of Strategies*. Cohasset, CA: Western Chapter of the International Society of Arboriculture.

⁷ Fite, K., Smiley, E.T. (2016). *Managing Trees During Construction, 2nd Ed.* International Society of Arboriculture: Atlanta, GA.

Table 1 Summary of encroachment setbacks for significant trees 10 and 17.

Tree No.	DBH (in)	6x (feet)	3x (feet)	1.5x (feet)	Proposed Encroachment
Tree 10	45	22.5	11.25	5.6	4 feet to sewer line from center of tree; within driveway footprint; 6.5 feet to foundation edge; 16.5 feet to sidewalk;
Tree 17	64	32	16	8	5 feet to sewer line from center of tree; 3 feet to driveway edge; 7 feet to foundation edge; 15 feet to sidewalk edge

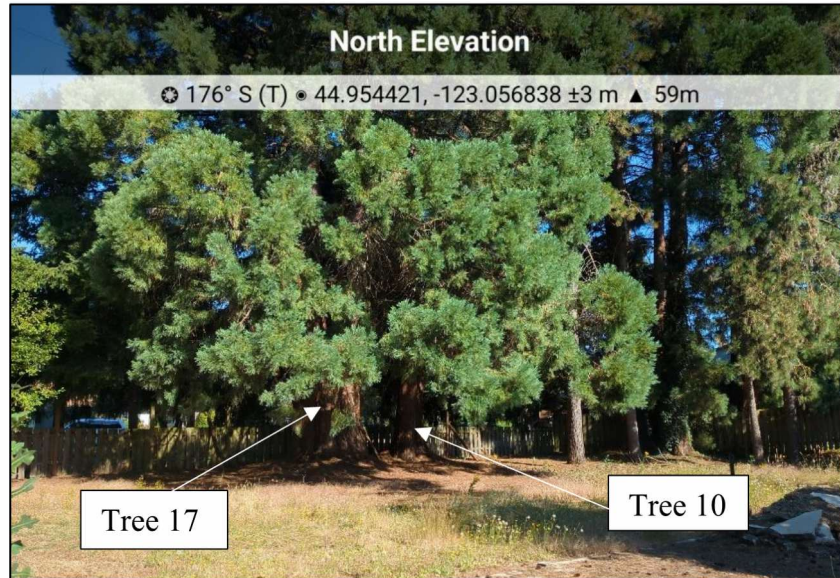


Figure 1 Trees 10 (right) and 17 (left) are significant trees proposed for removal.

The following findings are for the tree variance approval criteria in Section 808.045(d) of the Salem Development Code:

(d) *Approval criteria.* A tree variance shall be granted if either of the following criteria is met:

(1) *Hardship.*

(A) There are special conditions that apply to the property which create unreasonable hardships or practical difficulties which can be most effectively relieved by a variance;

Findings: The amount, location, and size of the significant trees on the property create an unreasonable hardship to retain all significant trees and develop the site. There are six significant trees that were considered when designing the proposed development. Four of the six significant trees are in the northwest corner of the property and can be retained (trees 1, 2, 4 and 7). Two significant trees are on the west side of the property where site access is required (trees 10 and 17). The proposed housing units are at the setback lines and cannot shift further from trees 10 and 17. The building, utilities, and hardscape are encroaching on trees 10 and 17 within their typical extreme minimum setbacks of 3x and within their ISA stability minimum setbacks of 1.5x. Site access is required is required to be taken from Overlook Avenue where the trees are located. Therefore, retention of trees 10 and 17 is not practicable.

The clustering of four of the significant trees in the northwest corner make it possible to retain these four trees in a grove, but stormwater requirements and water quality standards set by the City make it impractical to have less than 30 percent encroachment into the critical root zones for significant trees 4 and 7. As alluded to previously, it may be possible to reroute the storm drain to another area on Overlook Avenue away from trees 4 and 7 if 1) a new catch basin is installed, and 2) a pump would be permitted if the system could not be gravity-fed. However, the proposed daylight infiltration garden and storm drain is a more economical way to develop the site and meet other required City standards. Boring the storm drain in the currently proposed location will minimize root zone impacts for trees 4 and 7 while allowing the site to be developed in a more efficient way.

- (B) The proposed variance is the minimum necessary to allow the otherwise lawful proposed development or activity; or

Findings: The proposed critical root zone encroachment exceeding 30 percent for significant trees 4 and 7 and the removal of significant trees 10 and 17 is the minimum necessary to allow for otherwise lawful development of the site. Development constraints for this residential site include required setbacks, required stormwater standards, and site access. The proposed development meets these requirements while preserving four significant trees and removing two significant trees. The two significant trees to be removed are within the required site access area and directly adjacent to the footprints of buildings that cannot shift further from the trees due to required setbacks. The tree variance is the minimum necessary to retain significant trees 1, 2, 4, and 7 which are suitable for preservation with the proposed development while meeting all other development requirements.

The critical root zone encroachments for trees 10 and 17 is the minimum required to construct the required infiltration garden and storm drain. Storm drain rerouting to reduce impacts is not practicable since the storm drain can likely be bored underneath the tree root zones which would have minimal root zone impacts.

(2) *Economical use.*

- (A) Without the variance, the applicant would suffer a reduction in the fair market value of the applicant's property, or otherwise suffer an unconstitutional taking of the applicant's property;

Findings: The property is zoned residential and the permitted density and development standards contribute to the fair market value for the property. If all six significant trees were retained and protected with no or limited encroachment into their critical root zones, the property would have extremely limited developable space (as little as 52 square feet). This would reduce the fair market value of the property since a significant portion of its value is derived from the proposed townhouses which are 3,118 square feet of building area and a permissible use for the property.

- (B) The proposed variance is the minimum necessary to prevent a reduction in the fair market value of the applicant's property or otherwise avoid a taking of property; and

Findings: The proposed request to remove two significant trees and encroach on greater than 30 percent of the critical root zones of two significant trees is the minimum necessary to economically develop the property and prevent a reduction in its fair market value. This proposal allows for the adequate preservation and protection of four significant trees while removing two significant trees located at the required site access and directly adjacent to the proposed townhouses which cannot be shifted due to required setbacks. Access to the site and construction of the proposed townhouses is necessary to realize the property's fair market value.

- (C) The proposed variance is consistent with all other applicable local, state, and federal laws.

Findings: To the best of my knowledge the proposed variance is compliant with other applicable local, state, and federal laws.

Protection Measures During Construction (808.046)

The tree protection plan is in Attachment 3. The critical root zones for preserved trees are shown on the tree protection plan (Attachment 3) and subsequent encroachment calculation plans (Attachments 4 and 5). Trees 1, 2, 4 and 7 are significant trees that will be retained and protected.

Tree protection measures

The following tree protection measures are recommended:

1. Tree protection fencing.

- a. *Height:* Provide a minimum 6-foot-high metal fence (chain-link or chain-link panels).
- b. *Posts & Spacing:* Place concrete footers, steel footers, or metal t-posts no more than 10-feet apart.
- c. *Existing Grade:* Install fencing flush with the initial undisturbed grade of the protection zone.
- d. *Locations:* Install fencing as shown in Attachment 3.

2. Tree protection signage.

- a. Weatherproof tree protection signage shall be placed on tree protection fencing.
- b. Signage should be placed at intervals of every third fence panel/section.
- c. See Attachment 6 for an example tree protection sign.

3. Prevent protection zone impacts. The following activities are prohibited within a protection zone:

- a. Dumping of harmful chemicals and materials, such as paints, thinners, cleaning solutions, petroleum products, concrete or dry wall excess, construction debris, or run-off;
- b. Storage of materials such as building supplies, soil, rocks, or waste items;
- c. Placement of portable toilets, drop-boxes, or similar temporary items;
- d. Parking of vehicles or equipment; and,

- e. Excavation, trenching, grading, root pruning, or similar activities unless directed by an arborist present on site.
- 4. Tree protection fencing maintenance and removal:**
 - a. *Maintenance:* Maintain protection fencing in good effective condition at the approved and inspected location. Fencing that is damaged during site work shall be repaired and placed in the approved location prior to resuming work in the area. Failure to maintain tree protection fencing in the approved locations may result in a code violation.
 - b. *Removal:* Fencing may be removed when all building demolition activity that could cause damage or harm to trees and other vegetation has been completed and is no longer occurring on site (i.e., no use of heavy equipment; no delivery trucks and contractor vehicles driving or parking off driveway; no utility trenching; etc.).
- 5. Project arborist oversight.**
 - a. The project arborist will oversee the following work:
 - i. Excavation for the storm drain and infiltration rain garden south of trees 1 through 7.
 - b. The project arborist will document findings for the owner.
- 6. Root Pruning.** Root pruning will likely be necessary while excavating the trench for the storm drain (if boring is not possible) and for the infiltration rain garden. Excavation should be done slowly and methodically, several inches at a time to avoid root damage. Roots in conflict with proposed structures will either be cut or preserved, which may require site modifications. If roots are in direct conflict with proposed improvements, the arborist will guide the cutting of roots. A reciprocating saw with a clean, wood cutting blade should be used. The cut surface should then be covered with native soil. Cut roots will be documented for the property owner. Post-construction treatment, such as providing supplemental watering and fertilizer may be recommended.
- 7. Erosion control.** Straw wattles should be used as erosion control at the edge of the root protection zone if required by the City of Salem. Do not trench or use sediment fencing inside tree protection fencing.
- 8. Supplemental water during construction.** Preserved trees should be provided supplemental water twice a week between the months of May and September. Trees should be watered deeply, moisture reaching 18 inches below existing grade.
- 9. Report sharing.** Share this report in its entirety with the project team and construction staff.
- 10. Additional tree protection measures.** Additional tree protection measures consistent with the City of Salem tree code and industry standards are in Attachment 7.

Conclusion

The proposed townhomes at 1390 Overlook Avenue NW will require a tree variance to remove two significant trees and encroach beyond 30 percent for two additional significant trees. The locations of trees 10 and 17 are not compatible with the proposed development. While trees 4 and 7 will have greater than 30 percent critical root zone encroachment, the encroachment will be minimized and mitigated as recommended in this report. Seven (7) trees total will be retained and protected with tree protection fencing and project arborist oversight.

Please contact me if you have any questions about the information outlined in this report.

Sincerely,



Christine Johnson

*ASCA Registered Consulting Arborist® #823
ISA Certified Arborist®, PN-8730A
ISA Tree Risk Assessment Qualified
ASCA Tree and Plant Appraisal Qualified
christine@toddprager.com | 971.978.9381*

Enclosures: Attachment 1 – Tree Inventory
Attachment 2 – Existing Conditions and Demolition Plan
Attachment 3 – Tree Protection Plan
Attachment 4 – Site Constraints
Attachment 5 - Tree Protection Encroachment Calculations
Attachment 6 – Tree Protection Signage
Attachment 7 – Tree Protection Specifications
Attachment 8 – Assumptions and Limiting Conditions



Attachment 1 - Tree Inventory
1390 Overlook Drive

No.	Common Name	Species Name	DBH ¹ (in)	C-Rad ² (ft)	Health ³	Structure ³	Sig ⁴	Comments	Treatment	Area of CRZ ⁵	30%	Area of Encroachment	Percent Encroachment
1	giant Sequoia	<i>Sequoiadendron giganteum</i>	45	15	good	fair	yes	will straddle property and ROW; pruned for utilities, one-sided	retain	6359	1908	1525	24%
2	giant Sequoia	<i>Sequoiadendron giganteum</i>	37	15	good	fair	yes	will straddle property and ROW; pruned for utilities, one-sided, ivy on lower trunk	retain	4299	1290	659	15%
3	ponderosa pine	<i>Pinus ponderosa</i>	16	8	poor	fair	no	thin, narrow crown, dieback, possible canker, suppressed	retain	804	241	155	19%
4	giant Sequoia	<i>Sequoiadendron giganteum</i>	37	15	good	fair	yes	one-sided, self-corrected phototropic lean, ivy	retain	4299	1290	1912	44%
5	ponderosa pine	<i>Pinus ponderosa</i>	14	6	good	fair	no	high crown, suppressed, bowed trunk, narrow crown	retain	615	185	89	14%
6	giant Sequoia	<i>Sequoiadendron giganteum</i>	23	10	good	fair	no	narrow crown, ivy	retain	1661	498	124	7%
7	giant Sequoia	<i>Sequoiadendron giganteum</i>	42	18	good	fair	yes	one-sided, ivy	retain	5539	1662	2058	37%
8	Douglas-fir	<i>Pseudotsuga menziesii</i>	11	8	good	poor	no	topped for utility clearance at 25', self corrected phototropic lean	remove	380	114	n/a	n/a
9	Douglas-fir	<i>Pseudotsuga menziesii</i>	10	8	good	fair	no	topped for utility clearance at 25', self corrected phototropic lean	remove	314	94	n/a	n/a
10	giant Sequoia	<i>Sequoiadendron giganteum</i>	45	20	fair	fair	yes	Codominant leaders at 4':26", 37", narrow crotch, thin, 26" leader lost top at 25', self-corrected phototropic lean on 37" leader	remove	6359	1908	n/a	n/a
11	ponderosa pine	<i>Pinus ponderosa</i>	19	8	good	fair	no	one-sided, narrow crown	remove	1134	340	n/a	n/a
12	Douglas-fir	<i>Pseudotsuga menziesii</i>	9	8	fair	poor	no	topped for utility clearance at 25', self corrected phototropic lean, exempt (less than 10-inch DBH)	n/a	254	76	n/a	n/a
13	Douglas-fir	<i>Pseudotsuga menziesii</i>	10	8	fair	poor	no	topped for utility clearance at 25', self corrected phototropic lean	remove	314	94	n/a	n/a
14	Douglas-fir	<i>Pseudotsuga menziesii</i>	10	8	fair	poor	no	topped for utility clearance at 25', self corrected phototropic lean	remove	314	94	n/a	n/a
15	Douglas-fir	<i>Pseudotsuga menziesii</i>	10	8	fair	poor	no	topped for utility clearance at 25', self corrected phototropic lean	remove	314	94	n/a	n/a
16	ponderosa pine	<i>Pinus ponderosa</i>	9	6	fair	fair	no	suppressed, poor taper, location approximated on map by arborist, exempt (less than 10-inch DBH)	n/a	254	76	n/a	n/a



Attachment 1 - Tree Inventory
1390 Overlook Drive

No.	Common Name	Species Name	DBH ¹ (in)	C-Rad ² (ft)	Health ³	Structure ³	Sig ⁴	Comments	Treatment	Area of CRZ ⁵	30%	Area of Encroachment	Percent Encroachment
17	giant Sequoia	<i>Sequoiadendron giganteum</i>	64	25	good	fair	yes	codominant split at 8', south leader splits again at 30', exaggerated swell, location approximated on map by arborist	remove	12861	3858	n/a	n/a
18	dogwood	<i>Cornus florida</i>	13	8	fair	fair	no	DBH approximated, location approximated on map by arborist, heavy ivy load, suppressed	remove	531	159	n/a	n/a

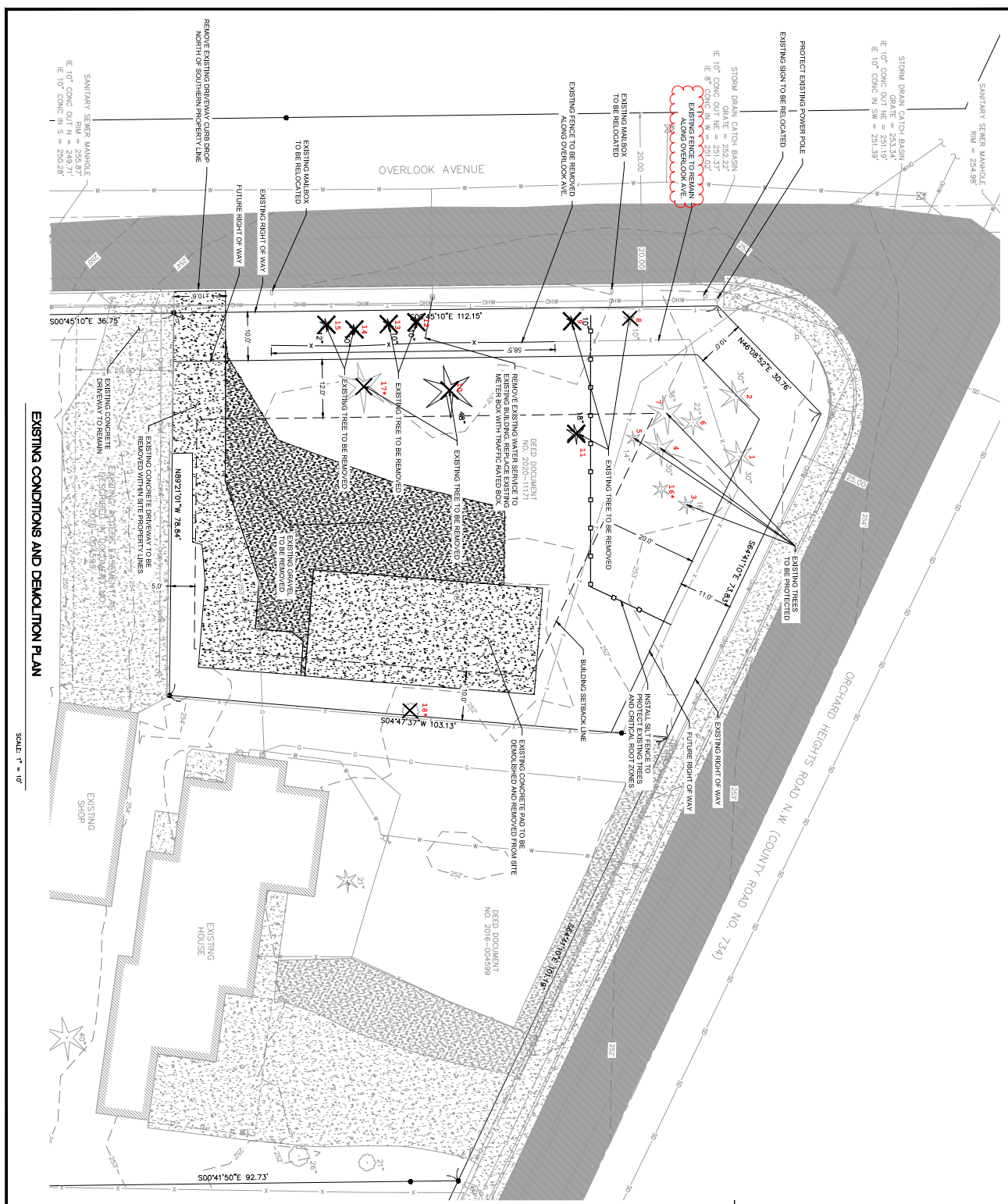
¹DBH is tree diameter measured at 4.5-feet above the ground level in inches, except as otherwise noted; multiple trunks splitting below DBH are measured separately and individual trunk measurements are separated by a comma, except multiple trunks of the same size are indicated as quantity x size.

²C-Rad is crown radius measured in feet.

³Health and Structure are rated as good, fair, poor, very poor, to dead.

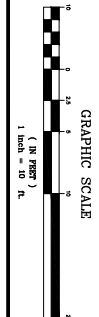
⁴Sig notes whether or not trees are "significant" per SRC Section 808.005: "Significant tree means: (a) A rare, threatened, or endangered tree of any size, as defined or designated under state or federal law and included in the tree and vegetation technical manual; (b) An Oregon white oak (*Quercus garryana*) with a dbh of 20 inches or greater; and (c) Any other tree with a dbh of 30 inches or greater, but excluding: (1) Tree of heaven (*Ailanthus altissima*); (2) Empress tree (*Paulownia tomentosa*); (3) Black cottonwood (*Populus trichocarpa*); and (4) Black locust (*Robinia pseudoacacia*).

⁵Area of CRZ is the area of the tree's critical root zone (CRZ).



EXISTING CONDITIONS AND DEMOLITION PLAN

SCALE: 1" = 10'



EXISTING CONDITIONS LEGEND:

- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING GRAVEL
- STORM DRAINAGE LINE
- SANITARY SEWER LINE
- UNDERGROUND TELECOMMUNICATION LINE
- UNDERGROUND WATER LINE
- OVERHEAD DGS LINE
- OVERHEAD UTILITY LINE
- FENCE LINE
- DECIDUOUS TREE
- CONIFEROUS TREE
- SANITARY SEWER MANHOLE
- CATCH BASIN
- GAS METER
- WATER VALVE
- WATER METER
- HOSE BIB
- WATER SPOUT
- UTILITY POLE
- GUY ANCHOR
- STREET LIGHT POLE
- COMMUNICATION VAULT
- COMMUNICATION RISER
- UNKNOWN UTILITY VAULT
- GATE POST
- MAILBOX
- SIGN
- TREE NO.
- TREE LOCATION APPROXIMATED BY ARBORIST

Date	Sheet No.
12/13/2023	C-2
2021-114	2 of 7

JASON FLORES
 P.O. BOX 20025 KIEZER, OR 97307

1390 OVERLOOK AVE PARTITION
1390 OVERLOOK AVE NW SALEM, OR
EXISTING CONDITIONS AND
DEMOLITION PLAN

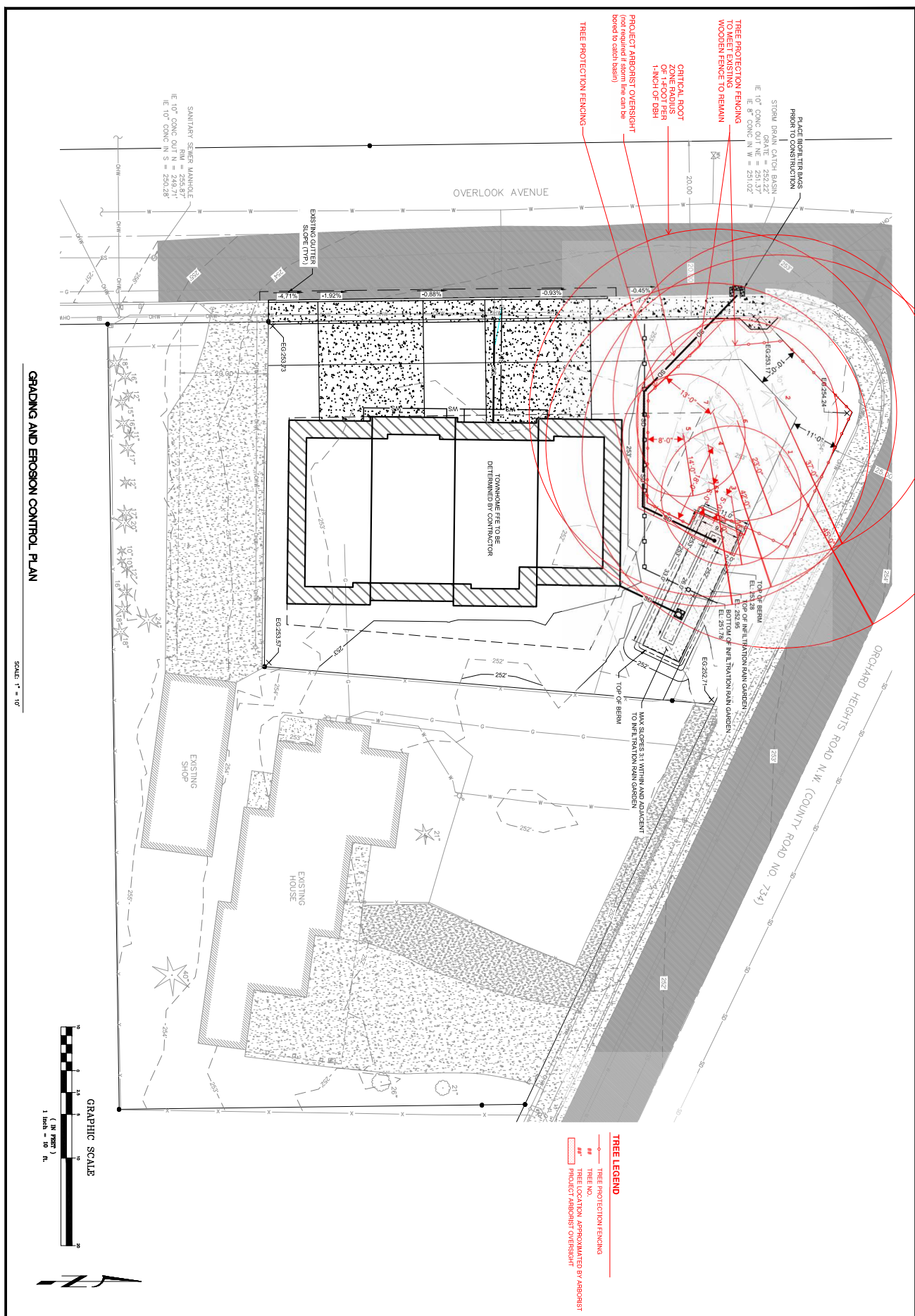
REV.	DATE	DESCRIPTION	BY

H B H 501 E First Street
 Newberg, Oregon 97132
 CONSULTING 503/554-9553 fax 503/537-9554
 ENGINEERS email: mail@hbh-consulting.com

Designed By: DRS Drawn By: DRS Checked By: ARC Submittal No: 1

FILE: 2021-114\DWG\2023\EXISTING CONDITIONS.DWG

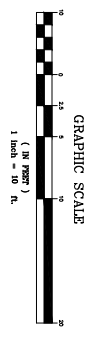




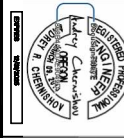
- TREE LEGEND**
- TREE PROTECTION FENCING
 - TREE NO.
 - TREE LOCATION APPROXIMATED BY ARBOREST
 - PROJECT ARBOREST OVERSIGHT

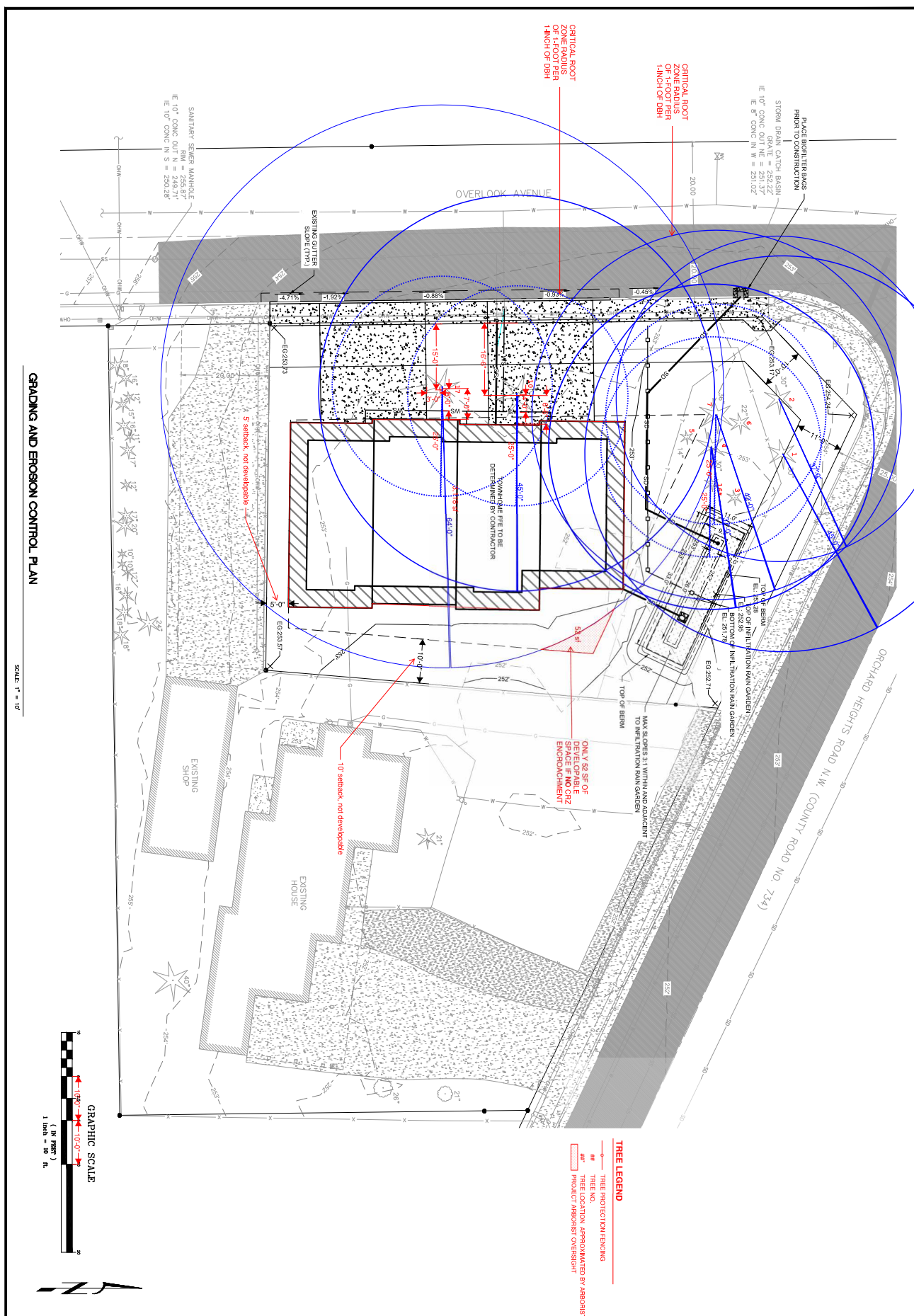
GRADING AND EROSION CONTROL PLAN

SCALE: 1" = 10'



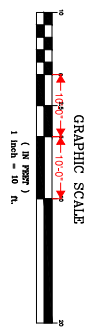
Date: 12/13/2023 Sheet No.: G-4 of 7	JASON FLORES PO BOX 20025 KIEZEL, OR 97307 1390 OVERLOOK AVE PARTITION 1390 OVERLOOK AVE NW SALEM, OR GRADING AND EROSION CONTROL PLAN	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REV.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV.	DATE	DESCRIPTION	BY									<div style="font-size: 2em; font-weight: bold; letter-spacing: 0.5em;">H B H</div> 501 E First Street Newberg, Oregon 97132 CONSULTING 503/554-9553 fax 503/537-9554 ENGINEERS email: mail@hbh-engineers.com Designed By: DRS Drawn By: DRS Checked By: ARC Submittal No.: 1 File: C:\001-0114\001\0114\001\0114-0114-0114.dwg
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GRADING AND EROSION CONTROL PLAN

SCALE: 1" = 10'



- TREE LEGEND**
- TREE PROTECTION ENKING
 - ## TREE NO.
 - ## TREE LOCATION APPROXIMATED BY ARBORIST
 - ## PROJECT ARBORIST OVERSIGHT

Date: 12/13/2023	Sheet No.: 04	JASON FLORES PO BOX 20025 KIEZEL, OR 97307	REV. DATE DESCRIPTION BY	<p>H B H 501 E First Street Newberg, Oregon 97132 CONSULTING 503/554-9553 fax 503/537-9554 ENGINEERS email: mail@hbh-consulting.com</p>	
2021-0114	7	1390 OVERLOOK AVE PARTITION 1390 OVERLOOK AVE NW SALEM, OR GRADING AND EROSION CONTROL PLAN	DESIGNED BY: DRS DRAWN BY: DRS CHECKED BY: ARC SUBMITTED NO: 1		