



# City of Sandy

## Agenda

**Planning Commission Meeting**  
**Meeting Location:** Hybrid - 39250 Pioneer Blvd. and Zoom  
**Meeting Date:** Monday, April 24, 2023  
**Meeting Time:** 6:30 PM

**1. MEETING FORMAT NOTICE**

This meeting will be conducted in a hybrid in-person / online format. The Commission or a portion of the Commission will be present in-person in the Council Chambers and members of the public are welcome to attend in-person as well. Members of the public also have the choice to view and participate in the meeting online via Zoom.

To attend the meeting in-person

Come to Sandy City Hall (lower parking lot entrance).  
39250 Pioneer Blvd., Sandy, OR 97055

To attend the meeting online via Zoom

Please use this link: <https://us02web.zoom.us/j/86010441116>  
If you would rather access the meeting via telephone, dial +1 346 248 7799. When prompted, enter the following meeting number: 860 1044 1116

**2. ROLL CALL**

**3. APPROVAL OF MINUTES**

- 3.1. **Draft Minutes for February 27, 2023** 3 - 9  
[Planning Commission - 27 Feb 2023 - Minutes - Pdf](#)

**4. REQUESTS FROM THE FLOOR - CITIZEN COMMUNICATION ON NON- AGENDA ITEMS**

The Commission welcomes your comments at this time. Please see the instructions below:

- If you are participating online, click the "raise hand" button and wait to be recognized.
- If you are participating via telephone, dial \*9 to "raise your hand" and wait to be recognized.

**5. DIRECTOR'S REPORT**

- 5.1. **Director's Report for April 24, 2023**  
[Director's Report for April 24, 2023 - Pdf](#)

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## **6. PLANNING COMMISSION DISCUSSION**

## **7. OLD BUSINESS**

- 7.1. 22-031 DR/VAR/TREE State Street Homes Mixed-Use Development 12 - 302  
[22-031 DR/VAR/TREE State Street Homes Mixed-Use Development - Pdf](#)  
[Exhibit A Land Use Applications](#)  
[Exhibit B Narrative](#)  
[Exhibit C Plan Set](#)  
[Exhibit D and E Lighting Plans and Cut-Sheets](#)  
[Exhibit F Stormwater Report](#)  
[Exhibit G Transportation Analysis Letter](#)  
[Exhibit H Arborist Report](#)  
[Exhibit I ODOT Memo](#)  
[Exhibit J Indenture of Access](#)  
[Exhibit K and L Easements](#)  
[Exhibit M Parks Comments](#)  
[Exhibit N Fire Marshal Comments](#)  
[Exhibit O ODOT comments](#)  
[Exhibit P City Transportation Engineer DKS Comments](#)  
[Exhibit Q PW Comments](#)  
[Exhibit R Third Party Arborist Review](#)  
[Exhibit S ODOT Comments State Street Homes pre-app](#)  
[Exhibit T Email from ODOT](#)  
[Exhibit U Sandy Multi-Family Site Plan Revisions \(rcvd Feb 9, 2023\)](#)  
[Exhibit V Dennis Petross Public Comments \(received February 14 2023\)](#)  
[Exhibit W Tolling the 120-day clock](#)  
[Exhibit X Letter from Studio 3 Architecture](#)  
[Exhibit Y Revised Plan Set](#)  
[Exhibit Z Dennis Petross Public Comment \(received April 12, 2023\)](#)  
[Exhibit AA ODOT Email from April 13, 2023](#)

## **8. ADJOURNMENT**





**MINUTES**  
**Planning Commission Meeting**  
**Monday, February 27, 2023 Hybrid - 39250**  
**Pioneer Blvd. and Zoom 6:30 PM**

**COMMISSIONERS PRESENT:** Jerry Crosby, Commissioner, Steven Hook, Commissioner, Jan Lee, Commissioner, Breezy Poulin, Commissioner, Darren Wegener, Commissioner, and Kristina Ramseyer, Commissioner

**COMMISSIONERS ABSENT:** Noah Mhyrum, Commissioner

**STAFF PRESENT:** Kelly O'Neill Jr., Development Services Director, Emily Meharg, Senior Planner, and Josh Soper, City Attorney

**COUNCIL LIAISON PRESENT:** Chris Mayton

**1. MEETING FORMAT NOTICE**

Instructions for electronic meeting

**2. ROLL CALL**

Chairman Crosby called the meeting to order at 6:33 p.m.

**3. INTRODUCTION TO NEW PLANNING COMMISSIONERS**

Chairman Crosby welcomed Commissioner Ramseyer to the Planning Commission. Commissioner Ramseyer thanked Chairman Crosby.

**4. APPROVAL OF MINUTES**

**4.1. Draft Minutes for January 30, 2023**

Chair Crosby asked for any edits. With no requested edits, Crosby declared the minutes approved.

**5. REQUESTS FROM THE FLOOR - CITIZEN COMMUNICATION ON NON-AGENDA ITEMS**

None

**6. DIRECTOR'S REPORT**

Development Services Director O'Neill provided an update on everything happening with the Development Services Department, including recent employee changes.

**7. COUNCIL LIAISON & PLANNING COMMISSIONER DISCUSSION**

Commissioner Wegener thanked Marisol Martinez and Emily Meharg for their service to the City of Sandy.

**8. NEW BUSINESS**

**8.1. Water System Master Plan Adoption (22-052 CPA):**

Chair Crosby opened the public hearing on File No. 22-052 CPA at 6:39 p.m. Crosby called for any abstentions, conflicts of interest, ex-parte contact, challenges to the jurisdiction of the Planning Commission, or any challenges to any individual member of the Planning Commission. No challenges were made, and no declarations were made by the Planning Commission.

**Staff Report:**

Senior Planner Meharg provided background in the form of a presentation in regard to the Water System Master Plan adoption. Assistant Public Works Director AJ Thorne provided a high-level overview of the master plan and the primary projects within the plan.

Chairman Crosby asked a question about utility extensions outside the city limits but within the Urban Growth Boundary. Thorne stated that utility extensions outside city limits will be decided by future development related to individual properties. Development Services Director O'Neill stated that individual property development utility expansion is similar to local streets in the Transportation System Plan (TSP).

Commissioner Lee stated that a number of cities are placing hydroelectricity development in their pipe work. Thorne addressed Commissioner Lee's question around hydroelectricity.

**Public Testimony:**

None

**Staff Recap:**

None

**Motion:** Motion to close the public hearing at 6:52 p.m.

Moved By: Commissioner Wegener

Seconded By: Commissioner Hook

Yes votes: All Ayes

No votes: None

Abstentions: None

**Motion:** Motion to forward a recommendation of approval to the City Council for File No. 22-052 CPA.

Moved By: Commissioner Wegener  
Seconded By: Commissioner Lee  
Yes votes: Wegener, Ramseyer, Lee, Hook, Poulin, and Crosby  
No votes: None  
Abstentions: None  
The motion passed at 6:53 p.m.

**8.2. State Street Homes Mixed-Use Development (22-031 DR/VAR/TREE):**

Chair Crosby opened the public hearing on File No. 22-031 DR/VAR/TREE at 6:55 p.m. Crosby called for any abstentions, conflicts of interest, ex-parte contact, challenges to the jurisdiction of the Planning Commission, or any challenges to any individual member of the Planning Commission. Commissioner Lee stated that she had contact with one person and Lee told her to contact staff and go to the hearing. Commissioner Wegener stated that he drove by the site numerous times. No challenges were made.

**Staff Report:**

Senior Planner Meharg provided background in the form of a presentation in regard to the State Street Homes proposal. Development Services Director O'Neill explained the options that the Planning Commission has tonight. Chairman Crosby asked if the storage units are for the tenants or are commercial spaces. Meharg stated that in accordance with the permitted uses the storage units are available to the public. Also, this application was submitted prior to self-service storage being removed as an allowed use in the C-2 zoning district.

**Applicant's Presentation:**

Mark Wilde  
Principal with State Street Homes  
30688 SE Country Living Lane  
Boring, OR 97009

Mr. Wilde stated that the mixed-use project is located on a lot that State Street Homes is looking to purchase next to Paola's Pizza Barn. He then provided an overview of the project, including an overview of the indenture of access to Highway 26. Mr. Wilde stated that the stormwater easement is not secured yet, but they are negotiating the easement. He also stated that the applicant is in agreement with staff's recommendations and conditions in the staff report.

Mercedes Butchas  
Studio 3 Architecture  
275 Court Street NE  
Salem, OR 97301

Ms. Butchas explained that the Paola's Pizza Barn site has additional space available for a landscape area along Highway 26 if the existing landscape buffer were to be removed.

**Public Testimony in favor:**

None

**Public Testimony against:**

Elizabeth Kitsoulis  
38105 Highway 26  
Sandy, OR 97055

Ms. Kitsoulis stated that her relatives constructed the house that she currently lives in. She stated that she has concerns with the overall height of the proposed structure and has concerns with additional traffic generated by the use. In addition, she had concerns about tree retention and preserving what is existing.

Dennis Petross  
17115 Bluff Road  
Sandy, OR 97055

Mr. Petross's main concern was the retaining wall that is proposed abutting his property and the inconsistencies with the plans that were submitted for review. He also stated that construction of the retaining wall is nearly impossible without access onto his property due to the proximity of the wall in relation to his property. In addition, he stated that he has concerns with stormwater drainage on to his property, especially at joints in the wall. Mr. Petross also said he is concerned about congestion related to the proposal. He asked for additional time to review.

Susan Drew  
37770 Highway 26  
Sandy, OR 97055

Ms. Drew stated that she has been living near the site for a long time and was surprised that a four-story high building was proposed on the vacant land. She also stated that she was surprised that additional traffic analysis was not performed and is worried about traffic accidents. Ms. Drew also said she is for tree preservation and worried about lighting in the parking lots.

Shawn McCamman  
37875 Meeker Street  
Sandy, OR 97055

Ms. McCamman stated that she has concerns about Sandy Fire District being able to extinguish a fire in a four-story building. She also stated she has concerns about tree retention, stormwater, driveway access to Highway 26, illegal parking in the neighborhood, and other items.

**Public Testimony neutral:**

None

**Staff Recap:**

Senior Planner Meharg stated that the proposal is in the C-2 zoning district so the height and uses meet the municipal code. She also said the number of parking spaces meets the code requirements, but the space sizes need to be modified. Ms. Meharg also elaborated on comments from ODOT, the Fire Marshal, and other code criteria including mailing notice distance. Development Services Director O'Neill elaborated on the proposal and the public testimony.

**Applicant Rebuttal:**

Mark Wilde stated that as a developer he is sympathetic to adjacent homeowner concerns and that proposed projects are only proposed after research and analysis. He stated that he had a traffic analysis completed and the analysis was provided with the application. He stated that the proposed retaining walls will be designed by a civil engineer and that if impacts are proposed to adjacent properties, then they will have to negotiate with surrounding property owners. Mr. Wilde elaborated on traffic impacts, access rights, tree impacts, fire apparatus access, and a few other items.

Mercedes Butchas stated that she did not have any additional comments to add.

Kelli Grover  
Firwood Design Group LLC  
359 E Historic Columbia River Highway  
Troutdale, OR 97060

Ms. Grover explained that the grading sheets are accurate for the wall heights, but the site plan is not accurate. The walls will most likely be ultra-block walls and be constructed from the development site without needing access onto adjacent properties. Ms. Grover explained that it would be nice to retain the trees along Highway 26 and that maybe there could be further discussion with ODOT on the access location.

**Discussion:**

Chairman Crosby explained why the public hearing will remain open. Commissioner Wegener asked the applicant if there is a plan to safely move customers from the parking lot north of Paola's Pizza Barn into the Paola's Pizza Barn building. Mark Wilde stated that there are no modifications proposed to the access of the Paola's Pizza Barn facility, but there will be a delineated walkway.

Commissioner Lee stated that she would like the Commission to have additional time to review all of the information prior to making the decision. Attorney Soper stated that the Commission can continue the hearing so long as there is adequate time with the 120-day clock. Development Services Director O'Neill stated that the earliest we could hold the continuance is April 24, 2023. Chairman Crosby asked Mark Wilde if the applicant would be willing to toll the 120-day clock. Mark Wilde stated he is not the majority principal of the company and cannot make a decision on tolling the clock without additional input from partners.

Chairman Crosby declared a 10-minute recess at 8:23 p.m.

Chairman Crosby asked Mark Wilde if he had anything to report. Mark Wilde asked when they could get a grading permit. O'Neill explained the process for obtaining permits after the land use decision has been made. Mark Wilde stated that they would agree to toll the 120-day clock. Attorney Soper stated that tolling the clock has to be done in writing.

Chairman Crosby explained the process and the options that the Planning Commission have to proceed. Chairman Crosby asked the Commissioners what items they would like to review prior to making a decision. Commissioner Wegener asked for additional analysis of the site plan including a larger setback to the south property line, additional square footage for parking spaces, updated recreation plan for the common outdoor area, additional information on retaining wall heights and how they are designed, and location of mechanical and electrical equipment. Commissioner Ramseyer would like additional information on the retaining wall design and materials, and hours of operation for the storage units. Commissioner Lee would like to see the landscaping maintained and tree retention. Commissioner Poulin would like more information on retaining wall heights, additional landscaping along the flag lot, and additional discussion with ODOT. O'Neill stated that an easement could be recorded at the location of the proposed driveway as suggested by ODOT or at an alternative location to the west.

Chairman Crosby asked a few questions about tree retention. Meharg explained why she wrote some of the findings and conditions with alternative options. Chairman Crosby asked the other commissioners if they would be open to approving retention of some trees below 11-inches DBH. Commissioner Poulin agreed that she is open to alternative tree retention sizes, but that the applicant is responsible for tree retention. Commissioner Wegener asked for the temperature on driveway location. All Commissioners agreed that they want tree retention along Highway 26 and for the driveway to be located at its existing location. Commissioner Wegener would like undergrounding of utilities to limit impacts to trees on the property to the east and would also like additional articulation on the ground floor of the building. Commissioner Wegener also asked what constitutes a primary entrance and would like to make sure the staircases to the upper levels have a pedestrian shelter. Meharg stated that the code requirement is to have a minimum of five feet over all primary entries. Commissioner Wegener would like to see updated elevations for the Commission review in April, specifically referencing Condition of Approval A. 2.

Commissioner Hook would like additional information on screening for mechanical, electrical, and communication equipment. Meharg explained the additional conditions around screening.

**Motion:** Motion to continue the public hearing to April 24, 2023.

Moved By: Commissioner Wegener  
Seconded By: Commissioner Ramseyer  
Yes votes: Wegener, Ramseyer, Lee, Hook, Poulin, and Crosby  
No votes: None  
Abstentions: None

**9. ADJOURNMENT**

Chair Crosby adjourned the meeting at 9:09 p.m.



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Chair, Jerry Crosby



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Planning Director, Kelly O'Neill Jr

Draft



## Staff Report

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**Meeting Date:** April 24, 2023  
**From** Kelly O'Neill Jr., Development Services Director  
**SUBJECT:** Director's Report for April 24, 2023

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### **BACKGROUND / CONTEXT:**

The Development Services Department remains very busy. We have lost three employees since the beginning of February 2023. On April 4, 2023, a new department member, Jann Reed, joined the team as our new permit technician. Through the budget process we will evaluate new hires, including the potential addition of a code enforcement officer and possibly a new planner sometime in 2023.

### Upcoming meetings:

- **May 22 at 6:30 PM**
- **June 26 at 6:30 PM**

### Applications of note:

- **City of Sandy Water System Master Plan adoption (2022-052 CPA):** The master plan was reviewed by the Planning Commission on February 27; PC forwarded a recommendation of approval and adoption of the master plan with a 6:0 vote at the Feb 27 PC hearing. The City Council adopted the plan on April 3rd.
- **Ron Johnston subdivision (2022-053 SUB):** Staff received additional materials at the end of March and deemed this application complete on April 4, 2023. This application to create a manufactured dwelling park subdivision per ORS 92.830-92.845 will not add any additional dwelling units and is not subject to the moratorium.
- **Barlow Trail Vet Clinic (22-041 DR/ADJ):** This application to build a new clinic on the lot between Pioneer Blvd. and Junker Street, next to the Sandy Action Center, is being reviewed by staff. Staff is currently waiting on some final submittal items from the applicant in order to complete this Type II review.
- **Cascade Creek Apartments (22-039 DR/MP/TREE):** This application for a 78 unit (formerly 80 units) mixed-use multi-family development with 10 office spaces north of Bornstedt Park was deemed incomplete back in September. Staff received additional materials in early March and deemed this application complete on March 20, 2023. A meeting is being scheduled for the Planning Commission on June 26.

### Other items of note:



- **Clear and Objective Code Audit:** City staff and the City attorney continue to work with the consultants on this code audit. We are hopeful that new code provisions will be brought forth this summer.
- **Transportation System Plan (TSP):** City staff is working closely with DKS Associates and ODOT to complete the final analysis for the TSP. We are scheduled to have a Planning Commission hearing on May 22 and a City Council hearing on June 20.
- **Comprehensive Plan update:** This project is ongoing, and a complete project update was performed at a joint Planning Commission/City Council work session on April 3, 2023.



## Staff Report

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**Meeting Date:** April 24, 2023

**From** Kelly O'Neill Jr., Development Services Director

**SUBJECT:** 22-031 DR/VAR/TREE State Street Homes Mixed-Use Development

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**DECISION TO BE MADE:**

Approve or Deny this Type III Quasi-Judicial land use decision

**BACKGROUND / CONTEXT:**

The applicant, State Street Homes, submitted an application on behalf of the owners, State Street Homes and Joycelyn Paola, to construct a four-story mixed-use building with associated parking and landscaping. The building will contain self-service storage on the ground floor and 42 multi-family residential units above. The recent adoption of Ordinance 2022-26 to restrict self-service storage does not apply to this application. The proposed development and the existing Paola's Pizza Barn will share an access from Highway 26 and the existing Paola's Pizza Barn parking lot will be reconfigured. The applicant is also requesting five (5) variances.

The Planning Commission held a hearing to review the proposal on February 27, 2023. The Commission heard a presentation from City staff, a presentation from the applicant, and received public comments from four individuals. After a brief discussion, the Commission decided to continue the public hearing to April 24, 2023. The continuance was made in order to give the applicant time to provide clarification on a number of items identified at the hearing and for staff, the Commissioners, and the public time to review the updated materials.

On February 28, 2023, the applicant submitted an email (Exhibit W) tolling the 120-day clock from February 27 to April 24, 2023. This request to toll the clock extended the 120-day clock deadline to June 23, 2023. On March 21, 2023, the applicant submitted new materials (Exhibits X and Y) for staff to review and the Planning Commission to consider. Exhibit X is a letter summarizing the changes and Exhibit Y is a revised plan set.

Prior to publication of this staff report, the City received an additional public comment from Dennis Petross (Exhibit Z) and an email from ODOT (Exhibit AA).

**KEY CONSIDERATIONS / ANALYSIS:**

See Staff Report - Modifications to the February 27, 2023, staff report have been completed in track changes for easy identification for the Planning Commission, public, and the applicant. Additions have been made in [blue underline](#) and deletions have been

made in ~~red strikethrough~~. The recommendation section and recommended conditions of approval section have been modified and track changes have been removed for ease of reading.

**RECOMMENDATION:**

Staff recommends the Planning Commission **approve** the proposed mixed-use development and parking lot reconfiguration request **with conditions as outlined in the staff report.**

Staff further recommends the Planning Commission **approve** the following variances:

- A.Type III Special Variance to Section 17.74.40(B.2) to exceed the maximum 4-foot height of a wall/fence on a commercial property in the front yard.
- B.Type III Special Variance to Section 17.74.40(B.4) to exceed the maximum 8-foot height of a wall/fence on a commercial property in the rear yard.
- C.Type III Special Variance to Section 17.74.40(B.4) to exceed the maximum 8-foot height of a wall/fence on a commercial property in the side yard.
- D.Type III Tree Removal Variance in accordance with Section 17.102.70.
- E.Type III Special Variance to Section 17.90.160 (D) regarding the requirement to have eight (8) foot building recesses and extensions every 20 feet.

**LIST OF ATTACHMENTS/EXHIBITS:**

**Staff Report**

**Applicant's Submittals:**

- A.Land Use Applications
- B.Project Narrative (dated September 16, 2022)
- C.Plan Set
  - Sheet G0.01 - Cover Sheet
  - Sheet 1 - Cover Sheet and Notes
  - Sheet 2 – Existing Conditions and Demo Plan
  - Sheet 3 – Composite Site Plan
  - Sheet 4 – Entry Utility Plan
  - Sheet 5 – Site Utility Plan
  - Sheet 6 – Stormwater Extension Plan
  - Sheet 7 –Grading and ESC Plan
  - Sheet 8 – Wall Cross Sections
  - Sheet 9 – Entry Grading Plan
  - Sheet 10 – Civic Area Grading Plan
  - Sheet 11 – ESC Notes and Details
  - Sheet 12 – Site Circulation Plan
  - Sheet L1.1 – Existing Tree Inventory
  - Sheet L2.1 – Preliminary Planting Plan
  - Sheet A1.01 – Site Plan
  - Sheet A1.02 – Enlarged Site Plan

- Sheet A1.03 – Trash Enclosure
- Sheet A1.04 – Bicycle Enclosure
- Sheet A1.05 – Gazebo
- Sheet A1.21 – Floor Plan – Level 01
- Sheet A1.22 – Floor Plan – Levels 02-04
- Sheet A1.23 – Floor Plan – Roof
- Sheet A2.01 – Elevations (north and east)
- Sheet A2.02 – Elevations (south and west)

D.Lighting Plans

- Sheet E0.00 – Site Lighting Plan
- Sheet E0.01 – Photometric Plan

E.Lighting Cut-Sheets

F.Preliminary Stormwater Report (dated September 12, 2022)

G.Transportation Analysis Letter (dated August 29, 2022)

H.Arborist Report (dated September 22, 2022)

I.ODOT Memo (dated December 5, 2022)

J.ODOT Indenture of Access (dated December 5, 2022)

K.Reciprocal Access and Maintenance Agreement (Clackamas County Doc. 2022-037782)

L.Storm Sewer Easement (Clackamas County Doc. 2022-037783)

**Agency Comments:**

M.Parks and Recreation Director (dated January 3, 2023)

N.Fire Marshal (dated January 10, 2023)

O.ODOT (dated January 13, 2023)

P.City Transportation Engineer (dated January 17, 2023)

Q.Assistant Public Works Director (received January 17, 2023)

R.Third-party Arborist Review (dated January 19, 2023)

**Additional Documents Submitted by Staff:**

S.ODOT comments from State Street Homes pre-application meeting (dated May 24, 2021)

T.ODOT email (dated December 21, 2022)

**Additional documents Submitted by the Applicant:**

U.Updated Sheets A1.01 and A1.02

**Public Comments:**

V.Dennis Petross (received February 14, 2023)

**Updated documents Submitted by the Applicant for the April 24, 2023, PC Meeting:**

W.Email from the applicant tolling the 120-day clock (dated February 28, 2023)

X.Letter from Studio 3 Architecture (dated March 21, 2023)

Y.Revised Plan Set (dated March 21, 2023)

**Public Comments:**

Z.Dennis Petross (received April 12, 2023)

**ODOT Comments:**

AA. ODOT email (received April 13, 2023)

**PLANNING COMMISSION STAFF REPORT REVISED**  
**TYPE III LAND USE PROPOSAL**

This proposal was reviewed concurrently as a Type III Design Review with ~~four (4)~~ five (5) Type III variances, and tree removal. The following exhibits and findings of fact explain the proposal and support the staff recommendation.

**DATE:** ~~February 17~~ April 18, 2023

**FILE NO.:** 22-031 DR/VAR/TREE

**PROJECT NAME:** State Street Homes Mixed Use Development

**APPLICANT:** State Street Homes

**OWNER:** State Street Homes (Tax Lot 902); Joycelyn D Paola Trustee (Tax Lot 1000)

**PHYSICAL ADDRESS:** 38015 Highway 26 and adjacent parcel to the east (no situs)

**LEGAL DESCRIPTION:** T2SR4E14AD, Tax Lots 902 and 1000

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## EXHIBITS

### **Applicant's Submittals:**

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  - Sheet A1.23 – Floor Plan – Roof
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  - Sheet A2.02 – Elevations (south and west)
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- K. Reciprocal Access and Maintenance Agreement (Clackamas County Doc. 2022-037782)
- L. Storm Sewer Easement (Clackamas County Doc. 2022-037783)

### **Agency Comments:**

- M. Parks and Recreation Director (dated January 3, 2023)
- N. Fire Marshal (dated January 10, 2023)

- O. ODOT (dated January 13, 2023)
- P. City Transportation Engineer (dated January 17, 2023)
- Q. Assistant Public Works Director (received January 17, 2023)
- R. Third-party Arborist Review (dated January 19, 2023)

**Additional Documents Submitted by Staff:**

- S. ODOT comments from State Street Homes pre-application meeting (dated May 24, 2021)
- T. ODOT email (dated December 21, 2022)

**Additional documents Submitted by the Applicant:**

- U. Updated Sheets A1.01 and A1.02

**Public Comments:**

- V. Dennis Petross (received February 14, 2023)

**Updated documents Submitted by the Applicant for the April 24, 2023, PC Meeting:**

- [W. Email from the applicant tolling the 120-day clock \(dated February 28, 2023\)](#)
- [X. Letter from Studio 3 Architecture \(dated March 21, 2023\)](#)
- [Y. Revised Plan Set \(dated March 21, 2023\)](#)

**Public Comments:**

- [Z. Dennis Petross \(received April 12, 2023\)](#)

**ODOT Comments:**

- [AA. ODOT email \(received April 13, 2023\)](#)



## FINDINGS OF FACT

### GENERAL FINDINGS

1. These findings are based on the applicant's submittal items received on August 2, 2022, with additional items received October 3, 2022, December 5, 2022, and December 22, 2022. The application was deemed complete on December 29, 2022. The 120-day deadline is April 28, 2023. [As explained in Findings 10-13, additional items were received since the public hearing on February 27, 2023.](#)
2. This report is based upon the exhibits listed in this document, including the applicant's submittals, agency comments, and public testimony.
3. This application is not subject to the moratorium on development adopted by City Council through Resolution 2022-24 because it was submitted prior to the effective date of the moratorium.
4. The proposal includes two lots (Tax Lots 902 and 1000) that total 2.46 acres. The existing Paola's Pizza Barn (Tax Lot 1000) is located at 38015 Highway 26 and the proposed mixed-use development is located on the flag lot to the east (Tax Lot 902; no situs address).
5. The parcel has a Comprehensive Plan Map designation of Commercial and a Zoning Map designation of General Commercial (C-2).
6. The applicant, State Street Homes, submitted an application on behalf of the owners, State Street Homes and Joycelyn Paola, to construct a four-story mixed-use building with associated parking and landscaping. The building will contain self-service storage on the ground floor and 42 multi-family residential units above. The recent adoption of Ordinance 2022-26 to restrict self-service storage does not apply to this application. The proposed development and the existing Paola's Pizza Barn will share an access from Highway 26 and the existing Paola's Pizza Barn parking lot will be reconfigured. [At the hearing on February 27, 2023,](#) ~~the applicant~~ [is also was](#) requesting the following four (4) variances:
  - A. Type III Special Variance to Section 17.74.40(B.2) to exceed the maximum 4-foot height of a wall/fence on a commercial property in the front yard.
  - B. Type III Special Variance to Section 17.74.40(B.4) to exceed the maximum 8-foot height of a wall/fence on a commercial property in the rear yard.
  - C. Type III Special Variance to Section 17.74.40(B.4) to exceed the maximum 8-foot height of a wall/fence on a commercial property in the side yard.
  - D. Type III Tree Removal Variance in accordance with Section 17.102.70.

[After the Planning Commission hearing and reviewing the staff report in further detail, the applicant decided to apply for a fifth Type III variance. The additional variance is a Type III Special Variance to Section 17.90.160 \(D\) regarding the requirement to have eight \(8\) foot building recesses and extensions every 20 feet. The applicant is requesting four \(4\) foot offsets as reviewed in the variance section below.](#)

7. The City of Sandy completed the following notices:
  - A. A transmittal was sent to agencies asking for comment on December 29, 2022.
  - B. Notification of the proposed application was mailed to affected property owners within 500 feet of the subject property on February 2, 2023.
  - C. A legal notice was published in the Sandy Post on February 8, 2023.
  - D. [Since the public hearing was continued to a date certain no additional notices were sent.](#)
  
8. At publication of this staff report, ~~one-two~~ written public comments ~~was~~ [have been](#) received. Dennis Petross (Exhibit V [and Exhibit Z](#)) expressed concerns related to the proposed retaining wall, stormwater management, nature path width, light pollution, and erosion control. Petross noted wall height contradictions and the lack of wall sections, details, construction methods, and maintenance access in the submitted items, and requested additional details and information on the proposed retaining wall and photometric plans prior to making final comments.
  
9. On February 9, 2023, the applicant submitted an updated Site Plan (Sheet A1.01) and Enlarged Site Plan (Sheet A1.02) (Exhibit U) in response to a request from staff for more information and clarification on a few items prior to the hearing. The updated plans detail the proposed building outside of the 15-foot sanitary sewer line easement along the south property line of the flag portion of Tax Lot 902. ~~Staff did not have time to do an in-depth evaluation of the updated plans but note the following:~~
  - ~~A. The majority of parking spaces on Tax Lot 902 are still detailed at 16 feet deep. At least 60 percent of the parking spaces on Tax Lot 902 will need to meet the standard parking space size requirement of 9 feet by 18 feet. All other parking related requirements (e.g., aisle width, landscaping buffer width, etc.) will still need to be met.~~
  - ~~B. The reconfiguration removes the proposed open lawn area in the northwest corner of Tax Lot 902. The applicant will need to confirm that the shared outdoor recreation requirement is still being met. If the Planning Commission approves the requested variance to the minimum tree retention standards, the location of any required mitigation trees on Tax Lot 902 will need to be reevaluated.~~
  - ~~C. The proposed reconfiguration of the parking area south of the Paola's Pizza Barn will need to be evaluated. The right-of-way dedication required along Highway 26 will also need to be considered. An analysis of the required and proposed parking for Tax Lot 1000 is still required.~~
  - ~~D. The applicant will need to demonstrate that all other requirements of the Development Code will be met with the new layout.~~
  
10. [The Planning Commission held a hearing to review the proposal on February 27, 2023. The Commission heard a presentation from City staff, a presentation from the applicant, and received public comments from four individuals. After a brief discussion, the Commission decided to continue the public hearing to April 24, 2023. The continuance was made in order to give the applicant time to provide clarification on a number of items identified at the](#)

hearing and to give staff, the Commissioners, and the public time to review the updated materials.

11. On February 28, 2023, the applicant submitted an email (Exhibit W) tolling the 120-day clock from February 27 to April 24, 2023. This request to toll the clock extended the 120-day clock deadline to June 23, 2023.

12. On March 21, 2023, the applicant submitted new materials (Exhibits X and Y) for staff to review and the Planning Commission to consider. Exhibit X is a letter summarizing the changes and Exhibit Y is a revised plan set. The applicant noted that the different plan sets (e.g., civil, architectural, landscape, etc.) were not fully coordinated due to the time constraint. **The applicant shall revise the entire plan set to make sure all sheets are consistent, and no site improvements or existing conditions proposed to remain are contradictory in the plan set.**

13. On April 13, 2023, ODOT submitted an email into the record (Exhibit AA) indicating they are not willing to move the driveway to the location as requested by the Planning Commission.

## **DESIGN REVIEW – Chapter 17.90**

~~10.14.~~ The proposal is subject to all the requirements for Design Review as stated in Section 17.90.00. **As required by Section 17.90.00, the reviewing body shall refer to the following objectives in evaluating Design Review requests:**

- A. Protect and enhance the city's quality of life and community image.
- B. Encourage functional, safe, and aesthetically pleasing development, while maintaining compatibility with the surrounding built and natural environment.
- C. Implement the Sandy Style, as described by this chapter. The Sandy Style is based on the following guiding principles:
  - i. Celebrate Sandy as the Gateway to Mount Hood through contextually appropriate landscaping and building designs.
  - ii. Protect and enhance Sandy's tree canopy, particularly along the Highway 26 Landscape Management Corridor.
  - iii. Emphasize a "village" scale and character in new development. Village scale means development is compact and walkable, building entrances are oriented to the street sidewalk or a plaza, and large building masses are broken down through a combination of design elements such as articulation, combinations of complementary building materials and detailing.
  - iv. Express elements of or reflect Cascadian architecture by adapting appropriate elements of English Arts and Crafts Style (1900—1920) and Oregon Rustic Style (1915—1940), and/or similar elements, into new buildings and exterior remodels, except in locations where this Code allows or requires a different architectural style (e.g., C-1 Historic Roadside Commercial District).
  - v. Encourage green building practices in new construction, such as the use of renewable energy (e.g., solar and wind), use of recycled materials, integration of water quality facilities in landscapes, capture of rainwater for irrigation, and similar practices.
- D. The city considers the following elements to be incompatible with the Sandy Style. The reviewing body may deny, or require modifications to, a project with any of the following:
  - i. Excessive tree removal and/or grading that may harm existing vegetation within a designated landscape conservation area.
  - ii. Commercial development where buildings are setback from the street behind surface parking lots.
  - iii. Excessive surface parking lot paving and redundant driveways.
  - iv. Drive-up facilities adjacent to a street that interrupt pedestrian circulation patterns or create potential safety hazards.
    - v. Disjointed parking areas, confusing or unsafe circulation patterns.
    - vi. Box-like structures with large, blank, unarticulated wall surfaces.
    - vii. Building materials or colors that do not conform to this Code.
    - viii. Highly reflective surfaces or heavily tinted glass storefronts.
    - ix. Strongly thematic architectural styles, forms, colors, materials, and/or detailing, that do not conform to the Sandy Style, including some forms of franchise architectural styles associated with some chain commercial establishments.
    - x. Inadequate landscape buffers adjacent to parking lots, walkways, and streets.

- xi. Visible outdoor storage, loading, and equipment areas.

The applicant's original submittal as reviewed at the February 27, 2023, Planning Commission hearing included Staff finds the proposal is generally in compliance with the intent of the Sandy Style, but believes the project contains a few elements that were are incompatible with Sandy Style as proposed, particularly D.i. and not adhering to C.ii. The two incompatibilities are discussed further in Section 17.90.120(F) of this document as part of the analysis of the applicant's request to remove substantial existing trees within the property's existing required landscape buffer along Highway 26. The updated proposal submitted on March 21, 2023, (Exhibit Y) addresses these concerns by keeping the driveway in its current location and retaining the existing landscape management buffer along Highway 26. Therefore, staff finds the updated proposal is in compliance with the intent of the Sandy Style. However, on April 13, 2023, ODOT submitted an email into the record (Exhibit AA) indicating they are not willing to move the driveway to the location as requested by the Planning Commission.

- ~~11.~~ **15.** Section 17.90.70 specifies that **design review approval shall be void after two (2) years from the date of the Final Order, unless the applicant has submitted plans for building permit approval.**
- ~~12.~~ **16.** Section 17.90.120 contains design standards for the General Commercial (C-2) zone. Section 17.90.120(A) contains standards related to site layout and access. Section 17.90.120(A.1) requires all lots to abut or have cross access to a dedicated public street. The multi-family development lot (Tax Lot 902) and the existing Paola's Pizza Barn lot (Tax Lot 1000) are proposed to share an access to Highway 26.
- ~~13.~~ **17.** Section 17.90.120(A.3) requires off-street parking to be located to the rear or side of buildings with no portion of the parking lot located within required setbacks or within ten feet of the public right-of-way. When access must be provided directly from a public right-of-way, driveways for ingress or egress shall be limited to one per 150 feet. For lots with frontage of less than 150 feet or less, shared access may be required. As detailed on the Site Plan (Exhibit ~~Y~~ **C**, Sheet ~~3A1.01~~ **3A1.01**), the proposed parking for the mixed-use lot is located behind the proposed building. The existing Paola's Pizza Barn includes parking to the front, side, and rear of the building. The applicant is proposing to remove the parking to the side of the building and to add additional parking to the rear of the building. The reconfigured parking area on the Paola's Pizza Barn lot is located behind the existing building; however, ~~the~~ existing parking in front of the building is proposed to remain, but the number of spaces will be reduced, and the layout will be reconfigured to come into compliance with the standards of Chapter 17.98.
- ~~14.~~ **18.** Section 17.90.120(A.5) requires urban design details, such as raised or painted pedestrian crossings and similar devices incorporating changes in paving materials, textures or color, to be used to calm traffic and protect pedestrians in parking areas. Section 17.90.120(A.7) requires walkways from the public street sidewalk to the building entrance(s) and that crosswalks through parking lots and drive aisles shall be constructed of a material contrasting with the road surface or painted (e.g., colored concrete inlay in asphalt). The proposed mixed-use development is on a flag lot and the building and parking area are set back from

Highway 26. The Site Plan (Exhibit ~~Y~~C, Sheet 3) details a pedestrian walkway along the ~~pole portion of the lot~~east side of the shared driveway that connects the sidewalk on Highway 26 to the proposed mixed-use building entrance. The Site Plan also details a 4-foot-wide colored concrete inlay pedestrian walkway that connects the pedestrian walkway across the shared driveway aisle to the Paola's Pizza Barn entrance in compliance with Sections 17.90.120(A.5 and A.7). ~~The proposal also includes a reconfiguration of the existing parking areas on the Paola's Pizza Barn site (Tax Lot 1000). Currently, there are existing parking spaces for the Paola's Pizza Barn located in the flagpole portion of Tax Lot 902 with a striped walkway connecting the spaces to the Paola's Pizza Barn building. The proposed reconfiguration will remove these spaces and the striped walkway. The parking spaces located within the flagpole will be replaced with the relocated shared access driveway and pedestrian walkway connecting the sidewalk on Highway 26 to the mixed-use building.~~ **The applicant shall update the Plan Set to detail a colored concrete inlay crosswalk connecting the pedestrian walkway located in the flagpole of Tax Lot 902 across the shared driveway aisle to the Paola's Pizza Barn entrance in compliance with the design standards of Section 17.90.120(A.5 and 7). The pedestrian crossing shall have a paved delineation in the form of a colored concrete inlay.**

- ~~15.~~19. Section 17.90.120(B) contains provisions specifying building façade articulation, pedestrian shelters, construction materials, and colors. Section 17.90.120(B.1) requires that buildings visible from an abutting public street or pedestrian walkway are to be articulated, varied, and provide visual interest. The ground floor of the proposed mixed-use building is a commercial use and subject to the requirements of Section 17.90.120(B). The narrative (Exhibit B) states that the north elevation of the proposed building is visible from Bluff Road. The Enlarged Site Plan (Exhibit ~~Y~~C, Sheet A1.02) details pedestrian walkways on all four sides of the proposed building, thus all four ground floor elevations are required to meet Section 17.90.120(B). The Elevations (Exhibit ~~Y~~C, Sheets A2.01 and A2.02) detail the change in materials with different types of proposed siding and decking on the residential floors and ground floor as well as delineation between the ground floor and upper floors, ~~but it is difficult to evaluate the depth of the articulation based on the elevations.~~ The Floor Plan – Level 01 (Exhibit ~~Y~~C, Sheet A1.21) ~~does not include any articulation on any of the ground floor facades, with the exception of the details~~ gabled entries that project outward on the north, west, and east elevations, as well as recessed pockets on the north and south elevations. As stated in the letter from the applicant dated March 21, 2023 (Exhibit X), the recessed pockets on the north and south facades are 9-inches deep and no wall plane is greater than 37 feet in compliance with Section 17.90.120(B). ~~The gabled entries occur at a spacing in conformance with the requirements of Section 17.90.120(B) on the east and west elevations, but the north elevation appears to include wall planes greater than 40 feet in length. The ground floor of the south elevation does not appear to include any articulation and neither the north nor south ground floor elevations include contrasting materials. The applicant shall update the Floor Plan—Level 01 and Elevations to detail articulated elevations on ground floor (level 01) of all four building facades meeting the wall plane requirements of Section 17.90.120(B) (i.e., distinct planes of no more than 40 linear feet with recessed or projecting sections that project or recede at least six inches from the adjacent plane, for a length of at least four feet).~~

~~16~~20. Section 17.90.120(B.2) requires that buildings incorporate pedestrian shelters over primary building entrances and pedestrian areas. The pedestrian shelters must extend at least 5 feet over the pedestrian area. Shelters designed with gables are preferred over flat shelters and must comply with the roof pitch standards in Section 17.90.120(C). Building entrances are located on the north, west, and east sides of the mixed-use building. As detailed on the Floor Plan – Level 01 (Exhibit Y~~C~~, Sheet A1.21), all entrances are proposed to have a minimum 5-foot-deep pedestrian shelter, with the primary entrance on the north elevation detailed to have a 12-foot-deep pedestrian shelter. As stated in the narrative (Exhibit B), the upper-level patios and exterior storage areas provide shelter over the walkway along the north façade.

~~17~~21. Section 17.90.120(B.3.a) requires architecturally unified buildings. Architectural unity means buildings are related in architectural style and share some common elements, such as color scheme, materials, roof forms, and/or detailing. The applicant is proposing the primary mixed-use building as well as a garbage enclosure, bicycle parking enclosure, and covered gazebo. The mixed-use building elevations (Exhibit Y~~C~~, Sheets A2.01 and A2.02) detail a cultured stone base with a mix of lap siding and cedar shake siding, and a standing seam metal roof with gabled ends featuring heavy timbers. The trash enclosure (Exhibit Y~~C~~, Sheet A1.03), bicycle enclosure (Exhibit Y~~C~~, Sheet A1.04), and gazebo (Exhibit Y~~C~~, Sheet A1.05), all detail gabled roofs with wooden beams. Both the bicycle enclosure and gazebo also have a stone base at the base of the supporting posts. Architectural unification of buildings on the site is satisfied.

~~18~~22. Section 17.90.120(B.3.b) requires strong base materials on those sides of the building visible from an abutting public street. Per the submitted building elevations (Exhibit Y~~C~~, Sheets A2.01 and A2.02), all of the main mixed-use building elevations feature a 36-inch-tall cultured stone base in compliance with this standard.

~~19~~23. Section 17.90.120(B.3.d) states that siding shall consist of wood, composite-wood (e.g., concrete fiberboard, panels or shingles), stone, brick, split-faced or rusticated concrete block, concrete form liner or a combination of these materials. The applicant is proposing to use a mix of lap siding, fiber cement shingles, and vertical board and batten siding as an accent. Section 17.90.120(B.3.d.ii) states: “Where board-and-batten siding is used, battens shall be a minimum of two-inches wide x one-inch deep and spaced 24 inches apart or closer; rough-sawn boards (specialty panel) are preferred over panels having a resin overlay.” The mixed-use building elevations (Exhibit Y~~C~~, Sheets A2.01 and A2.02) specify lap siding with alternating 4-inch and 8-inch exposure and lap siding with 8-inch exposure in compliance with the code. The elevations also specify fiber cement board and batten siding, ~~but do not specify the depth or spacing. Battens shall be a minimum of~~ two-inches wide ~~by one inch deep~~ and spaced a maximum of 24 inches apart or closer on center.

~~20~~24. Section 17.90.120(B.3.e) requires building elevations facing a public street to incorporate at least three (3) Sandy Style features. The south elevation of the proposed mixed-use building faces Highway 26, though the building will be substantially set back from the highway on the flag portion of the flag lot and won't be easily visible from the highway. The east elevation faces Bluff Road, with a parking lot owned by the Oregon Trail School District (OTSD) located between the building and the road. As detailed on the mixed-use building



north and east elevations (Exhibit [Y](#)~~C~~, Sheet A2.01) and explained in the narrative (Exhibit B), all elevations feature exposed natural wood-colored beams, brackets and trim, metal canopies and roofing, and shingles as an accent material. The trash enclosure, bicycle parking enclosure, and gazebo all feature gabled roofs with wood beams, brackets, and a standing seam metal roof. Thus, all proposed structures are detailed in compliance with Section 17.90.120(B.3.e).

~~24~~25. Section 17.90.120(B.4) requires exterior building colors to include warm earth tones that conform to the Color Palette in Chapter 17.90, Appendix C. As specified in the narrative (Exhibit B), all paint colors are earth tones from the City's approved Miller Paint Historic Collection. As detailed on the elevations (Exhibit [Y](#)~~C~~, Sheets A2.01 and A2.02), the fiber cement lap siding with alternating 4-inch and 8-inch exposure will be painted "Palomino," lap siding with 8-inch exposure "Gropius Gray," cedar shake siding "Portobello," board and batten siding "Jewett White," and trim, heavy timber canopy, bracket, cedar fascia board, and decking will all be painted "Chocolate" in conformance with the color palette.

~~22~~26. Section 17.90.120(C.1) requires gable roofs with a minimum roof pitch of 6:12 on new buildings with a span of 50 feet or less. The proposed building is approximately 190 feet by 69 feet; thus the roof span is greater than 50 feet. However, as stated in the narrative (Exhibit B) and detailed on the mixed-use building Floor Plan - Roof (Exhibit [Y](#)~~C~~, Sheet A1.23) and the trash enclosure (Exhibit [Y](#)~~C~~, Sheet A1.03), bicycle enclosure (Exhibit [Y](#)~~C~~, Sheet A1.04), and gazebo (Exhibit [Y](#)~~C~~, Sheet A1.05), the applicant is proposing a 6:12 roof pitch for all proposed structures.

~~23~~27. Section 17.90.120(C.4) requires pitched roofs visible from an abutting public street to provide a secondary roof form. The applicant did not submit a line-of-sight diagram but the narrative (Exhibit B) states that the north elevation of the building will be visible from Bluff Road. The north roof is approximately 190 feet, which requires four (4) secondary roof forms. As detailed on the north elevation (Exhibit [Y](#)~~C~~, Sheet A2.01), the applicant is proposing four (4) dormers along the north roof in compliance with the code.

~~24~~28. Section 17.90.120(C.5) requires visible roof materials to be wood shingle or architectural grade composition shingle, slate, or concrete tile. Metal with standing or batten seam may also be used conforming to the Color Palette in Appendix D of the Development Code. The applicant is proposing to use standing seam metal in "Dark Brown," which is an approved roof color in Appendix D.

~~25~~29. Section 17.90.120(C.6) requires all roof and wall-mounted mechanical, electrical, communications, and service equipment, including satellite dishes and vent pipes, to be screened from view from all adjacent public rights-of-way and civic spaces by parapets, walls, or by other approved means. Per the narrative (Exhibit B), all rooftop penetrations (i.e., vent pipes) and wall penetrations (i.e., venting for exhaust fans) will have covers and/or be hooded and be a similar color to the adjacent building material so as to blend in with the building; there will be no other rooftop/wall-mounted mechanical, electrical, or communication systems.



~~26.~~30. Section 17.90.120(D) contains standards related to building orientation and entrances.

The intent of providing adequate building orientation and entrances is to maintain and enhance streetscapes as public spaces, emphasizing pedestrian-scale and character. Section 17.90.120(D.1) requires buildings to be oriented to a public street or civic space. This standard is met when at least 50 percent of the subject site's street frontage is comprised of building(s) placed within 20 feet of a sidewalk, walkway, or civic space and not more than 20 percent of the off-street parking is located between a building's front façade and the adjacent street(s). The proposed mixed-use building is located on a flag lot and thus is set back greater than 20 feet from the street frontage; however, there is a proposed walkway within 20 feet of all four sides of the building as well as a proposed civic space within 20 feet of the west side of the building. In addition, the proposed building is set back 10 feet from the south property line on the flag portion of the lot and comprises approximately 71 percent of the flag's south property line. The proposal includes a direct pedestrian walkway connecting the primary building entrances to the sidewalk on Highway 26. No parking is proposed to be located between the building's front façade and the highway.

~~27.~~31. Section 17.90.120(D.3) states that ground floor spaces shall face a public street or civic space and shall be connected to it by a direct pedestrian route (i.e., avoid out-of-direction travel). The proposed mixed-use building is located on a flag lot and is set back substantially from Highway 26. The south elevation technically faces Highway 26 but is separated from the highway by the parcel to the south (Tax Lot 900). The pedestrian and vehicular access to the building is along the flagpole portion of the lot and the pedestrian walkway directly connects the building's three pedestrian entrances (on the north, east, and west facades) to the Highway 26 sidewalk.

~~28.~~32. Section 17.90.120(D.5) requires structures greater than 40,000 gross square feet to have at least two clearly articulated public entrances on the structure; at least one such entrance shall be visible from a public street and connected to that street by a pedestrian sidewalk or walkway. The proposed building is ~~48,804~~46,500 square feet and is therefore required to comply with Section 17.90.120(D.5). The building is located on the flag portion of a flag lot and thus is set back substantially from Highway 26. The applicant is proposing public entrances on the north, east, and west facades, all of which have a pedestrian walkway that connects the entrance to the Highway 26 sidewalk. The entrances on the north and west facades will be visible from the shared driveway access and pedestrian walkway where residents/customers will enter the site.

~~29.~~33. Section 17.90.120(D.7) requires buildings to provide at least one (1) elevation where the pedestrian environment is "activated." An elevation is "activated" when it meets the window transparency requirements in Subsection 17.90.120(E) and contains a public entrance with a pedestrian shelter extending at least five (5) feet over an adjacent sidewalk, walkway, or civic space. As stated in the narrative (Exhibit B), the applicant has identified the north building elevation as the "activated" elevation. The north elevation contains a primary building entrance with a pedestrian shelter extending greater than five feet over the walkway in front of the entrance. The window transparency requirements are discussed in Section 17.90.120(E) below.

~~30.~~34. Section 17.90.120(D.8) states that primary entrances shall be architecturally emphasized, visible from the public right-of-way, and where practical sheltered with a gabled canopy, overhang, or portico with a depth of at least five (5) feet. Detailing around the base of the building, such as stonework, benches, or art, should also be used to emphasize an entrance. As previously stated, the proposed mixed-use building is located on the flag portion of the flag lot and is not highly visible from either Highway 26 or Bluff Road. The proposed building has primary entrances on the north, west, and east elevations, all of which have a pedestrian shelter with a depth of at least 5 feet. As stated in the narrative (Exhibit B), all primary entrances are articulated by a separate roof structure from the building that provides at least 5 feet of shelter.

~~31.~~35. Section 17.90.120(E.2) contains standards for construction and placement of ground floor windows. A building greater than 30,000 square feet is required to provide 20 percent ground floor windows on the activated frontage. As noted in the narrative (Exhibit B), the applicant has designated the north elevation as the activated frontage. Per the narrative (Exhibit B), the ground floor wall area of the north elevation is 1,693 square feet, which requires 339 square feet of glazing. The [North Elevation \(Exhibit Y, Sheet A2.01\)](#) narrative states that the glazed opening area, which includes ~~17~~ details 19 windows and three doors (two single doors and one double door) with windows above, ~~is 349 square feet; however, the North Elevation (Exhibit C, Sheet A2.01) notes that the~~ and calculates ground floor glazing ~~at is 339.5363.11~~ square feet in compliance with Section 17.90.120(E.2). Per the narrative, all ground floor glazing is made of clear glass, vertically oriented, and provided with trim surrounds with a depth of 3.5 inches. ~~Based on measurements taken from the north elevation (Exhibit C, Sheet A2.01), it appears the wall area calculated in the narrative was not based on a 12-foot ground floor. Chapter 17.10 of the Development Code defines ground floor elevation as: "The elevation of a building that is at or nearest the ground level measured from the ground to a point 12 feet above the ground. (This definition is used to measure the ground floor area subject to window requirements in Chapter 17.90)." In addition, it appears that the glazing calculations include the window trim. The applicant shall update the elevations and floor plan to detail two (2) additional windows (detailed at 3-feet by 5-feet-6-inches per elevation note #16) on the ground floor of the north elevation. Staff recommends the two (2) additional windows be added to the north wall of the mini-storage office to the west of the main lobby entrance.~~

~~32.~~36. Section 17.90.120(E.3) contains standards for upper floor windows. Per the narrative (Exhibit B), all upper floor windows are vertical in nature and are less than 5-feet by 7-feet. All windows will have internal grids and a 3.5-inch trim. As noted on the north elevation (Exhibit ~~Y~~C, Sheet A2.01), the internal grids on all of the upper story windows will not exceed 1-foot in either direction. The upper floor windows are in compliance with Section 17.90.120(E.3).

~~33.~~37. Section 17.90.120(F) contains additional landscaping and streetscape design standards, including standards for parcels along Highway 26. Section 17.90.120(F.2) states that parcels abutting Highway 26 shall provide a landscape buffer comprising not less than 30 percent of the highway frontage, to a depth of not less than 20 feet. One of the many requirements within the buffer is that existing trees shall be preserved to the greatest extent practicable. The required landscape buffer is further detailed in the Chapter 17.10 definitions, which

defines the landscape management corridor as: “The required yards abutting Highway 26 within the C-2, I-I and I-2 zoning districts where the Development Code requires native conifer and deciduous landscaping, creating the appearance of a forested corridor; openings or breaks in the landscape corridor are minimized, allowing for transportation access and framed views into development sites.” The subject properties (Tax Lots 902 and 1000) both have frontage on Highway 26. Both lots currently share an access located at Station (STA) 759+40 and are proposed to continue to share an [access](#). ~~relocated access located at STA 759+85.~~ The combined frontage on Highway 26 is approximately 171 feet, requiring a 51-foot landscape buffer. The lots currently have a 65-foot-wide landscape buffer with existing trees and vegetation located along the entire south property line of the flagpole adjacent to Highway 26 and the eastern portion of the south property line of Tax Lot 1000 in compliance with Section 17.92.120(F). ~~However, The original plans reviewed at the February 27, 2023, Planning Commission hearing included the applicant is proposing a proposal~~ to remove the existing landscape buffer to accommodate relocation of the shared access driveway. Relocation of the driveway results in removal of approximately nine (9) trees and one (1) shrub within the 20-foot buffer plus an additional three (3) trees and four (4) shrubs further north outside of the designated buffer area. Per Section 17.90.00(C.2) protecting and enhancing Sandy's tree canopy, particularly along the Highway 26 Landscape Management Corridor, is one of the guiding principles of the Sandy Style that the reviewing body is required to refer to in reviewing all Design Review requests. In addition, “excessive tree removal and/or grading that may harm existing vegetation within a designated landscape conservation area” is one of the elements determined to be incompatible with the Sandy Style per Section 17.90.00(D.1) and the reviewing body may deny, or require modifications to, a project that includes excessive tree removal within a designated landscape area. Thus, removal of the existing landscape buffer along Highway 26 is not compatible with Sandy Style and may constitute a reason for denial of a Design Review application. [Based on preliminary feedback from the Planning Commission, the applicant updated the proposal to keep the shared driveway at the existing location and to retain the existing landscape buffer along Highway 26 in compliance with the requirements of Section 17.90.120\(F\) as well as the guiding principles of the Sandy Style. On April 13, 2023, ODOT submitted an email into the record \(Exhibit AA\) indicating they are not willing to move the driveway to the location as requested by the Planning Commission. Since ODOT is unwilling to move the driveway location the applicant will need to modify the driveway approach once again on the plan set. However, the majority of the driveway alignment may remain as proposed in Exhibit Y.](#) There is an additional landscaped area along the west side of the south frontage of Tax Lot 1000, but the applicant did not submit a tree inventory or any other details on the existing plants. Based on Google Earth imagery, it appears that the western landscaped area is sparsely planted and does not meet the requirements of Section 17.90.120(F). **The applicant shall update the Plan Set to detail a minimum 20-foot-deep landscape buffer that comprises at least 30 percent (51 feet minimum) of the combined Highway 26 frontage of the subject properties in compliance with Section 17.90.120(F). Staff recommends the Planning Commission require the applicant to either:** [The applicant shall revise the plan set to align the access at STA 759+85. The applicant shall update the Preliminary Planting Plan to detail all proposed plants in the landscape buffer along Highway 26 selected from the list in Section 17.90.120\(F.3\). However, due to concerns with Asian Long-horned Beetle, the maple species are not currently permitted; cascara, pacific dogwood, or an alternative native deciduous tree species reviewed and approved by](#)

staff shall be selected instead. If the Planning Commission approves the applicant's request for a variance to the minimum tree retention standards, staff recommends all new landscaping on the subject properties be native species or water-efficient species acclimated to the Willamette Valley, consistent with the conservation benchmarks in the City of Sandy 2016 Water Management and Conservation Plan.

~~A. Retain the existing 65-foot landscape buffer as is, including retaining all of the existing trees and shrubs for a minimum depth of 20 feet. This option would require keeping the current shared access driveway location at STA 759+40, or as otherwise approved by ODOT, terminating the shared access easement at STA 759+85, recording an updated shared access easement reflecting that location, and updating the driveway and sidewalk design in compliance with ODOT and ADA standards.~~

~~B. Update the Plan Set to detail an alternative landscape buffer that meets the requirements of Section 17.90.120(F). If the applicant chooses to propose an alternative landscape buffer location, the applicant shall update the Preliminary Planting Plan to detail retention of all existing trees within the buffer area as well as planting a mix of both deciduous and evergreen trees (nine (9) trees minimum), shrubs, and groundcover at a quantity sufficient to provide a partial buffer within two (2) years from the date they are planted. The proposed plants shall be selected from the list in Section 17.90.120(F.3). However, due to concerns with Asian Long-horned Beetle, the maple species are not currently permitted; cascara, pacific dogwood, or an alternative native deciduous tree species reviewed and approved by staff shall be selected instead. If the Planning Commission approves the applicant's request for a variance to the minimum tree retention standards, staff recommends all new landscaping on the subject properties be native species or water-efficient species acclimated to the Willamette Valley, consistent with the conservation benchmarks in the City of Sandy 2016 Water Management and Conservation Plan.~~

~~34.~~38. Section 17.90.120(G) contains requirements related to civic space. The intent of civic space is to connect buildings to the public realm and create comfortable and attractive gathering places and outdoor seating areas for customers and the public. As ~~stated in~~ detailed on the narrative Enlarged Site Plan (Exhibit Y, Sheet A1.02B), the applicant proposes a 1,534 ~~1,590~~-square foot outdoor public plaza located on the west side of the building, which is in compliance with the code requirement. The narrative ~~further~~ (Exhibit B) states that due to the property being on a flag lot, having a civic space directly abut a public right-of-way is not possible; however, the location was chosen for its pedestrian connectivity to Highway 26 via the new pedestrian walkway that connects the proposed mixed-use building and civic space to the highway. The civic space is proposed to contain various raised planters and public benches.

~~35.~~39. Section 17.90.120(H) contains standards related to lighting and states that walkways and parking lots should be illuminated at 1.5 to 2.0 foot-candles. The proposal includes parking on Tax Lot 1000 and parking and pedestrian walkways on Tax Lot 902. The Photometric Plan (Exhibit D, Sheet E0.01) details lighting in both parking areas and along the pedestrian

pathways north, west, and east of the building as well as the pedestrian walkway through the flagpole portion of Tax Lot 902 that connects to Highway 26; however, not all areas are detailed at 1.5 – 2.0 foot-candles. In addition, the Photometric Plan does not show any lighting along the pedestrian walkway south of the proposed mixed-use building. **The applicant shall update the Photometric Plan to detail all walkways and parking lots illuminated at 1.5 – 2.0 foot-candles. The applicant shall update the Photometric Plan to detail path lighting along the proposed pedestrian walkway on the south side of the mixed-use building at 1.5 – 2.0 foot-candles. To prevent impact within the critical root zones of existing trees on the adjacent property to the south (Tax Lot 900), staff recommends solar path lighting; however, if electrical conduit is installed, the applicant shall bore the conduit at a minimum depth of 18-inches under the critical root zone of the existing trees under supervision of an ISA-certified arborist.** Lighting is further reviewed in Chapter 15.30 of this document.

~~36.~~40. Section 17.90.120(I) contains standards related to safety and security and requires window placement that enables visibility between the building interior and exterior pedestrian and parking areas. As detailed on the mixed-use building elevations (Exhibit ~~Y~~E, Sheets A2.01 and A2.02), all four sides of the building contain windows, which provides visibility between the interior of the building and the parking areas and pedestrian walkway areas.

~~37.~~41. Section 17.90.120(I.3) contains standards related to addressing and requires street address numbers measuring a minimum of six (6) inches high, which clearly locate buildings and their entries for patrons and emergency services. **The applicant shall provide street address numbers measuring a minimum of six (6) inches high, which clearly locate the mixed-use building and its entries for patrons and emergency services. The applicant shall verify the location(s) of the address with the Building Official and emergency service providers. Per the Fire Marshal (Exhibit N), the address identification shall be legible and placed in a position that is visible from the street or road fronting the property, including on a monument sign.**

~~38.~~42. The intent of Section 17.90.120(J) is to promote land use compatibility and aesthetics, particularly where development abuts public spaces. Section 17.90.120(J.1) states that exterior storage of merchandise and/or materials, except as specifically authorized as a permitted accessory use, is prohibited. The applicant is not proposing outdoor storage or display areas. The applicant is proposing a garbage and recycling area, which will be screened.

43. Section 17.90.120(J.3) states that mechanical, electrical, communications equipment including meters and transformers, and service and delivery entrances and garbage storage areas shall be screened from view from public rights-of-way and civic spaces. Garbage storage areas are addressed in staff's response to Section 17.90.120(J.4), below. ~~The submitted narrative (Exhibit B) does not address Section 17.90.120(J.3) and the submitted elevations (Exhibit C, Sheets A2.01 and A2.02) do not detail mechanical, electrical, or communications equipment.~~ The proposed building is set back on the flag lot and not likely to be highly visible from a public right-of-way; however, the west elevation will be highly visible from the civic space area. **All mechanical, electrical, and communications**

~~equipment shall be screened from view from all public rights-of-way and civic spaces.~~ In addition to the civic space, the proposed layout includes primary building entrances with pedestrian walkways on the north and east elevations, with parking along the north elevation and additional pedestrian amenities (bicycle parking, gazebo, fire pit, dog area) along the east elevation. Thus, the north and east elevations will be highly visible from the interior of the site. ~~Staff recommends the Planning Commission require mechanical, electrical, and communications equipment to be screened from view from pedestrian amenity areas and parking areas in addition to being screened from public rights-of-way and civic spaces.~~ The Enlarged Site Plan (Exhibit Y, Sheet A1.02) and east and south elevations (Exhibit Y, Sheets A2.01 and A2.02) detail mechanical and electrical equipment located along the south elevation at the southwest corner of the proposed building. The Preliminary Planting Plan (Exhibit Y, Sheet L2.1) details proposed screening of the mechanical and electrical equipment consisting of Silver King Euonymus as well as Kaleidoscope Abelia and Yedda Hawthorn. All mechanical, electrical, and communications equipment shall be screened from view from all public rights-of-way and civic spaces. On-grade and above-grade electrical and mechanical equipment such as transformers, heat pumps, and central air conditioner units shall be screened with sight obscuring fences, walls, or landscaping.

- ~~39.~~44. Section 17.90.120(J.4) contains standards for trash collection and recycling areas. The applicant proposes a screened garbage and recycling area to the east of the proposed mixed-use building. The submitted Trash Enclosure Elevations (Exhibit ~~Y~~C, Sheet A1.03) detail a covered structure with a gabled roof and a 6-foot-tall wall on all four sides designed to match the primary building in compliance with the code. The wall is proposed to be alternating 1-inch by 6-inch and 1-inch by 8-inch horizontal boards with a 1/2-inch gap between each and painted “Gropius Gray” to match the main building with 6-inch by 6-inch pressure treated wood posts. The front (west) and side (south) walls contain gates for access.
- ~~40.~~45. Section 17.90.160 includes additional design standards for multi-family developments. The proposal includes a mixed-use building with self-service storage on the ground floor and residential units above and thus is subject to the additional multi-family design standards.
- ~~41.~~46. Section 17.90.160(A) contains requirements for roofs. However, this building is located in the General Commercial (C-2) zoning district, and this code provision is superseded by the 6:12 roof slope provision. The proposed mixed-use building features a 6:12 roof pitch in compliance with Section 17.90.120(C).
- ~~42.~~47. Section 17.90.160(B) contains requirements for entries. As discussed in Section 17.90.120(B), all entrances are proposed to have a minimum 5-foot-deep pedestrian shelter, with the primary entrance on the north elevation detailed to have a 12-foot-deep pedestrian shelter. All entries face a pedestrian walkway with a direct connection to the sidewalk on Highway 26. Therefore, staff finds that the proposed entries are in compliance with Section 17.90.160(B).
- ~~43.~~48. Section 17.90.160(C) states that building facades shall be articulated with windows, entries, balconies and/or bays. Towers or other special vertical elements may be used in a limited fashion to focus views to the area from surrounding streets. As detailed on the



Elevations (Exhibit [Yc](#), Sheets A2.01 and A2.02), all facades of the mixed-use building feature windows and three of the facades (north, west, and east) contain an entry with a projecting gable end in compliance with this section. In addition, the north and south facades include balconies.

~~44.49.~~ Section 17.90.160(D) states that along the vertical face of a structure, when facing a public street, pedestrian way, or an abutting residential use, offsets shall occur at a minimum of every 20 feet by providing recesses of a minimum depth of eight feet or extensions with a minimum depth of eight feet. If a partially enclosed covered porch is proposed, this can meet one of the offset requirements provided the porch is eight feet deep and at least 125 square feet in area. All four sides of the proposed mixed-use building face a pedestrian walkway. Based on the Floor Plan – Levels 02-04 (Exhibit [Yc](#), Sheets A1.22-24), it appears that the applicant is proposing alternating storage areas and outdoor patios on the north and south elevations; however, they are only extended or recessed 4 feet. In addition, some of the offsets occur greater than 20 feet apart. No offsets are detailed on the east and west elevations. **The applicant shall update the Floor Plan – Levels 02-04 to detail offsets at a minimum of every 20 feet by providing recesses or extensions with a minimum depth of eight feet on all four elevations of the proposed mixed-use building. If this cannot be accomplished, the applicant will need to apply for an adjustment or** [The applicant is requesting a Special V variance to Section 17.90.160\(D\) to not provide eight-foot-deep offsets at a minimum of every 20 feet. The variance request is discussed in Chapter 17.66 of this document.](#)

~~45.50.~~ Section 17.90.160(E) contains requirements for private outdoor areas. A separate outdoor area of not less than 48 square feet in the form of balconies, terraces, or porches shall be provided for each dwelling unit located above the ground level. As detailed on the Floor Plan – Levels 02-04 (Exhibit [Yc](#), Sheets A1.22-24), 18 of the 1-bedroom units include a 54 square foot outdoor patio, ~~and 12 nine~~ [of the 1-bedroom units include a 49 47 square foot patio, three of the 1-bedroom units include a 69 square foot patio, and two of the 1-bedroom units include a 51 square foot patio, both all](#) in compliance with the code. All 2-bedroom units include a 51 square foot patio in compliance with the code.

~~46.51.~~ Section 17.90.160(F) contains parking lot requirements. Parking lots in multi-family developments shall not occupy more than 50 percent of the frontage of any public street abutting the lot or building. The proposed parking and maneuvering area for the mixed-use development is located behind (north of) the proposed building on the flag portion of the flag lot in compliance with this section.

~~47.52.~~ Section 17.90.160(G) contains requirements for individual storage areas. Enclosed storage areas shall be required and may be attached to the exterior of each dwelling unit to accommodate garden equipment, patio furniture, barbecues, bicycles, etc. Individual storage areas are required to be a minimum of 24 square feet and a minimum of 6 feet in height for 1-bedroom units, and a minimum of 36 square feet and 6 feet in height for 2-bedroom units. As detailed on the Floor Plan – Levels 02-04 (Exhibit [Yc](#), Sheets A1.22-24), each 1-bedroom unit includes [either a 26 27 or 28 square foot individual storage area, with the exception of two of the 1-bedroom units on the fourth floor that contain a 21 square foot and an 18 square foot storage area for a total of 39 square feet of storage; thus, all 1-bedroom units are in](#)

[compliance with the minimum storage requirement.](#) ~~and e~~ Each 2-bedroom unit includes a ~~20~~ [21](#) square foot and an 18-square foot storage area for a total of ~~38~~ [39](#) square feet of storage area in compliance with the code.

~~48.~~[53.](#) Section 17.90.160(I) contains requirements for shared outdoor recreation areas. Multi-family residential development shall provide usable recreation areas for developments containing more than 5 dwelling units at the rate of 200 square feet per dwelling unit. The proposed 42-unit multi-family project requires 8,400 square feet of shared outdoor recreation area (42 x 200 = 8,400). The Enlarged Site Plan (Exhibit [Y](#)~~C~~, Sheet A1.02) details ~~9,081~~[8,994](#) square feet of shared outdoor area as follows: ~~786~~[980](#) square foot off-leash dog area, 320 square foot covered gazebo (counted at 1.25 of the 256 square foot size), ~~285~~ [263](#) square foot fire pit with outdoor seating, ~~1,785 square foot northern outdoor lawn area,~~ ~~958~~[1,198](#) square foot eastern outdoor lawn area, ~~2,860~~[4,146](#) square foot landscaped nature path connecting the eastern open lawn area to the pedestrian walkway in the flag pole, and 2,087 square foot landscaped nature area located to the east of the pedestrian walkway in the flag pole.

~~49.~~[54.](#) Section 17.90.160(J) contains requirements for safety and security, which include providing an outdoor lighting system which facilitates police observation and resident observation through strategic location, orientation, and brightness without being obtrusive by shining into residential units or adjacent residential developments, and establishing a directory for apartment complexes of four or more units, which clearly orients visitors and emergency service providers as to the location of residential units. Where possible, this system should be evident from the primary vehicle entryway. The applicant submitted a Site Lighting Plan (Exhibit D, Sheet E0.00) that details proposed lighting. Lighting is discussed in further detail in Section 17.90.120(H) and Chapter 15.30 of this document. Neither the Site Plans (Exhibit [Y](#)~~C~~, Sheets 3, A1.01, and A1.020) nor the Floor Plans (Exhibit [Y](#)~~C~~, Sheets A1.21 and A1.22) detail the location of an apartment directory. The ground floor plan (floor plan – level 01) details a lobby at the main entrance, which is assumed to serve both the residential units and the mini-storage facility. **The applicant shall update the Floor Plan – Level 01 to detail an apartment directory in the lobby.**

~~50.~~[55.](#) Section 17.90.160(K) contains requirements for service, delivery, and screening. Per Section 17.90.160(K.2), pedestrian access from unit entries to postal delivery areas, garbage and recycling collection areas, shared activity areas, and parking areas is required to be provided. Elements such as, but not limited to, concrete paths, striped walkways or raised walkways through vehicular areas or gravel trails will meet this requirement. Per Section 17.90.160(K.4), garbage collection areas shall have a concrete floor surface and shall have a gate on the truck-loading side and a separate pedestrian access. Per Section 17.90.160(K.5), outdoor storage areas, garbage containers and recycling bins shall be screened from view with a solid sight obscuring wall or fence not less than six feet in height and constructed of durable materials compatible with the primary structure(s) or with evergreen plant materials which will retain their screening ability and will reach the height of six feet within three years from time of planting. As detailed on the Enlarged Site Plan (Exhibit [Y](#)~~C~~, Sheet A1.02), the garbage enclosure is located along the east property line with a pedestrian walkway directly connecting the garbage enclosure to the building's entrances. The Trash Enclosure (Exhibit [Y](#)~~C~~, Sheet A1.03) details the garbage area having a concrete floor and



screened by a 6-foot-tall wall with both a gate on the truck-loading side (west) and a separate pedestrian gate on the south side. ~~In the narrative response to Section 17.84.100, the applicant states that the mail delivery area is located in front of the development. However, †The Enlarged Site Plans (Exhibit YC, Sheets 3, A1.01, and A1.02) do not clearly identify the location of the mail delivery area.~~ details mail boxes located just east of the primary entryway on the north elevation. **The applicant shall update the Plan Set to detail the location of the mail delivery area in a convenient location efficiently designed for residents and mail delivery personnel and in accordance with U.S. Postal Service requirements.**

~~54.56.~~ Section 17.90.160(L) contains requirements for electrical and mechanical equipment. On-grade and above-grade electrical and mechanical equipment such as transformers, heat pumps, and central air conditioner units shall be screened with sight obscuring fences, walls, or landscaping. ~~The submitted narrative (Exhibit B) does not address Section 17.90.160(L) and the submitted~~ The Enlarged Site Plan (Exhibit Y, Sheet A1.02) and the east and south elevations (Exhibit YC, Sheets A2.01 and A2.02) do not detail electrical and mechanical equipment located along the south elevation at the southwest corner of the proposed building. The Preliminary Planting Plan (Exhibit Y, Sheet L2.1) details the proposed mechanical and electrical equipment screening, which consists of Silver King Euonymus as well as Kaleidoscope Abelia and Yedda Hawthorn. **On-grade and above-grade electrical and mechanical equipment such as transformers, heat pumps, and central air conditioner units shall be screened with sight obscuring fences, walls, or landscaping.**

## **FENCES/RETAINING WALLS – Chapter 17.74**

~~52.57.~~ Section 17.74.40 specifies, among other things, retaining wall and fence height in front, side, and rear yards. Retaining walls on property in commercial zones shall not exceed 4 feet in height in the front yard and 8 feet in height in the rear yard and side yards. The Grading and ESC Plan (Exhibit [Yc](#), Sheet 7) and the Wall Cross Sections (Exhibit [Yc](#), Sheet 8) detail retaining walls on the south, north, and east sides of the proposed mixed-use building lot. The narrative (Exhibit B) [and Enlarged Site Plan \(Exhibit Y, Sheet A1.02\)](#) states that the walls will have a 3-foot-6-inch guardrail on top of them. The combined height of the retaining wall and fence on the south, north, and east sides exceed the maximum allowed [wall/fence](#) height in a commercial zone per Section 17.74.40(B). The applicant has requested three (3) special variances to exceed the maximum allowed retaining wall and fence height for the south, north, and east sides of the mixed-use lot, which are discussed in more detail in Chapter 17.66 of this staff report. [With the additional submission items since the hearing on February 27, 2023, the applicant did not address the majority of the concerns raised by Dennis Petross \(Exhibits V and Z\). The applicant shall submit additional information from an engineer providing a guarantee that stormwater from the proposed retaining walls will not cause unintended drainage to properties to the north and east of the subject site.](#)

## **VARIANCES – Chapter 17.66**

~~53.58.~~ The applicant requested the following ~~four (4)~~ five (5) variances:

- A. Type III Special Variance to Section 17.74.40(B.2) to exceed the 4-foot maximum height of a retaining wall and fence in a commercial front yard (south side).
- B. Type III Special Variance to Section 17.74.40(B.4) to exceed the 8-foot maximum height of a retaining wall and fence in a commercial rear yard (north side).
- C. Type III Special Variance to Section 17.74.40(B.4) to exceed the 8-foot maximum height of a retaining wall and fence in a commercial side yard (east side).
- D. Type III Tree Removal Variance.
- ~~D.~~E. Type III Special Variance to Section 17.90.160(D) to not provide 8-foot-deep offsets a minimum of every 20 feet on the residential floors.

Variances A-C and E are processed through Chapter 17.66 and are reviewed in detail below. The Type III Tree Removal Variance is processed in accordance with Section 17.102.70 and is discussed in Chapter 17.102 of this document.

### Variance A: Wall/Fence Height – Front Yard (South Side)

~~54.59.~~ The applicant requested a Type III Special Variance to Section 17.74.40(B.2) to exceed the 4-foot maximum height of a retaining wall and fence in a commercial front yard (south side).

~~55.60.~~ To be granted a Type III Special Variance, the applicant must meet one of the following criteria in Section 17.66.80:

- A. The unique nature of the proposed development is such that:
  - 1. The intent and purpose of the regulations and of the provisions to be waived will not be violated; and
  - 2. Authorization of the special variance will not be materially detrimental to the public welfare and will not be injurious to other property in the area when compared with the effects of development otherwise permitted.
- B. The variance approved is the minimum variance needed to permit practical compliance with a requirement of another law or regulation.
- C. When restoration or replacement of a nonconforming development is necessary due to damage by fire, flood, or other casual or natural disaster, the restoration or replacement will decrease the degree of the previous noncompliance to the greatest extent possible.

~~56.61.~~ Staff believes the requested variance to Section 17.74.40(B.2) to exceed the 4-foot maximum height of a retaining wall and fence in a commercial front yard meets Criterion A. As detailed on the Composite Site Plan (Exhibit Y~~C~~, Sheet 3) and the Grading and ESC Plan (Exhibit Y~~C~~, Sheet 7), the applicant is proposing ~~an~~ a retaining wall with a maximum height of 5 feet ~~approximately 5-foot to 7-foot tall retaining wall~~ on the south side (front) of Tax Lot 902 south of the proposed bicycle parking enclosure, stairs, and gazebo. ~~The Site Plan~~

includes a note (key note #17) that states the wall is +/- 7 feet. The Stairs Grading Detail on the Grading and ESC Plan labels the wall as 5 feet in height. The submittal items did not include an elevation profile of the entire wall so it is unclear what the maximum wall height is. The narrative (Exhibit B) states and the Enlarged Site Plan (Exhibit ~~Y~~C, Sheet A1.02) details that the wall will have a 3-foot-6-inch guardrail on top for a maximum combined height of 8.5 feet, approximately 8.5 to 10.5 feet, depending on whether the wall is 5 feet as detailed on the Grading and ESC Plan or +/- 7 feet as detailed on the Site Plan. Neither the narrative or the Plan Set specify details on the type of retaining wall and type of guardrail that are proposed. Chapter 17.74 of the narrative states that the maximum 4-foot retaining wall/fence height in a front yard cannot be met due to the topography of the site. The narrative did not provide any additional information, nor did it address the variance criteria in Chapter 17.66. Because the subject parcel (Tax Lot 902) is a flag lot, the front lot line is not adjacent to the public right-of-way and appears more like a side yard or rear yard than a front yard. Per Section 17.74.40(B.4) a wall/fence in a commercial side yard or rear yard is permitted to be 8 feet in height. Thus, permitting a variance to allow the combined wall/fence height at 8 feet is in line with the intent of the height regulations and will not be detrimental to the adjacent property owner since the adjacent property owner would be outright permitted to have an 8-foot-tall wall/fence along the same property line since it is their rear yard. As proposed, the wall would only be visible from the subject property (Tax Lot 902). The property that abuts the subject property would only see the guardrail on top of the wall. In addition, there is an existing vegetative screen as indicated on the Existing Conditions and Demolition Plan (Exhibit ~~Y~~C, Sheet 2) along the property line between the subject property (Tax Lot 902) and the property to the south (Tax Lot 700). It is also worth noting, that while there is an existing house to the south of the subject property, the existing zoning is General Commercial (C-2).

~~57-62.~~ For the reasons discussed, **staff recommends the Planning Commission approve the requested variance to exceed the 4-foot maximum height of a retaining wall and fence in a commercial front yard (south side). Staff recommends the Planning Commission approve a maximum wall height of 5 feet and a maximum guardrail height of 3.5 feet. ~~require the applicant to submit clarification on the height of the wall and make a determination as follows:~~**

~~55-~~

~~A. If the wall is 5 feet tall as specified in the Stairs Grading Detail, staff recommends the Planning Commission approve the requested variance with a maximum wall height of 5 feet and a maximum guardrail height of 3.5 feet, in which case the applicant shall update the Plan Set to detail the south (front) retaining wall and fence as a maximum 5-foot-tall retaining wall with a maximum 3-foot-6-inch-tall guardrail on top.~~

~~B. If the wall is greater than 5 feet in height, staff recommends the Planning Commission review the applicant's updated information regarding wall height and make a determination on the maximum wall height they'd support in a commercial front yard.~~

~~In either case, t~~**The retaining wall shall be a split face block wall or alternative wall reviewed and approved by the Director and the guardrail shall be black steel or**

**aluminum picket fence, or submit a similar alternative design to staff for review and approval. Where the fence pickets are required as a guard from falling, the space between pickets shall be less than 4 inches.**

Variance B: Wall/Fence Height – Rear Yard (North Side)

~~58-63.~~ The applicant requested a Type III Special Variance to Section 17.74.40(B.4) to exceed the 8-foot maximum height of a retaining wall and fence in a commercial rear yard (north side).

~~59-64.~~ To be granted a Type III Special Variance, the applicant must meet one of the following criteria in Section 17.66.80:

- A. The unique nature of the proposed development is such that:
  1. The intent and purpose of the regulations and of the provisions to be waived will not be violated; and
  2. Authorization of the special variance will not be materially detrimental to the public welfare and will not be injurious to other property in the area when compared with the effects of development otherwise permitted.
- B. The variance approved is the minimum variance needed to permit practical compliance with a requirement of another law or regulation.
- C. When restoration or replacement of a nonconforming development is necessary due to damage by fire, flood, or other casual or natural disaster, the restoration or replacement will decrease the degree of the previous noncompliance to the greatest extent possible.

~~60-65.~~ Staff believes the requested variance to Section 17.74.40(B.4) to exceed the 8-foot maximum height of a retaining wall and fence in a commercial rear yard meets Criterion A. As detailed on the ~~Composite Site Plan (Exhibit C, Sheet 3), Grading and ESC Plan (Exhibit C, Sheet 7), and~~ Wall Cross Sections (Exhibit YC, Sheet 8), the applicant is proposing a retaining wall with a maximum wall height of 14.9 feet ~~an approximately 12 foot to 14.9-foot tall retaining wall~~ on the north side (rear) of Tax Lot 902. ~~The Site Plan includes a note (key note #15) that states the wall is +/- 12 feet. The Wall Cross Sections detail one wall section at 14.9 feet in height (STA 1+00).~~ The narrative (Exhibit B) states and the Enlarged Site Plan (Exhibit YC, Sheet A1.02) details that the wall will have a 3-foot-6-inch guardrail on top for a maximum combined height of ~~approximately 15.5 feet to 18.4 feet, depending on whether the wall is +/- 12 feet as detailed on the Site Plan or 14.9 feet as detailed on the Wall Cross Section.~~ The Wall Cross Sections specify the retaining wall is a modular wall but neither the narrative nor the Plan Set specify the type of modular retaining wall nor the type of guardrail that are proposed. Chapter 17.74 of the narrative states that the maximum 8-foot retaining wall/fence height in a rear yard cannot be met due to the topography of the site. The narrative did not provide any additional information, nor did it address the variance criteria in Chapter 17.66. Due to the conflicting information submitted by the applicant, staff finds it difficult to make a specific recommendation regarding maximum wall height; however, staff recognizes the topography of the site provides a design challenge and is generally supportive of a variance to exceed the 8-foot wall/fence height maximum in a commercial rear yard. It is

also worth noting, that while there are existing houses to the north of the subject property, the existing zoning is General Commercial (C-2).

~~61.66.~~ For the reasons discussed, **staff recommends the Planning Commission approve the requested variance to exceed the 8-foot maximum height of a retaining wall and fence in a commercial rear yard (north side). Staff recommends the Planning Commission ~~require the applicant to submit clarification on the height of the wall, review the proposed wall/guardrail height (proposed at a maximum combined height of 18.4 feet), review public testimony, and make a determination on the maximum wall height they'd support in a commercial rear yard (with a 3.5-foot guardrail on top). The retaining wall shall be a split face block wall or alternative wall reviewed and approved by the Director and the guardrail shall be black steel or aluminum picket fence, or submit a similar alternative design to staff for review and approval. Where the fence pickets are required as a guard from falling, the space between pickets shall be less than 4 inches.~~**

Variance C: Wall/Fence Height – Side Yard (East Side)

~~62.67.~~ The applicant requested a Type III Special Variance to Section 17.74.40(B.4) to exceed the 8-foot maximum height of a retaining wall and fence in a commercial side yard (east side).

~~63.68.~~ To be granted a Type III Special Variance, the applicant must meet one of the following criteria in Section 17.66.80:

- A. The unique nature of the proposed development is such that:
  - 1. The intent and purpose of the regulations and of the provisions to be waived will not be violated; and
  - 2. Authorization of the special variance will not be materially detrimental to the public welfare and will not be injurious to other property in the area when compared with the effects of development otherwise permitted.
- B. The variance approved is the minimum variance needed to permit practical compliance with a requirement of another law or regulation.
- C. When restoration or replacement of a nonconforming development is necessary due to damage by fire, flood, or other casual or natural disaster, the restoration or replacement will decrease the degree of the previous noncompliance to the greatest extent possible.

~~64.69.~~ Staff believes the requested variance to Section 17.74.40(B.4) to exceed the 8-foot maximum height of a retaining wall and fence in a commercial side yard meets Criterion A. As detailed on the ~~Composite Site Plan (Exhibit C, Sheet 3),~~ Grading and ESC Plan (Exhibit YC, Sheet 7); and Wall Cross Sections (Exhibit YC, Sheet 8), the applicant is proposing an approximately 7.55-foot ~~to 8-foot~~ tall retaining wall on the east side (side yard) of Tax Lot 902. The wall is a continuation of the wall along the north property line. ~~The Site Plan includes a note (key note #16) that states the wall is +/- 8 feet.~~ The Wall Cross Sections detail the tallest wall section at 7.55-feet in height (STA 3+00) but the detail for the north wall section just before the wall turns the corner to the east is detailed at 11.75-feet (STA 2+50). The submittal items did not include an elevation profile of the entire wall, so it is

unclear what the maximum wall height is for the portion of the wall on the east property line between stations 2+50 and 3+00. The narrative (Exhibit B) states and the Enlarged Site Plan (Exhibit ~~Y~~C, Sheet A1.02) details that the wall will have a 3-foot-6-inch guardrail on top for a combined height of approximately ~~11.05-feet~~~~10.05 feet to 11.5 feet~~, or greater, depending on whether the wall is ~~+/- 8 feet as detailed on the Site Plan or~~ 7.55 feet as detailed on the Wall Cross Section at STA 3+00, or potentially taller north of STA 3+00. The Wall Cross Sections specify the retaining wall is a modular wall but neither the narrative nor the Plan Set specify the type of modular retaining wall nor the type of guardrail that are proposed. Chapter 17.74 of the narrative states that the maximum 8-foot retaining wall/fence height in a side yard cannot be met due to the topography of the site. The narrative did not provide any additional information, nor did it address the variance criteria in Chapter 17.66. The wall and guardrail will be visible from the adjacent OTSD parking lot to the east and from Bluff Road. Due to the conflicting information submitted by the applicant, staff finds it difficult to make a specific recommendation regarding maximum wall height; however, staff recognizes the topography of the site provides a design challenge and is generally supportive of a variance to exceed the 8-foot wall/fence height maximum in a commercial side yard. It is also worth noting, that the properties to the east of the subject property are zoned as General Commercial (C-2) and owned by the Oregon Trail School District.

- 70.** For the reasons discussed, **staff recommends the Planning Commission approve the requested variance to exceed the 8-foot maximum height of a retaining wall and fence in a commercial side yard (east side). Staff recommends the Planning Commission ~~require the applicant to submit clarification on the height of the wall~~ review the proposed wall/guardrail height (proposed at a maximum combined height of 11.05 feet, but likely taller at the north end), review public testimony, and make a determination on the maximum wall height they'd support in a commercial side yard (with a 3.5-foot guardrail on top). The retaining wall shall be a split face block wall or alternative wall reviewed and approved by the Director and the guardrail shall be black steel or aluminum picket fence, or submit a similar alternative design to staff for review and approval. Where the fence pickets are required as a guard from falling, the space between pickets shall be less than 4 inches.**

Variance E: Building Offsets

71. The applicant requested a Type III Special Variance to Section 17.90.160 (D) to not provide eight (8) foot building recesses and/or extensions every 20 feet.

72. To be granted a Type III Special Variance, the applicant must meet one of the following criteria in Section 17.66.80:

- A. The unique nature of the proposed development is such that:
1. The intent and purpose of the regulations and of the provisions to be waived will not be violated; and
  2. Authorization of the special variance will not be materially detrimental to the public welfare and will not be injurious to other property in the area when compared with the effects of development otherwise permitted.



B. The variance approved is the minimum variance needed to permit practical compliance with a requirement of another law or regulation.

C. When restoration or replacement of a nonconforming development is necessary due to damage by fire, flood, or other casual or natural disaster, the restoration or replacement will decrease the degree of the previous noncompliance to the greatest extent possible.

73. Staff believes the requested variance to Section 17.90.160(D) to not provide 8-foot-deep recesses and/or extensions every 20 feet meets Criterion A. Section 17.90.160(D) states that along the vertical face of a structure, when facing a public street, pedestrian way or an abutting residential use, offsets shall occur at a minimum of every 20 feet by providing recesses and/or extensions (e.g., decks, patios, entrances, floor area, etc.) at a minimum depth of 8 feet. The proposed site layout includes pedestrian walkways around all four sides of the building, thus all four elevations are required to meet Section 17.90.160(D). The applicant is proposing alternating storage areas and outdoor patios on the north and south elevations as detailed on the Floor Plan – Levels 02-04 (Exhibit Y, Sheets A1.22-24); however, they are only extended or recessed 4 feet. In addition, a few of the offsets occur approximately 23 feet apart instead of 20 feet apart. No offsets are detailed on the east and west elevations. Per the applicant’s written statement dated March 21, 2023 (Exhibit X), providing 8-foot-deep offsets is not practical for a building at this scale. The letter states: “8’-0” building overhangs are not practical in the upper floors without the use of columns at every overhang, which we don’t believe would be a better representation of the Sandy style than what we are currently proposing. The proposed building incorporates 4’-0” deep offsets in the upper levels to best reflect the intent of this standard, while keeping the constructability of the building in mind as well.” Staff finds that the intent of the offset requirement is to break up the wall plane into smaller and varied sections. In addition to the proposed storage/patio area offsets, the applicant is proposing three (3) different siding materials on the north and south facades as well as a stone base, gabled roof forms, shed roofs with ornamental brackets, and many windows, all of which will provide visual interest. In addition, the north façade, which will be the more visible of the two, contains four dormers, more ground floor windows, and a gabled entryway, adding additional interest. The east and west facades do not contain any offsets on the upper residential floors; however, they also feature a stone base, gabled roof forms, and four (4) different siding materials, thereby providing varied wall plane sections and visual interest.

Staff finds that the ground floor of the west elevation facing the civic space needs additional windows. Adding an additional four windows on the ground floor, two windows on each side of the gabled entry, would meet the intent of Section 17.90.120 (E) by promoting business vitality, public safety, and aesthetics through effective window placement and design. **The applicant shall update the Building Elevations to include an additional four windows on the west ground floor elevation with at least two windows on each side of the gabled entry.**

74. For the reasons explained above, **staff recommends the Planning Commission approve the requested variance to Section 17.90.160(D) to not provide 8-foot-deep offsets every 20 feet. Staff recommends the Planning Commission require the applicant to provide**



visual interest on all four elevations as outlined above and detailed on the Elevations (Exhibit Y, Sheets A2.01 and A2.02).

## **ZONING and SETBACKS – Chapters 17.44 and 17.80**

~~65.75.~~ The applicant proposes constructing a four-story mixed-use building with associated parking and landscaping on Tax Lot 902. The building will contain self-service storage on the ground floor and 42 multi-family residential units above as permitted in the general commercial (C-2) zoning district per Sections 17.44.10(B.2.i) and 17.44.10(A.1), respectively. The applicant also proposes ~~relocating the shared access driveway to span the common lot line between Tax Lots 902 and 1000, as well as reconfiguring~~ redesigning the existing Paola's Pizza Barn parking lot, which is permitted as an accessory use per Section 17.44.10(C.3).

~~66.76.~~ Section 17.44.30(A) contains the development requirements for the C-2 zoning district, which include a 20 percent minimum landscaping requirement. Per the submitted narrative (Exhibit B) and Enlarged Site Plan (Exhibit ~~Y~~C, Sheet A1.02), the site is proposed to contain ~~27.21~~ 24.66 percent landscaping. It appears that this calculation is for the mixed-use development lot (Tax Lot 902) and does not include the Paola's Pizza Barn lot (Tax Lot 1000). ~~The proposal includes removal of existing landscaping on Tax Lot 1000 to accommodate a relocated access driveway.~~ **The applicant shall submit additional information on the percent landscaping on Tax Lot 1000 demonstrating that the 20 percent landscaping minimum is met.** Landscaping is discussed further in Chapter 17.92 of this staff report.

~~67.77.~~ Per Section 17.44.30(A), the maximum structure height is 55-feet. The narrative (Exhibit B) and Elevations (Exhibit C, Sheet A2.01) detail the proposed mixed-use building height at 52-feet-2-inches to the mid-point of the highest gable, in compliance with the standard.

~~68.78.~~ Section 17.44.30(A) requires a 10-foot minimum and 50-foot maximum front yard setback. Chapter 17.80 contains additional setback requirements on collector and arterial streets. Section 17.80.20 requires all structures to have a minimum setback of 20 feet to collector and arterial streets. Highway 26 is classified as an arterial street and, thus, all structures will need to be set back at least 20 feet from the applicable property line. The proposed mixed-use development is located on a flag lot, with the flag portion of the lot set back approximately 215 feet from Highway 26 and the proposed mixed-use building set back 10 feet from the south property line of the flag portion of the lot.

## **TRANSPORTATION AND IMPROVEMENTS – Chapter 17.84**

~~69.79.~~ Section 17.84.20 pertains to timing of required improvements. Section 17.84.20(A.2) states that where a land division is not proposed, the site shall have required public and franchise utility improvements installed or financially guaranteed in accordance with the provisions of Chapter 17 prior to temporary or final occupancy of structures. **The applicant shall install required public and franchise utility improvements prior to temporary or final occupancy of the proposed mixed-use building.**

~~70.80.~~ Section 17.84.30 includes pedestrian and bicycle requirements. Section 17.84.30(A.2) requires all proposed sidewalks on arterial or collector streets to be six feet wide and separated from curbs by a tree planting area that is a minimum of five feet in width. As required by Section 17.84.30(B), safe and convenient pedestrian and bicyclist facilities that strive to minimize travel distance to the extent practicable shall be provided in conjunction with new development. The existing sidewalk along the subject properties and the adjacent properties to the east and west is curb-tight. ~~As stated in the narrative (Exhibit B), the existing driveway will be relocated, and the sidewalk will be modified. The submitted Site Plans (Exhibit C, Sheets 3 and A1.01) do not detail sidewalk improvements. The narrative states the modified sidewalk will be a minimum of 5 feet in width, which is insufficient for an arterial street sidewalk.~~ Based on Figure 6 of the 2011 Transportation System Plan, the required improvements for a 40-mph zone along Highway 26 include a 6-foot-wide bike lane, 6-inch curb, planter strip with street trees set back at least 6 feet from the curb, and 6-foot-wide sidewalk. Based on a total identified minimum width of 22 to 24 feet, the planter strip is required to be 9.5-11 feet in width. The recent Goodwill project west of the subject properties included an 11-foot-wide planter strip. ~~It's unclear from the submittal items how much right-of-way remains behind the existing curb; however, a~~ As noted by ODOT (Exhibit O), the applicant will be required to dedicate right-of-way as necessary to accommodate the planned cross section and ADA improvements. Based on preliminary feedback from the Planning Commission, the applicant updated the proposal to keep the shared driveway at the existing location. On April 13, 2023, ODOT submitted an email into the record (Exhibit AA) indicating they are not willing to move the driveway to the location as requested by the Planning Commission. Since ODOT is unwilling to move the driveway location the applicant will need to modify the driveway approach once again on the plan set. However, the majority of the driveway alignment may remain as proposed in Exhibit Y. The Composite Site Plan (Exhibit Y, Sheet 3) details the proposed frontage improvements, which include a 6-inch curb, 10-foot planter strip, 6-foot sidewalk, and 0.55-foot frontage zone, in addition to the existing bicycle lane. The plan notes there will be a 12-foot right-of-way dedication. The sidewalk on the east side of the frontage meanders slightly, resulting in a slightly narrower and slightly wider planter strip adjacent to the meandering section. This is presumably designed to maximize protection of existing trees in the landscape buffer along Highway 26. A small section of sidewalk in the flagpole of Tax Lot 902 is located outside the proposed right-of-way dedication and encroaches slightly onto the property. The Composite Site Plan details street trees 30 feet on center and located within the northern 5 feet of the 10-foot planter strip such that they are further from the highway. Per the Assistant Public Works Director (Exhibit Q), **frontage improvements along Highway 26 shall be made in accordance with Figure 6 in the 2011 Transportation System Plan for a 40 MPH speed zone. ADA compliance and 6-foot sidewalks shall be maintained across the frontage. If**

necessary, the applicant shall record an access easement for the portion of the Highway 26 sidewalk that encroaches onto Tax Lot 902. The applicant shall update the Plan Set to detail a minimum 6-foot-wide sidewalk, 9.5-foot to 11-foot-wide planter strip, 6-inch curb, and 6-foot-wide bike lane along the Highway 26 frontage of the subject properties. Street trees shall be planted 30 feet on center within the planter strip, with ODOT approval. The required width of the planter (minimum 9.5 feet up to 11 feet) shall be determined based on the relative location of the required street trees in relation to the overhead power lines such that the street trees are set back sufficiently so as not to grow into the power lines (minimum of 6 feet from curb). If an 11-foot-wide planting strip provides insufficient space to set back the street trees such that they won't grow into the power lines, the applicant shall plant short growth species to avoid conflict with overhead utilities.

- ~~71.81.~~ Section 17.84.50(B) outlines requirements for transportation impact studies for developments with dwellings. The applicant submitted a Transportation Analysis Letter (Exhibit G) from Lancaster Mobley, dated August 22, 2022. The City Transportation Engineer (Exhibit P) reviewed the letter and determined that a full traffic impact analysis is not triggered based on a peak hour trip generation under the threshold for this development. This finding analyzes the Transportation Analysis Letter (TAL).
- A. According to the TAL, the proposed development would generate up to 16 site trips during the morning peak hour, 17 trips during the evening peak hour, and 196 average weekday trips.
  - B. The City Transportation Engineer (Exhibit P) reviewed the TAL and provided the following comments in a letter dated January 17, 2023:
    - i. **The development shall contribute System Development Charges toward citywide impacts.**
    - ii. **Minimum sight distance requirements shall be met at all site driveways. Sight distances should be verified in the final engineering/construction stages of development.**
  - C. ODOT (Exhibit O) reviewed the TAL and provided the following comments in a letter dated January 13, 2023:
    - i. The site of this proposed land use action proposes an access to US 26. ODOT has permitting authority for this facility and an interest in ensuring that this proposed land use is compatible with its safe and efficient operation. **The applicant shall contact the District Contact, Robbie Cox, at [D2CAP@odot.oregon.gov](mailto:D2CAP@odot.oregon.gov) to determine permit requirements and obtain application information.** Per the Assistant Public Works Director (Exhibit Q), **the applicant shall update the "Utility Notes" on Sheet 1 of the Plan Set to note that ODOT approval must be secured before constructing the new entrance on Highway 26.**
    - ii. **Right-of-way donated to ODOT as necessary to accommodate the planned cross section and ADA improvements shall be provided. The deed must be to the State of Oregon, Oregon Department of Transportation. The ODOT District contact will assist in coordinating the transfer. ODOT should provide verification to the local jurisdiction that this requirement has been**

**fulfilled. The property owner must be the signatory for the deed and will be responsible for a certified environmental assessment of the site prior to transfer of property to the Department.** Note: It may take up to 3 months to transfer ownership of property to ODOT.

- iii. **A State Highway Approach Road Permit from ODOT for access to the state highway for the proposed use is required and being completed. Truck turning templates shall be provided as needed to ensure vehicles can enter and exit the approach safely. Site access to the state highway is regulated by OAR 734.51. For application information go to <http://www.oregon.gov/ODOT/HWY/ACCESSMGT/Pages/Application-Forms.aspx>.** Note: It may take 2 to 3 months to process a State Highway Approach Road Permit.
- iv. **The applicant shall record cross-over access easements to the adjacent properties with state highway frontage with the County Assessor to facilitate future shared access.** Shared access will improve highway safety by reducing potential conflicts between vehicles and between vehicles and pedestrians and bicyclists at closely spaced driveways and will implement ODOT Access Management Program goals.
- v. **The applicant is advised that the subject property's highway frontage is access controlled. ODOT has acquired and owns access rights to the subject property. The subject property was granted a Reservation of Access, as recorded in the property deed. Based on the reviewed material, the proposal is relocating the access and an Indenture of Access is required and being processed. If ODOT approves an Indenture of Access, it changes the terms for using the access right and any modification must be recorded in a property deed. The owner is responsible for recording the deed and for any associated costs.** Note: It may take 1 to 2 months to process an Indenture of Access.
- vi. **An ODOT Miscellaneous Permit must be obtained for all work in the highway right-of-way.**

~~72-82.~~ Sections 17.84.50(F and G) require public streets to be improved to City standards along the entire frontage of the property. Highway 26 is identified as an arterial street in the TSP and is therefore required to be improved to arterial street City standards. Per the Assistant Public Works Director (Exhibit Q), **frontage improvements along Highway 26 shall be made in accordance with Figure 6 in the 2011 Transportation System Plan for a 40 MPH speed zone. ADA compliance and 6-foot sidewalks shall be maintained across the frontage. The applicant shall update the Plan Set to detail a minimum 6-foot-wide sidewalk, 9.5-foot to 11-foot-wide planter strip, 6-inch curb, and 6-foot-wide bike lane along the Highway 26 frontage of the subject properties. Street trees shall be planted 30 feet on-center within the planter strip, with ODOT approval. The required width of the planter (minimum 9.5 feet up to 11 feet) shall be determined based on the relative location of the required street trees in relation to the overhead power lines such that the street trees are set back sufficiently so as not to grow into the power lines (minimum of 6 feet from curb). If an 11-foot-wide planting strip provides insufficient space to set back the street trees such that they won't grow into the power lines, the applicant shall plant short growth species to avoid conflict with overhead utilities.**

## **PARKING, LOADING, AND ACCESS REQUIREMENTS – Chapter 17.98**

~~73.83.~~ Section 17.98.10(O) pertains to unassigned parking for residential developments. Multi-family developments with more than 10 required vehicle parking spaces shall provide unassigned parking. The unassigned parking shall consist of at least 15 percent of the total required parking spaces and be located to be available for use by all occupants and guests of the development. The applicant did not indicate whether they are planning to provide assigned parking or if all of the spaces will be unassigned. **If the applicant proposes assigned parking for the multi-family development, at least 15 percent of the total required parking spaces for the multi-family development shall be unassigned and available for use by all occupants and guests of the development.**

~~74.84.~~ Section 17.98.20 contains off-street parking requirements. The proposed use is a mixed-use building with self-service storage on the ground floor and 42 multi-family residential units above. As ~~stated in the narrative~~ [detailed in the calculations on the Enlarged Site Plan \(Exhibit Y, Sheet A1.02B\)](#), ~~3230~~ of the residential units are 1-bedroom units and the remaining ~~1042~~ residential units are 2-bedroom units. Per Section 17.98.20(A.8), a 1-bedroom unit requires a minimum of 1.5 parking spaces per unit and a 2-bedroom unit requires a minimum of 2 parking spaces per unit. In addition, one bicycle parking spaces is required for each residential unit. Therefore, the multi-family portion of the development requires ~~6869~~ parking spaces ( $(\del{3230} \times 1.5) + (\del{1042} \times 2) = \del{6869}$ ) and 42 bicycle parking spaces. Per Section 17.98.20(A.11), storage establishments require 1 parking space per employee on the largest shift and two (2) bicycle parking spaces. The submitted narrative (Exhibit B) states that a maximum of two (2) employees will be working at once. Therefore, the self-service storage portion of the development requires two (2) parking spaces and two (2) bicycle parking spaces. In total, the proposed mixed-use development requires ~~7074~~ parking spaces and 44 bicycle parking spaces. The proposed mixed-use development includes ~~7072~~ parking spaces in compliance with the required minimum as ~~stated in the narrative (Exhibit B) and~~ [detailed on the site plans \(Exhibit YC, Sheets 3 and A1.02\)](#). The ~~narrative also states there will be~~ [Bicycle Enclosure Detail \(Exhibit Y, Sheet A1.04\) details](#) 20 bicycle parking stalls in a covered outdoor bicycle area and [the Residential Floor Plans \(Exhibit Y, Sheets A1.22-24\) detail](#) 8 bicycle racks on each residential floor for a total of 44 bicycle parking spaces in compliance with the required minimum.

~~75.85.~~ In addition to the proposed mixed-use building and associated parking on Tax Lot 902, the applicant is proposing alterations to the existing parking lot for the Paola's Pizza Barn on Tax Lot 1000. The proposal includes removal of approximately 42 parking spaces located adjacent to the west property line of Tax Lot 1000, adjacent to the east property line of Tax Lot 1000, within the northern portion of the flagpole on Tax Lot 902, and just east of the existing Paola's Pizza Barn building ~~to accommodate the proposed relocation of the shared access driveway~~, as well as a reconfiguration of the parking area to the rear (north) of the Paola's Pizza Barn building. One of the parking spaces proposed for removal is an ADA parking space. The proposed parking area north of the existing building includes 33 relocated parking spaces, none of which are detailed as ADA spaces. ~~No changes are proposed to the parking area directly south of the Paola's Pizza Barn building, which contains 11 parking spaces.~~ [The applicant proposes modifying the parking area directly south of the Paola's Pizza Barn building to include 5 parking spaces, 3 of which are proposed as ADA parking spaces](#)

[with access aisles](#). Per Section 17.98.20(A.10), eating or drinking establishments require 1 parking space per 250 square feet of gross floor area or 1 parking space per 4 fixed seats or stools, plus 1 per 2 employees. In addition, two (2) bicycle parking spaces or 5 percent of the minimum parking spaces (whichever is greater) are required. [The updated Site Plan \(Exhibit Y, Sheet A1.01\) includes an analysis of required parking for the Paola's Pizza Barn \(Tax Lot 1000\). The analysis states that the existing restaurant building is 4,421 square feet and that there will be 10 employees on the largest shift, which requires a total of 23 parking spaces and two \(2\) bicycle parking spaces. The proposed parking area redesign includes a total of 38 parking spaces, 33 to the rear of the building and 5 in front of the building. It is not clear from the Site Plan where the two bicycle parking spaces are located. The applicant shall update the Site Plan to detail the location for the two \(2\) required bicycle parking spaces on Tax Lot 1000.](#) ~~The submitted narrative (Exhibit B) does not include any analysis of the existing and proposed changes to parking associated with the Paola's Pizza Barn. It is unclear if the site has any bicycle parking spaces, how many existing spaces there are, how many employees are present on the largest shift, the number of seats in the restaurant, or what the total square footage of the restaurant building(s) is. In addition, there are some issues related to the aisle width and vehicle maneuvering area related to the 11 existing spaces to the south of the existing building. The applicant shall submit a parking analysis for the Paola's Pizza Barn on Tax Lot 1000, including an analysis of required parking spaces, existing parking spaces, proposed parking spaces, and ADA parking spaces, as well as a proposed reconfiguration of the parking area south of the building in compliance with Chapter 17.98. If the minimum parking requirements for parking spaces, ADA parking spaces, and/or bicycle parking spaces are not met, the applicant shall submit an updated parking plan for Tax Lot 1000 in conformance with Chapter 17.98 and ADA requirements.~~

~~76.~~86. Section 17.98.160 contains requirements related to bicycle parking facilities. Per Section 17.98.160(B) each required bicycle parking space shall be at least two and one-half feet by six feet; vertical or upright bicycle storage structures are exempt from the parking space length. An access aisle of at least five feet wide shall be provided and maintained beside or between each row of bicycle parking. The submitted Bicycle Enclosure (Exhibit ~~Y~~[Y](#), Sheet A1.04) details the proposed bicycle enclosure with 10 "Inverted U" bike racks separated into two rows with a 5-foot-wide access aisle between the two rows of bike racks. In addition, the Floor Plan – Levels 02-04 (Exhibit ~~Y~~[Y](#), Sheets ~~A1.22-24~~[A1.22-24](#)) details a bike storage room with eight (8) bike racks on each of the three residential floors. The covered bicycle area is located at the southwest side of the building and is not visible from the primary building entrance. ~~However, the original Plan Set (Exhibit C) detailed five (5) additional bike parking spaces near the primary entrance on the north side of the proposed mixed-use building, as labeled on the Preliminary Planting Plan (Exhibit C, Sheet L2.1). However, the updated Plan Set (Exhibit Y) does not detail bicycle parking near the primary entrance.~~

~~77.~~87. Section 17.98.60 includes standards on parking lot design, size, and access. The Enlarged Site Plan (Exhibit ~~Y~~[Y](#), Sheet A1.02) identifies ~~70~~[70](#) ~~72~~[72](#) parking spaces on the mixed-use development lot (Tax Lot 902). The Enlarged Site Plan labels ~~28-27~~[28-27](#) of the spaces as "compact" and three (3) as ADA. The three (3) ADA parking spaces are all detailed at 9 feet by 18 feet, and one has a passenger side access aisle in compliance with the code and ORS 447.233. **Signage associated with the ADA parking spaces shall meet the head clearance**



**distance requirement in the Building Code. All approved parking spaces shall be clearly delineated with painted lines and the entrance and exit driveways shall be signed or marked with paint. The spaces that are labeled “compact” are detailed at 8 feet by 16 feet, with the exception of one (1) that is detailed at 9 feet wide with a depth of 18 feet on the west and 16 feet on the east. However, many of the other parking spaces that aren’t labeled “compact” are also detailed at 16 feet in depth, which does not meet the minimum size requirement for a standard parking space. Only 13 of the proposed parking spaces on the mixed-use property meet the minimum 9-foot by 18-foot requirement for a standard parking space (including the three ADA parking spaces). Section 17.98.60(B.5) states that no more than 40 percent of the parking stalls shall be compact spaces. As detailed, 59-27 parking spaces (or 82-39 percent) are compact in compliance with the code. The applicant shall update the Plan Set to detail that a minimum of 43 (60 percent) of the parking spaces on Tax Lot 902 meet the minimum standard parking space size requirement (9 feet by 18 feet).**

~~78.88.~~ The ~~Enlarged~~ Site Plan ([Exhibit Y, Sheet A1.01](#)) details 33 reconfigured parking spaces behind the existing Paola’s Pizza Barn, and an additional ~~5+1 existing~~ parking spaces in front of the Paola’s Pizza Barn, including ~~one-three (3)~~ ADA parking spaces, ~~two of which with have~~ a passenger side aisle. All ~~383~~ parking spaces ~~at the rear of the building~~ are detailed at 9 feet by 18 feet with 25-foot-wide parking aisles. ~~As previously stated, there are numerous issues with the existing parking area located to the south of the Paola’s Pizza Barn Building. The applicant shall submit a parking analysis for the Paola’s Pizza Barn on Tax Lot 1000, including an analysis of required parking spaces, existing parking spaces, proposed parking spaces, and ADA parking spaces, as well as a proposed reconfiguration of the parking area south of the building in compliance with Chapter 17.98. If the minimum parking requirements for parking spaces, ADA parking spaces, and/or bicycle parking spaces are not met, the applicant shall submit an updated parking plan for Tax Lot 1000 in conformance with Chapter 17.98 and ADA requirements.~~

~~79.89.~~ Section 17.98.60(C) contains standards on parking lot aisle width. All parking lot aisles are proposed to meet or exceed the minimum aisle width standards for one-way and two-way parking lot aisles. The [Site Plan \(Exhibit Y, Sheet A1.01\)](#) and the [Enlarged Site Plan \(Exhibit YC, Sheet A1.02\)](#) details all parking lot aisles at 25 or 26 feet wide [on both tax lots in compliance with the code](#). The ~~Composite Site Plan (Exhibit C, Sheet 3)~~ details the northernmost parking aisle on Tax Lot 902 at 24.95 feet in width. The applicant is required to update the Plan Set to detail additional standard parking spaces, which may affect aisle width and/or landscaping. ~~The updated Plan Set shall demonstrate compliance with the aisle width standards in Section 17.98.60(C).~~

~~80.90.~~ Section 17.98.80(A) requires access from a lower functional order street. Both subject parcels (Tax Lots 902 and 1000) have frontage on Highway 26, with Tax Lot 902 being a flag lot. Neither parcel has access to any other streets. The parcels (Tax Lots 902 and 1000) are proposed to share an access from Highway 26. At the pre-application meeting for the subject application, ODOT provided pre-application meeting comments (Exhibit S) requiring the applicant to either work with the property owner of Tax Lot 900 to establish a crossover easement to one of the reservations located on the frontage of Tax Lot 9000, or to relinquish



access rights to the engineering stations located on Tax Lot 900 in exchange for establishing access rights at the existing Paola's Pizza Barn access on Tax Lot 1000 (STA 759+40), with a crossover easement between Tax Lot 1000 and 902. At some point between the pre-application meeting and submittal of the land use application, ODOT revised their recommendation to require a shared access between Tax Lots 1000 and 902 but to relocate the access from the existing access at STA 759+40 further east to STA 759+85 such that the new access straddles the shared property line. Relocating the shared access and driveway further east, as proposed, requires removal of at least 13 mature trees, five (5) mature shrubs, and existing groundcover, and brings the proposal out of compliance with the landscape buffer requirement detailed in Sections 17.90.120(F) and 17.90.00(C.2). Staff reached out to ODOT staff for more information regarding the updated access location recommendation and received a response (Exhibit T). ODOT explained that they have been having issues with shared accesses where the access is strictly located on one parcel and the owners of the parcel with the access block the access for the other parcel. ODOT's updated recommendation to relocate the shared access such that the center line of the shared access is on the shared lot line between Tax Lots 1000 and 902 removes the likelihood of one owner blocking another owner's right to access. Staff understands this concern but also recognizes that relocating the access will bring the subject properties out of compliance with Sections 17.90.120(F) and 17.90.00(C.2). Moreover, staff requires that a shared access easement be recorded regardless of whether the existing shared access is maintained or if the shared access is relocated. The location of the shared access and the requirement to comply with the landscape buffer requirement are discussed further in Section 17.90.120(F) of this document. Based on preliminary feedback from the Planning Commission, the applicant updated the proposal to keep the shared driveway at the existing location and to retain the existing landscape buffer along Highway 26 in compliance with the requirements of Section 17.90.120(F) as well as the guiding principles of the Sandy Style. On April 13, 2023, ODOT submitted an email into the record (Exhibit AA) indicating they are not willing to move the driveway to the location as requested by the Planning Commission. Since ODOT is unwilling to move the driveway location the applicant will need to modify the driveway approach once again on the plan set. However, the majority of the driveway alignment may remain as proposed in Exhibit Y. The applicant shall revise the plan set to align the access at STA 759+85. The applicant shall update the Preliminary Planting Plan to detail all proposed plants in the landscape buffer along Highway 26 selected from the list in Section 17.90.120(F.3).

~~81.91.~~ Section 17.98.120 contains landscaping and screening provisions for parking areas. Section 17.98.120(A) requires screening of parking areas containing 4 or more spaces. Section 17.92.80 requires buffering in conjunction with issuance of construction permits for parking areas containing four or more spaces, loading areas, and vehicle maneuvering areas. The proposal includes a parking area associated with the proposed mixed-use development on Tax Lot 902 and modifications to the Paola's Pizza Barn parking areas, driveway, and aisles on Tax Lot 1000. The Enlarged Site Plan (Exhibit ~~Y~~C, Sheet A1.02) and Preliminary Planting Plan (Exhibit ~~Y~~C, Sheet L2.1) detail boundary plantings between the parking areas and adjacent properties as well as plantings between parking bays and vehicle maneuvering areas.

The Enlarged Site Plan details ~~the all~~ landscaping buffers on Tax Lot 902 at a minimum of 5-foot in width in compliance with the code. The proposed retaining walls along the north and

east property lines will be placed within the landscape buffer area; however, the Enlarged Site Plan details that the minimum 5-foot landscaping area width will still be met. The Preliminary Planting Plan (Exhibit Y, Sheet L2.1) details a mix of groundcover and shrubs with one tree proposed along the west parking lot buffer, shrubs with a few trees along the north parking lot buffer, and shrubs along the east parking lot buffer. **The applicant shall update the Preliminary Planting Plan to detail a mix of low-lying ground cover and shrubs and vertical shrubs and trees in the west, north, and east parking lot landscaping buffers on Tax Lot 902.** ~~for the most part; however, the middle landscape planter in the double row of parking spaces on Tax Lot 902 is detailed at 5 feet wide including the curb. The applicant shall update the Plan Set to detail planter and boundary areas in the parking lot at a minimum diameter of five feet (two and one-half foot radius, inside dimensions).~~

~~Neither the Enlarged Site Plan (Exhibit Y, Sheet A1.01) nor~~ and the Preliminary Planting Plan (Exhibit Y, Sheet L2.1) detail a landscaping buffer along the west side of the newly configured parking area behind the Paola's Pizza Barn on Tax Lot 1000 at 2-feet in width that is proposed to be planted with a single groundcover (kinnikinick). **The applicant shall update the Preliminary Planting Plan Set to detail a minimum 5-foot-wide (interior dimension) landscape planter with a mix of low-lying ground cover and shrubs, and vertical shrubs and trees between the proposed westernmost parking row on Tax Lot 1000 and the property to the west.**

~~In addition, the Enlarged Site Plan includes a note (Keystone 8) that indicates there will be a retaining wall with a guardrail on top located within the landscaping buffer along the north and east property lines of Tax Lot 902. It is unclear exactly where the retaining wall is proposed to be located. The applicant shall submit section drawings that clearly detail the parking area, landscaping area, retaining wall, guardrail, and property lines for the areas between the parking area and the north and east property line; the landscape buffer shall have a minimum inside dimension of 5 feet.~~

~~82.~~ 92. Section 17.98.120(B) requires parking in a commercial district that adjoins a residential district to include a site-obscuring screen that is at least 80 percent opaque when viewed horizontally from between 2 and 8 feet above the average ground level. Although there are residences to the north and south of the proposed mixed-use development, all adjacent properties are zoned General Commercial, C-2, so this standard is not applicable.

~~83.~~ 93. Section 17.98.120(C) requires parking facilities to include at least 10 percent landscaping. The Enlarged Site Plan (Exhibit YC, Sheet A1.02) ~~states that the overall landscaping for the mixed-use development site (Tax Lot 902) is 27.21 percent. Although the plan does not include~~ a landscaping analysis for the parking area on Tax Lot 902. Based on the analysis, the parking area is 26,680 square feet, which requires 2,668 of landscaping. The proposed parking lot landscaping on Tax Lot 902 is 3,870 square feet in compliance with the standard. The Site Plan (Exhibit Y, Sheet A1.01) includes the parking lot landscaping analysis for Tax Lot 1000. Based on the combined square footage of the parking areas in front of and to the rear of the Paola's Pizza Barn, 1,739 square feet of parking lot landscaping is required. As noted on Sheet A1.01, the applicant is providing 2,131 square feet of parking lot landscaping on Tax Lot 1000 in compliance with the standard. specifically, a majority of

~~the proposed landscaping consists of planter bays and buffers within the parking area. In addition, the applicant did not submit any information on the percent of landscaping on Tax Lot 1000. **The applicant shall submit additional information regarding landscaping in the parking areas on Tax Lot 1000 to ensure that the 10 percent minimum landscaping standard is met.**~~

~~84.94.~~ Section 17.98.120(D) restricts parking bays to no more than 20 spaces and requires landscape planters at the ends of each parking bay that have a minimum width of five feet and a minimum length of 17 feet for a single depth bay and 34 feet for a double bay. Each planter shall contain one major structural tree and ground cover. The Preliminary Planting Plan (Exhibit YC, Sheet L2.1) details planter bays at the ends of ~~a majority of all~~ the parking bays that are at least five feet in width by 17 feet in length or five feet in width and 34 feet in length for a double bay. ~~with All of the planters are detailed to contain one major structural tree and ground cover, with the exception of the planter to the south of the easternmost parking row on Tax Lot 902, which does not contain a tree. ; however, there are multiple planter bays that do not meet the minimum 5-foot by 17-foot requirement and/or do not detail one major structural tree and ground cover.~~ **The applicant shall update the Preliminary Planting Plan to detail a landscape planter at the end of each parking bay at a minimum width of 5 feet and a minimum length of 17 feet, exclusive of curb, with one major structural tree and ground cover in the landscape area south of the easternmost parking row on Tax Lot 902.**

~~85.95.~~ Section 17.98.120(E) states that parking area setbacks shall be landscaped with major trees, shrubs, and ground cover. Section 17.92.80 requires parking area buffers to contain a balance of low-lying ground cover and shrubs, and vertical shrubs and trees. ~~The submitted Preliminary Planting Plan (Exhibit C, Sheet L2.1) details landscaping buffers between parking areas and adjacent properties; however, the buffers along the east and west property lines of Tax Lot 902 and the west property line of Tax Lot 1000 are detailed to only contain groundcover. The applicant shall update the Preliminary Planting Plan to detail a mix of groundcover, shrubs, and trees in the required landscaping buffers between parking areas and adjacent properties. As discussed in Finding #83, above, the applicant shall update the Preliminary Planting Plan to detail a mix of low-lying ground cover and shrubs and vertical shrubs and trees in the west, north, and east parking lot landscaping buffers on Tax Lot 902. The applicant shall update the Preliminary Planting Plan Set to detail a minimum 5-foot-wide (interior dimension) landscape planter with a mix of low-lying ground cover and shrubs, and vertical shrubs and trees between the proposed westernmost parking row on Tax Lot 1000 and the property to the west.~~

~~86.96.~~ Section 17.98.120(F) requires wheel stops or other methods to protect landscaped areas and pedestrian walkways. The Preliminary Planting Plan (Exhibit YC, Sheet L2.1) and the ~~Enlarged-Site Plan (Exhibit YC, Sheet A1.012))~~ detail wheel stops in all of the ~~reconfigured proposed~~ parking spaces on Tax Lots 902 and 1000, ~~and in the middle rows and southern row of parking spaces on Tax Lot 902.~~ Section 17.98.120(F) allows parking to project over an internal sidewalk provided a minimum clearance of five feet for pedestrian circulation is maintained. Section 17.92.10(D) states that where the curb or the edge of a required planter or boundary area is used as a tire stop for parking, the planter or boundary plantings shall be

~~a minimum width of seven and one half feet. The applicant will be required to update the parking plan to include standard sized parking spaces, which may affect the landscaping buffers. The updated Plan Set shall either detail wheel stops in the parking spaces adjacent to landscaping and walkways (5-foot minimum, exclusive of curb) to protect landscaping and pedestrian walkways, or shall detail a minimum planting area of 7.5 feet, exclusive of curb, adjacent to all parking spaces that use the curb as a tire stop and a minimum clearance of 5 feet for pedestrian walkways that are adjacent to parking spaces that use the curb as a tire stop.~~

~~87.97.~~ Section 17.98.130 requires that all parking and vehicular maneuvering areas shall be paved with asphalt or concrete. As required by Section 17.98.130, **all parking, driveway, and maneuvering areas shall be constructed of asphalt, concrete, or other approved material.**

~~88.98.~~ Section 17.98.140 requires parking areas, aisles, and turnarounds to provide adequate provisions for on-site collection of stormwater to eliminate sheet flow onto sidewalks, public rights-of-way, and abutting private property. **The applicant shall comply with the requirements of Section 13.18 of the Sandy Municipal Code.**

~~89.99.~~ Section 17.98.150 requires lighting to be provided in all required off-street parking areas. The applicant submitted a lighting fixture schedule for new site lighting, and a photometric plan. These submittals are reviewed in Chapter 15.30 of this document.

~~90.100.~~ Section 17.98.190 contains minimum standards for off-street loading facilities for commercial and industrial developments and states that all commercial and industrial uses that anticipate loading and unloading of products/materials shall provide an off-street area for loading/unloading of products/materials. The proposal includes self-service storage on the ground floor, which is expected to require loading and unloading of products/materials. The Enlarged Site Plan (Exhibit YC, Sheet A1.02) details a 10 foot by 35 foot loading area with an unobstructed height clearance of 14 feet near the east entrance of the mixed-use building in compliance with the code. The plan does not specify how the loading area will be delineated. **The required loading berth shall be not less than ten feet in width by 35 feet in length and shall have an unobstructed height clearance of 14 feet. The applicant shall update the Plan Set to detail a minimum 10-foot by 35-foot loading area with 14 feet of clearance.** The loading area shall be delineated either by striping or use of a different material. The loading area shall be screened from public view from public streets and from adjacent properties.

## **UTILITIES – Chapters 17.84 and 15.30**

~~91.~~101. Section 17.84.60 outlines the requirements of public facility extensions. The applicant submitted an Entry Utility Plan (Exhibit C, Sheet 4) and a Site Utility Plan (Exhibit C, Sheet 5) that show the location of proposed water, sanitary sewer, and stormwater drainage facilities for Tax Los 902 and 1000.

~~92.~~102. The applicant's original Plan Set (Exhibit C) detailed the proposed building encroaching into the sanitary sewer line easement area that runs along the southern portion of the flag portion of the lot. The Assistant Public Works Director (Exhibit Q) reviewed the proposal and noted ~~s that the plans and overview show potential~~ the encroachment into the sanitary sewer line (and possibly easement) between the proposed mixed use building and the south property line. Section 17.84.90(A.2) requires the easement to be a minimum of 15 feet wide. The space between the building and the property line ~~appears to be~~ as originally proposed was only 10 feet wide. The building's second story is also cantilevered, which ~~appears to~~ encroached even further into the existing area that needs to be maintained for future access to the sewer line. Lastly, the Assistant Public Works Director noted that grades are difficult to determine since they do not show the depth of the sewer, but the building is six or seven feet below native ground adjacent to the sewer on the south side of the building. The updated Plan Set (Exhibit Y) details the proposed building (including the cantilever) set back at least 15 feet such that it is no longer encroaching into the existing utility. The applicant shall record a 15-foot-wide sanitary sewer easement where the existing sewer line runs along the south property line of the flag portion of Tax Lot 902 or submit documentation of the existing recorded easement. The applicant shall update the Plan Set to detail a 15-foot-wide sanitary sewer easement where the existing sewer line runs along the south property line of the flag portion of Tax Lot 902. The applicant shall update the Plan Set to detail the proposed building, including the cantilever, outside of the 15-foot easement. Alternatively, the applicant may be able to abandon the existing public sanitary sewer line along the south property line of Tax Lot 902 and relocate the public sanitary sewer line such that it extends further north from the point the existing sewer line enters Tax Lot 902 and aligns with the proposed parking aisles on Tax Lot 902 and then connects to the private sewer lateral on Tax Lot 1000. In this case, the applicant shall record a 15-foot easement reflecting the updated location of the public sanitary sewer line on Tax Lot 902.

~~93.~~103. Broadband vault/conduit infrastructure are required for all new developments. **The applicant shall provide SandyNet with a set of PGE utility and street/sidewalk lighting plans to design and return a SandyNet broadband deployment plan to overlay in the dry utility shared trench. SandyNet will provide requirements for layout and acceptable materials for the developer/contractor. SandyNet shall be contacted after installation of infrastructure and coordinated for onsite inspection before backfilling the common trench. Plans for SandyNet design shall be sent to Greg Brewster [gbrewster@ci.sandy.or.us](mailto:gbrewster@ci.sandy.or.us), 503-953-4604. The onsite contact for general questions and inspections will be Ron Yow, [ryow@ci.sandy.or.us](mailto:ryow@ci.sandy.or.us), 541-514-9771.**

~~94.~~104. Franchise utilities will be provided as required in Section 17.84.80. The location of these utilities shall be identified with building permit plans and installed or guaranteed prior

to the mixed-use building site receiving a certificate of occupancy. **All franchise utilities shall be installed underground. The developer shall make all necessary arrangements with franchise utility providers.**

~~95.~~**105.** Eight-foot-wide public utility easements (PUE) are required along all property lines abutting a public right-of-way. Both properties (Tax Lots 902 and 1000) contain frontage on Highway 26. **The applicant shall record an eight-foot-wide public utility easement along the entirety of the Highway 26 right-of-way of Tax Lots 902 and 1000.**

~~96.~~**106.** Section 17.84.100 outlines the requirements for mail delivery facilities. [The Enlarged Site Plan \(Exhibit Y, Sheets A1.02\) details mailboxes located just east of the primary entryway on the north elevation.](#) **The location and type of mail delivery facilities shall be coordinated with the City Engineer and the Post Office as part of the construction plan process.**

~~97.~~**107.** The Fire Marshal (Exhibit N) reviewed the proposal and provided general comments as well as comments related to fire apparatus access and firefighting water supplies. **The applicant shall comply with all applicable Oregon Fire Code requirements.** When buildings are completely protected with an approved automatic fire sprinkler system, the requirements for fire apparatus access and water supply may be modified as approved by the fire code official. **The applicant shall adhere to all Fire Marshal requirements in Exhibit N, including but not limited to the following:**

- A. **Construction documents detailing compliance with fire apparatus access and fire protection water supply requirements shall be provided to Sandy Fire District for review and approval concurrently with building permit submittal. All construction activities shall comply with the applicable Oregon Fire Code and the Fire Code Application Guide.**
- B. **The owner or owner's authorized agent shall be responsible for the development, implementation and maintenance of a written plan establishing a fire prevention program at the project site applicable throughout all phases of the construction. The plan shall address the requirements found in OFC Chapter 33 and shall be made available for review by the fire code official upon request.**
- C. **Where fire apparatus access roads or a water supply for fire protection are required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except where approved alternative methods of protection are provided.**
- D. **Buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property, including monument signs.**
- E. **A key lock box for building will be required to provide access to common use areas, the fire alarm control panel(s), and the fire sprinkler riser room(s). The Fire District uses KNOX brand boxes. To order a KNOX box keyed for the Sandy Fire District, please visit Sandy Fire's website (<https://www.knoxbox.com/Products>) for ordering information.**
- F. **Knox Box Contents. When more than one key is secured in the Knox Box, each key shall be legibly identified as to its use, utilizing a round key tag that is a minimum of**



1-inch in diameter. Necessary keys provided by the building owner or business owner may include: a) Main entrance door, b) Fire Alarm Control Panel, c) Alarm codes, d) Manual pull stations, e) Fire Sprinkler Control padlock/s, f) Mechanical rooms, g) Elevator control, h) Attic or roof access, and i) Any other keys necessary to access building controls.

- G. An emergency vehicle access and maintenance agreement shall be deeded and recorded as a condition of approval.
- H. New buildings four or more stories above grade plane, except those with a roof slope greater than four units vertical in 12 units horizontal (33.3% slope), shall be provided with a stairway to the roof.
- I. Commercial buildings exceeding three stories or 30 feet in height shall have not fewer than two means of fire apparatus access for each building.
- J. A minimum of one on-site fire hydrant shall be provided near the proposed mixed-use development for firefighting operations. If distances between fire hydrants exceeds 500 feet, additional on-site fire hydrants may be required along the fire apparatus access road.
- K. Fire department connections (FDC) are required to be remote and shall be located within 100 feet of a public fire hydrant. All FDC's shall be permanently labeled with appropriate address in which it serves and shall be accessible and visible from the fire apparatus access road.
- L. Each new fire hydrant installed shall be ordered in an OSHA safety red finish and have a 4-inch non-threaded metal faced hydrant connection with cap installed on the steamer port (4 1/2-inch NST x 4-inch Storz Adaptor). If a new building, structure, or dwelling is already served by an existing hydrant, the existing hydrant shall also be OSHA safety red and have a 4-inch non-threaded metal faced hydrant connection with cap installed.

~~98.~~108. The applicant submitted a preliminary stormwater report (Exhibit F). **All site runoff shall be detained such that post-development runoff does not exceed the predevelopment runoff rate for the 2, 5, 10 and 25 year storm events. Stormwater quality treatment shall be provided for all site drainage per the standards in the City of Portland Stormwater Management Manual (COP SWMM).** With the additional submission items since the hearing on February 27, 2023, the applicant did not address the majority of the concerns raised by Dennis Petross (Exhibits V and Z). The applicant shall submit additional information from an engineer providing a guarantee that stormwater from the proposed retaining walls will not cause unintended drainage to properties to the north and east of the subject site.

~~99.~~109. The proposal includes an offsite stormwater conveyance line as detailed on the Stormwater Extension Plan (Exhibit C, Sheet 6) that extends through three properties to the north before connecting to an existing storm line connection into a ditch inlet in Meeker Street. Per the Assistant Public Works Director (Exhibit Q), **the applicant shall confirm that the storm system shown is private until it outfalls to the ditch inlet. New storm lines shall require an easement through each property. The applicant shall record all necessary easements for offsite utilities.** Based on the proposed location of the stormwater conveyance line, it appears that a number of existing trees on the properties to the north may be negatively affected. **The applicant shall submit additional information from the**

**project arborist or third-party arborist regarding the proposed stormwater conveyance line extension that evaluates impacts on offsite trees and outlines strategies to minimize negative impacts to existing trees. The applicant shall retain the project arborist or third-party arborist on site during extension of the storm line within the critical root zone of 1-foot per 1-inch DBH of the offsite trees. If any of the offsite trees need to be removed, the applicant and subject property owner shall submit a tree removal application in accordance with Chapter 17.102.**

~~100.~~110. Chapter 15.30 contains the City of Sandy's Dark Sky Ordinance. The applicant submitted a Site Lighting Plan (Exhibit D, Sheet E0.00), Photometric Plan (Exhibit D, Sheet E0.01), and a lighting fixture cut sheet (Exhibit E) for a D-Series Size 0 LED Area Luminaire by Lithonia Lighting. The Site Lighting Plan details four (4) single-headed lights and five (5) double-headed lights and specifies that the lights will be 3,000 Kelvins in compliance with the code. **Downward facing, full cut-off lighting shall be required. Lights shall not exceed 4,125 Kelvins or 591 nanometers to minimize negative impacts on wildlife and human health.**

~~101.~~111. Section 15.30.060(D) states that all outdoor lighting systems shall be designed and operated so that the area ten feet beyond the property line of the premises receives no more than one-quarter of a foot-candle of light from the premises lighting system. The submitted Photometric Plan (Exhibit D, Sheet E0.01) details foot candles extending 10 feet beyond the property lines. Light trespass onto adjacent properties is detailed to exceed the 0.25 foot-candle maximum on the property east of the flagpole (Tax Lot 900) as well as the property east of the flag portion of Tax Lot 902 (Tax Lot 600). In addition, the applicant is required to provide lighting along the proposed path south of the mixed-use building, which will need to be analyzed for light trespass. **The applicant shall update the Photometric Plan such that the area ten feet beyond the property line of the subject properties receives no more than one-quarter of a foot-candle of light from the development's lighting system.**



## **URBAN FORESTRY – 17.102**

~~102.112.~~ In addition to the landscaping requirements of Chapter 17.92, Chapter 17.102 contains Urban Forestry regulations. An Arborist Report prepared by Caleb Lattimer of Teragan & Associates and dated September 22, 2022, is included as Exhibit H. The arborist inventoried all trees 2-inches and greater diameter at breast height (DBH) on the subject property as well as trees on the adjacent properties that may be impacted by development on the subject property. The inventory of existing trees is also included in the Plan Set (Existing Tree Inventory; Exhibit ~~Y~~~~C~~, Sheet L1.01), though the one included in the Arborist Report is more accurate and comprehensive in terms of existing trees and species identification. However, the arborist report was based on an outdated version of the site plan. Based on preliminary feedback from the Planning Commission, the applicant updated the proposal to keep the shared driveway at the existing location and to retain the existing landscape buffer along Highway 26 in compliance with the requirements of Section 17.90.120(F) as well as the guiding principles of the Sandy Style. On April 13, 2023, ODOT submitted an email into the record (Exhibit AA) indicating they are not willing to move the driveway to the location as requested by the Planning Commission. Since ODOT is unwilling to move the driveway location the applicant will need to modify the driveway approach once again on the plan set. However, the majority of the driveway alignment may remain as proposed in Exhibit Y. The arborist report also shows a number of trees in the southeast corner of Tax Lot 902 marked for removal (with an X) that are marked as being retained in the inventory and in the Plan Set. In addition, the only trees detailed in the arborist report on Tax Lot 1000 are those located within the existing landscape buffer in the southeast corner of Tax Lot 1000. It appears that there may be a couple additional trees on Tax Lot 1000 located in the southwest corner in front of the existing building. **The applicant shall update the Tree Retention Plan in the Arborist Report to reflect the updated site plan and the driveway location at Station 759+85 as required by ODOT, ~~the retention of the trees in the southeast corner of Tax Lot 902, and the location, condition, and species of any additional trees on Tax Lot 1000.~~**

~~103.113.~~ The applicant's Arborist Report was reviewed by a third-party arborist reviewer. The third-party review was conducted by Todd Prager of Todd Prager & Associates, LLC and is dated January 19, 2023 (Exhibit R). The third-party review noted the outdated site plan used in the applicant's arborist report and states: "The main differences appear to be on the east side of the site adjacent to trees 28 through 30. The site plan changes should be reviewed by the project arborist to ensure the trees will be adequately protected. Particular attention should be paid to the location of the proposed retaining wall adjacent to trees 31 and 32 (see sheet 3 in Attachment 2) and the proposed grading that potentially conflicts with the root zones of trees 28 and 29 (see sheet 7 in Attachment 2)." **The project arborist shall review the site plan changes on the east side of Tax Lot 902 and shall ensure the trees marked for retention will be adequately protected. Particular attention shall be paid to the location of the proposed retaining wall adjacent to Trees #31 and 32 (see sheet 3 in Attachment 2 of the third-party arborist review (Exhibit R)) and the proposed grading that potentially conflicts with the root zones of Trees #28 and 29 (see sheet 7 in Attachment 2 of the third-party arborist review (Exhibit R)).**

~~104.114.~~ Section 17.102.50(A) contains tree retention requirements and requires retention of at least three (3) trees per acre. Retention trees are required to be 11-inches DBH or greater, healthy, likely to live to maturity, and be located to minimize the potential for blow-down. Based on the acreage of the subject properties, a minimum of seven (7) retention trees are required. The applicant's original proposal included retention of ~~is proposing to retain~~ one (1) tree on the subject properties. The tree proposed for retention is a 28-inch DBH bigleaf maple (Tree #28) determined to be in good condition and fair structure, with multiple stems at the base and deadwood in the crown. Tree #28 is located along the east property line at the southeast corner of Tax Lot 902. Based on feedback from the Planning Commission, the applicant updated the plan set (Exhibit Y) to keep the existing shared driveway location and retain the existing trees in the flagpole portion of Tax Lot 902 and the landscape buffer along Highway 26. The updated Existing Tree Inventory (Exhibit Y, Sheet L1.1), details retention of four (4) trees that meet the retention criteria of Section 17.102.50(A). These are Trees # 4, 5, 11, and 28. However, on April 13, 2023, ODOT submitted an email into the record (Exhibit AA) indicating they are not willing to move the driveway to the location as requested by the Planning Commission. Since ODOT is unwilling to move the driveway location the applicant will need to modify the driveway approach once again on the plan set. Because the proposal does not meet the minimum tree retention requirement of seven (7) retention trees, the applicant is requesting a variance to the tree retention requirement pursuant to Section 17.102.70.

~~105.115.~~ Section 17.102.70 outlines the process for a variance to the minimum tree retention standard. Under a Type III review process, the Planning Commission may allow newly-planted trees to substitute for retained trees if the substitution is at a ratio of at least two-to-one (i.e., at least two native quality nursery grown trees will be planted for every protected tree that is removed) and the substitution more nearly meets the intent of this chapter due to the location of the existing and proposed new trees, or the physical condition of the existing trees or their compatibility with the existing soil and climate conditions, or an undue hardship is caused by the requirement for retention of existing trees, or tree removal is necessary to protect a scenic view corridor. Neither the applicant's arborist report (Exhibit H) nor the narrative (Exhibit B) addressed Section 17.102.70 or specified why the tree retention variance was being requested. The third-party arborist review (Exhibit R) reviewed the applicant's original proposal as well as the code requirements and determined there are six (6) potential retention trees that meet the criteria of Section 17.102.50(A). The six (6) potential retention trees are:

- Tree #4 (a 12-inch DBH Colorado blue spruce in good condition)
- Tree #5 (an 11-inch DBH western redcedar in good condition)
- Tree #11 (a 15-inch DBH Norway spruce in good condition)
- Tree #28 (a 28-inch DBH bigleaf maple in good condition)
- Tree #33 (a 24-inch DBH Douglas fir in good condition)
- Tree #34 (a 24-inch DBH Douglas fir in good condition).

These six (6) retention tree candidates are highlighted in yellow on Attachment 1 and 2 of the third-party arborist review (Exhibit R). The third-party arborist report states: "Of these trees, tree 28 is proposed for retention while the remaining trees will be removed. Trees 33 and 34

do not appear practicable to retain based on their locations towards the center of the site within the proposed parking lot. However, trees 4, 5, and 11 may be possible to retain if the site access could be reconfigured. It should be clarified whether the driveway reconfiguration is an ODOT requirement, or a recommendation. Based on this clarification, a determination can be made as to whether up to four retention trees could be retained, or if only one retention tree can be retained. The balance of required retention trees could be mitigated if a variance is approved by the Planning Commission according to Sec. 17.102.70.” [The applicant is not proposing to retain Tree #33 or Tree #34. Trees #33 and 34 are located towards the center of the site within the proposed parking lot and do not make sense to retain based on their location.](#)

~~106.116.~~ [116.](#) In addition to the six (6) trees that meet the retention standards of being 11-inches DBH or greater and in good condition, there are a few additional trees that are either in good condition but less than 11-inches DBH, or 11-inches DBH or greater but in fair condition. In the past, the Planning Commission has allowed trees slightly smaller than 11-inches DBH in good condition to count as retention trees and has allowed 11-inch or greater trees in fair condition to count as retention trees at a 2:1 ratio (two trees in fair condition count as one retention tree). There are a few existing trees on the subject properties that could be potential retention trees based on these criteria; these are:

- Tree #4.1 (a 10-inch DBH Colorado blue spruce in good condition)
- Tree #7 (a 10-inch DBH windmill palm in good condition)
- Tree #10 (a 16-inch sugar maple in fair condition)
- Tree #35 (a 12-inch DBH bigleaf maple in fair condition).

Three (3) of the four (4) trees (Trees #4.1, 7, and 10) are located near the southeast corner of the subject properties in the existing landscape buffer along Highway 26 and [could potentially be retained if the shared driveway is kept in its existing location.](#) ~~The fourth tree (Tree #35) is located towards the center of the site within the proposed parking lot and does not make sense to retain for the same reasons as Trees 33 and 34, discussed above. Retention of Tree #7 would depend on how much right-of-way needs to be dedicated to accommodate the required street frontage improvements.~~

~~107.117.~~ [117.](#) [With the driveway being located at Station 759+85 as required by ODOT,](#) ~~The~~ applicant is proposing to retain one (1) tree on the subject properties: Tree #28. The third-party arborist review evaluated whether Tree #28 can be adequately protected from construction impacts, taking into account the area of root zone impacts by the proposed construction, grading, and retaining wall in the root zone of the tree. As identified in the third-party arborist review (Exhibit R): “The currently proposed impacts include grading within four feet of the tree’s trunk and disturbance of approximately 40 percent of its root zone. This well exceeds the City’s typical minimum tree protection zone in Figure 1 and will likely not provide adequate protection for tree 28. The applicant should explore whether it is possible to construct a retaining wall as shown in the example markup on sheet L2.1 in Attachment 2 to limit root zone disturbance to less than 25 percent and limit grade changes and any construction to at least 14 feet from tree 28. If this is possible, the tree could be adequately protected.” Thus, based on the applicant’s proposal and the third-party arborist

review, only one (1) retention tree is proposed (Tree #28); however, adequate protection of ~~that~~ Tree #28 would require additional protection measures to limit root zone disturbance such that the tree is likely to grow to maturity as required of a retention tree per Section 17.102.50(A.3). The applicant shall update the arborist report to include a determination of whether it is possible to construct a retaining wall near Tree #28 to limit critical root zone disturbance to less than 25 percent and limit grade changes and any construction to at least 14 feet from Tree #28 (see the example markup on sheet L2.1 in Attachment 2 of the third-party arborist review). If adequate protection of Tree #28 is possible, staff recommends the Planning Commission require retention of Tree #28 and count it as a retention tree.

In addition to the proposed retention tree (Tree # 28), there are five (5) other trees that meet the tree retention requirements (Trees #4, 5, 11, 33, and 34) as well as four (4) additional trees that are close to meeting the retention requirements and could be potential candidates (Trees #4.1, 7, 10, and 35). Of these nine (9) additional retention tree candidates, three (3) trees (Trees #33, 34, and 35) are located towards the center of the site within the proposed parking lot and do not make sense to retain based on their location. Staff finds that these three (3) trees (Trees #33, 34, and 35) meet variance criteria 17.102.70(B.1). The remaining six (6) trees (Trees #4, 4.1, 5, 7, 10, and 11) are all located in the existing required landscape buffer along Highway 26 in the southeast corner of the subject properties. The applicant is proposing to remove all of these existing trees (as well as others that don't meet the retention standards) in order to accommodate relocation of the shared access driveway per ODOT's ~~request~~ requirement in Exhibit AA. Removal of these trees ~~could potentially meet~~ tree variance criteria B.1 (in Section 17.102.70) due to ODOT's ~~request~~ requirement to relocate the shared access driveway to Station 759+85. Staff would prefer to see existing healthy trees retained rather than plant mitigation trees due to the low survival rate and continued code enforcement issues that mitigation trees have historically resulted in. Staff understands ODOT's concerns and desire to relocate the shared access driveway, but staff is also required to uphold the requirements of the Development Code, including the following:

- The landscape buffer requirement outlined in Section 17.90.120(F)
- The Sandy Style guiding principle to protect the landscape buffer along Highway 26 in Section 17.90.00(C.2)
- Excessive tree removal and/or grading that may harm existing vegetation within a designated landscape conservation area is explicitly listed as an element incompatible with Sandy Style in Section 17.90.00(D.1)
- The minimum tree retention standards in Section 17.102.50(A)
- The tree protection standards in Section 17.92.10(C)

As discussed in Section 17.90.120(F) of this document, the applicant will be required to ~~either:~~

- ~~A. Retain the existing landscape buffer, including the existing trees and other vegetation, and keep the existing location of the shared access driveway (or another location approved by ODOT that does not impact the existing landscape buffer),~~ OR
- ~~R~~elocate the required landscape buffer to allow the shared access driveway to be located on the shared property line at Station 759+85 as ~~requested~~ required by ODOT.

~~If the applicant chooses option A, five (5) to six (6) trees that either meet or are close to meeting the retention standards could likely be retained (Trees #4, 4.1, 5, 10, and 11 should be able to be retained and Tree #7 may also be able to be retained depending on how much right-of-way dedication is required) in addition to Tree #28. If the applicant chooses option B, Based on ODOT's requirement to have the access located at Station 759+85, Tree #28 is the only potential retention tree that could be retained. Staff recommends the Planning Commission determine whether they want to grant a variance to the tree retention standards in Section 17.102.50 based on the criteria in Section 17.102.70. Staff recommends the Planning Commission review the existing and proposed driveway location keeping in mind both ODOT's recommendation and the City's Development Code requirements, particularly Sections 17.90.00(C.2), 17.90.00(D.1), 17.90.120(F), and 17.92.10(C), in addition to the tree retention requirements of Chapter 17.102. If Based on ODOT's requirement to locate the driveway at Station 759+85, staff recommends the Planning Commission decides to grant a variance to the minimum tree retention standards, staff recommends the Planning Commission determine the minimum number of retention trees they will require be retained. In addition, if the Planning Commission grants a variance to allow the applicant to not retain the minimum number of trees, staff recommends the Planning Commission require that all new landscaping on the property be native species or water-efficient species acclimated to the Willamette Valley (see the Water-Efficient Plants for the Willamette Valley booklet). The applicant shall update the Preliminary Planting Plan to detail native species or water-efficient plants acclimated to the Willamette Valley, consistent with the conservation benchmarks in the City of Sandy 2016 Water Management and Conservation Plan.~~

118. With regards to Tree #28, the applicant shall explore whether it is possible to construct a retaining wall near Tree #28 to limit root zone disturbance to less than 25 percent and limit grade changes and any construction to at least 14 feet from Tree #28 (see the example markup on sheet L2.1 in Attachment 2 of the third-party arborist review). If this is possible, Tree #28 could be adequately protected and counted as a retention tree. If this is not possible, the applicant shall mitigate for Tree #28 by planting two (2) mitigation trees on the subject properties. ~~With regards to Trees #4, 4.1, 5, 7, 10, and 11, †~~The applicant shall mitigate for Trees #4, 4.1, 5, 7, 10, and 11 at a minimum 2:1 ratio. This will require planting (or paying a fee in lieu of mitigation for) 12 mitigation trees. The required landscape buffer along Highway 26 will need to be relocated and planted per Section 17.90.120(F). As discussed in Section 17.90.120(F) of this document, this will include planting nine (9) trees within the relocated landscape buffer.  
~~-either:~~

~~A. Retain existing Trees #4, 4.1, 5, 7, 10, and 11 as retention trees. This will require adequately protecting the trees throughout construction such that they remain healthy and likely to grow to maturity. Tree protection fencing will be required at the critical root zone of 1 foot per 1 inch DBH, with allowance for up to 25 percent impact to the critical root zone provided there is no encroachment into the minimum root protection zone of 0.5 feet per 1 inch DBH.~~

~~B. Mitigate for Trees #4, 4.1, 5, 7, 10, and 11 at a minimum 2:1 ratio. This will require planting (or paying a fee in lieu of mitigation for) 12 mitigation trees. If the applicant chooses this option, the required landscape buffer along Highway 26 will need to be relocated and planted per Section 17.90.120(F). As discussed in Section 17.90.120(F) of this document, this will include planting nine (9) trees within the relocated landscape buffer.~~

~~108.119.~~ This finding analyzes the ~~potential~~ need for mitigation trees. Based on whether or not Tree #28 can be adequately protected and retained, ~~and whether the applicant chooses option A or B,~~ the applicant ~~may will~~ need to mitigate for ~~one or more~~ required retention trees, which could result in up to 14 required mitigation trees. These mitigation trees will need to be planted on the subject properties and located such that they can grow to maturity. If there is insufficient space to plant the required number of mitigation trees, the City may require a fee-in-lieu of mitigation tree for one or more required mitigation trees at \$500 per tree.

As required by Section 17.102.70(A), mitigation trees are required to be native species, and are typically planted “like for like.” Five of the six retention tree candidates are evergreen conifers (2 Colorado blue spruce, 2 Doug firs, and a Norway spruce) and the sixth is a large native deciduous tree (a bigleaf maple). Of the four (4) potential retention candidates, one is an evergreen conifer, one is an evergreen palm, and two are large deciduous trees. Thus, a minimum of 10-12 of the mitigation trees would need to ~~be~~ large native evergreen trees, such as Alaska yellow cedar, incense cedar, Douglas fir, or western hemlock, and the remaining 2-4 mitigation trees would need to be large native deciduous trees, such as bigleaf maple or red alder. Staff analyzed the proposed development on both subject properties and determined ~~the following in relation to the location of~~ there is insufficient space on Tax Lot 902 to plant potential mitigation trees.

~~A. Based on an analysis of the proposed site and landscape plans for the mixed-use development site (Tax Lot 902), staff determined that if mitigation trees were to be planted on the flag lot (Tax Lot 902), they would need to be placed within the proposed 1,785 square foot open lawn area in the northwest corner of the flag lot in order to ensure sufficient soil volume and planting space, and to reduce potential future conflicts with built structures or other development. If the applicant needs to plant mitigation trees on Tax Lot 902, the mitigation trees shall be planted in the 1,785 square foot open lawn area in the northwest corner of the lot. The third-party arborist (Exhibit R) reviewed the proposed mixed-use development site and landscaping plans and noted there is one black gum (*Nyssa sylvatica*) proposed in that location, which has a 20 to 30 foot wide mature crown spread. That leaves a remaining planting space of approximately 55 to 60 linear feet. Based on that analysis, the third party arborist recommends no more than one to two large, native, evergreen trees to be planted in the 1,785 square foot open lawn area to avoid excessive competition over time between trees growing in that location. In addition, there is a proposed stormwater conveyance line that bisects the proposed open lawn area. The applicant shall plant no more than two (2) of the required mitigation trees within the 1,785 square foot open space area in the northwest corner of Tax Lot 902.~~



~~B.A. Any remaining required mitigation trees would either need to be planted on Tax Lot 1000 or the applicant would need to pay a fee in lieu of mitigation tree at \$500 per tree.~~ The only non-developed area on Tax Lot 1000 that could accommodate mitigation trees is the northern portion of the site, north of the proposed parking lot. While there appears to be sufficient space to accommodate planting some mitigation trees, there is also a stormwater conveyance line that is proposed to enter the northern portion of Tax Lot 1000 from the east and then turn north, continuing through the northern portion of Tax Lot 1000 and exiting at the north property line. ~~If the applicant needs to plant additional mitigation trees on Tax Lot 1000, the trees shall be planted on the northern portion of Tax Lot 1000 and t~~ **The applicant shall submit analysis from the project arborist or third-party arborist detailing that evaluating the mitigation tree planting potential for the northern portion of Tax Lot 1000, including potential impacts from the stormwater conveyance line as well as a determination of how many large evergreen mitigation trees the area can accommodate based on has sufficient soil volume and planting space ~~to accommodate the necessary number of mitigation trees (large native evergreens).~~ If the applicant is unable to provide sufficient soil volume and planting space for the necessary number of mitigation trees, the applicant shall pay a fee-in-lieu of mitigation tree at \$500 per tree for the number of mitigation trees the site cannot support.**

All proposed mitigation trees will need to be kept alive and healthy. To help maximize the health and survival of the mitigation trees in the future, **the applicant shall adhere to the following conditions:**

- The applicant shall aerate and amend the soil prior to planting the mitigation trees and shall submit documentation from the project landscaper stating that the soil has been amended and aerated prior to planting the mitigation trees.
- The applicant shall not anchor anything to the mitigation trees, compact the soil under the dripline, or otherwise harm or damage the mitigation trees.
- The mitigation trees shall be a minimum of 5 feet in height at time of planting and planted per the City of Sandy standard planting detail. All ties and burlap shall be removed from the root ball prior to planting. If the burlap cannot be completely removed from the root ball without compromising the integrity of the root ball, the burlap shall be removed from at least the top one third of the side of the root ball. If the mitigation trees are staked, the applicant shall use loosely tied twine to tie the trees to the stake and the twine shall be removed after the first growing season but no later than one year from being planted.
- The mitigation trees shall be adequately watered for at least the first three dry seasons (summers). To help ensure proper watering, the applicant shall install an irrigation system, such as drip-line irrigation.

~~109.120.~~ There are also multiple existing trees on the adjacent properties to the south (Tax Lot 900) and east (Tax Lots 500 and 600) of Tax Lot 902 that will be retained; however, due to their proximity to the shared property line with Tax Lot 902, development of Tax Lot 902 will impact the root systems of these trees. Negative impacts to these existing trees on adjacent properties should be minimized to the greatest extent practicable. The third-party

arborist report (Exhibit R) identifies 21 trees on adjacent properties that are proposed to be retained and protected with development (highlighted in green on Attachment 1 and 2 of the third-party review). The third-party arborist reviewed the impact of the [applicant's original proposal and](#) proposed construction adjacent to these with the trees' critical root zones (1 foot per 1-inch DBH) and minimum root protection zones (0.5 feet per 1-inch DBH) as detailed in Figure 1 of the third-party review and determined that there are 12 trees on neighboring properties that will not be able to meet the minimum trees protection zone requirements as detailed in Figure 1. The third-party review outlines ~~the following~~ recommendations to protect the neighboring trees in addition to the protection measures outlined in the applicant's arborist report: [however, based on the applicant's updated site layout, some of the third-party arborist's recommendations are no longer relevant.](#)

- ~~**Trees 2.1, 2.3, and 13.2:** Consider shifting the pedestrian pathway so it is directly adjacent to the driveway alignment at the driveway entrance adjacent to trees 2.1 and 2.3. Also, consider shifting the entire driveway further from all three trees if allowed by ODOT. If the applicant chooses to locate the driveway along the shared property line, the applicant shall update the Plan Set to detail the pedestrian walkway so it's directly adjacent to the driveway alignment at the driveway entrance adjacent to Trees #2.1 and 2.3.~~
- **Tree 15:** Consider locating utilities under the sidewalk or driveway so they are further from the tree. **The applicant shall update the Utility Plan to locate utilities under the sidewalk or driveway so they are further from Tree #15.**
- **Trees 21, 23, 24, 25, and 26:** Trees 21, 24, 25, and 26 are nuisance species (sweet cherry, *Prunus avium*). Consider discussing removal with the tree owner rather than protecting this low value species.
- **Trees 29, 31, and 32:** These trees have the greatest potential to be impacted based on the sizes of the root zones and proximity of grading or retaining walls. Consider whether a retaining wall could be used to prevent grading within the typical minimum construction setback radius of tree 29. For trees 31 and 32, consider removing the parking space closest to the tree and shifting the retaining wall to the edge of the parking lot and driveway access to avoid the typical minimum construction setback radii of the trees. **The applicant shall consider whether a retaining wall could be used to prevent grading within the typical minimum construction setback radius of Tree #29. For Trees #31 and 32, the applicant shall consider removing the parking space closest to the tree and shifting the retaining wall to the edge of the parking lot and driveway access to avoid the typical minimum construction setback radii of the trees.**

~~110.121.~~ The Arborist Report (Exhibit H) provides recommendations for protection of retained trees including identification of the recommended tree protection zone for these trees as detailed on page 9 of the report. However, as previously stated, the arborist report is based on an outdated site plan. The third-party arborist review (Exhibit R) reviewed the proposed tree protection fencing plan and added the critical root zone and minimum root protection zones



to the page 9 plan used in the applicant's arborist report as well as to the updated site plan in Attachment 2 of the third-party report. **The applicant shall update the proposed tree protection fencing plan on page 9 of the arborist report to reflect the updated site plan. The updated tree protection plan shall address the third-party recommendation for a retaining wall to protect Tree #28 and shall detail the tree fencing such that no more than 25 percent of the critical root zone of Tree #28 is impacted with no encroachment into the minimum root zone, or, if this is not feasible and Tree #28 cannot be adequately protected, Tree #28 shall not count as a retention tree. The applicant shall install tree protection fencing as detailed on the updated tree protection fencing plan. Tree protection shall comply with the following requirements:**

- **The tree fencing shall be installed prior to any development activity on the site, including earthwork, tree removal, and erosion control measures, in order to protect the trees and the soil around the trees from disturbance.**
- **Erosion control fencing shall be installed outside of the tree protection area fencing. If erosion control is required inside the tree protection zones, use straw wattles to minimize root zone disturbance of the trees to be retained.**
- **The applicant shall not relocate or remove the tree protection fencing prior to the certificate of occupancy.**
- **The tree protection fencing shall be 6-foot-tall chain link or no-jump horse fencing supported with metal posts placed no farther than 10 feet apart installed flush with the initial undisturbed grade.**
- **The applicant shall affix laminated signs (minimum 8.5 inches by 11 inches, placed every 75 feet or less) to the tree protection fencing with the following information as recommended by the project arborist:**

**TREE PROTECTION ZONE, DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION FENCING, Please contact the City's Planning Division and the project arborist if alterations to the approved location of the tree protection fencing are necessary. Planning Division – [planning@cityofsandy.com](mailto:planning@cityofsandy.com). [Name], Project Arborist – [Phone Number/contact].**

- **No construction activity shall occur within the tree protection zone, including, but not limited to, grading, clearing, excavation, access, stockpiling, or dumping or storage of materials such as building supplies, soil, waste items, equipment, or parked vehicles.**
- **The applicant shall request an inspection of tree protection measures with City staff and the project arborist prior to any tree removal, grading, or other construction activity on the site.**
- **Up to 25 percent of the area between the minimum root protection zone of 0.5 feet per 1-inch DBH and the critical root zone of 1 foot per 1-inch DBH may be able to be impacted without compromising the tree, provided the work is monitored by a qualified arborist.**
- **The applicant shall retain an arborist on site to monitor any construction activity within the critical root protection zones of the retention trees or trees on**

adjacent properties that have critical root protection zones that would be impacted by development activity on the subject property.

- **Prior to receiving a certificate of occupancy, the applicant shall submit a post-construction arborist report prepared by the project arborist or other TRAQ certified arborist to assess whether any of the retention trees were damaged during construction. If retention trees were damaged and need to be replaced, the mitigation ratio shall be 4:1 achieved through planting mitigation trees and/or paying a fee in lieu of mitigation tree as determined by staff.**

~~111~~.122. The applicant did not provide specific information regarding how the trees proposed for removal with this application would be felled. **The applicant shall have the trees felled such that they do not negatively impact existing trees that will remain either on the subject properties or the adjacent properties. Tree removal shall be completed without the use of vehicles or heavy equipment in the tree protection zone. Removal of any trees from within the critical root zones of protected retention trees or existing trees on adjacent properties shall be completed under the supervision of the project arborist and the applicant shall fell the trees to be removed away from the trees to be retained so they do not contact or otherwise damage the trunks or branches of the trees to be retained.**

~~112~~.123. The applicant did not indicate if there are nests in the trees proposed for removal. **If the trees are removed during prime nesting season (February 1- July 31), the applicant shall check for nests prior to tree removal. If nests are discovered, the applicant shall delay tree removal until after the nesting season or shall hire a professional to relocate the nests to an appropriate nearby location, provided the species using the nest is not invasive.**

~~113~~.124. The applicant's submitted Arborist Report (Exhibit H) and the third-party arborist review (Exhibit R) include recommendations for additional protection measures related to tree removal as well as tree protection recommendations for the trees to be retained. **The applicant shall adhere to recommendations contained in the arborist report and third-party arborist review including the following:**

- The project arborist shall be onsite during excavation within the critical root zones of retained Trees # 13.2, 14, 15, 21, 23, 24, 25, 26, 28, 29, 31, and 32.
- The project arborist shall evaluate and oversee the proper cutting of roots with sharp cutting tools. If many significant roots are encountered during excavation in the zones highlighted in Appendix 5 of the arborist report, an alternative layout for areas requiring excavation should be considered to maintain the health and safety of retained trees. Alternate methods of construction may also be necessary for the preservation of significant roots of retained trees. Other construction methods include but are not limited to bridging over significant roots, constructing sidewalks on top of grade over landscape fabric without excavation, and using post and beam construction instead of conventional footing foundations within the critical root zone.

- The arborist report (with updates as required) and the third-party arborist review shall be shared in their entirety to the project team, including contractors performing demolition and concrete work.
- The applicant shall adhere to the tree protection specifications contained in Appendix 3 of the arborist report (pages 4-6) including requirements before construction begins, during construction, and after construction.

**~~114.125.~~ 125. To ensure protection of the required retention and mitigation trees, the applicant shall record a tree protection covenant specifying protection of the approved retention and mitigation trees on the subject properties and limiting removal without submittal of an Arborist's Report and City approval. The covenant shall detail the species and locations of the mitigation trees and retention trees as well as the critical root zones of each retention tree at 1 foot per 1-inch DBH. This covenant shall be finalized after the post-construction arborist report.**

## **LANDSCAPING AND SCREENING – Chapter 17.92**

~~115.~~126. Section 17.92.10 contains general provisions for landscaping. As required by Section 17.92.10(C), trees over 25-inches circumference measured at a height of 4.5 feet above grade are considered significant and should be preserved to the greatest extent practicable and integrated into the design of a development. Trees to be retained shall be protected from damage during construction by a construction fence located five feet outside the dripline. A 25-inch circumference tree measured at 4.5 feet above grade has roughly an eight-inch diameter at breast height (DBH). The applicant is proposing to remove a majority of the trees on the site and the proposed development will likely negatively impact existing trees on adjacent properties. Tree retention and protection are discussed in more detail in the Urban Forestry, Chapter 17.102, section of this document.

~~116.~~127. **Per Section 17.92.10(D), planter and boundary areas used for required plantings shall have a minimum diameter of five feet (two and one-half foot radius, inside dimensions). Where the curb or the edge of these areas are used as a tire stop for parking, the planter or boundary plantings shall be a minimum width of seven and one-half feet.**

~~117.~~128. Per Section 17.92.10(L), **all landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing.** Landscaping will be maintained or otherwise enforced by Code Enforcement.

~~118.~~129. Section 17.92.20 contains minimum landscaping area requirements. The subject property is zoned General Commercial, C-2. Section 17.92.20 requires that a minimum of 20 percent of the site be landscaped in the General Commercial (C-2) zoning district. The submitted Enlarged Site Plan (Exhibit YC, Sheet A1.02) details a ~~24.66~~27.21 percent landscaping area on the mixed-use development site (Tax Lot 902). ~~As a condition of approval, the applicant is required to provide additional standard sized parking spaces, which may affect the landscaping area. The applicant shall submit confirmation that the proposal meets the minimum landscaping requirement on Tax Lot 902 after all required updates are made to the Plan Set.~~ The applicant did not submit the percent landscaping for the Paola's Pizza Barn lot (Tax Lot 1000). ~~The proposal includes removal of existing landscaping on Tax Lot 1000 to accommodate a relocated access driveway. The applicant shall submit additional information on the percent landscaping on Tax Lot 1000 demonstrating that the 20 percent landscaping minimum is met.~~

~~119.~~130. Section 17.92.30 states that planting of trees is required for all parking lots with four or more parking spaces, public street frontages, and along private drives more than 150 feet long. Parking lot trees are required at 1 medium tree per 8 parking spaces, or 1 large tree per 12 parking spaces. The mixed-use development (Tax Lot 902) contains ~~72~~70 parking spaces, which requires a minimum of 9 medium trees or 6 large trees. The Preliminary Planting Plan (Exhibit Y, Sheet L2.1) details ~~10~~six (6) medium-large trees in the parking area, as well as ~~three~~four (4) small trees (Crape Myrtles). ~~Two additional trees will also need to be planted to meet the requirements of Section 17.98.120(D)~~As discussed in Section 17.98.120(D), the applicant is required to plant a major structural tree (medium-large size) south of the easternmost parking area on Tax Lot 902, which will result in a total of seven (7) medium-

large trees and four (4) small trees in the parking area of Tax Lot 902. Tax Lot 1000 contains approximately 4437 parking spaces, which requires a minimum of 6-5 medium sized parking lot trees. The Preliminary Planting Plan (Exhibit Y, Sheet L2.1) details planting 2-4 medium sized parking lot trees in the rear parking area and three (3) medium sized trees in the front parking area on Tax Lot 1000 in compliance with the code. ~~However, as previously stated, in order to be in compliance with Section 17.98.120(D), the applicant shall update the Preliminary Planting Plan to detail one major structural tree and ground cover in the landscape planters at each end of each parking bay. This will require a reconfiguration of the parking in front (south) of the existing Paola's Pizza Barn building.~~ The updated Composite Site Plan (Exhibit Y, Sheet 3) details the proposed frontage improvements along Highway 26, including the 10 foot wide planter strip with street trees placed approximately 30 feet on center and located in the northern 5 feet of the planter strip to minimize conflict with overhead powerlines. The Preliminary Planting Plan (Exhibit Y, Sheet L2.1) does not reflect the updated frontage improvements nor does it detail proposed street trees. **The applicant shall update the Preliminary Planting Plan to detail the required frontage improvements, including street trees, and the planting palette shall indicate the street tree species. If the 10-foot-wide planting strip provides insufficient space to set back the street trees such that they won't grow into the power lines, the applicant shall select short growth species to avoid conflict with overhead utilities.**

~~120.~~131. The applicant is proposing to mass grade the area of the subject properties that will be developed as detailed on the Grading and ESC Plan (Exhibit C, Sheet 7). This will remove topsoil and will heavily compact the existing soil. To maximize the success of the landscaping required to be planted, **the applicant shall aerate and amend the soil within the planting areas on the buildable portion of the site to a depth of 3 feet prior to planting required landscaping. The applicant shall submit a letter from the project landscaper confirming that the soil has been aerated and amended prior to planting required landscaping.**

~~121.~~132. Section 17.92.40 requires that all landscaping shall be irrigated, either with a manual or automatic system. The Preliminary Planting Plan (Exhibit C, Sheet L2.1) states that the irrigation system will be an "automated underground system design build by the landscape contractor." **The applicant shall submit details on the proposed automatic irrigation system with building plans. Per Section 17.92.10(L), all landscaping shall be continually maintained, including necessary watering, weeding, pruning and replacing.**

~~122.~~133. Section 17.92.50 specifies the types and sizes of plant materials that are required when planting new landscaping. Trees are typically required to be a minimum caliper of 1.5-inches measured 6 inches from grade if deciduous, or 5 feet in height if coniferous. Shrubs are required to be a minimum of one gallon in size or two feet in height when measured immediately after planting. **All trees planted on the site shall be a minimum of 1.5-inches in caliper measured 6 inches above the ground (if deciduous) or 5 feet in height (if coniferous) and shall be planted per the City of Sandy standard planting detail. Trees shall be planted, staked, and bark mulch, vegetation, or other approved material installed prior to occupancy. Tree ties shall be loosely tied twine or other soft material and shall be removed after one growing season (or a maximum of 1 year). All shrubs**

shall be a minimum of one gallon in size or 2-feet in height when measured immediately after planting.

~~123.~~134. Section 17.92.50(B) encourages the use of native plant materials or plants acclimatized to the Pacific Northwest where possible. The Preliminary Planting Plan (Exhibit C, Sheet L2.1) includes two native plants. The remaining proposed plants are not native to the Pacific Northwest but are also not nuisance species. **Staff recommends the applicant update the Preliminary Planting Plan to detail native species or water-efficient plants acclimated to the Willamette Valley. If the Planning Commission approves the applicant's request for a variance to the minimum tree retention standards, staff recommends the Planning Commission require the applicant to update the Planting Plan to detail all new landscaping as native species or water-efficient species acclimated to the Willamette Valley,** consistent with the conservation benchmarks in the City of Sandy 2016 Water Management and Conservation Plan.

~~124.~~135. Section 17.92.60 requires revegetation in all areas that are not landscaped or remain as natural areas. The applicant did not submit any plans for re-vegetation of areas damaged through grading/construction. Most of the areas affected by grading on Tax Lot 902 will be improved; however, the plans show grading on the north section of Tax Lot 1000 to accommodate the storm sewer in a portion of the site that does not contain any proposed development. **Areas where natural vegetation has been removed or damaged through grading or construction activity in areas not affected by the landscaping requirements and that are not to be occupied by structures or other improvements shall be replanted.**

~~125.~~136. Section 17.92.80 requires boundary plantings in parking, loading, and vehicle maneuvering areas to buffer these uses from adjacent properties and the public right-of-way. Parking lot buffer landscaping is discussed in further detail in Section 17.98.120 of this document.

~~126.~~137. Section 17.92.130 contains standards for a performance bond. The applicant has the option to defer the installation of trees and other landscaping for weather-related reasons. Staff recommends the applicant utilize this option rather than planting trees and landscaping during the dry summer months. Consistent with the warranty period in Section 17.92.140, staff recommends a two-year maintenance and warranty period for trees and landscaping. **If the applicant chooses to postpone tree and/or landscaping installation, the applicant shall post a performance bond equal to 120 percent of the cost of the trees/landscaping, assuring planting within 6 months. The cost of the trees shall be based on the average of three estimates from three landscaping contractors; the estimates shall include as separate items all materials, labor, and other costs of the required action, including a two-year maintenance and warranty period.**

## **PARKLAND AND OPEN SPACE – Chapter 17.86**

~~127.~~138. Section 17.86.10 includes minimum parkland dedication requirements and requires residential developments, including multi-family development, to provide parkland to serve the residents of the development. The proposed 42 multi-family units are required to provide 0.571 acres of parkland (42 units x 2 persons/units x 0.0068 per person parkland dedication factor). Per the submitted narrative (Exhibit B), the applicant proposes payment in lieu of land dedication. Section 17.86.10(C) and 17.86.40 pertain to fee in lieu of dedication. Sections 17.86.40(A-C) state that the City shall accept a fee in lieu of dedication if the land area proposed for dedication is not identified in the 2022 Parks and Trails Master Plan proposed park system or proposed trail system and if the level of service standard for mini parks described in the 2022 Parks and Trails Master Plan has been satisfied. The Parks and Recreation Director (Exhibit M) reviewed the application and code criteria and recommends a fee-in-lieu of parkland dedication. The current fee-in-lieu amount is \$869,242.00 per acre. A payment in lieu of land dedication is separate from Park Systems Development Charges (SDCs) and is not eligible for a credit of Park SDCs. **The applicant shall pay a fee in lieu of parkland dedication in the amount of \$496,337.18 (0.571 acres x \$869,242 per acre). The fee in lieu of dedication shall be paid at the time of building permit issuance for the mixed-use building.**



### **EROSION CONTROL – Chapters 15.44 and 8.04**

~~128.~~139. A separate Grading and Erosion Control Permit will be required prior to any site grading. **The applicant shall submit a grading and erosion control permit and request an inspection of installed devices prior to any additional grading onsite.**

~~129.~~140. Section 15.44.50 contains requirements for maintenance of a site including re-vegetation of all graded areas. **All erosion control and grading shall comply with Section 15.44 of the Municipal Code. The proposed development is greater than one acre which typically requires approval of a DEQ 1200-C Permit.**

~~130.~~141. **All the work within the public right-of-way and within the paved area should comply with American Public Works Association (APWA) and City requirements as amended.**

~~131.~~142. Recent development has sparked unintended rodent issues in surrounding neighborhoods. Prior to development of the site, **the applicant shall have a licensed pest control agent evaluate the site to determine if rat eradication is needed. The result of the evaluation shall be submitted to staff.**

~~132.~~143. The Assistant Public Works Director (Exhibit Q) reviewed the proposal and noted that it appears that the construction entrance is called out with a wash station on Sheet 9 of the Plan Set. **The applicant shall confirm the location and dimensions of the construction entrance.**

## RECOMMENDATION

Staff recommends the Planning Commission **approve** the proposed mixed-use development and parking lot reconfiguration request **with conditions as outlined below**.

Staff further recommends the Planning Commission **approve** the following requested variances:

- A. Type III Special Variance to Section 17.74.40(B.2) to exceed the 4-foot maximum height of a retaining wall and fence in a commercial front yard (south side). Staff recommends the Planning Commission approve a maximum wall height of 5 feet and a maximum guardrail height of 3.5 feet. The retaining wall shall be a split face block wall or alternative wall reviewed and approved by the Director and the guardrail shall be black steel or aluminum picket fence, or submit a similar alternative design to staff for review and approval. Where the fence pickets are required as a guard from falling, the space between pickets shall be less than 4 inches.
- B. Type III Special Variance to Section 17.74.40(B.4) to exceed the 8-foot maximum height of a retaining wall and fence in a commercial rear yard (north side). Staff recommends the Planning Commission review the proposed wall/guardrail height (proposed at a maximum combined height of 18.4 feet), review public testimony, and make a determination on the maximum wall height they'd support in a commercial rear yard (with a 3.5-foot guardrail on top). The retaining wall shall be a split face block wall or alternative wall reviewed and approved by the Director and the guardrail shall be black steel or aluminum picket fence, or submit a similar alternative design to staff for review and approval. Where the fence pickets are required as a guard from falling, the space between pickets shall be less than 4 inches.
- C. Type III Special Variance to Section 17.74.40(B.4) to exceed the 8-foot maximum height of a retaining wall and fence in a commercial side yard (east side). Staff recommends the Planning Commission review the proposed wall/guardrail height (proposed at a maximum combined height of 11.05 feet, but likely taller at the north end), review public testimony, and make a determination on the maximum wall height they'd support in a commercial side yard (with a 3.5-foot guardrail on top). The retaining wall shall be a split face block wall or alternative wall reviewed and approved by the Director and the guardrail shall be black steel or aluminum picket fence, or submit a similar alternative design to staff for review and approval. Where the fence pickets are required as a guard from falling, the space between pickets shall be less than 4 inches.
- D. Type III Tree Removal Variance in accordance with Section 17.102.70. Staff recommends the Planning Commission grant a variance to the minimum tree retention standards based on ODOT's requirement to locate the driveway at Station 759+85 and require retention of Tree # 28 to count as a retention tree provided the tree can be adequately protected based on the updated arborist evaluation. Staff recommends the Planning Commission require mitigation for the remaining six required retention trees, as well as any additional mitigation determined to be necessary based on the updated arborist evaluation. If the Planning Commission grants a variance to allow the applicant

to not retain the minimum number of trees, staff recommends the Planning Commission require that all new landscaping on the property be native species or water-efficient species acclimated to the Willamette Valley (see the Water-Efficient Plants for the Willamette Valley booklet), consistent with the conservation benchmarks in the City of Sandy 2016 Water Management and Conservation Plan. If the Planning Commission requires native species or water-efficient species acclimated to the Willamette Valley then the applicant shall update the Preliminary Planting Plan.

- E. Type III Special Variance to Section 17.90.160(D) to not provide 8-foot offsets every 20 feet. Staff recommends the Planning Commission approve the requested variance to Section 17.90.160(D) to not provide 8-foot-deep offsets every 20 feet. Staff recommends the Planning Commission require the applicant to provide visual interest on all four elevations as outlined in the analysis in Chapter 17.66 of this document and detailed on the Elevations (Exhibit Y, Sheets A2.01 and A2.02). Staff recommends that the applicant update the Building Elevations to include an additional four windows on the west ground floor elevation with at least two windows on each side of the gabled entry.

## **RECOMMENDED CONDITIONS OF APPROVAL**

### **A. Submit the following with the trade permits and prior to any grading or tree removal:**

1. Revise the entire plan set to make sure all sheets are consistent, and no site improvements or existing conditions proposed to remain are contradictory in the plan set, including a revision to the plan set to align the access at Station 759+85 as required by ODOT.
2. Based on the required ODOT access at Station 759+86, submit an updated Plan Set detailing the following:
  - a. A minimum 20-foot-deep landscape buffer that comprises at least 30 percent (51 feet minimum) of the combined Highway 26 frontage of the subject properties in compliance with Section 17.90.120(F). Planting shall be a mix of both deciduous and evergreen trees (nine (9) trees minimum), shrubs, and groundcover at a quantity sufficient to provide a partial buffer within two (2) years from the date they are planted. The proposed plants shall be selected from the list in Section 17.90.120(F.3). Due to concerns with Asian Long-horned Beetle, the maple species are not currently permitted; cascara, pacific dogwood, or an alternative native deciduous tree species reviewed and approved by staff shall be selected instead.
  - b. Revise the “Utility Notes” on Sheet 1 of the Plan Set to note that ODOT approval must be secured before constructing the new entrance on Highway 26 at Station 759+85.
  - c. Detail the location for the two (2) required bicycle parking spaces on Tax Lot 1000.
3. Submit updated Floor Plans and Elevations to detail the following:
  - a. An apartment directory in the lobby.
  - b. Include an additional four windows on the west ground floor elevation with at least two windows on each side of the gabled entry.
4. Submit an update Photometric Plan to detail the following:
  - a. The area ten feet beyond the property line of the premises receives no more than one-quarter of a foot-candle of light from the premises lighting system.
  - b. Detail all walkways and parking lots illuminated at 1.5 – 2.0 foot-candles.
  - c. Detail path lighting along the proposed pedestrian walkway on the south side of the mixed-use building at 1.5 – 2.0 foot-candles. To prevent impact within the critical root zones of existing trees on the adjacent property to the south (Tax Lot 900), staff recommends solar path lighting; however, if electrical conduit is installed, the applicant shall bore the conduit at a minimum depth of 18-inches under the critical root zone of the existing trees under supervision of an ISA-certified arborist.

5. Submit an updated Preliminary Planting Plan to detail the following:
  - a. A minimum 5-foot-wide (interior dimension) landscape planter with a mix of low-lying ground cover and shrubs, and vertical shrubs and trees between the proposed westernmost parking row on Tax Lot 1000 and the property to the west. The revised plan (Exhibit Y, Sheet L2.1) details this landscape planter at only 2 feet in width.
  - b. A minimum 20-foot-deep landscape buffer that comprises at least 30 percent (51 feet minimum) of the combined Highway 26 frontage of the subject properties in compliance with Section 17.90.120(F).
  - c. All proposed plants in the landscape buffer along Highway 26 shall be selected from the list in Section 17.90.120(F.3). However, due to concerns with Asian Long-horned Beetle, the maple species are not currently permitted; cascara, pacific dogwood, or an alternative native deciduous tree species reviewed and approved by staff shall be selected instead.
  - d. All new landscaping on the subject properties shall be native species or water-efficient species acclimated to the Willamette Valley, consistent with the conservation benchmarks in the City of Sandy 2016 Water Management and Conservation Plan.
  - e. Detail a mix of low-lying ground cover and shrubs and vertical shrubs and trees in the west, north, and east parking lot landscaping buffers on Tax Lot 902.
  - f. Detail one major structural tree in the landscape area south of the easternmost parking row on Tax Lot 902.
  - g. Detail the required frontage improvements, including street trees, and the planting palette shall indicate the street tree species. If the 10-foot-wide planting strip provides insufficient space to set back the street trees such that they won't grow into the power lines, the applicant shall select short growth species to avoid conflict with overhead utilities.
  - h. Additional information on the percent landscaping on Tax Lot 1000 demonstrating that the 20 percent landscaping minimum is met.
6. Submit an updated Tree Retention Plan, Arborist Report, and Planting Plan based on the following required considerations:
  - a. Consider discussing removal of Trees #21, 24, 25, and 26 (all of which are nuisance species (sweet cherries)) with the adjacent property owner rather than protecting this low value species.
  - b. The applicant shall consider whether a retaining wall could be used to prevent grading within the typical minimum construction setback radius of Tree #29. For Trees #31 and 32, the applicant shall consider removing the parking space closest to

the tree and shifting the retaining wall to the edge of the parking lot and driveway access to avoid the typical minimum construction setback radii of the trees.

- c. Include a determination of whether it is possible to construct a retaining wall near Tree #28 to limit root zone disturbance to less than 25 percent and limit grade changes and any construction to at least 14 feet from Tree #28 (see the example markup on sheet L2.1 in Attachment 2 of the third-party arborist review). If this is possible, Tree #28 could be adequately protected and counted as a retention tree. If this is not possible, the applicant shall mitigate for Tree #28 by planting two (2) mitigation trees on the subject properties.
  - d. The project arborist shall review the site plan changes on the east side of Tax Lot 902 and shall ensure the trees marked for retention will be adequately protected. Particular attention shall be paid to the location of the proposed retaining wall adjacent to Trees #31 and 32 (see sheet 3 in Attachment 2 of the third-party arborist review (Exhibit R)) and the proposed grading that potentially conflicts with the root zones of Trees #28 and 29 (see sheet 7 in Attachment 2 of the third-party arborist review (Exhibit R)).
  - e. Since ODOT is requiring the shared driveway to be located at Station 759+85, the applicant shall mitigate for Trees #4, 4.1, 5, 7, 10, and 11 at a minimum 2:1 ratio. This will require planting (or paying a fee in lieu of mitigation for) 12 mitigation trees. The required landscape buffer along Highway 26 will need to be relocated and planted per Section 17.90.120(F). As discussed in Section 17.90.120(F) of this document, this will include planting nine (9) trees within the relocated landscape buffer.
  - f. Submit analysis from the project arborist or third-party arborist evaluating the mitigation tree planting potential for the northern portion of Tax Lot 1000, including potential impacts from the stormwater conveyance line as well as a determination of how many large evergreen mitigation trees the area can accommodate based on sufficient soil volume and planting space.
  - g. If the applicant is unable to provide sufficient soil volume and planting space for the necessary number of mitigation trees, the applicant shall pay a fee-in-lieu of mitigation tree at \$500 per tree for the number of mitigation trees the site cannot support.
7. Submit an updated Tree Retention Plan and Tree Protection Fencing Plan on page 9 of the Arborist Report to reflect the following:
    - a. Updated site plan with the driveway at Station 759+85.
    - b. The updated tree protection shall address the third-party recommendation for a retaining wall to protect Tree #28 and shall detail the tree fencing such that no more than 25 percent of the critical root zone of Tree #28 is impacted with no encroachment into the minimum root zone, or, if this is not feasible and Tree #28

cannot be adequately protected, Tree #28 shall not count as a retention tree.

8. Submit a plan detailing the proposed automatic irrigation system.
9. Submit an updated Utility Plan to locate utilities under the sidewalk or driveway so they are further from Tree #15.
10. Submit additional information from an engineer providing a guarantee that stormwater from the proposed retaining walls will not cause unintended drainage to properties to the north and east of the subject site.
11. Submit an updated Retaining Wall Detail to detail a split face block wall or alternative wall reviewed and approved by the Director and a black steel or aluminum picket fence guardrail or submit a similar alternative design to staff for review and approval. Where the fence pickets are required as a guard from falling, the space between pickets shall be less than 4 inches.
12. Submit a detailed final stormwater report stamped by a licensed professional engineer for review. The calculations shall meet the water quality/quantity criteria as stated in the City of Sandy Development Code (SDC) Chapter 13.18 Standards and the City of Portland Stormwater Management Manual (SWMM) Standards that were adopted by reference into the Sandy Development Code.
13. Submit information confirming that the storm system shown is private until its outfall to the ditch inlet. New storm lines shall require a recorded easement through each property per Condition E.11.c.
14. Submit additional information from the project arborist or third-party arborist regarding the proposed stormwater conveyance line extension that evaluates impacts on offsite trees and outlines strategies to minimize negative impacts to existing trees. The applicant shall retain the project arborist or third-party arborist on site during extension of the storm line within the critical root zone of 1-foot per 1-inch DBH of the offsite trees. If any of the offsite trees need to be removed, the applicant and subject property owner shall submit a tree removal application in accordance with Chapter 17.102.
15. Submit a set of PGE utility and street/sidewalk lighting plans to design and return a SandyNet broadband deployment plan to overlay in the dry utility shared trench. SandyNet will provide requirements for layout and acceptable materials for the developer/contractor. SandyNet shall be contacted after installation of infrastructure and coordinated for onsite inspection before backfilling the common trench. Plans for SandyNet design shall be sent to Greg Brewster [gbrewster@ci.sandy.or.us](mailto:gbrewster@ci.sandy.or.us), 503-953-4604. The onsite contact for general questions and inspections will be Ron Yow, [ryow@ci.sandy.or.us](mailto:ryow@ci.sandy.or.us), 541-514-9771.
16. Submit construction documents detailing compliance with fire apparatus access and fire protection water supply requirements shall be provided to the Sandy Fire District for review and approval concurrently with building permit submittal. All construction



activities shall comply with the applicable Oregon Fire Code and the Fire Code Application Guide.

17. Submit information on the location and dimensions of the construction entrance.
18. Submit a copy of the State Highway Approach Road Permit from ODOT for access to the state highway for the proposed use to City staff.

**B. Prior to tree removal, the applicant shall complete the following and receive the necessary approvals as described:**

1. Apply for a Grading and Erosion Control Permit and detail the location of the tree protection fencing on the submitted Grading and Erosion Control Plan Set.
2. Install tree protection fencing as detailed on the updated tree protection fencing plan. The tree fencing shall be installed prior to any development activity on the site, including earthwork, tree removal, and erosion control measures, in order to protect the trees and the soil around the trees from disturbance. The tree fencing shall adhere to the following:
  - a. Erosion control fencing shall be installed outside of the tree protection area fencing. If erosion control is required inside the tree protection zones, use straw wattles to minimize root zone disturbance of the trees to be retained.
  - b. The applicant shall not relocate or remove the tree protection fencing prior to the certificate of occupancy.
  - c. The tree protection fencing shall be 6-foot-tall chain link or no-jump horse fencing supported with metal posts placed no farther than 10 feet apart installed flush with the initial undisturbed grade.
  - d. The applicant shall affix a laminated sign (minimum 8.5 inches by 11 inches, placed every 75 feet or less) to the tree protection fencing with the following information: “TREE PROTECTION ZONE, DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION FENCING, Please contact the City’s Planning Division and the project arborist if alterations to the approved location of the tree protection fencing are necessary. Planning Division – [planning@cityofsandy.com](mailto:planning@cityofsandy.com). [Name], Project Arborist – [Phone Number].”
3. Request an inspection of tree protection measures as specified in Section 17.102.50 C. with Planning staff and the project arborist. The tree protection fencing inspection shall be completed prior to any tree removal, earthwork, grading, or other development/construction activity on the site.
4. Once the tree protection fencing is approved, the applicant shall adhere to the following conditions when performing tree removal or other development activity on the site:

- a. No construction activity shall occur within the tree protection zone, including, but not limited to, grading, clearing, excavation, access, stockpiling, or dumping or storage of materials such as building supplies, soil, waste items, equipment, or parked vehicles.
- b. Up to 25 percent of the area between the minimum root protection zone of 0.5 feet per 1-inch DBH and the critical root zone of 1 foot per 1-inch DBH may be able to be impacted without compromising the tree, provided the work is monitored by a qualified arborist.
- c. Retain an arborist on site to monitor any construction activity within the critical root protection zones of the retention trees or trees on adjacent properties that have critical root protection zones that would be impacted by development activity on the subject property.
- d. The applicant shall not remove any trees that aren't marked for removal.
- e. Tree removal shall be completed without the use of vehicles or heavy equipment in the tree protection zone.
- f. Removal of any trees from within the critical root zones of protected retention trees shall be completed under the supervision of the project arborist and the applicant shall fell the trees to be removed away from the trees to be retained so they do not contact or otherwise damage the trunks or branches of the trees to be retained.
- g. If the trees are removed during prime nesting season (February 1- July 31), the applicant shall check for nests prior to tree removal. If nests are discovered, the applicant shall delay tree removal until after the nesting season or shall hire a professional to relocate the nests to an appropriate nearby location, provided the species using the nest is not invasive.
- h. The project arborist shall be onsite during excavation within the critical root zones of retained Trees # 13.2, 14, 15, 21, 23, 24, 25, 26, 28, 29, 31, and 32.
- i. The project arborist shall evaluate and oversee the proper cutting of roots with sharp cutting tools. If many significant roots are encountered during excavation in the zones highlighted in Appendix 5 of the arborist report, an alternative layout for areas requiring excavation should be considered to maintain the health and safety of retained trees. Alternate methods of construction may also be necessary for the preservation of significant roots of retained trees. Other construction methods include but are not limited to bridging over significant roots, constructing sidewalks on top of grade over landscape fabric without excavation, and using post and beam construction instead of conventional footing foundations within the critical root zone.
- j. The arborist report (with updates as required) and the third-party arborist review shall be shared in their entirety to the project team, including contractors performing demolition and concrete work.

- k. The applicant shall adhere to the tree protection specifications contained in Appendix 3 of the arborist report (pages 4-6) including requirements before construction begins, during construction, and after construction.

**C. Prior to earthwork, grading, or excavation, the applicant shall complete the following and receive necessary approvals as described:**

1. Apply and receive approval for a Grading and Erosion Control Permit and request an inspection of installed devices prior to any grading onsite. The grading and erosion control plan shall include a re-vegetation plan for all areas disturbed during construction. All erosion control and grading shall comply with Section 15.44 of the Municipal Code.
2. Install sediment fencing outside the tree protection zones. If erosion control is required inside the tree protection zones, the applicant shall use straw wattles to minimize root zone disturbance of the trees to be retained.
3. Submit proof of receipt of a Department of Environmental Quality 1200-C permit or submit confirmation from DEQ if a 1200-C Permit will not be required.
4. Request an inspection of erosion control measures. Inspections of erosion control measures by the Public Works Department shall be completed prior to any earthwork or grading being conducted onsite.
5. Prior to grading or any earthwork, have a licensed pest control agent evaluate the site to determine if rat eradication is needed. The result of the evaluation shall be submitted to staff, and if required, the evaluation shall include eradication techniques.

**D. Prior to issuance of the building permit the applicant shall pay all fees, including all system development charges and the fee in lieu of parkland dedication in the amount of \$496,337.18 (0.571 acres x \$869,242 per acre).**

**E. Prior to receiving a certificate of occupancy, the applicant shall complete all of the following improvements or provide financial assurance for their future completion:**

1. If necessary, the applicant shall record an access easement for the portion of the Highway 26 sidewalk that encroaches onto Tax Lot 902. If an easement is recorded with ODOT, the applicant shall submit a copy of the right-of-way dedication to City staff.
2. Install all required landscaping.
  - a. Aerate and amend the soil within the planting areas on the buildable portion of the site to a depth of 3 feet prior to planting the trees prior to planting mitigation trees and other landscaping. Submit a letter from the project landscaper confirming that the soil has been aerated and amended prior to planting the mitigation trees and required landscaping.

- b. Plant required mitigation trees and/or pay a fee-in-lieu of \$500 per tree for mitigation trees.
3. Install an irrigation system, such as drip-line irrigation or a sprinkler system, to water all landscaping, including trees.
4. Install all required improvements. Frontage improvements along Highway 26 shall be made in accordance with Figure 6 in the 2011 Transportation System Plan for a 40 MPH speed zone and as approved by ODOT. ADA compliance and 6-foot sidewalks shall be maintained across the frontage.
5. Install all 8,994 square feet of shared outdoor area as follows: 980 square foot off-leash dog area, 320 square foot covered gazebo (counted at 1.25 of the 256 square foot size), 263 square foot fire pit with outdoor seating, 1,198 square foot eastern outdoor lawn area, 4,146 square foot landscaped nature path connecting the eastern open lawn area to the pedestrian walkway in the flag pole, and 2,087 square foot landscaped nature area located to the east of the pedestrian walkway in the flag pole.
6. Install address identification on the building as approved by the Building Official. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property, including on a monument sign. Provide street address numbers measuring a minimum of six (6) inches high, which clearly locate the mixed-use building and its entries for patrons and emergency services. The applicant shall verify the location(s) of the address with the Building Official and emergency service providers.
7. Submit a post-construction report prepared by the project arborist or other TRAQ qualified arborist to assess whether any of the retention trees were damaged during construction. If retention trees were damaged and need to be replaced, the applicant shall apply for a tree removal permit and the mitigation ratio shall be 4:1 achieved through planting mitigation trees and/or paying a fee in lieu of mitigation tree as determined by staff.
8. Record a tree protection covenant specifying protection of the approved retention and mitigation trees on the subject properties and limiting removal without submittal of an Arborist's Report and City approval and submit a copy to City staff. The covenant shall detail the species and locations of the mitigation trees and retention trees as well as the critical root zones of each retention tree at 1 foot per 1-inch DBH.
9. An emergency vehicle access and maintenance agreement shall be deeded and recorded and a copy provided to City staff.
10. Install all required fire hydrants. Each new fire hydrant installed shall be ordered in an OSHA safety red finish and have a 4-inch non-threaded metal faced hydrant connection with cap installed on the steamer port (4 ½-inch NST x 4-inch Storz Adaptor). If a new building, structure, or dwelling is already served by an existing hydrant, the existing hydrant shall also be OSHA safety red and have a 4-inch non-threaded metal faced hydrant connection with cap installed.

11. Record the following easements with the County Recorder and submit a copy to City staff:
  - a. Cross-over access easements to the adjacent properties with state highway frontage to facilitate future shared access.
  - b. An eight-foot-wide public utility easement along the entirety of the Highway 26 right-of-way of Tax Lots 902 and 1000.
  - c. All necessary easements for offsite utilities including an easement through each property for the new stormwater conveyance line.
  - d. A 15-foot-wide sanitary sewer easement where the existing sewer line runs along the south property line of the flag portion of Tax Lot 902 or submit documentation of the existing recorded easement.

**F. General Conditions**

1. Design review approval shall be void after two (2) years from the date of the Final Order, unless the applicant has submitted plans for building permit approval.
2. All mechanical, electrical, and communications equipment shall be screened from view from all public rights-of-way and civic spaces. On-grade and above-grade electrical and mechanical equipment such as transformers, heat pumps, and central air conditioner units shall be screened with sight obscuring fences, walls, or landscaping.
3. If the applicant proposes assigned parking for the multi-family development, at least 15 percent of the total required parking spaces for the multi-family development shall be unassigned and available for use by all occupants and guests of the development.
4. Signage associated with the ADA parking spaces shall meet the head clearance distance requirement in the Building Code.
5. All parking, driveway, and maneuvering areas shall be constructed of asphalt, concrete, or other approved material. All approved parking spaces shall be clearly delineated with painted lines and the entrance and exit driveways shall be signed or marked with paint.
6. The required loading berth shall be not less than ten feet in width by 35 feet in length and shall have an unobstructed height clearance of 14 feet. The loading area shall be screened from public view from public streets and from adjacent properties. The loading area shall be delineated either by striping or use of a different material.
7. Landscaping shall comply with the following requirements:
  - a. Per Section 17.92.10(D), planter and boundary areas used for required plantings shall have a minimum diameter of five feet (two and one-half foot radius, inside dimensions). Where the curb or the edge of these areas are used as a tire stop for

parking, the planter or boundary plantings shall be a minimum width of seven and one-half feet.

- b. All trees planted on the site shall be a minimum of 1.5-inches in caliper measured 6 inches above the ground and shall be planted per the City of Sandy standard planting detail. Trees shall be planted, staked, and bark mulch, vegetation, or other approved material installed prior to occupancy. Tree ties shall be loosely tied twine or other soft material and shall be removed after one growing season (or a maximum of 1 year).
  - c. All shrubs shall be a minimum of one gallon in size or 2-feet in height when measured immediately after planting.
  - d. All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing.
  - e. Areas where natural vegetation has been removed or damaged through grading or construction activity in areas not affected by the landscaping requirements and that are not to be occupied by structures or other improvements shall be replanted.
  - f. If the applicant chooses to postpone tree and/or landscaping installation, the applicant shall post a performance bond equal to 120 percent of the cost of the trees/landscaping, assuring planting within 6 months. The cost of the trees shall be based on the average of three estimates from three landscaping contractors; the estimates shall include as separate items all materials, labor, and other costs of the required action, including a two-year maintenance and warranty period.
8. The applicant shall not anchor anything to the mitigation trees, compact the soil under the dripline, or otherwise harm or damage the mitigation trees. The mitigation trees shall be a minimum of 5 feet in height at time of planting and planted per the City of Sandy standard planting detail. All ties and burlap shall be removed from the root ball prior to planting. If the burlap cannot be completely removed from the root ball without compromising the integrity of the root ball, the burlap shall be removed from at least the top one third of the side of the root ball. If the mitigation trees are staked, the applicant shall use loosely tied twine to tie the trees to the stake and the twine shall be removed after the first growing season but no later than one year from being planted. The mitigation trees shall be adequately watered for at least the first three dry seasons (summers).
9. The applicant shall call the PGE Service Coordinators at 503-323-6700 when they are ready to start the project.
10. All franchise utilities shall be installed underground. The developer shall make all necessary arrangements with franchise utility providers.
11. An ODOT Miscellaneous Permit must be obtained for all work in the highway right-of-way.

12. Where fire apparatus access roads or a water supply for fire protection are required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except where approved alternative methods of protection are provided.
13. The applicant shall comply with all applicable Oregon Fire Code requirements. The applicant shall adhere to all Fire Marshal requirements in Exhibit N, including but not limited to the following:
  - a. The owner or owner's authorized agent shall be responsible for the development, implementation and maintenance of a written plan establishing a fire prevention program at the project site applicable throughout all phases of the construction. The plan shall address the requirements found in OFC Chapter 33 and shall be made available for review by the fire code official upon request.
  - b. A key lock box for the building shall be required to provide access to common use areas, the fire alarm control panel(s), and the fire sprinkler riser room(s). The Fire District uses KNOX brand boxes. To order a KNOX box keyed for the Sandy Fire District, please visit Sandy Fire's website for ordering information.
  - c. Knox Box Contents. When more than one key is secured in the Knox Box, each key shall be legibly identified as to its use, utilizing a round key tag that is a minimum of 1-inch in diameter. Necessary keys provided by the building owner or business owner may include: a) Main entrance door, b) Fire Alarm Control Panel, c) Alarm codes, d) Manual pull stations, e) Fire Sprinkler Control padlock/s, f) Mechanical rooms, g) Elevator control, h) Attic or roof access, and i) Any other keys necessary to access building controls.
  - d. New buildings four or more stories above grade plane, except those with a roof slope greater than four units vertical in 12 units horizontal (33.3% slope), shall be provided with a stairway to the roof.
  - e. Commercial buildings exceeding three stories or 30 feet in height shall have not fewer than two means of fire apparatus access for each building.
  - f. A minimum of one on-site fire hydrant shall be provided near the proposed mixed-use development for firefighting operations. If distances between fire hydrants exceeds 500 feet, additional on-site fire hydrants may be required along the fire apparatus access road.
  - g. Fire department connections (FDC) are required to be remote and shall be located within 100 feet of a public fire hydrant. All FDC's shall be permanently labeled with appropriate address in which it serves and shall be accessible and visible from the fire apparatus access road.



14. Downward facing, full cut-off lighting shall be required, and shall not exceed 0.25 foot candles of light at ten feet beyond the property lines. Lights shall not exceed 4,125 Kelvins or 591 nanometers to minimize negative impacts on wildlife and human health.
15. All earthwork activities to include grading, foundation excavation, site and sub-grade preparation, cut and fill slopes shall be observed and documented by a geo-technical engineer to assure compliance with IBC standards as amended by the state of Oregon and referenced as “Oregon Structural Specialty Code” (OSSC). Site grading shall not in any way impede or impound or inundate the surface drainage flow from the adjoining properties without a proper collection system. The earthwork activities shall be observed and documented under the supervision of the geotechnical Engineer.
16. All site runoff shall be detained such that post-development runoff does not exceed the predevelopment runoff rate for the 2, 5, 10 and 25 year storm events. Stormwater quality treatment shall be provided for all site drainage per the standards in the City of Portland Stormwater Management Manual (COP SWMM).
17. Successors-in-interest of the applicant shall comply with site development requirements prior to the issuance of building permits.
18. Comply with all other conditions or regulations imposed by the Sandy Fire District, or state and federal agencies. Compliance is made a part of this approval and any violations of these conditions and/or regulations may result in the review of this approval and/or revocation of approval.

**EXHIBIT A**



**General Land Use Application**

**1 page**

<b>Name of Project:</b>	
<b>Location or Address:</b>	

<b>Map &amp; Tax Lot #</b>	<b>T:</b>	<b>R:</b>	<b>Section:</b>	<b>Tax Lot (s):</b>
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<b>Request:</b>

I am the (check one)  owner  lessee of the property listed above, and the statements and information contained herein are in all respects true, complete and correct to the best of my knowledge and belief.

Applicant (if different than owner)	Owner
Address	Address
City/State/Zip	City/State/Zip
Email mark@statestreet-homes.com emily@statestreet-homes.com	Email
Phone	Phone
Signature	Signature <i>Brandon Gill</i>

Staff Use Only

File #: 22-031 DR	Date: 8/2/22	Fee: \$12,605	Planner:
Type of review:	Type I <input type="checkbox"/>	Type II <input checked="" type="checkbox"/>	Type III <input type="checkbox"/> Type IV <input type="checkbox"/>
Has applicant attended a pre-app?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, date of pre-app meeting: May 2021	

Development Services Department, 39250 Pioneer Blvd, Sandy, OR 97055, 503.489.2160



**General Land Use Application**



**1 page**

<b>Name of Project:</b>	State Street Homes Sandy-Hwy 26 Project
<b>Location or Address:</b>	No Situs, Flag lot next to 38015 Hwy 26 Sandy, OR 97055

<b>Map &amp; Tax Lot #</b>	<b>T:</b>	<b>R:</b>	<b>Section:</b>	<b>Tax Lot (s):</b> 24E14AD00902
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<b>Request:</b> Mixed use 4 story building on C-2 lot
• LEVEL 01, STORAGE/LEASING: 9,984 sf, • LEVEL 02-04, RESIDENTIAL: 10,695 sf, OVERALL = 42,069 sf
1 BED / 1 BATH - 30 UNITS, 2 BED / 2 BATH - 12 UNITS, TOTAL UNITS = 42 UNITS

I am the (check one)  owner  lessee of the property listed above, and the statements and information contained herein are in all respects true, complete and correct to the best of my knowledge and belief.

Applicant (if different than owner) State Street Homes	Owner Joycelyn Paola
Address 1233 NW Northrup St Ste 125	Address 15475 SE 262nd Ave
City/State/Zip Portland, OR 97209	City/State/Zip Boring, OR 97009
Email brandon@statestreet-homes.com	Email Mitchpaola@gmail.com
Phone 503-753-4492	Phone 503-358-3431
Signature 	Signature  <small>DocuSigned by: Joycelyn Paola 2BCCEC295B9B147B...</small>

Staff Use Only

File #:	Date:	Fee\$:	Planner:
Type of review: Type I <input type="checkbox"/>	Type II <input checked="" type="checkbox"/>	Type III <input type="checkbox"/>	Type IV <input type="checkbox"/>
Has applicant attended a pre-app? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, date of pre-app meeting:			

Development Services Department, 39250 Pioneer Blvd, Sandy, OR 97055, 503.489.2160



**Design Review - Narrative**

September 16th, 2022

New Mixed Use Development  
38015 Hwy 26  
Sandy, OR  
Zoned C-2, General Commercial

The proposed project includes the development of one 46,500 sf mixed use building with approximately 11,280 sf of mini-storage provided on the ground floor and approximately 35,208 sf of residential above. The proposed development will be accessed off of HWY 26 through a shared access easement with Paola's Pizza Barn. The building will be 4 stories in height and composed of 42 units, thirty (30) 1 bd / 1 ba units and twelve (12) 2 bd / 2 ba units. Outlined below is how the proposed projects addresses all applicable Design Standards for Site plan and Design Review

Site Plan and Design Review criteria:

- The proposed project meets all of the applicable standards within the city of Sandy's Title 17 – Development Code, the following is a summary of all the applicable design standards for a Mixed-Use Development within a C-2 (General Commercial) zone and how the proposed project satisfies these requirements

**17.44 – General Commercial, C-2**

- **17.44.10 – Permitted uses**
  - *Multi-family dwellings above a commercial business is permitted outright per 17.44.10.A.1, as is self-service storage per 17.44.10.B.i*
- **17.44.30.A – Development Requirements**
  - *Front setback: 10'-0" min., 50'-0" maximum. The proposed development is on a flag lot, and by nature, the Front setback is taken parallel to the access aisle to the lot. Due to the access of this lot being share with the adjacent tax lot 1000, the front setback is taken from the West property line as indicated on the site plan. The building is set back roughly 31'-2" from the front setback line, meeting the min./max. front setback*
  - *Landscaping: 20% minimum. The proposed development meets this standard with 27.21% of landscaping*
  - *Maximum Structure Height: 55'-0." The proposed development meets this standard with a building height of 52'-2"*

#### 17.74 – Accessory Development – Additional Provisions and Procedures

- **17.74.40.B – Fences and Windscreens, Commercial**
  - Fences in front yard: the height of a fence or retaining wall in a front yard shall not exceed four feet. Due to the topography, this standard cannot be met, retaining walls within the front set back are higher than 4'-0" in height and have a 3'-6" guardrail atop them, thus requiring a Type III Special Variance
  - Fences in side and rear yards: height of a fence or retaining wall adjacent to a side or rear yard or a side or rear property line shall not exceed eight feet. Due to the topography, this standard cannot be met. The retaining walls along the side and rear property lines have a 3'-6" guardrail atop them and are higher than 8'-0" in height, thus requiring a Type III Special Variance

#### 17.84 – Improvements Required with Development

- **17.84.30.A – Pedestrian and Bicyclist Requirements: Sidewalks shall be required along both sides of all arterial, collector, and local streets.**
  - Highway 26 is classified as a Major Arterial street, thus requiring sidewalks along both sides of the street. The proposed development will be altering the existing sidewalk and drive apron for Paolo pizza to provide joint access per ODOT standards. The modified sidewalk will be a minimum 5'-0" in width and match the existing sidewalk.
- **17.84.30.B – Pedestrian and Bicyclist Requirements: Safe and convenient pedestrian and bicyclist facilities that strive to minimize travel distance to the extent practicable shall be provided in conjunction with new development.**
  - The proposed development provides direct access from the highway to the entrance of the building with a minimum of 5'-0" wide raised sidewalk, promoting a safe and convenient path for both pedestrians and bicyclists alike.
- **17.84.40 – Transit and School Bus Transit Requirements: Development sites located along existing or planned transit routes shall, where appropriate, incorporate bus pull-outs and/or shelters into the site design**
  - While located on a transit route, the proposed development is not near any existing transit stops thus providing a bus pull-out and/or transit stop shelters is not appropriate for the frontage of this site.
- **17.84.50.B – Street Requirements: Transportation Impact Study(Dwellings), for development applications that propose dwelling units, an applicant must submit a transportation impact study.**
  - A Transportation Impact Study was performed for the proposed development and has been included with this submittal.
- **17.84.50.F – Street Requirements: Development sites shall be provided with access from a public street improved to the city standards.**

- The proposed development is accessed off of Highway 26 and the shared access with Paola Pizza is designed per ODOT's standards.
- **17.84.60.A – Public Facilities: All development sites shall be provided with public water, sanitary sewer, broadband (fiber) and storm drainage.**
  - The proposed development will be provided with all of the above.
- **17.84.100 – Mail Delivery Facilities: In establishing placement of mail delivery facilities, location of sidewalks, bikeways, intersections, existing or future driveways, existing or future utilities, right-of-way and street width, and vehicle, bicycle and pedestrian movements shall be considered.**
  - The proposed mail delivery area has been placed with all of the above in mind. The location is set immediately in front of the development and provides adequate access for pedestrians and mail carriers alike.

**17.86 – Parkland and Open Space: Multi-family developments are required to provide parkland to serve residents of those developments. The required parkland acreage to be dedicated shall be based on the following formula, required parkland dedication (acres) = (proposed dwelling units) x (persons/dwelling unit) x 0.0068 (per person park land dedication factor)**

- The proposed development requires 0.57 acres of parkland (42 x 2 x 0.0068), in which the development will provide a payment in lieu of land dedication.

**17.90.120 – Design Standards, General Commercial**

- **17.90.120.A.1 – Site Layout and Access: All lots shall abut or have access to a dedicated public street.**
  - Lot 902 has direct access to Highway 26 via a shared access easement with Paola's Pizza Barn.
- **17.90.120.A.3 – Site Layout and Access: Off-street parking shall be located to the rear of side of buildings with no portion of the parking lot located within required setbacks or within 10'-0" of the public right-of-way.**
  - Off-street parking area for the proposed mixed-use building is located to the rear side of the building. Revised parking layout for the adjacent lot 1000 is now located primary to the rear of that existing building.
- **17.90.120.A.7 – Site Layout and Access: Walkways from the public street sidewalk to the building entrance(s) are required.**
  - A walkway from Highway 26 is provided for direct pedestrian access to the West, North, and East entrances of the new mixed-use building.
- **17.90.120.B.1.a – Articulation: All elevations visible from an abutting public street or pedestrian way shall be divided into distinct planes of no more than 40 lineal feet.**
  - The North Elevation, visible from Bluff Road, provides articulation in its façade in the form of recessed balconies. No wall plane is greater than 40 linear feet, and all recessed balconies are greater than 6" in depth from the adjacent wall plane. Each balcony is at least 13'-0" in width. Each wall change provides a change in material color to provide contrasting and complementary changes within the façade. The recessed balconies and popped out exterior storage areas, supported

by exposed wood bracketing, provide pedestrian shelter along the North perimeter of the building

- **17.90.120.B.2 – Pedestrian Shelters: Buildings must incorporate pedestrian shelters**
  - Pedestrian shelters are provided along the three primary entrances along the East, North, and West facades. The upper level patios and exterior storage areas provide shelter over the front sidewalk along the North façade of the building.
- **17.90.120.B.3 – Building materials: Exterior building materials shall convey an impression of strength and durability consistent with the Sandy Style.**
  - The proposed building is consistent with Sandy’s Style with natural stone as a base for both the building and all exterior columns. The primary siding is composed of fiber cement lapped siding, fiber cement shingles and board and batten siding as an accent.
- **17.90.120.B.3.e – Building materials: Building elevations facing a public street shall incorporate at least three (3) of the features listed under 17.90.120.B.3.e**
  - The proposed North elevation that faces Bluff Road incorporates exposed natural wood color beams, brackets and trim, metal canopies and roofing, and shingles as an accent material. These features are consistent around the entire façade of the building, not just the façade that faces Bluff Road.
- **17.90.120.B.4 – Colors: Building exteriors shall comply with the following standards: permitted color include warm earth tones conforming to Color Palette in Appendix C.**
  - All proposed colors are warm earth tones in nature and are taken from Miller Paint Company’s Historic Colour Collection
- **17.90.120.C.1 – Roof Pitch, Materials, and Parapets: Except as provided in subsections 17.90.120.C.8, below, pitched (gable or hipped) roofs are required on all new buildings with a span of 50’-0” of less.**
  - The proposed building length is ~190’-0” and the width is ~69’-0”, thus this requirement does not apply. However, a gable roof is provided.
- **17.90.120.C.4 – Roof Pitch, Materials, and Parapets: Pitched roof visible from an abutting public street shall provide a secondary roof form (e.g. dormer) in the quantity of 4 for 81’-0” and greater**
  - The North roof pitch is visible via Bluff Road and ~190’-0” in length, thus provides adequate secondary roof forms to break up the span of the roof
- **17.90.120.C.5 – Roof Pitch, Materials, and Parapets: Visible roof materials must be wood shingle or architectural grade composition shingle, slate, or concrete tile. Metal with standing or batten seam may also be used conforming to the Color Palette in Appendix D**
  - The proposed roofing material is a standing seam metal, in Dark Brown, which conforms to the Color Pallett in Appendix D
- **17.90.120.C.6 – Roof Pitch, Materials, and Parapets: All roof and wall-mounted mechanical, electrical, communications and service equipment, including satellite dishes and vent pipes, shall be screened from view from all adjacent public rights-of-way and civic spaces by parapets, walls or by other approved means.**
  - All rooftop penetrations (i.e. vent pipes) and wall penetrations (i.e. venting for exhaust fans) will be will have covers and/or be hooded and be a similar color to the adjacent building material so as to blend in with the building. There will be no other rooftop/wall-mounted mechanical, electrical, or communication systems then what is noted above.
- **17.90.120.D.1 – Building Orientation and Entrances: Buildings shall be orientated to a public street or civic space. This standard is met when at least 50% of the subject site’s**



*street frontage is compromised of building(s) placed within 20'-0" of a sidewalk, walkway or civic space.*

- The proposed site is a flag lot and thus the "frontage" of this site is compromised of the drive aisle and outdoor space.
- **17.90.120.D.3 – Building Orientation and Entrances: Ground floor spaces shall face a public street or civic space and shall be connected to it by a direct pedestrian route (i.e. avoid out-of-direction travel).**
  - Due to the proposed site being a flag lot, orientating the main entrance to Highway 22 is not possible. However, direct pedestrian access is granted from Highway 22 to the West and North ground floor entrances of the building.
- **17.90.120.D.5 – Building Orientation and Entrances: For Structures greater than 40,000 gross square feet, there shall be at least two (2) clearly articulated public entrances on the structure; at least one such entrance shall be visible from a public street and connected to that street by a pedestrian sidewalk or walkway**
  - The proposed building is roughly 46,500 sf structure, and thus requires a minimum of 2 articulated entrances. The proposed project proposes three (3) articulated entrances, one on the West, one on the North and one on the East facade of the building.
- **17.90.120.D.7 – Building Orientation and entrances: Buildings shall provide at least one (1) elevation where the pedestrian environment is "activated." An elevation is "activated" when it meets the window transparency requirements in subsection 17.90.120.E, below, and contain a public entrance with a pedestrian shelter extending at least five (5) feet over an adjacent sidewalk, walkway, or civic space.**
  - The proposed building provides an activated elevation along the North Façade of the building. The North façade provides an emphasized public entrance, 5'-0" of pedestrian shelter, and meets the window transparency requirements. See below how the proposed activated elevations meets subsection 17.90.120.E.2.
- **17.90.120.D.8 – Primary entrances must be architecturally emphasized and visible from the public right-of-way and shall be sheltered with a canopy, overhang, or portico with a depth of at least 5'-0"**
  - The proposed building provides three primary entrances, one on the West façade, one on the North façade and one on the East façade. Due the nature of the lot being a flag lot and not having frontage along a public right-of-way, no primary entrance is entirely visible from a public right-of-way. The East primary entrance may be visible from Highway 22, and the North primary entrance may be visible from Bluff Blvd. Regardless, all primary entrances are articulated from secondary entrances by a separate roof structure from the building that provides at least 5'-0" of shelter.
- **17.90.120.E.2 – Ground Floor Windows: the ground floor elevation of all new buildings shall contain ground floor display areas, windows, and doorways on the "activated" frontage.**
  - Buildings greater than 30,000 SF must provide a minimum of 20% glazing on the ground floor. The ground floor of the North façade is 1,693 SF, thus requiring a minimum of 339 SF of activated glazing. The proposed ground floor glazing for the North façade provides 349 SF of glazing, exceeding this standard. All ground floor glazing is made of clear glass, vertically orientated, and provided with trim surrounds with a depth of 3 ½"

- **17.90.120.E.3 – Upper Floor Windows:** *the reviewing authority may require buildings exceeding 20'-0" in height of provide upper-story windows along the "activated" frontage. Windows shall be square or vertically oriented. Individual window units shall not exceed five (5) feet by seven (7) feet. Any portion of a window unit with a dimension exceeding four (4) feet shall be divided into smaller panes. At least half of all the windows in upper floors shall be made up of glass panes with dimensions no greater than two (2) feet by three (3) feet, unless approved by variance or adjustment. Upper story windows that have one (1) foot by (1) foot grid inside double pain glass are appropriate and are encouraged. Window trim and moldings shall be compatible with those used on the ground floor*
  - The proposed windows on the upper floors meet the above requirements as all windows are vertical in nature, individual windows are less than 5'-0" in width and less than 7'-0" in height, all windows have internal grids to break up the window pane, and all windows are provided with a 3 ½" trim surround.
- **17.90.120.F.2 – Landscaping and Streetscape Design:** *parcels abutting Highway 26 shall provide a landscape buffer compromising not less than 30% of the highway frontage, to a depth of not less than 20'-0"*
  - The lot is a flag lot in nature and provides a 67'-8" of frontage through a shared easement along Highway 26. The proposed site plan provides 39'-0" of landscape frontage, for a total of 58%
- **17.90.120.G.1-6 – Civic Space:** *Not less than three (3) percent of the building area of every development shall be improved as a civic space. Civic space improvements may include plazas, private extensions of sidewalks, walkways, public art, pedestrian-scale lighting, bus waiting areas, tourist amenities or similar pedestrian amenities. Priority locations for civic spaces are those areas with the highest pedestrian activity. Civic spaces should about a public right-of-way or otherwise be connected to and visible from a public right-of-way by a sidewalk or approved pedestrian access way.*
  - The proposed building is 46,500 sf, thus requiring 1,395 sf of Civic Space. The project proposes a 1,590 sf outdoor public plaza as Civic space located towards the West side of the building. Due to the property being on a flag lot, having a civic space directly abut a public right-of-way is not possible, however, the location was chosen for its pedestrian connectivity to highway 22 via the new sidewalk that connects our site to the highway. The Civic space is a public plaza with various raised planters and public benches.
- **17.90.120.H.1-3 – Lighting:** *To promote business vitality, public safety and aesthetics through effective outdoor lighting, consistent with the Sandy Style*
  - All walkways, parking lots, and building entrances will be illuminated at a minimum of 1-5 – 2.0 foot candles
- **17.90.120.J.1-4 – External Storage and Screening:** *To promote land use compatibility and aesthetics, particularly where development abuts public spaces*
  - Trash collection and recycling storage areas are not visible from any public rights-of-ways or civic spaces. While the proposed trash and recycling storage are is exterior to the building, it is both enclosed and covered in a manor that reflects the aesthetics of the primary building on-site.

**17.90.160 – Additional Requirements, Multifamily Developments**

- **17.90.160.A.1 – Roofs shall be gabled or hip type roofs (minimum 3:12) with at least a 30" overhang and using shingles or similar roofing materials. Alternatives may be approved**

*where the developer can demonstrate that abutting structures or the majority of structures within 300 feet have roofs similar to what is proposed*

- The roof meets this standard by taking on a gable roof form with a slope of 6:12. As the project is a mixed use building that falls in a C-2 zone, the roofing material is proposed to be standing seam metal roof to match that of other commercial buildings in the area.
- **17.90.160.B.1 – Entries shall be sheltered with an overhang, portico or recessed entry or otherwise be articulated with an architecturally detailed entry**
  - All three primary ground floor entrances are sheltered with a separate roof structure to articulate the importance of these entries. These shelters provide 8' – 12' of shelter.
- **17.90.160.E.2 – A separate outdoor area of not less than 48 square feet in the form of balconies, terraces or porches shall be provided for each dwelling unit located above the ground level**
  - Each upper story dwelling unit is accompanied by a balcony. The balcony SF range from 49.5 sf to 54.25 sf.
- **17.90.160.G – Enclosed storage areas shall be required and may be attached to the exterior of each dwelling unit to accommodate garden equipment, patio furniture, barbecues, bicycles, etc.**
  - Each unit is accompanied by an exterior storage closet off of its balcony. The one (1) bedrooms exterior storage closets range from 25.88 sf to 27 sf, while the two (2) bedroom units come equipped with a 39 sf exterior storage closet.
- **17.90.160.I – Multi-family residential development shall provide usable recreation areas for developments containing more than 5 dwelling units at a rate of 200 SF per dwelling unit. Such areas shall be counted as part of the required landscaping.**
  - The proposed projects has a total of 42 units on-site, requiring 8,400 sf of outdoor rec area. The proposed outdoor rec areas include a fenced in dog park (705 sf), an outdoor seating/fire pit area (285 sf), open lawn to the East and North of the building (2,468 sf), a covered gazebo (320 sf), landscaped nature path behind the building (2,860 sf) and a landscaped nature sidewalk path connecting the back nature path to the adjacent highway (2,087 sf), for a total of 8,725 sf of outdoor rec area.

#### **17.92 – Landscape and Screening General Standards**

- **17.92.20 – Minimum Improvements-Landscaping and screening: the minimum landscaping area for a C-2 zoned site is 20%**
  - *The proposed development exceeds this minimum requirement by providing 27% landscaping*
- **17.92.30 – Required Tree Plantings: Planting of trees is required for all parking lots with four or more parking spaces.**
  - *The proposed development has 72 parking stalls dedicated to the residential development and 33 relocated parking stalls for Paolo Pizza. The development requires either 13 Medium trees or 9 large trees, or a combination of. The proposed development meets this standard with 10 large parking trees spread throughout the parking lot.*

- **17.92.100 – Screening of service facilities: site-obscuring shrubbery or a berm, wall or fence shall be placed along a property line between residential and commercial and industrial zones and around unsightly areas such as a trash and recycling areas.**
  - The proposed development provides screening of exterior trash areas by the means of a wood slat wall, 6'-0" in height.

#### **17.98 – Parking, Loading, and Access Requirements**

- **17.98.20 – Off-Street Parking Requirements: In addition to 1.5 stalls per studio/1 bed and 2 stalls per units with 2 beds or greater, parking for employees shall be provided based on one space per two employees for the largest shift**
  - With thirty (3) 1 bed units, twelve (12) 2 bed units, and a max of two (2) employees working at once, the proposed development exceeds this standard with a total of 72 parking spaces. 1 bicycle parking stall is required per unit. The proposed development provides 20 bicycle parking stalls in a covered outdoor bicycle area and 8 bicycle racks on each residential floor for a total of 44 bicycle parking stalls for the development.
- **17.98.50 – Setbacks: Required parking shall not be located in a required front or side yard setback area.**
  - The proposed project meets this requirement
- **17.98.60 – Design, size and access: All off-street parking facilities, vehicular maneuvering areas, driveways, loading facilities, accessways, and private streets shall conform to the standards set forth in this section. A standard space shall be 9'-0" x 18'-0", and compact stalls shall be 8'-0" x 16'-0" with no more than 40% of the spaces being compact.**
  - The proposed development meets these standards
- **17.98.120 – Landscaping and Screening: Screening of all parking areas containing four or more spaces and all parking areas in conjunction with an off-street loading facility shall be required in accordance with zoning district requirements and chapter 17.98. Parking facilities shall include landscaping to cover not less than 10% of the area devoted to parking facilities, parking areas shall be divided into bays of not more than 20 spaces. Between, and at the end of each parking bay, there shall be planters that have a minimum width of 5'-0" and a minimum length of 17'-0." Wheel stops, bumper guards, or other methods to protect landscaped areas and pedestrian walkways shall be provided.**
  - The proposed development meets this standard.
- **17.98.130 – Paving: Parking areas, driveways, aisles and turnarounds shall be paved with concrete, asphalt or comparable surfacing.**
  - The proposed development meets this standard.
- **17.98.140 – Drainage: Parking areas, aisles and turnarounds shall have adequate provisions made for the on-site collection of drainage waters to eliminate sheet flow of such waters onto sidewalks, public right-of-way and abutting private properties.**
  - The proposed development meets this standard.

- **17.98.150 – Lighting:** *Artificial lighting shall be provided in all required off-street parking areas. Lighting shall be directed into the site and shall be arranged to not produce direct glare on adjacent properties*
  - *The proposed development meets this standard.*
- **17.98.160.A – Bicycle Parking Facilities, Locations:** *Bicycle parking shall be located on site, convenient to the primary building entrances, and have direct access to both the public right-of-way and to the main entrance of the primary structure*
  - *The proposed bicycle storage rooms and bicycle enclosure on the site meets these requirements*
- **17.98.160.B - Bicycle Parking Facilities, Bicycle Parking Space Dimensions:** *each required bicycle parking space shall be at least 2'-0" x 6'-0" with a minimum vertical clearance of 7'-0" and an access aisle of 5'-0"*
  - *The proposed development meets these standards*
- **17.98.160.C - Bicycle Parking Facilities, Security:** *Bicycle parking facilities shall offer security in the form of either a lockable enclosure in which the bicycle can be store in a stationary object (i.e a "rack") upon which the bicycle can be located, racks shall accommodate both cable and u-shaped locks, racks shall be securely anchored to the ground, and all outdoor bicycle parking facilities shall be provided with adequate shelter.*
  - *Both the proposed indoor and outdoor bicycle parking meet this standards.*

#### **17.102 – Urban Forestry**

- **17.102.20.A – Applicability,** *no person shall cut, harvest, or remove trees 11 inches DBH or greater without first obtaining a permit and demonstrating compliance with this chapter*
  - *The proposed development proposes the removal of 6 trees with a DBH of 12-24." The applicant will obtain a permit for the removal of these trees.*
- **17.120.30.A.1 – Procedures and application requirements:** *A person who desires to remove trees shall first apply for and receive one of the following tree cutting permits before tree removal occurs*
  - *The proposed development is removing fewer than 50 trees, and thus requires a Type I Tree removal permit*
- **17.102.50.A – Tree retention:** *The landowner is responsible for retention and protection of trees required to be retained as specified*
  - *The proposed development is made up of 1.46 acres of land, requiring a minimum of 4.38 trees with 11" DBH or greater to be retained. This requirement is met through the retention of 7 trees on the property that are 11" DBH or greater.*

We believe that through the findings above, the proposed project meets all applicable Site and Design approval criteria for a Type II Site and Design Plan Review.

Sincerely,

*Mercedes Butchas*

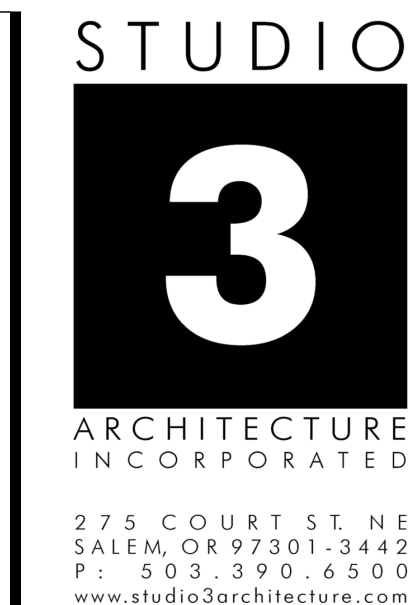
Mercedes Butchas  
Studio 3 Architecture, Inc  
275 Court Street NE  
Salem, Oregon 97301  
[mercedes@studio3architecture.com](mailto:mercedes@studio3architecture.com)  
503-390-6500



# SITE PLAN & DESIGN REVIEW

# MIXED USE DEVELOPMENT

38105 Hwy 26, Sandy OR

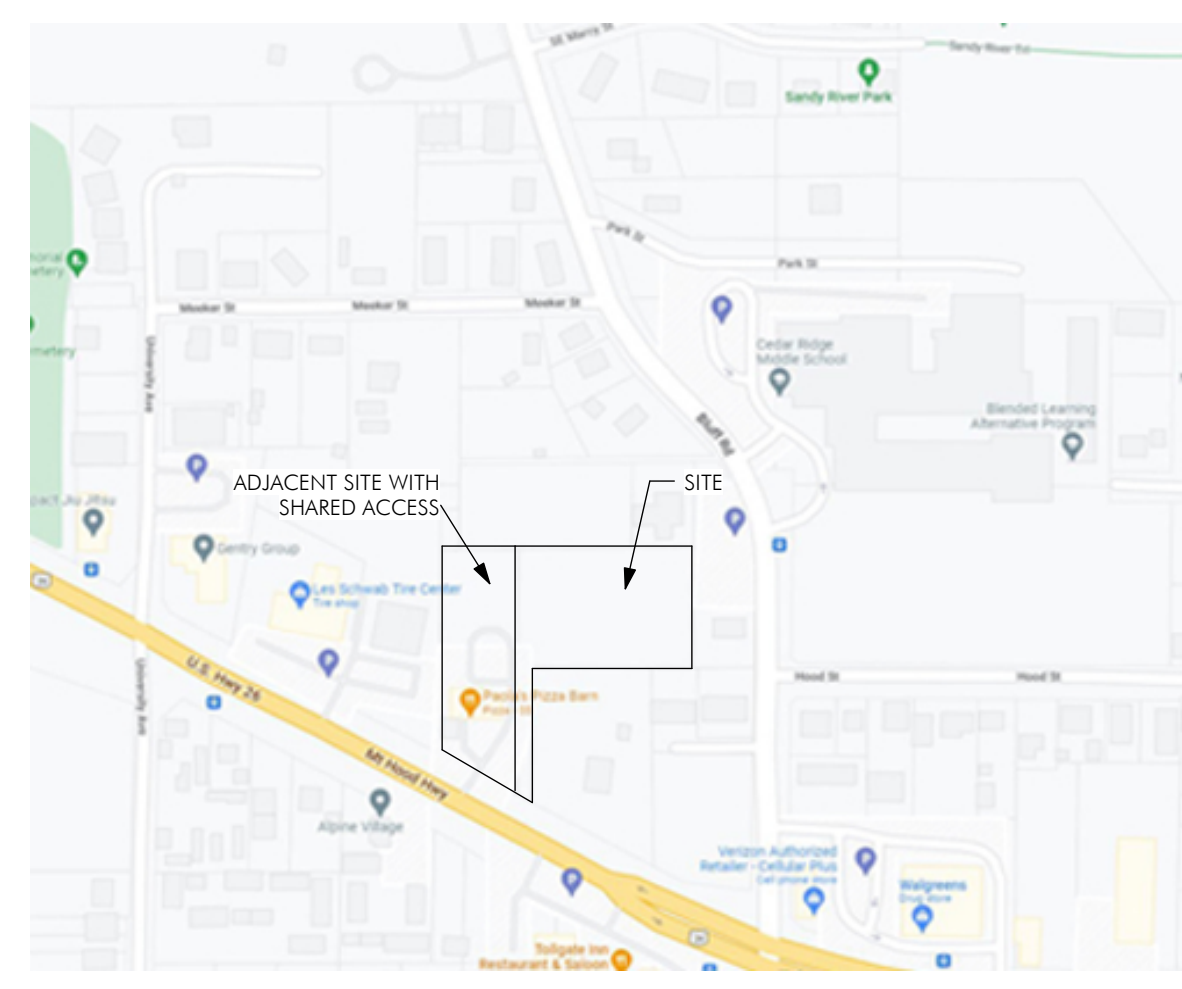


IN THE EVENT CONFLICTS ARE DISCOVERED BETWEEN THE ORIGINAL SIGNED AND SEALED DOCUMENTS PREPARED BY THE ARCHITECTS AND/OR THEIR CONSULTANTS, AND ANY COPY OF THE DOCUMENTS TRANSMITTED BY MAIL, FAX, ELECTRONICALLY OR OTHERWISE, THE ORIGINAL SIGNED AND SEALED DOCUMENTS SHALL GOVERN.

PROJECT # 2021-146  
DATE: 07/29/2022

REVISIONS

## VICINITY MAP:



## AERIAL PHOTO:



## DRAWINGS LIST:

- GENERAL
- G0.01 COVER SHEET
- CIVIL
- C1 COVER SHEET AND NOTES
- C2 EXISTING CONDITIONS AND DEMO PLAN
- C3 COMPOSITE SITE PLAN
- C4 ENTRY UTILITY PLAN
- C5 SITE UTILITY PLAN
- C6 STORMWATER EXTENSION PLAN
- C7 GRADING AND ESC PLAN
- C8 WALL CROSS SECTIONS
- C9 ENTRY GRADING PLAN
- C10 CIVIC AREA GRADING PLAN
- C11 ESC NOTES AND DETAILS
- C12 SITE CIRCULATION PLAN
- LANDSCAPE
- L1.1 EXISTING TREE INVENTORY
- L2.1 PRELIMINARY PLANTING PLAN
- ARCHITECTURAL
- A1.01 SITE PLAN
- A1.02 ENLARGED SITE PLAN
- A1.03 TRASH ENCLOSURE
- A1.04 BICYCLE ENCLOSURE
- A1.05 GAZEBO
- A1.21 FLOOR PLAN - LEVEL 01
- A1.22 FLOOR PLAN - LEVELS 02-04
- A1.23 FLOOR PLAN - ROOF
- A2.01 ELEVATIONS
- A2.02 ELEVATIONS

## PROJECT TEAM:

**OWNER:**  
State Street Homes, Inc.  
Brandon Gill  
1233 NW Northrup St. #135  
Portland, OR 97209  
P: 503.954.8545  
E: Brandon@statestreet-homes.com

**ARCHITECT:**  
STUDIO 3 ARCHITECTURE, Inc.  
Gene Bolante  
275 Court Street St. NE  
Salem OR 97301  
P: 503.390.6500  
E: Gene@studio3architecture.com

**LANDSCAPE:**  
Laurus Designs, LLC  
Lauara Antonson  
1012 Pine St.  
Silverton, OR 97381  
P: 503.784.6494  
E: laura@laurusdesigns.com

**CIVIL ENGINEER:**  
Firwood Design Group  
Kelli Grover  
359 E. Historic Columbia River HW  
Troutdale, OR 97060  
P: 503.668.3737  
E: kg@firwooddesign.com

## SYMBOL LEGEND:

<b>ELEVATION DATUM:</b>	<b>WINDOW TYPE:</b>
<ul style="list-style-type: none"> <li>100.00 F.F.E.</li> <li>ELEVATION DATUM LOCATION:</li> </ul>	<ul style="list-style-type: none"> <li>REFER TO WINDOW ELEVATIONS SHOWN ON DRAWINGS AS 1X</li> </ul>
<b>SECTION REFERENCE:</b>	<b>DOOR NUMBER:</b>
<ul style="list-style-type: none"> <li>FILLED ARROW DENOTES BUILDING SECTION</li> <li>OPEN ARROW DENOTES WALL SECTION/DETAIL</li> <li>DETAIL NUMBER</li> <li>SHEET NUMBER</li> <li>SIDE NOTE IF REQUIRED</li> </ul>	<ul style="list-style-type: none"> <li>DOOR SIZE OR NUMBER</li> </ul>
<b>ELEVATION REFERENCE:</b>	<b>PLAN NOTE DESIGNATION:</b>
<ul style="list-style-type: none"> <li>ELEVATION NUMBER OR DESIGNATION AS OCCURS</li> <li>SHEET NUMBER</li> </ul>	<ul style="list-style-type: none"> <li>PLAN OR SIDE NOTE NUMBER</li> <li>MARK OR DIAGONAL NOTE NUMBER</li> <li>REVISION NUMBER</li> </ul>
<b>DETAIL REFERENCE:</b>	<b>ROOM TITLE + NUMBER:</b>
<ul style="list-style-type: none"> <li>DETAIL NUMBER</li> <li>SHEET NUMBER</li> <li>SIDE NOTE IF REQUIRED</li> <li>DETAIL CUT LOCATION IF SHOWN</li> </ul>	<ul style="list-style-type: none"> <li>ROOM NAME</li> <li>ROOM NUMBER</li> </ul>
	<b>WALL TYPE MARK:</b>
	<ul style="list-style-type: none"> <li>WALL OR PARTITION CONSTRUCTION TYPE. SEE LEGEND.</li> </ul>

NEW MULTI-FAMILY DEVELOPMENT

**SANDY**

38015 Hwy 26, Sandy, OR

SHEET:  
**G0.01**  
COVER SHEET



**GENERAL NOTES:**

- ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND THE APPLICABLE PROVISIONS OF THE CITY OF SANDY PUBLIC WORKS STANDARDS. IMPROVEMENTS DEPICTED ON THESE PLANS ARE IN CONFORMANCE WITH THE CITY LAND USE ACTION CASEFILE NO. 12-031 SUB/MOD.
- IN ORDER TO PROTECT UNDERGROUND FACILITIES, EXCAVATORS PERFORMING THE WORK SET FORTH ON THESE PLANS MUST COMPLY WITH THE PROVISIONS OF ORS 757.541 TO 757.571 (REQUIRES CONTRACTOR TO NOTIFY UTILITIES AT LEAST 48 HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS, PRIOR TO ANY EXCAVATION).
- THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY AND SHOWN FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED PRIOR TO COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.
- VERTICAL DATUM: CITY OF SANDY BENCHMARK #10, ELEVATION=867.035, LOCATED AT THE SE CORNER OF BLUFF ROAD AND MARCY STREET
- TRENCHES WITHIN THE RIGHTS OF WAY SHALL BE BACKFILLED WITH AN APPROVED GRANULAR MATERIAL CONFORMING TO APWA CLASS B SPECIFICATIONS.
- TRENCHES OUTSIDE OF RIGHTS OF WAY MAY BE BACKFILLED IN ACCORDANCE WITH NATIVE MATERIAL AND COMPACTION SPECIFICATIONS FOR APWA CLASS A BACKFILL.
- VEGETATION AND TOPSOIL ARE TO BE STRIPPED TO MINERAL EARTH (AND INSPECTED BY THE PROJECT ENGINEER OR GEOTECHNICAL ENGINEER) PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS.
- IN ADDITION TO ANY REQUIRED COMPACTION TESTING, THE CITY MAY REQUIRE A PROOF ROLL WITH A FULLY LOADED 10-YARD DUMP TRUCK TO CHECK SUBGRADE COMPACTION PRIOR TO PLACEMENT OF ROCK SUBBASE AND AGAIN AT THE COMPLETION OF THE PLACEMENT OF THE BASE ROCK PRIOR TO PAVING THE FIRST LIFT OF ASPHALT.
- ASPHALTIC CONCRETE MIX IS TO BE BATCHED FROM A MIX FORMULA APPROVED BY OSD FOR MATERIAL USED. PAVING CONTRACTOR SHALL PROVIDE A CERTIFICATE OF COMPLIANCE FROM ASPHALT PAVEMENT PLANT.
- SUBSEQUENT SETTLEMENT OR CRACKING OF FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A FAILURE OF THE SUBGRADE AND REPAIRED AT NO COST TO THE CITY AND IN A MANNER ACCEPTABLE TO THE CITY. A PERFORMANCE BOND IS REQUIRED TO GUARANTEE REPAIRS UNDER THE WARRANTY PERIOD.
- THE CONTRACTOR SHALL CONTROL TRAFFIC THROUGH THE PROJECT SITE IN CONFORMANCE WITH THE LATEST EDITION OF "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "OREGON SUPPLEMENTS". THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN LOCAL ACCESS FOR HOMEOWNERS ALONG THE PROJECT SITE.
- THE CONTRACTOR AND/OR SUB-CONTRACTOR SHALL HAVE A MINIMUM OF ONE (1) SET OF APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING THE CONSTRUCTION PHASES.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, TOPSOIL AND OTHER MATERIAL ENCOUNTERED DURING THE CONSTRUCTION OF THE ROADWAY AND WHERE INDICATED ON THE PLANS. MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, REGIONAL AND STATE REGULATIONS AT FACILITIES AUTHORIZED TO ACCEPT SUCH MATERIAL.
- CONTRACTOR SHALL CAREFULLY MAINTAIN BENCHMARKS, PROPERTY CORNERS, MONUMENTS AND OTHER REFERENCE POINTS. IF SUCH POINTS ARE DISTURBED OR DESTROYED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PAY FOR THEIR REPLACEMENT BY EMPLOYING A PROFESSIONAL LAND SURVEYOR TO RESET PROPERTY CORNERS AND OTHER SUCH MONUMENTS.
- EXCESS EXCAVATED MATERIAL SHALL BE HAULED AND DISPOSED OF AT SITES PROVIDED BY THE OWNER AND APPROVED PURSUANT TO AN APPROPRIATE GRADING PERMIT. FILL SITES SHALL BE LEVELED AND GRADED TO DRAIN. THE CONTRACTOR SHALL CORRECT ANY FILL RELATED CONDITIONS.
- FINAL CLEANUP - PRIOR TO FINAL ACCEPTANCE AND PAYMENT, THE CONTRACTOR SHALL CLEAN THE WORK SITE AND ADJACENT AREAS OF ANY DEBRIS, DISCARDED ASPHALTIC CONCRETE MATERIAL OR OTHER ITEMS DEPOSITED BY THE CONTRACTORS PERSONNEL DURING THE PERFORMANCE OF THIS CONTRACT.
- A PERMIT IS REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY, CONTACT THE CITY OF SANDY PUBLIC WORKS DEPARTMENT OR VISIT [www.ci.sandy.or.us](http://www.ci.sandy.or.us) FOR PERMIT APPLICATION FORMS.
- ALL WORK MUST COMPLY WITH CITY OF SANDY GRADING AND EROSION CONTROL PERMIT #xxxx GR/EC ISSUED XX/XX/XX AND THE NPDES 1200C PERMIT ISSUED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY ON YY/YY/YY. ALL WORK MUST COMPLY WITH THE MOST STRINGENT REQUIREMENTS IN BOTH PERMITS.
- ALL WORK MUST COMPLY WITH THE CITY OF SANDY'S EROSION CONTROL STANDARDS. CONTRACTOR TO SCHEDULE INSPECTIONS 48 NORMAL BUSINESS HOURS IN ADVANCE.
- PRIOR TO DEMOLITION OF ANY OF THE EXISTING STRUCTURES ON-SITE, A DEMOLITION PERMIT IS REQUIRED FROM THE CITY OF SANDY.
- ANY EXISTING DOMESTIC OR IRRIGATION WELLS SHALL BE ABANDONED IN CONFORMANCE WITH OAR 690-220-0030. SUBMIT COPY OF WRD ABANDONMENT FORM TO THE CITY. ANY EXISTING ON-SITE SEWAGE DISPOSAL SYSTEM SHALL BE ABANDONED IN CONFORMANCE WITH CLACKAMAS COUNTY WES REGULATIONS. THE CONTRACTOR SHOULD SUBMIT COPY OF THE CERTIFICATES FOR WELL ABANDONMENT AND SEPTIC TANK REMOVAL TO THE CITY.
- IF, AT ANYTIME DURING THE ON-SITE CONSTRUCTION, THE CONTRACTOR OBSERVES AN ENVIRONMENTAL IMPACT ON-SITE SUCH AS OIL TANKS, CONTAMINATION RESIDUE OR HAZARDOUS MATERIALS, SPILLAGE, ETC., IT MUST BE REPORTED, INSPECTED, AND TREATED IN CONFORMANCE WITH THE APPROPRIATE AGENCY'S REQUIREMENTS.

# MIXED USE SITE DEVELOPMENT

38015 HWY 26, SANDY, OR 97055

**SANITARY SEWER NOTES:**

- SEWER PIPE AND FITTINGS TO BE GREEN PVC GRAVITY SEWER PIPE CONFORMING TO ASTM D-3034, SDR 35 FOR 8" AND 6", SDR26 FOR 15", WITH RUBBER RING TYPE JOINTS CONFORMING WITH ASTM D-3212. SUBMIT CERTIFICATE OF COMPLETION OF 95% MANDREL TEST ON ALL PIPES AFTER COMPACTION.
- PIPE BEDDING, PIPE ZONE MATERIALS SHALL BE 3/4" MINUS CRUSHED ROCK. BACKFILL WITHIN THE RIGHT-OF-WAY SHALL BE 3/4" MINUS CRUSHED ROCK COMPACTED TO 95% OF AASHTO T-180 (ASTM D-1557).
- SEWER MAINS TO BE AIR TESTED AS PER APWA PART 00445.72. 95% MANDREL TESTED AS PER APWA PART 00445.73. AND VIDEO INSPECTED AS PER APWA PART 00445.74 FOLLOWING TRENCH BACKFILL AND COMPACTION.
- LATERALS SHALL BE 6" 3034 PVC PIPE, GREEN IN COLOR, AND SHALL BE INSTALLED AT 2% MINIMUM SLOPE UNLESS OTHERWISE NOTED.
- MANHOLE TESTING SHALL BE AS PER APWA PART 00470.71.
- SETTLEMENT OF THE FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A RESULT OF IMPROPER COMPACTION AND SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- ALL AC SAWCUT LINES SHALL BE STRAIGHT. ALL EDGES SHALL BE SEALED AND SANDED UPON COMPLETION.
- ALL SERVICE LATERALS SHALL EXTEND 5 FT. BEYOND THE PROPERTY LINE. THE END SHALL BE MARKED WITH A SINGLE 2X4 WHICH EXTEND 2 FT. ABOVE FINISH GRADE. THE EXPOSED PORTIONS OF THE 2X4 SHALL BE PAINTED WHITE. DEPTH OF LATERAL SHALL BE PAINTED ON THE 2X4, CLEANOUTS SHALL BE INSTALLED FOR EACH STRUCTURE
- SANITARY LATERAL LOCATIONS SHALL BE STAMPED WITH AN "S" ON THE CURB FACE FOR FUTURE LOCATION.
- SEWER AND WATERLINE CROSSINGS MUST MEET THE REQUIREMENTS OF OAR 333-061-0050(9)
- PRIOR TO CONSTRUCTION, OBTAIN APPROVAL FOR THE SANITARY SEWER SYSTEM FROM THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) AS PER OAR 340-052 AND SUBMIT A COPY OF THE APPROVAL TO THE CITY (ENGINEER TO APPLY FOR APPROVAL).
- CONTRACTOR TO SUBMIT A BYPASS PUMPING PLAN FOR TRUNK LINE RELOCATION, PLAN SHALL INCLUDE DETAILS ON PUMP SIZING FOR PEAK FLOWS, STANDBY, BACKUP PUMP(S), PUMP ATTENDANT AND / OR DIAL-OUT SYSTEM FOR PUMP FAILURE OR MALFUNCTION

**STREET AND STORM DRAINAGE NOTES:**

- STREET AND STORM DRAIN IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF SANDY STANDARDS AND REQUIREMENTS.
- ALL TRENCH EXCAVATION SHALL CONFORM TO STANDARD STORM SEWER SPECIFICATIONS AND SHALL BE UNCLASSIFIED.
- PIPE BEDDING AND PIPE ZONE SHALL CONFORM TO THE EXCAVATION AND BACKFILL DETAILS, AND SHALL BE 3/4"-0" CRUSHED ROCK.
- THE CITY REQUIRES COMPACTION WITHIN THE RIGHT-OF-WAY TO BE 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD USED TO ACHIEVE REQUIRED COMPACTION.
- TRENCH BACKFILL OUTSIDE OF RIGHTS OF WAY OR PAVED AREAS MAY BE EXCAVATED TRENCH MATERIAL. TRENCH BACKFILL IN PAVED AREAS SHALL BE AN APPROVED GRANULAR MATERIAL.
- MATERIAL IN SOFT SPOTS WITHIN THE ROADWAY SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH 1-1/2"-0" CRUSHED ROCK. THE ENTIRE SUBGRADE SHALL BE THOROUGHLY COMPACTED TO 95% AASHTO T-180.
- CONTRACTOR SHALL NOTIFY THE ENGINEER AND CITY OF SANDY WHEN SUBGRADE IS COMPLETE AND 24 HOURS PRIOR TO PLACEMENT OF ROCK BASE MATERIAL AND 24 HOURS PRIOR TO FINAL PAVING FOR AN INSPECTION OF THE WORK. FAILURE TO DO SO WILL MAKE ANY SUBGRADE FAILURE PROBLEMS THE RESPONSIBILITY OF THE CONTRACTOR. A PROOF ROLL WITH A FULLY LOADED 10-YARD DUMP TRUCK MAY BE REQUIRED TO CHECK SUBGRADE COMPACTION PRIOR TO PLACEMENT OF ROCK SUBBASE AND AGAIN AT THE COMPLETION OF THE PLACEMENT OF THE BASE ROCK PRIOR TO PAVING THE FIRST LIFT OF ASPHALT.
- ALL SAWCUT JOINTS SHALL BE STRAIGHT, TACKED AND SAND SEALED UPON PAVING.
- THE CITY REQUIRES A SUCCESSFUL MANDREL PULL ON ONE SECTION OF EACH DIAMETER OF STORM PIPE USED.
- ASPHALT COMPACTION SHALL BE PERFORMED USING NUCLEAR GAUGE. THE RICE DENSITY TESTS SHALL EET 91% FOR THE BASE LIFT AND 92% FOR THE TOP LIFT IN ACCORDANCE WITH ODOT TM305 OR AASHTO T-209. SUBMIT TESTING REPORTS TO THE CITY.
- STORM DRAIN LATERALS SHALL BE 4" 3034 PVC AND WHITE IN COLOR. PLACE 2X4 WOODEN PIPE MARKER AT END OF EACH LATERAL.

**GRADING NOTES:**

- FILLS SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY IN THE BUILDING ENVELOPE AND 92 PERCENT OF MAXIMUM DENSITY ON THE REMAINDER OF THE LOT AS DETERMINED BY ASTM TEST SD 1557-91, METHOD A, OR AN EQUIVALENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE NECESSARY ARRANGEMENTS FOR SUCH TESTING AND FOR SUPPLYING THE RESULTS TO THE CITY OF SANDY.
- ALL CUTS SHALL BE MADE CONSISTENT WITH THE DETAILS NOTED IN THE PLANS. NO CUT SHALL EXCEED A GRADE OF 2 HORIZONTAL TO 1 VERTICAL UNLESS APPROVED BEFOREHAND BY THE ENGINEER AND THE CITY OF SANDY.
- APPROPRIATE BENCHING OF FILLS IS REQUIRED FOR FILLS OVER 5 FEET IN HEIGHT ON SLOPES IN EXCESS OF 5 HORIZONTAL TO 1 VERTICAL. BENCHING MUST BE DONE AS PER THE APPROVED PLANS. THE CITY OF SANDY SHALL INSPECT BENCHES PRIOR TO FILL PLACEMENT.
- CUT AND FILL SLOPES SHALL BE PROTECTED FROM EROSION. SUCH CONTROL MAY CONSIST OF APPROPRIATE REVEGETATION OR OTHER ACCEPTABLE MEANS AND METHODS. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTHWORK OR SITE STRIPPING.
- THE CONTRACTOR SHALL COORDINATE WITH CITY PERSONNEL BY CALLING (503) 668-6941 OR (503) 668-5533 ANYTIME FOR REQUIRED INSPECTIONS AT THE FOLLOWING STAGES OF CONSTRUCTION:

**UTILITY NOTES:**

- THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FROM THE CITY OF SANDY PRIOR TO BEGINNING CONSTRUCTION.

**NOTIFICATION:**

GENERAL - THE CONTRACTOR SHALL, AS A MINIMUM, COORDINATE THE PROPOSED CONSTRUCTION ACTIVITIES WITH THE OWNER AND LOCAL PUBLIC AGENCIES, UTILITIES AND COMPANIES DURING CONSTRUCTION TO AVOID DAMAGE AND TO PREVENT THE INTERRUPTION OF SERVICES AND UTILITIES TO RESIDENTS AND BUSINESSES:

OREGON UTILITY NOTIFICATION CENTER  
1-503-246-6699

CLACKAMAS COUNTY  
(503) 353-4400

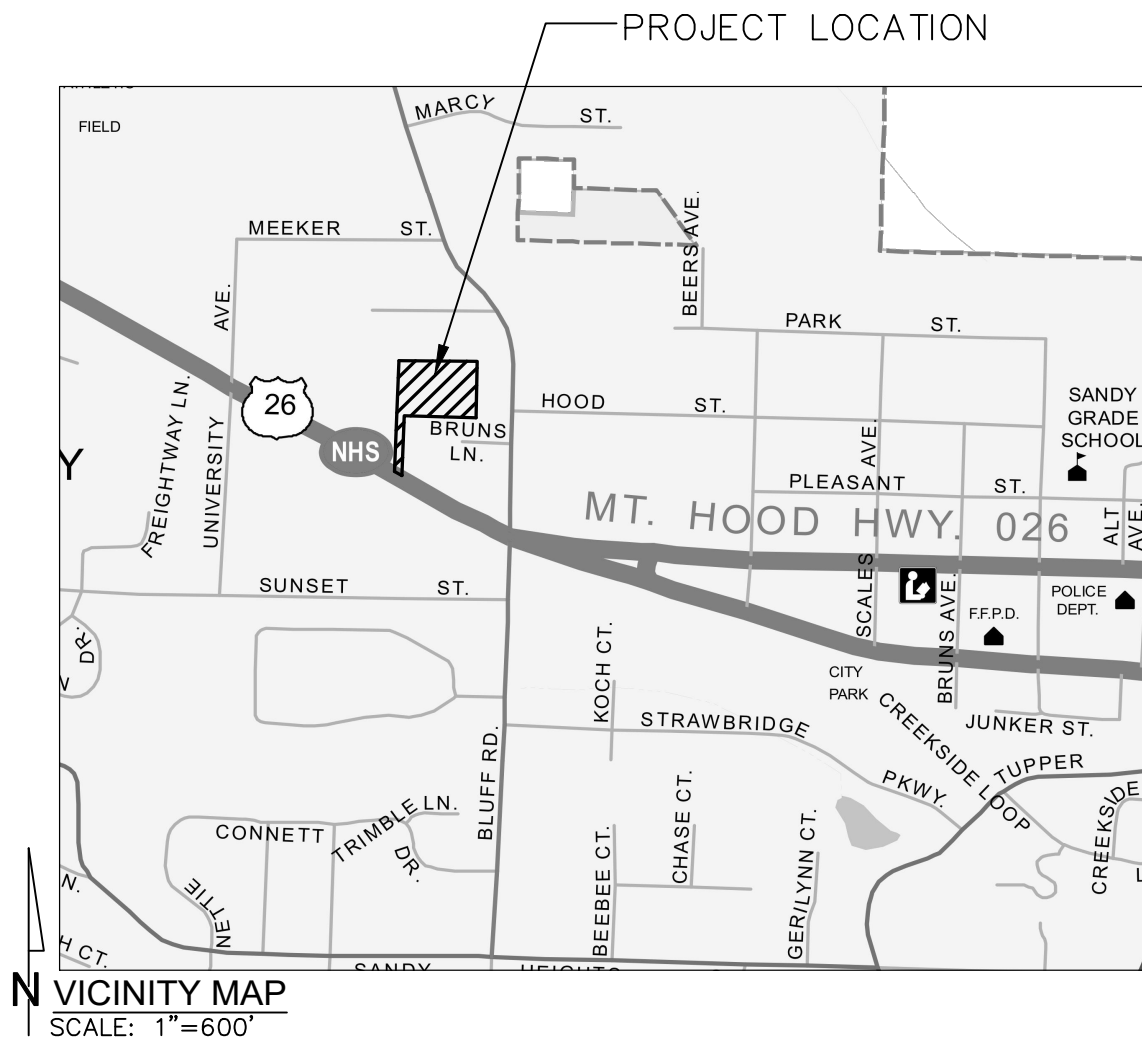
CITY OF SANDY ENGINEERING DEPT. (503) 668-5533  
BUILDING DIVISION INSPECTIONS (503) 668-6941

PORTLAND GENERAL ELECTRIC  
(503) 226-8111

VERIZON NORTHWEST (TELEPHONE)  
1-800-483-4100

NORTHWEST NATURAL GAS  
(503) 226-4211

CHARTER COMMUNICATIONS (CABLE TV)  
1-866-731-5420



**WATERLINE NOTES**

- STENCIL "W" ON CURBS AT WATER METER LOCATION.
- ALL PUBLIC WATERLINE PIPE SHALL BE PRESSURE CLASS 350 DUCTILE IRON. DUCTILE IRON PIPE SHALL BE CEMENT-MORTAR LINED AND SHALL CONFORM TO AWWA STANDARD C151 AND C104 AND SHALL BE U.S. TYTON JOINT PIPE OR APPROVED EQUAL. RUBBER RING GASKETS SHALL CONFORM TO ANSI A-21.10 AND ANSI A-21.4. MORTAR LINING SHALL BE SAME THICKNESS AS FOR PIPE.
- NO PUBLIC WATER VALVES SHALL BE OPENED OR CLOSED (OPERATED) BY ANYONE BUT THE CITY OF SANDY.
- ALL PUBLIC WATERLINES PIPE SHALL HAVE A MINIMUM OF 36" OF COVER IN STREET RIGHT OF WAYS TO FINISH GRADE UNLESS OTHERWISE SHOWN.
- ALL WATERLINES SHALL BE THOROUGHLY FLUSHED AND CHLORINATED AND PORTABLE WATER TEST SHALL BE APPROVED BY THE OREGON STATE HEALTH DEPARTMENT AND THE CITY OF SANDY PRIOR TO ANY METER SERVICE HOOK-UP OR CONNECTION TO EXISTING SYSTEM. DISINFECTION TESTING OF ALL WATERLINES TO BE PER AWWA C-651
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPER SEPARATION BETWEEN SANITARY SEWER LINES AND WATERLINES AS REQUIRED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY AND SATE DEPARTMENT OF HEALTH.
- ALL FILLING, FLUSHING, AND TESTING OF NEW WATERLINE FACILITIES SHALL BE DONE THROUGH A 6" DOUBLE-CHECK DEVICE AND TEMPORARY BLOW-OFFS.
- MECHANICAL RESTRAINT IS REQUIRED AT ALL FITTINGS AS OPPOSED TO THRUST BLOCKING
- PRIOR TO CONSTRUCTION, OBTAIN APPROVAL FOR THE WATER SYSTEM FROM THE OREGON DEPARTMENT OF HUMAN SERVICES, DRINKING WATER PROGRAM AS PER OAR 333-061 AND SUBMIT A COPY OF THE APPROVAL TO THE CITY (ENGINEER TO APPLY FOR APPROVAL)
- ALL WATERLINES TO BE HYDROSTATIC TESTED PER AWWA C-600

**WATER SERVICES**

- WATER SERVICE PIPE SHALL BE COPPER TUBING CONFORMING TO ASTM B88, TYPE K, ANNEALED, THE TUBING SHALL BE COUPLED USING FLARE TYPE COMPRESSION FITTINGS CONFORMING TO THE REQUIREMENTS OF AWWA C800 WITH MINIMUM 150 PSI WORKING PRESSURE.
- SADDLES SHALL BE STAINLESS STEEL, DOUBLE STRAPS OR BAND TYPE WITH STANDARD TAPPING TO MATCH SERVICE REQUIREMENTS.
- CORPORATION STOPS SHALL CONFORM TO AWWA C800 AND SHALL BE OF LEAD-FREE BRONZE ALLOY WITH COLD-FLARE CUTS OR COMPRESSION OUTLET. DIRECT TAP CONNECTIONS SHALL BE AWWA TAPERED THREAD INLET. SADDLE CONNECTIONS SHALL BE IP INLET. REFER TO STANDARD DRAWING #408 FOR APPROVED MANUFACTURERS AND MODEL NUMBERS
- METER STOPS SHALL BE ANGLE PATTERN WITH LOCK WINGS, REFER TO STANDARD DETAIL NO. 408 FOR APPROVED MANUFACTURERS AND MODEL NUMBERS.



EXPIRES: 06/30/23  
SIGNATURE DATE:

**SHEET INDEX**

- COVER SHEET AND NOTES
- EXISTING CONDITIONS AND DEMO PLAN
- COMPOSITE SITE PLAN
- ENTRY UTILITY PLAN
- SITE UTILITY PLAN
- STORMWATER EXTENSION PLAN
- GRADING AND ESC PLAN
- WALL CROSS SECTIONS
- ENTRY GRADING PLAN
- CIVIC AREA GRADING PLAN
- ESC NOTES AND DETAILS
- SITE CIRCULATION PLAN

9/29/2022 3:29:09 PMBB s:\project files\projects\e21-043 state street homes\cad\sheets\e21-043 cover sheet.dwg

DRAWN:	DESIGNED:	CHECKED:
SCALE: AS SHOWN	DATE: DECEMBER 2021	
PROJECT NO. E21-043		

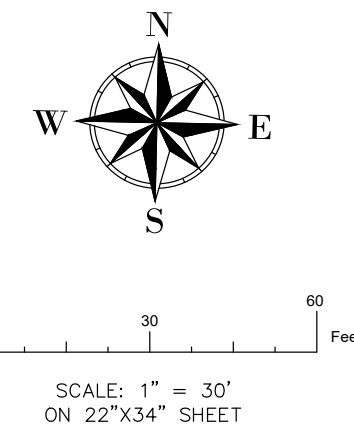
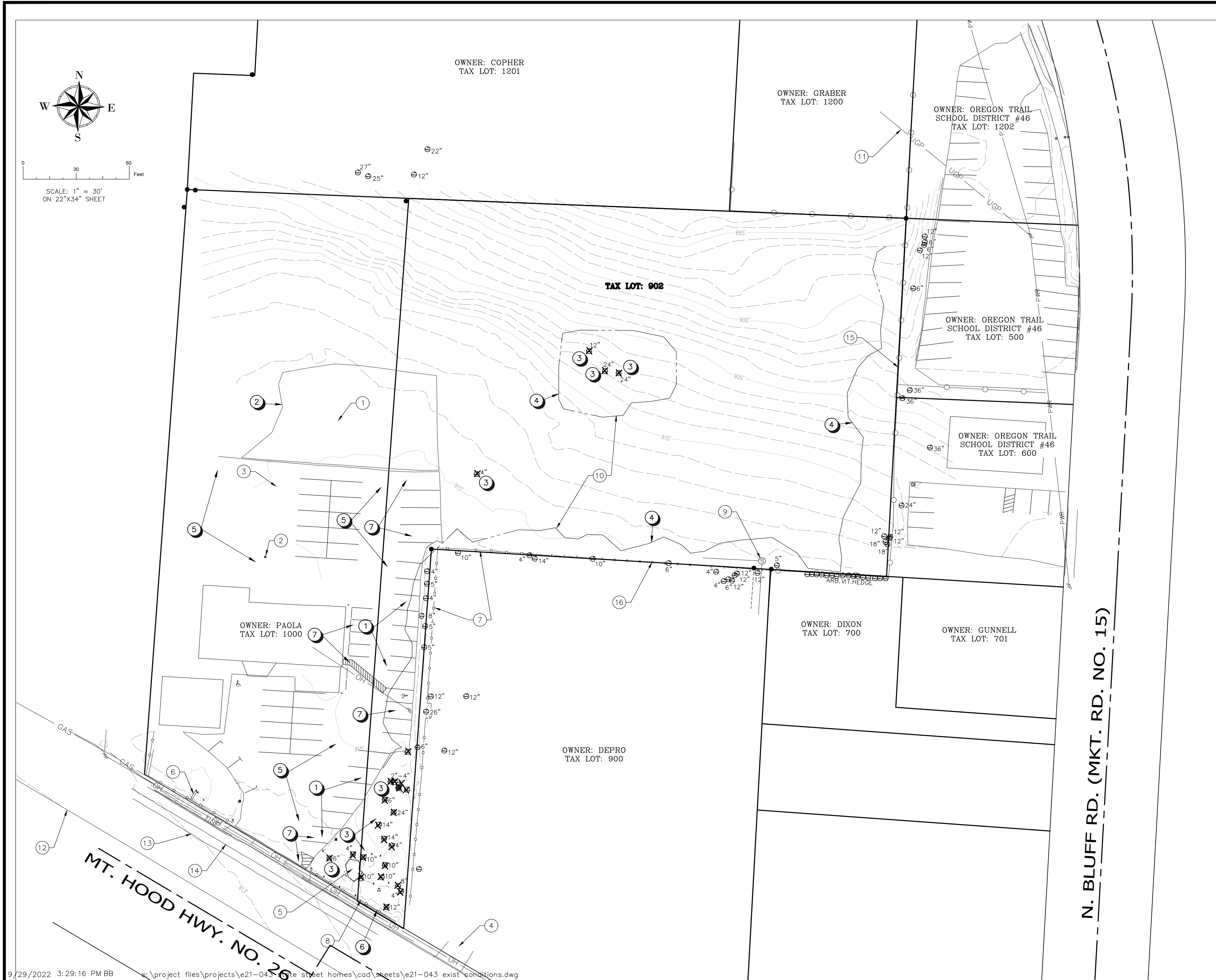
**FIRWOOD DESIGN GROUP**  
Reliable Engineering Solutions  
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY  
TROUTDALE, OREGON 97060  
(503) 668-3737

**STATE STREET HOMES**  
1233 NW NORTHRUP ST. #125  
PORTLAND, OR 97209

**COVER SHEET AND NOTES**  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

1  
12





**AS-BUILT NOTES**

- 1 GRAVEL PARKING AREA USED FOR DELIVERY SEMIS WITH 35' TRAILER TURNING AND LARGE VEHICLE PARKING.
- 2 STORM DRAIN IN PAVED PARKING LOT.
- 3 PAVED PARKING AREA WITH VERY FADED PARKING LINES.
- 4 NEAREST DRIVEWAY APPROACH
- 5 EXISTING POND LANDSCAPE FEATURE WITH STONE BORDER AND SMALL PATH. SEVERAL ELECTRICAL OUTLETS IN THE AREA TO THE EAST.
- 6 EXISTING PAOLA'S PIZZA SIGN.
- 7 NEWER 6-FOOT WOOD FENCE BELONGING TO DEPRO.
- 8 OLD 2-FOOT WOOD DECORATIVE FENCE RUNS ALONG FRONTAGE ON BOTH SIDES OF APPROACH.
- 9 EXISTING SANITARY SEWER MANHOLE LID.
- 10 TREE DRIP LINE.
- 11 UNDERGROUND POWER TO GRABER RESIDENCE. LOCATION NOT VERIFIED. INFORMED OF ITS EXISTENCE VIA GRABER AND TOLD IT IS 9' UNDERGROUND.
- 12 NORTHERN MOST LINE OF CENTER TURN LANE.
- 13 FOG LINE.
- 14 BIKE LANE.
- 15 6-FOOT CHAINLINK FENCE.
- 16 3-FOOT WELDED WIRE FENCE WITH GATE JUST WEST OF MANHOLE LID.

CONTOURS: 1' MINOR AND 5' MAJOR

FIELD WORK CONDUCTED ON JULY 14 AND 15, 2021. WATER AND SEWER LOCATES WERE NOT MARKED AT THE TIME OF SURVEY. SEE CITY MAP.

THIS DOES NOT CONSTITUTE A FORMAL BOUNDARY SURVEY. THIS BOUNDARY IS BASED ON A BEST FIT OF S11941 TO FOUND MONUMENTS. RIGHTS-OF-WAYS HAVE NOT BEEN RESOLVED AND MAY NOT BE ACCURATE.

**LEGEND**

- FOUND MONUMENT OF RECORD
- WOOD FENCE
- ▭ CHAINLINK FENCE
- ▭ BARBWIRE/WOVEN WIRE/FARM FENCE
- ⊙ EXISTING TREE WITH DIAMETER
- ⊙ ELECTRICAL OUTLET
- UGP — UNDERGROUND ELECTRIC
- PWR — OVERHEAD WIRE
- ⊙ UTILITY POLE
- GAS — UNDERGROUND GAS LINE
- ⊙ IRRIGATION CONTROL BOX
- ⊙ 5' LAMP POST
- ⊙ FLOOD LIGHT
- ⊙ SANITARY SEWER MANHOLE
- SS — SANITARY SEWER LINE
- ⊙ STORM SEWER MANHOLE
- ⊙ STORM CATCH BASIN
- ⊙ SPRINKLER HEAD
- CS SURVEY NUMBER, CLACKAMAS COUNTY SURVEY RECORDS
- DOC. NO. DOCUMENT NUMBER, CLACKAMAS COUNTY DEED RECORDS

**DEMO KEY NOTES**

- 1 SAWCUT AND REMOVE PORTION OF EXIST ASPHALT AS NECESSARY TO CONSTRUCT NEW ASPHALT MATCHLINE AND 6" EXPOSURE CURB AND 5' SIDEWALK, SEE SHEET 3
- 2 EXIST GRAVEL AREA TO BE REMOVED
- 3 REMOVE EXIST TREE (24 TOTAL), TYPICAL
- 4 REMOVE EXIST BRUSH
- 5 PROTECT EXIST ASPHALT
- 6 REMOVE EXIST FENCE
- 7 REMOVE EXIST STRIPING

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON  
MAY 26, 2015  
SAMANTHA KAY TANNER  
90079  
RENEWS 6/30/2022

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PROJECT NO. E21-043		

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Reliable Engineering Solutions

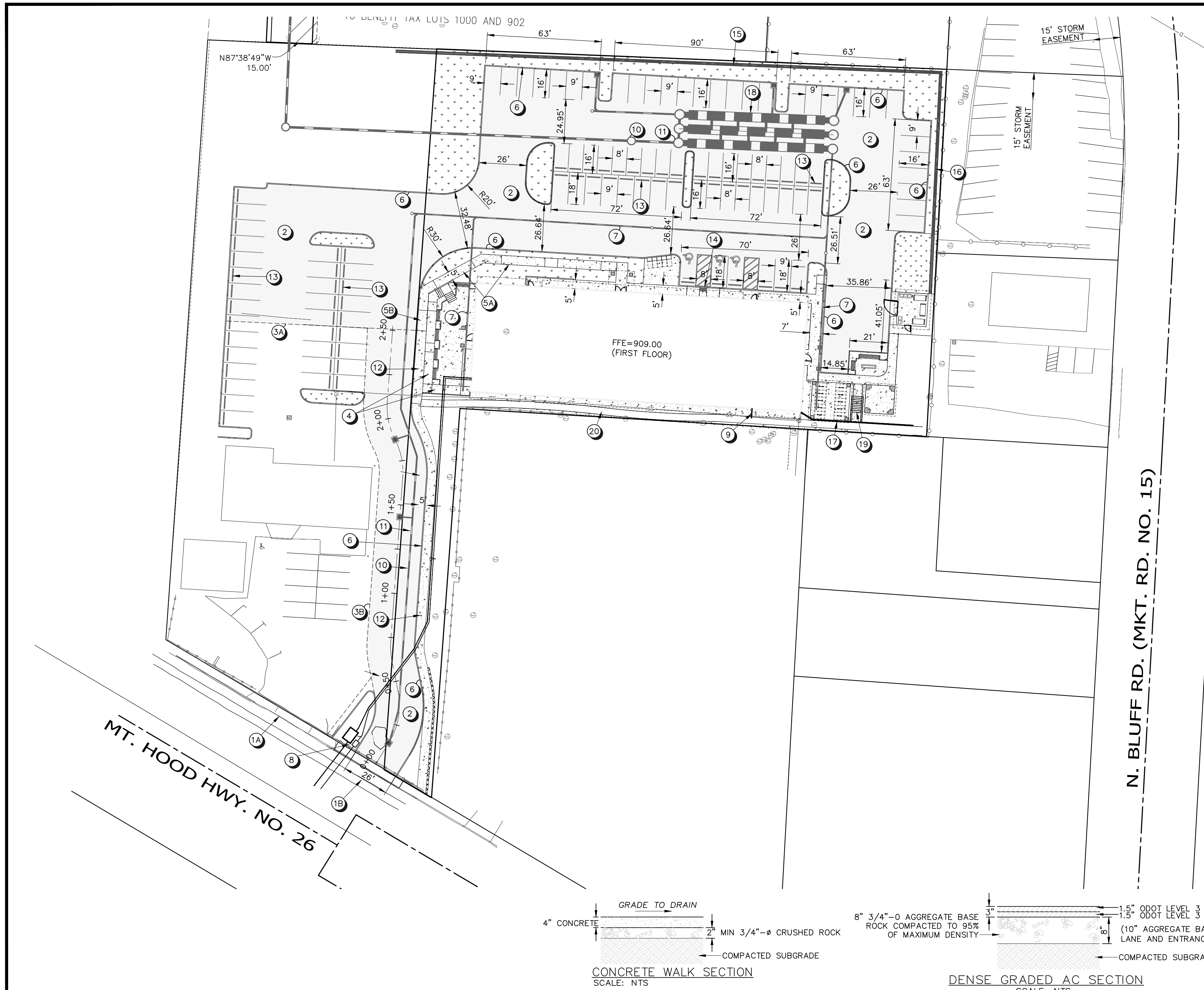
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(503) 668-3737

**STATE STREET HOMES**  
1233 NW NORTHRUP ST. #125  
PORTLAND, OR 97209

**EXISTING CONDITIONS AND DEMO PLAN**  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

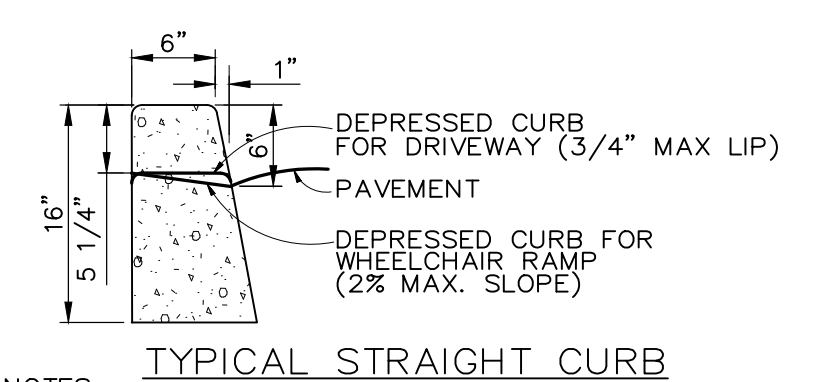
**2**  
**12**





**KEY NOTES**

- 1A EXIST 35'± WIDE COMMERCIAL DRIVEWAY APPROACH
- 1B PROPOSED 26' WIDE DRIVEWAY ACCESS AND SIDEWALK
- 2 NEW ASPHALT DRIVEWAY AND PARKING AREA, SEE TYPICAL SECTION DETAIL THIS SHEET, SEE SITE CIRCULATION PLAN ON SHEET 12 FOR EMERGENCY VEHICLE ACCESS PLAN
- 3A SAWCUT MIN 1" FROM EDGE OF EXIST EDGE OF ASPHALT, TYPICAL
- 3B SAWCUT EXIST ASPHALT FOR MATCH LINE TO EXIST AC PARKING, TYPICAL
- 4 CONCRETE SIDEWALK RAMP TO CIVIC AREA ACCESS WITH HAND RAILS, SEE ARCHITECTURAL PLANS FOR HAND RAILING DETAILS
- 5A DOWNWARD RAMP AND LANDING PATHWAY WITH HANDRAILS TO MAIN FLOOR, SEE ARCHITECTURAL PLANS FOR HANDRAIL DETAILS
- 5B RAMP DOWN PORTION OF SIDEWALK WITH HAND RAILS, SEE ARCHITECTURAL PLANS FOR HANDRAIL DETAILS
- 6 CURB WITH 6" EXPOSURE UNLESS OTHERWISE NOTED (TYPICAL), SEE TYPICAL SECTION THIS SHEET
- 7 DOWNSPOUT CONVEYANCE LINES TO STORM SYSTEM
- 8 DOUBLE DETECTOR CHECK VALVE AND VAULT AND WATER SERVICE METER AND VAULT FOR SPRINKLER AND POTABLE WATER SERVICE
- 9 CONNECT TO EXIST SEWER MAIN FOR SEWER SERVICE, CONTRACTOR TO VERIFY DEPTH PRIOR TO CONSTRUCTION
- 10 WATER QUALITY MANHOLE, SEE SHEET 5
- 11 FLOW CONTROL MANHOLE, SEE SHEET 5
- 12 PROPOSED 5' WIDE CONCRETE WALKWAY, MAX 2% CROSS SLOPE (1.5% TYPICAL) AND MAXIMUM 5% LONGITUDINAL SLOPE, SEE TYPICAL SECTION DETAIL THIS SHEET
- 13 CONCRETE WHEEL STOPS WITH STORMWATER UNDERDRAIN (TYPICAL)
- 14 ADA COMPLIANT SIDEWALK RAMP
- 15 12'± RETAINING WALL
- 16 8'± RETAINING WALL
- 17 7'± RETAINING WALL
- 18 60" DETENTION SYSTEM, SEE SHEET 5
- 19 10 STAIRS WITH LANDINGS TO TOP OF WALL, SEE SHEET 4 FOR SPOT GRADING PLAN
- 20 TRAIL



- NOTES:**
- 1. ALL RADII SHALL BE 3/4" EXCEPT AS OTHERWISE SHOWN.
  - 2. ISOLATION JOINTS SHALL BE PLACED ONLY AS SPECIFIED.
  - 3. CONTRACTION JOINTS SHALL BE PLACED AT 15' INTERVALS AND SHALL EXTEND AT LEAST 50% THROUGH THE CURB OR CURB AND GUTTER.
  - 4. A CONTRACTION JOINT SHALL BE PLACED ALONG AND OVER WEEP HOLE THROUGH THE CURB AND THROUGH THE SIDEWALK.
  - 5. WHEN SIDEWALKS ARE CONSTRUCTED, EXTEND 3" PIPE TO BACK OF SIDEWALK AND INSTALL COUPLING.



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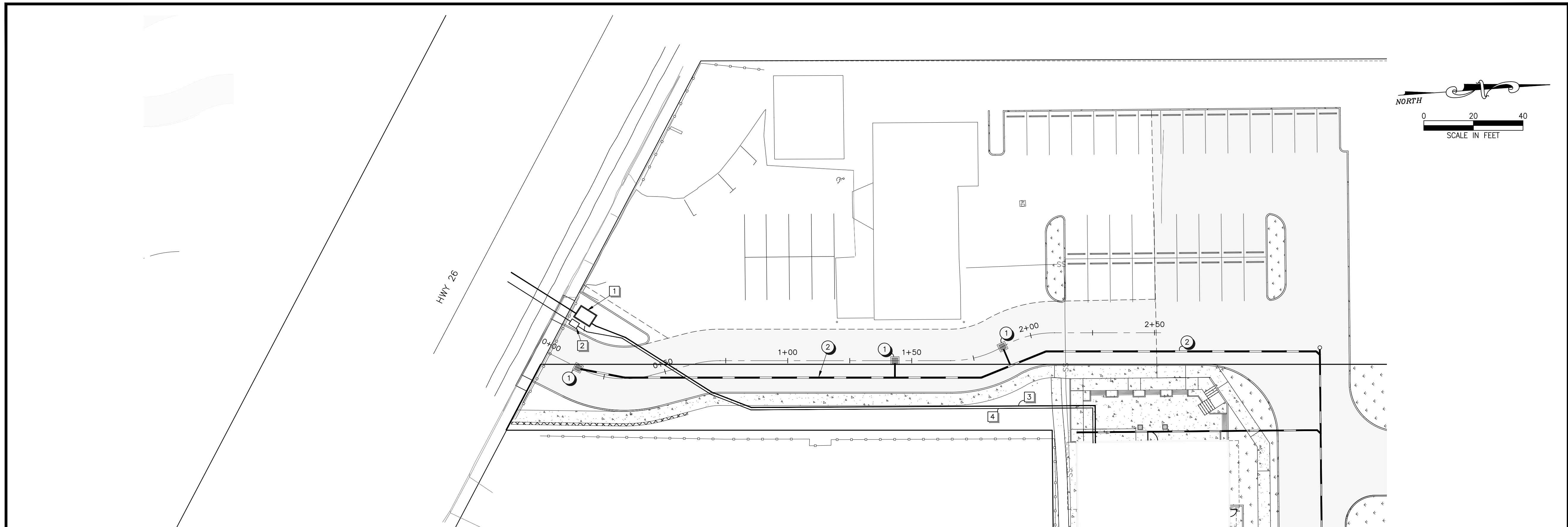
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PORTLAND, OR 97209

**COMPOSITE SITE PLAN**  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

**3**  
**12**



- KEY NOTES**
- ① LYNCH TYPE TRAP CATCH BASIN
  - ② STORM CONVEYANCE LINE TO DETENTION SYSTEM

- WATERLINE KEY NOTES**
- ① PROPOSED DOUBLE DETECTOR CHECK VALVE AND VAULT BY FIRE SUPPRESSION DESIGNER
  - ② PROPOSED WATER METER SIZED BY WATER SYSTEM DESIGNER
  - ③ NEW FIRE SUPPRESSION LINE, SIZE PROVIDED BY WATER SYSTEM DESIGNER
  - ④ NEW POTABLE WATER SERVICE LINE, SIZE PROVIDED BY WATER SYSTEM DESIGNER



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PROJECT NO. E21-043		

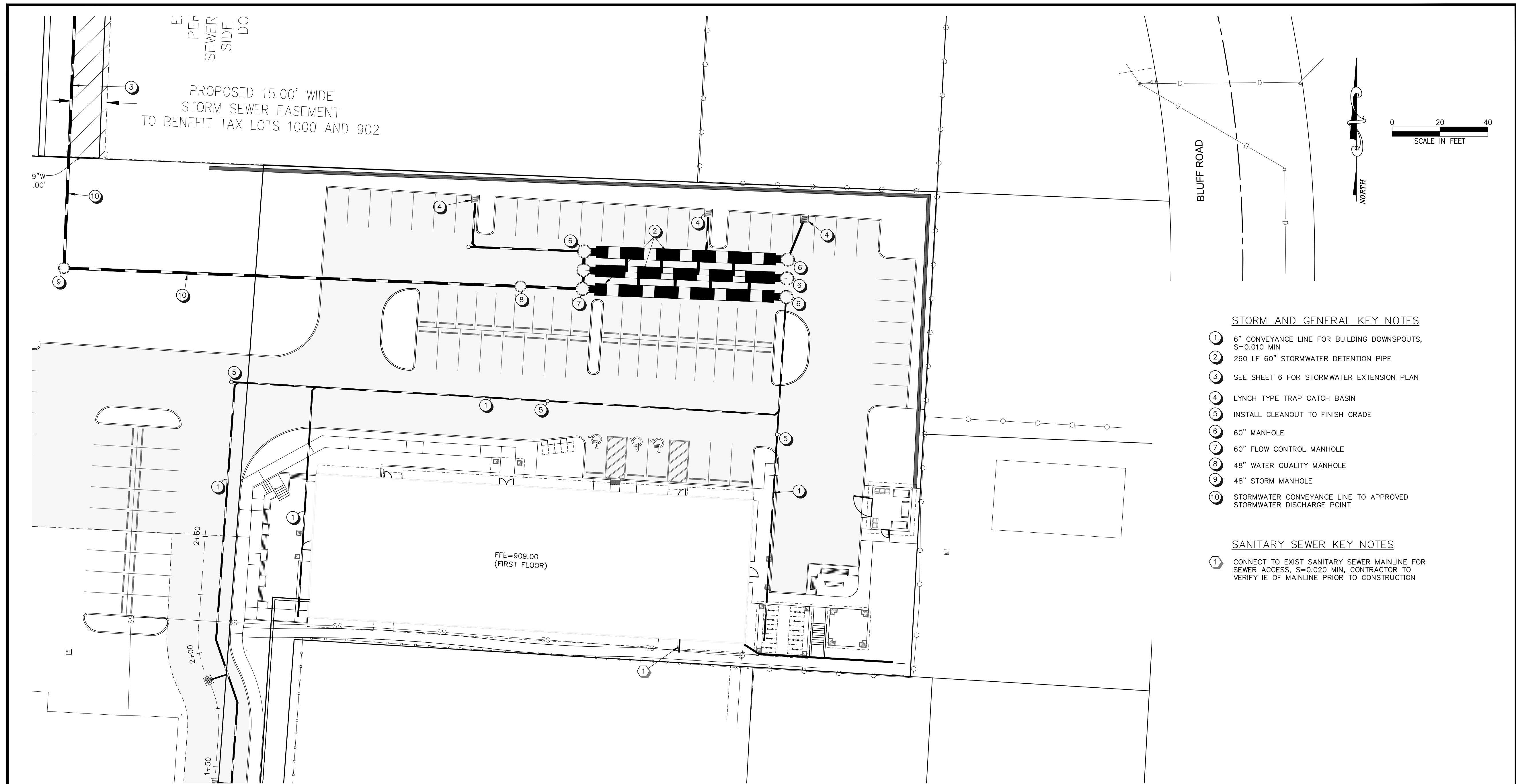
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**ENTRY UTILITY PLAN**  
 MIXED USE SITE DEVELOPMENT  
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**4**  
**12**





**STORM AND GENERAL KEY NOTES**

- ① 6" CONVEYANCE LINE FOR BUILDING DOWNSPOUTS, S=0.010 MIN
- ② 260 LF 60" STORMWATER DETENTION PIPE
- ③ SEE SHEET 6 FOR STORMWATER EXTENSION PLAN
- ④ LYNCH TYPE TRAP CATCH BASIN
- ⑤ INSTALL CLEANOUT TO FINISH GRADE
- ⑥ 60" MANHOLE
- ⑦ 60" FLOW CONTROL MANHOLE
- ⑧ 48" WATER QUALITY MANHOLE
- ⑨ 48" STORM MANHOLE
- ⑩ STORMWATER CONVEYANCE LINE TO APPROVED STORMWATER DISCHARGE POINT

**SANITARY SEWER KEY NOTES**

- ① CONNECT TO EXIST SANITARY SEWER MAINLINE FOR SEWER ACCESS, S=0.020 MIN, CONTRACTOR TO VERIFY IE OF MAINLINE PRIOR TO CONSTRUCTION



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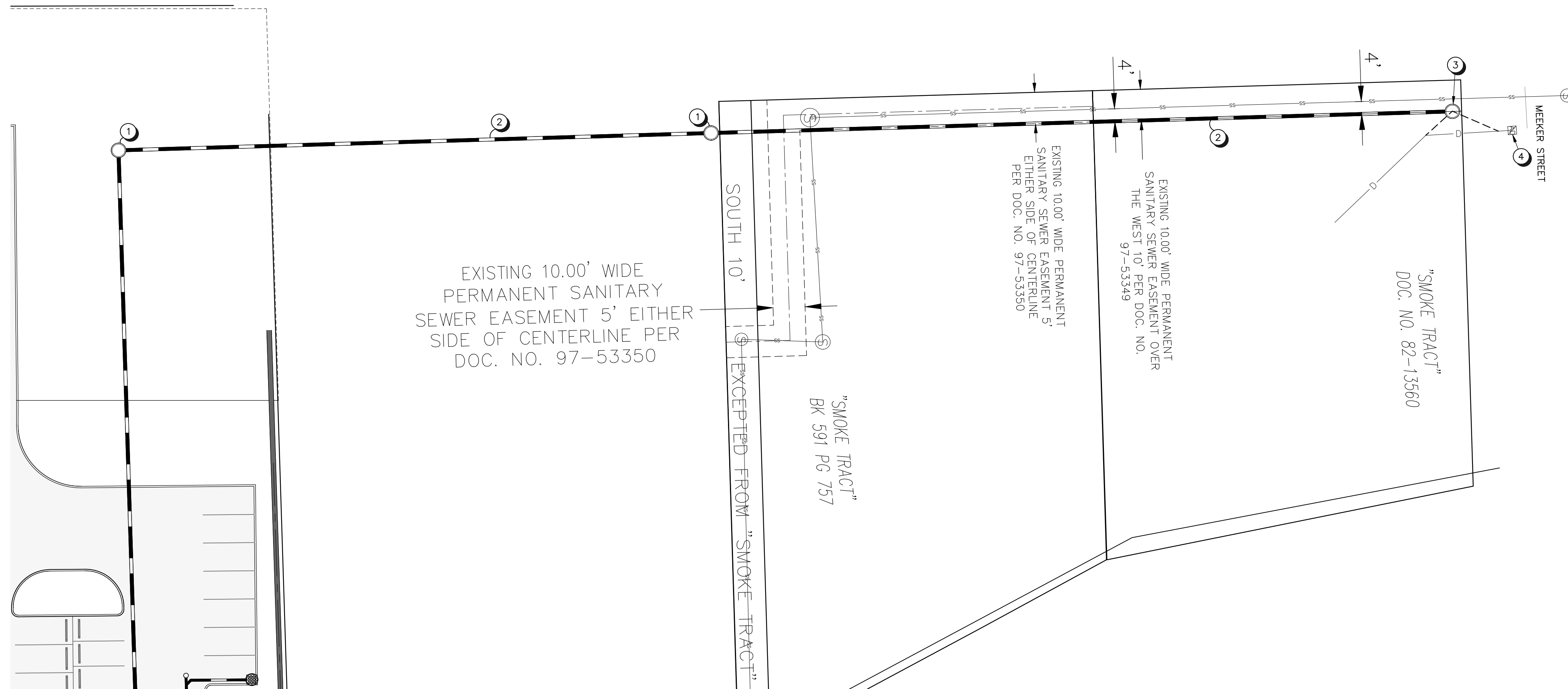


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**SITE UTILITY PLAN**  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

**5**  
**12**



**KEY NOTES**

- ① 48" STORM MANHOLE
- ② STORMWATER CONVEYANCE LINE TO APPROVED STORMWATER DISCHARGE POINT
- ③ REALIGN EXIST STORMLINE AND CONNECT INTO PROPOSED 48" MANHOLE
- ④ STORMWATER TO CONNECT INTO EXIST DITCH INLET, UTILIZE EXIST STORM LINE CONNECTION INTO DITCH INLET



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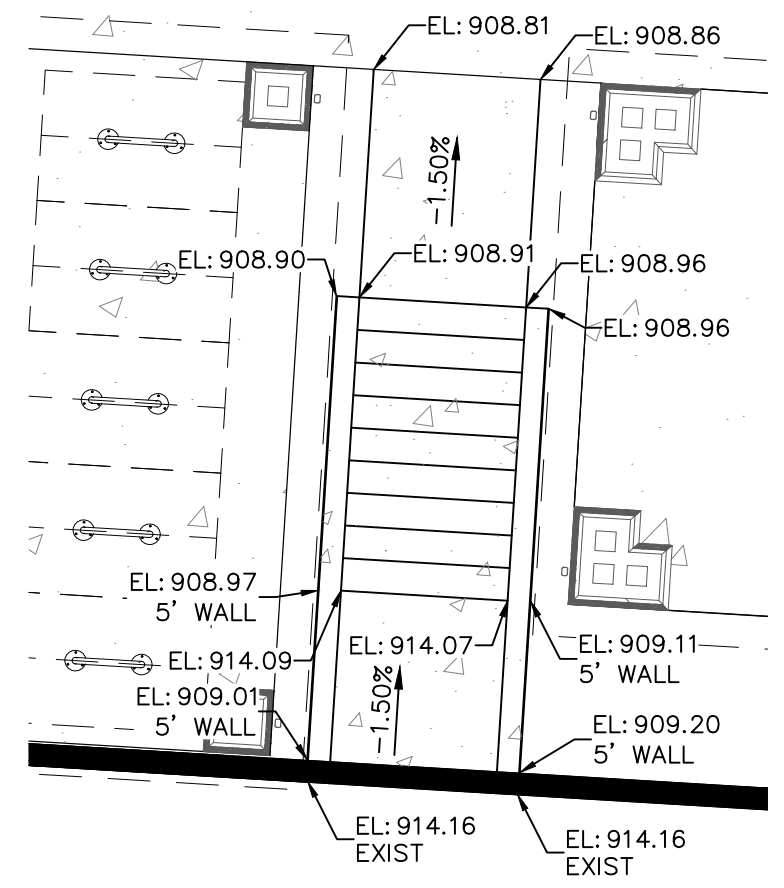
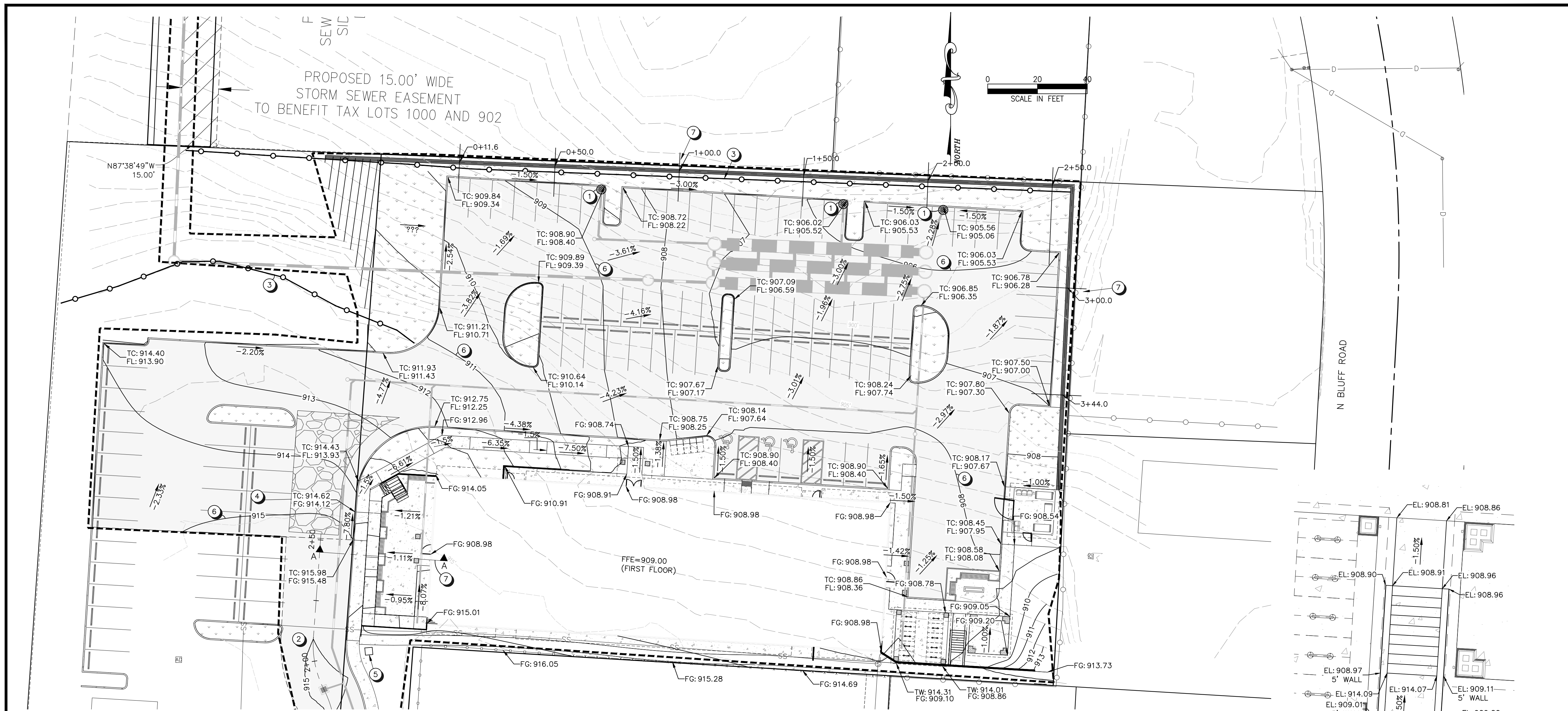
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**STORMWATER EXTENSION PLAN**  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

**6**  
**12**





**KEY NOTES**

- 1 CB INSERT INLET PROTECTION FOR AREA DRAIN TYPE CATCH BASIN. SEE DETAILS ON SHEET 11 (TYPICAL)
- 2 PROVIDE TEMPORARY INLET PROTECTION ON ALL STORMWATER INLETS WITHIN 250 LF DOWNSTREAM OF THE PROJECT SITE
- 3 TEMPORARY SILT FENCING, SEE DETAIL ON SHEET 11, ADJUST SILT FENCING AS NECESSARY DURING CONSTRUCTION
- 4 CONSTRUCTION ENTRANCE, SEE DETAIL THIS ON SHEET 11
- 5 CONSTRUCT TEMPORARY 3' X 3' X 2' DEEP SUMP AREA TO BE USED AS WASH AREA FOR CONCRETE TRUCKS, AFTER CURBS AND SIDEWALKS ARE INSTALLED AND BEFORE ROADS ARE PAVED, FILL AND COMPACT SUMP AREA PER STRUCTURAL REQUIREMENTS, DO NOT OVERFILL SUMP AREA, CONTRACTOR TO INCREASE SUMP WIDTH AS NECESSARY TO PROVIDE ADEQUATE VOLUME AS (IF) NEEDED
- 6 PROPOSED FINISH GRADE CONTOURS (TYPICAL)
- 7 SEE SHEET 8 FOR WALL CROSS SECTIONS, TYPICAL

**ESTIMATED INPLACE QUANTITIES:**

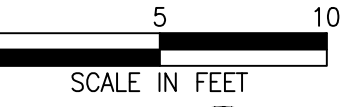
SITE SCRAPING OF ORGANICS AND HARD SURFACES (ASSUMED 4" AVERAGE, TO BE HAUL OFF): 790 CY  
 ASPHALT DATUM TO SITE SCRAPING: 610 CY CUT, 4190 CY FILL  
 SIDEWALK/LANDSCAPE DATUM TO SITE SCRAPING: 361 CY CUT, 940 CY FILL  
 UNDER BUILDING (ASSUME SLAB CONSTRUCTION): 2030 CY CUT, 0 CY FILL

TOTAL CUT: 3,791 CY  
 TOTAL FILL: 5,130 CY

QUANTITY IS AN ESTIMATE FOR INPLACE QUANTITIES AND DOES NOT INCLUDE TRENCH SPOILS, CONTRACTOR RESPONSIBLE FOR DOING OWN QUANTITY ESTIMATE FOR CONSTRUCTION COST

**LEGEND**

- TEMPORARY SEDIMENT FENCE
- BIO-BAG AND INLET INSERT PROTECTION
- LIMITS OF DISTURBANCE (1.9 ACRES)



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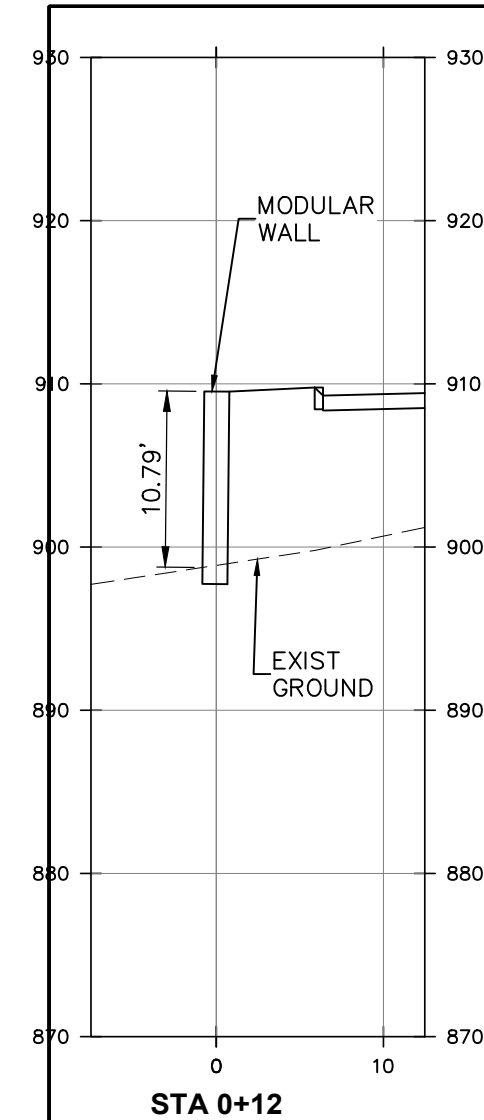
**FIRWOOD DESIGN GROUP**  
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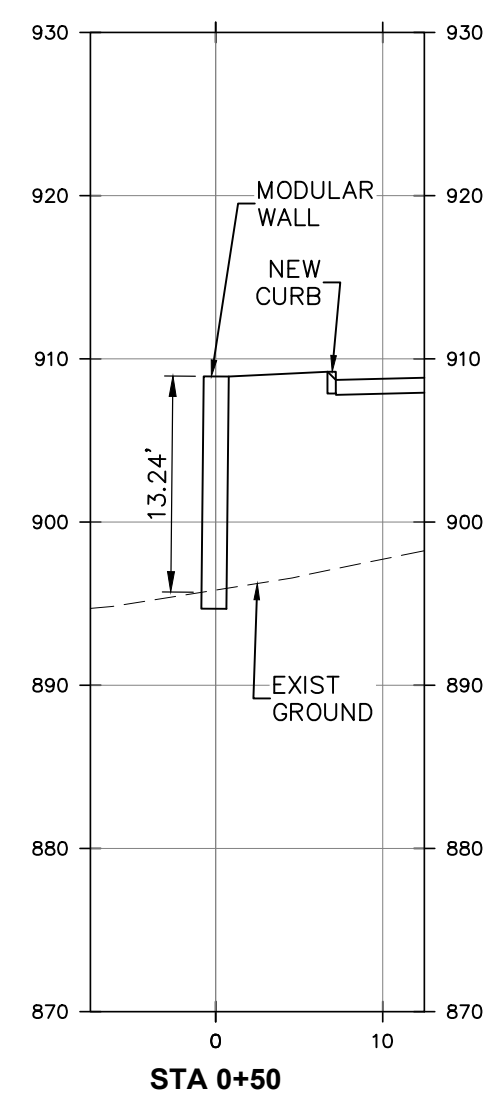
**GRADING AND ESC PLAN**  
 MIXED USE SITE DEVELOPMENT  
 38015 HWY 26, SANDY, OR 97055

7  
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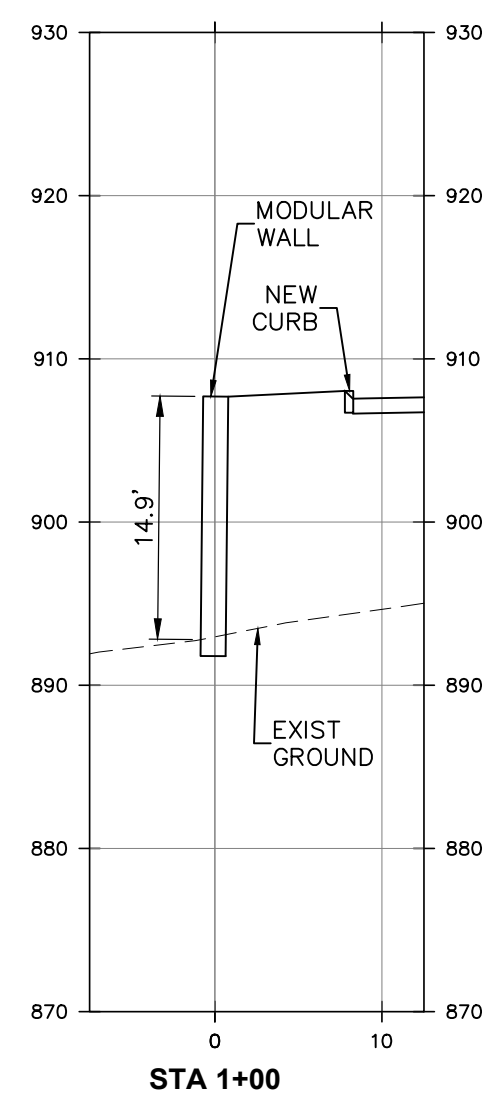




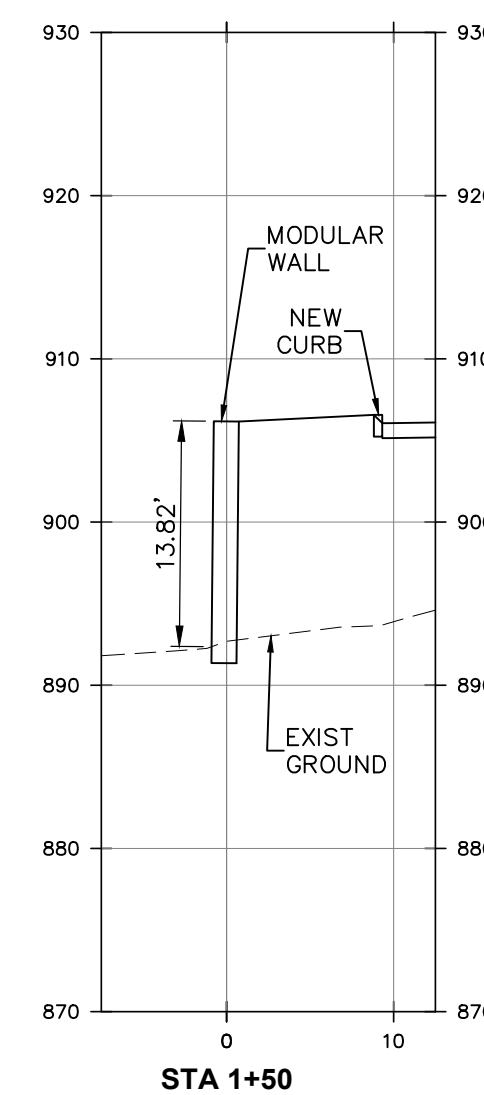
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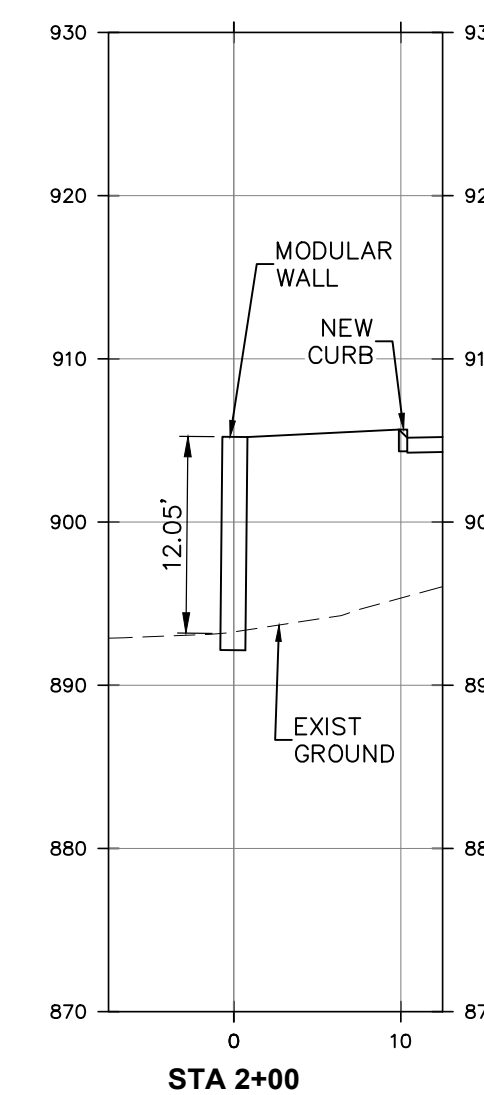
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STA 1+00

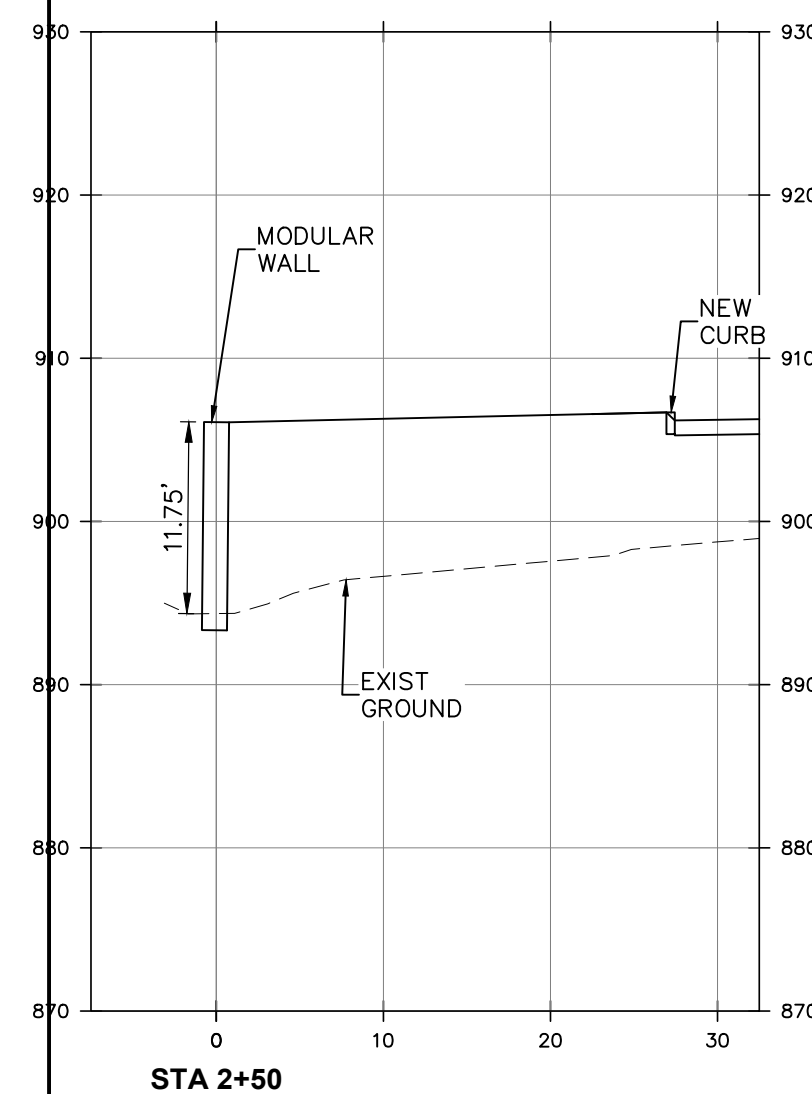


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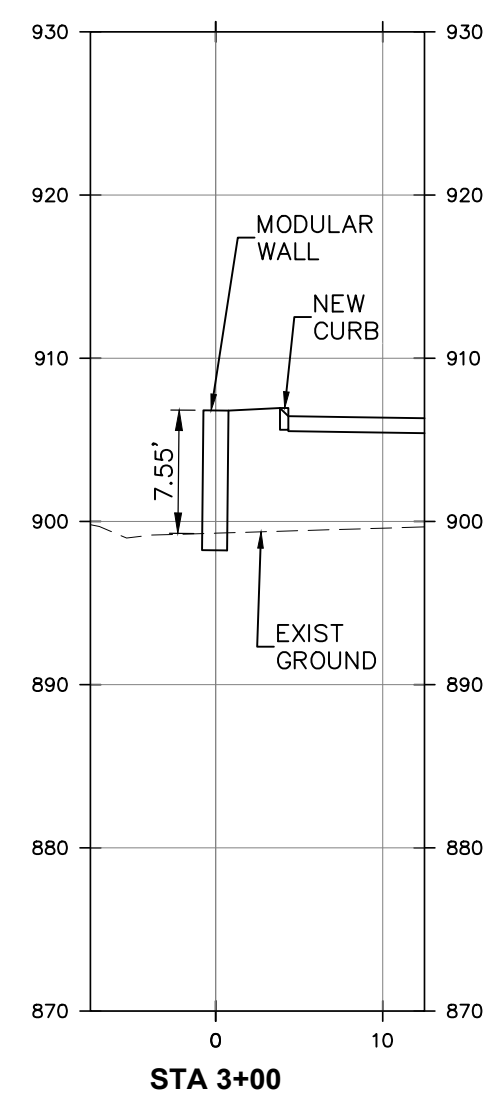


STA 2+00

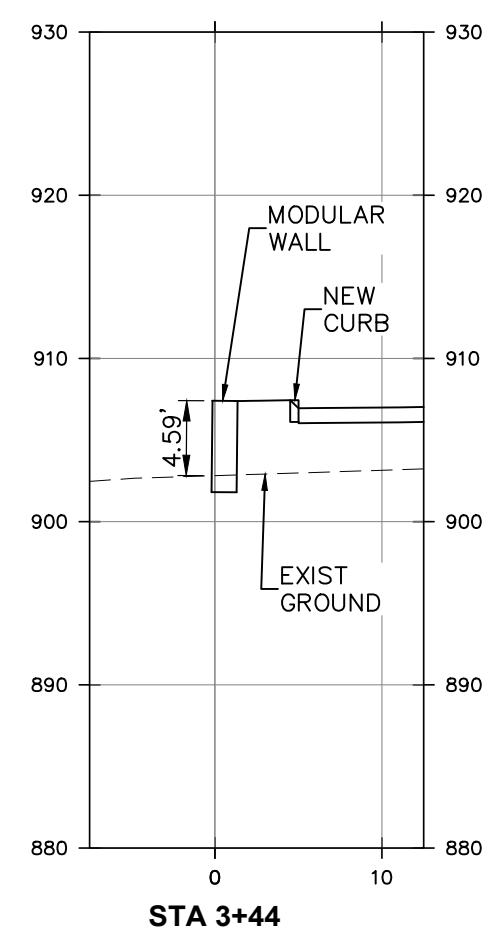
**WALL CROSS SECTIONS**  
SCALE: SEE SCALE BAR  
(SEE SHEET 7 FOR PLAN VIEW)



STA 2+50

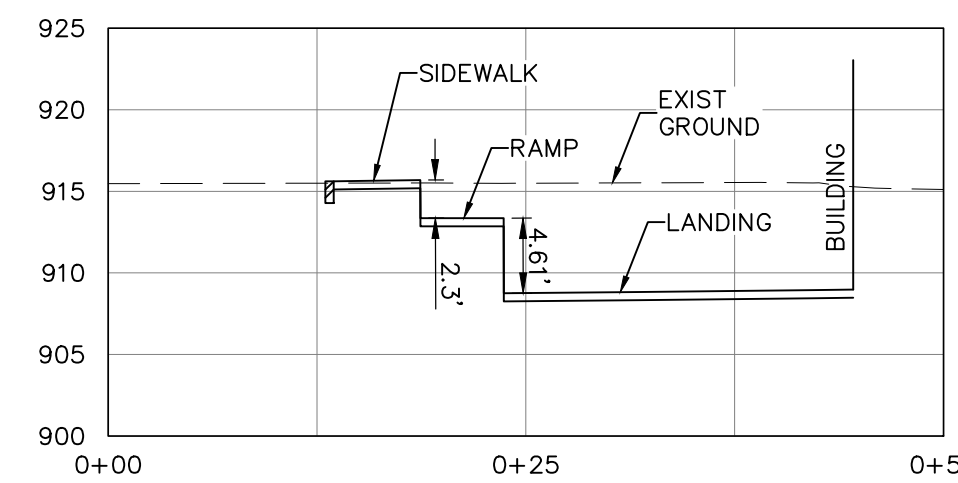


STA 3+00

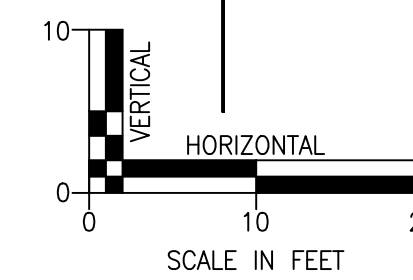


STA 3+44

**WALL CROSS SECTIONS**  
SCALE: SEE SCALE BAR  
(SEE SHEET 7 FOR PLAN VIEW)



**WALL CROSS "A-A"**  
SCALE: SEE SCALE BAR  
(SEE SHEET 7 FOR PLAN VIEW)



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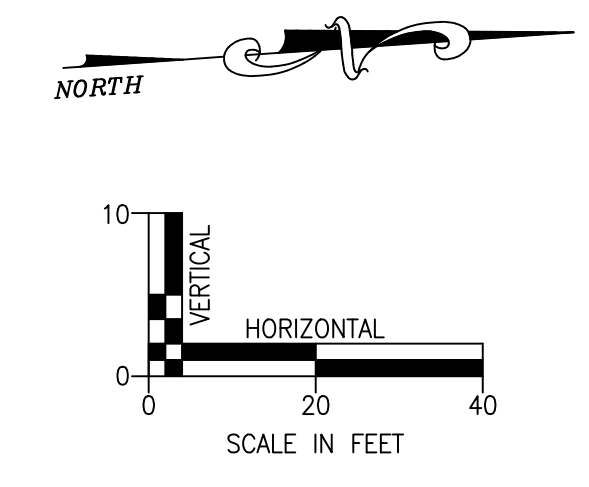
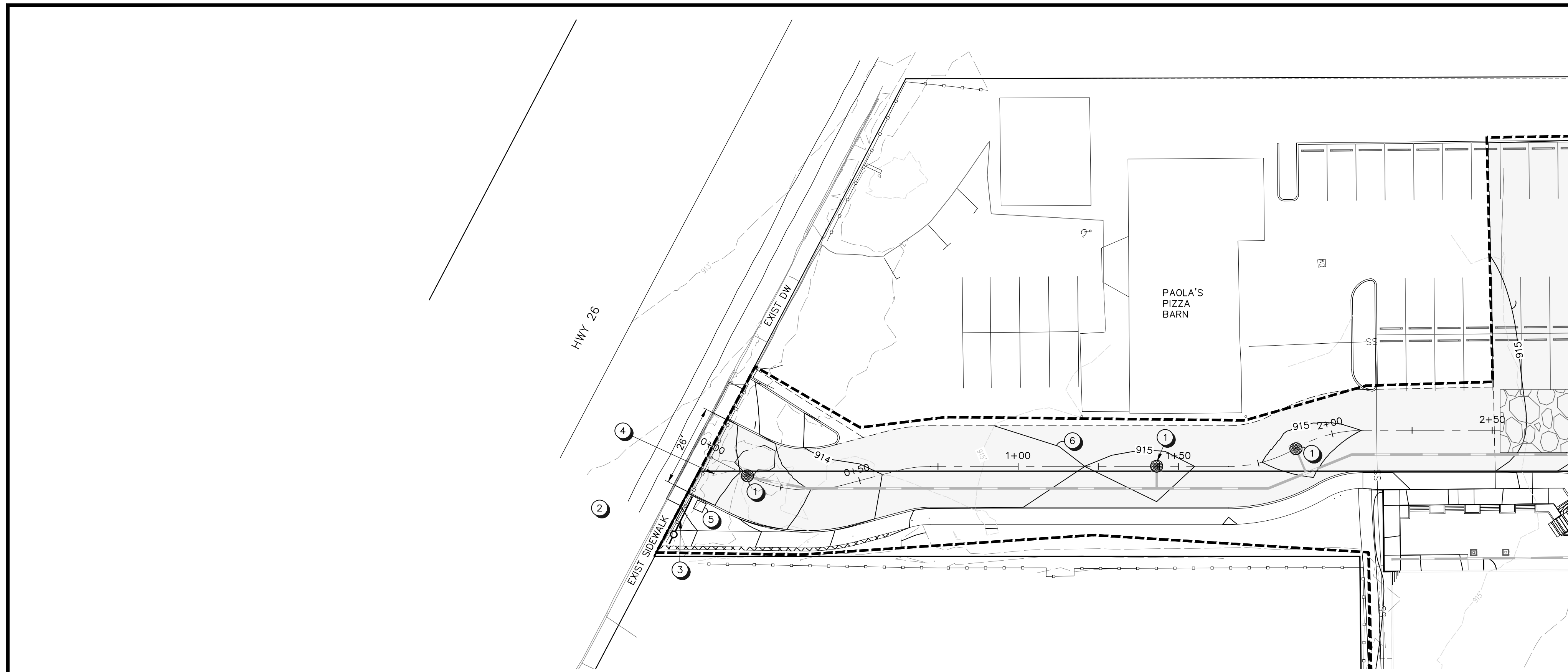


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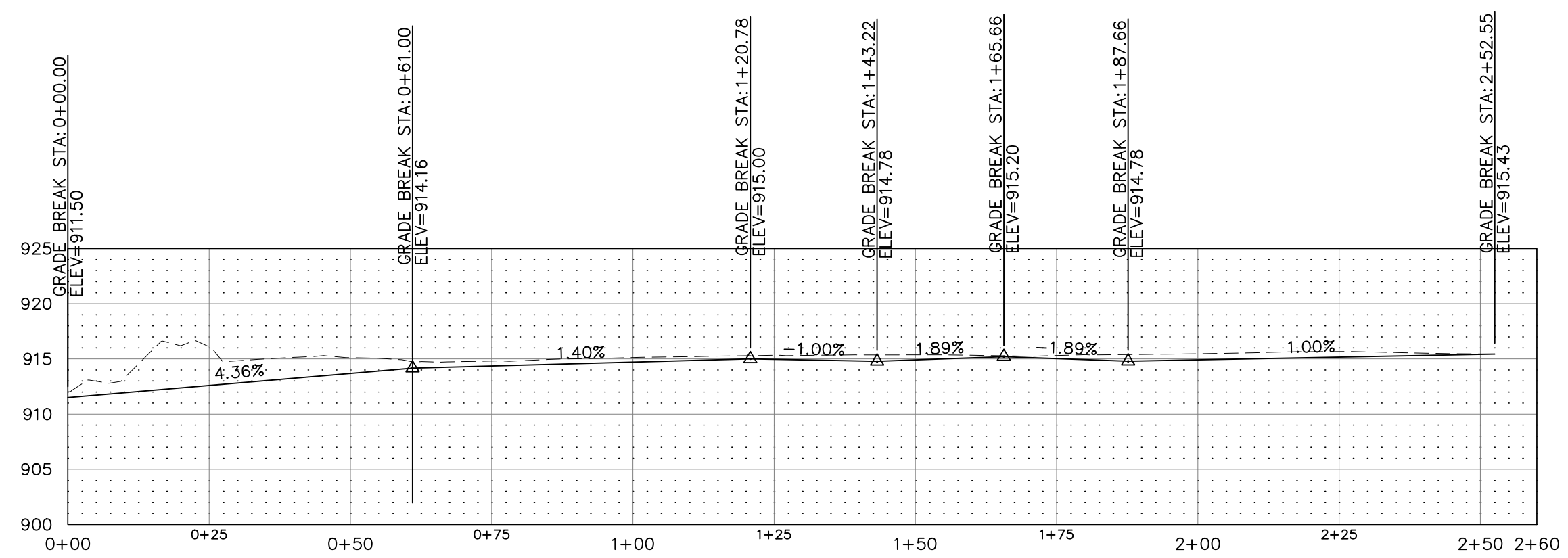
WALL CROSS SECTIONS  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

8  
12



**KEY NOTES**

- ① CB INSERT INLET PROTECTION FOR AREA DRAIN TYPE CATCH BASIN, SEE DETAILS ON SHEET 11 (TYPICAL)
- ② PROVIDE TEMPORARY INLET PROTECTION ON ALL STORMWATER INLETS WITHIN 250 LF DOWNSTREAM OF THE PROJECT SITE
- ③ TEMPORARY SILT FENCING, SEE DETAIL ON SHEET 11, ADJUST SILT FENCING AS NECESSARY DURING CONSTRUCTION
- ④ CONSTRUCTION ENTRANCE, SEE DETAIL THIS ON SHEET 11
- ⑤ CONSTRUCT TEMPORARY 3' X 3' X 2' DEEP SUMP AREA TO BE USED AS WASH AREA FOR CONCRETE TRUCKS, AFTER CURBS AND SIDEWALKS ARE INSTALLED AND BEFORE ROADS ARE PAVED, FILL AND COMPACT SUMP AREA PER STRUCTURAL REQUIREMENTS, DO NOT OVERFILL SUMP AREA, CONTRACTOR TO INCREASE SUMP WIDTH AS NECESSARY TO PROVIDE ADEQUATE VOLUME AS (IF) NEEDED
- ⑥ PROPOSED FINISH GRADE CONTOURS (TYPICAL)



- LEGEND**
- TEMPORARY SEDIMENT FENCE
  - ⊙ BIO-BAG AND INLET INSERT PROTECTION
  - LIMITS OF DISTURBANCE (1.9 ACRES)



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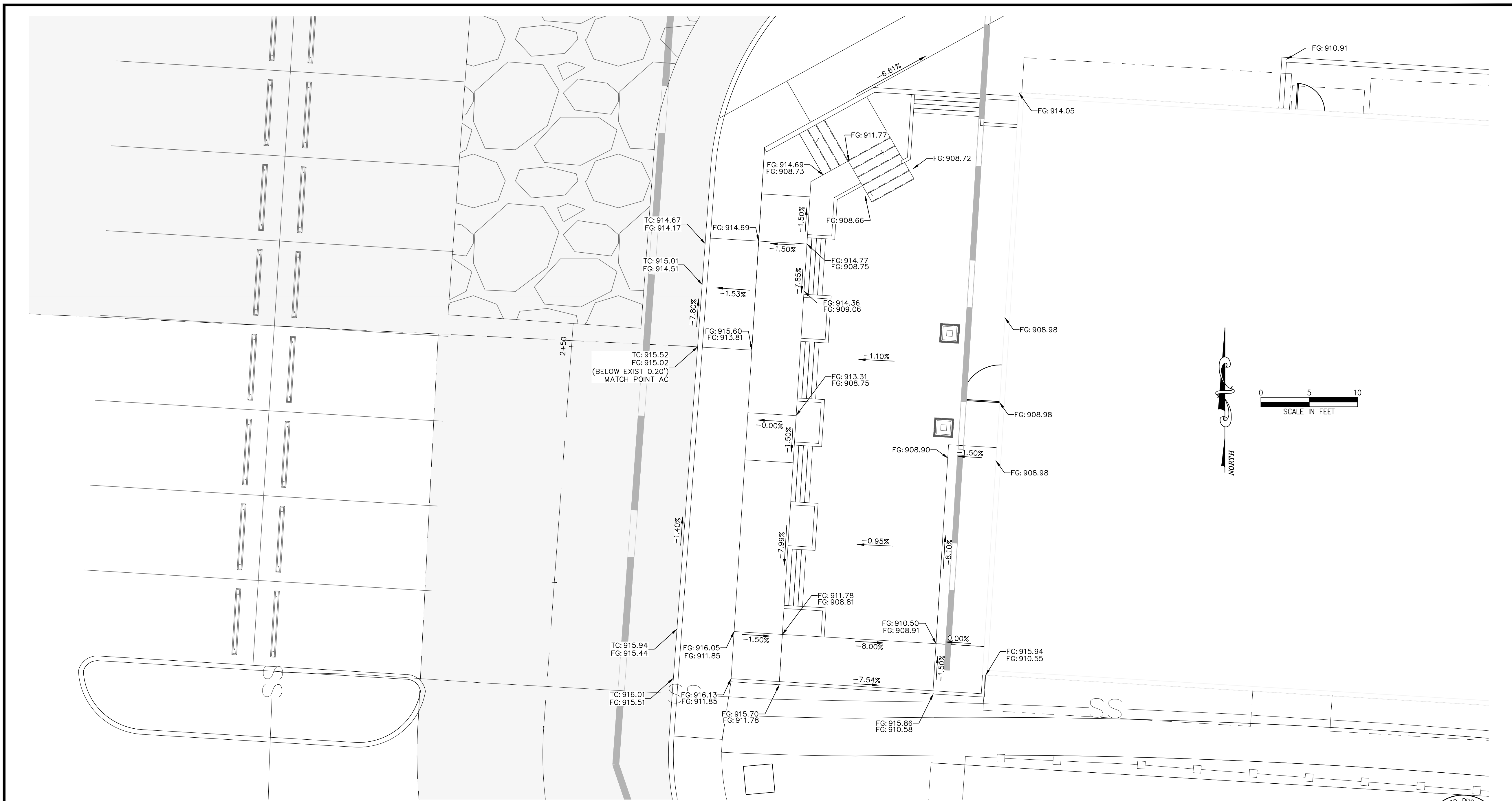
**FIRWOOD DESIGN GROUP**  
Reliable Engineering Solutions

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**STATE STREET HOMES**  
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**ENTRY GRADING PLAN**  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055





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PROJECT NO. E21-043		

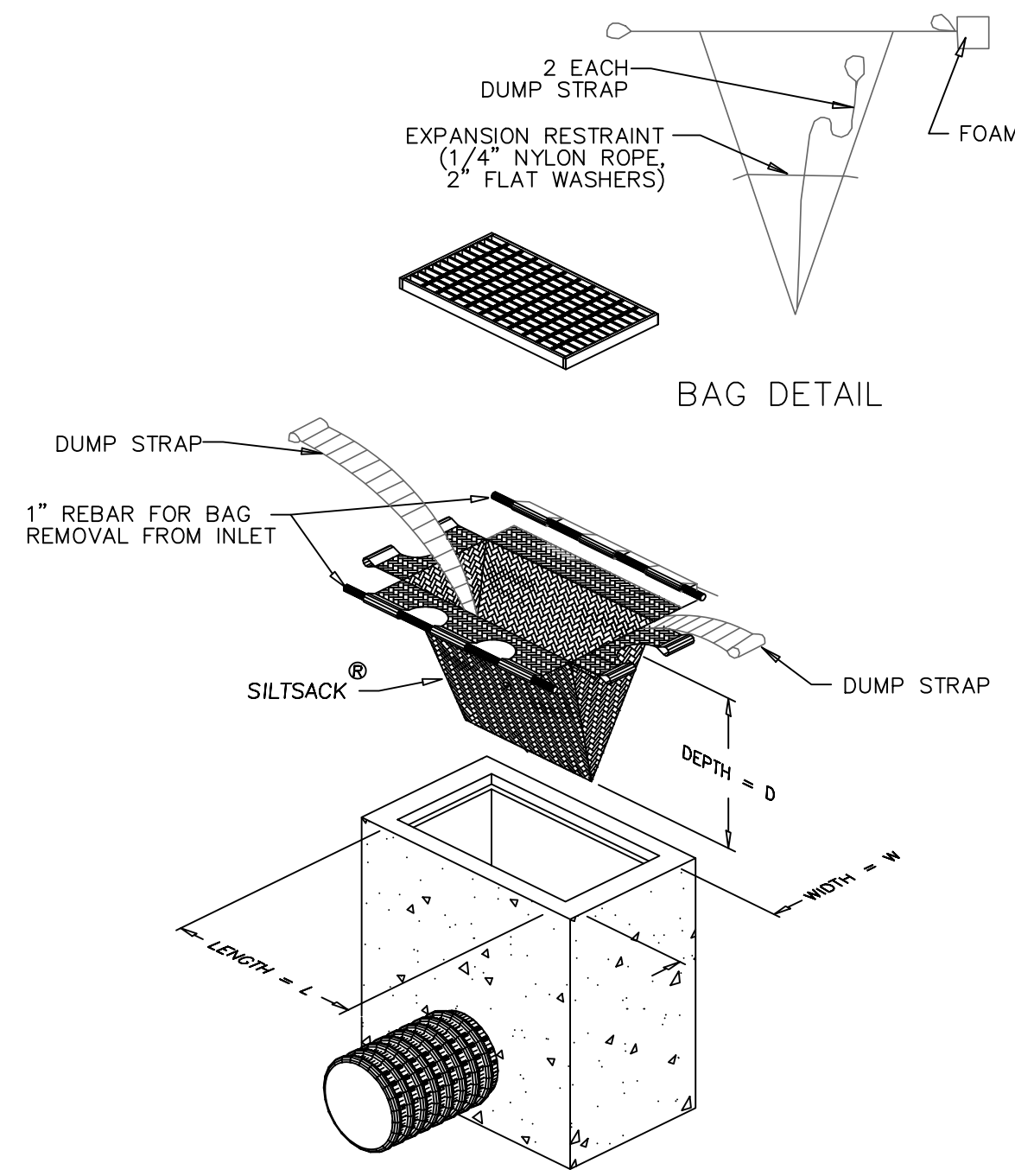
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**CIVIC AREA GRADING PLAN**  
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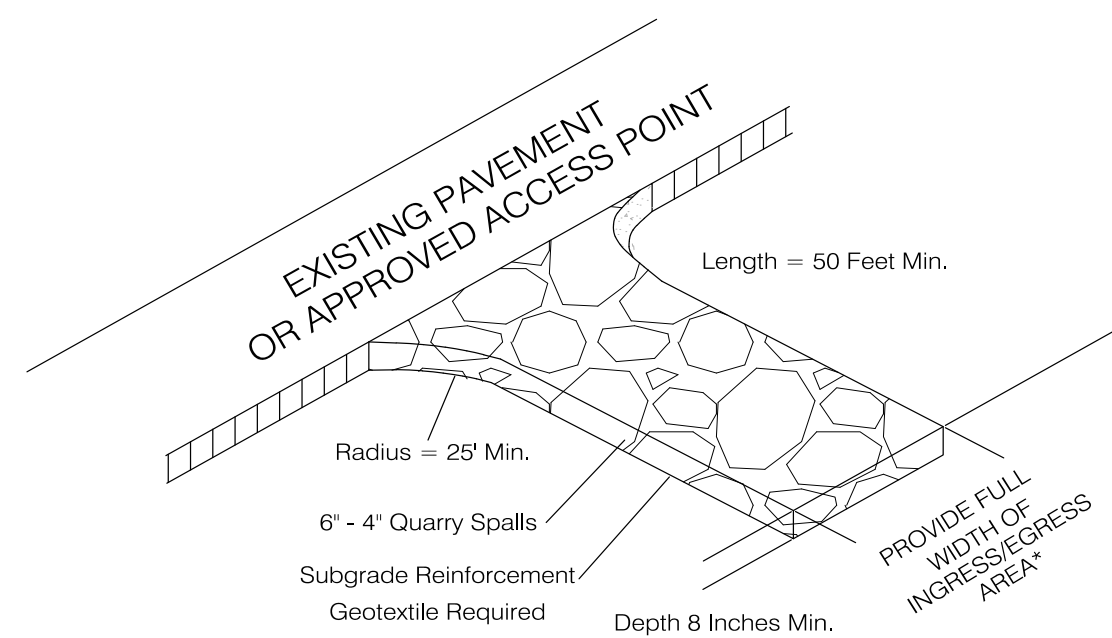
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REGULAR FLOW ONLY DO NOT USE HIGH FLOW INSERT BAGS.

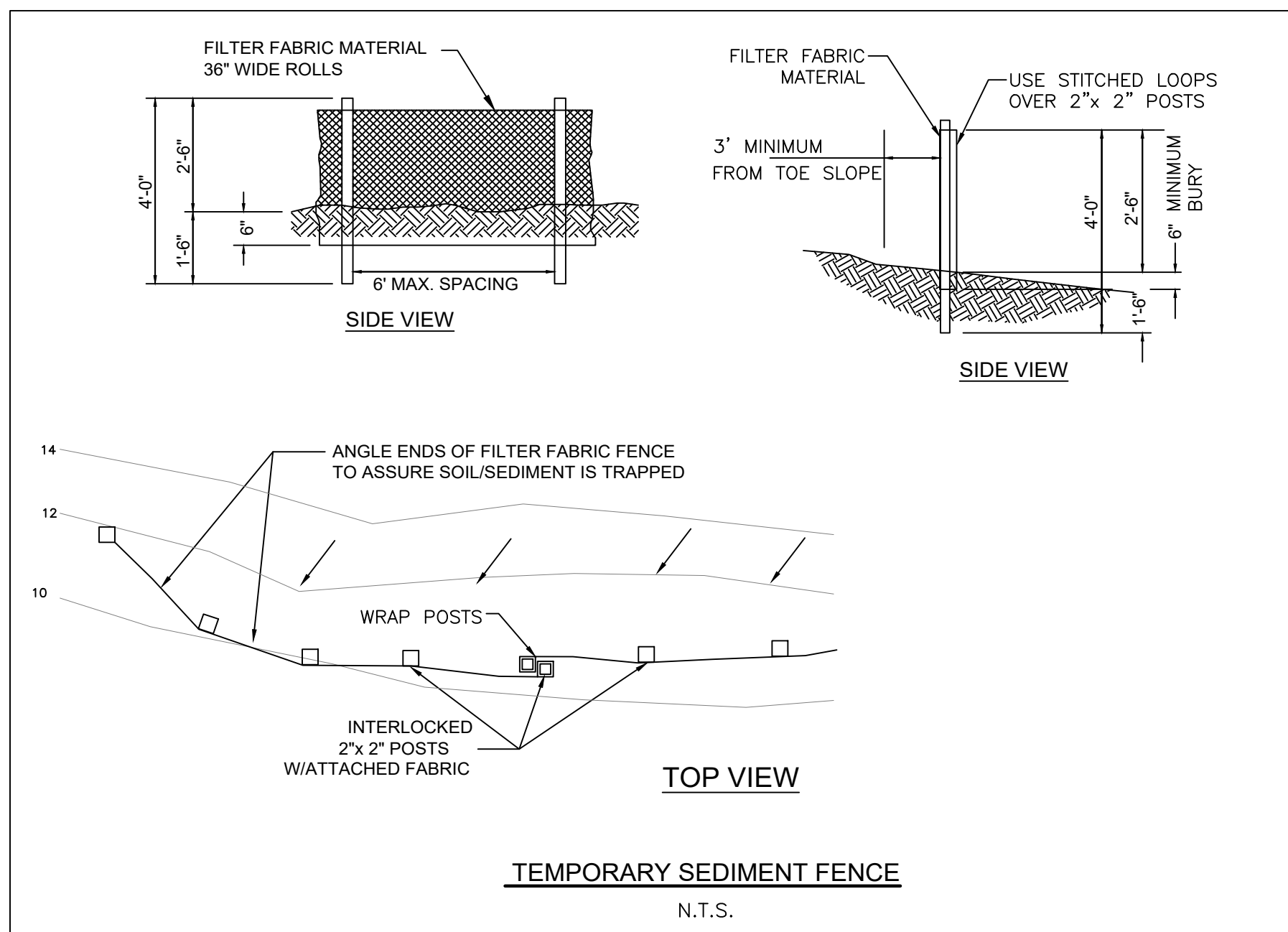
**INLET PROTECTION**



\*20' MIN. FOR SINGLE FAMILY AND DUPLEX RESIDENTIAL

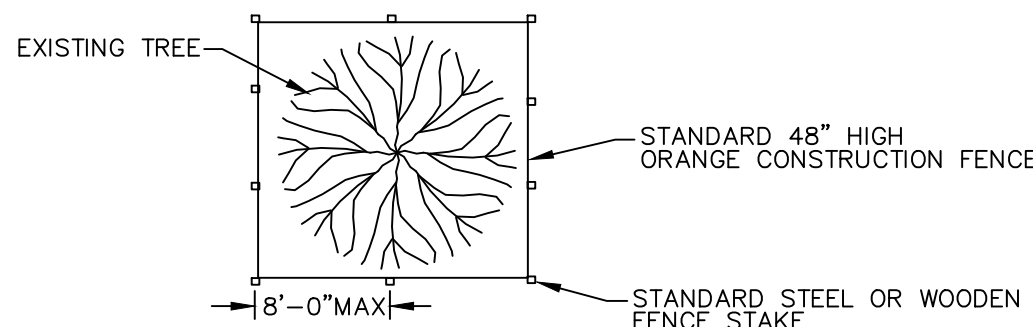
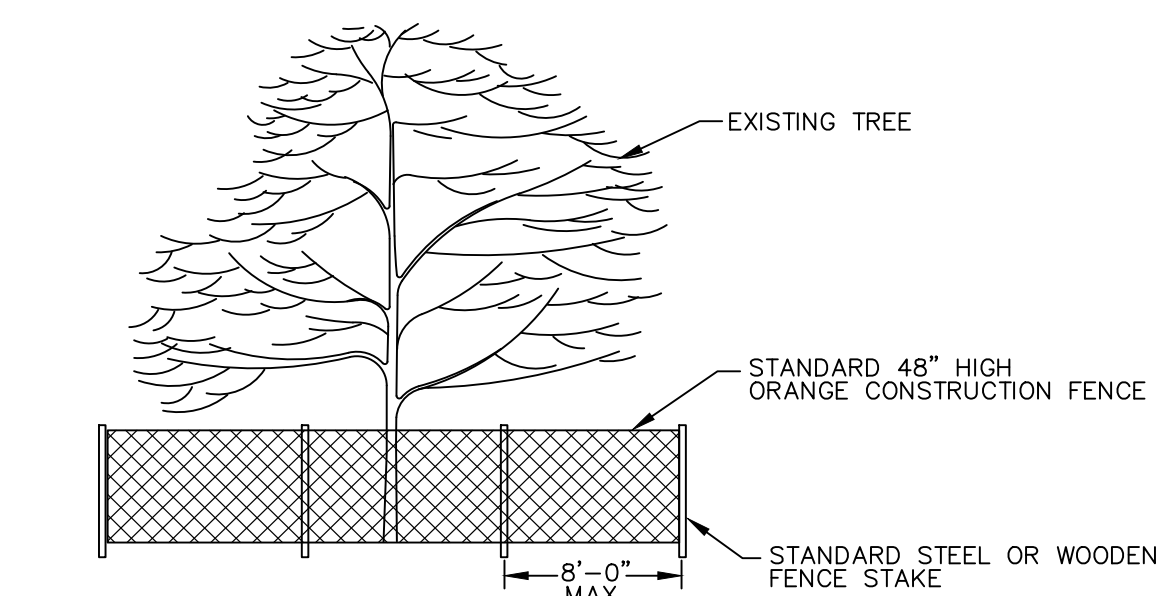
**GRAVEL CONSTRUCTION ENTRANCES :**

1. STABILIZED CONSTRUCTION ENTRANCE(S) SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
2. ALL VEHICLES LEAVING THE SITE SHALL LEAVE BY DRIVING ACROSS THE GRAVEL CONSTRUCTION ENTRANCE(S) IF GRAVEL ENTRANCE BECOME FILLED WITH MUD AND IS NO LONGER FUNCTIONAL. ADDITIONAL GRAVEL SHALL BE PLACED. VEHICLE TIRES SHALL BE FREE FROM DIRT BEFORE LEAVING THE SITE.
3. IF ACCESS IS NEEDED FROM A PAVED SURFACE OVER A CURB TO A GRAVEL SITE ENTRANCE. A WOODEN RAMP SHALL BE BUILT FROM THREE OR MORE PLANKS OF INCREASING SIZE WOOD, OFFSET TO ALLOW FOR DRAINAGE. NO GRAVEL OR ROAD BASE RAMPS ALLOWED.



**SEDIMENT CONTROL FENCES :**

1. AT NO TIME SHALL SEDIMENT BE ALLOWED TO ACCUMULATE BEHIND A SEDIMENT FENCE MORE THAN ONE-THIRD OF THE FENCE HEIGHT ABOVE GROUND. SEDIMENT SHOULD BE REMOVED OR REGRADED ONTO SLOPES, AND THE SEDIMENT FENCES REPAIRED AND REESTABLISHED AS NEEDED.
2. FENCE SHALL BE REMOVED ONLY WHEN UPSLOPE AREAS ARE PERMANENTLY STABILIZED.



NOTE:  
TREE PROTECTION FENCE SHALL BE LOCATED AT THE OUTER PERIMETER OF THE DRIP LINE OR AS NOTED ON THE PLAN. INSTALL FENCING AS PER MANUFACTURER'S SPECIFICATIONS.  
FENCE MAY BE LOCATED AROUND THE DRIP LINE OF TREE GROUPINGS RATHER THAN INDIVIDUAL TREES.

**TREE PROTECTION DETAIL**

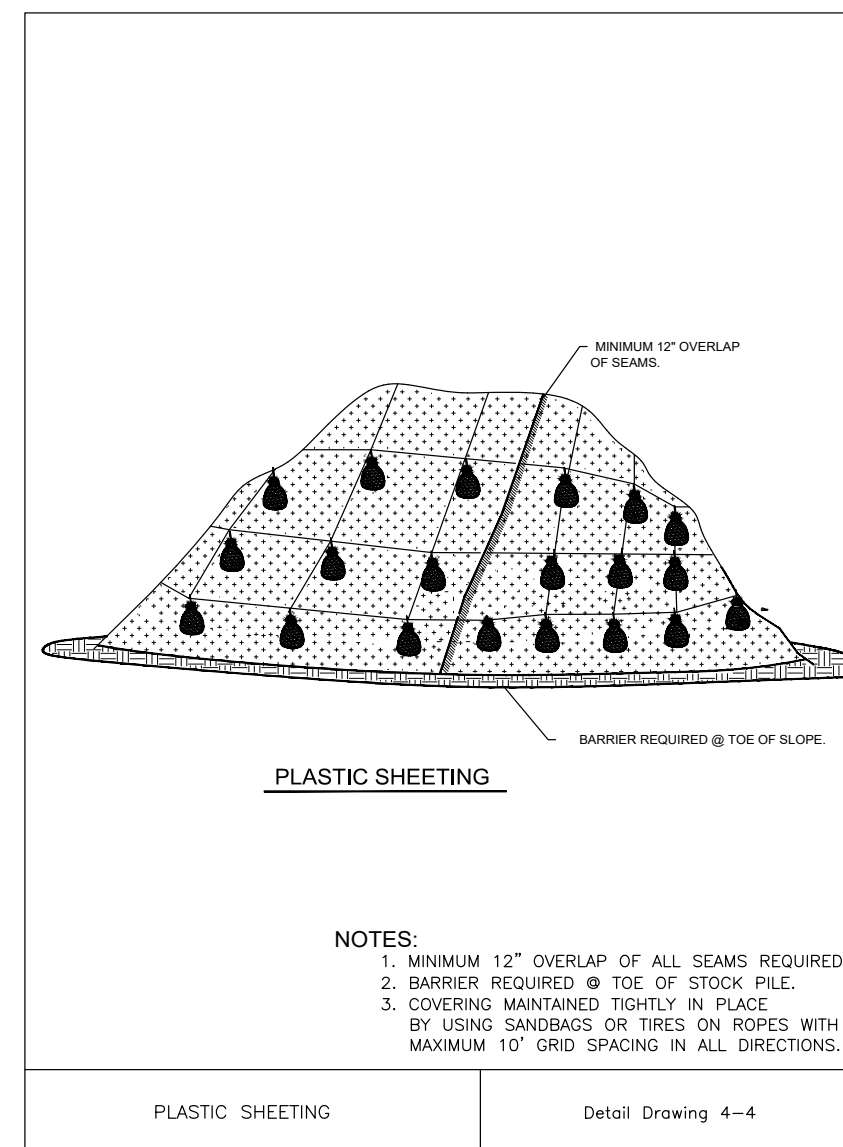
**EROSION AND SEDIMENT CONTROL NOTES**

**GENERAL :**

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF SANDY ORDINANCES & REFERENCED DOCUMENTS & CITY OF PORTLAND EROSION CONTROL MANUAL.
2. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
3. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENT FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR EXPECTED STORM EVENTS AND TO ENSURE THE SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.
4. NO VISIBLE AND MEASURABLE SEDIMENT OR POLLUTANT SHALL EXIT THE SITE, ENTER THE PUBLIC RIGHT-OF-WAY, OR BE DEPOSITED INTO ANY WATER BODY OR STORM DRAINAGE SYSTEM.
5. ANY SOIL THAT ENTERS THE PUBLIC RIGHT-OF-WAY SHALL BE REMOVED WITHIN 24 HOURS.
6. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED TO MEET DEQ AND CITY OF SANDY STANDARDS AS NECESSARY TO PREVENT SEDIMENT DISCHARGE FROM THE SITE.
7. ESC FACILITIES SHALL BE INSPECTED EVERY 24 HOURS DURING STORM OR RAIN EVENTS TO ENSURE THE MEASURES ARE FUNCTIONING PROPERLY.
8. PERMANENT OR TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DENUDED DEVELOPMENT SITES IN CONFORMANCE WITH THE FOLLOWING SCHEDULE:
  - a. BETWEEN OCTOBER 1 AND APRIL 30, ALL DENUDED SITES SHALL IMMEDIATELY BE PROVIDED WITH EITHER TEMPORARY OR PERMANENT SOIL STABILIZATION.
  - b. BETWEEN MAY 1 AND SEPTEMBER 30, TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES TO REDUCE DUST AND SEDIMENT TRANSPORT SHALL BE APPLIED AS SOON AS PRACTICABLE, BUT IN NO CASE MORE THAN SEVEN DAYS AFTER GROUND DISTURBING ACTIVITY OCCURS.
  - c. GROUND COVER SHALL BE INSTALLED ON ANY PORTION OF A SITE THAT IS DENUDED FOR MORE THAN 6 MONTHS.
  - d. TEMPORARY MEASURES SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE ESTABLISHED.
  - e. STOCKPILES SHALL BE SECURED OR PROTECTED THROUGHOUT THE PROJECT WITH TEMPORARY OR PERMANENT SOIL STABILIZATION MEASURES.
  - f. REPLACEMENT GROUND COVER VEGETABLE SHALL NOT INCLUDE PLANTS LISTED AS NUISANCE OR PROHIBITED PLANTS ON THE CITY OF PORTLAND PLANT LIST.
  - g. EROSION CONTROL MEASURES SHALL BE MAINTAINED DURING CONSTRUCTION.
9. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
10. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE EVERY TWO WEEKS, OR WITHIN 24 HOURS FOLLOWING A STORM EVENT. DAILY INSPECTIONS SHALL BE PERFORMED DURING PROLONGED RAINFALL. LOG OF INSPECTIONS TO BE KEPT AVAILABLE AT THE SITE.

**RESEEDING/ESTABLISHMENT OF VEGETATIVE COVER :**

1. RECOMMENDED EROSION CONTROL GRASS SEED MIXES ARE AS SPECIFIED AS BELOW. SIMILAR MIXES DESIGNED TO ACHIEVE EROSION CONTROL MAY BE SUBSTITUTED WITH APPROVAL. IN GENERAL, USE OF QUICK GROWING, STERILE GRASSES AND GRAINS IN MIXTURE WITH PERMANENT VEGETATIVE COVER IS RECOMMENDED TO ACHIEVE QUICK COVER OF EXPOSED SOILS.
  - a. DWARF GRASS MIX (LOW HEIGHT, LOW MAINTENANCE), 100 POUNDS PER ACRE SEED RATE  
  
(MINIMUM):  
1. DWARF PERENNIAL RYEGRASS, 80% BY SEED COUNT.  
2. CREEPING RED FESCUE, 20% BY SEED COUNT.
2. IT IS RECOMMENDED THAT TOP SOIL ON SLOPES BE PREPARED BY ROUGHENING THE SLOPES BEFORE SEEDING.
3. AREAS THAT FAIL TO ESTABLISH GRASS COVER ADEQUATE TO PREVENT EROSION SHALL BE RESEED AS SOON AS SUCH AREAS ARE IDENTIFIED, AND ALL APPROPRIATE MEASURES TAKEN TO ESTABLISH COVER.
4. EROSION CONTROL MEASURES SHALL BE MAINTAINED BY CONTRACTOR UNTIL GRASS COVER IS ESTABLISHED AND UP TO ONE YEAR AFTER COMPLETION OF CONSTRUCTION, WHICHEVER IS SOONER.
5. MULCH SHALL BE SPREAD UNIFORMLY IMMEDIATELY FOLLOWING SEEDING.



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DATE:	NO.	REVISION

DRAWN:	DESIGNED:	CHECKED:
SCALE: AS SHOWN	DATE: DECEMBER 2021	
PROJECT NO. E21-043		

**FIRWOOD DESIGN GROUP**  
Reliable Engineering Solutions  
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY  
TROUTDALE, OREGON 97060  
(503) 668-3737

**STATE STREET HOMES**  
1233 NW NORTHRUP ST. #125  
PORTLAND, OR 97209

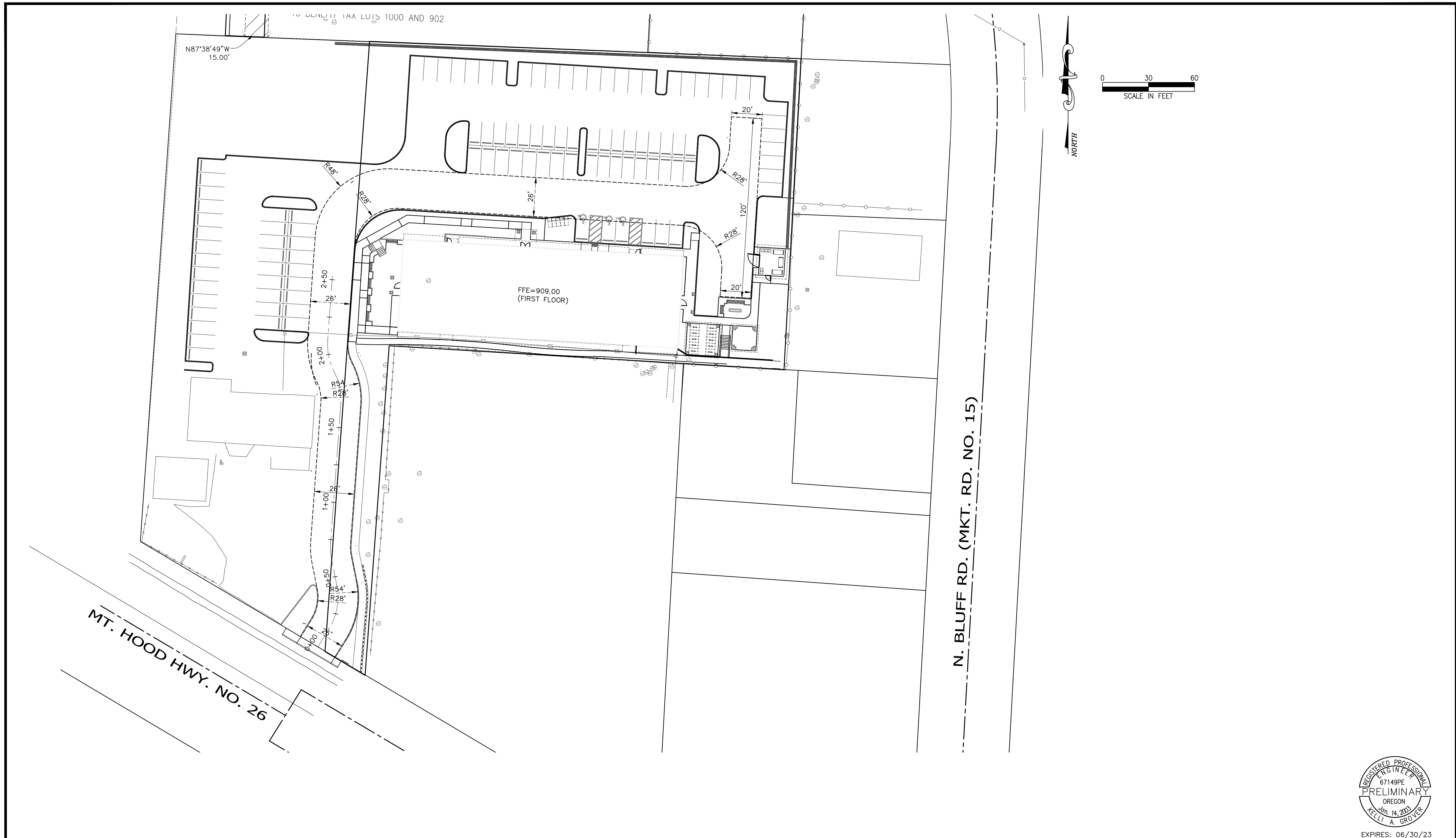
**ESC NOTES AND DETAILS**  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055



EXPIRES: 06/30/23  
SIGNATURE DATE: \_\_\_\_\_

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EXPIRES: 06/30/23  
SIGNATURE DATE: \_\_\_\_\_

DATE	NO.	REVISION

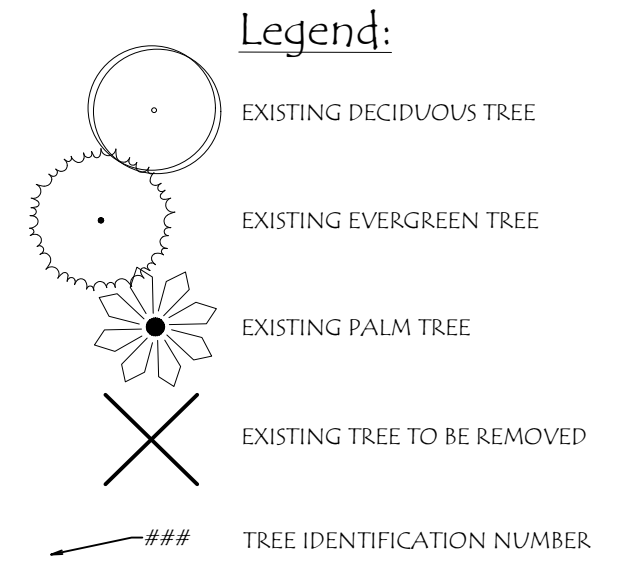
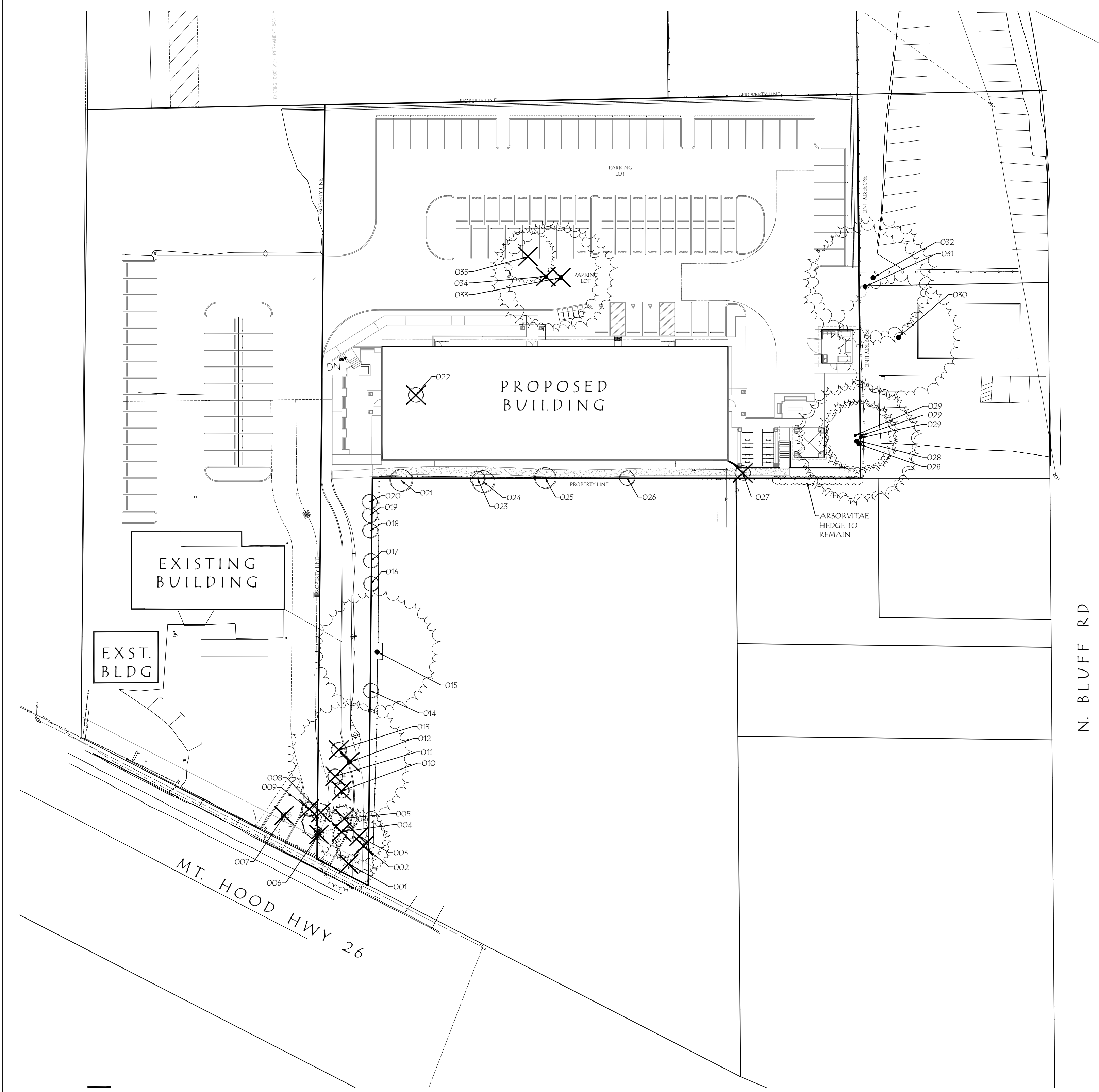
DRAWN:	DESIGNED:	CHECKED:
SCALE: AS SHOWN	DATE: DECEMBER 2021	
PROJECT NO. E21-043		

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 359 EAST HISTORIC COLUMBIA RIVER HIGHWAY  
 TROUTDALE, OREGON 97060  
 (503) 668-3737

**STATE STREET HOMES**  
 1233 NW NORTHRUP ST. #125  
 PORTLAND, OR 97209

**SITE CIRCULATION PLAN**  
 MIXED USE SITE DEVELOPMENT  
 38015 HWY 26, SANDY, OR 97055

12/12



**General Notes:**

1. TREE LOCATIONS BASED ON SITE SURVEY.
2. SEE ARCHITECTURAL PLANS FOR SITE INFORMATION.
3. TREE INVENTORY TABLE SEE THIS SHEET.

**Existing Tree Inventory**

TREE ID	TREE SPECIES	SIZE (DBH)	NOTES	REMAIN/REMOVE
001	Blue Spruce	12"		Remove, Development Impacts
002	Western Red Cedar	4"		Remove, Development Impacts
003	Western Red Cedar	8"		Remove, Development Impacts
004	Blue Spruce	10"		Remove, Development Impacts
005	Western Red Cedar	8"		Remove, Development Impacts
006	Windmill Palm	10"		Remove, Development Impacts
007	Windmill Palm	6"		Remove, Development Impacts
008	Conifer (Unknown)	10"	Dead	Remove, Development Impacts
009	Holly	4"		Remove, Development Impacts
010	Sugar Maple	14"		Remove, Development Impacts
011	Cherry	14"		Remove, Development Impacts
012	Douglas Fir	24"		Remove, Development Impacts
013	Cherry	6"		Remove, Development Impacts
014	Filbert	14"		Remain
015	Douglas Fir	26"		Remain
016	Redbud	5"	Located on Property Line	Remain
017	Holly	5"	Located on Property Line	Remain
018	Thundercloud Plum	4"	Located on Property Line	Remain
019	Redbud	5"	Located on Property Line	Remain
020	Thundercloud Plum	4"	Located on Property Line	Remain
021	Red Maple	10"	Located on Adjacent Property	Remain
022	Filbert	6"		Remove, Development Impacts
023	Cherry	4"	Located on Property Line	Remain
024	Red Maple	6"	Located on Adjacent Property	Remain
025	Cherry	10"	Located on Property Line	Remain
026	Cherry	6"	Located on Property Line	Remain
027	Redbud	5"		Remove, Development Impacts
028	Douglas Fir	18", 18"	Located on Property Line	Remain
029	Douglas Fir	12", 12", 12"	Located on Property Line	Remain
030	Douglas Fir	36"	Located on Adjacent Property	Remain
031	Douglas Fir	36"	Located on Adjacent Property	Remain
032	Douglas Fir	36"	Located on Adjacent Property	Remain
033	Douglas Fir	24"		Remove, Development Impacts
034	Douglas Fir	24"		Remove, Development Impacts
035	Douglas Fir	12"		Remove, Development Impacts

**Laurus Designs, LLC**

1012 Pine Street  
Silverton, Oregon  
503.784.6494

**Multi-Family Sandy**

38015 Highway 26  
Sandy, Oregon

REGISTERED  
643  
**PRELIMINARY**  
LAURA A. ANTONSON  
OREGON  
11/16/2007  
LANDSCAPE ARCHITECT

**EXISTING TREE INVENTORY**

SCALE: 1"=30'-0"  
0' 15' 30' 60'  
SCALE

September 15th, 2022

**REVISIONS**

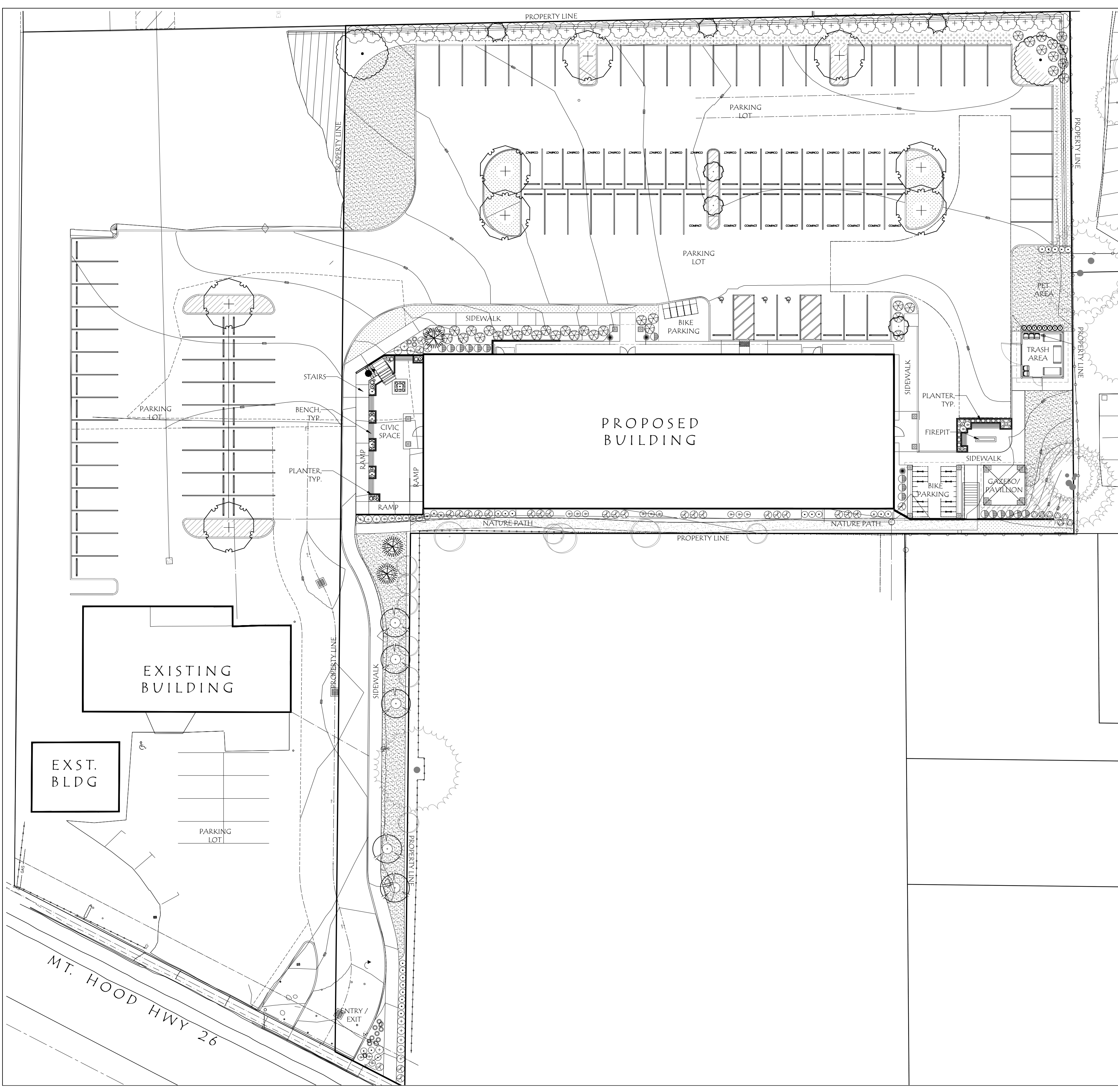
#	DATE	NOTES	INITIALS

**L1.1**

SHEET 1 OF 2

PROJECT #: 1409R





- Legend:**
- EXISTING DECIDUOUS TREE TO REMAIN
  - EXISTING EVERGREEN TREE TO REMAIN

- General Notes:**
- PLANTING PLAN FOR PRELIMINARY USE ONLY. NOT FOR BIDDING OR CONSTRUCTION.
  - TREE INVENTORY FOR EXISTING TREES TO REMAIN AND REMOVE SEE SHEET L1.1.
  - SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN.
  - SEE CIVIL DRAWINGS FOR GRADING AND UTILITIES.
  - PLANT SIZES MEET MINIMUM CITY OF SANDY PLANT REQUIREMENTS OR GREATER.
  - IRRIGATION TO BE AN AUTOMATIC UNDERGROUND SYSTEM DESIGN BUILT BY THE LANDSCAPE CONTRACTOR.

**Landscape Requirements**  
 Total Site Area (sf): 63,711 sf (1.46 acres)  
 Landscape Area: 15,894 sf  
 Civic Space: 1,614 sf  
 Outdoor Recreation Areas: 9,901 sf  
 Parking Lot: 1 Large Tree Per 12 Spaces  
 Screen/buffer: Evergreen plants to screen within 2 years

**Preliminary Plant Legend**

TREES	QTY	BOTANICAL / COMMON NAME	SIZE	NOTES
	3	Chamaecyparis nootkatensis 'Glauca Pendula' / Weeping Nootka False Cypress	5' Ht. Min., B&B	
	3	Chamaecyparis obtusa 'Gracilis' / Slender Hinoki False Cypress	5' Ht. Min., B&B	
	3	Lagerstroemia indica 'Whit II' TM / Dynamite Crape Myrtle	1 1/2" Cal., B&B	
	2	Nyssa sylvatica 'Wildfire' / Black Gum	1 1/2" Cal., B&B	Large Parking Lot Tree
	5	Prunus serrulata 'Amanoyawa' / Japanese Flowering Cherry	1 1/2" Cal., B&B	
	8	Zelkova serrata 'Green Vase' / Sawleaf Zelkova	1 1/2" Cal., B&B	Large Parking Lot Tree

SHRUBS	QTY	BOTANICAL / COMMON NAME	SIZE
	36	Abelia x grandiflora 'Kaleidoscope' / Kaleidoscope Abelia	2 Gal.
	8	Euonymus japonicus 'Greenspire' / Greenspire Upright Euonymus	5 Gal.
	7	Ilex crenata 'Sky Pencil' / Sky Pencil Japanese Holly	24"-30" Ht.
	38	Ligustrum japonicum 'Texanum' / Texas Japanese Privet	5 Gal.
	20	Nandina domestica 'Atropurpurea Nana' / Dwarf Nandina	1 Gal.
	38	Prunus laurocerasus 'Mount Vernon' / Mount Vernon Laurel	1 Gal.
	12	Rosa KnockOut 'Radrazz' / Radrazz KnockOut Rose	2 Gal.
	16	Sarcococca confusa / Fragrant Sarcococca	2 Gal.
	27	Spiraea x bumalda 'Magic Carpet' / Magic Carpet Spiraea	2 Gal.
	7	Symphoricarpos albus / Common White Snowberry	1 Gal.

GRASSES / PERENNIALS	QTY	BOTANICAL / COMMON NAME	SIZE
	23	Calamagrostis x acutiflora 'Karl Foerster' / Karl Foerster Feather Reed Grass	1 Gal.
	3	Hakonechloa macra 'Aureola' / Golden Variegated Forest Grass	1 Gal.
	30	Iberis sempervirens 'Absolutely Amethyst' / Absolutely Amethyst Candytuft	1 Gal.
	16	Pennisetum alopecuroides 'Burgundy Bunny' / Burgundy Bunny Dwarf Fountain Grass	1 Gal.

GROUND COVERS	QTY	BOTANICAL / COMMON NAME	SIZE	SPACING
	195	Arctostaphylos uva-ursi / Kinnikinnick	1 Gal.	30" o.c.
	275	Fragaria chiloensis / Beach Strawberry	4" Pot	18" o.c.
	293	Rubus pentalobus 'Emerald Carpet' / Bramble	1 Gal.	30" o.c.
	3,795 sf	ProTime 301 Water Smarter Fescue or Equal	Seed @ Rate of 10 lbs per 1000 sf	

Laurus Designs, LLC

1012 Pine Street  
 Silverton, Oregon  
 503.784.6494

Multi-Family  
 Sandy

38015 Highway 26  
 Sandy, Oregon

REGISTERED  
 643  
**PRELIMINARY**  
 LAURA A. ANTONSON  
 OREGON  
 11/16/2007  
 LANDSCAPE ARCHITECT

**PRELIMINARY PLANTING PLAN**

SCALE: 1"=20'-0"  
 0' 10' 20' 40'  
 SCALE

September 15th, 2022

**REVISIONS**

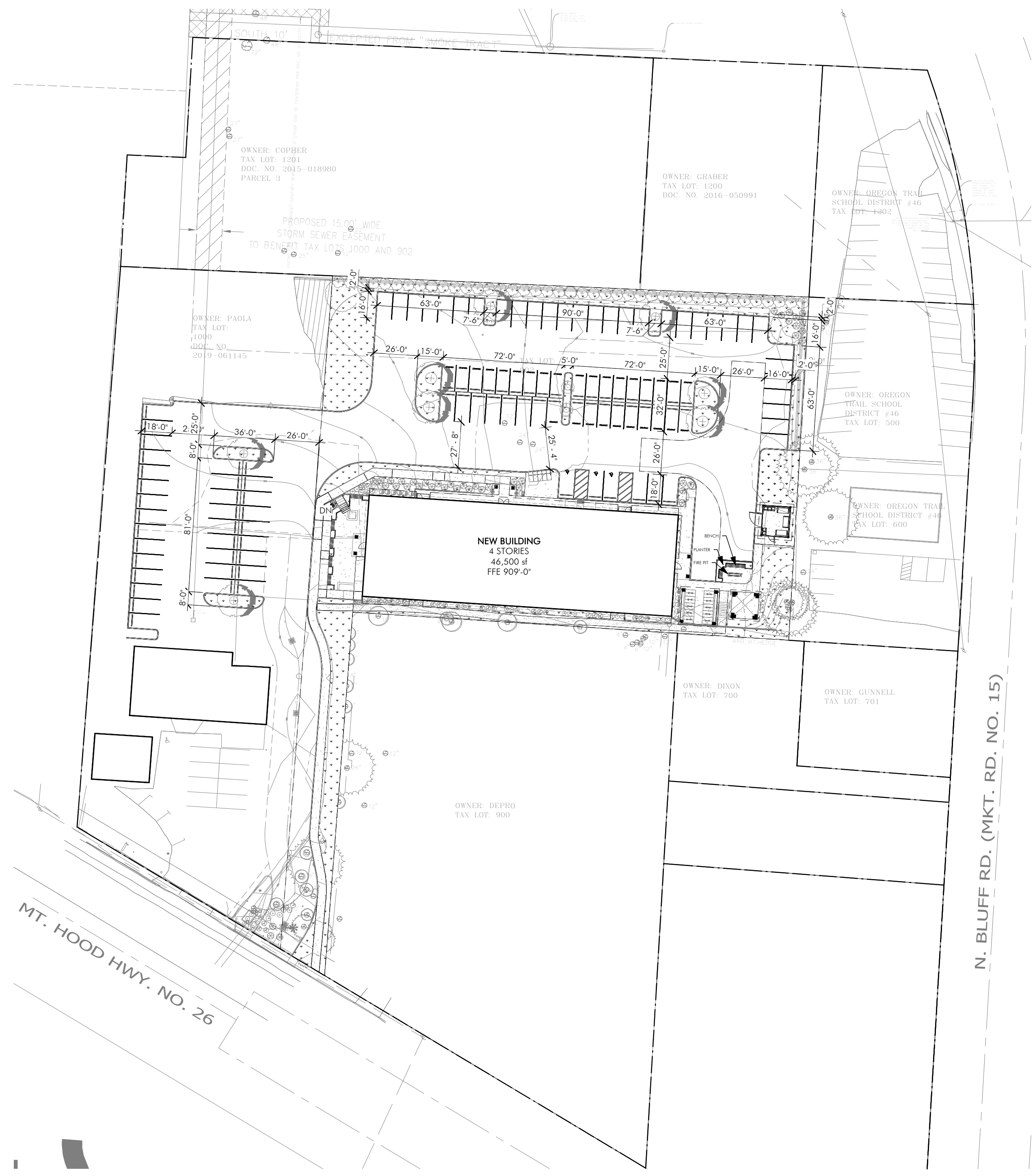
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**L2.1**

SHEET 2 OF 2

PROJECT #: 1409R





**SITE PLAN GENERAL NOTES:**

- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- REFER TO CIVIL DRAWINGS FOR GRADING. SITE IS REQUIRED TO MEET THE LAWS OF FHA AND ADA. ACCESSIBLE ROUTES SHALL NOT EXCEED 5% (1 IN 20) OR CROSS SLOPES SHALL NOT EXCEED 2% (1 IN 50). ALL AT GRADE SIDEWALKS ARE ACCESSIBLE ROUTES.
- JOINTS IN CONCRETE WALKS NOTED AS E.J. ARE TO BE CONSTRUCTED AS EXPANSION JOINTS. ALL OTHER JOINTS SHOWN, TO BE TOOLED CONTROL JOINTS. SEE CIVIL.
- PROVIDE CONSTRUCTION FENCING AS REQUIRED TO SECURE SITE AND BUILDING DURING CONSTRUCTION.
- SEE LANDSCAPE DRAWINGS FOR LANDSCAPE AND IRRIGATION ELEMENTS.
- EXTREME CARE SHOULD BE TAKEN TO PRESERVE EXISTING ROOTS OF TREES TO REMAIN.
- SEE ELECTRICAL DRAWINGS FOR SITE LIGHTING.

STUDIO



275 COURT ST. NE  
SALEM, OR 97301-3442  
P: 503.390.6500  
www.studio3architecture.com



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PROJECT # 2021-146  
DATE: 07/29/2022

REVISIONS

NEW MULTI-FAMILY DEVELOPMENT

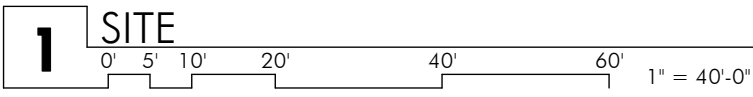
**SANDY**

38015 Hwy 26, Sandy, OR

SHEET:

**A1.01**

SITE PLAN



**SITE PLAN GENERAL NOTES:**

- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
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- PROVIDE CONSTRUCTION FENCING AS REQUIRED TO SECURE SITE AND BUILDING DURING CONSTRUCTION.
- EXTREME CARE SHOULD BE TAKEN TO PRESERVE EXISTING ROOTS OF TREES TO REMAIN.
- SEE LANDSCAPE DRAWINGS FOR LANDSCAPE AND IRRIGATION ELEMENTS.
- SEE ELECTRICAL DRAWINGS FOR SITE LIGHTING.

**SITE DEVELOPMENT CODE REVIEW:**

SITE AREA: 63,711 sf = 1.46 ac  
 ZONING: C-2 General Commercial  
 FRONT YARD - 10'-0" SIDE/REAR YARD - NONE  
 BUILDING HEIGHT: 55 FT.  
 PROPOSED: 3 LEVELS OF RES. OVER 1 LEVEL OF STORAGE  
 BUILDING AREAS:  
 • LEVEL 01, STORAGE/LEASING: 11,280 sf  
 • LEVEL 02-04, RESIDENTIAL: 11,736 sf  
 OVERALL = 46,500 sf

CIVIC SPACE REQMT: 3% BUILDING AREA = 1,395 sf  
 PROVIDED = 1,590 sf

OUTDOOR REC AREA: 200 sf PER UNIT = 8,400 sf  
 OUTDOOR DOG PARK = 786 SF  
 COVERED GAZEBO (256 sf x 1.25) = 320 SF  
 OUTDOOR SEATING/FIRE PIT = 285 SF  
 NORTHERN OPEN LAWN = 1,785 SF  
 EASTERN OPEN LAWN = 958 SF  
 LANDSCAPED NATURE PATH = 2,860 SF  
 LANDSCAPED NATURE SIDEWALK PROVIDED = 9,081 SF

UNIT MIX:  
 1 BED / 1 BATH - 30 UNITS  
 2 BED / 2 BATH - 12 UNITS  
 TOTAL UNITS = 42 UNITS

PARKING:  
 • STORAGE: 1 SPACE PER 2 EMPLOYEES  
 1.5 SPACES PER 1 BD  
 2 SPACES PER 2 BD = 71 SPACES RQ'D  
 PROVIDED = 72 SPACES  
 38% COMPACT

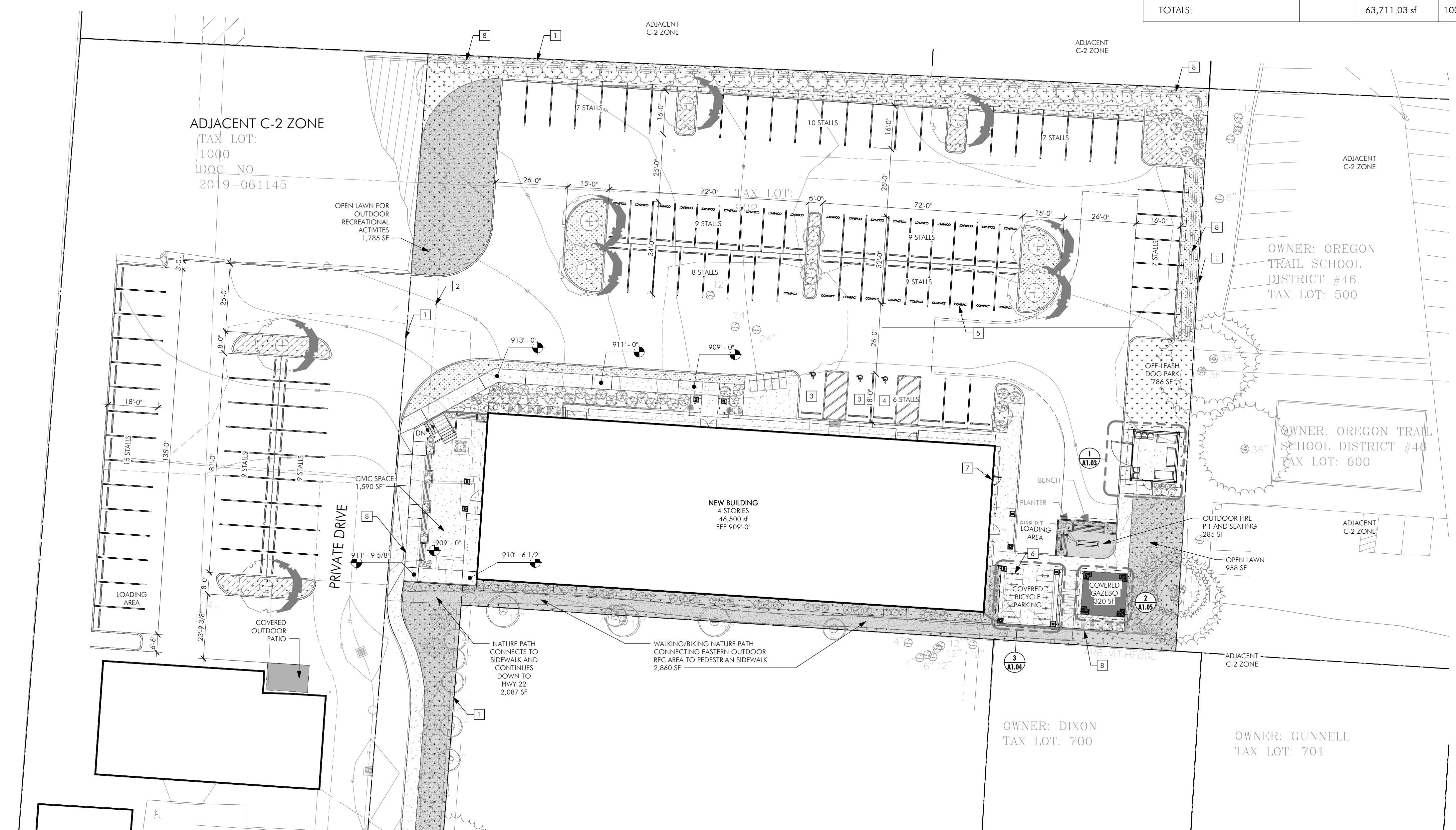
BIKE PARKING:  
 • MULTIFAMILY: 1 PER DWELLING UNIT = 42 SPACES

**SITE PLAN KEYNOTES:**

- PROPERTY LINE
- FRONT SETBACK
- ACCESSIBLE PARKING STALL
- VAN ACCESSIBLE PARKING STALL
- COMPACT PARKING SPACE, PROVIDE PAINTED LETTERING AT EACH STALL AS INDICATED
- SHORT-TERM BIKE PARKING WITH GROUND MOUNTED U-RACKS
- PROVIDE SIGNAGE AT DOOR INDICATING FIRE RISER ROOM
- PROVIDE 3'-6" HIGH GUARDRAIL TOP RETAINING WALL/ADJACENT TO RAMP/STAIR WHEN GREATER THAN 30" IN HEIGHT

**SITE CALCULATIONS AND LEGEND:**

SITE ELEMENT DESCRIPTION:	LEGEND:	AREA: (sf)	PERCENTAGE: (%)
BUILDINGS:	[Symbol]	11,279.98 sf	17.70 %
BUILDINGS OVERHANG ABOVE:	[Symbol]		
LANDSCAPING:	[Symbol]	17,328.37 sf	27.21 %
ASPHALT PAVING:	[Symbol]	28,224.39 sf	44.30 %
ACCESSORY STRUCTURES:	[Symbol]	942.48 sf	1.48 %
CONCRETE SIDEWALKS:	[Symbol]	3,322.09 sf	5.21 %
CONCRETE PAVING & CURBS:	[Symbol]	2,613.72 sf	4.10 %
TOTALS:		63,711.03 sf	100.0 %



275 COURT ST NE  
 SALEM, OR 97301-3442  
 P: 503.390.6500  
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**FOR PLAN REVIEW ONLY**

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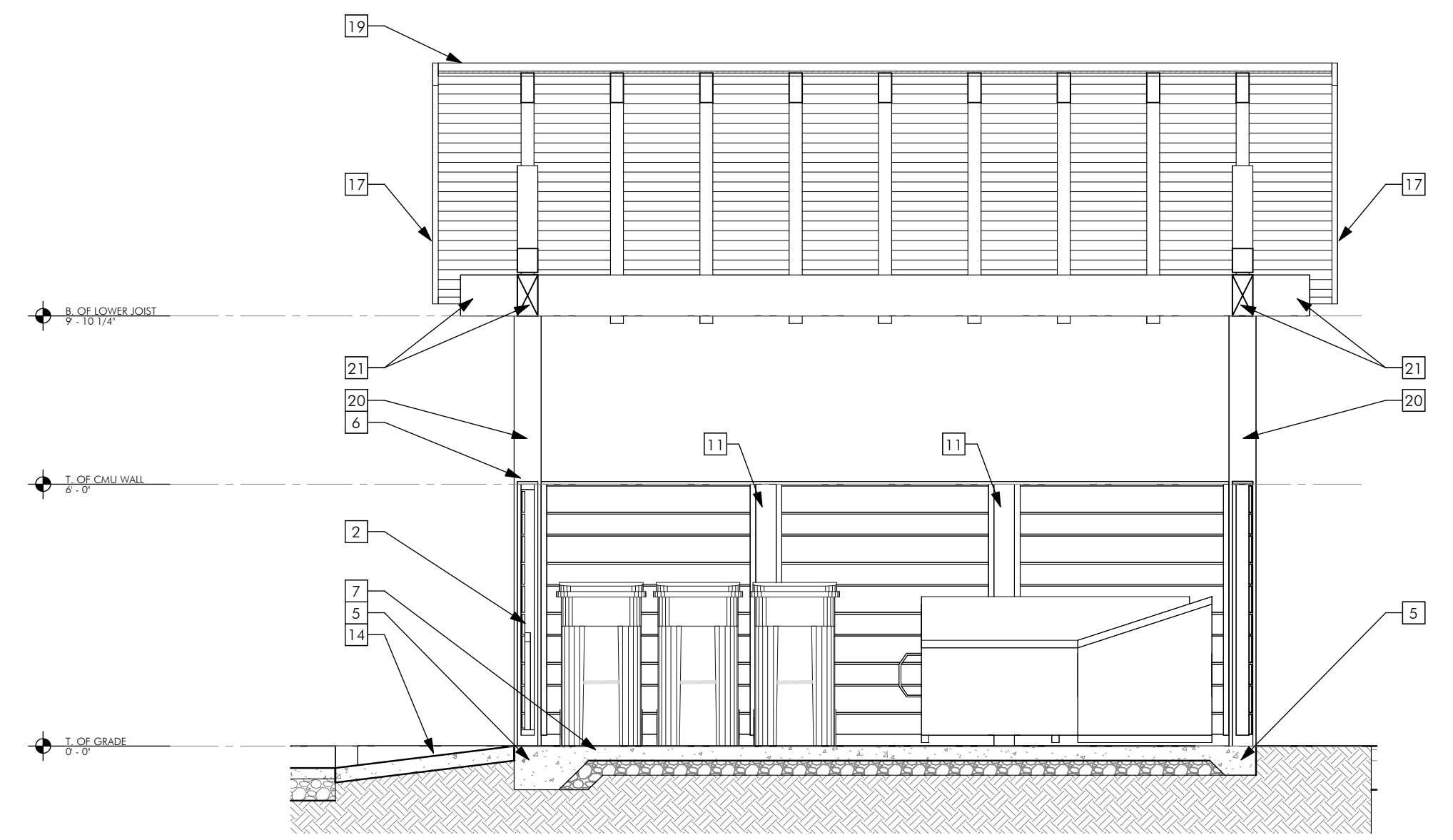
PROJECT # 2021-146  
 DATE: 12/21/2022  
 REVISIONS

NEW MULTI-FAMILY DEVELOPMENT  
**SANDY**  
 38015 Hwy 26, Sandy, OR

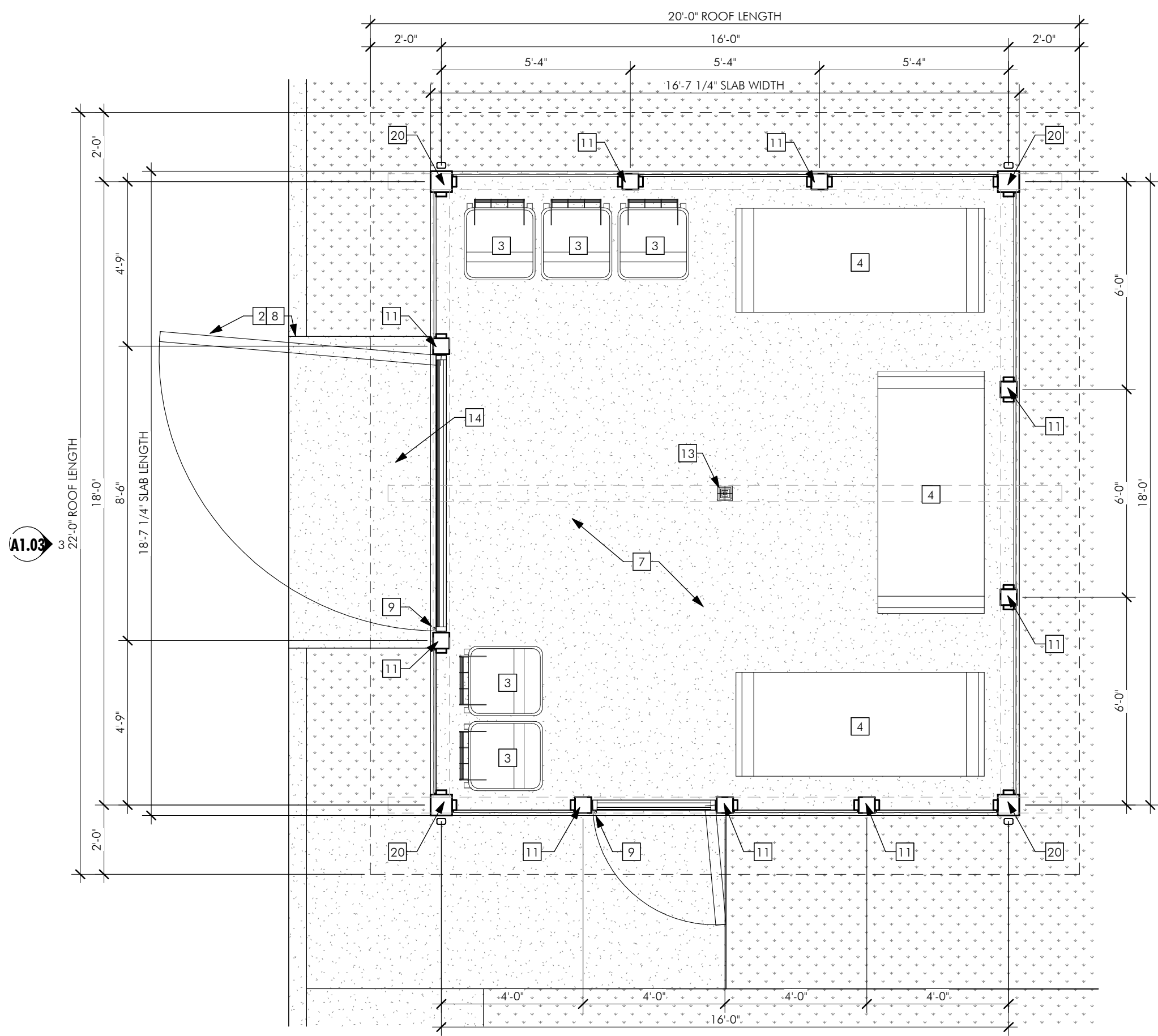
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 ENLARGED SITE PLAN



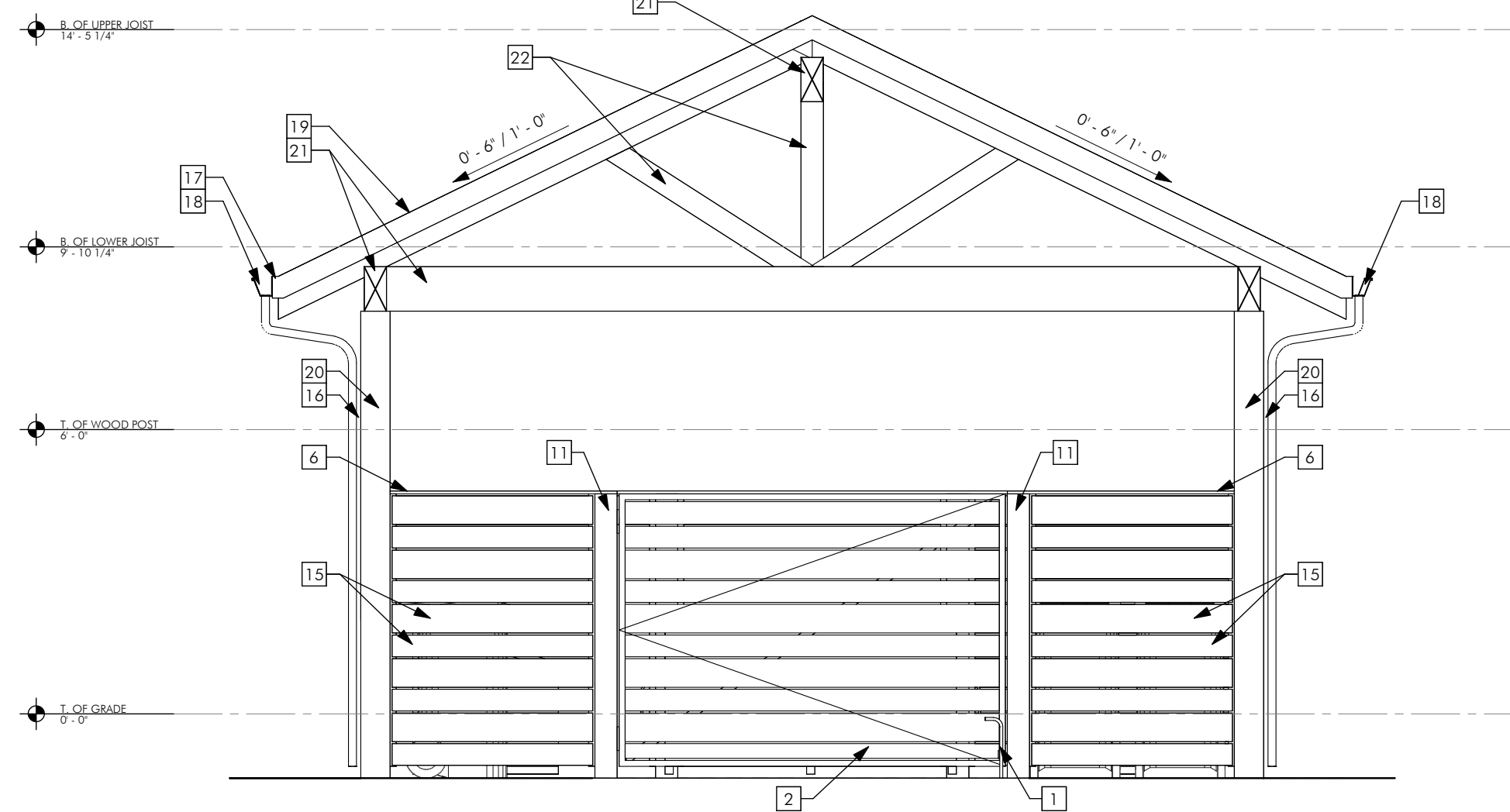




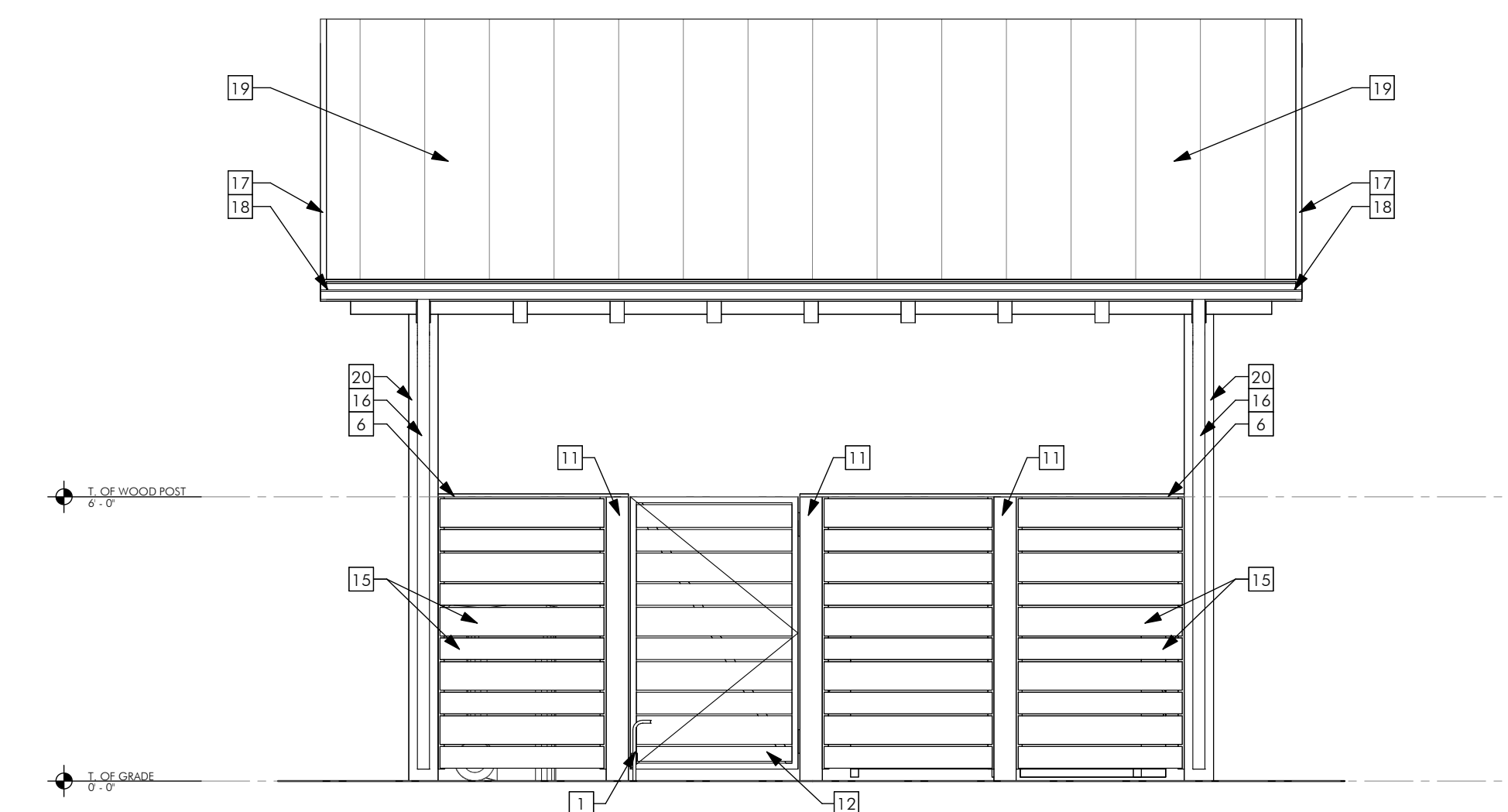
**2 TRASH ENCLOSURE - SECTION**



**1 TRASH ENCLOSURE**



**3 TRASH ENCLOSURE - FRONT**



**4 TRASH ENCLOSURE - SIDE**

**TRASH ENC. NOTES:**

- 1 GALVANIZED STEEL LOCKABLE CANE BOLTS FOR GATE
- 2 8'-0" WIDE GATE WITH HEAVY DUTY GALVANIZED STRAP HINGES AND CANE BOLT WITH SLEEVE IN CONCRETE PAD
- 3 90 GALLON RECYCLING BIN
- 4 2 CUBIC YARD TRASH BIN
- 5 CONCRETE FOOTING / THICKENED SLAB EDGE, SEE STRUCTURAL
- 6 1x6 TOP RAIL
- 7 CONCRETE SLAB, SEE STRUCTURAL. SLOPE FLOOR OF TRASH ENCLOSURE TO INTERIOR DRAIN
- 8 PROVIDE GATE STOP AND HOOK TO RESTRAIN GATE IN OPEN POSITION WHEN IN USE
- 9 GALVANIZED STEEL SLEEVE SET IN CONCRETE (OPEN TO DRAIN BELOW CONCRETE SLAB), TO RECEIVE GATE CANE BOLT
- 10 H.D. WELDABLE HINGES
- 11 6'-0" HIGH, 6x6" PRESSURE TREATED WOOD POST
- 12 3'-6" WIDE PEDESTRIAN DOOR WITH HEAVY DUTY GALVANIZED STRAP HINGES
- 13 4" X 4" SQUARE FLOOR DRAIN
- 14 SLOPE CONCRETE DOWN TO ASPHALT
- 15 ALTERNATE 1x6" AND 1x8" BOARDS HORIZONTALLY WITH A 1/2" GAP BETWEEN EACH. PAINT TO MATCH ADJACENT BUILDING. MILLER PAINT, GROPIUS GRAY
- 16 PRE-FINISHED ALUMINUM DOWNSPOUT
- 17 2"x6" WOOD FASCIA
- 18 PRE-FINISHED ALUMINUM GUTTER
- 19 2" STANDING SEAM METAL ROOF, OVER PLYWOOD SHEATHING. OVER 4x8" WOOD JOISTS SPACED 24" O.C. 1" T&G PANELING ATTACHED TO UNDERSIDE OF SHEATHING BETWEEN ROOF JOISTS. METAL ROOF COLOR TO MATCH ADJACENT BUILDING
- 20 8"x8" PRESSURE TREATED WOOD POST
- 21 6x12" WOOD BEAM
- 22 6x6" WOOD SUPPORTS



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PROJECT # 2021-1146  
DATE: 07/29/2022

REVISIONS

NEW MULTI-FAMILY DEVELOPMENT

**SANDY**

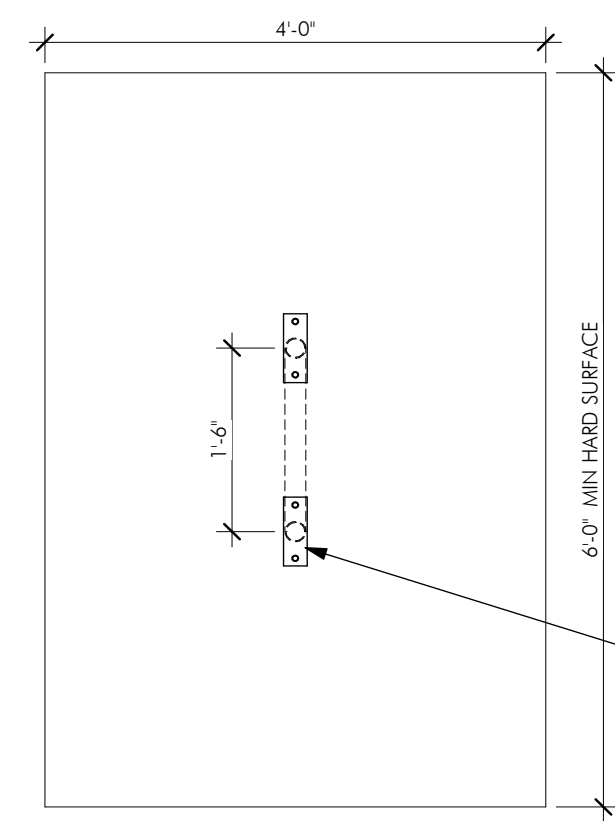
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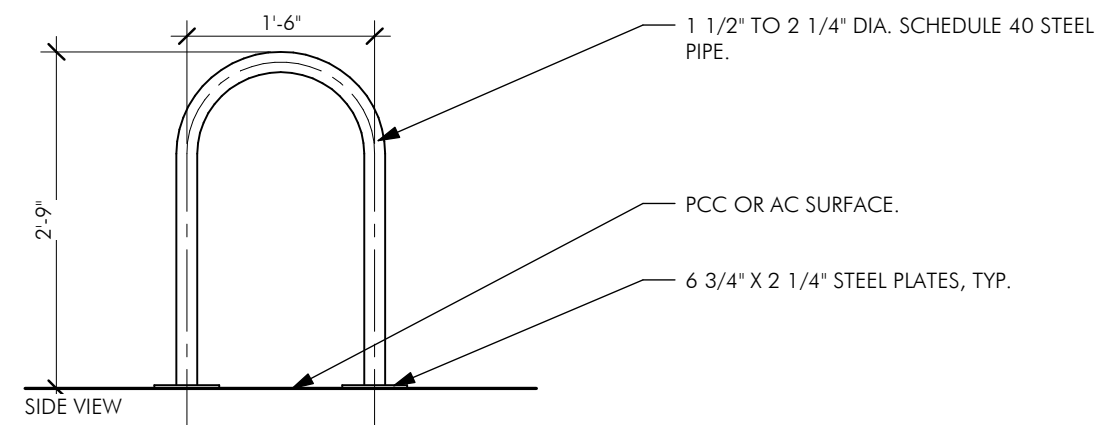
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TRASH ENCLOSURE



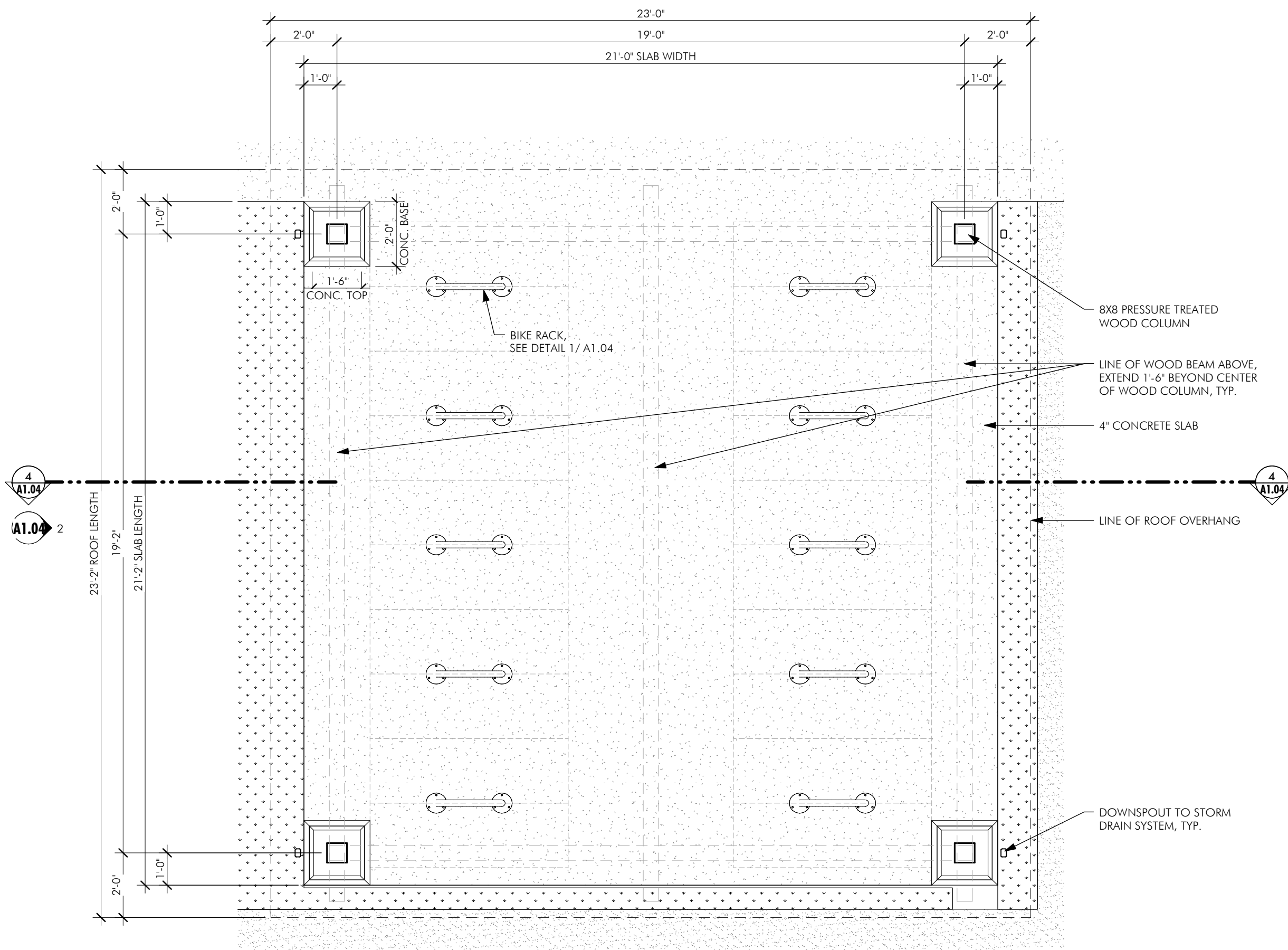


- NOTES:
- BIKE RACKS SHALL HAVE A GLOSS BLACK POLYESTER POWDER COAT FINISH.
  - MOUNTING RAILS SHALL BE FURNISHED WITH MOUNTING HOLES AND VANDAL RESISTANT CONCRETE ANCHOR MOUNTING HARDWARE.
  - EACH "U" SHALL BE WELDED OR MOUNTED TO RAILS OR PLATES WITH VANDAL RESISTANT OR HIDDEN FASTENERS. FOR SINGLE "U" INSTALLATION, EACH MOUNTING PLATE WILL BE EQUIPPED WITH TWO ANCHOR BOLT HOLES.



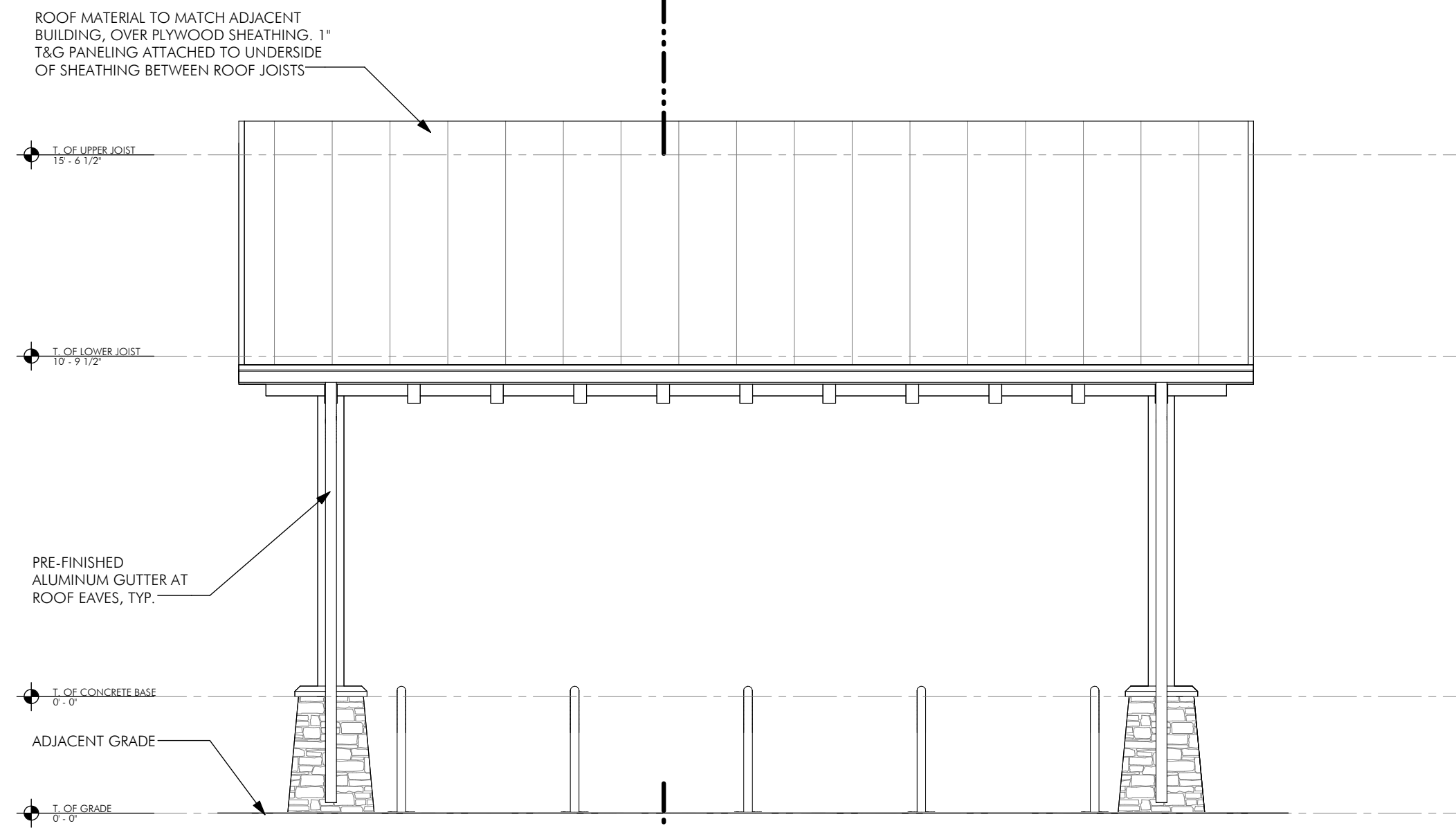
**1** "INVERTED U" BIKE RACK DETAIL  
3/4" = 1'-0"

SIDE VIEW

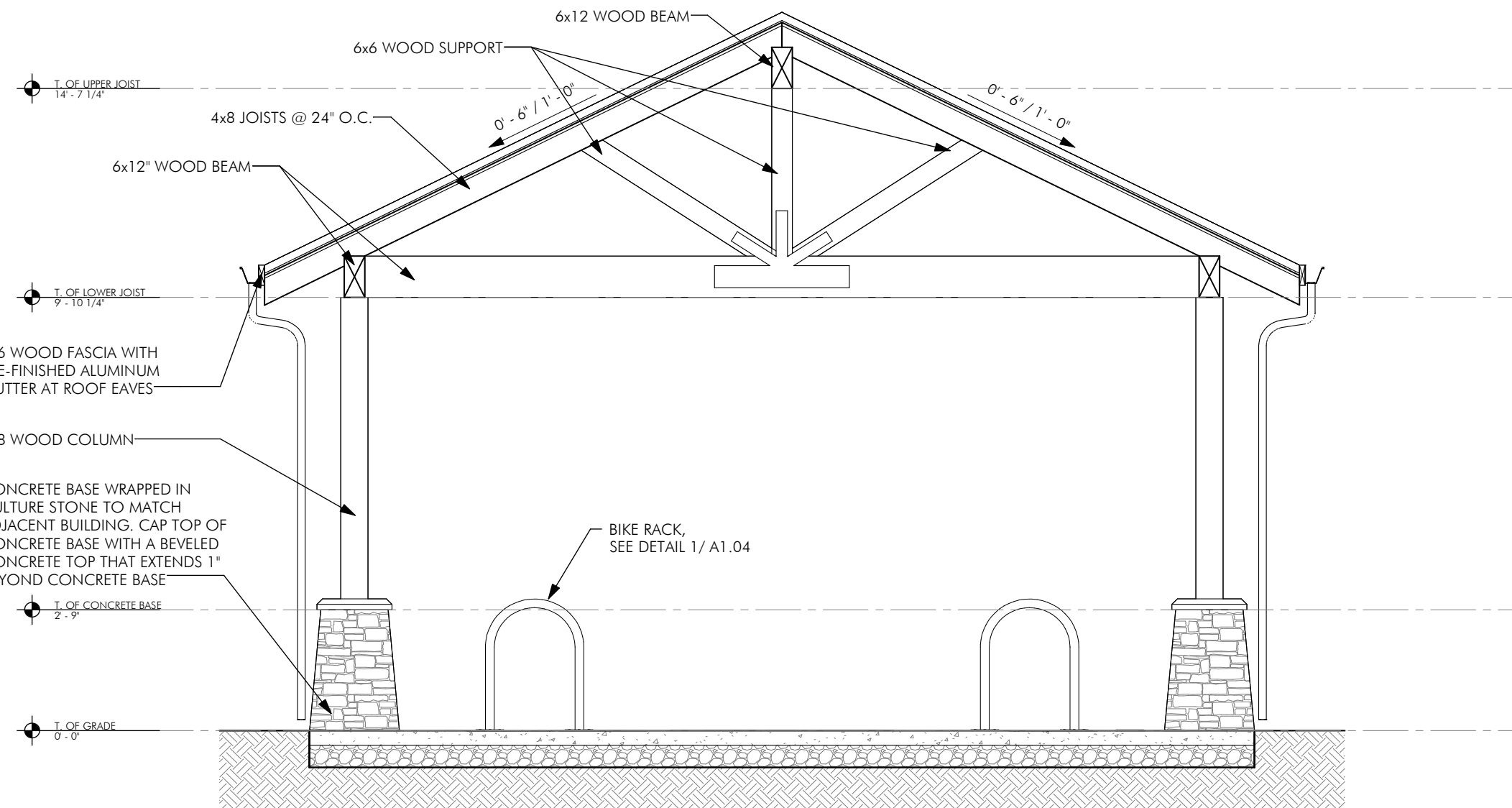


**3** BICYCLE ENCLOSURE  
3/8" = 1'-0"

**2** BICYCLE ENCLOSURE - ELEVATION, SIDE  
3/8" = 1'-0"



**2** BICYCLE ENCLOSURE - ELEVATION, SIDE  
3/8" = 1'-0"



**4** BIKE ENCLOSURE - SECTION  
3/8" = 1'-0"



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DATE: 07/29/2022

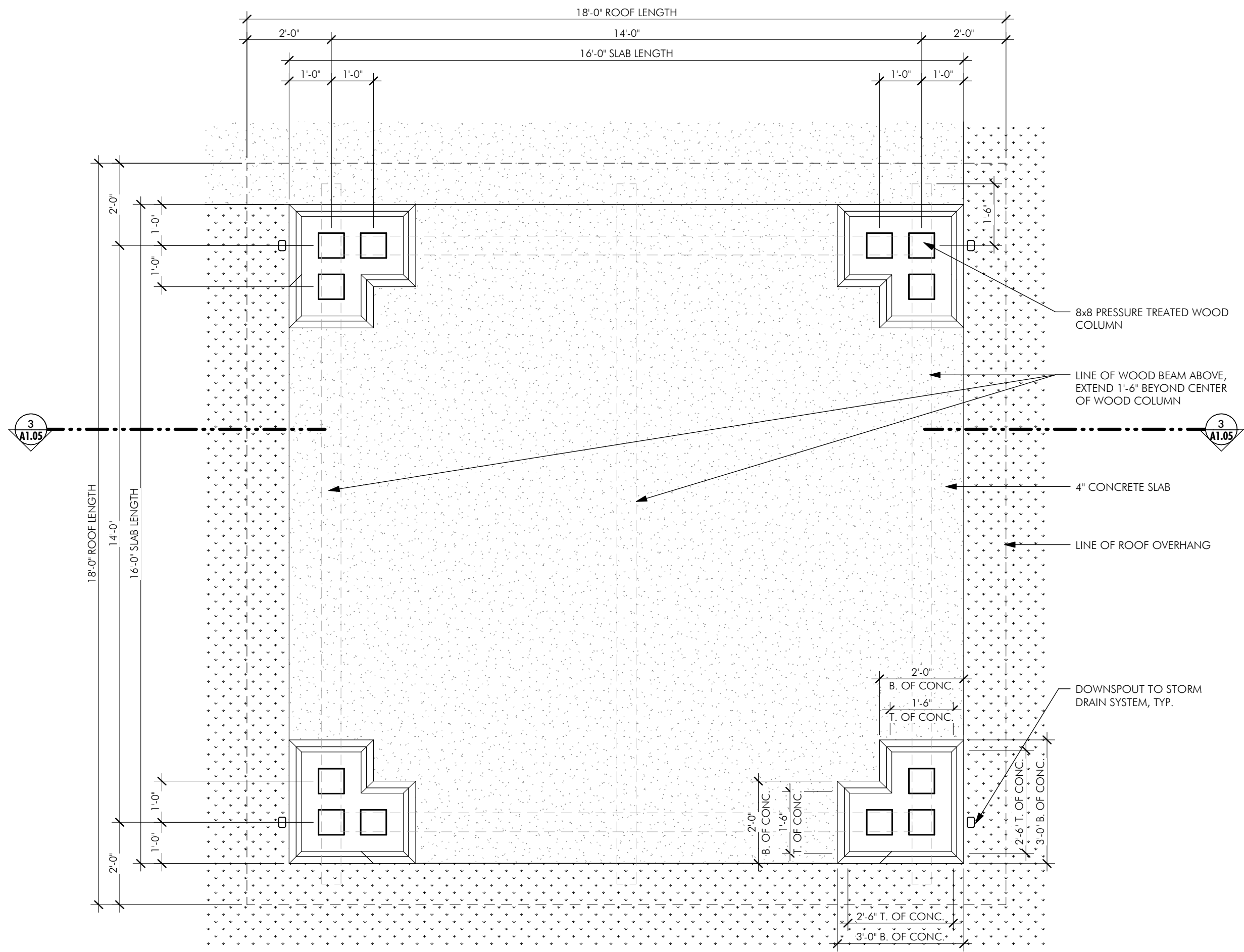
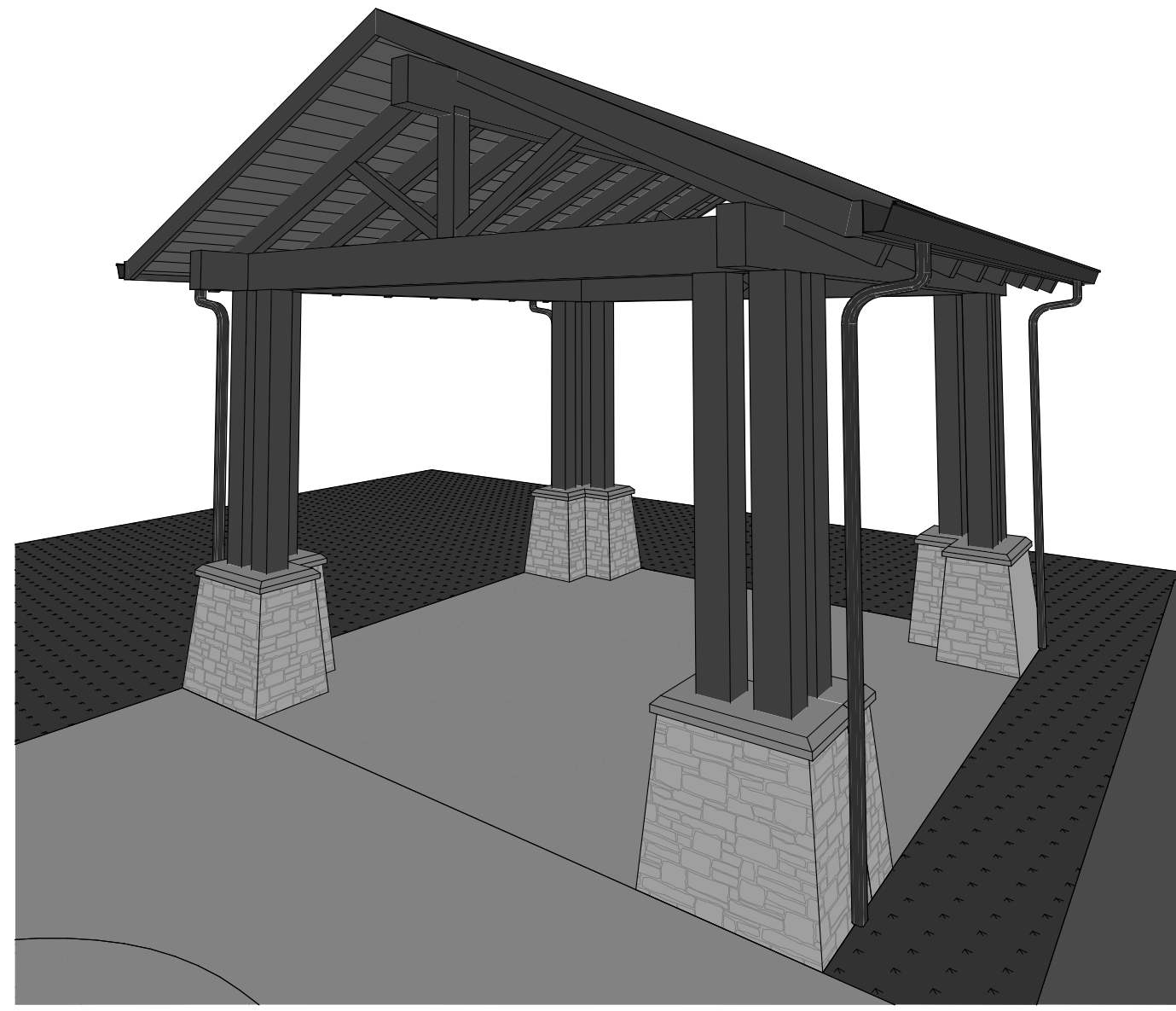
REVISIONS

NEW MULTI-FAMILY DEVELOPMENT  
**SANDY**  
38015 Hwy 26, Sandy, OR

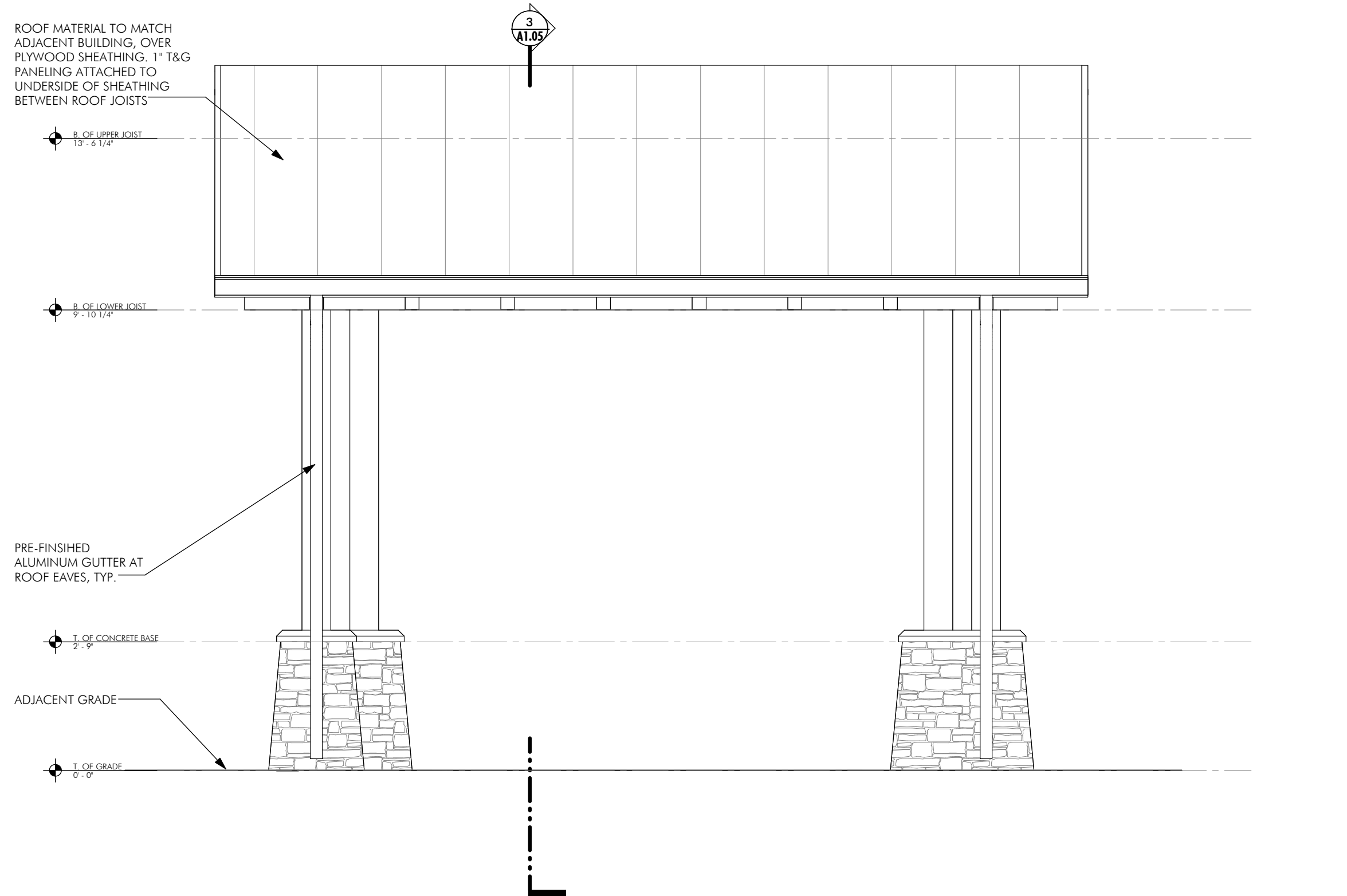
SHEET:  
**A1.04**  
BICYCLE ENCLOSURE



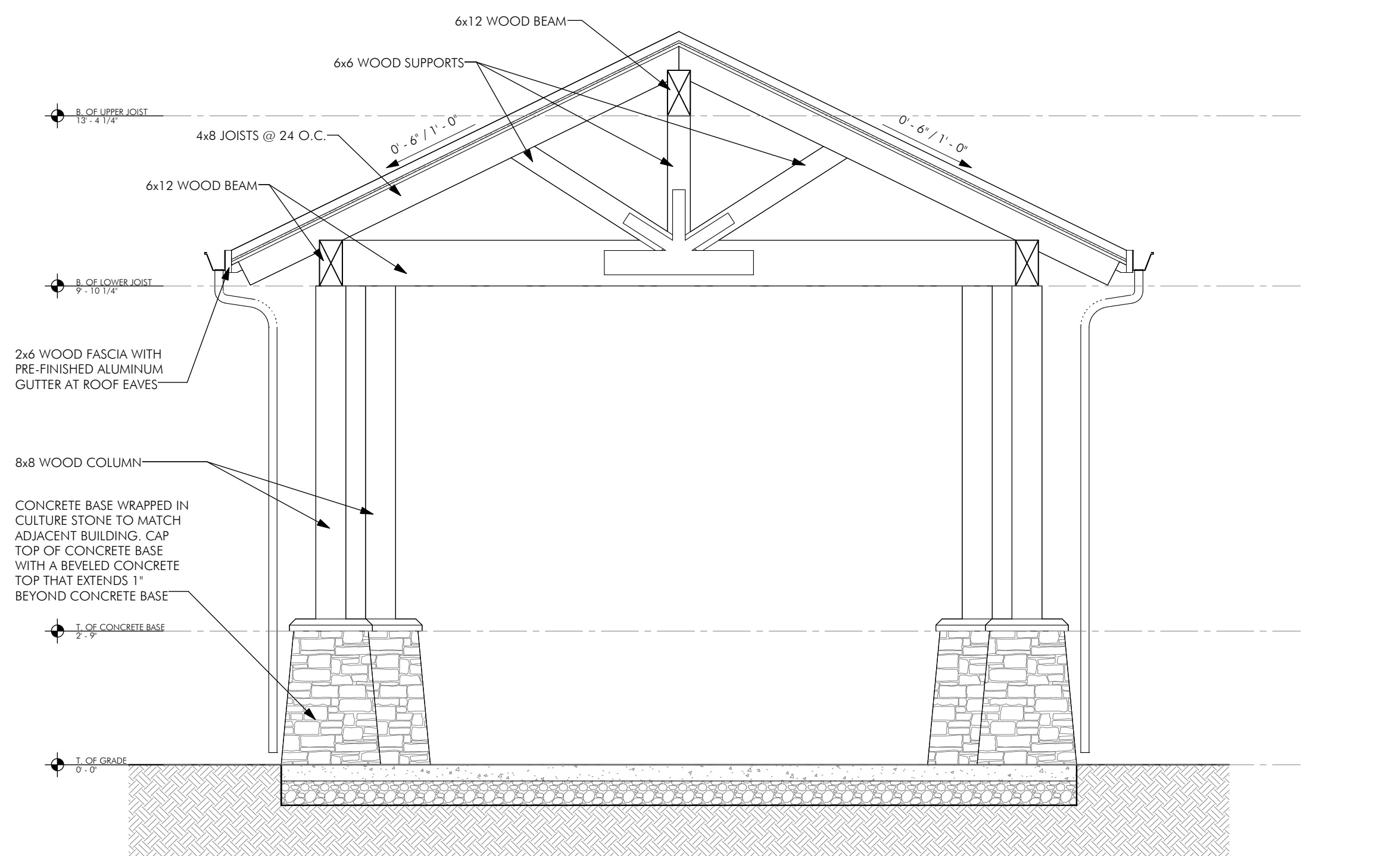




**2** GAZEBO  
0 1 2 4 6 1/2" = 1'-0"



**1** GAZEBO - ELEVATION, SIDE  
0 1 2 4 6 1/2" = 1'-0"



**3** GAZEBO - SECTION  
0 1 2 4 6 1/2" = 1'-0"



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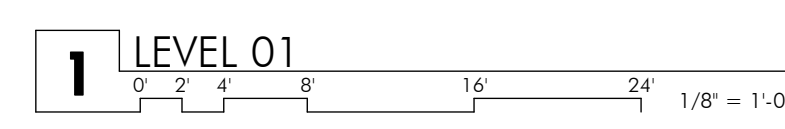
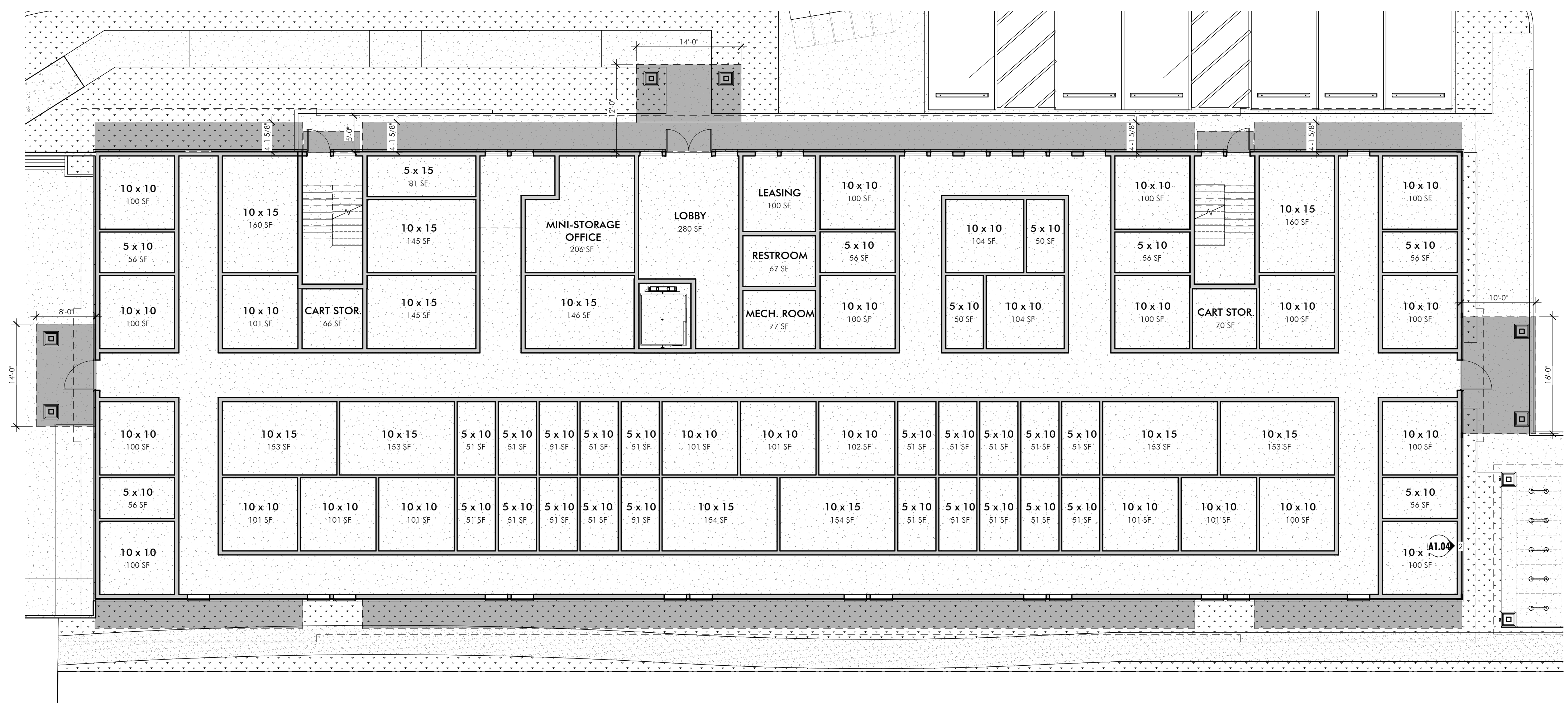
PROJECT # 2021-1146  
DATE: 07/29/2022

REVISIONS



**GENERAL PLAN NOTES:**

- GENERAL NOTES APPLY TO ALL DRAWINGS.
- CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE DRAWINGS AND ON THE JOB SITE PRIOR TO EXECUTION OF ANY WORK, AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCY. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED DUE TO HIS FAILURE TO DO SO.
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- ALL DOORS ARE TO BE 3" FROM FACE OF FRAMING TO ROUGH OPENING, OR CENTERED IN THE WALL, U.N.O. ALL OPENINGS ARE DIMENSIONED FROM FACE OF FRAMING TO CENTER OF OPENING.
- SEE STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS. WHERE NON-SHEAR WALLS ARE IN THE SAME PLANE, CONTINUE SHEATHING LAYER TO NEAREST CORNER TO ENSURE CONTINUITY.
- WALL MATERIAL MAY CHANGE AT WALL INTERSECTIONS, REVIEW SECTIONS AND ELEVATIONS FOR ADDED INFORMATION.
- PROVIDE FIRE BLOCKING IN CONCEALED SPACES OF WALLS, PARTITIONS AND FURRED SPACES AT 10'-0" O.C. IN ALL DIRECTIONS AND AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES.
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- SEE ENLARGED FLOOR PLANS FOR DIMENSIONS AND WALL TAGS NOT SHOWN.



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P: 503.390.6500  
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PROJECT # 2021-146  
DATE: 07/29/2022

REVISIONS

NEW MULTI-FAMILY DEVELOPMENT

**SANDY**

38015 Hwy 26, Sandy, OR



SHEET:  
**A1.21**  
FLOOR PLAN - LEVEL  
01

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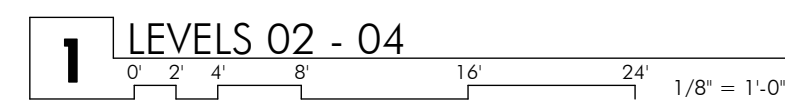
REVISIONS

NEW MULTI-FAMILY DEVELOPMENT

**SANDY**

38015 Hwy 26, Sandy, OR

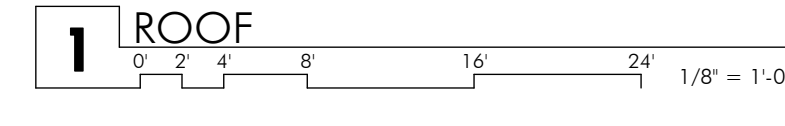
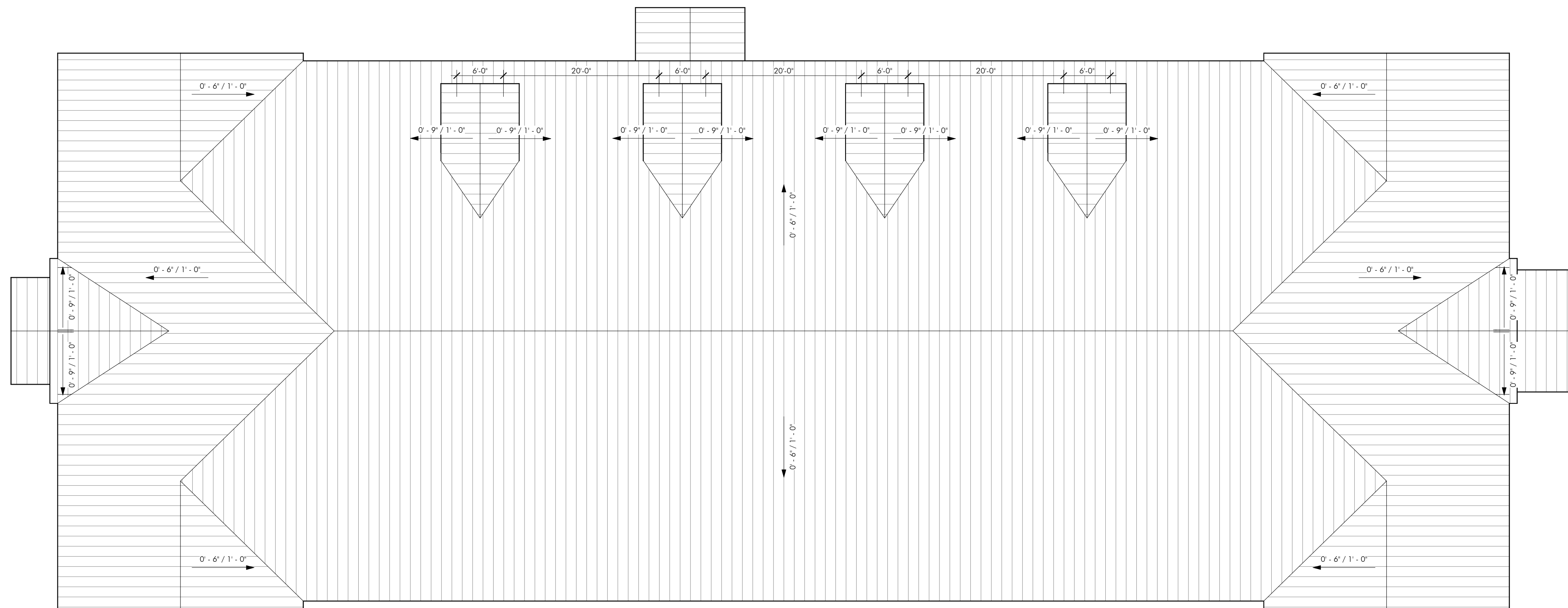
SHEET:  
**A1.22**  
FLOOR PLAN - LEVELS  
02-04





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PROJECT # 2021-146  
DATE: 07/29/2022

REVISIONS

NEW MULTI-FAMILY DEVELOPMENT  
**SANDY**  
38015 Hwy 26, Sandy, OR

SHEET:  
**A1.23**  
FLOOR PLAN - ROOF





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NEW MULTI-FAMILY DEVELOPMENT

**SANDY**

38015 Hwy 26, Sandy, OR

SHEET:

**A2.01**

ELEVATIONS

GROUND FLOOR WALL AREA: 1,693 SF  
WINDOWS GGD: 339 SF (20%)  
PROVIDED:  
DOOR GLAZING: 51 SF  
TRANSOM GLAZING: 14 SF  
WINDOW GLAZING: 274.5 SF  
TOTAL: 339.5 SF (20%)



**1** North Building Elevation  
0 2 4 8 16 24 1/8" = 1'-0"

**ELEVATION NOTES:**

- 1 FIBER CEMENT LAP SIDING W/ ALTERNATING 4" AND 8" EXPOSURE. COLOR: MILLER PAINT-PALOMINO.
- 2 FIBER CEMENT LAP SIDING W/ 8" EXPOSURE. COLOR: MILLER PAINT-GROPIUS GRAY
- 3 FIBER CEMENT TRIM. COLOR: MILLER PAINT-CHOCOLATE.
- 4 CULTURED STONE BASE.
- 5 CEDAR SHAKE SIDING. COLOR: MILLER PAINT-PORTOBELLA
- 6 STANDING SEAM METAL ROOF.
- 7 VINYL WINDOW. COLOR: WHITE. FIBER CEMENT TRIM SURROUND. PAINT: CHOCOLATE
- 8 INSULATED HOLLOW METAL DOOR. PAINT WHITE TO MATCH WINDOWS.
- 9 HEAVY TIMBER CANOPY. COLOR: MILLER PAINT-CHOCOLATE
- 10 FIBERGLASS DOOR. COLOR: WHITE.
- 11 CEDAR FACIA BOARD. COLOR: CHOCOLATE
- 12 HEAVY TIMBER BRACKET. COLOR: MILLER PAINT-CHOCOLATE
- 13 FIBER CEMENT BOARD & BATTEN SIDING. COLOR: MILLER PAINT-JWETT WHITE.
- 14 X2 DECKING OVER WOOD FRAMING WITH VERTICAL METAL RAILING AND X2 WOOD TOP RAIL. PAINT ALL EXPOSED WOOD AND STEEL MILLER PAINT-CHOCOLATE.
- 15 LIGHT WELL FOR LEVEL 01 WINDOW
- 16 3 0 x 5 6 FIXED WINDOW WITH INTERIOR GRID. GLAZED AREA: 16.5 SF
- 17 3 0 x 5 6 SINGLE HUNG WINDOW WITH INTERIOR GRIDS NOT TO EXCEED 1'-0" IN EITHER DIRECTION.
- 18 3 0 x 7 0 DOOR WITH INTERIOR GRIDS NOT TO EXCEED 1'-0" IN EITHER DIRECTION. GLAZED AREA: 12.75 SF
- 19 3 0 x 3 6 FIXED WINDOW WITH INTERIOR GRID. GLAZED AREA: 10.5 SF
- 20 3 0 x 1 2 FIXED WINDOW WITH INTERIOR GRID. GLAZED AREA: 3.5 SF
- 21 6 0 x 1 2 FIXED WINDOW WITH INTERIOR GRID. GLAZED AREA: 7 SF
- 22 3 0 x 2 0 FIXED WINDOW WITH INTERIOR GRIDS NOT TO EXCEED 1'-0" IN EITHER DIRECTION.
- 23 4 0 x 7 0 DOOR WITH INTERIOR GRIDS NOT TO EXCEED 1'-0" IN EITHER DIRECTION.
- 24 2 0 x 5 6 SINGLE HUNG WINDOW WITH INTERIOR GRIDS NOT TO EXCEED 1'-0" IN EITHER DIRECTION.
- 25 3 0 x 4 0 SINGLE HUNG WINDOW WITH INTERIOR GRIDS NOT TO EXCEED 1'-0" IN EITHER DIRECTION.
- 26 4 0 x 4 0 SLIDER WINDOW WITH INTERIOR GRIDS NOT TO EXCEED 1'-0" IN EITHER DIRECTION.



**2** East Building Elevation  
0 2 4 8 16 24 1/8" = 1'-0"

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PROJECT # 2021-146  
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REVISIONS



1 South Building Elevation  
0 2 4 8 16 24 1/8" = 1'-0"



2 West Building Elevation  
0 2 4 8 16 24 1/8" = 1'-0"

ELEVATION NOTES:

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NEW MULTI-FAMILY DEVELOPMENT

SANDY

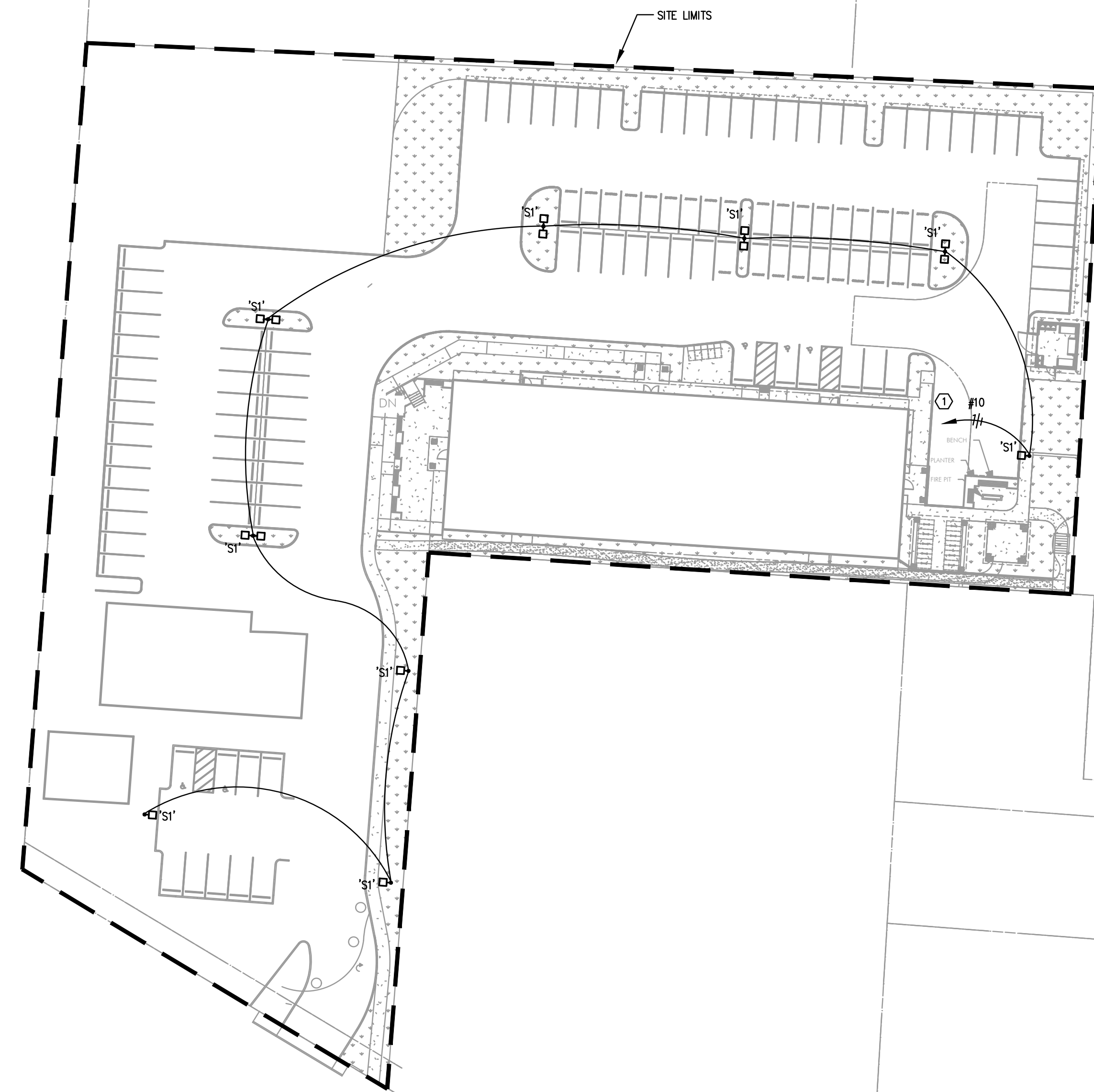
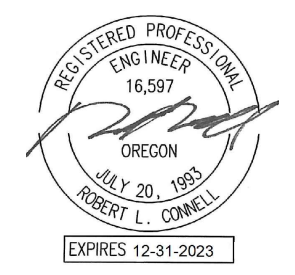
38015 Hwy 26, Sandy, OR

SHEET:

A2.02

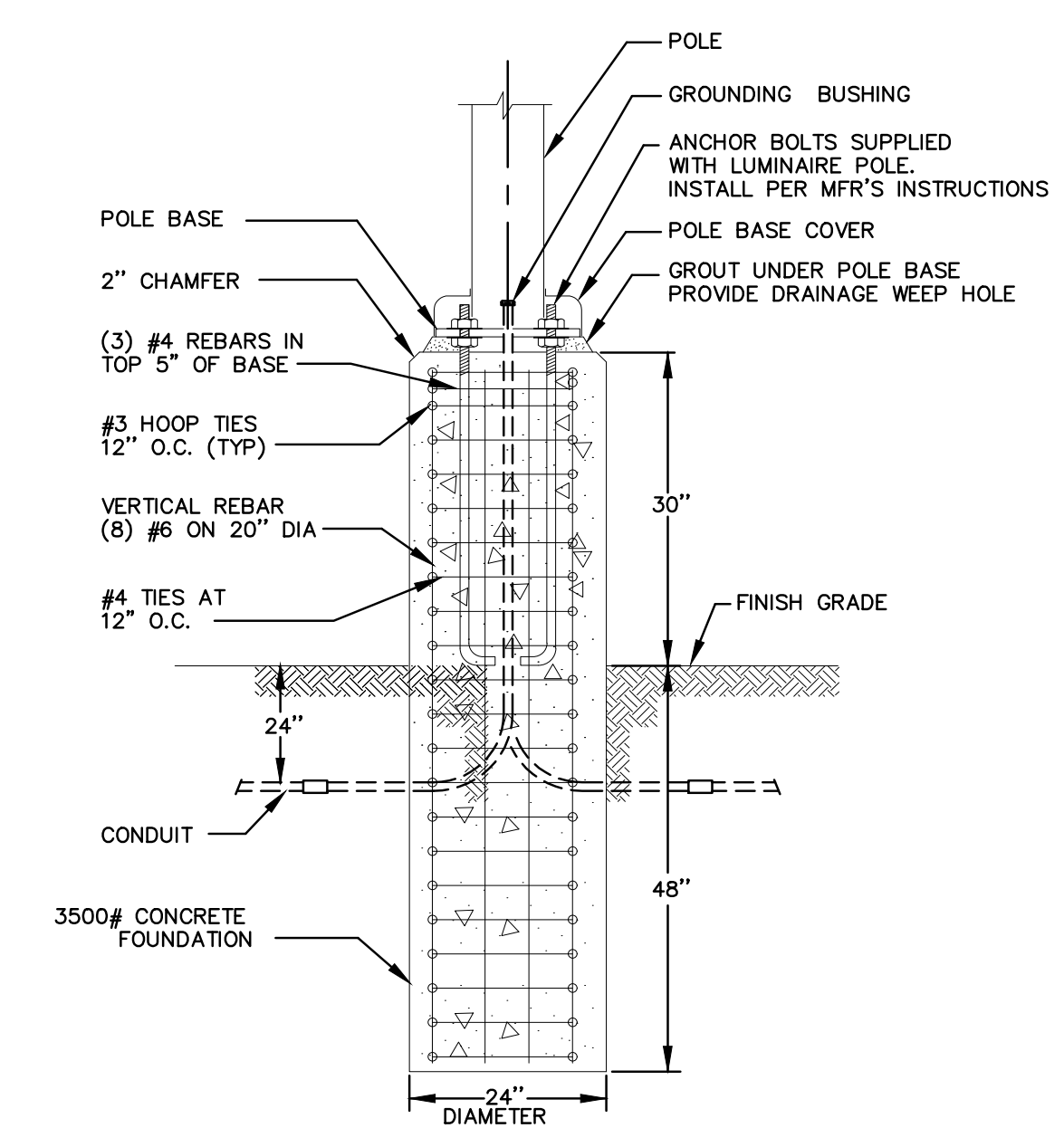
ELEVATIONS

**EXHIBIT D**



**1** SITE LIGHTING PLAN  
E0.00 1/32" = 1'-0"

LIGHTING FIXTURE LIST					
TYPE	LAMP	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	OPTIONS
S1	LED 3000K 5500LM	LITHONIA LIGHTING (OR APPROVED OTHER)	DSXO P2 SERIES	TYPE :AREA LIGHT (SINGLE/TWIN HEAD) MOUNTING :POLE MOUNT (+20'-0") HOUSING : LENS/REFL : VOLTAGE :MVOLT BALLAST :LED DRIVER	TFTM DISTRIBUTION  INTEGRAL PHOTOCELL  PARKING AREA
49W					



**2** POLE BASE DETAIL  
E0.00 N.T.S.

**NOTES:**  
 ① ROUTE HOME RUN VIA LIGHTING CONTROL PANEL FOR CONTROLS. CONNECT TO SPARE 20A/1P CIRCUIT BREAKER IN 'HOUSE' PANEL

Date: 07-29-2022  
 Proj No: 10423  
 Drawn By: REM  
 Chkd By: REM  
 DSGN By: REM  
 Acad File: E000

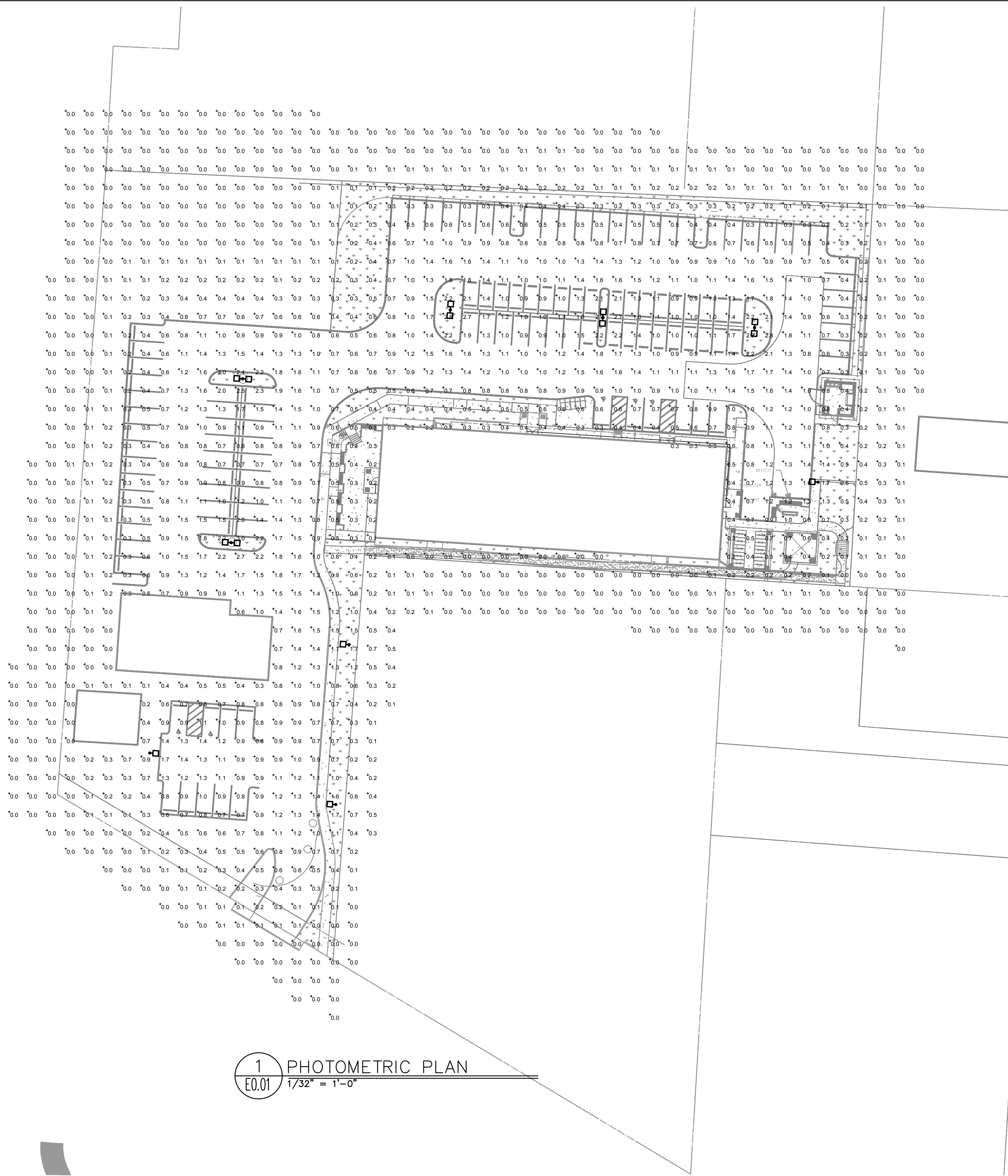
**NEW MULTI-FAMILY DEVELOPMENT**  
 SANDY  
 38015 HWY 26  
 OR  
 SITE LIGHTING PLAN



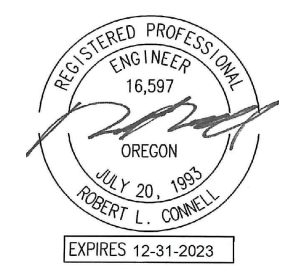
Consulting Engineers  
 2007 S.E. Ash St.  
 Portland, OR 97214  
 PHN: (503) 234-0548  
 FAX: (503) 234-0677  
 WWW.MFA-ENG.COM

SHEET  
**E0.00**  
 OF 0000





1 PHOTOMETRIC PLAN  
 E0.01 1/32" = 1'-0"



Date: 07-29-2022  
 Proj. No: 10423  
 Drawn By: REM  
 Chkd By: REM  
 DSGN By: REM  
 Acad File: E000

**NEW MULTI-FAMILY DEVELOPMENT**  
 SANDY  
 38015 HWY 26  
 OR  
 PHOTOMETRIC PLAN



Consulting Engineers  
 2007 S.E. Ash St.  
 Portland, OR 97214  
 PHN: (503) 234-0548  
 FAX: (503) 234-0677  
 WWW.MFA-ENG.COM

SHEET  
**E0.01**  
 OF 0000

# EXHIBIT E



## D-Series Size 0 LED Area Luminaire



Buy American

Catalog Number
Notes
Type

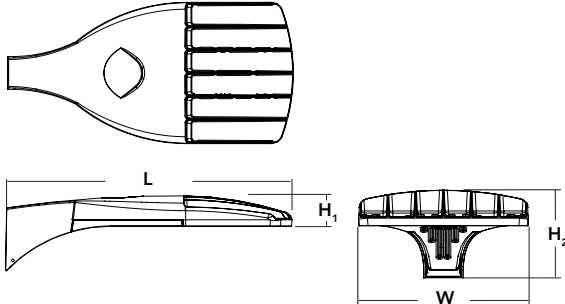
Hit the Tab key or mouse over the page to see all interactive elements.

### Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

### Specifications

- EPA: 0.95 ft<sup>2</sup> (.09 m<sup>2</sup>)
- Length: 26" (66.0 cm)
- Width: 13" (33.0 cm)
- Height<sub>1</sub>: 3" (7.62 cm)
- Height<sub>2</sub>: 7" (17.8 cm)
- Weight (max): 16 lbs (7.25 kg)



### Ordering Information

EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED		Color temperature		Distribution		Voltage		Mounting	
Series	LEDs								
DSX0 LED	<b>Forward optics</b> P1 P5 P2 P6 P3 P7 <sup>1</sup> P4 <sup>1</sup> <b>Rotated optics</b> P10 <sup>2</sup> P12 <sup>2</sup> P11 <sup>2</sup> P13 <sup>1,2</sup>	30K 3000 K 40K 4000 K 50K 5000 K		T1S Type I short (Automotive) T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium TSVS Type V very short <sup>3</sup>	T5S Type V short <sup>3</sup> T5M Type V medium <sup>3</sup> TSW Type V wide <sup>3</sup> BLC Backlight control <sup>4</sup> LCCO Left corner cutoff <sup>4</sup> RCCO Right corner cutoff <sup>4</sup>	MVOLT (120V-277V) <sup>5,6</sup> XVOLT (277V-480V) <sup>7,8,9</sup> 120 <sup>6</sup> 208 <sup>6</sup> 240 <sup>6</sup> 277 <sup>6</sup> 347 <sup>6</sup> 480 <sup>6</sup>		<b>Shipped included</b> SPA Square pole mounting RPA Round pole mounting <sup>10</sup> WBA Wall bracket <sup>3</sup> SPUMBA Square pole universal mounting adaptor <sup>11</sup> RPUMBA Round pole universal mounting adaptor <sup>11</sup> <b>Shipped separately</b> KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) <sup>12</sup>	

Control options		Other options		Finish (required)	
<b>Shipped installed</b> NLTAIR2 nLight AIR generation 2 enabled <sup>13,14</sup> PIRHN Network, high/low motion/ambient sensor <sup>15</sup> PER NEMA twist-lock receptacle only (control ordered separate) <sup>16</sup> PER5 Five-pin receptacle only (control ordered separate) <sup>16,17</sup> PER7 Seven-pin receptacle only (leads exit fixture) (control ordered separate) <sup>16,17</sup> DMG 0-10V dimming extend out back of housing for external control (control ordered separate) <sup>18</sup>	PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc <sup>19,20</sup> PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc <sup>19,20</sup> PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc <sup>19,20</sup> PIRH1FC3V High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc <sup>19,20</sup> FAO Field adjustable output <sup>21</sup>	<b>Shipped installed</b> HS House-side shield <sup>22</sup> SF Single fuse (120, 277, 347V) <sup>6</sup> DF Double fuse (208, 240, 480V) <sup>6</sup> L90 Left rotated optics <sup>2</sup> R90 Right rotated optics <sup>2</sup> DDL Diffused drop lens <sup>22</sup> HA 50°C ambient operations <sup>1</sup> BAA Buy America(n) Act Compliant <b>Shipped separately</b> BS Bird spikes <sup>23</sup> EGS External glare shield	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLTXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white		



COMMERCIAL OUTDOOR

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DSX0-LED  
Rev. 07/19/21  
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## Ordering Information

### Accessories

Ordered and shipped separately.

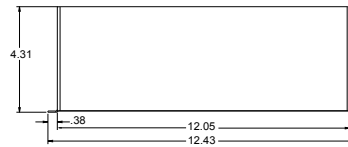
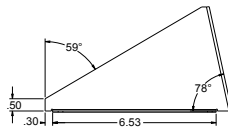
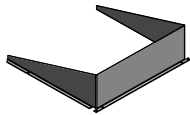
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) <sup>24</sup>
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) <sup>24</sup>
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) <sup>24</sup>
DSHORT SBK U	Shorting cap <sup>24</sup>
DSXOHS 20C U	House-side shield for P1,P2,P3 and P4 <sup>22</sup>
DSXOHS 30C U	House-side shield for P10,P11,P12 and P13 <sup>22</sup>
DSXOHS 40C U	House-side shield for P5,P6 and P7 <sup>22</sup>
DSXODDL U	Diffused drop lens (polycarbonate) <sup>22</sup>
PUMBA DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish) <sup>23</sup>
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) <sup>23</sup>
DSXOEGS (FINISH) U	External glare shield

For more control options, visit [DTL](#) and [ROAM](#) online. Link to [nLight Air 2](#)

### NOTES

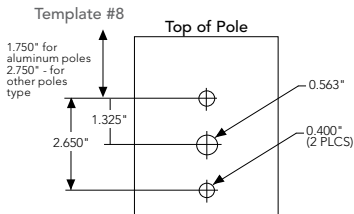
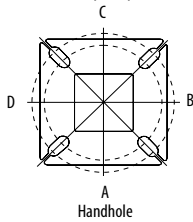
- 1 HA not available with P4, P7, and P13.
- 2 P10, P11, P12 and P13 and rotated options (L90 or R90) only available together.
- 3 Any Type 5 distribution with photocell, is not available with WBA.
- 4 Not available with HS or DDL.
- 5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- 6 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).
- 7 XVOLT only suitable for use with P4, P7 and P13.
- 8 XVOLT operates with any voltage between 277V and 480V.
- 9 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
- 10 Suitable for mounting to round poles between 3.5" and 12" diameter.
- 11 Universal mounting brackets intended for retrofit on existing pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8.
- 12 Must order fixture with SPA mounting. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
- 13 Must be ordered with PIRHN.
- 14 Sensor cover available only in dark bronze, black, white and natural aluminum colors.
- 15 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit [this link](#).
- 16 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
- 17 If ROAM<sup>®</sup> node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
- 18 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
- 19 Reference Controls Options table on page 4.
- 20 Reference Motion Sensor Default Table on page 4 to see functionality.
- 21 Not available with other dimming controls options.
- 22 Not available with BLC, LCCO and RCCO distribution.
- 23 Must be ordered with fixture for factory pre-drilling.
- 24 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
- 25 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8

## EGS – External Glare Shield



## Drilling

### HANDHOLE ORIENTATION (from top of pole)



### Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
<b>Minimum Acceptable Outside Pole Dimension</b>							
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"		3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"		4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

### DSX0 Area Luminaire - EPA

\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

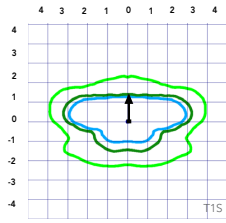
Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX0 LED	0.950	1.900	1.830	2.850	2.850	3.544

# Photometric Diagrams

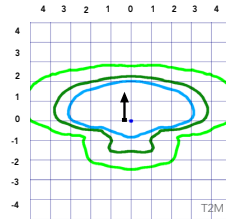
To see complete photometric reports or download .ies files for this product, visit [Lithonia Lighting's D-Series Area Size 0 homepage](#).

Isofootcandle plots for the DSX0 LED 40C 1000 40K. Distances are in units of mounting height (20').

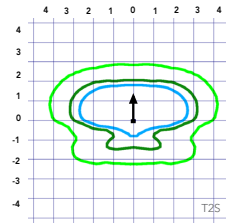
- LEGEND**
- 0.1 fc
  - 0.5 fc
  - 1.0 fc



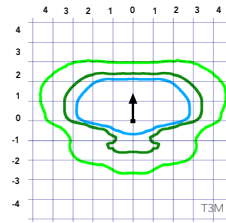
Test No.



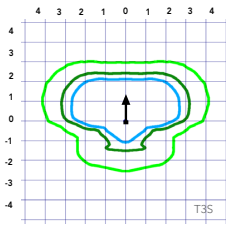
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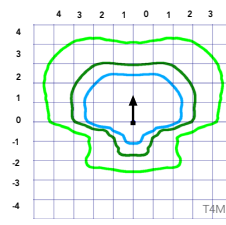
Test No. LTL23457P25 tested in accordance with IESNA LM-79-08.



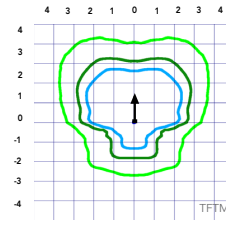
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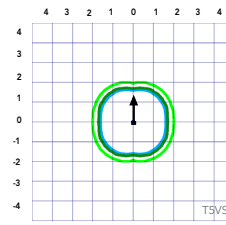
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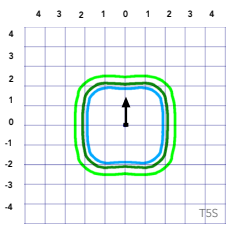
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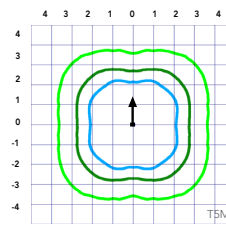
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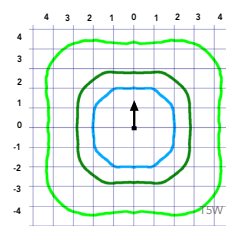
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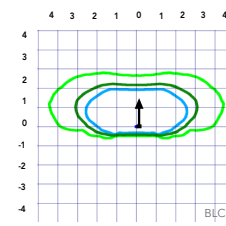
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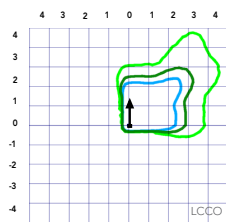
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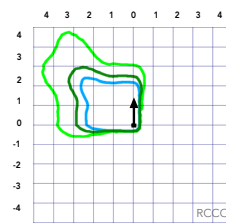
Test No. LTL23457P25 tested in accordance with IESNA LM-79-08.



Test No.



Test No.



Test No.

## Performance Data

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
<b>25°C</b>	<b>77°C</b>	<b>1.00</b>
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

### Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
25,000	0.96
50,000	0.92
100,000	0.85

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min

\*for use when motion sensor is used as dusk to dawn control.

### Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A)					
					120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	20	530	38	0.32	0.18	0.15	0.15	0.10	0.08
	P2	20	700	49	0.41	0.23	0.20	0.19	0.14	0.11
	P3	20	1050	71	0.60	0.37	0.32	0.27	0.21	0.15
	P4	20	1400	92	0.77	0.45	0.39	0.35	0.28	0.20
	P5	40	700	89	0.74	0.43	0.38	0.34	0.26	0.20
	P6	40	1050	134	1.13	0.65	0.55	0.48	0.39	0.29
	P7	40	1300	166	1.38	0.80	0.69	0.60	0.50	0.37
Rotated Optics (Requires L90 or R90)	P10	30	530	53	0.45	0.26	0.23	0.21	0.16	0.12
	P11	30	700	72	0.60	0.35	0.30	0.27	0.20	0.16
	P12	30	1050	104	0.88	0.50	0.44	0.39	0.31	0.23
	P13	30	1300	128	1.08	0.62	0.54	0.48	0.37	0.27

### Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBGR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclipse.	nLight Air rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app.



## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics																							
Power Package	LED Count	Drive Current	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)								
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW				
P1	20	530	38W	T1S	4,369	1	0	1	115	4,706	1	0	1	124	4,766	1	0	1	125				
				T2S	4,364	1	0	1	115	4,701	1	0	1	124	4,761	1	0	1	125				
				T2M	4,387	1	0	1	115	4,726	1	0	1	124	4,785	1	0	1	126				
				T3S	4,248	1	0	1	112	4,577	1	0	1	120	4,634	1	0	1	122				
				T3M	4,376	1	0	1	115	4,714	1	0	1	124	4,774	1	0	1	126				
				T4M	4,281	1	0	1	113	4,612	1	0	2	121	4,670	1	0	2	123				
				TF1M	4,373	1	0	1	115	4,711	1	0	2	124	4,771	1	0	2	126				
				TSVS	4,548	2	0	0	120	4,900	2	0	0	129	4,962	2	0	0	131				
				T5S	4,552	2	0	0	120	4,904	2	0	0	129	4,966	2	0	0	131				
				T5M	4,541	3	0	1	120	4,891	3	0	1	129	4,953	3	0	1	130				
				TSW	4,576	3	0	2	120	4,929	3	0	2	130	4,992	3	0	2	131				
				BLC	3,586	1	0	1	94	3,863	1	0	1	102	3,912	1	0	1	103				
				LCCO	2,668	1	0	1	70	2,874	1	0	2	76	2,911	1	0	2	77				
				RCCO	2,668	1	0	1	70	2,874	1	0	2	76	2,911	1	0	2	77				
				P2	20	700	49W	T1S	5,570	1	0	1	114	6,001	1	0	1	122	6,077	2	0	2	124
								T2S	5,564	1	0	2	114	5,994	1	0	2	122	6,070	2	0	2	124
T2M	5,593	1	0					1	114	6,025	1	0	1	123	6,102	1	0	1	125				
T3S	5,417	1	0					2	111	5,835	1	0	2	119	5,909	2	0	2	121				
T3M	5,580	1	0					2	114	6,011	1	0	2	123	6,087	1	0	2	124				
T4M	5,458	1	0					2	111	5,880	1	0	2	120	5,955	1	0	2	122				
TF1M	5,576	1	0					2	114	6,007	1	0	2	123	6,083	1	0	2	124				
TSVS	5,799	2	0					0	118	6,247	2	0	0	127	6,327	2	0	0	129				
T5S	5,804	2	0					0	118	6,252	2	0	0	128	6,332	2	0	1	129				
T5M	5,789	3	0					1	118	6,237	3	0	1	127	6,316	3	0	1	129				
TSW	5,834	3	0					2	119	6,285	3	0	2	128	6,364	3	0	2	130				
BLC	4,572	1	0					1	93	4,925	1	0	1	101	4,987	1	0	1	102				
LCCO	3,402	1	0					2	69	3,665	1	0	2	75	3,711	1	0	2	76				
RCCO	3,402	1	0					2	69	3,665	1	0	2	75	3,711	1	0	2	76				
P3	20	1050	71W					T1S	7,833	2	0	2	110	8,438	2	0	2	119	8,545	2	0	2	120
								T2S	7,825	2	0	2	110	8,429	2	0	2	119	8,536	2	0	2	120
				T2M	7,865	2	0	2	111	8,473	2	0	2	119	8,580	2	0	2	121				
				T3S	7,617	2	0	2	107	8,205	2	0	2	116	8,309	2	0	2	117				
				T3M	7,846	2	0	2	111	8,452	2	0	2	119	8,559	2	0	2	121				
				T4M	7,675	2	0	2	108	8,269	2	0	2	116	8,373	2	0	2	118				
				TF1M	7,841	2	0	2	110	8,447	2	0	2	119	8,554	2	0	2	120				
				TSVS	8,155	3	0	0	115	8,785	3	0	0	124	8,896	3	0	0	125				
				T5S	8,162	3	0	1	115	8,792	3	0	1	124	8,904	3	0	1	125				
				T5M	8,141	3	0	2	115	8,770	3	0	2	124	8,881	3	0	2	125				
				TSW	8,204	3	0	2	116	8,838	4	0	2	124	8,950	4	0	2	126				
				BLC	6,429	1	0	2	91	6,926	1	0	2	98	7,013	1	0	2	99				
				LCCO	4,784	1	0	2	67	5,153	1	0	2	73	5,218	1	0	2	73				
				RCCO	4,784	1	0	2	67	5,153	1	0	2	73	5,218	1	0	2	73				
				P4	20	1400	92W	T1S	9,791	2	0	2	106	10,547	2	0	2	115	10,681	2	0	2	116
								T2S	9,780	2	0	2	106	10,536	2	0	2	115	10,669	2	0	2	116
T2M	9,831	2	0					2	107	10,590	2	0	2	115	10,724	2	0	2	117				
T3S	9,521	2	0					2	103	10,256	2	0	2	111	10,386	2	0	2	113				
T3M	9,807	2	0					2	107	10,565	2	0	2	115	10,698	2	0	2	116				
T4M	9,594	2	0					2	104	10,335	2	0	3	112	10,466	2	0	3	114				
TF1M	9,801	2	0					2	107	10,558	2	0	2	115	10,692	2	0	2	116				
TSVS	10,193	3	0					1	111	10,981	3	0	1	119	11,120	3	0	1	121				
T5S	10,201	3	0					1	111	10,990	3	0	1	119	11,129	3	0	1	121				
T5M	10,176	4	0					2	111	10,962	4	0	2	119	11,101	4	0	2	121				
TSW	10,254	4	0					3	111	11,047	4	0	3	120	11,186	4	0	3	122				
BLC	8,036	1	0					2	87	8,656	1	0	2	94	8,766	1	0	2	95				
LCCO	5,979	1	0					2	65	6,441	1	0	2	70	6,523	1	0	3	71				
RCCO	5,979	1	0					2	65	6,441	1	0	2	70	6,523	1	0	3	71				

## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics																							
Power Package	LED Count	Drive Current	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)								
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW				
P5	40	700	89W	T1S	10,831	2	0	2	122	11,668	2	0	2	131	11,816	2	0	2	133				
				T2S	10,820	2	0	2	122	11,656	2	0	2	131	11,803	2	0	2	133				
				T2M	10,876	2	0	2	122	11,716	2	0	2	132	11,864	2	0	2	133				
				T3S	10,532	2	0	2	118	11,346	2	0	2	127	11,490	2	0	2	129				
				T3M	10,849	2	0	2	122	11,687	2	0	2	131	11,835	2	0	2	133				
				T4M	10,613	2	0	3	119	11,434	2	0	3	128	11,578	2	0	3	130				
				TFTM	10,842	2	0	2	122	11,680	2	0	2	131	11,828	2	0	2	133				
				TSVS	11,276	3	0	1	127	12,148	3	0	1	136	12,302	3	0	1	138				
				T5S	11,286	3	0	1	127	12,158	3	0	1	137	12,312	3	0	1	138				
				T5M	11,257	4	0	2	126	12,127	4	0	2	136	12,280	4	0	2	138				
				TSW	11,344	4	0	3	127	12,221	4	0	3	137	12,375	4	0	3	139				
				BLC	8,890	1	0	2	100	9,576	1	0	2	108	9,698	1	0	2	109				
				LCCO	6,615	1	0	3	74	7,126	1	0	3	80	7,216	1	0	3	81				
				RCCO	6,615	1	0	3	74	7,126	1	0	3	80	7,216	1	0	3	81				
				P6	40	1050	134W	T1S	14,805	3	0	3	110	15,949	3	0	3	119	16,151	3	0	3	121
								T2S	14,789	3	0	3	110	15,932	3	0	3	119	16,134	3	0	3	120
								T2M	14,865	3	0	3	111	16,014	3	0	3	120	16,217	3	0	3	121
T3S	14,396	3	0					3	107	15,509	3	0	3	116	15,705	3	0	3	117				
T3M	14,829	2	0					3	111	15,975	3	0	3	119	16,177	3	0	3	121				
T4M	14,507	2	0					3	108	15,628	3	0	3	117	15,826	3	0	3	118				
TFTM	14,820	2	0					3	111	15,965	3	0	3	119	16,167	3	0	3	121				
TSVS	15,413	4	0					1	115	16,604	4	0	1	124	16,815	4	0	1	125				
T5S	15,426	3	0					1	115	16,618	4	0	1	124	16,828	4	0	1	126				
T5M	15,387	4	0					2	115	16,576	4	0	2	124	16,786	4	0	2	125				
TSW	15,506	4	0					3	116	16,704	4	0	3	125	16,915	4	0	3	126				
BLC	12,151	1	0					2	91	13,090	1	0	2	98	13,255	1	0	2	99				
LCCO	9,041	1	0					3	67	9,740	1	0	3	73	9,863	1	0	3	74				
RCCO	9,041	1	0					3	67	9,740	1	0	3	73	9,863	1	0	3	74				
P7	40	1300	166W					T1S	17,023	3	0	3	103	18,338	3	0	3	110	18,570	3	0	3	112
								T2S	17,005	3	0	3	102	18,319	3	0	3	110	18,551	3	0	3	112
								T2M	17,092	3	0	3	103	18,413	3	0	3	111	18,646	3	0	3	112
				T3S	16,553	3	0	3	100	17,832	3	0	3	107	18,058	3	0	3	109				
				T3M	17,051	3	0	3	103	18,369	3	0	3	111	18,601	3	0	3	112				
				T4M	16,681	3	0	3	100	17,969	3	0	3	108	18,197	3	0	3	110				
				TFTM	17,040	3	0	3	103	18,357	3	0	4	111	18,590	3	0	4	112				
				TSVS	17,723	4	0	1	107	19,092	4	0	1	115	19,334	4	0	1	116				
				T5S	17,737	4	0	2	107	19,108	4	0	2	115	19,349	4	0	2	117				
				T5M	17,692	4	0	2	107	19,059	4	0	2	115	19,301	4	0	2	116				
				TSW	17,829	5	0	3	107	19,207	5	0	3	116	19,450	5	0	3	117				
				BLC	13,971	2	0	2	84	15,051	2	0	2	91	15,241	2	0	2	92				
				LCCO	10,396	1	0	3	63	11,199	1	0	3	67	11,341	1	0	3	68				
				RCCO	10,396	1	0	3	63	11,199	1	0	3	67	11,341	1	0	3	68				



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## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Rotated Optics																			
Power Package	LED Count	Drive Current	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P10	30	530	53W	T1S	6,727	2	0	2	127	7,247	3	0	3	137	7,339	3	0	3	138
				T2S	6,689	3	0	3	126	7,205	3	0	3	136	7,297	3	0	3	138
				T2M	6,809	3	0	3	128	7,336	3	0	3	138	7,428	3	0	3	140
				T3S	6,585	3	0	3	124	7,094	3	0	3	134	7,183	3	0	3	136
				T3M	6,805	3	0	3	128	7,331	3	0	3	138	7,424	3	0	3	140
				T4M	6,677	3	0	3	126	7,193	3	0	3	136	7,284	3	0	3	137
				TF1M	6,850	3	0	3	129	7,379	3	0	3	139	7,472	3	0	3	141
				TSVS	6,898	3	0	0	130	7,431	3	0	0	140	7,525	3	0	0	142
				T5S	6,840	2	0	1	129	7,368	2	0	1	139	7,461	2	0	1	141
				T5M	6,838	3	0	1	129	7,366	3	0	2	139	7,460	3	0	2	141
				TSW	6,777	3	0	2	128	7,300	3	0	2	138	7,393	3	0	2	139
				BLC	5,626	2	0	2	106	6,060	2	0	2	114	6,137	2	0	2	116
				LCCO	4,018	1	0	2	76	4,328	1	0	2	82	4,383	1	0	2	83
				RCCO	4,013	3	0	3	76	4,323	3	0	3	82	4,377	3	0	3	83
				P11	30	700	72W	T1S	8,594	3	0	3	119	9,258	3	0	3	129	9,376
T2S	8,545	3	0					3	119	9,205	3	0	3	128	9,322	3	0	3	129
T2M	8,699	3	0					3	121	9,371	3	0	3	130	9,490	3	0	3	132
T3S	8,412	3	0					3	117	9,062	3	0	3	126	9,177	3	0	3	127
T3M	8,694	3	0					3	121	9,366	3	0	3	130	9,484	3	0	3	132
T4M	8,530	3	0					3	118	9,189	3	0	3	128	9,305	3	0	3	129
TF1M	8,750	3	0					3	122	9,427	3	0	3	131	9,546	3	0	3	133
TSVS	8,812	3	0					0	122	9,493	3	0	0	132	9,613	3	0	0	134
T5S	8,738	3	0					1	121	9,413	3	0	1	131	9,532	3	0	1	132
T5M	8,736	3	0					2	121	9,411	3	0	2	131	9,530	3	0	2	132
TSW	8,657	4	0					2	120	9,326	4	0	2	130	9,444	4	0	2	131
BLC	7,187	3	0					3	100	7,742	3	0	3	108	7,840	3	0	3	109
LCCO	5,133	1	0					2	71	5,529	1	0	2	77	5,599	1	0	2	78
RCCO	5,126	3	0					3	71	5,522	3	0	3	77	5,592	3	0	3	78
P12	30	1050	104W					T1S	12,149	3	0	3	117	13,088	3	0	3	126	13,253
				T2S	12,079	4	0	4	116	13,012	4	0	4	125	13,177	4	0	4	127
				T2M	12,297	3	0	3	118	13,247	3	0	3	127	13,415	3	0	3	129
				T3S	11,891	4	0	4	114	12,810	4	0	4	123	12,972	4	0	4	125
				T3M	12,290	3	0	3	118	13,239	4	0	4	127	13,407	4	0	4	129
				T4M	12,058	4	0	4	116	12,990	4	0	4	125	13,154	4	0	4	126
				TF1M	12,369	4	0	4	119	13,325	4	0	4	128	13,494	4	0	4	130
				TSVS	12,456	3	0	1	120	13,419	3	0	1	129	13,589	4	0	1	131
				T5S	12,351	3	0	1	119	13,306	3	0	1	128	13,474	3	0	1	130
				T5M	12,349	4	0	2	119	13,303	4	0	2	128	13,471	4	0	2	130
				TSW	12,238	4	0	3	118	13,183	4	0	3	127	13,350	4	0	3	128
				BLC	10,159	3	0	3	98	10,944	3	0	3	105	11,083	3	0	3	107
				LCCO	7,256	1	0	3	70	7,816	1	0	3	75	7,915	1	0	3	76
				RCCO	7,246	3	0	3	70	7,806	4	0	4	75	7,905	4	0	4	76
				P13	30	1300	128W	T1S	14,438	3	0	3	113	15,554	3	0	3	122	15,751
T2S	14,355	4	0					4	112	15,465	4	0	4	121	15,660	4	0	4	122
T2M	14,614	3	0					3	114	15,744	4	0	4	123	15,943	4	0	4	125
T3S	14,132	4	0					4	110	15,224	4	0	4	119	15,417	4	0	4	120
T3M	14,606	4	0					4	114	15,735	4	0	4	123	15,934	4	0	4	124
T4M	14,330	4	0					4	112	15,438	4	0	4	121	15,633	4	0	4	122
TF1M	14,701	4	0					4	115	15,836	4	0	4	124	16,037	4	0	4	125
TSVS	14,804	4	0					1	116	15,948	4	0	1	125	16,150	4	0	1	126
T5S	14,679	3	0					1	115	15,814	3	0	1	124	16,014	3	0	1	125
T5M	14,676	4	0					2	115	15,810	4	0	2	124	16,010	4	0	2	125
TSW	14,544	4	0					3	114	15,668	4	0	3	122	15,866	4	0	3	124
BLC	7,919	3	0					3	62	8,531	3	0	3	67	8,639	3	0	3	67
LCCO	5,145	1	0					2	40	5,543	1	0	2	43	5,613	1	0	2	44
RCCO	5,139	3	0					3	40	5,536	3	0	3	43	5,606	3	0	3	44

## FEATURES & SPECIFICATIONS

### INTENDED USE

The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

### CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (0.95 ft<sup>2</sup>) for optimized pole wind loading.

### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermostat powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

### OPTICS

Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K or 5000 K (70 CRI) configurations. The D-Series Size 0 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

### ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### STANDARD CONTROLS

The DSX0 LED area luminaire has a number of control options. DSX Size 0, comes standard with 0-10V dimming driver. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensors with on-board photocells feature field-adjustable programming and are suitable for mounting heights up to 30 feet.

### nLIGHT AIR CONTROLS

The DSX0 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

### INSTALLATION

Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 0 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 0 utilizes the AERIS™ series pole drilling pattern (template #8). Optional terminal block and NEMA photocontrol receptacle are also available.

### LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C to 50°C ambient with HA option. U.S. Patent No. D672,492 S. International patent pending.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

### BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

### WARRANTY

5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/support/customer-support/terms-and-conditions](http://www.acuitybrands.com/support/customer-support/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



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**STORMWATER REPORT**  
**Preliminary**

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**MIXED USE SITE DEVELOPMENT**  
**38015 HYW 26**  
**Sandy, OR 97055**  
**FDG # E21-043**

**September 12, 2022**

Prepared By:



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359 E. Historic Columbia River Highway  
Sandy, OR 97060  
503.668.3737- fax 503.668.3788



Sandy Multi-Family

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- IV. SITE DESCRIPTION
- V. STORMWATER MANAGEMENT

APPENDICES

Time of Concentration Pathway Exhibit

Storm Basin Area Exhibit

HydroCAD output

NRCS Soils Report

**STORM DRAINAGE CALCULATIONS**

## Sandy Multi-Family

### I. OBJECTIVE

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The objective is to provide stormwater treatment and detention for the new impervious parking, sidewalk, and building areas.

Stormwater discharge from the above referenced impervious areas will be discharged into a 60" detention system and routed into a water quality manhole and into the public stormwater system in Meeker Street north of the site improvements.

### II. METHODOLOGY

---

As per the City of Sandy code, the 2016 City of Portland stormwater manual (performance method for all facilities) was applied in developing the proposed stormwater management for the impervious surface areas. Water quality and quantity is managed via underground detention facilities and a water quality manhole. The City of Portland Hierarchy for the new impervious area categories 1-3 (See Section V) are not feasible due to site constraints including soil types and fill condition of the site development. HydroCAD is used to apply the Santa Barbara unit hydrograph for the respective storm intensities for the 2yr, 5yr, 10yr, and 25yr 24hour design storms.

### III. REFERENCES:

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USGS Soil Maps for Clackamas County, Oregon  
City of Portland, Stormwater Management Manual

### IV. SITE DESCRIPTION:

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The site is a parcel located in the City of Sandy at 38015 HYW 26 and is approximately 2.0 acres in size with a topography that has slopes ranging from 0 to 12%. The site slopes from South to North towards Meeker Street. The site is currently an empty field area just north of Highway 26. The proposed on-site improvements include 41,740 sf of new asphalt driveway and parking area, 5,490 sf new concrete / sidewalk area, and 11,320 sf of new building roof area.

The Soils per the USDA Soils maps are predominately classified as Cazadero silty clay loam, with 0 to 12 percent slopes. The Soils have a hydrologic soil group - Hydrologic Group C. Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

### V. STORMWATER MANAGEMENT:

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#### **Stormwater Hierarchy**

The following management hierarchy is the order of preferred management approaches per the City of Portland manual:

Category 1. Requires total on-site infiltration in vegetation infiltration facilities.

## Sandy Multi-Family

Category 2. Requires total on-site infiltration in vegetation infiltration facilities that overflow to subsurface infiltration facilities or standalone subsurface infiltration facilities.

Category 3. Requires onsite detention with vegetated facilities that overflow to drainageway, stream, river, or storm pipe only.

Categories 1 and 2 are not feasible due to the low infiltration rate of the soils (0.5 inches per hour), see USDA NRCS soils report included in this report. Stormwater Hierarchy Categories 1-3 are not feasible due to site constraints such as site fill and the lack of adequate room for vegetated areas.

The design storms and detention requirements, as required by the City of Sandy design and construction standards, are as follows:

Recurrence Interval <sup>~</sup> (years)	Total Precipitation Depth (In)
WQ	0.20 intensity per rational method
2	3.5
5	4.5
10	4.8
25	5.5

1. The post construction 24-hour 2-year recurrence interval storm event runoff will not exceed the 2-year predevelopment 2-year 24-hour runoff
2. The post construction 24-hour 5-year recurrence interval storm event runoff will not exceed the 5-year predevelopment 5-year 24-hour runoff
3. The post construction 24-hour 10-year recurrence interval storm event runoff will not exceed the 10-year predevelopment 10-year 24-hour runoff
4. The post construction 24-hour 25-year recurrence interval storm event runoff will not exceed the predevelopment 25-year runoff.

### Water Quantity Analysis for Impervious Areas

Stormwater detention is achieved by directing stormwater into the proposed underground detention pipes located at the northerly side of the parking area. The Santa Barbara Urban Hydrograph (HydroCAD) was used to create the basin hydrographs (see appendix for data and calculations) and to estimate the peak flows for the design storms. A curve number (CN) value of 98 was assigned to the impervious surfaces. The time of concentration for impervious area is 6 minutes as a minimum value.

A 250 lf 60" underground stormwater detention system for the impervious area will be required to detain stormwater per the City of Sandy standards. The City of Sandy standards for detention are used as outlined above for the calculations.

## Sandy Multi-Family

### Stormwater Flows

Design Storm	Pre-Development (Existing) Peak Flow (cfs)	Post-Construction Peak Flow (cfs)	Allowed Post Construction Runoff	Actual Post Construction Runoff
2 year	0.46	1.09	0.46	0.45
5 year	0.74	1.41	0.74	0.74
10 year	0.83	1.51	0.83	0.83
25 year	1.05	1.73	1.05	0.99

### Stage and Storage

Post construction event	Peak Stage Elevation (ft)	Peak Storage (cf)
2 year	2.33	1,927
5 year	2.90	2,644
10 year	3.05	2,829
25 year	3.43	3,293

### Water Quality Analysis for Impervious Area

The water quality flow as required by the City of Sandy is the 0.20 inches / hour storm; Applying the rational method, CIA = (0.90) (0.20) (1.34) = 0.24 cfs is the water quality flow rate for all of the impervious area for the Mixed Use Site Development Improvements. Storm water treatment is proposed to be achieved by utilizing the CDS Hydrodynamic Separator Model PMSU20\_15\_4 water quality manhole; The treatment capacity of the PMSU20\_15\_4 water quality manhole is 0.70 cfs.

Treatment specification for the PMSU20\_15\_4 Stormwater Treatment Device (SWTD) meets the follows standards:

1. The SWTD is capable of achieving an 80 percent average annual reduction for a particle distribution having a mean particle size (d50) of 125 microns
2. The SWTD is capable of capturing and retaining 100 percent of pollutants greater than or equal to 3/16 of an inch regardless of the pollutant's specific gravity (i.e.: floatable and neutrally buoyant materials) for flows up to the device's rated-treatment capacity. The SWTD is designed to retain all previously captured pollutants addressed by this subsection under all flow conditions.
3. The SWTD is capable of capturing and retaining total petroleum hydrocarbons. The SWTD is capable of achieving a removal efficiency of 92 and 78 percent when the device is operating at 25 and 50 percent of its rated-treatment capacity. These removal efficiencies is based on independent third-party research for influent oil concentrations representative of storm water runoff (20 ± 5 mg/L). The SWTD is

## Sandy Multi-Family

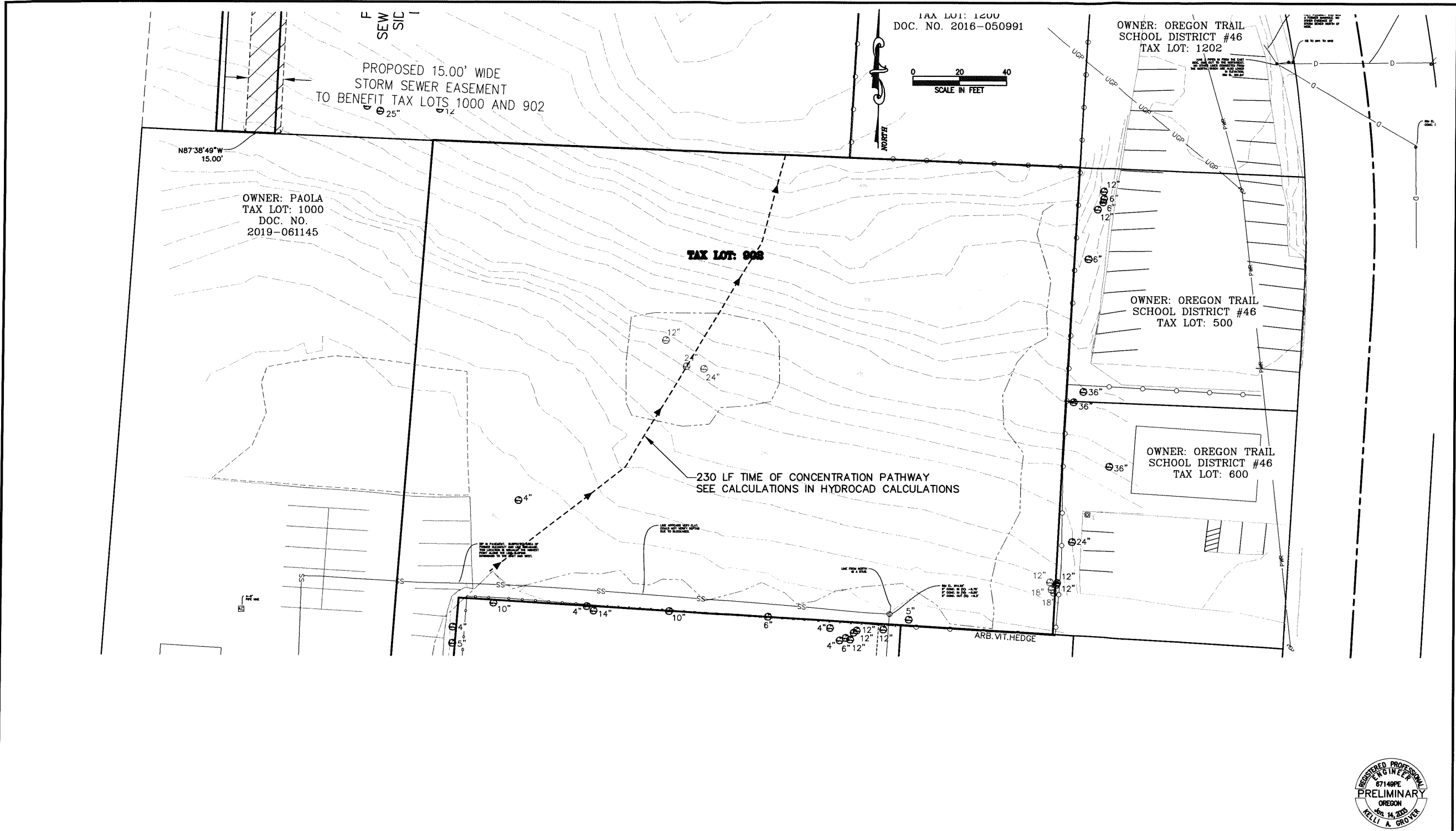
greater than 99 percent effective in controlling dry-weather accidental oil spills.

### Conclusion

---

Post development stormwater runoff will be detained, treated, and discharged into the existing City of Sandy Storm system located in Meeker Street at pre-existing flow rates for the design storms in conformance with the City of Sandy municipal code standards via a underground piped detention system and a water quality treatment CDS manhole.



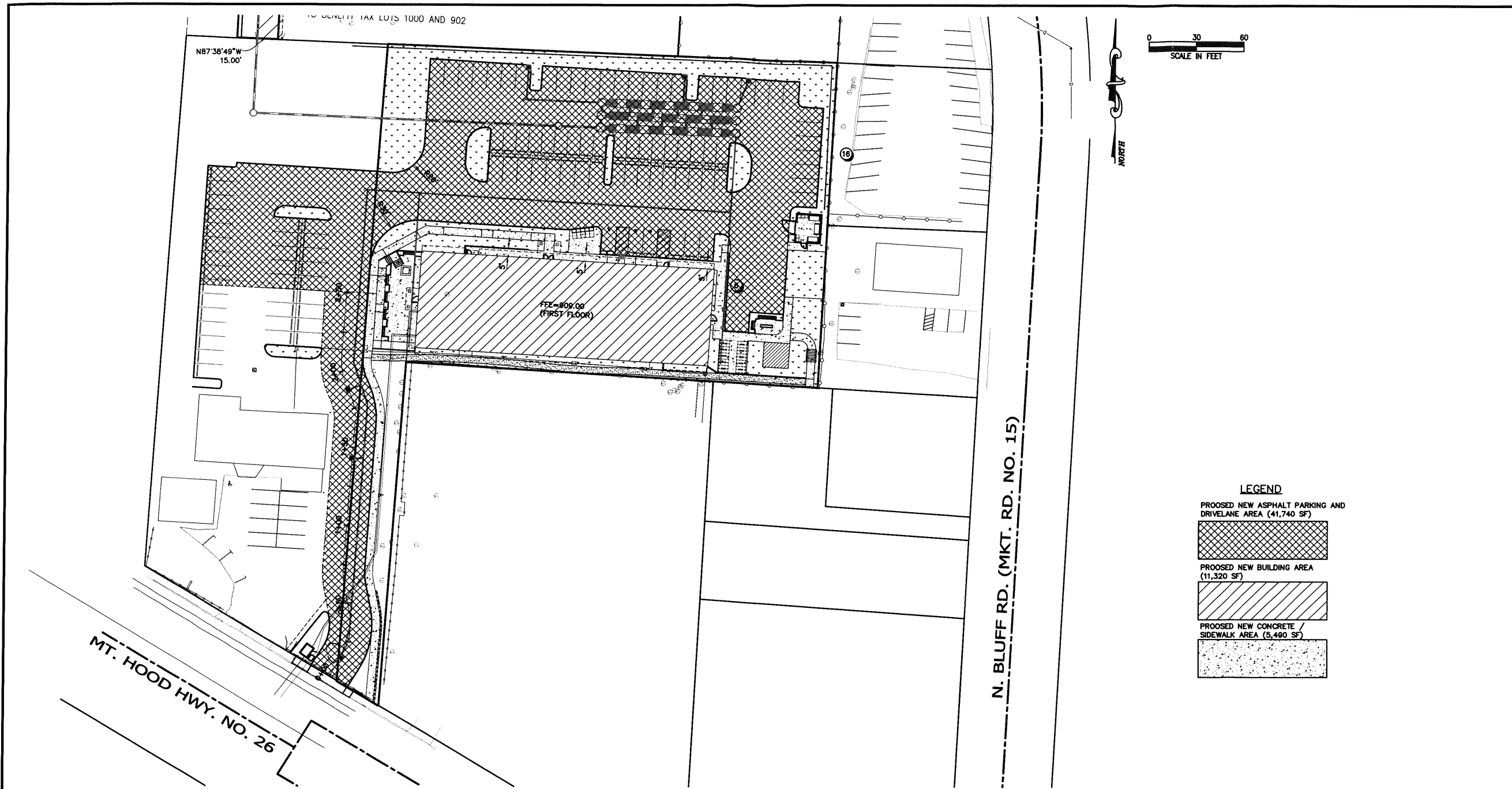


8/31/2022 2:30:31 PM BB s:\project files\projects\21-043 state street homes\cad\sheets\21-043 toc pathway.dwg



EXPIRES: 06/30/23  
SIGNATURE DATE:

DRAWN:		DESIGNED:		CHECKED:		 <b>FIRWOOD</b> DESIGN GROUP Reliable Engineering Solutions 359 EAST HISTORIC COLUMBIA RIVER HIGHWAY TROUTDALE, OREGON 97060 (503) 668-3737	STATE STREET HOMES 1233 NW NORTHRUP ST. #125 PORTLAND, OR 97209	TIME OF CONCENTRATION PATHWAY MIXED USE SITE DEVELOPMENT 38015 HWY 26, SANDY, OR 97055	1 <hr/> 1
SCALE: AS SHOWN		DATE: DECEMBER 2021		PROJECT NO. E21-043					
DATE:	NO.	REVISION							



**LEGEND**

	PROPOSED NEW ASPHALT PARKING AND DRIVEWAY AREA (41,740 SF)
	PROPOSED NEW BUILDING AREA (11,320 SF)
	PROPOSED NEW CONCRETE / SIDEWALK AREA (5,490 SF)



EXPIRES: 06/30/23  
SIGNATURE DATE:

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DATE:	NO.	REVISION

DRAWN:	DESIGNED:	CHECKED:
SCALE: AS SHOWN	DATE: DECEMBER 2021	
PROJECT NO. E21-043		

**FIRWOOD** DESIGN GROUP  
 Reliable Engineering Solutions  
 359 EAST HISTORIC COLUMBIA RIVER HIGHWAY  
 TROUTDALE, OREGON 97060  
 (503) 668-3737

**STATE STREET HOMES**  
 1233 NW NORTHROP ST. #125  
 PORTLAND, OR 97209

**STORM BASIN AREA EXHIBIT**  
 MIXED USE SITE DEVELOPMENT  
 38015 HWY 26, SANDY, OR 97055

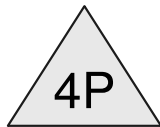
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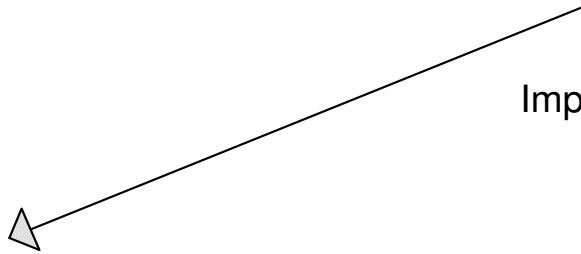
Pre Construction Runoff  
for Total Impervious  
Area



Impervious basin



48" Detention Basin



Routing Diagram for REVISED PRELIMINARY E21-043 Storm  
Prepared by Firwood Design Storm, Printed 9/15/2022  
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**Rainfall Events Listing**

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2yr	Type IA 24-hr		Default	24.00	1	3.50	2
2	5yr	Type IA 24-hr		Default	24.00	1	4.50	2
3	10yr	Type IA 24-hr		Default	24.00	1	4.80	2
4	25yr	Type IA 24-hr		Default	24.00	1	5.50	2

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**Area Listing (selected nodes)**

Area (sq-ft)	CN	Description (subcatchment-numbers)
41,740	98	Asphalt (3S)
11,320	98	Roof Area (3S)
5,490	98	Sidewalk (3S)
58,550	79	Woods/grass comb., Poor, HSG C (6S)
<b>117,100</b>	<b>89</b>	<b>TOTAL AREA</b>



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**Soil Listing (selected nodes)**

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
58,550	HSG C	6S
0	HSG D	
58,550	Other	3S
<b>117,100</b>		<b>TOTAL AREA</b>

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**Ground Covers (selected nodes)**

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover
0	0	0	0	41,740	41,740	Asphalt
0	0	0	0	11,320	11,320	Roof Area
0	0	0	0	5,490	5,490	Sidewalk
0	0	58,550	0	0	58,550	Woods/grass comb., Poor
<b>0</b>	<b>0</b>	<b>58,550</b>	<b>0</b>	<b>58,550</b>	<b>117,100</b>	<b>TOTAL AREA</b>

**REVISED PRELIMINARY E21-043 Storm**

Type IA 24-hr 2yr Rainfall=3.50"

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Time span=0.00-60.00 hrs, dt=0.05 hrs, 1201 points  
Runoff by SBUH method, Split Pervious/Imperv.  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment 3S: Impervious basin** Runoff Area=58,550 sf 100.00% Impervious Runoff Depth=3.27"  
Tc=6.0 min CN=0/98 Runoff=1.09 cfs 15,938 cf

**Subcatchment 6S: Pre Construction Runoff** Runoff Area=58,550 sf 0.00% Impervious Runoff Depth=1.57"  
Flow Length=230' Tc=7.4 min CN=79/0 Runoff=0.46 cfs 7,641 cf

**Pond 4P: 48" Detention Basin** Peak Elev=2.33' Storage=1,927 cf Inflow=1.09 cfs 15,938 cf  
Outflow=0.45 cfs 15,938 cf

**Total Runoff Area = 117,100 sf Runoff Volume = 23,578 cf Average Runoff Depth = 2.42"**  
**50.00% Pervious = 58,550 sf 50.00% Impervious = 58,550 sf**

**REVISED PRELIMINARY E21-043 Storm**

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Type IA 24-hr 2yr Rainfall=3.50"

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**Summary for Subcatchment 3S: Impervious basin**

Runoff = 1.09 cfs @ 7.92 hrs, Volume= 15,938 cf, Depth= 3.27"  
 Routed to Pond 4P : 48" Detention Basin

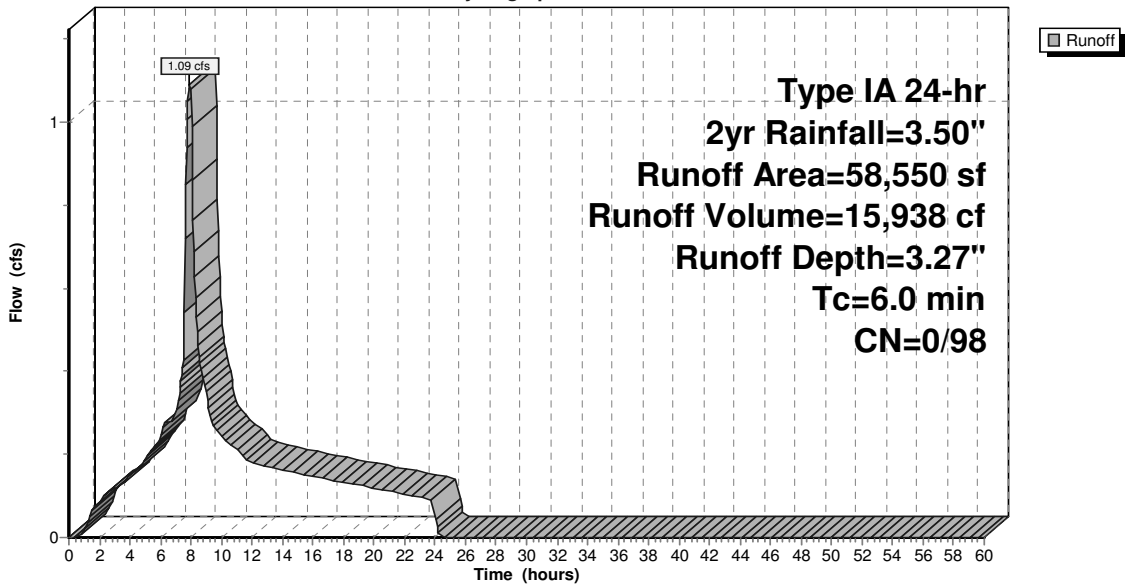
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.05 hrs  
 Type IA 24-hr 2yr Rainfall=3.50"

	Area (sf)	CN	Description
*	41,740	98	Asphalt
*	11,320	98	Roof Area
*	5,490	98	Sidewalk
	58,550	98	Weighted Average
	58,550		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 3S: Impervious basin**

Hydrograph



**REVISED PRELIMINARY E21-043 Storm**

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Type IA 24-hr 2yr Rainfall=3.50"

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**Summary for Subcatchment 6S: Pre Construction Runoff for Total Impervious Area**

Runoff = 0.46 cfs @ 7.99 hrs, Volume= 7,641 cf, Depth= 1.57"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.05 hrs  
Type IA 24-hr 2yr Rainfall=3.50"

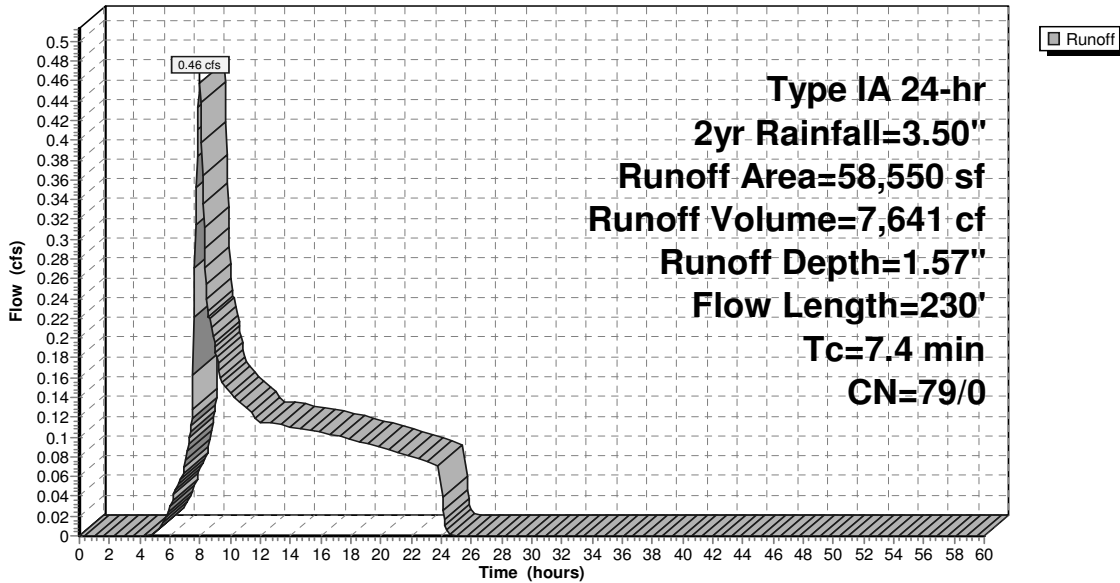
Area (sf)	CN	Description
58,550	79	Woods/grass comb., Poor, HSG C
58,550		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0500	0.26		<b>Sheet Flow,</b> Grass: Short n= 0.150 P2= 3.50"
0.9	130	0.1200	2.42		<b>Shallow Concentrated Flow, Shallow</b> Short Grass Pasture Kv= 7.0 fps
7.4	230	Total			

**Subcatchment 6S: Pre Construction Runoff for Total Impervious Area**

Hydrograph





**REVISED PRELIMINARY E21-043 Storm**

Type IA 24-hr 2yr Rainfall=3.50"

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**Summary for Pond 4P: 48" Detention Basin**

Inflow Area = 58,550 sf, 100.00% Impervious, Inflow Depth = 3.27" for 2yr event  
 Inflow = 1.09 cfs @ 7.92 hrs, Volume= 15,938 cf  
 Outflow = 0.45 cfs @ 8.47 hrs, Volume= 15,938 cf, Atten= 59%, Lag= 33.4 min  
 Primary = 0.45 cfs @ 8.47 hrs, Volume= 15,938 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs  
 Peak Elev= 2.33' @ 8.47 hrs Surf.Area= 1,230 sf Storage= 1,927 cf

Plug-Flow detention time= 26.7 min calculated for 15,938 cf (100% of inflow)  
 Center-of-Mass det. time= 26.7 min ( 691.7 - 665.0 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	4,909 cf	<b>60.0" Round Pipe Storage</b> L= 250.0' S= 0.0020 '/'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	<b>3.4" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#2	Primary	2.50'	<b>4.4" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

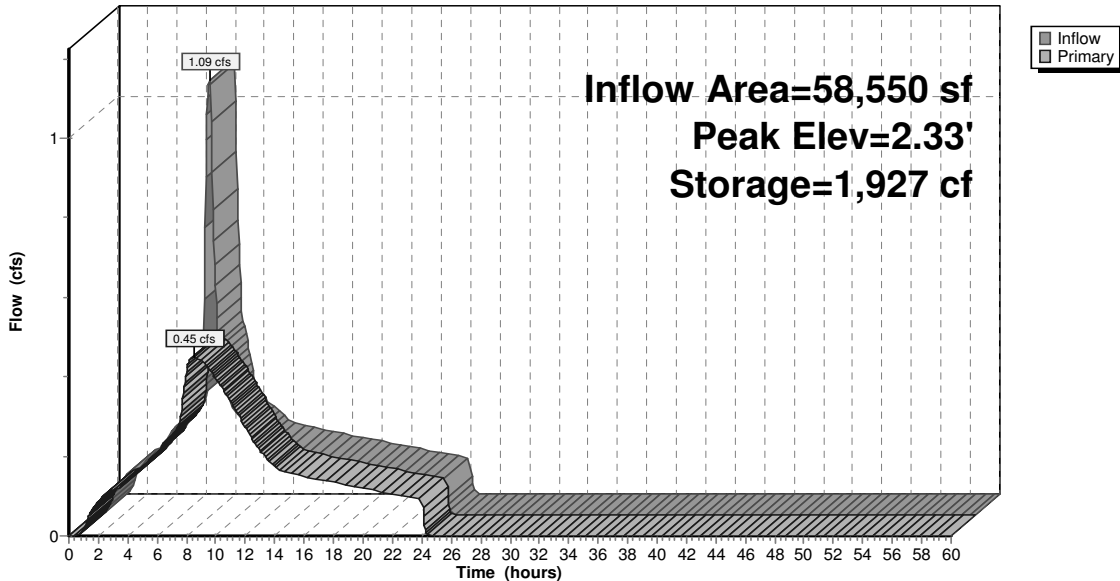
**Primary OutFlow** Max=0.45 cfs @ 8.47 hrs HW=2.32' (Free Discharge)

1=Orifice/Grate (Orifice Controls 0.45 cfs @ 7.11 fps)

2=Orifice/Grate ( Controls 0.00 cfs)

**Pond 4P: 48" Detention Basin**

Hydrograph



**REVISED PRELIMINARY E21-043 Storm**

Type IA 24-hr 5yr Rainfall=4.50"

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Time span=0.00-60.00 hrs, dt=0.05 hrs, 1201 points  
Runoff by SBUH method, Split Pervious/Imperv.  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment 3S: Impervious basin** Runoff Area=58,550 sf 100.00% Impervious Runoff Depth=4.26"  
Tc=6.0 min CN=0/98 Runoff=1.41 cfs 20,805 cf

**Subcatchment 6S: Pre Construction Runoff** Runoff Area=58,550 sf 0.00% Impervious Runoff Depth=2.38"  
Flow Length=230' Tc=7.4 min CN=79/0 Runoff=0.74 cfs 11,595 cf

**Pond 4P: 48" Detention Basin** Peak Elev=2.90' Storage=2,644 cf Inflow=1.41 cfs 20,805 cf  
Outflow=0.74 cfs 20,805 cf

**Total Runoff Area = 117,100 sf Runoff Volume = 32,400 cf Average Runoff Depth = 3.32"**  
**50.00% Pervious = 58,550 sf 50.00% Impervious = 58,550 sf**

**REVISED PRELIMINARY E21-043 Storm**

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Type IA 24-hr 5yr Rainfall=4.50"

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**Summary for Subcatchment 3S: Impervious basin**

Runoff = 1.41 cfs @ 7.92 hrs, Volume= 20,805 cf, Depth= 4.26"  
 Routed to Pond 4P : 48" Detention Basin

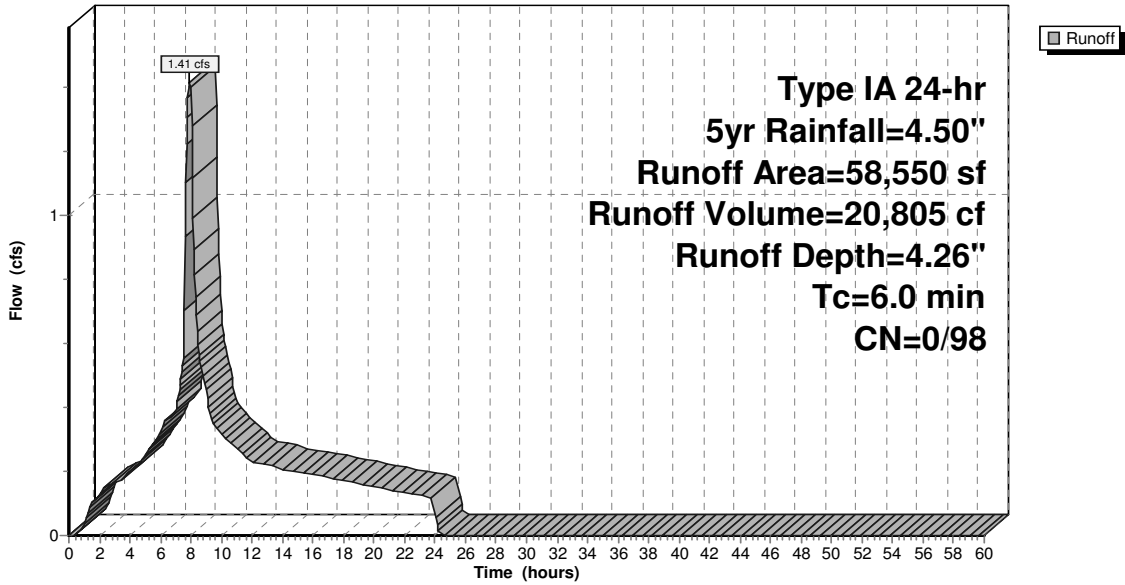
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.05 hrs  
 Type IA 24-hr 5yr Rainfall=4.50"

	Area (sf)	CN	Description
*	41,740	98	Asphalt
*	11,320	98	Roof Area
*	5,490	98	Sidewalk
	58,550	98	Weighted Average
	58,550		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 3S: Impervious basin**

Hydrograph



**REVISED PRELIMINARY E21-043 Storm**

Type IA 24-hr 5yr Rainfall=4.50"

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**Summary for Subcatchment 6S: Pre Construction Runoff for Total Impervious Area**

Runoff = 0.74 cfs @ 7.99 hrs, Volume= 11,595 cf, Depth= 2.38"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.05 hrs  
Type IA 24-hr 5yr Rainfall=4.50"

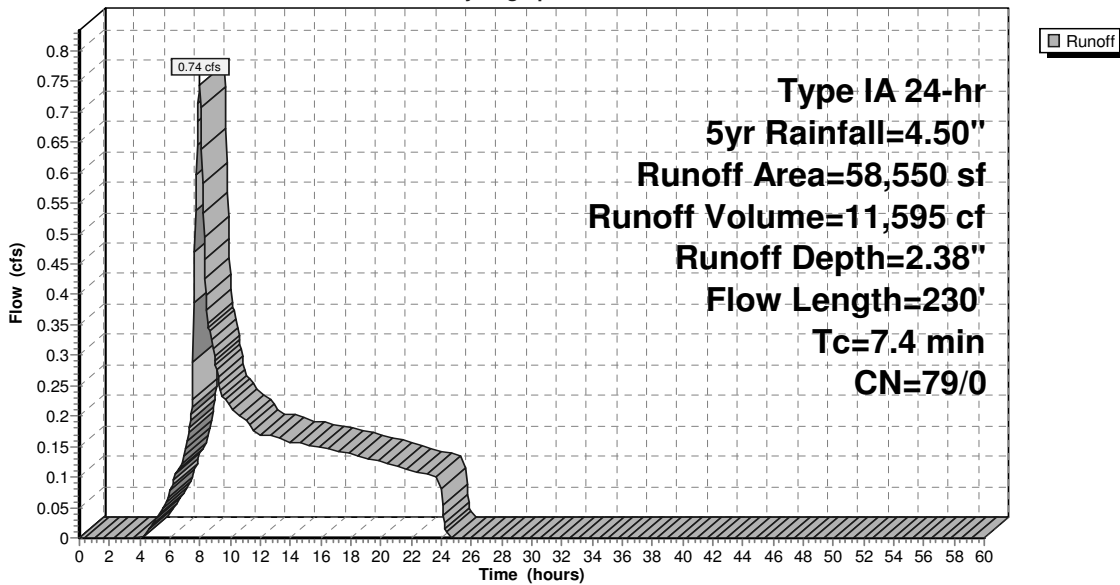
Area (sf)	CN	Description
58,550	79	Woods/grass comb., Poor, HSG C
58,550		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0500	0.26		<b>Sheet Flow,</b> Grass: Short n= 0.150 P2= 3.50"
0.9	130	0.1200	2.42		<b>Shallow Concentrated Flow, Shallow</b> Short Grass Pasture Kv= 7.0 fps
7.4	230	Total			

**Subcatchment 6S: Pre Construction Runoff for Total Impervious Area**

Hydrograph



**REVISED PRELIMINARY E21-043 Storm**

Type IA 24-hr 5yr Rainfall=4.50"

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**Summary for Pond 4P: 48" Detention Basin**

Inflow Area = 58,550 sf, 100.00% Impervious, Inflow Depth = 4.26" for 5yr event  
 Inflow = 1.41 cfs @ 7.92 hrs, Volume= 20,805 cf  
 Outflow = 0.74 cfs @ 8.31 hrs, Volume= 20,805 cf, Atten= 48%, Lag= 23.4 min  
 Primary = 0.74 cfs @ 8.31 hrs, Volume= 20,805 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs  
 Peak Elev= 2.90' @ 8.31 hrs Surf.Area= 1,246 sf Storage= 2,644 cf

Plug-Flow detention time= 34.5 min calculated for 20,805 cf (100% of inflow)  
 Center-of-Mass det. time= 34.5 min ( 693.6 - 659.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	4,909 cf	<b>60.0" Round Pipe Storage</b> L= 250.0' S= 0.0020 '/'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	<b>3.4" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#2	Primary	2.50'	<b>4.4" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

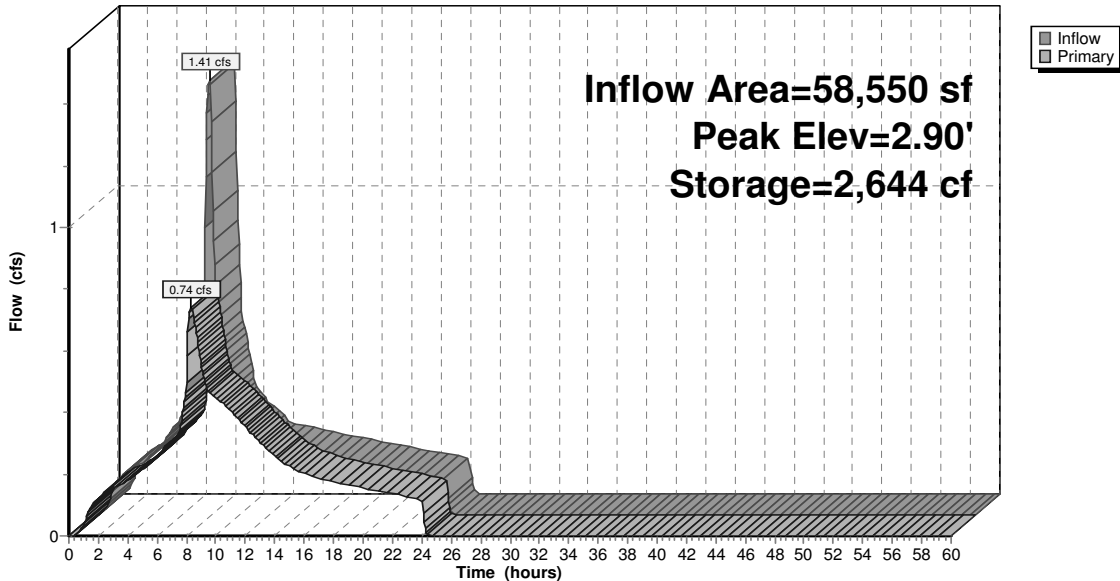
**Primary OutFlow** Max=0.74 cfs @ 8.31 hrs HW=2.90' (Free Discharge)

1=Orifice/Grate (Orifice Controls 0.50 cfs @ 8.00 fps)

2=Orifice/Grate (Orifice Controls 0.24 cfs @ 2.25 fps)

**Pond 4P: 48" Detention Basin**

Hydrograph





**REVISED PRELIMINARY E21-043 Storm**

Type IA 24-hr 10yr Rainfall=4.80"

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Time span=0.00-60.00 hrs, dt=0.05 hrs, 1201 points  
Runoff by SBUH method, Split Pervious/Imperv.  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment 3S: Impervious basin** Runoff Area=58,550 sf 100.00% Impervious Runoff Depth=4.56"  
Tc=6.0 min CN=0/98 Runoff=1.51 cfs 22,266 cf

**Subcatchment 6S: Pre Construction Runoff** Runoff Area=58,550 sf 0.00% Impervious Runoff Depth=2.63"  
Flow Length=230' Tc=7.4 min CN=79/0 Runoff=0.83 cfs 12,834 cf

**Pond 4P: 48" Detention Basin** Peak Elev=3.05' Storage=2,829 cf Inflow=1.51 cfs 22,266 cf  
Outflow=0.83 cfs 22,266 cf

**Total Runoff Area = 117,100 sf Runoff Volume = 35,100 cf Average Runoff Depth = 3.60"**  
**50.00% Pervious = 58,550 sf 50.00% Impervious = 58,550 sf**

**REVISED PRELIMINARY E21-043 Storm**

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Type IA 24-hr 10yr Rainfall=4.80"

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**Summary for Subcatchment 3S: Impervious basin**

Runoff = 1.51 cfs @ 7.91 hrs, Volume= 22,266 cf, Depth= 4.56"  
 Routed to Pond 4P : 48" Detention Basin

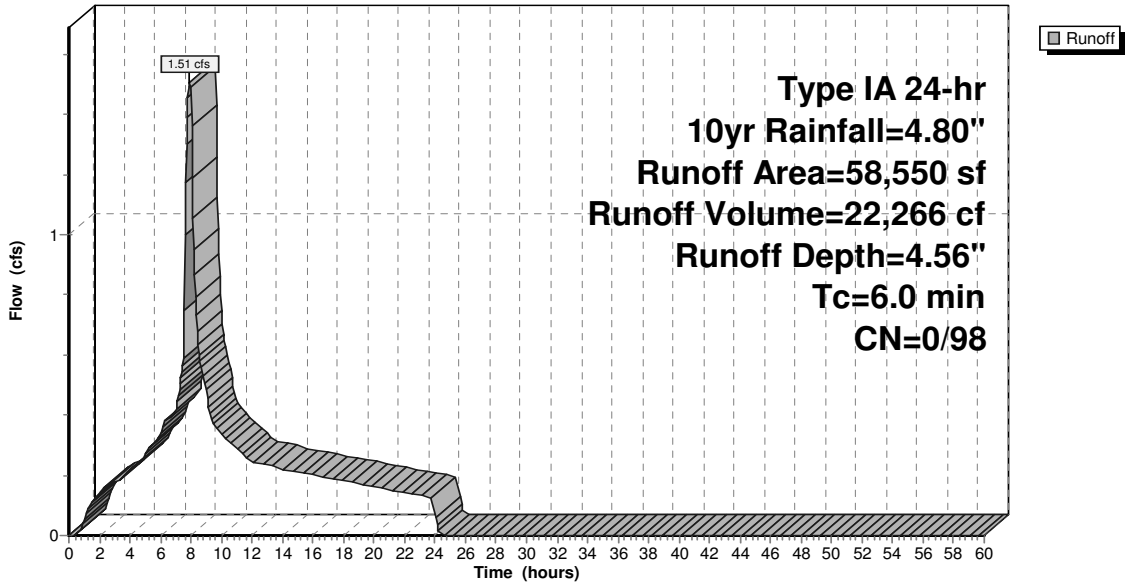
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.05 hrs  
 Type IA 24-hr 10yr Rainfall=4.80"

	Area (sf)	CN	Description
*	41,740	98	Asphalt
*	11,320	98	Roof Area
*	5,490	98	Sidewalk
	58,550	98	Weighted Average
	58,550		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 3S: Impervious basin**

Hydrograph



**REVISED PRELIMINARY E21-043 Storm**

Type IA 24-hr 10yr Rainfall=4.80"

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**Summary for Subcatchment 6S: Pre Construction Runoff for Total Impervious Area**

Runoff = 0.83 cfs @ 7.98 hrs, Volume= 12,834 cf, Depth= 2.63"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.05 hrs  
Type IA 24-hr 10yr Rainfall=4.80"

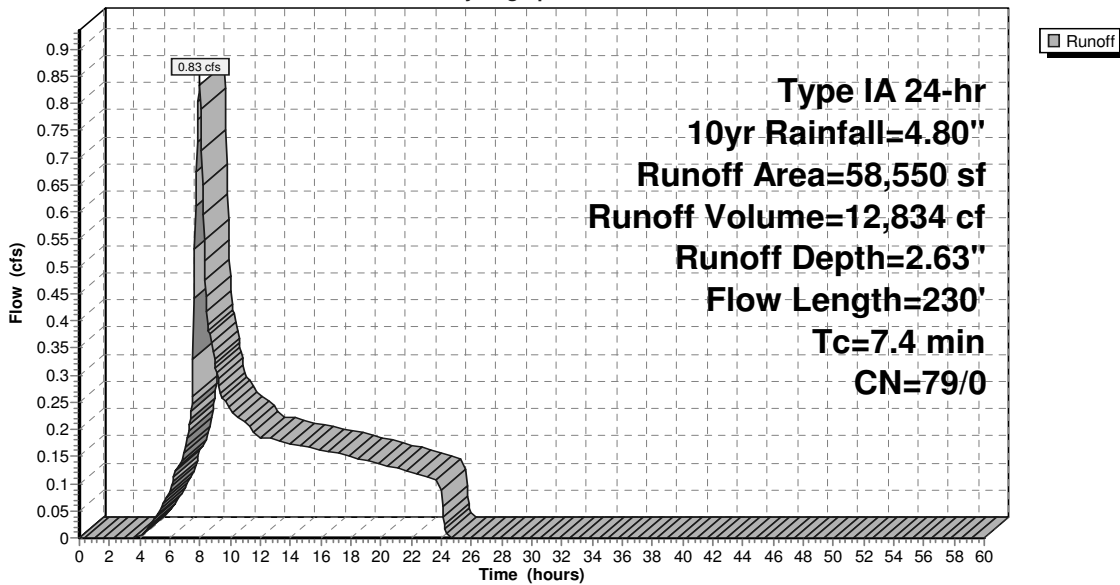
Area (sf)	CN	Description
58,550	79	Woods/grass comb., Poor, HSG C
58,550		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0500	0.26		<b>Sheet Flow,</b> Grass: Short n= 0.150 P2= 3.50"
0.9	130	0.1200	2.42		<b>Shallow Concentrated Flow, Shallow</b> Short Grass Pasture Kv= 7.0 fps
7.4	230	Total			

**Subcatchment 6S: Pre Construction Runoff for Total Impervious Area**

Hydrograph



**REVISED PRELIMINARY E21-043 Storm**

Type IA 24-hr 10yr Rainfall=4.80"

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**Summary for Pond 4P: 48" Detention Basin**

Inflow Area = 58,550 sf, 100.00% Impervious, Inflow Depth = 4.56" for 10yr event  
 Inflow = 1.51 cfs @ 7.91 hrs, Volume= 22,266 cf  
 Outflow = 0.83 cfs @ 8.28 hrs, Volume= 22,266 cf, Atten= 45%, Lag= 21.9 min  
 Primary = 0.83 cfs @ 8.28 hrs, Volume= 22,266 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs  
 Peak Elev= 3.05' @ 8.28 hrs Surf.Area= 1,239 sf Storage= 2,829 cf

Plug-Flow detention time= 36.0 min calculated for 22,248 cf (100% of inflow)  
 Center-of-Mass det. time= 36.0 min ( 693.7 - 657.7 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	4,909 cf	<b>60.0" Round Pipe Storage</b> L= 250.0' S= 0.0020 '/'

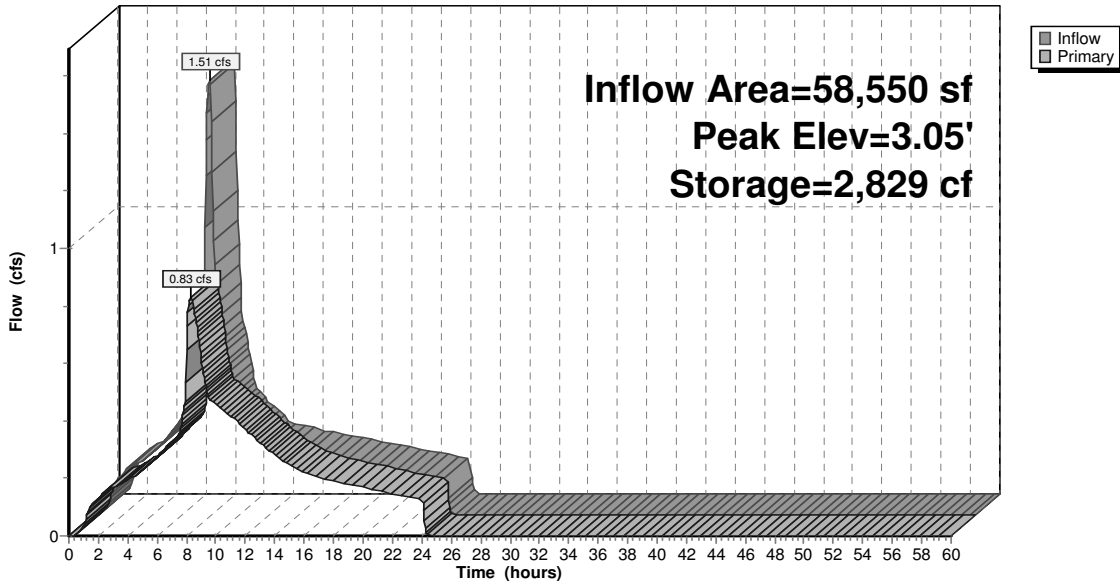
Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	<b>3.4" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#2	Primary	2.50'	<b>4.4" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

**Primary OutFlow** Max=0.83 cfs @ 8.28 hrs HW=3.05' (Free Discharge)

- 1=Orifice/Grate (Orifice Controls 0.52 cfs @ 8.21 fps)
- 2=Orifice/Grate (Orifice Controls 0.31 cfs @ 2.91 fps)

**Pond 4P: 48" Detention Basin**

Hydrograph



**REVISED PRELIMINARY E21-043 Storm**

Type IA 24-hr 25yr Rainfall=5.50"

Prepared by Firwood Design Storm

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Time span=0.00-60.00 hrs, dt=0.05 hrs, 1201 points  
Runoff by SBUH method, Split Pervious/Imperv.  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment 3S: Impervious basin** Runoff Area=58,550 sf 100.00% Impervious Runoff Depth=5.26"  
Tc=6.0 min CN=0/98 Runoff=1.73 cfs 25,676 cf

**Subcatchment 6S: Pre Construction Runoff** Runoff Area=58,550 sf 0.00% Impervious Runoff Depth=3.24"  
Flow Length=230' Tc=7.4 min CN=79/0 Runoff=1.05 cfs 15,792 cf

**Pond 4P: 48" Detention Basin** Peak Elev=3.43' Storage=3,293 cf Inflow=1.73 cfs 25,676 cf  
Outflow=0.99 cfs 25,676 cf

**Total Runoff Area = 117,100 sf Runoff Volume = 41,469 cf Average Runoff Depth = 4.25"**  
**50.00% Pervious = 58,550 sf 50.00% Impervious = 58,550 sf**

**REVISED PRELIMINARY E21-043 Storm**

Type IA 24-hr 25yr Rainfall=5.50"

Prepared by Firwood Design Storm

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**Summary for Subcatchment 3S: Impervious basin**

Runoff = 1.73 cfs @ 7.91 hrs, Volume= 25,676 cf, Depth= 5.26"  
 Routed to Pond 4P : 48" Detention Basin

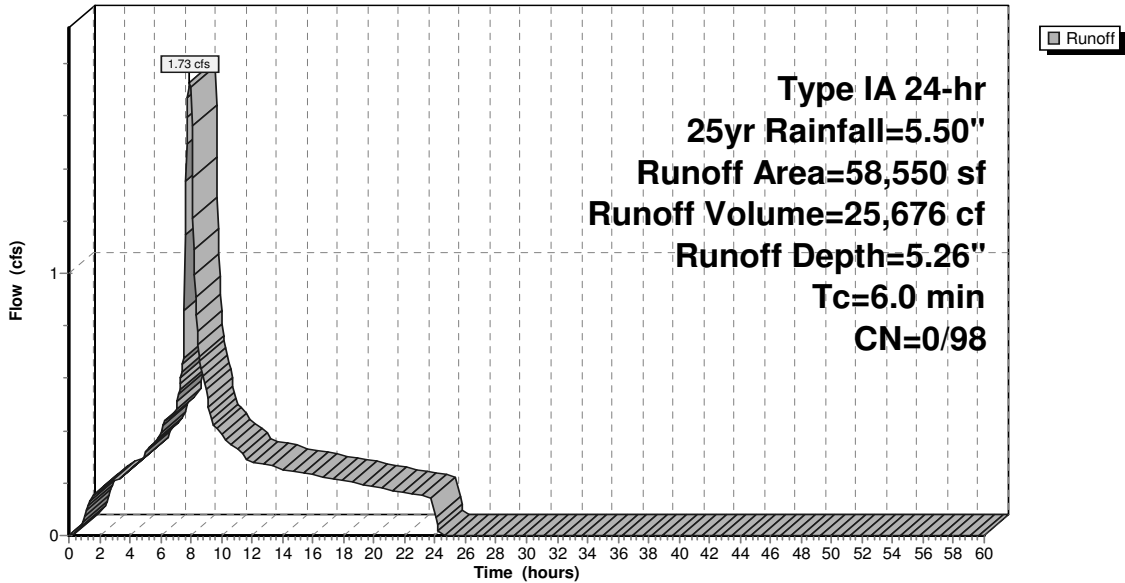
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.05 hrs  
 Type IA 24-hr 25yr Rainfall=5.50"

	Area (sf)	CN	Description
*	41,740	98	Asphalt
*	11,320	98	Roof Area
*	5,490	98	Sidewalk
	58,550	98	Weighted Average
	58,550		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 3S: Impervious basin**

Hydrograph





**REVISED PRELIMINARY E21-043 Storm**

Type IA 24-hr 25yr Rainfall=5.50"

Prepared by Firwood Design Storm

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**Summary for Subcatchment 6S: Pre Construction Runoff for Total Impervious Area**

Runoff = 1.05 cfs @ 7.98 hrs, Volume= 15,792 cf, Depth= 3.24"

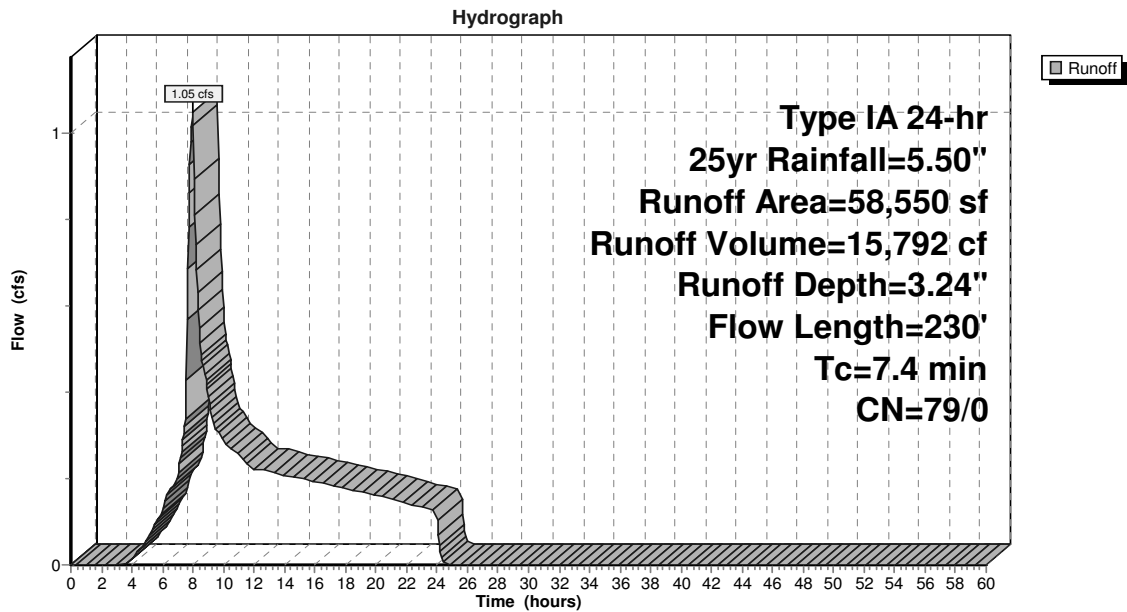
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.05 hrs  
Type IA 24-hr 25yr Rainfall=5.50"

Area (sf)	CN	Description
58,550	79	Woods/grass comb., Poor, HSG C
58,550		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0500	0.26		<b>Sheet Flow,</b> Grass: Short n= 0.150 P2= 3.50"
0.9	130	0.1200	2.42		<b>Shallow Concentrated Flow, Shallow</b> Short Grass Pasture Kv= 7.0 fps
7.4	230	Total			

**Subcatchment 6S: Pre Construction Runoff for Total Impervious Area**



**REVISED PRELIMINARY E21-043 Storm**

Type IA 24-hr 25yr Rainfall=5.50"

Prepared by Firwood Design Storm

Printed 9/15/2022

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**Summary for Pond 4P: 48" Detention Basin**

Inflow Area = 58,550 sf, 100.00% Impervious, Inflow Depth = 5.26" for 25yr event  
 Inflow = 1.73 cfs @ 7.91 hrs, Volume= 25,676 cf  
 Outflow = 0.99 cfs @ 8.26 hrs, Volume= 25,676 cf, Atten= 43%, Lag= 20.5 min  
 Primary = 0.99 cfs @ 8.26 hrs, Volume= 25,676 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs  
 Peak Elev= 3.43' @ 8.26 hrs Surf.Area= 1,200 sf Storage= 3,293 cf

Plug-Flow detention time= 39.7 min calculated for 25,676 cf (100% of inflow)  
 Center-of-Mass det. time= 39.7 min ( 694.8 - 655.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	4,909 cf	<b>60.0" Round Pipe Storage</b> L= 250.0' S= 0.0020 '/'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	<b>3.4" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#2	Primary	2.50'	<b>4.4" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

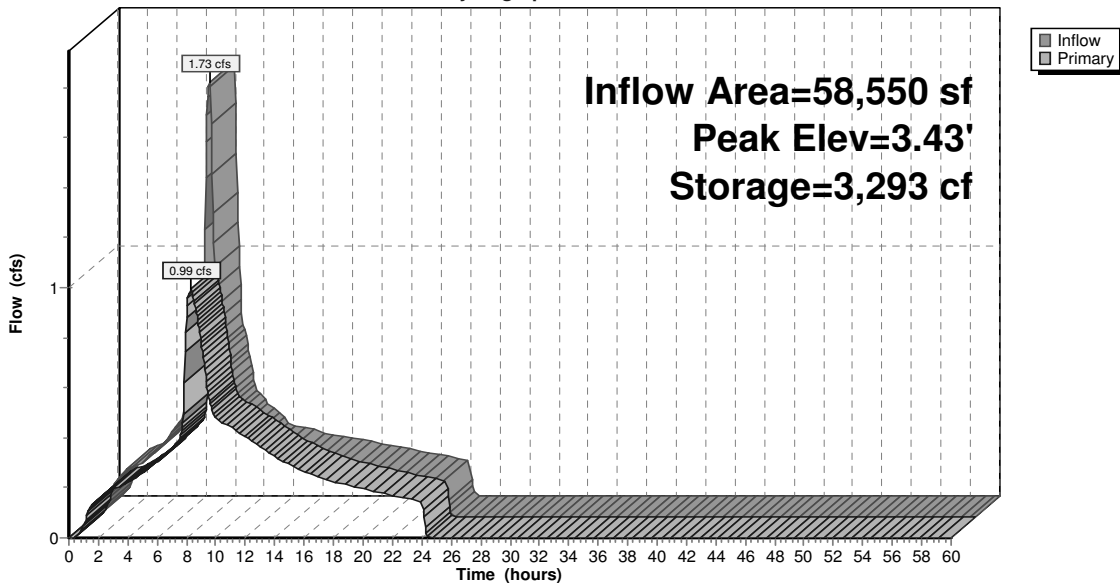
**Primary OutFlow** Max=0.99 cfs @ 8.26 hrs HW=3.43' (Free Discharge)

1=Orifice/Grate (Orifice Controls 0.55 cfs @ 8.73 fps)

2=Orifice/Grate (Orifice Controls 0.44 cfs @ 4.16 fps)

**Pond 4P: 48" Detention Basin**

Hydrograph





United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **Clackamas County Area, Oregon**



January 28, 2022

## Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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## How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

## Soil Map

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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

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Soil Map



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### MAP LEGEND

<b>Area of Interest (AOI)</b>		 Spoil Area
 Area of Interest (AOI)		 Stony Spot
<b>Soils</b>		 Very Stony Spot
 Soil Map Unit Polygons		 Wet Spot
 Soil Map Unit Lines		 Other
 Soil Map Unit Points		 Special Line Features
<b>Special Point Features</b>		<b>Water Features</b>
 Blowout		 Streams and Canals
 Borrow Pit		<b>Transportation</b>
 Clay Spot		 Rails
 Closed Depression		 Interstate Highways
 Gravel Pit		 US Routes
 Gravelly Spot		 Major Roads
 Landfill		 Local Roads
 Lava Flow		<b>Background</b>
 Marsh or swamp		 Aerial Photography
 Mine or Quarry		
 Miscellaneous Water		
 Perennial Water		
 Rock Outcrop		
 Saline Spot		
 Sandy Spot		
 Severely Eroded Spot		
 Sinkhole		
 Slide or Slip		
 Sodic Spot		

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Clackamas County Area, Oregon  
 Survey Area Data: Version 18, Oct 27, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 2, 2015—Sep 21, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
15B	Cazadero silty clay loam, 0 to 7 percent slopes	5.1	74.2%
15C	Cazadero silty clay loam, 7 to 12 percent slopes	1.8	25.4%
24B	Cottrell silty clay loam, 2 to 8 percent slopes	0.0	0.3%
<b>Totals for Area of Interest</b>		<b>6.9</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

## Custom Soil Resource Report

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Clackamas County Area, Oregon

### 15B—Cazadero silty clay loam, 0 to 7 percent slopes

#### Map Unit Setting

*National map unit symbol:* 223c  
*Elevation:* 300 to 900 feet  
*Mean annual precipitation:* 48 to 85 inches  
*Mean annual air temperature:* 50 to 52 degrees F  
*Frost-free period:* 140 to 200 days  
*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Cazadero and similar soils:* 85 percent  
*Minor components:* 2 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Cazadero

##### Setting

*Landform:* Terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Old mixed alluvium

##### Typical profile

*H1 - 0 to 21 inches:* silty clay loam  
*H2 - 21 to 75 inches:* clay

##### Properties and qualities

*Slope:* 0 to 7 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Moderate (about 8.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* C  
*Ecological site:* F003XC003OR - Glaciated Western Cascades Mesic Udic Forest Group  
*Forage suitability group:* Well drained < 15% Slopes (G002XY002OR)  
*Other vegetative classification:* Well drained < 15% Slopes (G002XY002OR)  
*Hydric soil rating:* No

#### Minor Components

##### Borges

*Percent of map unit:* 2 percent  
*Landform:* Hillslopes, depressions on terraces

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*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Base slope, tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Poorly Drained (G002XY006OR)  
*Hydric soil rating:* Yes

### 15C—Cazadero silty clay loam, 7 to 12 percent slopes

#### Map Unit Setting

*National map unit symbol:* 223d  
*Elevation:* 600 to 900 feet  
*Mean annual precipitation:* 60 to 85 inches  
*Mean annual air temperature:* 50 to 52 degrees F  
*Frost-free period:* 140 to 200 days  
*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Cazadero and similar soils:* 80 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Cazadero

##### Setting

*Landform:* Terraces  
*Landform position (three-dimensional):* Riser  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Old mixed alluvium

##### Typical profile

*H1 - 0 to 21 inches:* silty clay loam  
*H2 - 21 to 75 inches:* clay

##### Properties and qualities

*Slope:* 7 to 12 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Moderate (about 8.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* C  
*Ecological site:* F003XC003OR - Glaciated Western Cascades Mesic Udic Forest Group

## Custom Soil Resource Report

*Forage suitability group:* Well drained < 15% Slopes (G002XY002OR)  
*Other vegetative classification:* Well drained < 15% Slopes (G002XY002OR)  
*Hydric soil rating:* No

### 24B—Cottrell silty clay loam, 2 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* 223v  
*Elevation:* 300 to 900 feet  
*Mean annual precipitation:* 45 to 80 inches  
*Mean annual air temperature:* 50 to 54 degrees F  
*Frost-free period:* 140 to 200 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Cottrell and similar soils:* 90 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Cottrell

##### Setting

*Landform:* Hillslopes, terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Interfluve, base slope, tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Old alluvium

##### Typical profile

*H1 - 0 to 24 inches:* silty clay loam  
*H2 - 24 to 55 inches:* silty clay  
*H3 - 55 to 86 inches:* silty clay loam

##### Properties and qualities

*Slope:* 2 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* About 24 to 35 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* High (about 10.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* C  
*Ecological site:* F002XB006OR - Foothill Group  
*Forage suitability group:* Moderately Well Drained < 15% Slopes (G002XY004OR)

Custom Soil Resource Report

*Other vegetative classification:* Moderately Well Drained < 15% Slopes  
(G002XY004OR)  
*Hydric soil rating:* No

**Minor Components**

**Borges**

*Percent of map unit:* 4 percent  
*Landform:* Hillslopes, depressions on terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Base slope, tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Poorly Drained (G002XY006OR)  
*Hydric soil rating:* Yes

**Aquults**

*Percent of map unit:* 1 percent  
*Landform:* Depressions  
*Hydric soil rating:* Yes



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- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

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**EXHIBIT G**

321 SW 4th Ave., Suite 400  
 Portland, OR 97204  
 503.248.0313  
 lancastermoble.com

**Memorandum**

To: **Emily Moran**  
**State Street Homes**

From: **Myla Cross**

Date: **August 29, 2022**

Subject: **State Street Homes**  
**Transportation Analysis Letter**



EXPIRES 12/31/2022

This Transportation Analysis Letter (TAL) evaluates the transportation impacts of the proposed State Street Homes development, consisting of 42 apartment units and 35 self-storage units, located at 38015 Highway 26 in Sandy, Oregon. Based on feedback from City of Sandy staff, a full traffic impact study is not required; however, this TAL is provided to address potential transportation-related concerns.

The purpose of this TAL is to determine whether the transportation system within the vicinity of the site is capable of safely and efficiently supporting the existing and proposed uses, as well as to determine any mitigation that may be necessary to do so. Detailed information on trip generation calculations and safety analyses are included as an attachment to this letter.

**Location Description**

The proposed State Street Homes is located north of Highway 26, and west Bluff Road. The adjacent land uses are predominately residential and commercial properties. The project site is currently undeveloped. Access will be provided via a shared driveway between the project site (tax lot 902) and the property to the west (tax lot 1000).

**Vicinity Roadways**

The proposed development is expected to mainly impact Highway 26, as this roadway provides access to the site. Table 1 provides a description of Highway 26.

**Table 1: Vicinity Roadway Descriptions**

Street Name	Jurisdiction	Functional Classification	Cross-Section	Speed (MPH)	Curbs & Sidewalks	On-Street Parking	Bicycle Facilities
Highway 26	ODOT	Major Arterial/ Statewide Hwy	5 lanes	40	Both Sides	Not Permitted	Both Sides

Figure 1 presents an aerial image of the nearby vicinity with the project site outlined in yellow.



Figure 1: Aerial Photo of Site Vicinity (Image from Google Maps)

## Trip Generation

The State Street Homes development will include the construction of a four-story apartment building, consisting of 42 apartment units and 35 self-storage units on the ground floor. To estimate the number of trips that will be generated by the proposed use, trip rates from the *Trip Generation Manual*<sup>1</sup> were used. Specifically, data from the following land use codes were used:

- 151, *Mini-Warehouse*, based on the number of storage units.
- 221, *Multifamily Housing (Mid-Rise)*, was used based on the number of dwelling units.

The trip generation calculations show that the proposed project is projected to generate 16 morning peak hour trips, 17 evening peak hour trips, and 196 average weekday trips. The trip generation estimates are summarized in Table 2. Detailed trip generation calculations are included as an attachment to this memorandum.

Table 2: Trip Generation Summary

Land Use	ITE Code	Size	Morning Peak Hour			Evening Peak Hour			Weekday Total
			In	Out	Total	In	Out	Total	
Mini-Warehouse	151	35 storage units	0	0	0	1	0	1	6
Multifamily Housing (Mid-Rise)	221	42 dwelling units	4	12	16	10	6	16	190
<b>Total:</b>			4	12	16	11	6	17	196

<sup>1</sup> Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11<sup>th</sup> Edition, 2021.



## Trip Distribution

A preliminary directional distribution of site trips to and from the proposed development was estimated based on locations of likely destinations and locations of major transportation facilities in the site vicinity. The following trip distribution was used for analysis:

- Approximately 40 percent of site trips will travel to/from the east along Highway 26;
- Approximately 40 percent of site trips will travel to/from the west along Highway 26; and
- Approximately 20 percent of site trips will travel to/from the north along Bluff Road.

## Crash History

Using data obtained from ODOT's Crash Data System, a review of approximately five years of the most recent available crash history (January 2016 through December 2020) was performed along the site frontage on Highway 26. The crash data was evaluated based on the number of crashes, the type of collisions, and the severity of the collisions. Specific to the site access intersection (i.e. the existing access which currently serves Paola's Pizza Barn to the west of the site), a crash rate was calculated for the intersection by utilizing annual average daily traffic (AADT) volumes from ODOT's TransGIS website.

Crash severity is based on injuries sustained by people involved in the crash, and includes five categories:

- *PDO* – Property Damage Only;
- *Injury C* – Possible Injury;
- *Injury B* – Suspected Minor Injury;
- *Injury A* – Suspected Serious Injury; and
- *Fatality*

Crash rates provide the ability to compare safety risks at different intersections by accounting for both the number of crashes that have occurred during the study period and the number of vehicles that typically travel through the intersection. Crash rates in excess of 1.00 crashes per million entering vehicles (CMEV) may be indicative of design deficiencies and therefore require a need for further investigation and possible mitigation. According to *Exhibit 4-1: Intersection Crash Rates per MEV by Land Type and Traffic Control* of ODOT's Analysis Procedures Manual<sup>2</sup> (APM), intersections which experience crash rates in excess of their respective 90<sup>th</sup> percentile crash rates should be "flagged for further analysis". For stop-controlled, three-legged intersections in urban settings, the average and 90<sup>th</sup> percentile rates of 0.131 CMEV and 0.293 CMEV are applicable to the study intersection.

Based on the crash data, there was one reported crash located at the site access along Highway 26. The crash occurred when the driver of a southbound vehicle turning right from the site access failed to yield right-of-way to a westbound vehicle on Highway 26. The crash was classified as *PDO* – Property Damage Only. Given the

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<sup>2</sup> [Oregon Department of Transportation: Analysis Procedures Manual](#)



AADT of Highway 26 at a location just west of Bluff Road is approximately 29,000 vehicles, the crash rate at the intersection was calculated to be 0.019 CMEV.

There were six other crashes reported on Highway 26 within the vicinity of the site access that were rear-end collisions involving vehicles traveling eastbound or westbound on the highway, none of which appear to be related to the existing site access intersection or any other driveways along this segment of Highway 26. Crash reports for the study area are included as an attachment to this memorandum.

Based on the review of the available crash data, no significant trends or crash patterns were identified at the site access intersection that were indicative of safety concerns. In addition, the study intersection does not exhibit crash rates near or above the ODOT's 90<sup>th</sup> percentile rate. Accordingly, no safety mitigation is recommended per the crash data analysis.

## Sight Distance Evaluation

### Sight Distance Definitions & Methodologies

Sight Distances were measured at the proposed site access along Highway 26 in accordance with standards established in *A Policy on Geometric Design of Highways and Streets*<sup>3</sup>.

Intersection sight distance is an operational measure, intended to provide sufficient line of sight along the major-street so that a driver can enter the roadway without impeding the flow of through traffic. For intersection sight distance, the driver's eye is assumed to be 14.5 feet from the near edge of the travel lane of the intersecting street and at a height of 3.5 feet above the approach street pavement.

Stopping sight distance is considered the minimum requirement to ensure safe operation of the driveway. This distance allows the driver of a vehicle traveling on the major-street to react to a turning vehicle or other object in the roadway and come to a complete stop to avoid a collision.

### Sight Distance Measurements

A field investigation was conducted on Wednesday, August 17<sup>th</sup>, 2022, to measure sight distance at the proposed site access location along Highway 26. Based on the posted speed of 40 mph on Highway 26, the minimum recommended intersection sight distance for vehicles at a stopped position is 500 feet for left turning vehicles (viewing to the west of the site access), and 385 feet for right-turning vehicles (viewing to the east of the access). The minimum required stopping sight distance standard is 305 feet for both left and right-turning vehicles.

Due to existing fence and landscaping, sight distance measurements were taken from 11 feet behind the near edge of the travel lane rather than the standard 15 feet behind. However, there are no existing horizontal curves in the road near this location and no other obstructions were noted either on-site or along the roadway which would reduce sight distances to less than those measured in the field if measurements had been conducted at the standard 15-foot distance.

To the east, sight distance was measured back to the intersection of Highway 26 & Bluff Road approximately 425 feet away, therefore, exceeding the 385-foot minimum recommended intersection sight distance standard.

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<sup>3</sup> American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 7th Edition, 2018.





To the west, sight distance was measured to exceed 600 feet, exceeding the 500-foot minimum recommended intersection sight distance standard.

Provided any obstructing on-site foliage, fences, or landscaping near the proposed access are removed/ properly maintained following development of the site, adequate sight distances to the east and west of the access intersection can be made available to ensure safe and efficient operation along Highway 26. No other sight distance related mitigation is necessary or recommended at the proposed access intersection.

## City of Sandy and ODOT Standards

### **Private Access Driveway Width Standards**

Section 17.98.100(A) of the City of Sandy Development Code requires a minimum driveway width of 20 feet for two-way driveways. The proposed driveway access is approximately 26 feet wide. This standard is met and no mitigation is required.

### **Minimum ODOT Street Intersection Spacing Standards**

According to Table 14 in Appendix C of the Oregon Highway Plan<sup>4</sup> (OHP), for a Statewide Highway with a posted speed of 40 mph and an Annual Average Daily Traffic (AADT) of approximately 29,000 vehicles the minimum access spacing standard is 800 feet in urban areas and 990 feet in rural areas. Per Table 4 of the City's Transportation System Plan (TSP) indicates the minimum access spacing standards along Highway 26 are 990 feet for urban settings. Regardless of which standard is observed, neither spacing standard will be met at the proposed access location given the nearest accesses to the east and west of the site are located less than 100 feet and less than 150 feet away, respectively.

Although these spacing standards will not be met, approval of the proposed access is recommended for the following reasons:

- The project site's only frontage to an adjacent street is Highway 26. To gain access to Bluff Road, the nearest roadway to the site, the applicant would need to purchase additional property to the east of the site, creating an undue financial hardship on the applicant.
- The proposed site access will be consolidated/shared with an existing access which currently serves Paola's Pizza Barn to the west of the site. Accordingly, no additional access driveways will be constructed along Highway 26.
- Per the crash data analysis in this TAL, 1 crash was reported at the existing access intersection over the most recent five-year analysis period with a crash rate of 0.019 CMEV. Based on these findings it is expected that the access intersection will operate relatively safely following buildout of the proposed development.
- Adequate intersection sight distances to the east and west of the access intersection can be made available to ensure safe and efficient operation along Highway 26.
- There are currently multiple examples of driveways along the segment of Highway 26, between University Avenue and Bluff Road, where access spacing standards are not met. Therefore, it's

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<sup>4</sup> [Microsoft Word - 1999 OHP-Amend Final 05-15 Update 20151223 clean.docx \(oregon.gov\)](#)



reasonable to assume motor vehicle operators along this segment of roadway will be aware of and expect other vehicles to turn to/from these minor-street approaches.

Based on the above reasoning, City of Sandy and ODOT staff may approve site access at the proposed location along Highway 26.

#### **TSP Frontage Improvements**

Section 17.84.50 of the City of Sandy Development Code states that *"Where a development site abuts an existing public street not improved to City standards, the abutting street shall be improved to City standards along the full frontage of the property concurrent with development."* Based on a review of the City of Sandy's TSP, any portions of site frontage along Highway 26 not designed to appropriate standards will be updated in a manner consistent with Figures 6 through 8. If meeting these design standards is impractical when considering existing infrastructure along the highway and adjacent to the site frontage, the applicant may seek a variance or modification to these standards.

## Conclusions

Findings from this TAL include:

- The trip generation calculations show that the proposed development is projected to generate 16 morning peak hour trips, 17 evening peak hour trips, and 196 average weekday trips.
- Based on a review of crash data, no significant existing crash hazards are evident in the site vicinity. No specific safety mitigations are necessary or recommended in conjunction with the proposed development.
- Intersection sight distance recommendations are met to the east and west of the site access.
- Although ODOT's access spacing standards are not met at the proposed site access location, the City of Sandy and ODOT may approve site access at the proposed location along Highway 26 when considering the following:
  - The project site's only frontage to an adjacent street is Highway 26.
  - The proposed site access will be consolidated/shared with an existing access which currently serves Paola's Pizza Barn to the west of the site.
  - Based on a review of crash history at the existing access, it is expected that the access intersection will operate relatively safely following buildout of the proposed development.
  - Adequate sight distances to the east and west of the access intersection can be made available to ensure safe and efficient operation along Highway 26.
  - There are currently multiple examples of driveways along the segment of Highway 26, between University Avenue and Bluff Road, where access spacing standards are not met. Therefore, it's reasonable to assume motor vehicle operators along this segment of roadway will be aware of and expect other vehicles to turn to/from these minor-street approaches.
- All other City of Sandy standards have been reviewed and deemed met, therefore, no additional mitigation is necessary or recommended.

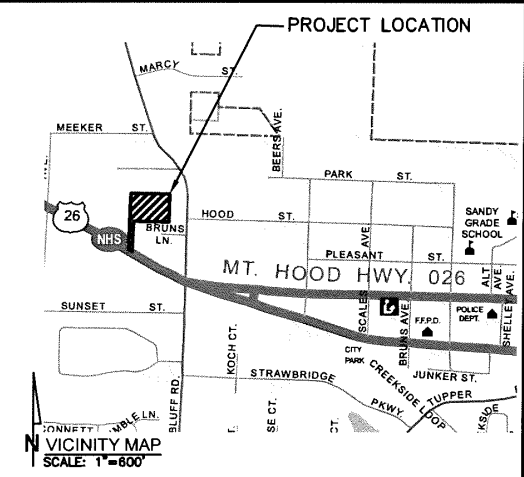
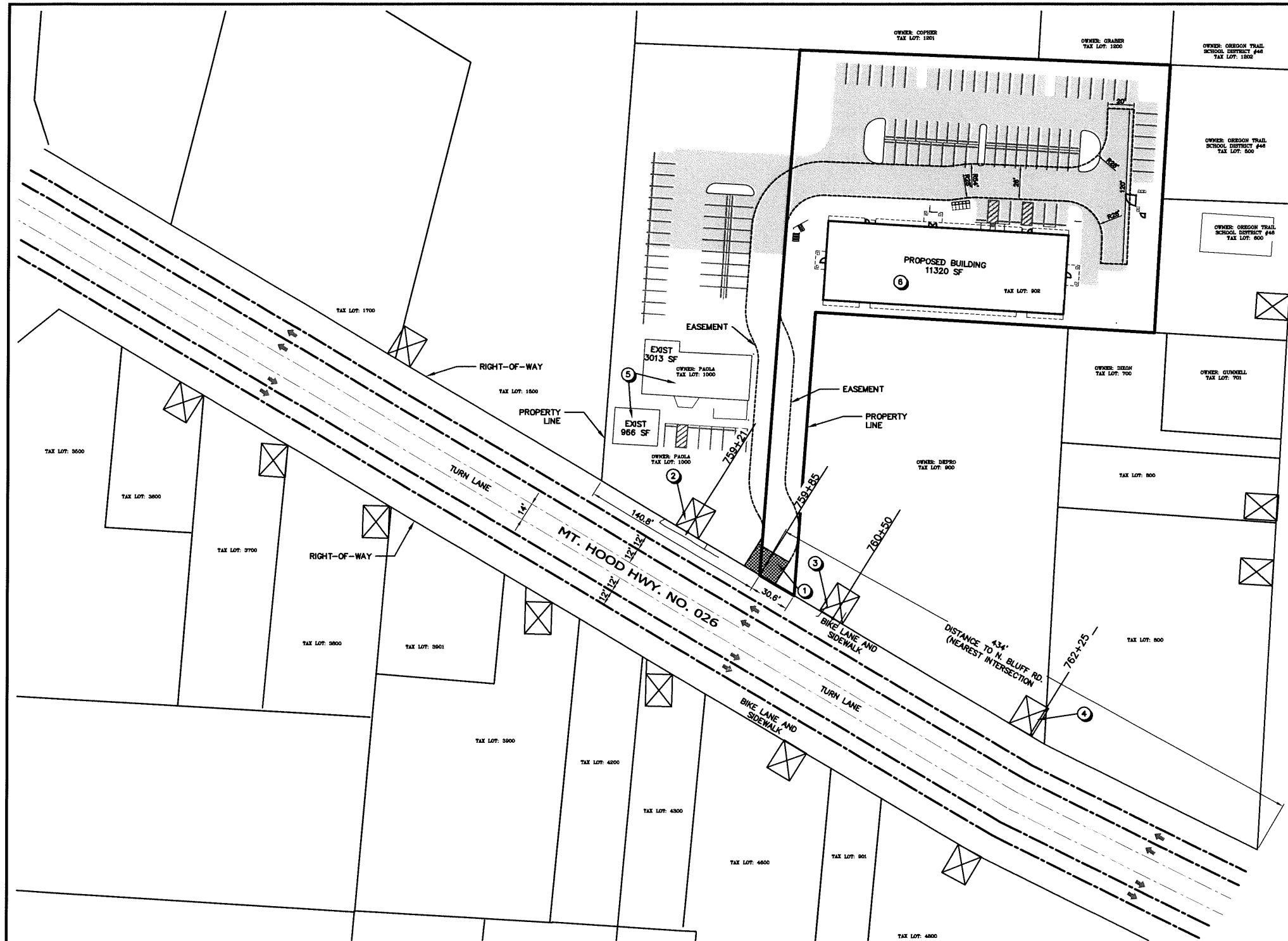


August 29, 2022  
Page 6 of 7

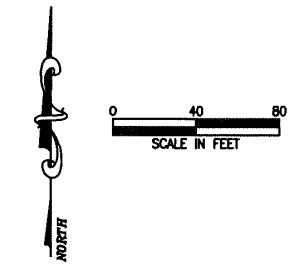
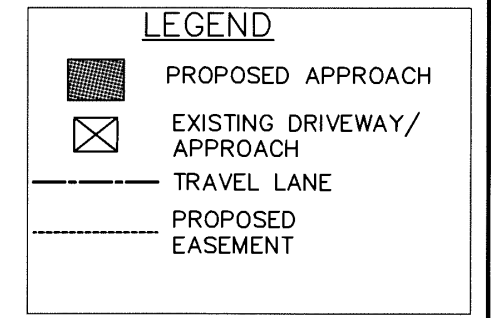
## Attachments



August 29, 2022  
Page 7 of 7



- KEY NOTES**
- ① PROPOSED 27.2' WIDE COMMERCIAL DRIVEWAY APPROACH TO BE UTILIZED FOR SITE ACCESS. HWY STA 759+85
  - ② APPROACH ACCESS FOR BENEFIT OF TAX LOT 902 TO BE CANCELED. HWY STA 759+21
  - ③ APPROACH ACCESS FOR BENEFIT OF TAX LOT 902 TO BE CANCELED. HWY STA 760+50
  - ④ APPROACH ACCESS FOR BENEFIT OF TAX LOT 902 TO BE CANCELED. HWY STA 762+25
  - ⑤ EXISTING PIZZA PARLOR. NO CHANGE IN USE.
  - ⑥ PROPOSED NEW BUILDING TO BE USED AS STORAGE AND APARTMENTS.



6/2/2022 2:29:26 PM BB s:\project files\projects\21-043 state street homes\cod\sheets\for odot\21-043 odot sheet-new entrance.dwg

DATE:	NO.	REVISION

DRAWN:	DESIGNED:	CHECKED:
SCALE: AS SHOWN	DATE: DECEMBER 2021	
PROJECT NO. E21-043		

**FIRWOOD** DESIGN GROUP  
 Reliable Engineering Solutions

359 EAST HISTORIC COLUMBIA RIVER HIGHWAY  
 TROUTDALE, OREGON 97060  
 (503) 688-3737

**STATE STREET HOMES**  
 1233 NW NORTHROP ST. #125  
 PORTLAND, OR 97209

**ODOT ACCESS PERMIT SHEET**  
 MIXED USE SITE DEVELOPMENT  
 38015 HWY 26, SANDY, OR 97055

1/1



TRIP GENERATION CALCULATIONS  
Source: Trip Generation Manual, 11th Edition

Land Use: Mini-Warehouse  
Land Use Code: 151  
Land Use Subcategory: All Sites  
Setting/Location: General Urban/Suburban  
Variable: Storage Units (100s)  
Trip Type: Vehicle  
Variable Quantity: **0.35**

WARNING: Variable Quantity is less than Minimum Survey Size for Peak Hours

**AM PEAK HOUR**

Trip Rate: 1.21

	Enter	Exit	Total
Directional Split	51%	49%	
Trip Ends	0	0	0

**PM PEAK HOUR**

Trip Rate: 1.68

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	1	0	1

**WEEKDAY**

Trip Rate: 17.96

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	3	3	6

**SATURDAY**

Trip Rate: 16.29

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	3	3	6



TRIP GENERATION CALCULATIONS  
Source: Trip Generation Manual, 11th Edition

Land Use: Multifamily Housing (Mid-Rise)  
Land Use Code: 221  
Land Use Subcategory: Not Close to Rail Transit  
Setting/Location: General Urban/Suburban  
Variable: Dwelling Units  
Trip Type: Vehicle  
Variable Quantity: **42**

AM PEAK HOUR

Trip Rate: 0.37

	Enter	Exit	Total
Directional Split	23%	77%	
Trip Ends	4	12	16

PM PEAK HOUR

Trip Rate: 0.39

	Enter	Exit	Total
Directional Split	61%	39%	
Trip Ends	10	6	16

WEEKDAY

Trip Rate: 4.54

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	95	95	190

SATURDAY

Trip Rate: 4.57

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	96	96	192





OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION  
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT  
CONTINUOUS SYSTEM CRASH LISTING

026: MT. HOOD

Highway 026 ALL ROAD TYPES, MP 23.74 to 23.79 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

5 - 7 of 7 Crash records shown.

SER#	P	R	J	S	W	DATE	COUNTY	RD#	FC	CONN#	RD CHAR	INT-TYPE	SPCL USE	MOVE	MOVE	A	S	PED	ERROR	ACT	EVENT	CAUSE	
INVEST	E	A	U	I	C	O	CITY	COMPNT	FIRST STREET	DIRECT	(MEDIAN)	INT-REL	TRLR QTY	OWNER	FROM	PRTC	INJ	G	E	LICNS	LOC		
RD DPT	E	L	G	N	H	R	URBAN AREA	MLG TYP	SECOND STREET	LOCTN	LEGS	TRAF-	RNDBT	SURF	COLL	SVRTY	SVRTY	E	X	RES			
UNLOC?	D	C	S	V	L	K	LONG	MILEPNT	LRS		(#LANES)	CONTL	DRVWY	LIGHT	SVRTY	V#	TYPE	TO	P#	TYPE			
													02	NONE	9	STOP							
													N/A			NW-SE						011	00
													PSNGR	CAR								000	000
02056	N	N	N	N		05/08/2016	CLACKAMAS	1	14		STRGHT	N			STRGHT							013	29
	NONE					SU	SANDY	MN	0	PROCTOR BLVD	NW	(NONE)	UNKNOWN	N	SE-NW							000	00
	N					5P	SANDY UA	23.77		BLUFF RD	05			N								026	026
	N					45 23 53.29	-122 16 20			002600100S00		(04)											
													01	NONE	0	STRGHT							
													PRVTE		SE-NW							000	00
													PSNGR	CAR								000	000
													02	PSNG	INJB	73	F					000	000
													02	NONE	0	STOP						011	013
													PRVTE		SE-NW							000	00
													PSNGR	CAR								000	000
													01	DRVR	NONE	56	M	OTH-Y				000	000
													02	PSNG	INJC	55	F	N-RES				000	000
													02	NONE	0	STOP						011	013
													PRVTE		SE-NW							000	00
													PSNGR	CAR								000	000
													03	NONE	0	STOP						022	00
													PRVTE		SE-NW							000	000
													PSNGR	CAR								000	000
													01	DRVR	NONE	55	M	OR-Y				000	000
																						000	000
03607	N	N	N	N		08/08/2016	CLACKAMAS	1	14		STRGHT	N			STRGHT								29
	CITY					MO	SANDY	MN	0	PROCTOR BLVD	W	(NONE)	UNKNOWN	N	W -E							000	00
	N					1P	SANDY UA	23.79		BLUFF RD	04			N								026	000
	N					45 23 52.8	-122 16 18.72			002600100S00		(04)											
													01	NONE	0	STRGHT							
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													02	PSNG	INJC	24	M					000	000
													02	NONE	0	STOP						011	00
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													PSNGR	CAR								000	000
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																						000	000

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.



9/22/2022

Emily Moran  
State Street Homes  
123 NW Northrup St #125  
Portland, OR 97209

**Re: Tree Protection Plan for 38015 HWY 26, Sandy, Oregon**

**Summary**

The property at 38015 Hwy 26 in Sandy, Oregon is planned for development and the construction of a 48,811 square foot, four-story building. Also planned is a parking lot with seventy-six spaces, and a shared access road on the west side of the property.

**Assignment**

Prepare a Tree Protection Plan to meet the requirements outlined in the City of Sandy Code 17.102.

**Observations**

A tree inventory of the undeveloped site was completed on 9/20/2022. All trees on the property were included in the inventory, as well as trees on adjacent properties which may be impacted by the planned construction. Twenty-four (24) trees will be impacted by site disturbance and are recommended for removal. Twenty-two (22) trees bordering the property are recommended to be retained and protected due to their location on neighboring properties and/or their health and structure.

**Discussion**

The proposed changes to the site will be within the critical root zones of existing trees. Existing asphalt will be removed and replaced, and new sidewalk will be excavated and poured. Twenty-four (24) trees are recommended for removal to accommodate the new construction. It is not possible to retain these trees with the proposed development. Twenty-two (22) trees around the outside of the of the planned construction shall be protected as outlined in the tree protection plan (Appendix 5). The trees to be retained and protected are near the property lines and in some cases on adjacent properties. Tree protection zones shall be fenced during the duration of the project and no changes to the native soil in these areas is planned.

As outlined in Appendix 5, the project arborist shall be onsite during excavation within the critical root zones of retained trees 13.2, 14, 15, 21, 23, 24, 25, 26, 28, 29, 31, and 32. The project consulting arborist shall evaluate and oversee the proper cutting of roots with sharp cutting tools. If many significant roots are encountered during excavation in the zones highlighted in Appendix 5, an alternative layout for areas requiring excavation should be considered to maintain the health and safety of retained trees. Alternate methods of construction may also be necessary for the preservation of significant roots of retained trees. Other construction methods include but are not limited to: bridging over significant roots, constructing sidewalks on top of grade over landscape fabric without excavation, and using post and beam construction instead of conventional footing foundations within the critical root zone.

Teragan & Associates, Inc.  
3145 Westview Circle, Lake Oswego, OR 97034  
E: info@teragan.com | O: 503.697.1975

## Recommendations

Based on the proposed development, my observations, and requirements of the proposed development at 38015 Hwy 26, I recommend the following actions:

1. **Tree protection fencing.** Tree protection fencing that is a minimum of six-feet tall and chain link shall be installed per the tree protection plan (Appendix 5).
  - a. Tree protection fencing is to be installed before any ground disturbing activities and remain in place for the duration of the project, or a planning official approves removal.
  - b. Tree protection is not to be moved without written consent from the project arborist.
2. **Tree removal.** Remove twenty-four (24) trees negatively impacted by site improvements.
3. **Report sharing.** Share this report in its entirety to the project team, including contractors performing demolition and concrete work.

Additional tree protection recommendations for the trees to be retained are included in Appendix 3, Tree Protection Specifications.

## Conclusion

The proposed renovation to the north of the north parking lot will require the removal of twenty-four (24) trees. Tree protection fencing shall be installed for the twenty-two (22) trees near or over the property line on adjacent properties that may be impacted by site disturbance. The project arborist shall be present during excavation within the critical root zones outlined in Appendix 5. This report meets the requirements outlined in the City of Sandy Code 17.102.

Please contact me if you have questions, concerns, or need any additional information.

Sincerely,

*Caleb Lattimer*

Caleb Lattimer  
ISA Certified Arborist®, PN-8644A  
ISA Tree Risk Assessment Qualified  
caleb@teragan.com

## Enclosures:

- |             |                                     |
|-------------|-------------------------------------|
| Appendix 1: | Certification of Performance        |
| Appendix 2: | Assumptions and Limiting Conditions |
| Appendix 3: | Tree Protection Specifications      |
| Appendix 4: | Tree Inventory                      |
| Appendix 5: | Tree Protection Plan                |

Teragan & Associates, Inc.  
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E: info@teragan.com | O: 503.697.1975

## **Appendix 1: Certification of Performance**

I, Caleb Lattimer, certify:

- That a representative of Teragan & Associates, Inc., has inspected the tree(s) and/or the property referred to in this report. The extent of the evaluation is stated in the attached report.
- That Teragan & Associates, Inc. has no current or prospective interest in the vegetation of the property that is the subject of this report, and Teragan & Associates, Inc. has no personal interest or bias with respect to the parties involved.
- That Teragan & Associates, Inc.'s compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party, or upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.
- That the analysis, opinions, and conclusions that were developed as part of this report have been prepared according to commonly accepted arboricultural practices.
- That a Board-Certified Master Arborist has overseen the gathering of data.

## **Appendix 2: Assumptions and Limiting Conditions**

1. Any legal description provided to the consultant is assumed to be correct. Teragan and Associates, Inc. checked the species identification and tree diameters in the field.
2. It is assumed that this property is not in violation of any codes, statutes, ordinances, or other governmental regulations.
3. The consultant is not responsible for information gathered from others involved in various activities pertaining to this project. Care has been taken to obtain information from reliable sources.
4. Loss or alteration of any part of this delivered report invalidates the entire report.
5. Drawings and information contained in this report may not be to scale and are intended to be used as display points of reference only.
6. The consultants' role is only to make recommendations. Inaction on the part of those receiving the report is not the responsibility of the consultant.
7. This report is to certify the trees that are on site, their size and condition and create a tree plan. Tree plan to include the measures necessary to protect trees that are to be retained during the construction process.

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E: [info@teragan.com](mailto:info@teragan.com) | O: 503.697.1975

## Appendix 3: Tree Protection Specifications

It is critical that the following steps be taken to ensure that trees slated for retention are protected.

### **Before Construction Begins**

- 1. Tree removals** within the tree protection area.
  - a. Prior to construction, allow tree removal within the tree protection area to occur.
    - i. The project arborist shall oversee the removal of any trees within the tree protection zone.
  - b. Installing tree protection fencing immediately following the removal of trees within the tree protection area (see 3 below). Tree protecting shall be installed after removals to ensure:
    - i. Tree removals are performed safely.
    - ii. Tree protection fencing is not accidentally or intentionally moved.
- 2. Notify all contractors of the tree protection procedures.** For successful tree protection on a construction site, all contractors must know and understand the goals of tree protection. It can only take one mistake with a misplaced trench or other action to destroy the future of a tree.
  - a. Hold a Tree Protection meeting with all contractors to fully explain goals of tree protection.
  - b. Have all sub-contractors sign memoranda of understanding regarding the goals of tree protection. Memoranda to include penalty for violating tree protection plan. Penalty to equal appraised value of tree(s) within the violated tree protection zone per the current Trunk Formula Method as outline by the Council of Tree & Landscape Appraisers current edition of the *Guide for Plant Appraisal*. Penalty is to be paid to owner of the property.
- 3. Fencing.**
  - a. Establish fencing around each tree or grove of trees to be retained.
  - b. The fencing is to be put in place before the ground is cleared in order to protect the trees and the soil around the trees from any disturbance at all.
  - c. Fencing is to be placed at the edge of the root protection zone. Root protection zones are to be established by the project arborist based on the needs of the site and the tree to be protected.
  - d. Fencing is to consist of 6-foot high chainlink fence secured to the ground with metal posts every ten feet to prevent it from being moved by contractors, sagging or falling down OR as required by municipal code.
  - e. Fencing is to remain in the position that is established by the project arborist and not to be moved without written permission from the project arborist until the end of the project.
- 4. Signage**
  - a. All tree protection fencing should have signage as follows so that all contractors understand the purpose of the fencing:

Teragan & Associates, Inc.  
3145 Westview Circle, Lake Oswego, OR 97034  
E: info@teragan.com | O: 503.697.1975



**VEGETATION/TREE PROTECTION ZONE**

**DO NOT REMOVE OR ADJUST THIS FENCING.**

**The fence locations are approved to protect vegetation & trees.**

**NOTE: Moving these fences is a civil violation.**

Please contact the Code Enforcement Specialist and project arborist if alterations to the approved location of the protection fencing is requested.

Project Arborist: TERAGAN & ASSOCIATES, INC 503-697-1975

- b. Signage should be placed as to be visible from all sides of a tree protection area and spaced every 75 feet.

**During Construction**

**1. Protection guidelines Within the Root Protection Zone**

- a. No traffic shall be allowed within the root protection zone. No vehicle, heavy equipment, or even repeated foot traffic.
  - b. No storage of materials including but not limiting to soil, construction material, or waste from the site.
    - i. Waste includes but is not limited to concrete wash out, gasoline, diesel, paint, cleaner, thinners, etc.
  - c. Construction trailers are not to be parked / placed within the root protection zone without written clearance from project arborist.
  - d. No vehicles shall be allowed to park within the root protection areas.
  - e. No activity shall be allowed that will cause soil compaction within the root protection zone.
- 2. Tree pruning.** The trees shall be protected from any cutting, skinning or breaking of branches, trunks or roots.
- 3. Root pruning.** Any roots that are to be cut from existing trees that are to be retained, the project consulting arborist shall be notified to evaluate and oversee the proper cutting of roots with sharp cutting tools. Cut roots are to be immediately covered with soil or mulch to prevent them from drying out.
- 4. Grade changes.** No grade change should be allowed within the root protection zone.
- 5. Root protection zone changes.** Any necessary deviation of the root protection zone shall be cleared by the project consulting arborist or project owner.
- 6. Watering.** Provide water to trees during the summer months. Tree(s) that will have had root system(s) cut back will need supplemental water to overcome the loss of ability to absorb necessary moisture during the summer months.
- 7. Utilities.** Any necessary passage of utilities through the root protection zone shall be by means of tunneling under roots by hand digging or boring.

**After Construction**

- 1. Landscaping.** Carefully landscape in the area of the tree. Do not allow trenching within the root protection zone. Carefully plant new plants within the root protection zone. Avoid cutting the roots of the existing trees.

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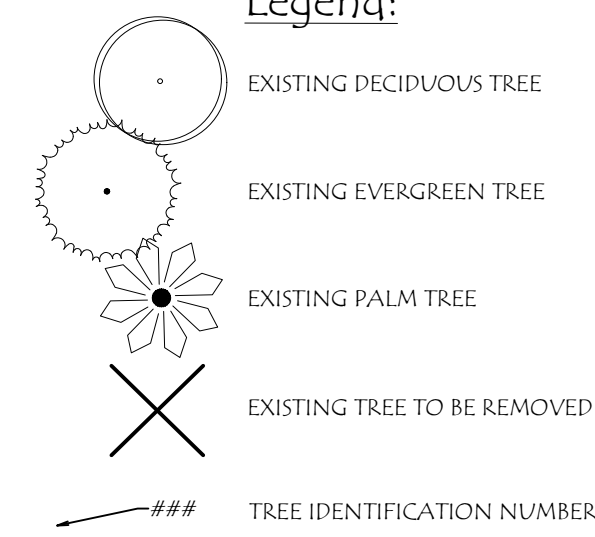
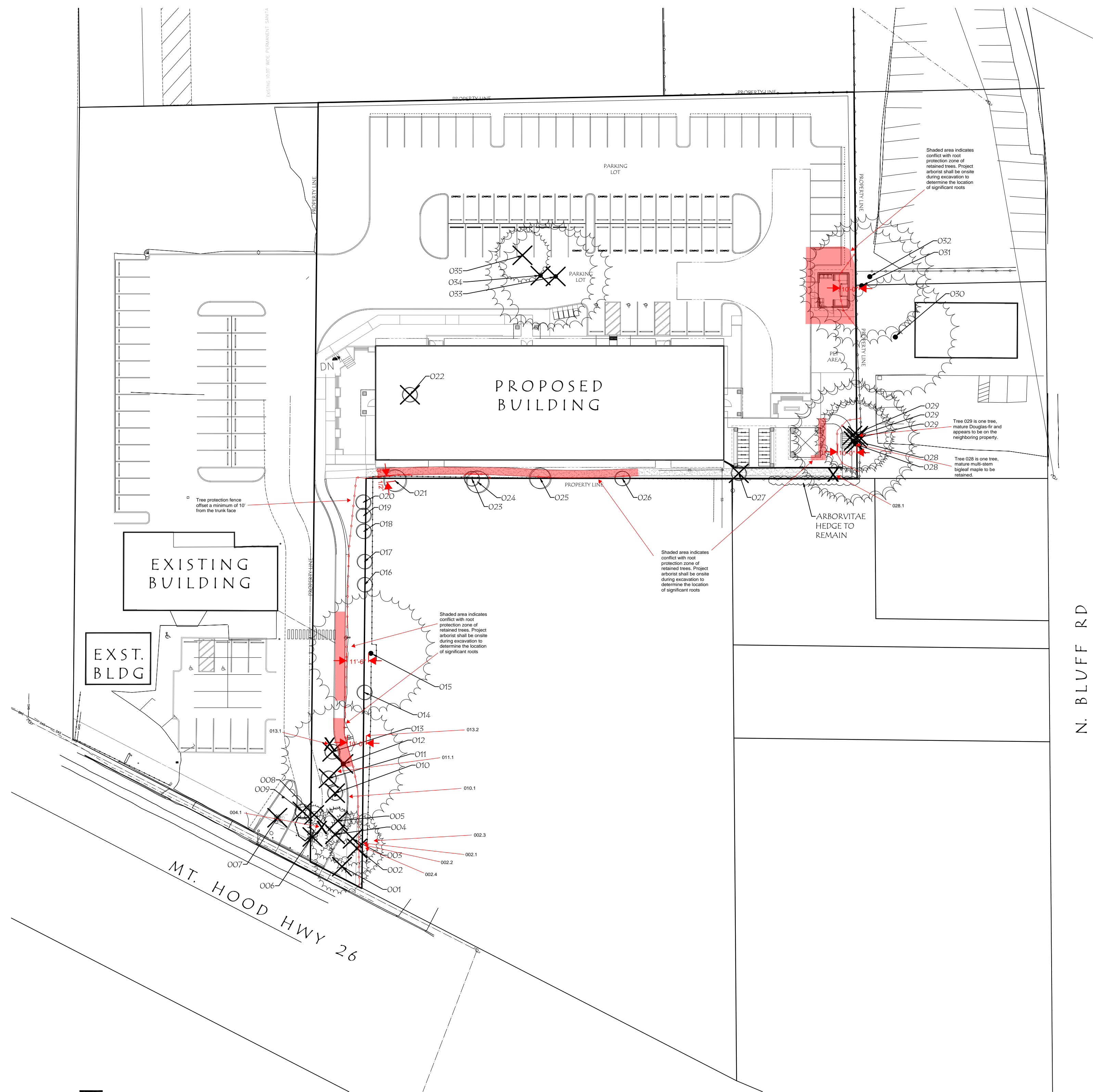
2. **Irrigation.** Do not plan for irrigation within the root protection zone of existing trees unless it is drip irrigation for a specific planting or cleared by the project arborist.
3. **Drainage.** Provide for adequate drainage of the location around the retained trees.
4. **Tree pruning.** Pruning of the trees should be completed as one of the last steps of the landscaping process before the final placement of trees, shrubs, ground covers, mulch, or turf.
5. **Pest and disease inspection.** Provide for inspection and treatment of insect and disease populations that can damage the retained trees and plants.
6. **Fertilization.** Trees that are retained may need to be fertilized as called for by project arborist after final inspection.

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Survey Number	Common Name	Scientific Name	DBH	Condition Health	Condition Structure	Field Notes/ Comments	Remove	Retain
001	Colorado blue spruce	<i>Picea pungens</i>	14	Poor	Poor		X	
002	western red cedar	<i>Thuja plicata</i>	6	Fair	Good		X	
002.1	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Good	Good	Tree may be on property to east		X
002.2	Douglas-fir	<i>Pseudotsuga menziesii</i>	6	Good	Good	Tree may be on property to east		X
002.3	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Good	Tree on property to east. Obvious large surface roots at 8' from base of tree.		X
002.4	English holly	<i>Ilex aquifolium</i>	4	Good	Good	Tree may be on property to east		X
003	western red cedar	<i>Thuja plicata</i>	8	Fair	Good		X	
004	Colorado blue spruce	<i>Picea pungens</i>	12	Good	Good		X	
004.1	Colorado blue spruce	<i>Picea pungens</i>	10	Good	Good		X	
005	western red cedar	<i>Thuja plicata</i>	11	Good	Good		X	
006	windmill palm	<i>Trachycarpus fortunei</i>	6	Good	Good		X	
006.1	Japanese maple	<i>Acer japonica</i>	2				X	
007	windmill palm	<i>Trachycarpus fortunei</i>	10	Good	Good	Tree on property to west	X	
008	western red cedar	<i>Thuja plicata</i>	10	Poor	Fair	Tree on property to west	X	
009	English holly	<i>Ilex aquifolium</i>	4	Good	Good	Tree on property to west	X	
010	sugar maple	<i>Acer saccharum</i>	16	Fair	Fair		X	
010.1	rhododendron	<i>Rhododendron</i>	4	Good	Good		X	
011	Norway spruce	<i>Picea abies</i>	15	Good	Good		X	
011.1	Japanese andromeda	<i>Pieris japonica</i>	3	Fair	Fair		X	
012	golden chain tree	<i>Laburnum anagyroides</i>	7	Fair	Fair	Sweeping trunk at base, codominant stems at 3'	X	
013	photinia	<i>Photinia serratifolia</i>	6	Good	Good		X	
013.1	photinia	<i>Photinia serratifolia</i>	6	Fair	Fair		X	
013.2	bigleaf maple	<i>Acer macrophyllum</i>	23	Poor	Poor	Tree may be on property to east. Thin crown		X
014	photinia	<i>Photinia serratifolia</i>	12	Good	Fair	Decay at base, tree may be on property line.		X
015	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Good	Tree on neighboring property to east		X
016	golden chain tree	<i>Laburnum anagyroides</i>	8	Poor	Poor	Tree on property to east. Significant decay in stem.		X
017	thundercloud plum	<i>Prunus cerasifera</i>	6	Fair	Fair	Tree on property to east		X
018	golden chain tree	<i>Laburnum anagyroides</i>	9	Fair	Fair	Tree on property to east		X

Survey Number	Common Name	Scientific Name	DBH	Condition Health	Condition Structure	Field Notes/ Comments	Remove	Retain
019	golden chain tree	<i>Laburnum anagyroides</i>	8	Fair	Fair	Tree on property to east. Significant decay in stem		X
020	thundercloud plum	<i>Prunus cerasifera</i>	4	Fair	Fair	Tree on property to east		X
021	sweet cherry	<i>Prunus avium</i>	10	Poor	Poor	Tree on property to south. Thin crown with ivy in crown		X
022	sweet cherry	<i>Prunus avium</i>	6	Good	Good		X	
023	cascara	<i>Frangula pershiana</i>	6	Good	Good	Tree on property to south		X
024	sweet cherry	<i>Prunus avium</i>	12	Fair	Fair	Tree on property to south		X
025	sweet cherry	<i>Prunus avium</i>	10	Poor	Fair	Tree on property to south		X
026	sweet cherry	<i>Prunus avium</i>	6	Poor	Poor	Tree on property to south. Stem originates on neighboring property		X
027	sweet cherry	<i>Prunus avium</i>	6	Poor	Poor	Tree appears to be on property to be developed	X	
028	bigleaf maple	<i>Acer macrophyllum</i>	28	Good	Fair	Multiple stems at base. Deadwood in crown		X
028.1	English holly	<i>Ilex aquifolium</i>	4	Fair	Fair	Tree appears to be on property to be developed	X	
029	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Good	Retain. Tree on property to east		X
030	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Good	Tree on property to east		X
031	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Good	Tree on property to east		X
032	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Good	Tree on property to east		X
033	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Fair	Tree base inaccessible. Branches at ground level	X	
034	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Fair	Tree base inaccessible. Branches at ground level	X	
035	bigleaf maple	<i>Acer macrophyllum</i>	12	Fair	Fair	Tree inaccessible. Suppressed crown	X	



**Legend:**

- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE
- EXISTING PALM TREE
- EXISTING TREE TO BE REMOVED
- TREE IDENTIFICATION NUMBER

**General Notes:**

1. TREE LOCATIONS BASED ON SITE SURVEY.
2. SEE ARCHITECTURAL PLANS FOR SITE INFORMATION.
3. TREE INVENTORY TABLE SEE THIS SHEET.

**Existing Tree Inventory**

TREE ID	TREE SPECIES	SIZE (DBH)	NOTES	REMAIN/REMOVE
001	Blue Spruce	12"		Remove, Development Impacts
002	Western Red Cedar	4"		Remove, Development Impacts
003	Western Red Cedar	8"		Remove, Development Impacts
004	Blue Spruce	10"		Remove, Development Impacts
005	Western Red Cedar	8"		Remove, Development Impacts
006	Windmill Palm	10"		Remove, Development Impacts
007	Windmill Palm	6"		Remove, Development Impacts
008	Conifer (Unknown)	10"	Dead	Remove, Development Impacts
009	Holly	4"		Remove, Development Impacts
010	Sugar Maple	14"		Remove, Development Impacts
011	Cherry	14"		Remove, Development Impacts
012	Douglas Fir	24"		Remove, Development Impacts
013	Cherry	6"		Remove, Development Impacts
014	Filbert	14"		Remain
015	Douglas Fir	26"		Remain
016	Redbud	5"	Located on Property Line	Remain
017	Holly	5"	Located on Property Line	Remain
018	Thundercloud Plum	4"	Located on Property Line	Remain
019	Redbud	5"	Located on Property Line	Remain
020	Thundercloud Plum	4"	Located on Property Line	Remain
021	Red Maple	10"	Located on Adjacent Property	Remain
022	Filbert	6"		Remove, Development Impacts
023	Cherry	4"	Located on Property Line	Remain
024	Red Maple	6"	Located on Adjacent Property	Remain
025	Cherry	10"	Located on Property Line	Remain
026	Cherry	6"	Located on Property Line	Remain
027	Redbud	5"		Remove, Development Impacts
028	Douglas Fir	18", 18"	Located on Property Line	Remove, Development Impacts
029	Douglas Fir	12", 12", 12"	Located on Property Line	Remove, Development Impacts
030	Douglas Fir	36"	Located on Adjacent Property	Remain
031	Douglas Fir	36"	Located on Adjacent Property	Remain
032	Douglas Fir	36"	Located on Adjacent Property	Remain
033	Douglas Fir	24"		Remove, Development Impacts
034	Douglas Fir	24"		Remove, Development Impacts
035	Douglas Fir	12"		Remove, Development Impacts

08/22/22

**Laurus Designs, LLC**

1012 Pine Street  
Silverton, Oregon  
503.784.6494

**Multi-Family Sandy**

38015 Highway 26  
Sandy, Oregon

REGISTERED  
643  
**PRELIMINARY**  
LAURA A. ANTONSON  
OREGON  
11/16/2007  
LANDSCAPE ARCHITECT

**EXISTING TREE INVENTORY**

SCALE: 1"=30'-0"  
0' 15' 30' 60'  
SCALE

July 11th, 2022

**REVISIONS**

#	DATE	NOTES	INITIALS

**L1.1**

SHEET 1 OF 2

PROJECT #: 1409R

**EXHIBIT I**



**Oregon**

Kate Brown, Governor

**Department of Transportation**

**Right of Way Section**

4040 Fairview Industrial Drive SE – MS2

Salem, OR 97302

503-986-3600

Fax 503-986-3625

[www.oregon.gov/odot/hwy/row](http://www.oregon.gov/odot/hwy/row)

December 5, 2022

State Street Homes, Inc.  
1233 NW Northrup St, STE 125  
Portland, OR 97209

Files: 34604, 37134  
Section: Duncan Road – Sandy  
Highway: Mt. Hood  
County: Clackamas

Enclosed is an Indenture of Access form which you should sign in the presence of a notary public. By signing this document you are relinquishing any interest in the access rights at Engineer's Stations 760+50 and 762+25 and the State is granting new access rights at Engineer's Station 759+85 in a width of 35 feet on the north side of the Mt. Hood Highway to serve tax lot 902 in Township 2 South, Range 4 East, Section 14AD. This reservation will be shared with tax lot 1000 to the west.

Please have the document signed and notarized. Return the original signed document to this office and I will obtain the signature of the State Right of Way Manager. Please return the signed and notarized document to the following address:

Oregon Department of Transportation  
Right of Way Section – Access Research MS-2  
4040 Fairview Industrial Drive SE  
Salem, OR 97302-1142

After the Indenture of Access has been signed by all parties, the original document will be recorded in Clackamas County and a photocopy of the recorded document will be forwarded to you for your permanent records.

Thank you.

Damon Eliuk  
Access Research Coordinator  
(971) 375-8109



**Files 34604, 37134**  
Drawing 8B-24-15

**INDENTURE OF ACCESS**

**THIS INDENTURE**, for no monetary consideration, dated this 5th day of December, 2022, by and between the **STATE OF OREGON, by and through its DEPARTMENT OF TRANSPORTATION**, hereinafter called "State", and **STATE STREET HOMES, INC., an Oregon corporation**, hereinafter called "Owner".

WHEREAS, State, by Warranty Deed recorded November 12, 1964, in Book 649, Page 126, Clackamas County Book of Deeds, acquired certain property; which Warranty Deed, in part, reserved access rights, for the service of the grantor's remaining property, to and from the North side of the Mt. Hood Highway opposite Engineer's Stations 760+50 and 762+25, both in a width of 35 feet; and

WHEREAS, Owner, by Statutory Warranty Deed recorded June 29, 2022, Instrument No. 2022-037666, Clackamas County Official Records, acquired fee title to the property affected by the access changes herein made; and

WHEREAS, by Reciprocal Access Easement and Maintenance Agreement recorded June 30, 2022, Instrument No. 2022-037782, Clackamas County Official Records, Owner acquired a property interest at Engineer's Station 759+85; and

WHEREAS, Owner has requested that Owner's access rights at Engineer's Stations 760+50 and 762+25 set out above be terminated, and that access rights be substituted, therefore, to and from the North side of the Mt. Hood Highway opposite Engineer's Station 759+85, in a width of 35 feet (New Access Rights); and

WHEREAS, State is agreeable to the granting of Owner's request.

**AFTER RECORDING RETURN TO:**  
OREGON DEPARTMENT OF TRANSPORTATION  
PROPERTY MANAGEMENT / ACCESS RESEARCH  
4040 FAIRVIEW INDUSTRIAL DRIVE SE, MS#2  
SALEM, OR 97302-1142

12/5/2022  
Page 1 of 3 - loA  
dje

**Files 34604, 37134**  
Drawing 8B-24-15

NOW THEREFORE, THIS INDENTURE WITNESSETH, that for and in consideration of the grant herein made by State, OWNER does convey unto State, its successors and assigns, Owner's existing access rights at Engineer's Stations 760+50 and 762+25, and STATE, in consideration of the relinquishment and warranties herein made, does grant New Access Rights as set forth above unto Owner and Owner's heirs, successors and assigns.

It is understood that the New Access Rights are to be used and enjoyed in common with the property abutting to the west, described as tax lot 1000, T02S-R04E-S14AD.

It is understood that the access rights at Engineer's Stations 760+50 and 762+25, North side, will continue to serve the property abutting to the east, described as tax lot 900, T02S-R04E-S14AD.

The other remaining provisions in the above-mentioned Warranty Deed to State shall remain in full force and effect, and the access rights herein granted shall be subject to all the provisions of said Warranty Deed, as fully as if set forth herein.

The New Access Rights granted herein are subject to, and may only be exercised in accordance with, the statutes and administrative rules applicable to access control and road approaches. Such access is contingent upon issuance of an approach road permit, and no access rights may be exercised or construction of an approach road begun unless, and until, a standard Approach Road Permit application is submitted and a permit issued by the Oregon Department of Transportation. The approach road may only be constructed or maintained upon issuance of such permit and in accordance with such permit. If the State constructs the approach road during a highway project, Grantor is required to sign a standard Approach Road Permit to ensure proper operation and maintenance of the approach road.

In construing this document, where the context so requires, the singular includes the plural and all grammatical changes shall be made so that this document shall apply equally to corporations and to individuals.

IN WITNESS WHEREOF, the parties hereto have executed these presents the day and year first written above.

**Files 34604, 37134**  
Drawing 8B-24-15

SIGNATURE PAGE 3 OF 3 AS ATTACHED TO ABOVE INDENTURE OF ACCESS DATED DECEMBER 5, 2022

**STATE OF OREGON, by and through its  
DEPARTMENT OF TRANSPORTATION**

By: \_\_\_\_\_  
Georgine Gleason, State Right of Way Manager

STATE OF OREGON, County of Marion

Dated \_\_\_\_\_, 20\_\_\_\_\_. Personally appeared Georgine Gleason, who being sworn, stated that she is the State Right of Way Manager for the State of Oregon, Department of Transportation, and that this document was voluntarily signed on behalf of the State of Oregon by authority delegated to her. Before me:

\_\_\_\_\_  
Notary Public for Oregon  
My Commission expires \_\_\_\_\_

**STATE STREET HOMES, INC.,  
an Oregon corporation**

By: \_\_\_\_\_  
Brandon Tyler Gill, President

By: \_\_\_\_\_  
Mark Wilde, Secretary

STATE OF OREGON, County of \_\_\_\_\_

Dated \_\_\_\_\_, 20\_\_\_\_\_. Personally appeared Brandon Tyler Gill and Mark Wilde, who, being sworn, stated that they are the President and Secretary of State Street Homes, Inc., an Oregon corporation, and that this instrument was voluntarily signed on behalf of the corporation by authority of its Board of Directors. Before me:

\_\_\_\_\_  
Notary Public for Oregon  
My Commission expires \_\_\_\_\_

FIRST AMERICAN 3718844-G.R.

After Recording Return to:  
State Street Homes, Inc  
1233 NW Northrup St.  
Suite 125  
Portland, OR 97209

Until a Change is requested, all  
Tax statements shall be sent to:  
No Change in Tax Statements

Clackamas County Official Records		<b>2022-037782</b>
Sherry Hall, County Clerk		06/30/2022 09:41:02 AM
D-E	Cnt=2 Str=73 LESLIE	\$148.00
\$35.00	\$5.00 \$16.00 \$10.00 \$20.00 \$62.00	

**RECIPROCAL ACCESS EASMENT AND MAINTENANCE AGREEMENT**

WHEREAS, Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust u/a/d August 21, 2019, is the owner of that tract described in Deed Document No. 2019-061145; and

WHEREAS, State Street Homes Inc, an Oregon Domestic Business Corporation, is the owner of that tract described in Deed Document No. 2022-037666; and

WHEREAS, Paola and State Street Homes both wish to provide a mutual private access easement between Paola and State Street Homes' adjacent tracts; and

WHEREAS, Paola and State Street Homes intend that the present and future owner(s) of each tract (collectively "the tracts") shall jointly and equally share in all decisions regarding the private access, as well as the maintenance, snowplowing, and repair costs thereof.

NOW, THEREFORE, the following permanent reciprocal easement and restrictions are hereby imposed upon the tracts and lands involved:

1. A permanent, variable-width access easement is hereby created for the benefit of the tracts as described and depicted in Exhibit 'A'.
2. The easement use granted herein will be appurtenant to, and for the benefit of, both tracts. All owners of the tracts will be subject to this easement and this easement will run with the land and be a covenant binding on all future owners of the tracts and their heirs or successors (collectively the owners).
3. The easement shall be used for private road, access, and utility purposes only. This easement agreement provides an effective and convenient mechanism for the owners to jointly maintain the easement area in a reasonably safe condition, suitable for safe and efficient travel for firefighting, emergency and other public vehicles and personnel

**RECIPROCAL ACCESS EASMENT AND MAINTENANCE AGREEMENT**

First American Title Accommodation  
Recording Assumes No Liability

FIRST AMERICAN 371 8844-G.R.

After Recording Return to:  
State Street Homes, Inc  
1233 NW Northrup St.  
Suite 125  
Portland, OR 97209

Until a Change is requested, all  
Tax statements shall be sent to:  
No Change in Tax Statements



**RECIPROCAL ACCESS EASMENT AND MAINTENANCE AGREEMENT**

WHEREAS, Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust u/a/d August 21, 2019, is the owner of that tract described in Deed Document No. 2019-061145; and

WHEREAS, State Street Homes Inc, an Oregon Domestic Business Corporation, is the owner of that tract described in Deed Document No. 2022-037666; and

WHEREAS, Paola and State Street Homes both wish to provide a mutual private access easement between Paola and State Street Homes' adjacent tracts; and

WHEREAS, Paola and State Street Homes intend that the present and future owner(s) of each tract (collectively "the tracts") shall jointly and equally share in all decisions regarding the private access, as well as the maintenance, snowplowing, and repair costs thereof.

NOW, THEREFORE, the following permanent reciprocal easement and restrictions are hereby imposed upon the tracts and lands involved:

1. A permanent, variable-width access easement is hereby created for the benefit of the tracts as described and depicted in Exhibit 'A'.
2. The easement use granted herein will be appurtenant to, and for the benefit of, both tracts. All owners of the tracts will be subject to this easement and this easement will run with the land and be a covenant binding on all future owners of the tracts and their heirs or successors (collectively the owners).
3. The easement shall be used for private road, access, and utility purposes only. This easement agreement provides an effective and convenient mechanism for the owners to jointly maintain the easement area in a reasonably safe condition, suitable for safe and efficient travel for firefighting, emergency and other public vehicles and personnel

RECIPROCAL ACCESS EASMENT AND MAINTENANCE AGREEMENT

First American Title Accommodation  
Recording Assumes No Liability

for public services, and delivery and business vehicles. It is intended that the easement shall permit year-round access for vehicles and foot traffic to and from Mt. Hood Hwy No. 26 (i.e. the public road) for the tracts.

4. The owners covenant and agree that the tracts shall have unobstructed right of ingress and egress over the easement area. The owners will not prohibit, restrict, limit or in any manner, interfere with the normal ingress and egress and use by way of the owner. Normal ingress and egress and use shall include use by guests, invitees, vendors, tradesmen, delivery persons, emergency service providers, or others bound to or returning from any part of either tract and having a need to use the easement area.
5. The easement shall be jointly maintained by the then-owners of the tracts, with the owner of each tract paying an equal fractional share of the reasonable costs of repairing and maintaining the private road located within the easement. No maintenance, repair, or upgrading of the private road work shall be done, however, until the owners of a majority of the tracts jointly agree on the contractor or contractors to do the work as well as what work will be done. If the owners of the tracts by majority vote cannot agree on the maintenance, alteration, repair, or upgrading work for the private road to be done or cannot agree upon the costs thereof, the owners of the tracts shall together choose one (1) arbitrator whose decision(s) regarding such item(s) shall be final and shall bind the parties. Notwithstanding anything contained in this agreement, the owner of each tract shall maintain and repair the private road access easement so as to always comply with the requirements of all applicable City of Sandy ordinances and in such a manner as to assure that the private easement is safe for travel at all times.
6. Any owner(s) or their guests, contractors, or invitees causing damage to the easement area beyond ordinary wear for commercial use (including any damage caused by construction or other equipment), will be solely responsible for the entire cost of repairs to the satisfaction of the other owners within thirty (30) calendar days of the damage.
7. No vehicle shall be parked on or within the easement, nor shall any impediment be placed, stored, or maintained on or within the easement. It is the intent of this document that the easement shall remain free and clear to allow the owners of each tract (and its invitees) to have full, unimpeded access to their respective tracts which branch off of the easement. No person shall in any way prohibit, restrict, limit, or in any matter interfere with normal ingress and egress and use of the easement (or the private road therein) by any of the other tract owners benefitted by the easement or their invitees.
8. Invalidation of any provisions of this easement by judgment or court order shall in no way effect any of the other provisions of this easement, which shall remain in full force and effect. This easement may not be amended or terminated except upon recordation

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RECIPROCAL ACCESS EASMENT AND MAINTENANCE AGREEMENT



in the deed records of Clackamas County, Oregon, of an express written amendment, amendments or termination, as applicable, approved, signed, and acknowledged by all owners of all parcels referencing this agreement.

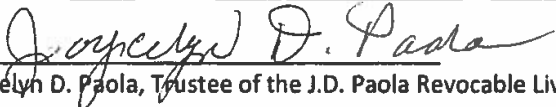
The true consideration for this conveyance is \$1.00, the receipt of which is hereby acknowledged.

THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

In witness whereof, the parties hereto have hereunder set their hand and seals on the day and year as set forth in their respective acknowledgments. And this easement, covenant, and restriction will be binding upon the undersigned heirs, successors, and assigns.

**GRANTORS**

Dated this 28<sup>th</sup> day of June 2022.

  
Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust

Dated this 28 day of June 2022.

  
Brandon Gill, President of State Street Homes Inc.

---

---

RECIPROCAL ACCESS EASMENT AND MAINTENANCE AGREEMENT

in the deed records of Clackamas County, Oregon, of an express written amendment, amendments or termination, as applicable, approved, signed, and acknowledged by all owners of all parcels referencing this agreement.

The true consideration for this conveyance is \$1.00, the receipt of which is hereby acknowledged.

THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

In witness whereof, the parties hereto have hereunder set their hand and seals on the day and year as set forth in their respective acknowledgments. And this easement, covenant, and restriction will be binding upon the undersigned heirs, successors, and assigns.

**GRANTORS**

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_.

\_\_\_\_\_  
Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust

Dated this 08 day of June 2022.

  
\_\_\_\_\_  
Brandon Gill, President of State Street Homes Inc.

=====

RECIPROCAL ACCESS EASMENT AND MAINTENANCE AGREEMENT

**APPROVALS AND ACCEPTANCE**

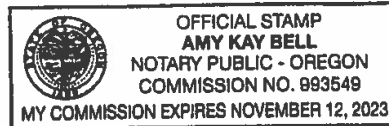
Dated this 20<sup>th</sup> day of June 2022.

Joycelyn D. Paola  
Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust

Dated this 28 day of June 2022.

Brandon Gill  
Brandon Gill, President of State Street Homes Inc.

**ACKNOWLEDGEMENTS**



STATE OF OREGON )  
COUNTY OF Clackamas ss.

This instrument was acknowledged before me on this 20<sup>th</sup> day of June, 2022 by Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust.

Amy K Bell  
Notary Public for Oregon  
My commission expires: 11/12/23



STATE OF OREGON )  
COUNTY OF Multnomah ) ss.

This foregoing instrument was acknowledged before me this 28 day of June, 2022, by Brandon Gill, President of State Street Homes Inc.

Stormi Leann Lowe  
Notary Public for Oregon  
My commission expires: 9-15-24

**RECIPROCAL ACCESS EASMENT AND MAINTENANCE AGREEMENT**

**APPROVALS AND ACCEPTANCE**

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

\_\_\_\_\_  
Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust

Dated this 28 day of June 2022.



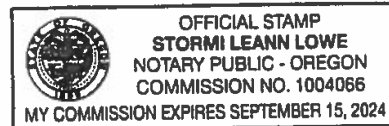
\_\_\_\_\_  
Brandon Gill, President of State Street Homes Inc.

**ACKNOWLEDGEMENTS**

STATE OF OREGON            )  
  ) ss.  
COUNTY OF \_\_\_\_\_ )

This instrument was acknowledged before me on this \_\_\_\_\_, day of \_\_\_\_\_, 20\_\_\_\_ by Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust.

\_\_\_\_\_  
Notary Public for Oregon  
My commission expires: \_\_\_\_\_



STATE OF OREGON            )  
  ) ss.  
COUNTY OF Multnomah )

This foregoing instrument was acknowledged before me this 28, day of June, 2022, by Brandon Gill, President of State Street Homes Inc.

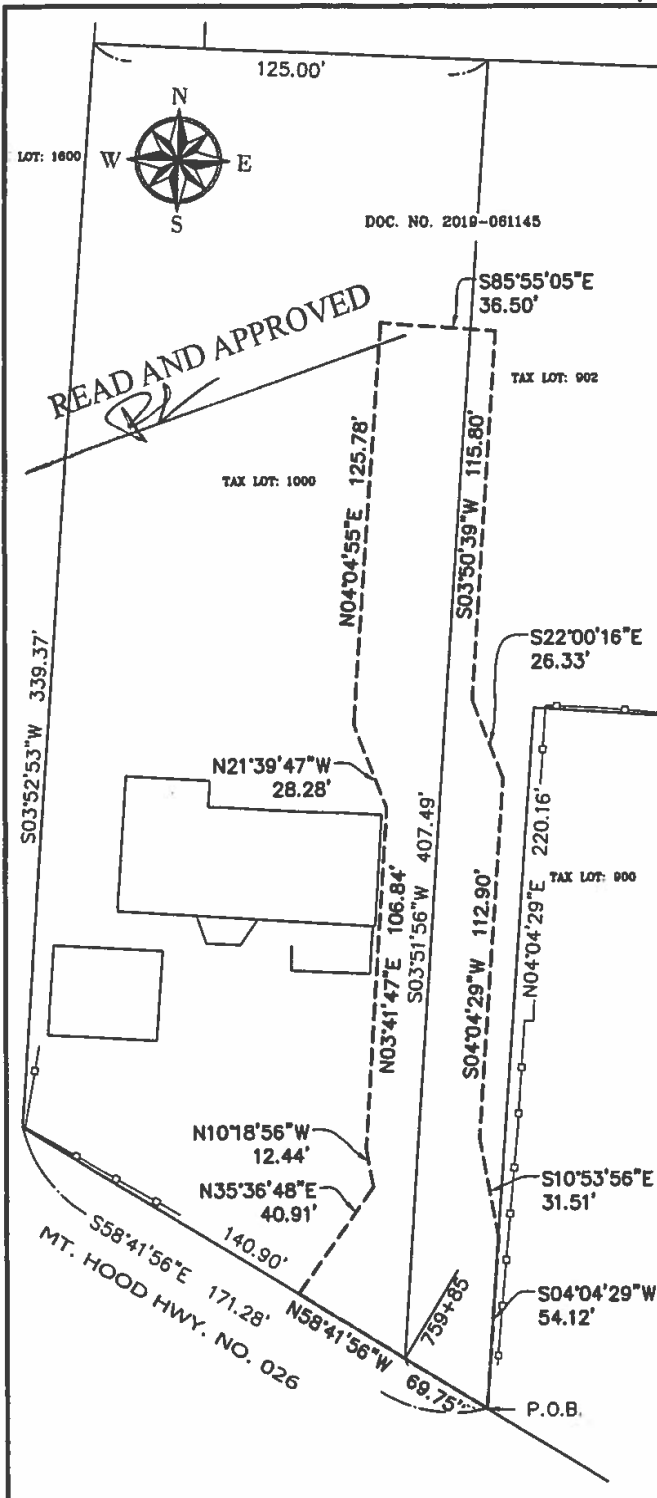


\_\_\_\_\_  
Notary Public for Oregon  
My commission expires: 9-15-24

=====

RECIPROCAL ACCESS EASMENT AND MAINTENANCE AGREEMENT

# EXHIBIT "A"



## LEGAL DESCRIPTION

A VARIABLE WIDTH TRACT OF LAND, BEING A PART OF DOCUMENT NO. 2019-061145, CLACKAMAS COUNTY DEED RECORDS, LOCATED IN THE NE 1/4 OF SECTION 14, TOWNSHIP 2 SOUTH, RANGE 4 EAST, WILLAMETTE MERIDIAN, CITY OF SANDY, CLACKAMAS COUNTY, OREGON, AND AS SHOWN ON THE ADJACENT MAP, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF THAT TRACT DESCRIBED IN DEED NO. 2019-061145 (P.O.B.),  
 THENCE NORTH 58°41'56" WEST 69.75 FEET ALONG THE NORTH RIGHT-OF-WAY OF MT. HOOD HWY. NO. 26;  
 THENCE NORTH 35°36'48" EAST 40.91 FEET;  
 THENCE NORTH 10°18'56" WEST 12.44 FEET;  
 THENCE NORTH 03°41'47" EAST 106.84 FEET;  
 THENCE NORTH 21°39'47" WEST 28.28 FEET;  
 THENCE NORTH 04°04'55" EAST 125.78 FEET;  
 THENCE SOUTH 85°55'05" EAST 36.50 FEET;  
 THENCE SOUTH 03°50'39" WEST 115.80 FEET;  
 THENCE SOUTH 22°00'16" EAST 26.33 FEET;  
 THENCE SOUTH 04°04'29" WEST 112.90 FEET;  
 THENCE SOUTH 10°53'56" EAST 31.51 FEET TO A POINT ON THE EAST PROPERTY LINE OF SAID DEED;  
 THENCE ALONG SAID EAST PROPERTY LINE SOUTH 04°04'29" WEST 54.12 FEET; TO SAID POINT OF BEGINNING.

CONTAINING 12,727 SQUARE FEET/ 0.29 AC. MORE OR LESS

BASIS OF BEARING IS PER GPS OBSERVATION ON CONTROL POINTS (OR NORTH 2011)

REGISTERED  
 PROFESSIONAL  
 LAND SURVEYOR

*Samantha Kay Tanner*  
 OREGON  
 MAY 26, 2015  
 SAMANTHA KAY TANNER  
 90079PLS

RENEWS 6/30/2024

SCALE: 1" = 50' ON 8.5"x11" SHEET  
 PLOT DATE: 6/22/2022  
 FILE NAME: 21013 EASEMENTS2.DWG

45th PARALLEL GEOMATICS, LLC  
 P.O. BOX 1863, HOOD RIVER, OREGON 97031  
 STANNER@45THPARALLELGEOMATICS.COM

RECIPROCAL ACCESS AND  
 UTILITY EASEMENT  
 EXHIBIT 'A'  
 LOCATED IN THE NE 1/4 SECTION 14, TOWNSHIP 2  
 SOUTH, RANGE 4 EAST, WILLAMETTE MERIDIAN

STATE STREET HOMES  
 1233 NW NORTHROP STREET  
 PORTLAND, OREGON 97209

1  
 1

FIRST AMERICAN 371 8844-GK

After Recording Return to:  
State Street Homes, Inc  
1233 NW Northrup St.  
Suite 125  
Portland, OR 97209

Until a Change is requested, all  
Tax statements shall be sent to:  
No Change in Tax Statements

Clackamas County Official Records		<b>2022-037783</b>
Sherry Hall, County Clerk		06/30/2022 09:41:02 AM
D-E	Cnt=1 Sin=73 LESLIE	\$113.00
\$25.00	\$16.00	\$10.00
	\$62.00	

STORM SEWER EASEMENT

Grantor: Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust u/a/d August 21, 2019, owner of that tract described in Deed Document No. 2019-061145

Grantee: State Street Homes Inc, an Oregon Domestic Business Corporation, owner of that tract described in Deed Document No. 2022-037666

First American Title Accommodation  
Recording Assumes No Liability

- Grant of Easement.** The above-named hereby grants and conveys an easement to the Grantee, its agents, successors and assigns, on, over and across the property legally described and depicted in attached Exhibit 'A' ("Easement Area") for the purposes set forth herein.
- Purpose of Easement.** Grantee, its agents, contractors and permittees, may use the Easement Area for the following purposes:

Storm Sewer: To install, construct, reconstruct, alter, improve, remove, access, repair, maintain, replace and operate a private storm sewer subject to all applicable municipal codes and regulations, together with all necessary connections and appurtenances thereto including without limitation sewer piping, manholes, access roadway, sumps, pump stations, vaults, catch basins, and inlets (collectively the "Facilities").

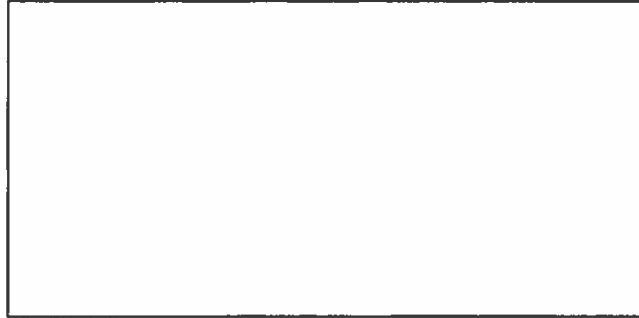
- Access.** Grantee shall have the right of ingress to and egress from the Easement Area over and across the Property for the purpose of installing, constructing, reconstructing, altering, improving, removing, repairing, maintaining, replacing, and operating the Facilities within the Easement Area.
- Restoration.** Promptly Following initial installation and construction of, and thereafter following any work in the Easement Area, Grantee shall, to the extent reasonably practicable, restore landscaping and surfaces and portions of the Property, including the



FIRST AMERICAN 371 8844-GK

After Recording Return to:  
State Street Homes, Inc  
1233 NW Northrup St.  
Suite 125  
Portland, OR 97209

Until a Change is requested, all  
Tax statements shall be sent to:  
No Change in Tax Statements



**STORM SEWER EASEMENT**

**Grantor:** Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust u/a/d August 21, 2019, owner of that tract described in Deed Document No. 2019-061145

**Grantee:** State Street Homes Inc, an Oregon Domestic Business Corporation, owner of that tract described in Deed Document No. 2022-0376666

First American Title Accommodation  
Recording Assumes No Liability

1. **Grant of Easement.** The above-named hereby grants and conveys an easement to the Grantee, its agents, successors and assigns, on, over and across the property legally described and depicted in attached Exhibit 'A' ("Easement Area") for the purposes set forth herein.
2. **Purpose of Easement.** Grantee, its agents, contractors and permittees, may use the Easement Area for the following purposes:

Storm Sewer: To install, construct, reconstruct, alter, improve, remove, access, repair, maintain, replace and operate a private storm sewer subject to all applicable municipal codes and regulations, together with all necessary connections and appurtenances thereto including without limitation sewer piping, manholes, access roadway, sumps, pump stations, vaults, catch basins, and inlets (collectively the "Facilities").

3. **Access.** Grantee shall have the right of ingress to and egress from the Easement Area over and across the Property for the purpose of installing, constructing, reconstructing, altering, improving, removing, repairing, maintaining, replacing, and operating the Facilities within the Easement Area.
4. **Restoration.** Promptly Following initial installation and construction of, and thereafter following any work in the Easement Area, Grantee shall, to the extent reasonably practicable, restore landscaping and surfaces and portions of the Property, including the

Easement Area, affected by Grantee's work to the condition existing immediately prior to such work. All such restoration shall be performed in a workmanlike manner, in accordance with all applicable laws, ordinances and codes. All such work shall be performed as soon as reasonably possible after the completion of Grantee's work shall be coordinated with Grantor so as to cause the minimum amount of disruption to Grantor's use of the Property. Grantee shall at all times while this Easement is in effect defend, indemnify and hold Grantor, its agents and employees harmless from any work conducted in the Easement Area or Grantor's use of the Easement Area.

5. **Consideration for Easement.** The consideration for this easement is \$ 1.00, together other good and valuable consideration, the receipt of which is hereby acknowledged.
6. **Easement to Bind Successors / Amendment of Easement.** This Easement shall run with the land, shall be binding upon the Grantor's and Grantee's successors and assigns in perpetuity, and may only be modified by the Grantee and Grantor by execution of a recordable document.
7. **Interference With Easement.** Grantor may utilize the Easement area provided said use is not inconsistent or does not interfere with the Grantee's use and of the purposes of this easement. No building construction, material storage, grade reduction, or tree planting shall be permitted within the Easement without prior written approval of Grantee's Public Works Director. No other utilities, facilities, or easements shall be located within the boundaries of the Easement without prior written approval of Grantee's Public Works Director.
8. **Warranty of Title.** Grantor warrants to Grantee that Grantor has full legal and equitable title to the real property upon which this easement is granted.

THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.


**GRANTOR**

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

\_\_\_\_\_  
Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust

**APPROVAL AND ACCEPTANCE**

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

  
\_\_\_\_\_  
Brandon Gill, President of State Street Homes Inc.

**ACKNOWLEDGEMENTS**

STATE OF OREGON            )  
  ) ss.  
COUNTY OF \_\_\_\_\_ )

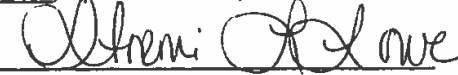
This instrument was acknowledged before me on this \_\_\_\_\_, day of \_\_\_\_\_, 20\_\_\_\_ by Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust.

\_\_\_\_\_  
Notary Public for Oregon  
My commission expires: \_\_\_\_\_



STATE OF OREGON            )  
  ) ss.  
COUNTY OF Multnomah )

This foregoing instrument was acknowledged before me this 28<sup>th</sup> day of June, 2022, by Brandon Gill, President of State Street Homes Inc.

  
\_\_\_\_\_  
Notary Public for Oregon  
My commission expires: 9-15-24

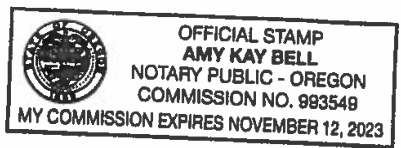
GRANTOR  
Dated this 28<sup>th</sup> day of June, 2022.  
Joycelyn D. Paola  
Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust

**APPROVAL AND ACCEPTANCE**

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.  
[Signature]  
Brandon Gill, President of State Street Homes Inc.

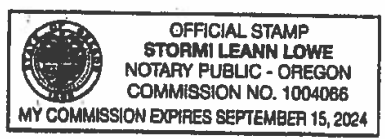
**ACKNOWLEDGEMENTS**

STATE OF OREGON )  
COUNTY OF Clackamas ss.



This instrument was acknowledged before me on this 28<sup>th</sup> day of June, 2022 by Joycelyn D. Paola, Trustee of the J.D. Paola Revocable Living Trust.

Amy K Bell  
Notary Public for Oregon  
My commission expires: 11/12/23



STATE OF OREGON )  
COUNTY OF Multnomah ) ss.

This foregoing instrument was acknowledged before me this 28<sup>th</sup> day of June, 2022, by Brandon Gill, President of State Street Homes Inc.

Stormi Lowe  
Notary Public for Oregon  
My commission expires: 9-15-24

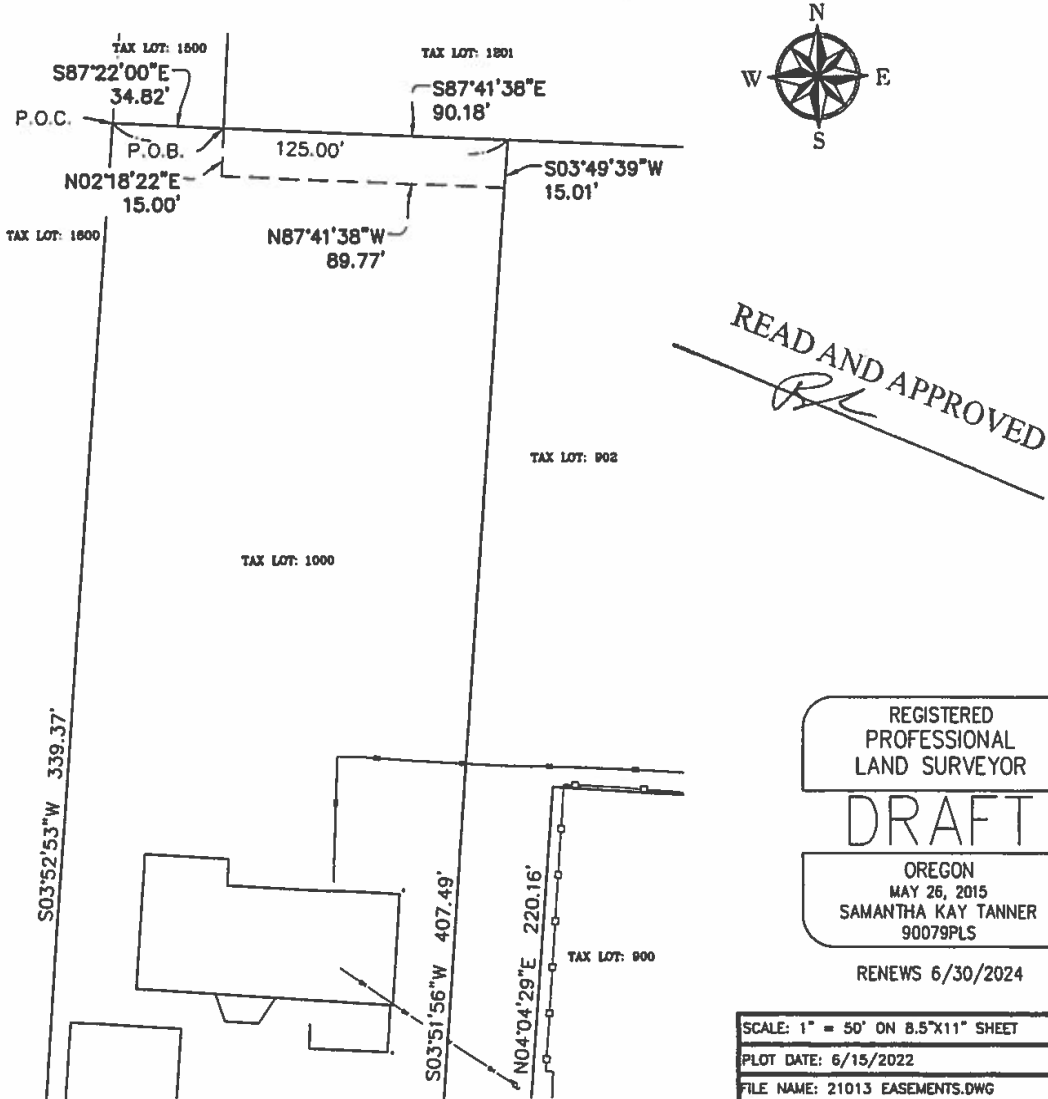
# EXHIBIT "A"

## LEGAL DESCRIPTION

A 15-FOOT WIDE TRACT OF LAND, BEING A PART OF DOCUMENT NO. 2019-061145, CLACKAMAS COUNTY DEED RECORDS, LOCATED IN THE NE 1/4 OF SECTION 14, TOWNSHIP 2 SOUTH, RANGE 4 EAST, WILLAMETTE MERIDIAN, CITY OF SANDY, CLACKAMAS COUNTY, OREGON, AND AS SHOWN ON THE ADJACENT MAP, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THAT TRACT DESCRIBED IN DEED NO. 2019-061145 (P.O.C.), THENCE SOUTH 87°22'00" EAST 34.82 FEET ALONG THE SOUTH LINE OF THAT TRACT OF LAND DESCRIBED IN DOC. NO. 2021-076221, CLACKAMAS COUNTY DEED RECORDS TO THE SOUTHEAST CORNER THEREOF, BEING THE POINT OF BEGINNING; THENCE ALONG THE SOUTH LINE OF THAT TRACT DESCRIBED AS PARCEL 3 IN DOC. NO. 2015-018980, CLACKAMAS COUNTY DEED RECORDS SOUTH 87°41'38" EAST 90.18 FEET TO THE NORTHEAST CORNER OF THAT TRACT DESCRIBED IN BOOK 607 PAGE 739, CLACKAMAS COUNTY DEED RECORDS; THENCE SOUTH 03°49'39" WEST 15.01 FEET ALONG THE EAST LINE THEREOF; THENCE NORTH 87°41'38" WEST 89.77 FEET 15.00 FEET SOUTH OF AND PARALLEL TO SAID NORTH LINE; THENCE NORTH 02°18'22" EAST 15.00 FEET TO SAID POINT OF BEGINNING. CONTAINING 1,350 SQUARE FEET MORE OR LESS.

BASIS OF BEARING IS PER GPS OBSERVATION ON CONTROL POINTS.



REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

DRAFT

OREGON  
MAY 26, 2015  
SAMANTHA KAY TANNER  
90079PLS

RENEWS 6/30/2024

SCALE: 1" = 50' ON 8.5"x11" SHEET  
PLOT DATE: 6/15/2022  
FILE NAME: 21013 EASEMENTS.DWG

<b>45th PARALLEL GEOMATICS, LLC</b> <small>P.O. BOX 1863, HOOD RIVER, OREGON 97031          STANNER@45THPARALLELGEOMATICS.COM</small>	<b>15-FOOT WIDE STORM SEWER EASEMENT EXHIBIT 'A'</b> <small>LOCATED IN THE NE 1/4 SECTION 14, TOWNSHIP 2 SOUTH, RANGE 4 EAST, WILLAMETTE MERIDIAN</small>	<b>STATE STREET HOMES</b> <small>1233 NW NORTHRUP STREET          PORTLAND, OREGON 97209</small>
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## EXHIBIT M



38348 Pioneer Blvd.,  
Sandy, OR 97055  
503-668-5569

**To: Planning Commission**

**Date: Jan. 3, 2023**

**From: Rochelle Anderholm-Parsch, Parks and Recreation Director**

**Subject: State Street Homes**

**Attachments: None**

I am sending this communication on behalf of the Parks and Recreation Department

City staff has reviewed the State Street Home application dated 12/29/22 and recommend a fee-in-lieu of parkland for the proposed development.

Thank you for your consideration of this matter.

**Staff Contact:**

Rochelle Anderholm-Parsch  
Parks and Recreation Director  
503-489-2157  
[randersholmparsch@ci.sandy.or.us](mailto:randersholmparsch@ci.sandy.or.us)



## SANDY FIRE DISTRICT NO. 72 Fire Prevention Division

### E-mail Memorandum

To: [planning@ci.sandy.or.us](mailto:planning@ci.sandy.or.us)

From: Gary Boyles

Date: January 10, 2023

Re: File No. 22-031 DR/VAR/TREE ~ 38105 Hwy 26

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This review is not intended to be a comprehensive analysis of all applicable code sections, nor shall this review nullify code requirements that are determined necessary during building permit review. Review and comments are based upon the current version of the Oregon Fire Code (OFC) as adopted by the Oregon Office of State Fire Marshal. The scope of this review is typically limited to fire apparatus access and water supply, although the applicant shall comply with all applicable OFC requirements. When buildings are completely protected with an approved automatic fire sprinkler system, the requirements for fire apparatus access and water supply may be modified as approved by the fire code official. References, unless otherwise specified, include provisions found in the Metro Code Committee's Fire Code Applications Guide, OFC Chapter 5 and Appendices B, C and D.

### COMMENTS:

#### General

1. Construction documents detailing compliance with fire apparatus access and fire protection water supply requirements shall be provided to Sandy Fire District for review and approval concurrently with building permit submittal. All construction activities shall comply with the applicable Oregon Fire Code and the [Fire Code Application Guide](#).
2. The owner or owner's authorized agent shall be responsible for the development, implementation and maintenance of a written plan establishing a fire prevention program at the project site applicable throughout all phases of the construction. The plan shall address the requirements found in OFC Chapter 33 and shall be made available for review by the fire code official upon request.
3. Where fire apparatus access roads or a water supply for fire protection are required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except where approved alternative methods of protection are provided.



4. Buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property, including monument signs.
5. A key lock box for building will be required to provide access to common use areas, the fire alarm control panel(s), and the fire sprinkler riser room(s). The Fire District uses KNOX brand boxes. To order a KNOX box keyed for the Sandy Fire District, please visit Sandy Fire's website (<https://www.knoxbox.com/Products>) for ordering information.
6. Knox Box Contents. When more than one key is secured in the Knox Box, each key shall be legibly identified as to its use, utilizing a round key tag that is a minimum of 1-inch in diameter. Necessary keys provided by the building owner or business owner may include:
  - a. Main entrance door
  - b. Fire Alarm Control Panel
  - c. Alarm codes
  - d. Manual pull stations
  - e. Fire Sprinkler Control padlock/s
  - f. Mechanical rooms
  - g. Elevator control
  - h. Attic or roof access
  - i. Any other keys necessary to access building controls
7. An emergency vehicle access and maintenance agreement shall be deeded and recorded as a condition of approval
8. New buildings four or more stories above grade plane, except those with a roof slope greater than four units vertical in 12 units horizontal (33.3% slope), shall be provided with a stairway to the roof.

#### Fire Apparatus Access

**FIRE APPARATUS ACCESS ROAD** (as defined by the OFC). A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as *fire lane*, public street, private street, parking lot lane and access roadway.

1. All public roads, bridges or entrances from public roads shall be subject to the applicable roadway standards for either Clackamas County or the City of Sandy.
2. Fire apparatus access roads shall be within 150 feet of all portions of the exterior walls of the first story of any building as measured by an approved route around the exterior of the building. An approved turnaround that meets the Oregon Fire Code requirements will be required if the remaining distance to an approved intersecting roadway, as measured along the fire apparatus access road, is greater than 150 feet.

3. Commercial buildings having a gross building area of more than 62,000 square feet (124,000 square feet if equipped throughout with an approved automatic sprinkler systems) shall be provided with two separated and approved fire apparatus access roads.
4. **Commercial buildings exceeding three stories or 30 feet in height shall have not fewer than two means of fire apparatus access for each building.**
5. Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.
6. Fire apparatus access roads shall have an unobstructed driving surface width of not less than 20 feet and an unobstructed vertical clearance of 13 feet 6 inches is to be maintained.
7. When the vertical distance between the grade plane and a building's highest roof surface exceeds 30 feet, approved aerial fire apparatus access roads shall be provided. For purposes of this requirement, the highest roof surface shall be determined by measurements to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater. If buildings are more than 30 feet in height, as measured above, the following requirements apply:
  - a. Aerial fire apparatus access roads shall be provided and have a minimum unobstructed width of 26 feet, exclusive of shoulders or parking, in the immediate vicinity of the building or portion thereof that will accommodate aerial operations.
  - b. The aerial fire apparatus access road shall be located not less than 15 feet nor greater than 30 feet from the building and shall be positioned parallel to one entire side of the building.
  - c. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the fire code official.
  - d. Overhead utility and power lines shall not be located within the aerial fire apparatus access road or between the aerial fire apparatus access road and the building.
8. Facilities, buildings, or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete, or other approved driving surface capable of supporting the imposed load of fire apparatus weighing up to 75,000 pounds (gross vehicle weight).
9. The inside turning radius and outside turning radius for fire apparatus access roads shall be not less than 28 feet and 48 feet respectively, measured from the same center point.
10. Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, "NO PARKING-FIRE LANE" signs shall be placed on one or both sides of the roadway and in turnarounds as needed.

### Firefighting Water Supplies

1. The minimum available fire-flow and flow duration for commercial and industrial buildings shall be as specified in OFC Appendix B. In no case shall the resulting fire-flow be less than 1,500 gpm at 20 psi residual.
2. Fire flow testing will be required to determine available fire flow. Testing will be the responsibility of the applicant. Applicant to contact the City of Sandy Public Works for testing information and requirements and notify the Fire Marshal prior to fire flow testing.
3. **A minimum of one on-site fire hydrant** shall be provided near the proposed mixed-use development for firefighting operations. If distances between fire hydrants exceeds 500 feet, additional on-site fire hydrants may be required along the fire apparatus access road.
4. **Fire department connections (FDC) are required to be remote and shall be located within 100 feet of a public fire hydrant.** All FDC's shall be permanently labeled with appropriate address in which it serves and shall be accessible and visible from the fire apparatus access road.
5. The minimum number and distribution of fire hydrants shall be in accordance with City of Sandy requirements and OFC Appendix C.
6. Fire hydrants installed within the Sandy Fire District shall comply with the following requirements:
  - a. Flow requirements and location of fire hydrants will be reviewed and approved by Sandy Fire upon building permit submittal.
  - b. Each new fire hydrant installed shall be ordered in an OSHA safety red finish and have a 4-inch non-threaded metal faced hydrant connection with cap installed on the steamer port (4 ½-inch NST x 4-inch Storz Adaptor). If a new building, structure, or dwelling is already served by an existing hydrant, the existing hydrant shall also be OSHA safety red and have a 4-inch non-threaded metal faced hydrant connection with cap installed.**

#### **NOTE:**

Sandy Fire District comments may not be all inclusive based on information provided. A more detailed review may be needed for future development to proceed.

**Please do not hesitate to contact Fire Marshal Gary Boyles at 503-891-7042 or [fmboyles.sandyfire@gmail.com](mailto:fmboyles.sandyfire@gmail.com) should you have any questions or concerns.**



Oregon

Tina Kotek, Governor

EXHIBIT O

Department of Transportation

Transportation Region 1

123 NW Flanders St.

Portland, OR 97209-4012

(503) 731-8200

Fax: (503) 731-8259

1/13/23:

ODOT #12104

ODOT Response

<b>Project Name:</b> State Street Homes	<b>Applicant:</b> State Street Homes
<b>Jurisdiction:</b> City of Sandy	<b>State Highway:</b> US 26
<b>Site Address:</b> 38015 Hwy 26, Sandy, OR	

The site of this proposed land use action proposes to access US 26. ODOT has permitting authority for this facility and an interest in ensuring that this proposed land use is compatible with its safe and efficient operation. **Please direct the applicant to the District Contact indicated below to determine permit requirements and obtain application information.**

COMMENTS/FINDINGS

The applicant proposes to construct a four-story mixed-use building with 42 multifamily Residential units. The proposed development and the existing Paola’s Pizza Barn proposes to share an access from Highway 26 and the existing Pizza Barn parking lot will be reconfigured. The developer is currently working with the District 2C Office to process all documents relating to the highway access.

All alterations within the State highway right of way are subject to the ODOT Highway Design Manual (HDM) standards. Alterations along the State highway but outside of ODOT right-of-way may also be subject to ODOT review pending its potential impact to safe operation of the highway. If proposed alterations deviate from ODOT standards a Design Exception Request must be prepared by a licensed engineer for review by ODOT Technical Services. Preparation of a Design Exception request does not guarantee its ultimate approval. Until more detailed plans have been reviewed, ODOT cannot make a determination whether design elements will require a Design Exception.

Note: Design Exception Requests may take up to 3 months to process.

All ODOT permits and approvals must reach 100% plans before the District Contact will sign-off on a local jurisdiction building permit, or other necessary requirement prior to construction.

ODOT RECOMMENDED LOCAL CONDITIONS OF APPROVAL

Right of Way

- Right of way donated to ODOT as necessary to accommodate the planned cross section and ADA improvements shall be provided. The deed must be to the State of Oregon, Oregon Department of Transportation. The ODOT District contact will assist in coordinating the transfer. ODOT should provide verification to the local jurisdiction that this requirement has been fulfilled. The property owner must be the signatory for the deed and will be responsible for a certified environmental assessment of the site prior to transfer of property to the Department.

Note: It may take up to **3 months** to transfer ownership of property to ODOT.

Access to the State Highway

- A State Highway Approach Road Permit from ODOT for access to the state highway for the proposed use is required and being completed. Truck turning templates shall be provided as needed to ensure vehicles can enter and exit the approach safely. Site access to the state highway is regulated by OAR 734.51. For application information go to <http://www.oregon.gov/ODOT/HWY/ACCESSMGT/Pages/Application-Forms.aspx>.

Note: It may take **2 to 3 months** to process a State Highway Approach Road Permit.

- The applicant shall record cross-over access easements to the adjacent properties with state highway frontage with the County Assessor to facilitate future shared access. Shared access will improve highway safety by reducing potential conflicts between vehicles and between vehicles and pedestrians and bicyclists at closely spaced driveways and will implement ODOT Access Management Program goals.

Access Control

- The applicant is advised that the subject property's highway frontage is access controlled. ODOT has acquired and owns access rights to the subject property. The subject property was granted a Reservation of Access, as recorded in the property deed. Based on the reviewed material, the proposal is relocating the access and an Indenture of Access is required and being processed. If ODOT approves an Indenture of Access, it changes the terms for using the access right and any modification must be recorded in a property deed. The owner is responsible for recording the deed and for any associated costs.

Note: It may take **1 to 2 months** to process a Indenture of Access.

Permits and Agreements to Work in State Right of Way

- An ODOT Miscellaneous Permit must be obtained for all work in the highway right of way.

**Please send a copy of the Notice of Decision including conditions of approval to:**

ODOT Region 1 Planning  
Development Review  
123 NW Flanders St  
Portland, OR 97209

[ODOT\\_R1\\_DevRev@odot.oregon.gov](mailto:ODOT_R1_DevRev@odot.oregon.gov)

Development Review Planner: Marah Danielson	503.731.8258, <a href="mailto:marah.b.danielson@odot.oregon.gov">marah.b.danielson@odot.oregon.gov</a>
Traffic Contact: Avi Tayar, P.E.	503.731.8221 <a href="mailto:Abraham.tayar@odot.oregon.gov">Abraham.tayar@odot.oregon.gov</a>
District Contact: Robby Cox	<a href="mailto:D2CAP@odot.oregon.gov">D2CAP@odot.oregon.gov</a>



DATE: January 17, 2023

REQUEST: State Street Homes, Transportation Review

FILE NO: 22-031/38015 Hwy 26

REVIEWER: Dock Rosenthal, PE, DKS Associates

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DKS Associates has reviewed the traffic analysis letter<sup>1</sup> and site plan for the State Street Homes and self-storage. The proposed development application would construct 42 apartment units and 35 self-storage units at 38015 Highway 26 in Sandy, Oregon. The project site is located just north of Pioneer Boulevard (US 26) and will connect to the transportation system with direct access on US 26.

A full traffic impact analysis is not triggered based on a peak hour trip generation under the threshold for this development. The general comments and listing of recommended conditions of approval are based on a review of the traffic analysis letter and site plan.

**DEVELOPMENT TRANSPORTATION IMPACT REVIEW**

Key comments and issues related to the proposed development’s transportation impact analysis include:

**Existing**

- Traffic analysis was not included in the and is not required for a traffic analysis letter.
- Crash data from January 2016 to December 2020 was analyzed, no systemic safety issues were identified. One crash from the site access driveway was recorded over the five year period.

**Future With Project Condition**

- ITE Trip Generation Code 151 Mini-Warehouse and 221 Multifamily Housing (Mid-rise) were used for the trip generation estimate.
- The proposed project would result in additional vehicle trips: 16 (4 in/12 out) AM peak hour vehicle trips, 17 (11 in/6 out) PM peak hour vehicle trips and 196 weekday trips.

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<sup>1</sup> State Street Homes, Lancaster Mobley, August 29, 2022.

- Intersection and Stopping site distance were evaluated for the site access. Intersection site distance was measured from 11 feet behind the near edge of the travel lane rather than 15 feet due to existing fence and landscaping. Intersection and stopping site distance are met.
- Access spacing standards were evaluated based on the Oregon Highway Plan and City of Sandy Transportation System Plan. Access spacing standards are not met for the site access driveway. No mitigation is recommended to meet the access spacing standard for the following reasons:
  - The site access is the only available access point for the parcel. Additional access would require the purchase of an additional parcel.
  - The site access will consolidate an existing driveway and not construct a new access point.
  - Intersection and stopping site distances are met, helping to ensure safe operation of the site access.
  - Many site access driveways along US 26 do not meet the access spacing standard, drivers along the highway are likely aware of turning vehicles from these access points.

#### **Mitigation**

- No mitigation is proposed.

### **RECOMMENDED CONDITIONS OF APPROVAL**

The following conditions of approval are recommended based on a review of the traffic impact study and site plan:

1. The development shall contribute Transportation System Development Charges toward citywide impacts.
2. Minimum sight distance requirements shall be met at all site driveways. Sight distances should be verified in the final engineering/construction stages of development.





WHERE INNOVATION MEETS ELEVATION

**EXHIBIT Q**  
39250 Pioneer Blvd  
Sandy, OR 97055  
503-668-5533

Memorandum

To: Emily Meharg, Associate Planner  
From: AJ Thorne, Assistant Public Works Director  
Re: State Street Homes 22-031

**Public Works Comments**

Review for this development has been completed by the City's Public Works Department and Curran McLeod Engineering. The comments are as follows:

**Transportation**

Under 'Utility Notes' on page 1, it should be noted that ODOT approval must be secured before constructing the new entrance on HWY 26.

It appears that the construction entrance is called out with a wash station on sheet 9. Please confirm the location and dimensions of the construction entrance.

Frontage improvements shall be made to figure 6 in the TSP for a 40 MPH speed zone. Street trees planted in the buffer should be short growth species to avoid conflict with overhead utilities. ADA compliance and 6 foot sidewalks shall be maintained across the frontage.

**Sanitary Sewer**

The plans and overview show potential encroachment into the sanitary sewer easement between the buildings and the property line.. The code in 17.84.90.A.2 requires the easement to be a minimum of 15 feet wide. The space between the building and the property line appears to be only 10 feet wide, although it's difficult to find a dimension. The building second story is also cantilevered, which appears to encroach even further into the existing easement. Lastly, grades are difficult to determine they do not show the depth of the sewer but the building is six or 7 feet below native ground adjacent to the sewer on the south side of the building.

**Storm Sewer**

Please confirm that the storm system shown is private until it outfalls to the ditch inlet. New storm lines will require an easement through each property.

Sincerely,

**AJ Thorne, PE**  
Assistant Public Works Director  
City of Sandy  
503-489-2162





Todd Prager & Associates LLC

MEMORANDUM

DATE: January 19, 2023
TO: Emily Meharg (City of Sandy)
FROM: Todd Prager, RCA #597, ISA Board Certified Master Arborist
RE: Tree Preservation and Removal Review for 38105 Highway 26

This memorandum is a summary of my review of the tree preservation and removal plan for the mixed-use development proposal at 38105 Highway 26 in Sandy, Oregon.

The City of Sandy requested a third-party review of the tree preservation and removal plan for the 38105 Highway 26 mixed-use project to address the following items:

- Review the arborist report for mixed-use development proposal on the vacant flag lot east of 38015 Highway 26 (Tax Lot 902);
Provide recommendations on how to minimize the negative impact to the trees on adjacent parcels;
Provide an assessment of whether tree # 28 can be adequately protected; and
Provide a recommendation for mitigation trees in the northwest corner of the site.

My review is based on the arborist report dated September 22, 2022, by Teragan & Associates, Inc. in Attachment 1 as well as the excerpted plan set dated July 29, 2022, in Attachment 2. Note that I added the following markups on pages 7 through 9 of the arborist report in Attachment 1 and sheets 2, 3, L1.1, and L2.1 in the plan set in Attachment 2 to aid in my review:

- Potential retention tree (11-inch+ DBH and good condition)
Neighboring tree to be retained
Typical root protection zone radius of one foot per inch of DBH
Typical minimum construction setback radius of 0.5 feet per inch of DBH

Todd Prager & Associates, LLC
601 Atwater Road · Lake Oswego, OR 97034
Phone: 971.295.4835 · Email: todd@toddprager.com · Website: toddprager.com

### Arborist Report Review

The arborist report in Attachment 1 includes the required elements: an inventory and assessment of existing trees; tree removal and preservation recommendations based on the proposed construction impacts; and protection recommendations for the trees to be retained. However, there are a few outstanding issues that should be addressed:

1. **Sec. 17.102.50.A Tree Retention:** This code standard requires at least three trees that are at least 11-inches in trunk diameter (DBH) per acre of contiguous development to be retained. City staff has determined that based on this code standard, seven trees are required to be retained. The City of Sandy's administrative practice is to require retention trees to be in good health condition. In reviewing pages 7 and 8 of the arborist report, there are six potential retention trees at the site (trees 4, 5, 11, 28, 33, and 34, which I highlighted in yellow). Of these trees, tree 28 is proposed for retention while the remaining trees will be removed. Trees 33 and 34 do not appear practicable to retain based on their locations towards the center of the site within the proposed parking lot. However, trees 4, 5, and 11 may be possible to retain if the site access could be reconfigured. It should be clarified whether the driveway reconfiguration is an ODOT requirement, or a recommendation. Based on this clarification, a determination can be made as to whether up to four retention trees could be retained, or if only one retention tree can be retained. The balance of required retention trees could be mitigated if a variance is approved by the Planning Commission according to Sec. 17.102.70.
2. **Differing Site Plans:** The site plan included on page 9 of the arborist report is different from the site plans provided in the plan set in Attachment 2. The main differences appear to be on the east side of the site adjacent to trees 28 through 30. The site plan changes should be reviewed by the project arborist to ensure the trees will be adequately protected. Particular attention should be paid to the location of the proposed retaining wall adjacent to trees 31 and 32 (see sheet 3 in Attachment 2) and the proposed grading that potentially conflicts with the root zones of trees 28 and 29 (see sheet 7 in Attachment 2).

### Protection of Trees on Adjacent Properties

I identified 21 trees on adjacent properties that are proposed to be retained and protected with development. These trees are highlighted in green on pages 7 through 9 of the arborist report and on sheets 2, 3, and L1.1 in the plan set in Attachment 2. The City of Sandy requested my recommendations on how to minimize the negative impact to these trees on adjacent properties.

The City of Sandy's administrative practice is to limit construction disturbances to no closer than a radius from a tree of 0.5 feet per inch of trunk diameter (DBH) if no more than 25 percent of the root protection zone area (estimated at one

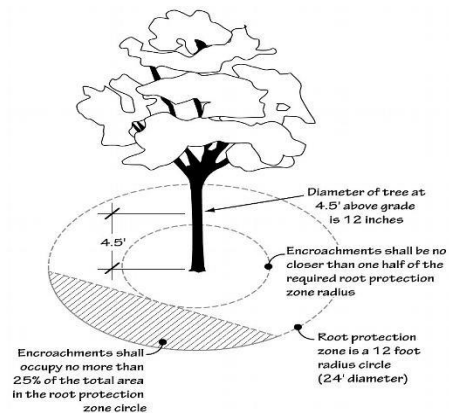


Figure 1: Typical minimum protection zone

Todd Prager & Associates, LLC  
601 Atwater Road · Lake Oswego, OR 97034  
Phone: 971.295.4835 · Email: todd@toddprager.com · Website: toddprager.com

foot radius per inch of DBH) is impacted. Figure 1 illustrates this concept.

I included the typical root protection zone radii and typical minimum construction setback radii for the trees on neighboring properties to be retained on page 9 of Attachment 1 and sheets 2, 3, and L1.1 in the plan set in Attachment 2. In reviewing the proposed construction in relation to the typical minimum protection zones in Figure 1, there are 12 neighboring trees that do not meet the Figure 1 minimum tree protection zone (trees 2.1, 2.3, 13.2, 15, 21, 23, 24, 25, 26, 29, 31, and 32).

The following protection measures should be considered for protecting trees on the neighboring property in addition to the protection measures described in the project arborist report:

**Trees 2.1, 2.3, and 13.2:** Consider shifting the pedestrian pathway so it is directly adjacent to the driveway alignment at the driveway entrance adjacent to trees 2.1 and 2.3. Also, consider shifting the entire driveway further from all three trees if allowed by ODOT.

**Tree 15:** Consider locating utilities under the sidewalk or driveway so they are further from the tree.

**Trees 21, 23, 24, 25, and 26:** Trees 21, 24, 25, and 26 are nuisance species (sweet cherry, *Prunus avium*). Consider discussing removal with the tree owner rather than protecting this low value species. If the owner does not want to remove these trees, determine whether the sidewalk can be constructed without disturbing the existing grade as recommended by the project arborist. Alternative sidewalk materials should be considered if they would be less impactful to the trees' root zones. The sidewalk may also be meandered further from these trees, and potentially avoid the typical minimum construction setback radius of tree 23.

**Trees 29, 31, and 32:** These trees have the greatest potential to be impacted based on the sizes of the root zones and proximity of grading or retaining walls. Consider whether a retaining wall could be used to prevent grading within the typical minimum construction setback radius of tree 29. For trees 31 and 32, consider removing the parking space closest to the tree and shifting the retaining wall to the edge of the parking lot and driveway access to avoid the typical minimum construction setback radii of the trees.

#### **Protection of Tree 28**

The City of Sandy requested my opinion as to whether tree 28 can be adequately protected from construction impacts and to include a measurement of the percent of root zone that is impacted by the proposed development.

On sheet L2.1 in Attachment 2, I provided a markup of the typical root protection zone radius and typical minimum construction setback radius for tree 28. I also provided a measurement of the area of root zone impacts by the proposed construction, grading, and retaining wall in the root zone of the tree. The currently proposed impacts include grading within four feet of the tree's trunk and disturbance

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*Todd Prager & Associates, LLC*  
601 Atwater Road · Lake Oswego, OR 97034  
Phone: 971.295.4835 · Email: [todd@toddprager.com](mailto:todd@toddprager.com) · Website: [toddprager.com](http://toddprager.com)

of approximately 40 percent of its root zone. This well exceeds the City's typical minimum tree protection zone in Figure 1 and will likely not provide adequate protection for tree 28.

The applicant should explore whether it is possible to construct a retaining wall as shown in the example markup on sheet L2.1 in Attachment 2 to limit root zone disturbance to less than 25 percent and limit grade changes and any construction to at least 14 feet from tree 28. If this is possible, the tree could be adequately protected.

#### **Mitigation Tree Recommendations**

If a tree retention variance is approved per Sec. 17.102.70, the applicant will be required to plant mitigation trees at a ratio of at least 2:1. If the only retention tree retained is tree 28, then mitigation would be required for six retention trees and at least 12 mitigation trees would be required to be planted. The City may require a fee-in-lieu of mitigation tree planting and/or planting trees on the 38015 Hwy 26 lot. The City noted that if trees were to be planted on the flag lot, they would likely be placed in the 1,785 square foot open lawn area in the NW corner of the flag lot. The City asked for my opinion as to how many mitigation trees (large, native, evergreen) I would recommend for that area.

As shown on sheet L2.1 in Attachment 2, there is one black gum (*Nyssa sylvatica*) proposed in that location, which has a 20- to 30-foot-wide mature crown spread. That leaves a remaining planting space of approximately 55 to 60 linear feet. I recommend no more than one to two large, native, evergreen trees to be planted in the 1,785 square foot open lawn area to avoid excessive competition over time between trees growing in that location.

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*Todd Prager & Associates, LLC*  
601 Atwater Road · Lake Oswego, OR 97034  
Phone: 971.295.4835 · Email: todd@toddpurger.com · Website: toddprager.com

### **Conclusion**

Based on my review of the tree preservation and removal plan for the mixed-use development proposal at 38105 Highway 26, I recommend the following:

- Consider whether site plan and/or construction modifications are possible to retain additional retention trees, and increase protections for certain offsite trees and onsite tree 28;
- Have the design team work with their project arborist to ensure any site plan modifications will provide adequate tree protection; and
- Plant no more than one to two mitigation trees in the open lawn area in the northwest corner of the site.

Please contact me if you have questions, concerns, or need any additional information.

Sincerely,



**Todd Prager**

*ASCA Registered Consulting Arborist  
ISA Board Certified Master Arborist, WE-6723B  
ISA Qualified Tree Risk Assessor  
AICP, American Planning Association*

Attachment 1 – Project Arborist Report with Redlines

Attachment 2 – Excerpted Plan Set with Redlines

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*Todd Prager & Associates, LLC  
601 Atwater Road · Lake Oswego, OR 97034  
Phone: 971.295.4835 · Email: todd@toddprager.com · Website: toddprager.com*

Third Party Review for 38015 Hwy 26  
Emily Meharg, City of Sandy

January 19, 2023  
Page 5 of 28



9/22/2022

Emily Moran  
State Street Homes  
123 NW Northrup St #125  
Portland, OR 97209

**Re: Tree Protection Plan for 38015 HWY 26, Sandy, Oregon**

**Summary**

The property at 38015 Hwy 26 in Sandy, Oregon is planned for development and the construction of a 48,811 square foot, four-story building. Also planned is a parking lot with seventy-six spaces, and a shared access road on the west side of the property.

**Assignment**

Prepare a Tree Protection Plan to meet the requirements outlined in the City of Sandy Code 17.102.

**Observations**

A tree inventory of the undeveloped site was completed on 9/20/2022. All trees on the property were included in the inventory, as well as trees on adjacent properties which may be impacted by the planned construction. Twenty-four (24) trees will be impacted by site disturbance and are recommended for removal. Twenty-two (22) trees bordering the property are recommended to be retained and protected due to their location on neighboring properties and/or their health and structure.

**Discussion**

The proposed changes to the site will be within the critical root zones of existing trees. Existing asphalt will be removed and replaced, and new sidewalk will be excavated and poured. Twenty-four (24) trees are recommended for removal to accommodate the new construction. It is not possible to retain these trees with the proposed development. Twenty-two (22) trees around the outside of the of the planned construction shall be protected as outlined in the tree protection plan (Appendix 5). The trees to be retained and protected are near the property lines and in some cases on adjacent properties. Tree protection zones shall be fenced during the duration of the project and no changes to the native soil in these areas is planned.

As outlined in Appendix 5, the project arborist shall be onsite during excavation within the critical root zones of retained trees 13.2, 14, 15, 21, 23, 24, 25, 26, 28, 29, 31, and 32. The project consulting arborist shall evaluate and oversee the proper cutting of roots with sharp cutting tools. If many significant roots are encountered during excavation in the zones highlighted in Appendix 5, an alternative layout for areas requiring excavation should be considered to maintain the health and safety of retained trees. Alternate methods of construction may also be necessary for the preservation of significant roots of retained trees. Other construction methods include but are not limited to: bridging over significant roots, constructing sidewalks on top of grade over landscape fabric without excavation, and using post and beam construction instead of conventional footing foundations within the critical root zone.

Teragan & Associates, Inc.  
3145 Westview Circle, Lake Oswego, OR 97034  
E: info@teragan.com | O: 503.697.1975



## Recommendations

Based on the proposed development, my observations, and requirements of the proposed development at 38015 Hwy 26, I recommend the following actions:

1. **Tree protection fencing.** Tree protection fencing that is a minimum of six-feet tall and chain link shall be installed per the tree protection plan (Appendix 5).
  - a. Tree protection fencing is to be installed before any ground disturbing activities and remain in place for the duration of the project, or a planning official approves removal.
  - b. Tree protection is not to be moved without written consent from the project arborist.
2. **Tree removal.** Remove twenty-four (24) trees negatively impacted by site improvements.
3. **Report sharing.** Share this report in its entirety to the project team, including contractors performing demolition and concrete work.

Additional tree protection recommendations for the trees to be retained are included in Appendix 3, Tree Protection Specifications.

## Conclusion

The proposed renovation to the north of the north parking lot will require the removal of twenty-four (24) trees. Tree protection fencing shall be installed for the twenty-two (22) trees near or over the property line on adjacent properties that may be impacted by site disturbance. The project arborist shall be present during excavation within the critical root zones outlined in Appendix 5. This report meets the requirements outlined in the City of Sandy Code 17.102.

Please contact me if you have questions, concerns, or need any additional information.

Sincerely,

*Caleb Lattimer*

Caleb Lattimer  
ISA Certified Arborist®, PN-8644A  
ISA Tree Risk Assessment Qualified  
caleb@teragan.com

## Enclosures:

- Appendix 1: Certification of Performance
- Appendix 2: Assumptions and Limiting Conditions
- Appendix 3: Tree Protection Specifications
- Appendix 4: Tree Inventory
- Appendix 5: Tree Protection Plan

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## Appendix 1: Certification of Performance

I, Caleb Lattimer, certify:

- That a representative of Teragan & Associates, Inc., has inspected the tree(s) and/or the property referred to in this report. The extent of the evaluation is stated in the attached report.
- That Teragan & Associates, Inc. has no current or prospective interest in the vegetation of the property that is the subject of this report, and Teragan & Associates, Inc. has no personal interest or bias with respect to the parties involved.
- That Teragan & Associates, Inc.'s compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party, or upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.
- That the analysis, opinions, and conclusions that were developed as part of this report have been prepared according to commonly accepted arboricultural practices.
- That a Board-Certified Master Arborist has overseen the gathering of data.

## Appendix 2: Assumptions and Limiting Conditions

1. Any legal description provided to the consultant is assumed to be correct. Teragan and Associates, Inc. checked the species identification and tree diameters in the field.
2. It is assumed that this property is not in violation of any codes, statutes, ordinances, or other governmental regulations.
3. The consultant is not responsible for information gathered from others involved in various activities pertaining to this project. Care has been taken to obtain information from reliable sources.
4. Loss or alteration of any part of this delivered report invalidates the entire report.
5. Drawings and information contained in this report may not be to scale and are intended to be used as display points of reference only.
6. The consultants' role is only to make recommendations. Inaction on the part of those receiving the report is not the responsibility of the consultant.
7. This report is to certify the trees that are on site, their size and condition and create a tree plan. Tree plan to include the measures necessary to protect trees that are to be retained during the construction process.

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Third Party Review for 38015 Hwy 26  
Emily Meharg, City of Sandy

January 19, 2023  
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## Appendix 3: Tree Protection Specifications

It is critical that the following steps be taken to ensure that trees slated for retention are protected.

### **Before Construction Begins**

- 1. Tree removals** within the tree protection area.
  - a. Prior to construction, allow tree removal within the tree protection area to occur.
    - i. The project arborist shall oversee the removal of any trees within the tree protection zone.
  - b. Installing tree protection fencing immediately following the removal of trees within the tree protection area (see 3 below). Tree protecting shall be installed after removals to ensure:
    - i. Tree removals are performed safely.
    - ii. Tree protection fencing is not accidentally or intentionally moved.
- 2. Notify all contractors of the tree protection procedures.** For successful tree protection on a construction site, all contractors must know and understand the goals of tree protection. It can only take one mistake with a misplaced trench or other action to destroy the future of a tree.
  - a. Hold a Tree Protection meeting with all contractors to fully explain goals of tree protection.
  - b. Have all sub-contractors sign memoranda of understanding regarding the goals of tree protection. Memoranda to include penalty for violating tree protection plan. Penalty to equal appraised value of tree(s) within the violated tree protection zone per the current Trunk Formula Method as outline by the Council of Tree & Landscape Appraisers current edition of the *Guide for Plant Appraisal*. Penalty is to be paid to owner of the property.
- 3. Fencing.**
  - a. Establish fencing around each tree or grove of trees to be retained.
  - b. The fencing is to be put in place before the ground is cleared in order to protect the trees and the soil around the trees from any disturbance at all.
  - c. Fencing is to be placed at the edge of the root protection zone. Root protection zones are to be established by the project arborist based on the needs of the site and the tree to be protected.
  - d. Fencing is to consist of 6-foot high chainlink fence secured to the ground with metal posts every ten feet to prevent it from being moved by contractors, sagging or falling down OR as required by municipal code.
  - e. Fencing is to remain in the position that is established by the project arborist and not to be moved without written permission from the project arborist until the end of the project.
- 4. Signage**
  - a. All tree protection fencing should have signage as follows so that all contractors understand the purpose of the fencing:

Teragan & Associates, Inc.  
3145 Westview Circle, Lake Oswego, OR 97034  
E: info@teragan.com | O: 503.697.1975

**VEGETATION/TREE PROTECTION ZONE**

**DO NOT REMOVE OR ADJUST THIS FENCING.**

**The fence locations are approved to protect vegetation & trees.**

**NOTE: Moving these fences is a civil violation.**

Please contact the Code Enforcement Specialist and project arborist if alterations to the approved location of the protection fencing is requested.

Project Arborist: TERAGAN & ASSOCIATES, INC 503-697-1975

- b. Signage should be placed as to be visible from all sides of a tree protection area and spaced every 75 feet.

**During Construction**

**1. Protection guidelines Within the Root Protection Zone**

- a. No traffic shall be allowed within the root protection zone. No vehicle, heavy equipment, or even repeated foot traffic.
  - b. No storage of materials including but not limiting to soil, construction material, or waste from the site.
    - i. Waste includes but is not limited to concrete wash out, gasoline, diesel, paint, cleaner, thinners, etc.
  - c. Construction trailers are not to be parked / placed within the root protection zone without written clearance from project arborist.
  - d. No vehicles shall be allowed to park within the root protection areas.
  - e. No activity shall be allowed that will cause soil compaction within the root protection zone.
- 2. Tree pruning.** The trees shall be protected from any cutting, skinning or breaking of branches, trunks or roots.
- 3. Root pruning.** Any roots that are to be cut from existing trees that are to be retained, the project consulting arborist shall be notified to evaluate and oversee the proper cutting of roots with sharp cutting tools. Cut roots are to be immediately covered with soil or mulch to prevent them from drying out.
- 4. Grade changes.** No grade change should be allowed within the root protection zone.
- 5. Root protection zone changes.** Any necessary deviation of the root protection zone shall be cleared by the project consulting arborist or project owner.
- 6. Watering.** Provide water to trees during the summer months. Tree(s) that will have had root system(s) cut back will need supplemental water to overcome the loss of ability to absorb necessary moisture during the summer months.
- 7. Utilities.** Any necessary passage of utilities through the root protection zone shall be by means of tunneling under roots by hand digging or boring.

**After Construction**

- 1. Landscaping.** Carefully landscape in the area of the tree. Do not allow trenching within the root protection zone. Carefully plant new plants within the root protection zone. Avoid cutting the roots of the existing trees.

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Attachment 1

2. **Irrigation.** Do not plan for irrigation within the root protection zone of existing trees unless it is drip irrigation for a specific planting or cleared by the project arborist.
3. **Drainage.** Provide for adequate drainage of the location around the retained trees.
4. **Tree pruning.** Pruning of the trees should be completed as one of the last steps of the landscaping process before the final placement of trees, shrubs, ground covers, mulch, or turf.
5. **Pest and disease inspection.** Provide for inspection and treatment of insect and disease populations that can damage the retained trees and plants.
6. **Fertilization.** Trees that are retained may need to be fertilized as called for by project arborist after final inspection.

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Third Party Review for 38015 Hwy 26  
Emily Meharg, City of Sandy

January 19, 2023  
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Survey Number	Common Name	Scientific Name	DBH	Condition Health	Condition Structure	Field Notes/ Comments	Remove	Retain
001	Colorado blue spruce	<i>Picea pungens</i>	14	Poor	Poor		X	
002	western red cedar	<i>Thuja plicata</i>	6	Fair	Good		X	
002.1	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Good	Good	Tree may be on property to east		X
002.2	Douglas-fir	<i>Pseudotsuga menziesii</i>	6	Good	Good	Tree may be on property to east		X
002.3	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Good	Tree on property to east. Obvious large surface roots at 8' from base of tree.		X
002.4	English holly	<i>Ilex aquifolium</i>	4	Good	Good	Tree may be on property to east		X
003	western red cedar	<i>Thuja plicata</i>	8	Fair	Good		X	
004	Colorado blue spruce	<i>Picea pungens</i>	12	Good	Good		X	
004.1	Colorado blue spruce	<i>Picea pungens</i>	10	Good	Good		X	
005	western red cedar	<i>Thuja plicata</i>	11	Good	Good		X	
006	windmill palm	<i>Trachycarpus fortunei</i>	6	Good	Good		X	
006.1	Japanese maple	<i>Acer japonica</i>	2				X	
007	windmill palm	<i>Trachycarpus fortunei</i>	10	Good	Good	Tree on property to west	X	
008	western red cedar	<i>Thuja plicata</i>	10	Poor	Fair	Tree on property to west	X	
009	English holly	<i>Ilex aquifolium</i>	4	Good	Good	Tree on property to west	X	
010	sugar maple	<i>Acer saccharum</i>	16	Fair	Fair		X	
010.1	rhododendron	<i>Rhododendron</i>	4	Good	Good		X	
011	Norway spruce	<i>Picea abies</i>	15	Good	Good		X	
011.1	Japanese andromeda	<i>Pieris japonica</i>	3	Fair	Fair		X	
012	golden chain tree	<i>Laburnum anagyroides</i>	7	Fair	Fair	Sweeping trunk at base, codominant stems at 3'	X	
013	photinia	<i>Photinia serratifolia</i>	6	Good	Good		X	
013.1	photinia	<i>Photinia serratifolia</i>	6	Fair	Fair		X	
013.2	bigleaf maple	<i>Acer macrophyllum</i>	23	Poor	Poor	Tree may be on property to east. Thin crown		X
014	photinia	<i>Photinia serratifolia</i>	12	Good	Fair	Decay at base, tree may be on property line.		X
015	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Good	Tree on neighboring property to east		X
016	golden chain tree	<i>Laburnum anagyroides</i>	8	Poor	Poor	Tree on property to east. Significant decay in stem.		X
017	thundercloud plum	<i>Prunus cerasifera</i>	6	Fair	Fair	Tree on property to east		X
018	golden chain tree	<i>Laburnum anagyroides</i>	9	Fair	Fair	Tree on property to east		X

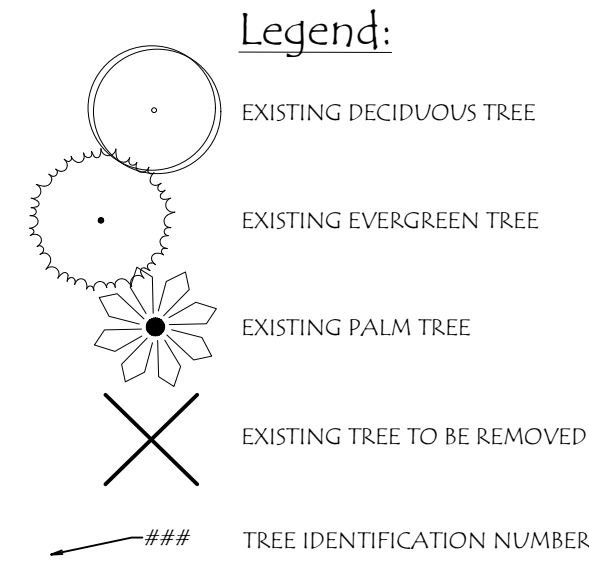
● - Potential retention tree (11-inch DBH and good condition)

● - Neighboring tree to be retained

Survey Number	Common Name	Scientific Name	DBH	Condition Health	Condition Structure	Field Notes/ Comments	Remove	Retain
019	golden chain tree	<i>Laburnum anagyroides</i>	8	Fair	Fair	Tree on property to east. Significant decay in stem		X
020	thundercloud plum	<i>Prunus cerasifera</i>	4	Fair	Fair	Tree on property to east		X
021	sweet cherry	<i>Prunus avium</i>	10	Poor	Poor	Tree on property to south. Thin crown with ivy in crown		X
022	sweet cherry	<i>Prunus avium</i>	6	Good	Good		X	
023	cascara	<i>Frangula pershiana</i>	6	Good	Good	Tree on property to south		X
024	sweet cherry	<i>Prunus avium</i>	12	Fair	Fair	Tree on property to south		X
025	sweet cherry	<i>Prunus avium</i>	10	Poor	Fair	Tree on property to south.		X
026	sweet cherry	<i>Prunus avium</i>	6	Poor	Poor	Stem originates on neighboring property		X
027	sweet cherry	<i>Prunus avium</i>	6	Poor	Poor	Tree appears to be on property to be developed	X	
028	bigleaf maple	<i>Acer macrophyllum</i>	28	Good	Fair	Multiple stems at base. Deadwood in crown		X
028.1	English holly	<i>Ilex aquifolium</i>	4	Fair	Fair	Tree appears to be on property to be developed	X	
029	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Good	Retain. Tree on property to east		X
030	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Good	Tree on property to east		X
031	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Good	Tree on property to east		X
032	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Good	Tree on property to east		X
033	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Fair	Tree base inaccessible. Branches at ground level	X	
034	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Fair	Tree base inaccessible. Branches at ground level	X	
035	bigleaf maple	<i>Acer macrophyllum</i>	12	Fair	Fair	Tree inaccessible. Suppressed crown	X	

- - Potential retention tree (11-inch+ DBH and good condition)
- - Neighboring tree to be retained





**General Notes:**

- TREE LOCATIONS BASED ON SITE SURVEY.
- SEE ARCHITECTURAL PLANS FOR SITE INFORMATION.
- TREE INVENTORY TABLE SEE THIS SHEET.

Attachment 1

**Existing Tree Inventory**

TREE ID	TREE SPECIES	SIZE (DBH)	NOTES	REMAIN/REMOVE
001	Blue Spruce	12"		Remove, Development Impacts
002	Western Red Cedar	4"		Remove, Development Impacts
003	Western Red Cedar	8"		Remove, Development Impacts
004	Blue Spruce	10"		Remove, Development Impacts
005	Western Red Cedar	8"		Remove, Development Impacts
006	Windmill Palm	10"		Remove, Development Impacts
007	Windmill Palm	6"		Remove, Development Impacts
008	Conifer (Unknown)	10"	Dead	Remove, Development Impacts
009	Holly	4"		Remove, Development Impacts
010	Sugar Maple	14"		Remove, Development Impacts
011	Cherry	14"		Remove, Development Impacts
012	Douglas Fir	24"		Remove, Development Impacts
013	Cherry	6"		Remove, Development Impacts
014	Filbert	14"		Remain
015	Douglas Fir	26"		Remain
016	Redbud	5"	Located on Property Line	Remain
017	Holly	5"	Located on Property Line	Remain
018	Thundercloud Plum	4"	Located on Property Line	Remain
019	Redbud	5"	Located on Property Line	Remain
020	Thundercloud Plum	4"	Located on Property Line	Remain
021	Red Maple	10"	Located on Adjacent Property	Remain
022	Filbert	6"		Remove, Development Impacts
023	Cherry	4"	Located on Property Line	Remain
024	Red Maple	6"	Located on Adjacent Property	Remain
025	Cherry	10"	Located on Property Line	Remain
026	Cherry	6"	Located on Property Line	Remain
027	Redbud	5"		Remove, Development Impacts
028	Douglas Fir	18", 18"	Located on Property Line	Remove, Development Impacts
029	Douglas Fir	12", 12", 12"	Located on Property Line	Remove, Development Impacts
030	Douglas Fir	36"	Located on Adjacent Property	Remain
031	Douglas Fir	36"	Located on Adjacent Property	Remain
032	Douglas Fir	36"	Located on Adjacent Property	Remain
033	Douglas Fir	24"		Remove, Development Impacts
034	Douglas Fir	24"		Remove, Development Impacts
035	Douglas Fir	12"		Remove, Development Impacts

08/22/22  
**Laurus Designs, LLC**  
  
 1012 Pine Street  
 Silverton, Oregon  
 503.784.6494

**Multi-Family Sandy**  
 38015 Highway 26  
 Sandy, Oregon

REGISTERED  
 643  
**PRELIMINARY**  
 LAURA A. ANTONSON  
 OREGON  
 11/16/2007  
 LANDSCAPE ARCHITECT

**EXISTING TREE INVENTORY**  
  
 SCALE: 1"=30'-0"  
 0' 15' 30' 60'  
 SCALE  
 July 11th, 2022

**REVISIONS**

#	DATE	NOTES	INITIALS

**L1.1**  
 SHEET 1 OF 2  
 PROJECT # 1402R  
 January 19, 2023  
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# SITE PLAN & DESIGN REVIEW

# MIXED USE DEVELOPMENT

Attachment 2

38105 Hwy 26, Sandy OR

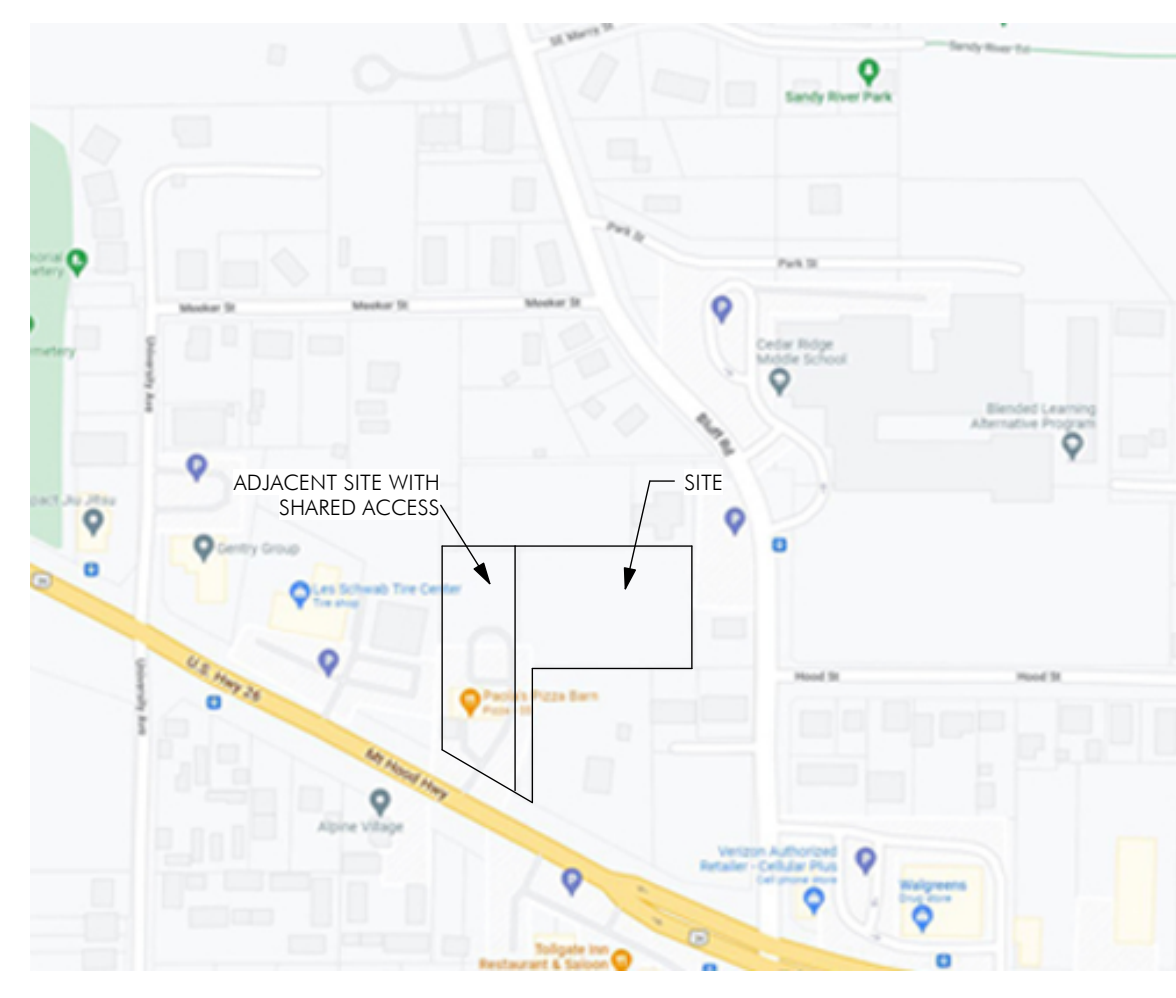


IN THE EVENT CONFLICTS ARE DISCOVERED BETWEEN THE ORIGINAL SIGNED AND SEALED DOCUMENTS PREPARED BY THE ARCHITECTS AND/OR THEIR CONSULTANTS, AND ANY COPY OF THE DOCUMENTS TRANSMITTED BY MAIL, FAX, ELECTRONICALLY OR OTHERWISE, THE ORIGINAL SIGNED AND SEALED DOCUMENTS SHALL GOVERN.

PROJECT # 2021-146  
DATE: 07/29/2022

REVISIONS

## VICINITY MAP:



## AERIAL PHOTO:



## DRAWINGS LIST:

- GENERAL
- G0.01 COVER SHEET
- CIVIL
- C1 COVER SHEET AND NOTES
- C2 EXISTING CONDITIONS AND DEMO PLAN
- C3 COMPOSITE SITE PLAN
- C4 ENTRY UTILITY PLAN
- C5 SITE UTILITY PLAN
- C6 STORMWATER EXTENSION PLAN
- C7 GRADING AND ESC PLAN
- C8 WALL CROSS SECTIONS
- C9 ENTRY GRADING PLAN
- C10 CIVIC AREA GRADING PLAN
- C11 ESC NOTES AND DETAILS
- C12 SITE CIRCULATION PLAN
- LANDSCAPE
- L1.1 EXISTING TREE INVENTORY
- L2.1 PRELIMINARY PLANTING PLAN
- ARCHITECTURAL
- A1.01 SITE PLAN
- A1.02 ENLARGED SITE PLAN
- A1.03 TRASH ENCLOSURE
- A1.04 BICYCLE ENCLOSURE
- A1.05 GAZEBO
- A1.21 FLOOR PLAN - LEVEL 01
- A1.22 FLOOR PLAN - LEVELS 02-04
- A1.23 FLOOR PLAN - ROOF
- A2.01 ELEVATIONS
- A2.02 ELEVATIONS

## PROJECT TEAM:

**OWNER:**  
State Street Homes, Inc.  
Brandon Gill  
1233 NW Northrup St. #135  
Portland, OR 97209  
P: 503.954.8545  
E: Brandon@statestreet-homes.com

**ARCHITECT:**  
STUDIO 3 ARCHITECTURE, Inc.  
Gene Bolante  
275 Court Street St. NE  
Salem OR 97301  
P: 503.390.6500  
E: Gene@studio3architecture.com

**LANDSCAPE:**  
Laurus Designs, LLC  
Lauara Antonson  
1012 Pine St.  
Silverton, OR 97381  
P: 503.784.6494  
E: laura@laurusdesigns.com

**CIVIL ENGINEER:**  
Firwood Design Group  
Kelli Grover  
359 E. Historic Columbia River HW  
Troutdale, OR 97060  
P: 503.668.3737  
E: kg@firwooddesign.com

## SYMBOL LEGEND:

<b>ELEVATION DATUM:</b>	<b>WINDOW TYPE:</b>
<ul style="list-style-type: none"> <li>100.00 F.F.E. ELEVATION</li> <li>ELEVATION DATUM LOCATION:</li> </ul>	<ul style="list-style-type: none"> <li>REFER TO WINDOW ELEVATIONS SHOWN ON DRAWINGS AS 1X</li> </ul>
<b>SECTION REFERENCE:</b>	<b>DOOR NUMBER:</b>
<ul style="list-style-type: none"> <li>FILLED ARROW DENOTES BUILDING SECTION</li> <li>OPEN ARROW DENOTES WALL SECTION/DETAIL</li> <li>DETAIL NUMBER</li> <li>SHEET NUMBER</li> <li>SIDE NOTE IF REQUIRED</li> </ul>	<ul style="list-style-type: none"> <li>DOOR SIZE OR NUMBER</li> </ul>
<b>ELEVATION REFERENCE:</b>	<b>PLAN NOTE DESIGNATION:</b>
<ul style="list-style-type: none"> <li>ELEVATION NUMBER OR DESIGNATION AS OCCURS</li> <li>SHEET NUMBER</li> </ul>	<ul style="list-style-type: none"> <li>PLAN OR SIDE NOTE NUMBER</li> <li>MARK OR DIAGONAL NOTE NUMBER</li> <li>REVISION NUMBER</li> </ul>
<b>DETAIL REFERENCE:</b>	<b>ROOM TITLE + NUMBER:</b>
<ul style="list-style-type: none"> <li>DETAIL NUMBER</li> <li>SHEET NUMBER</li> <li>SIDE NOTE IF REQUIRED</li> <li>DETAIL CUT LOCATION IF SHOWN</li> </ul>	<ul style="list-style-type: none"> <li>ROOM NAME</li> <li>ROOM NUMBER</li> </ul>
	<b>WALL TYPE MARK:</b>
	<ul style="list-style-type: none"> <li>WALL OR PARTITION CONSTRUCTION TYPE. SEE LEGEND.</li> </ul>

NEW MULTI-FAMILY DEVELOPMENT

**SANDY**

38015 Hwy 26, Sandy, OR

SHEET:  
**G0.01**  
COVER SHEET



# Attachment 2

## AS-BUILT NOTES

- 1 GRAVEL PARKING AREA USED FOR DELIVERY SEMIS WITH 35' TRAILER TURNING AND LARGE VEHICLE PARKING.
- 2 STORM DRAIN IN PAVED PARKING LOT.
- 3 PAVED PARKING AREA WITH VERY FADED PARKING LINES.
- 4 NEAREST DRIVEWAY APPROACH
- 5 EXISTING POND LANDSCAPE FEATURE WITH STONE BORDER AND SMALL PATH. SEVERAL ELECTRICAL OUTLETS IN THE AREA TO THE EAST.
- 6 EXISTING PAOLA'S PIZZA SIGN.
- 7 NEWER 6-FOOT WOOD FENCE BELONGING TO DEPRO.
- 8 OLD 2-FOOT WOOD DECORATIVE FENCE RUNS ALONG FRONTAGE ON BOTH SIDES OF APPROACH.
- 9 EXISTING SANITARY SEWER MANHOLE LID.
- 10 TREE DRIP LINE.
- 11 UNDERGROUND POWER TO GRABER RESIDENCE. LOCATION NOT VERIFIED. INFORMED OF ITS EXISTENCE VIA GRABER AND TOLD IT IS 9' UNDERGROUND.
- 12 NORTHERN MOST LINE OF CENTER TURN LANE.
- 13 FOG LINE.
- 14 BIKE LANE.
- 15 6-FOOT CHAINLINK FENCE.
- 16 3-FOOT WELDED WIRE FENCE WITH GATE JUST WEST OF MANHOLE LID.

CONTOURS: 1' MINOR AND 5' MAJOR

FIELD WORK CONDUCTED ON JULY 14 AND 15, 2021. WATER AND SEWER LOCATES WERE NOT MARKED AT THE TIME OF SURVEY. SEE CITY MAP.

THIS DOES NOT CONSTITUTE A FORMAL BOUNDARY SURVEY. THIS BOUNDARY IS BASED ON A BEST FIT OF S11941 TO FOUND MONUMENTS. RIGHTS-OF-WAYS HAVE NOT BEEN RESOLVED AND MAY NOT BE ACCURATE.

## LEGEND

- FOUND MONUMENT OF RECORD
- WOOD FENCE
- CHAINLINK FENCE
- BARBWIRE/WOVEN WIRE/FARM FENCE
- ⊙ EXISTING TREE WITH DIAMETER
- ⊙ ELECTRICAL OUTLET
- UGP UNDERGROUND ELECTRIC
- PWR OVERHEAD WIRE
- ⊙ UTILITY POLE
- GAS UNDERGROUND GAS LINE
- ⊙ IRRIGATION CONTROL BOX
- ⊙ 5' LAMP POST
- ⊙ FLOOD LIGHT
- ⊙ SANITARY SEWER MANHOLE
- SS SANITARY SEWER LINE
- ⊙ STORM SEWER MANHOLE
- ⊙ STORM CATCH BASIN
- ⊙ SPRINKLER HEAD
- CS SURVEY NUMBER, CLACKAMAS COUNTY SURVEY RECORDS
- DOC. NO. DOCUMENT NUMBER, CLACKAMAS COUNTY DEED RECORDS

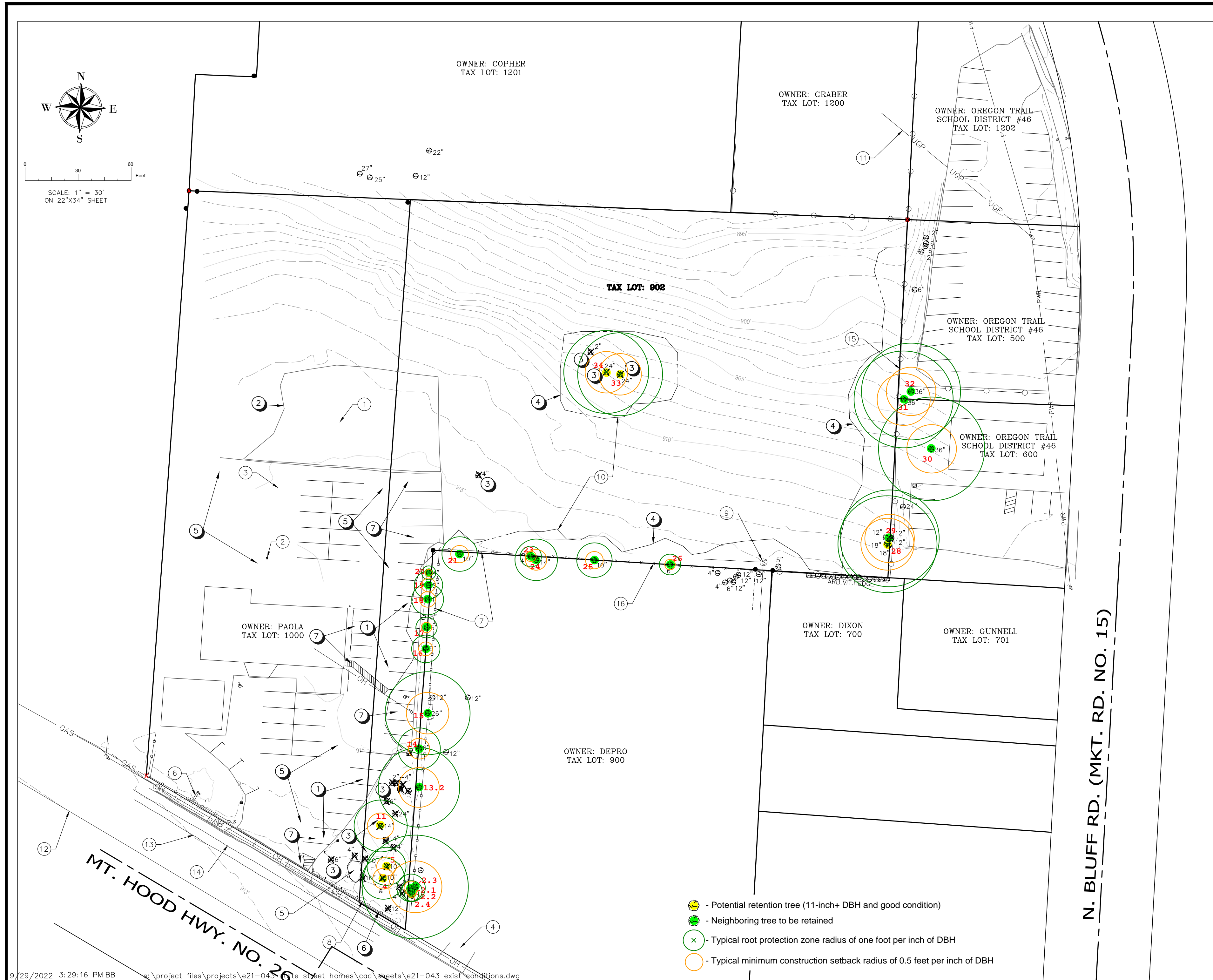
## DEMO KEY NOTES

- 1 SAWCUT AND REMOVE PORTION OF EXIST ASPHALT AS NECESSARY TO CONSTRUCT NEW ASPHALT MATCHLINE AND 6" EXPOSURE CURB AND 5' SIDEWALK, SEE SHEET 3
- 2 EXIST GRAVEL AREA TO BE REMOVED
- 3 REMOVE EXIST TREE (24 TOTAL), TYPICAL
- 4 REMOVE EXIST BRUSH
- 5 PROTECT EXIST ASPHALT
- 6 REMOVE EXIST FENCE
- 7 REMOVE EXIST STRIPING

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON  
MAY 26, 2015  
SAMANTHA KAY TANNER  
90079

RENEWS 6/30/2022



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DATE:	NO.	REVISION

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SCALE: AS SHOWN	DATE: DECEMBER 2021	
PROJECT NO. E21-043		

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Reliable Engineering Solutions

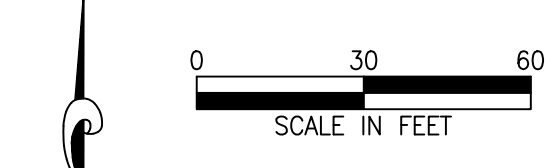
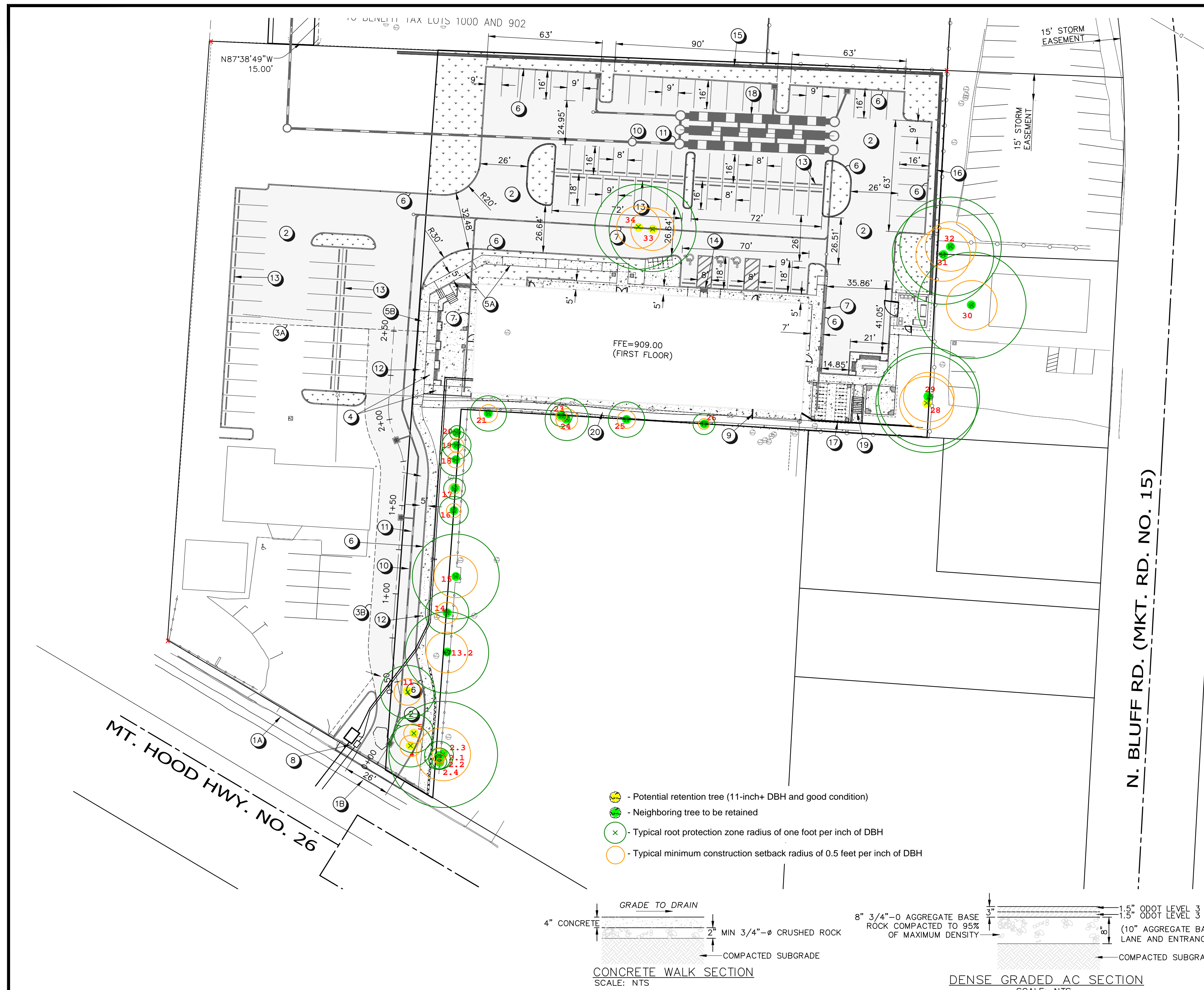
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY  
TROUTDALE, OREGON 97060  
(503) 668-3737

STATE STREET HOMES  
1233 NW NORTHRUP ST. #125  
PORTLAND, OR 97209

EXISTING CONDITIONS AND DEMO PLAN  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

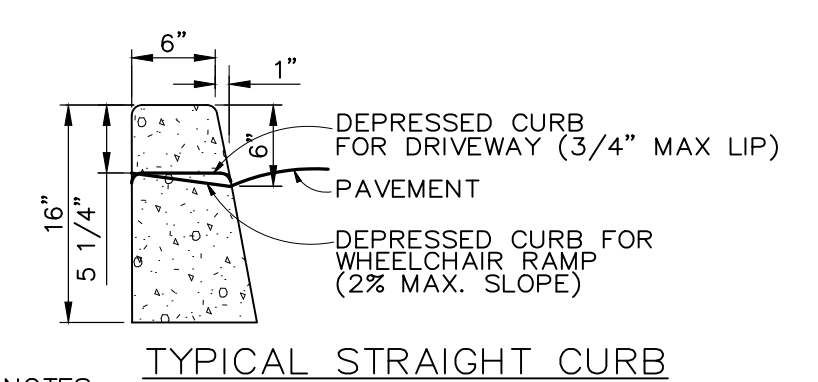
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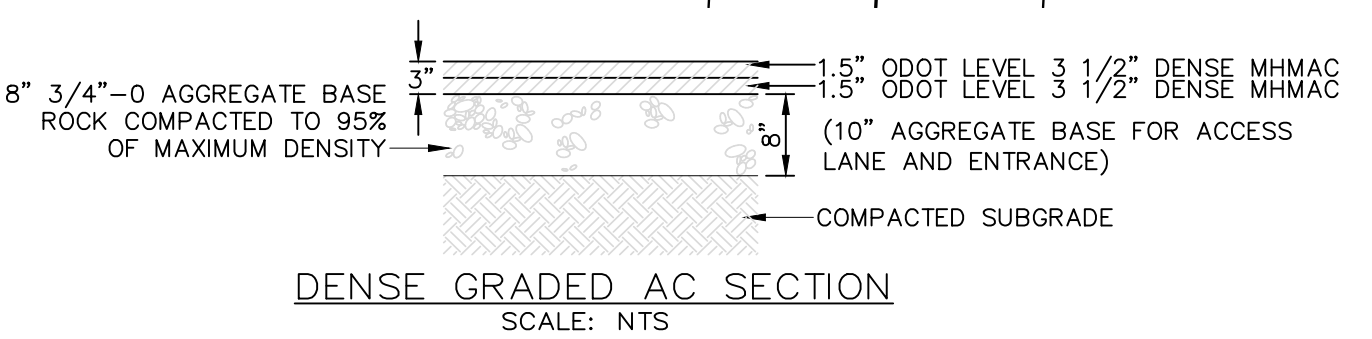
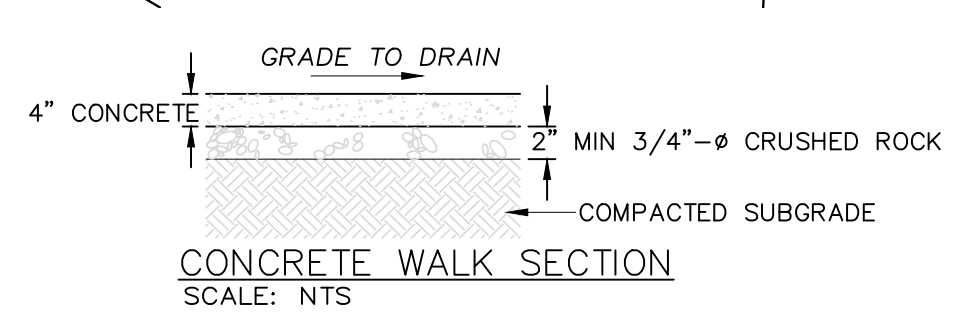
KEY NOTES

- 1A EXIST 35'± WIDE COMMERCIAL DRIVEWAY APPROACH
- 1B PROPOSED 26' WIDE DRIVEWAY ACCESS AND SIDEWALK
- 2 NEW ASPHALT DRIVEWAY AND PARKING AREA, SEE TYPICAL SECTION DETAIL THIS SHEET, SEE SITE CIRCULATION PLAN ON SHEET 12 FOR EMERGENCY VEHICLE ACCESS PLAN
- 3A SAWCUT MIN 1" FROM EDGE OF EXIST EDGE OF ASPHALT, TYPICAL
- 3B SAWCUT EXIST ASPHALT FOR MATCH LINE TO EXIST AC PARKING, TYPICAL
- 4 CONCRETE SIDEWALK RAMP TO CIVIC AREA ACCESS WITH HAND RAILS, SEE ARCHITECTURAL PLANS FOR HAND RAILING DETAILS
- 5A DOWNWARD RAMP AND LANDING PATHWAY WITH HANDRAILS TO MAIN FLOOR, SEE ARCHITECTURAL PLANS FOR HANDRAIL DETAILS
- 5B RAMP DOWN PORTION OF SIDEWALK WITH HAND RAILS, SEE ARCHITECTURAL PLANS FOR HANDRAIL DETAILS
- 6 CURB WITH 6" EXPOSURE UNLESS OTHERWISE NOTED (TYPICAL), SEE TYPICAL SECTION THIS SHEET
- 7 DOWNSPOUT CONVEYANCE LINES TO STORM SYSTEM
- 8 DOUBLE DETECTOR CHECK VALVE AND VAULT AND WATER SERVICE METER AND VAULT FOR SPRINKLER AND POTABLE WATER SERVICE
- 9 CONNECT TO EXIST SEWER MAIN FOR SEWER SERVICE, CONTRACTOR TO VERIFY DEPTH PRIOR TO CONSTRUCTION
- 10 WATER QUALITY MANHOLE, SEE SHEET 5
- 11 FLOW CONTROL MANHOLE, SEE SHEET 5
- 12 PROPOSED 5' WIDE CONCRETE WALKWAY, MAX 2% CROSS SLOPE (1.5% TYPICAL) AND MAXIMUM 5% LONGITUDINAL SLOPE, SEE TYPICAL SECTION DETAIL THIS SHEET
- 13 CONCRETE WHEEL STOPS WITH STORMWATER UNDERDRAIN (TYPICAL)
- 14 ADA COMPLIANT SIDEWALK RAMP
- 15 12'± RETAINING WALL
- 16 8'± RETAINING WALL
- 17 7'± RETAINING WALL
- 18 60" DETENTION SYSTEM, SEE SHEET 5
- 19 10 STAIRS WITH LANDINGS TO TOP OF WALL, SEE SHEET 4 FOR SPOT GRADING PLAN
- 20 TRAIL



- NOTES:
1. ALL RADII SHALL BE 3/4" EXCEPT AS OTHERWISE SHOWN.
  2. ISOLATION JOINTS SHALL BE PLACED ONLY AS SPECIFIED.
  3. CONTRACTION JOINTS SHALL BE PLACED AT 15' INTERVALS AND SHALL EXTEND AT LEAST 50% THROUGH THE CURB OR CURB AND GUTTER.
  4. A CONTRACTION JOINT SHALL BE PLACED ALONG AND OVER WEEP HOLE THROUGH THE CURB AND THROUGH THE SIDEWALK.
  5. WHEN SIDEWALKS ARE CONSTRUCTED, EXTEND 3" PIPE TO BACK OF SIDEWALK AND INSTALL COUPLING.

- - Potential retention tree (11-inch+ DBH and good condition)
- - Neighboring tree to be retained
- X - Typical root protection zone radius of one foot per inch of DBH
- - Typical minimum construction setback radius of 0.5 feet per inch of DBH



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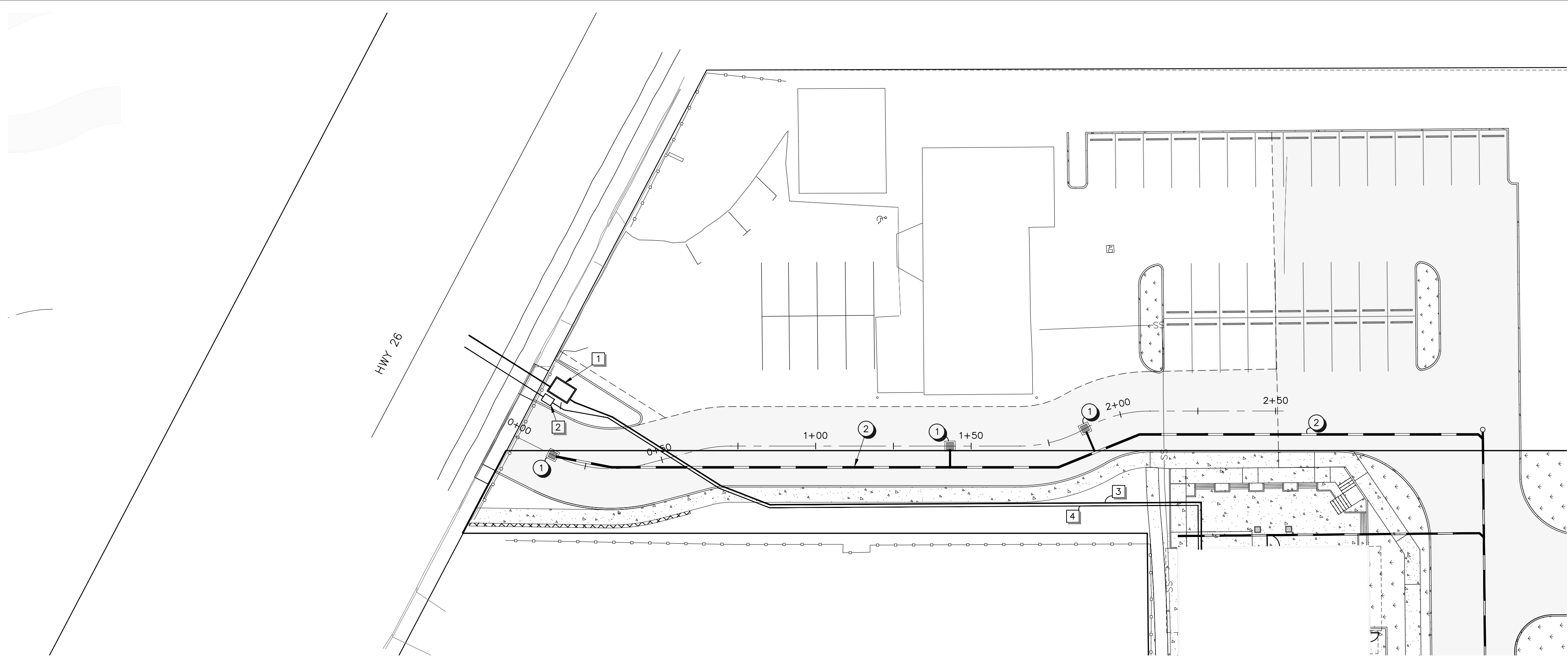
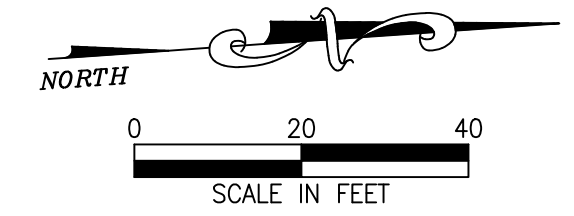
**FIRWOOD DESIGN GROUP**  
 Reliable Engineering Solutions  
 359 EAST HISTORIC COLUMBIA RIVER HIGHWAY  
 TROUTDALE, OREGON 97060  
 (503) 668-3737

**STATE STREET HOMES**  
 1233 NW NORTHRUP ST. #125  
 PORTLAND, OR 97209

**COMPOSITE SITE PLAN**  
 MIXED USE SITE DEVELOPMENT  
 38015 HWY 26, SANDY, OR 97055

3  
12





- KEY NOTES**
- ① LYNCH TYPE TRAP CATCH BASIN
  - ② STORM CONVEYANCE LINE TO DETENTION SYSTEM

- WATERLINE KEY NOTES**
- ① PROPOSED DOUBLE DETECTOR CHECK VALVE AND VAULT BY FIRE SUPPRESSION DESIGNER
  - ② PROPOSED WATER METER SIZED BY WATER SYSTEM DESIGNER
  - ③ NEW FIRE SUPPRESSION LINE, SIZE PROVIDED BY WATER SYSTEM DESIGNER
  - ④ NEW POTABLE WATER SERVICE LINE, SIZE PROVIDED BY WATER SYSTEM DESIGNER



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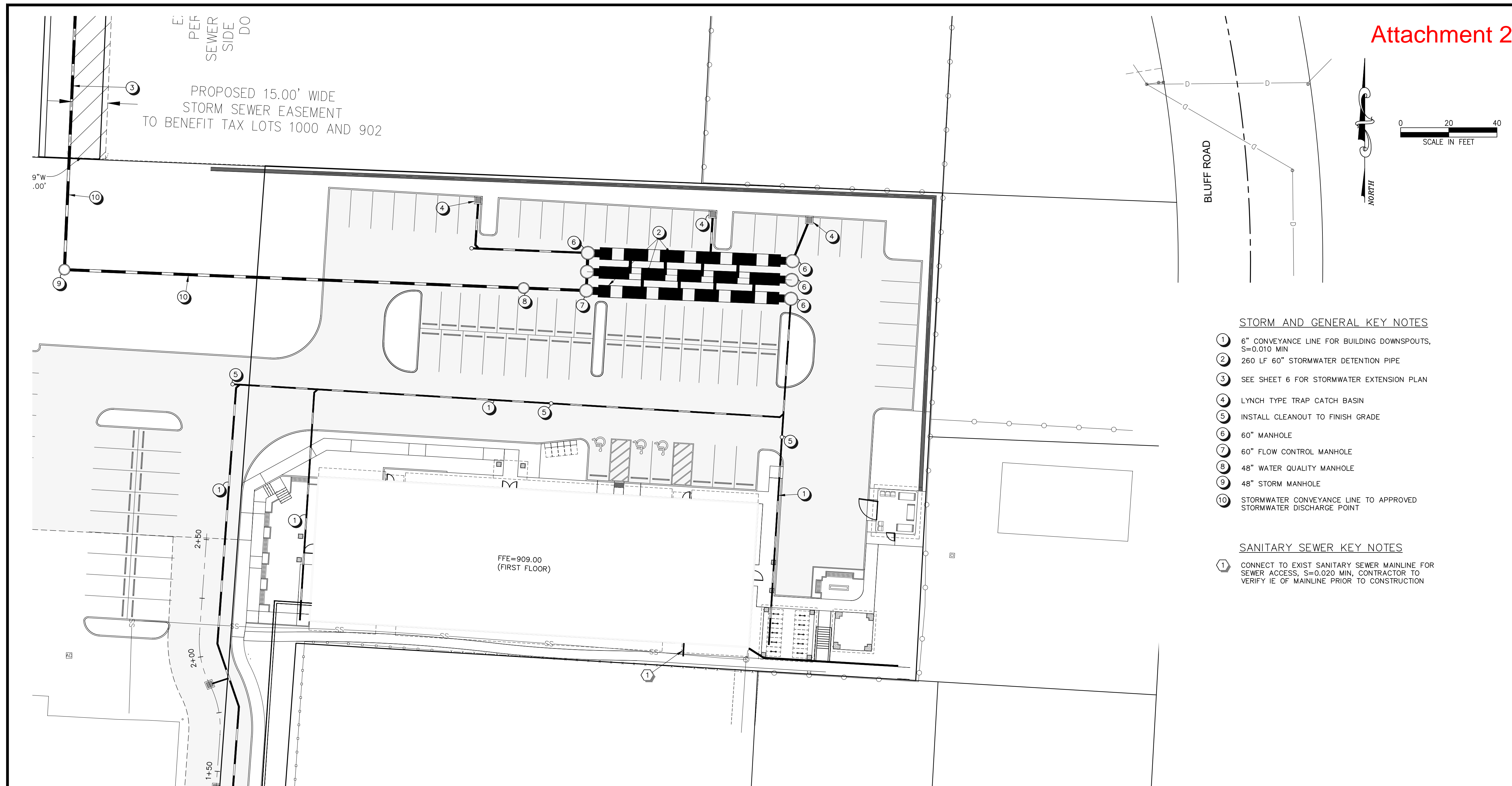
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SCALE: AS SHOWN	DATE: DECEMBER 2021	
PROJECT NO. E21-043		

**FIRWOOD DESIGN GROUP**  
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**STATE STREET HOMES**  
 1233 NW NORTHRUP ST. #125  
 PORTLAND, OR 97209

**ENTRY UTILITY PLAN**  
 MIXED USE SITE DEVELOPMENT  
 38015 HWY 26, SANDY, OR 97055

**4**  
**12**



**STORM AND GENERAL KEY NOTES**

- ① 6" CONVEYANCE LINE FOR BUILDING DOWNSPOUTS, S=0.010 MIN
- ② 260 LF 60" STORMWATER DETENTION PIPE
- ③ SEE SHEET 6 FOR STORMWATER EXTENSION PLAN
- ④ LYNCH TYPE TRAP CATCH BASIN
- ⑤ INSTALL CLEANOUT TO FINISH GRADE
- ⑥ 60" MANHOLE
- ⑦ 60" FLOW CONTROL MANHOLE
- ⑧ 48" WATER QUALITY MANHOLE
- ⑨ 48" STORM MANHOLE
- ⑩ STORMWATER CONVEYANCE LINE TO APPROVED STORMWATER DISCHARGE POINT

**SANITARY SEWER KEY NOTES**

- ① CONNECT TO EXIST SANITARY SEWER MAINLINE FOR SEWER ACCESS, S=0.020 MIN, CONTRACTOR TO VERIFY IE OF MAINLINE PRIOR TO CONSTRUCTION



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PROJECT NO. E21-043		

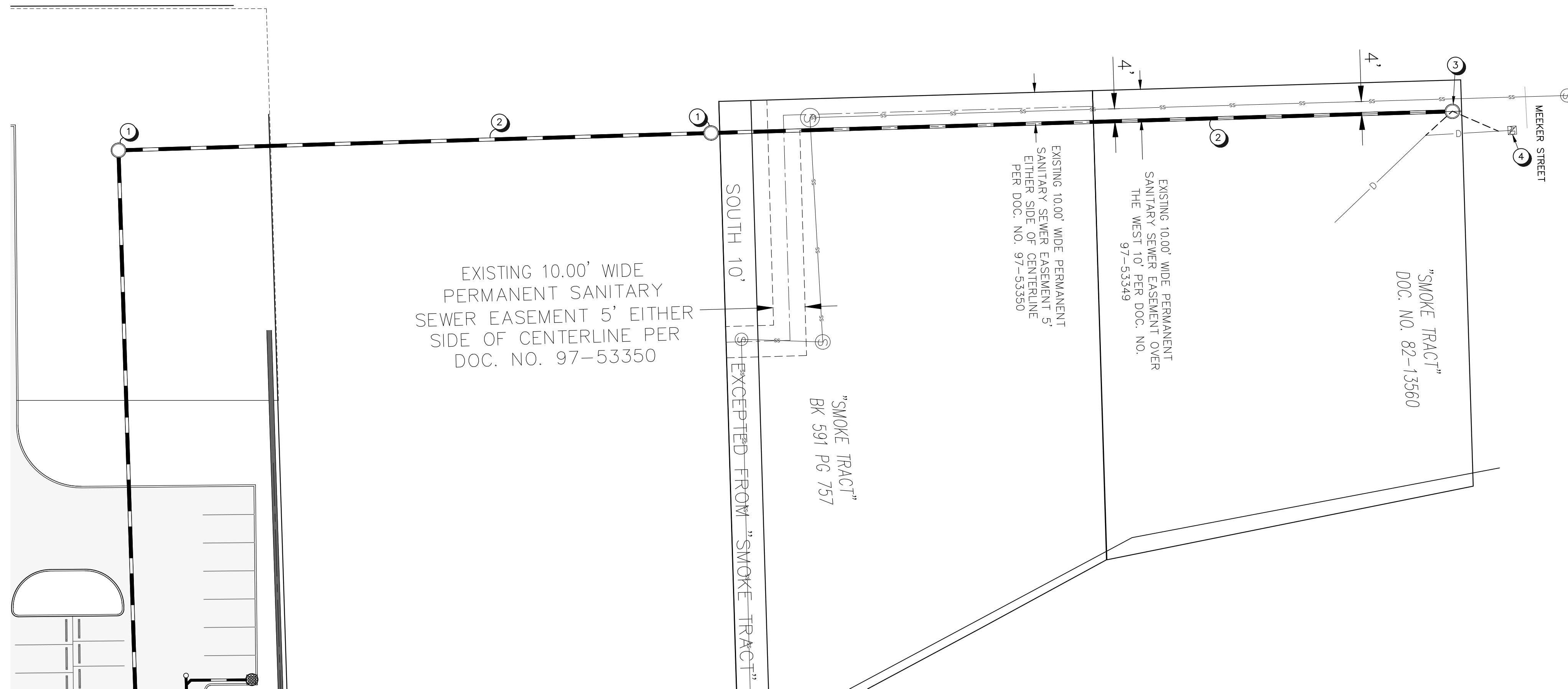
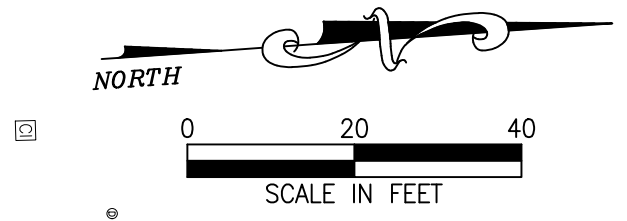
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**SITE UTILITY PLAN**  
 MIXED USE SITE DEVELOPMENT  
 38015 HWY 26, SANDY, OR 97055

5  
12

Third Party Review for 38015 Hwy 26  
 Emily Meharg, City of Sandy



KEY NOTES

- ① 48" STORM MANHOLE
- ② STORMWATER CONVEYANCE LINE TO APPROVED STORMWATER DISCHARGE POINT
- ③ REALIGN EXIST STORMLINE AND CONNECT INTO PROPOSED 48" MANHOLE
- ④ STORMWATER TO CONNECT INTO EXIST DITCH INLET, UTILIZE EXIST STORM LINE CONNECTION INTO DITCH INLET



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PROJECT NO. E21-043		



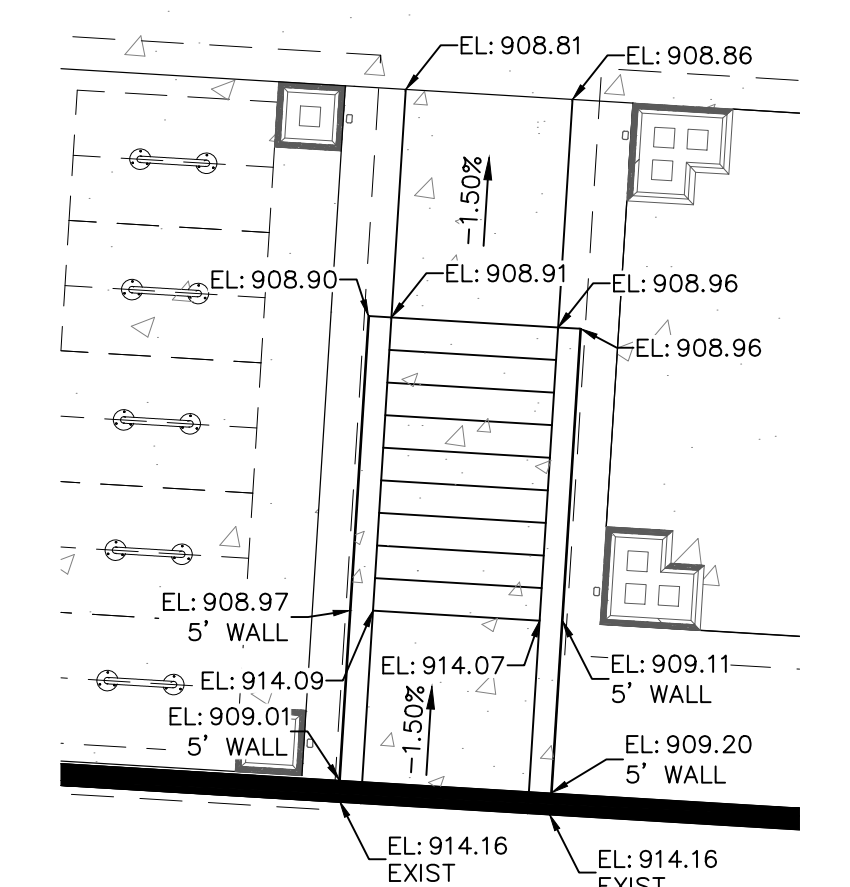
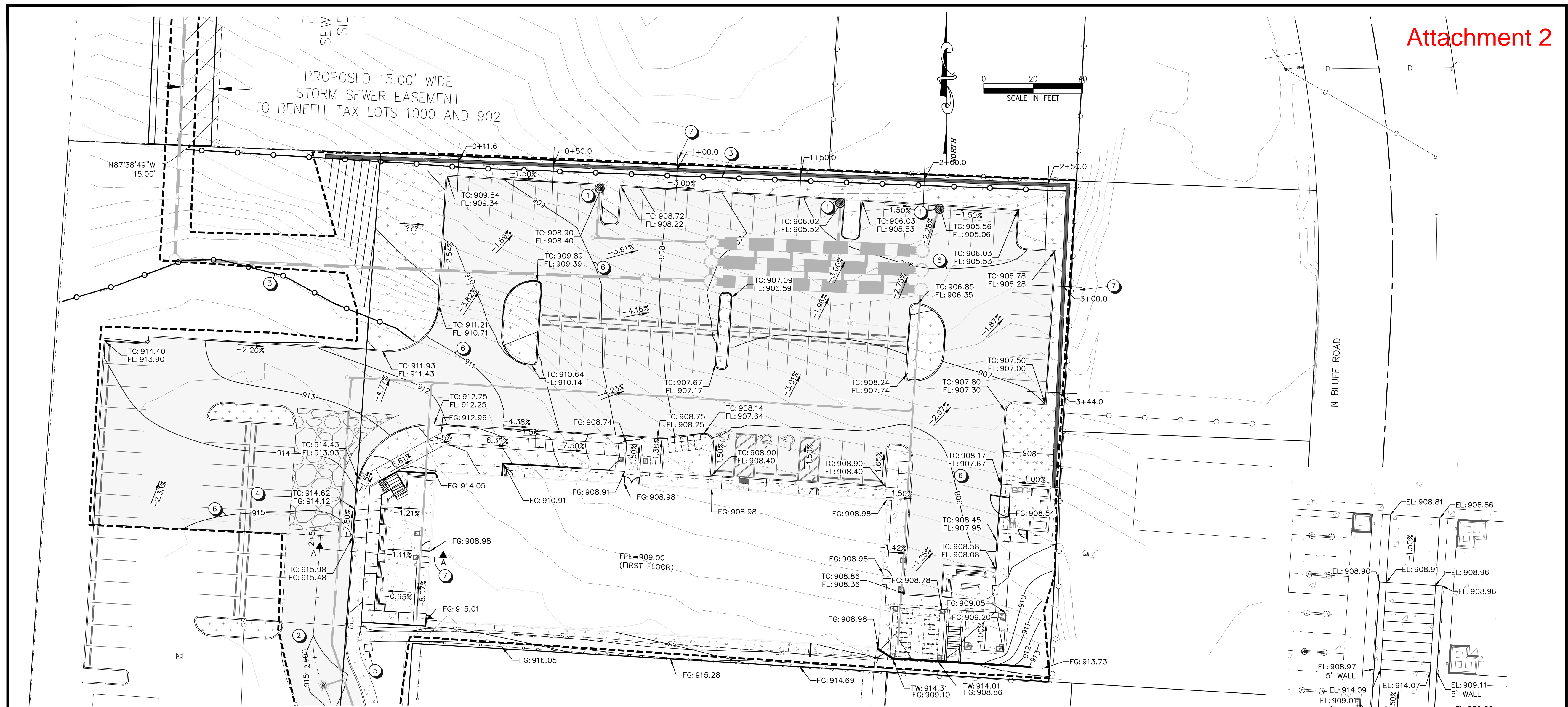
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STORMWATER EXTENSION PLAN  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

6  
12





- KEY NOTES**
- 1 CB INSERT INLET PROTECTION FOR AREA DRAIN TYPE CATCH BASIN. SEE DETAILS ON SHEET 11 (TYPICAL)
  - 2 PROVIDE TEMPORARY INLET PROTECTION ON ALL STORMWATER INLETS WITHIN 250 LF DOWNSTREAM OF THE PROJECT SITE
  - 3 TEMPORARY SILT FENCING, SEE DETAIL ON SHEET 11, ADJUST SILT FENCING AS NECESSARY DURING CONSTRUCTION
  - 4 CONSTRUCTION ENTRANCE, SEE DETAIL THIS ON SHEET 11
  - 5 CONSTRUCT TEMPORARY 3' X 3' X 2' DEEP SUMP AREA TO BE USED AS WASH AREA FOR CONCRETE TRUCKS, AFTER CURBS AND SIDEWALKS ARE INSTALLED AND BEFORE ROADS ARE PAVED, FILL AND COMPACT SUMP AREA PER STRUCTURAL REQUIREMENTS, DO NOT OVERFILL SUMP AREA, CONTRACTOR TO INCREASE SUMP WIDTH AS NECESSARY TO PROVIDE ADEQUATE VOLUME AS (IF) NEEDED
  - 6 PROPOSED FINISH GRADE CONTOURS (TYPICAL)
  - 7 SEE SHEET 8 FOR WALL CROSS SECTIONS, TYPICAL

**ESTIMATED INPLACE QUANTITIES:**

SITE SCRAPING OF ORGANICS AND HARD SURFACES (ASSUMED 4" AVERAGE, TO BE HAUL OFF): 790 CY  
 ASPHALT DATUM TO SITE SCRAPING: 610 CY CUT, 4190 CY FILL  
 SIDEWALK/LANDSCAPE DATUM TO SITE SCRAPING: 361 CY CUT, 940 CY FILL  
 UNDER BUILDING (ASSUME SLAB CONSTRUCTION): 2030 CY CUT, 0 CY FILL

TOTAL CUT: 3,791 CY  
 TOTAL FILL: 5,130 CY

QUANTITY IS AN ESTIMATE FOR INPLACE QUANTITIES AND DOES NOT INCLUDE TRENCH SPOILS, CONTRACTOR RESPONSIBLE FOR DOING OWN QUANTITY ESTIMATE FOR CONSTRUCTION COST

**STAIRS GRADING DETAIL**  
 SCALE: SEE SCALE BAR

**LEGEND**

- TEMPORARY SEDIMENT FENCE
- BIO-BAG AND INLET INSERT PROTECTION
- LIMITS OF DISTURBANCE (1.9 ACRES)

SCALE IN FEET: 0 5 10

**REGISTERED PROFESSIONAL ENGINEER**  
 67149PE  
**PRELIMINARY**  
 OREGON  
 KELLY A. GROVER  
 Expires: 06/30/23  
 Signature Date: \_\_\_\_\_

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SCALE: AS SHOWN	DATE: DECEMBER 2021	
PROJECT NO. E21-043		

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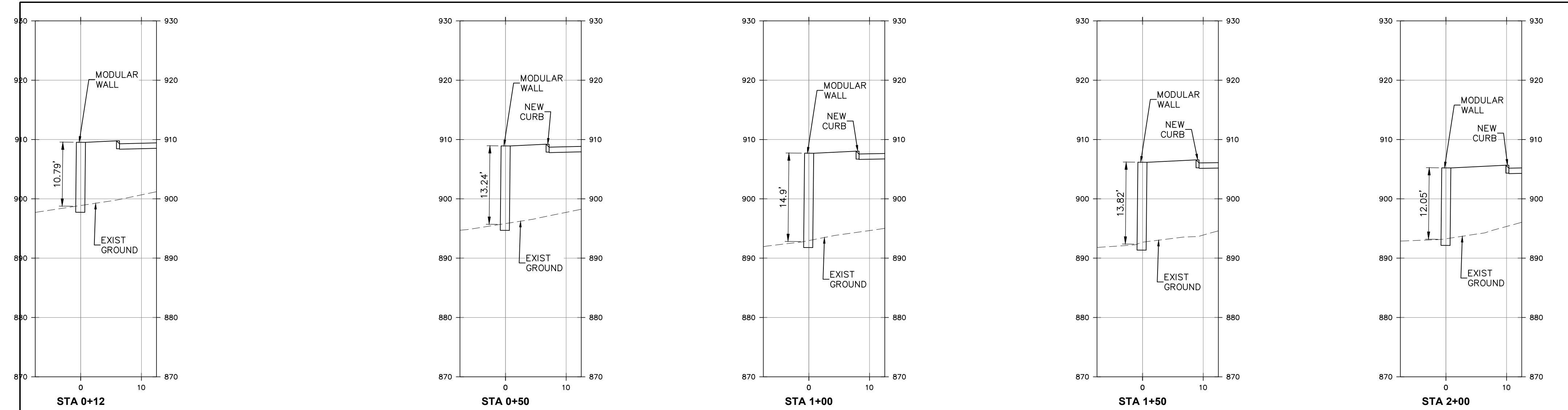
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 PORTLAND, OR 97209

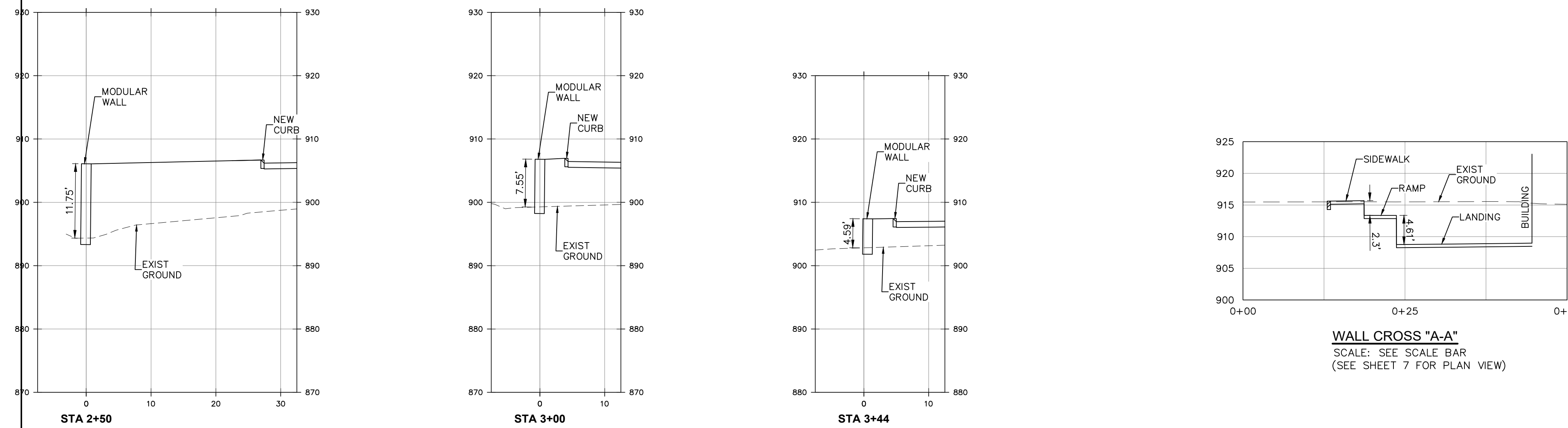
**GRADING AND ESC PLAN**  
 MIXED USE SITE DEVELOPMENT  
 38015 HWY 26, SANDY, OR 97055

**7**  
**12**

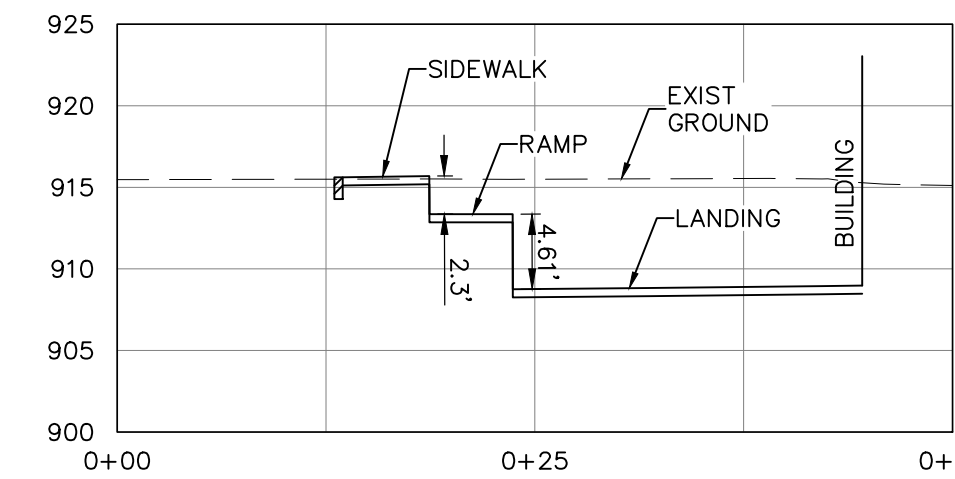




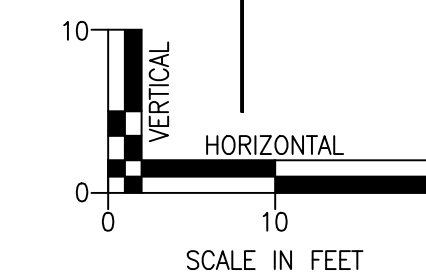
**WALL CROSS SECTIONS**  
SCALE: SEE SCALE BAR  
(SEE SHEET 7 FOR PLAN VIEW)



**WALL CROSS SECTIONS**  
SCALE: SEE SCALE BAR  
(SEE SHEET 7 FOR PLAN VIEW)



**WALL CROSS "A-A"**  
SCALE: SEE SCALE BAR  
(SEE SHEET 7 FOR PLAN VIEW)



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PROJECT NO. E21-043		

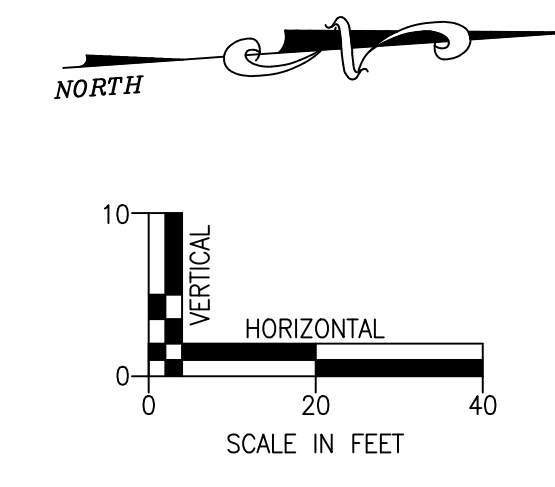
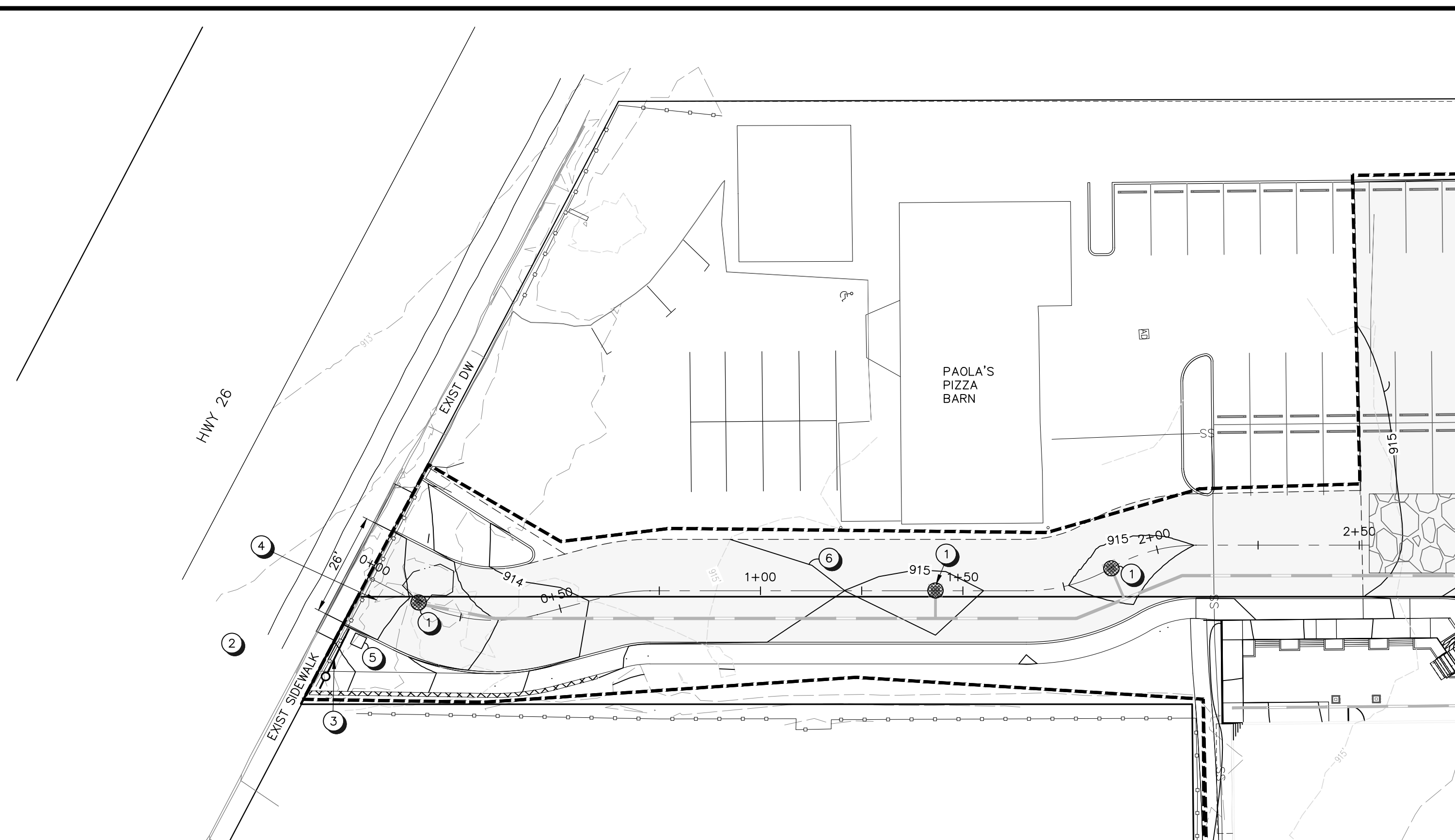


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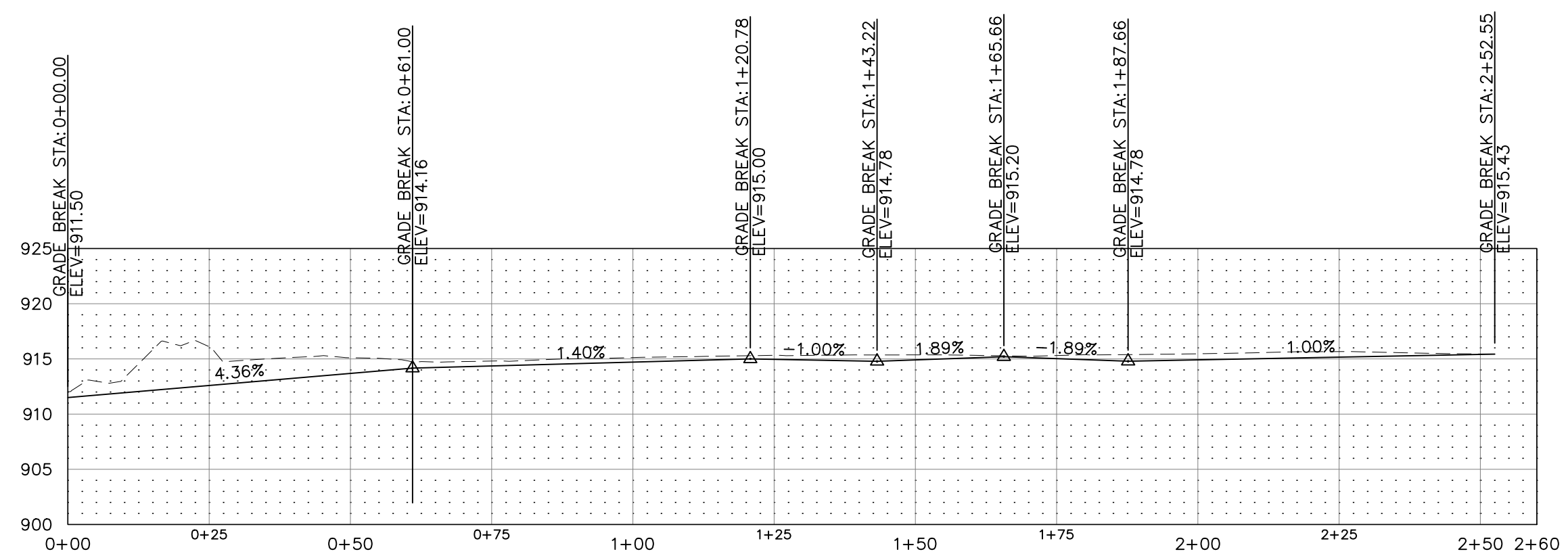
WALL CROSS SECTIONS  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

8  
12



KEY NOTES

- ① CB INSERT INLET PROTECTION FOR AREA DRAIN TYPE CATCH BASIN, SEE DETAILS ON SHEET 11 (TYPICAL)
- ② PROVIDE TEMPORARY INLET PROTECTION ON ALL STORMWATER INLETS WITHIN 250 LF DOWNSTREAM OF THE PROJECT SITE
- ③ TEMPORARY SILT FENCING, SEE DETAIL ON SHEET 11, ADJUST SILT FENCING AS NECESSARY DURING CONSTRUCTION
- ④ CONSTRUCTION ENTRANCE, SEE DETAIL THIS ON SHEET 11
- ⑤ CONSTRUCT TEMPORARY 3' X 3' X 2' DEEP SUMP AREA TO BE USED AS WASH AREA FOR CONCRETE TRUCKS, AFTER CURBS AND SIDEWALKS ARE INSTALLED AND BEFORE ROADS ARE PAVED, FILL AND COMPACT SUMP AREA PER STRUCTURAL REQUIREMENTS, DO NOT OVERFILL SUMP AREA, CONTRACTOR TO INCREASE SUMP WIDTH AS NECESSARY TO PROVIDE ADEQUATE VOLUME AS (IF) NEEDED
- ⑥ PROPOSED FINISH GRADE CONTOURS (TYPICAL)



- LEGEND
- TEMPORARY SEDIMENT FENCE
  - ⊙ BIO-BAG AND INLET INSERT PROTECTION
  - LIMITS OF DISTURBANCE (1.9 ACRES)



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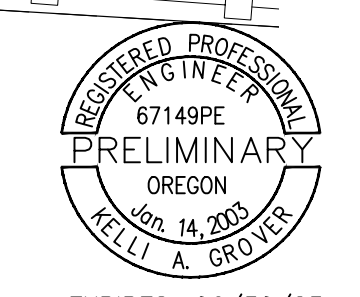
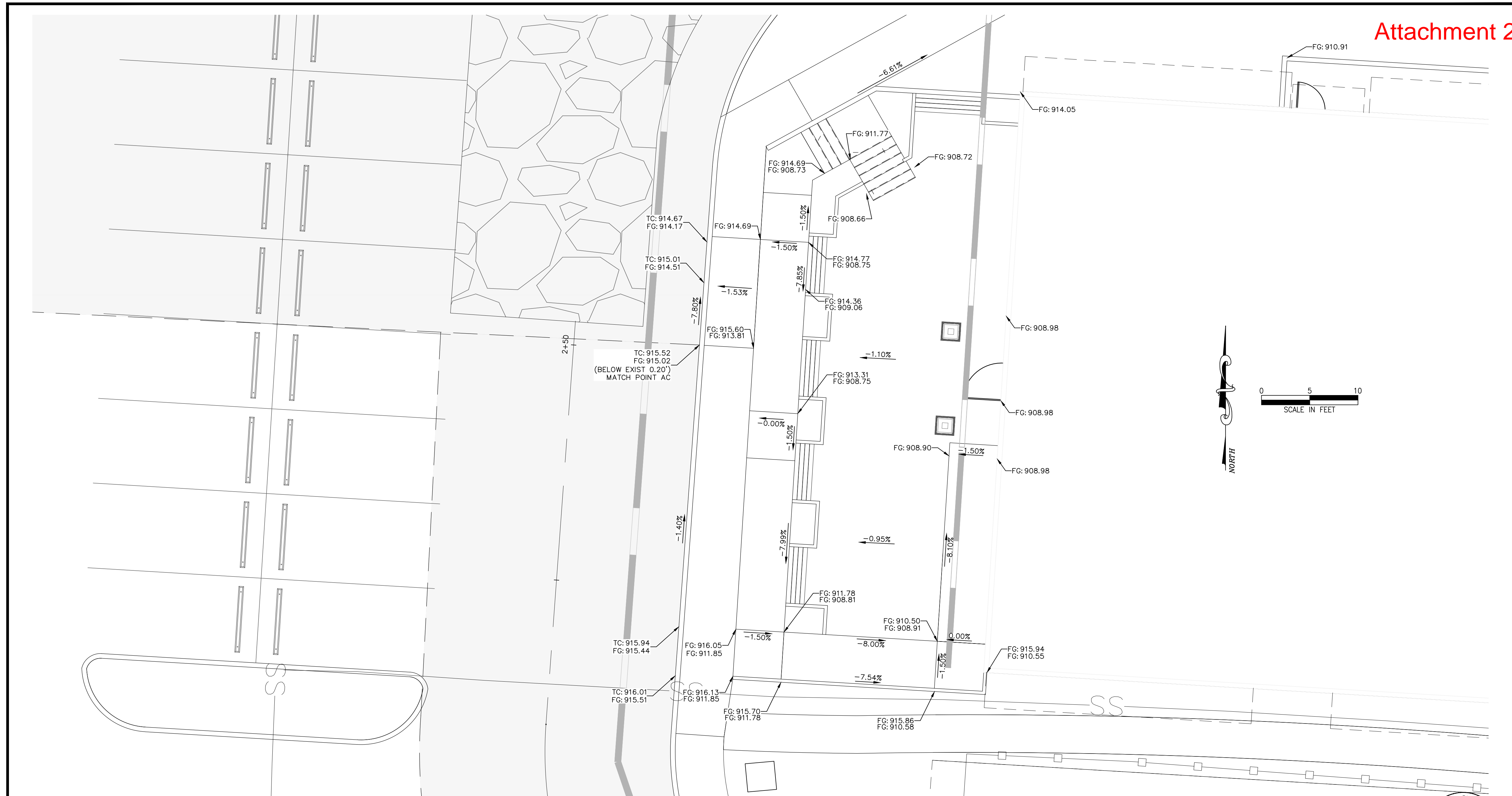
**FIRWOOD DESIGN GROUP**  
Reliable Engineering Solutions

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(503) 668-3737

STATE STREET HOMES  
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ENTRY GRADING PLAN  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

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12



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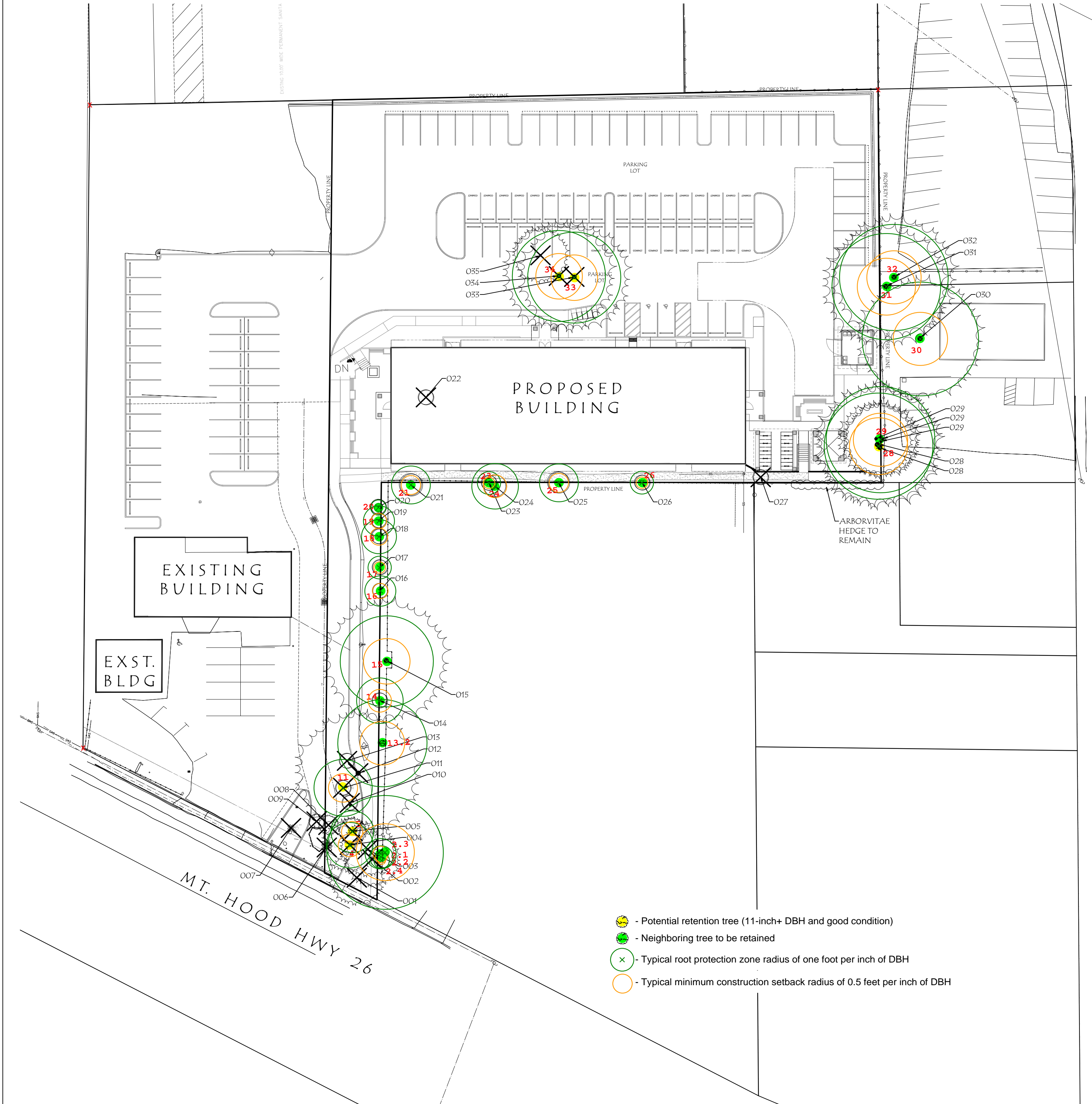
**STATE STREET HOMES**  
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 PORTLAND, OR 97209

**CIVIC AREA GRADING PLAN**  
 MIXED USE SITE DEVELOPMENT  
 38015 HWY 26, SANDY, OR 97055

10/12

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- Potential retention tree (11-inch+ DBH and good condition)
- Neighboring tree to be retained
- Typical root protection zone radius of one foot per inch of DBH
- Typical minimum construction setback radius of 0.5 feet per inch of DBH

- Legend:**
- EXISTING DECIDUOUS TREE
  - EXISTING EVERGREEN TREE
  - EXISTING PALM TREE
  - EXISTING TREE TO BE REMOVED
  - TREE IDENTIFICATION NUMBER

- General Notes:**
1. TREE LOCATIONS BASED ON SITE SURVEY.
  2. SEE ARCHITECTURAL PLANS FOR SITE INFORMATION.
  3. TREE INVENTORY TABLE SEE THIS SHEET.

## Attachment 2

### Existing Tree Inventory

TREE ID	TREE SPECIES	SIZE (DBH)	NOTES	REMAIN/REMOVE
001	Blue Spruce	12"		Remove, Development Impacts
002	Western Red Cedar	4"		Remove, Development Impacts
003	Western Red Cedar	8"		Remove, Development Impacts
004	Blue Spruce	10"		Remove, Development Impacts
005	Western Red Cedar	8"		Remove, Development Impacts
006	Windmill Palm	10"		Remove, Development Impacts
007	Windmill Palm	6"		Remove, Development Impacts
008	Conifer (Unknown)	10"	Dead	Remove, Development Impacts
009	Holly	4"		Remove, Development Impacts
010	Sugar Maple	14"		Remove, Development Impacts
011	Cherry	14"		Remove, Development Impacts
012	Douglas Fir	24"		Remove, Development Impacts
013	Cherry	6"		Remove, Development Impacts
014	Filbert	14"		Remain
015	Douglas Fir	26"		Remain
016	Redbud	5"	Located on Property Line	Remain
017	Holly	5"	Located on Property Line	Remain
018	Thundercloud Plum	4"	Located on Property Line	Remain
019	Redbud	5"	Located on Property Line	Remain
020	Thundercloud Plum	4"	Located on Property Line	Remain
021	Red Maple	10"	Located on Adjacent Property	Remain
022	Filbert	6"		Remove, Development Impacts
023	Cherry	4"	Located on Property Line	Remain
024	Red Maple	6"	Located on Adjacent Property	Remain
025	Cherry	10"	Located on Property Line	Remain
026	Cherry	6"	Located on Property Line	Remain
027	Redbud	5"		Remove, Development Impacts
028	Douglas Fir	18", 18"	Located on Property Line	Remain
029	Douglas Fir	12", 12", 12"	Located on Property Line	Remain
030	Douglas Fir	36"	Located on Adjacent Property	Remain
031	Douglas Fir	36"	Located on Adjacent Property	Remain
032	Douglas Fir	36"	Located on Adjacent Property	Remain
033	Douglas Fir	24"		Remove, Development Impacts
034	Douglas Fir	24"		Remove, Development Impacts
035	Douglas Fir	12"		Remove, Development Impacts

Laurus Designs, LLC

1012 Pine Street  
Silverton, Oregon  
503.784.6494

Multi-Family  
Sandy

38015 Highway 26  
Sandy, Oregon

REGISTERED  
643  
PRELIMINARY  
LAURA A. ANTONSON  
OREGON  
11/16/2007  
LANDSCAPE ARCHITECT

EXISTING TREE INVENTORY

SCALE: 1"=30'-0"  
0' 15' 30' 60'  
SCALE

September 15th, 2022

**REVISIONS**

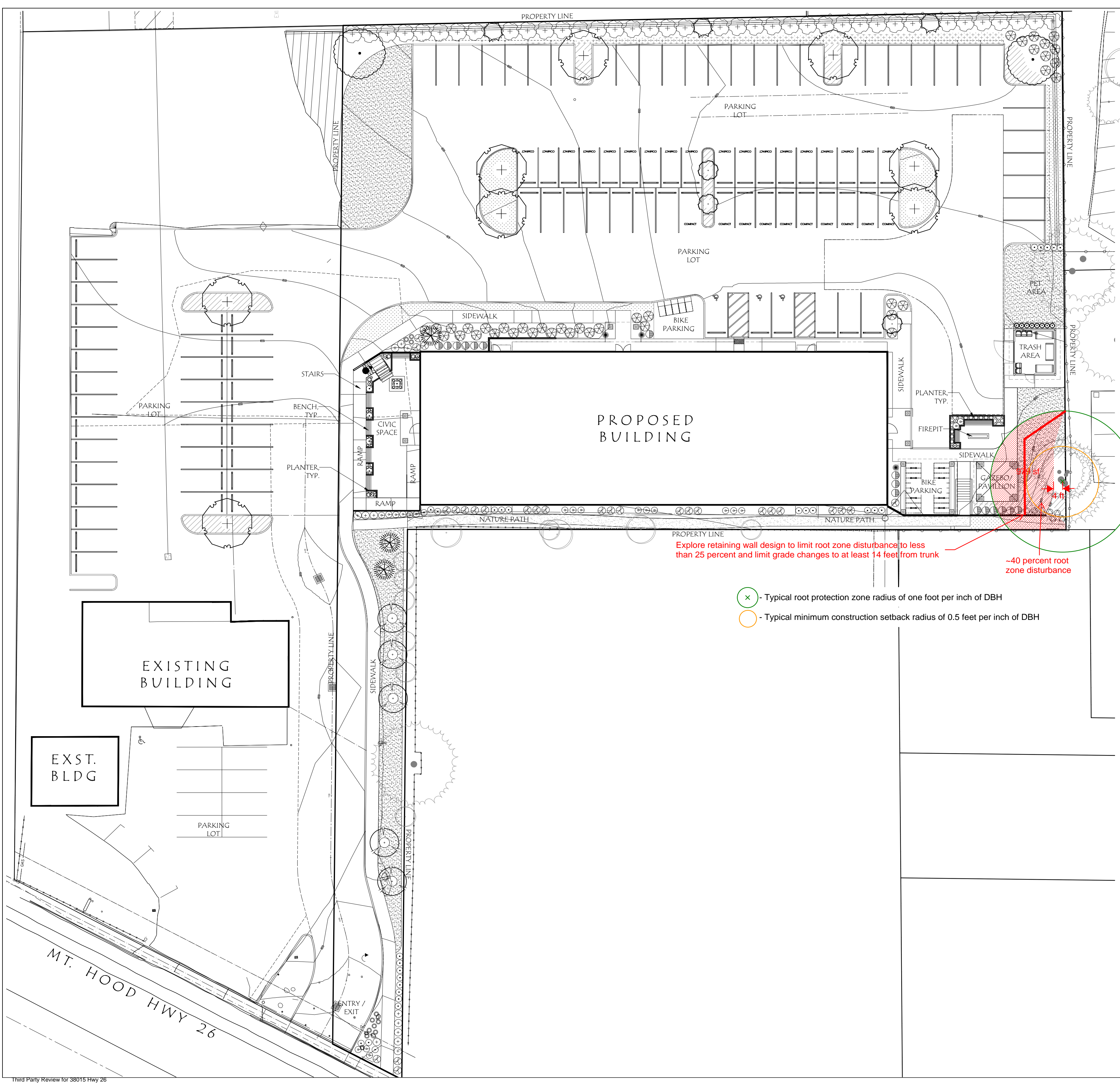
#	DATE	NOTES	INITIALS

**L1.1**

SHEET 1 OF 2

PROJECT #: 1409R  
JANUARY 19, 2023  
Page 25 of 28





- Legend:**
- EXISTING DECIDUOUS TREE TO REMAIN
  - EXISTING EVERGREEN TREE TO REMAIN

## Attachment 2

- General Notes:**
- PLANTING PLAN FOR PRELIMINARY USE ONLY. NOT FOR BIDDING OR CONSTRUCTION.
  - TREE INVENTORY FOR EXISTING TREES TO REMAIN AND REMOVE SEE SHEET L1.1.
  - SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN.
  - SEE CIVIL DRAWINGS FOR GRADING AND UTILITIES.
  - PLANT SIZES MEET MINIMUM CITY OF SANDY PLANT REQUIREMENTS OR GREATER.
  - IRRIGATION TO BE AN AUTOMATIC UNDERGROUND SYSTEM DESIGN BUILT BY THE LANDSCAPE CONTRACTOR.

**Landscape Requirements**  
 Total Site Area (sf): 63,711 sf (1.46 acres)  
 Landscape Area: 15,894 sf  
 Civic Space: 1,614 sf  
 Outdoor Recreation Areas: 9,901 sf  
 Parking Lot: 1 Large Tree Per 12 Spaces  
 Screen/buffer: Evergreen plants to screen within 2 years

### Preliminary Plant Legend

TREES	QTY	BOTANICAL / COMMON NAME	SIZE	NOTES
	3	Chamaecyparis nootkatensis 'Glauca Pendula' / Weeping Nootka False Cypress	5' Ht. Min., B&B	
	3	Chamaecyparis obtusa 'Gracilis' / Slender Hinoki False Cypress	5' Ht. Min., B&B	
	3	Lagerstroemia indica 'Whit II' TM / Dynamite Cape Myrtle	1 1/2" Cal., B&B	
	2	Nyssa sylvatica 'Wildfire' / Black Gum	1 1/2" Cal., B&B	Large Parking Lot Tree
	5	Prunus serrulata 'Amanoyawa' / Japanese Flowering Cherry	1 1/2" Cal., B&B	
	8	Zelkova serrata 'Green Vase' / Sawleaf Zelkova	1 1/2" Cal., B&B	Large Parking Lot Tree

SHRUBS	QTY	BOTANICAL / COMMON NAME	SIZE
	36	Abelia x grandiflora 'Kaleidoscope' / Kaleidoscope Abelia	2 Gal.
	8	Euonymus japonicus 'Greenspire' / Greenspire Upright Euonymus	5 Gal.
	7	Ilex crenata 'Sky Pencil' / Sky Pencil Japanese Holly	24"-30" Ht.
	38	Ligustrum japonicum 'Texanum' / Texas Japanese Privet	5 Gal.
	20	Nandina domestica 'Atropurpurea Nana' / Dwarf Nandina	1 Gal.
	38	Prunus laurocerasus 'Mount Vernon' / Mount Vernon Laurel	1 Gal.
	12	Rosa KnockOut 'Radrazz' / Radrazz KnockOut Rose	2 Gal.
	16	Sarcococca confusa / Fragrant Sarcococca	2 Gal.
	27	Spiraea x bumalda 'Magic Carpet' / Magic Carpet Spiraea	2 Gal.
	7	Symphoricarpos albus / Common White Snowberry	1 Gal.

GRASSES / PERENNIALS	QTY	BOTANICAL / COMMON NAME	SIZE
	23	Calamagrostis x acutiflora 'Karl Foerster' / Karl Foerster Feather Reed Grass	1 Gal.
	3	Hakonechloa macra 'Aureola' / Golden Variegated Forest Grass	1 Gal.
	30	Iberis sempervirens 'Absolutely Amethyst' / Absolutely Amethyst Candytuft	1 Gal.
	16	Pennisetum alopecuroides 'Bungundy Bunny' / Bungundy Bunny Dwarf Fountain Grass	1 Gal.

GROUND COVERS	QTY	BOTANICAL / COMMON NAME	SIZE	SPACING
	195	Arctostaphylos uva-ursi / Kinnikinnick	1 Gal.	30" o.c.
	275	Fragaria chiloensis / Beach Strawberry	4" Pot	18" o.c.
	293	Rubus pentalobus 'Emerald Carpet' / Bramble	1 Gal.	30" o.c.
	3,795 sf	ProTime 301 Water Smarter Fescue or Equal	Seed @ Rate of 10 lbs per 1000 sf	

Explore retaining wall design to limit root zone disturbance to less than 25 percent and limit grade changes to at least 14 feet from trunk

- Typical root protection zone radius of one foot per inch of DBH
- Typical minimum construction setback radius of 0.5 feet per inch of DBH

Laurus Designs, LLC  
  
 1012 Pine Street  
 Silverton, Oregon  
 503.784.6494

Multi-Family  
 Sandy  
 38015 Highway 26  
 Sandy, Oregon

REGISTERED  
 643  
**PRELIMINARY**  
 LAURA A. ANTONSON  
 OREGON  
 11/16/2007  
 LANDSCAPE ARCHITECT

**PRELIMINARY PLANTING PLAN**  
  
 SCALE: 1"=20'-0"  
 0' 10' 20' 40'  
 SCALE  
 September 15th, 2022

**REVISIONS**

#	DATE	NOTES	INITIALS

**L2.1**  
 SHEET 2 OF 2  
 PROJECT #: 1409R  
 JANUARY 15, 2023  
 Page 26 of 28

Third Party Review for 38015 Hwy 26  
 Emily Meharg, City of Sandy



**SITE PLAN GENERAL NOTES:**

- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- REFER TO CIVIL DRAWINGS FOR GRADING. SITE IS REQUIRED TO MEET THE LAWS OF FHA AND ADA. ACCESSIBLE ROUTES SHALL NOT EXCEED 5% (1 IN 20) OR CROSS SLOPES SHALL NOT EXCEED 2% (1 IN 50), ALL AT GRADE SIDEWALKS ARE ACCESSIBLE ROUTES.
- JOINTS IN CONCRETE WALKS NOTED AS E.J. ARE TO BE CONSTRUCTED AS EXPANSION JOINTS. ALL OTHER JOINTS SHOWN, TO BE TOOLED CONTROL JOINTS, SEE CIVIL.
- PROVIDE CONSTRUCTION FENCING AS REQUIRED TO SECURE SITE AND BUILDING DURING CONSTRUCTION.
- EXTREME CARE SHOULD BE TAKEN TO PRESERVE EXISTING ROOTS OF TREES TO REMAIN.
- SEE LANDSCAPE DRAWINGS FOR LANDSCAPE AND IRRIGATION ELEMENTS.
- SEE ELECTRICAL DRAWINGS FOR SITE LIGHTING.

**SITE DEVELOPMENT CODE REVIEW:**

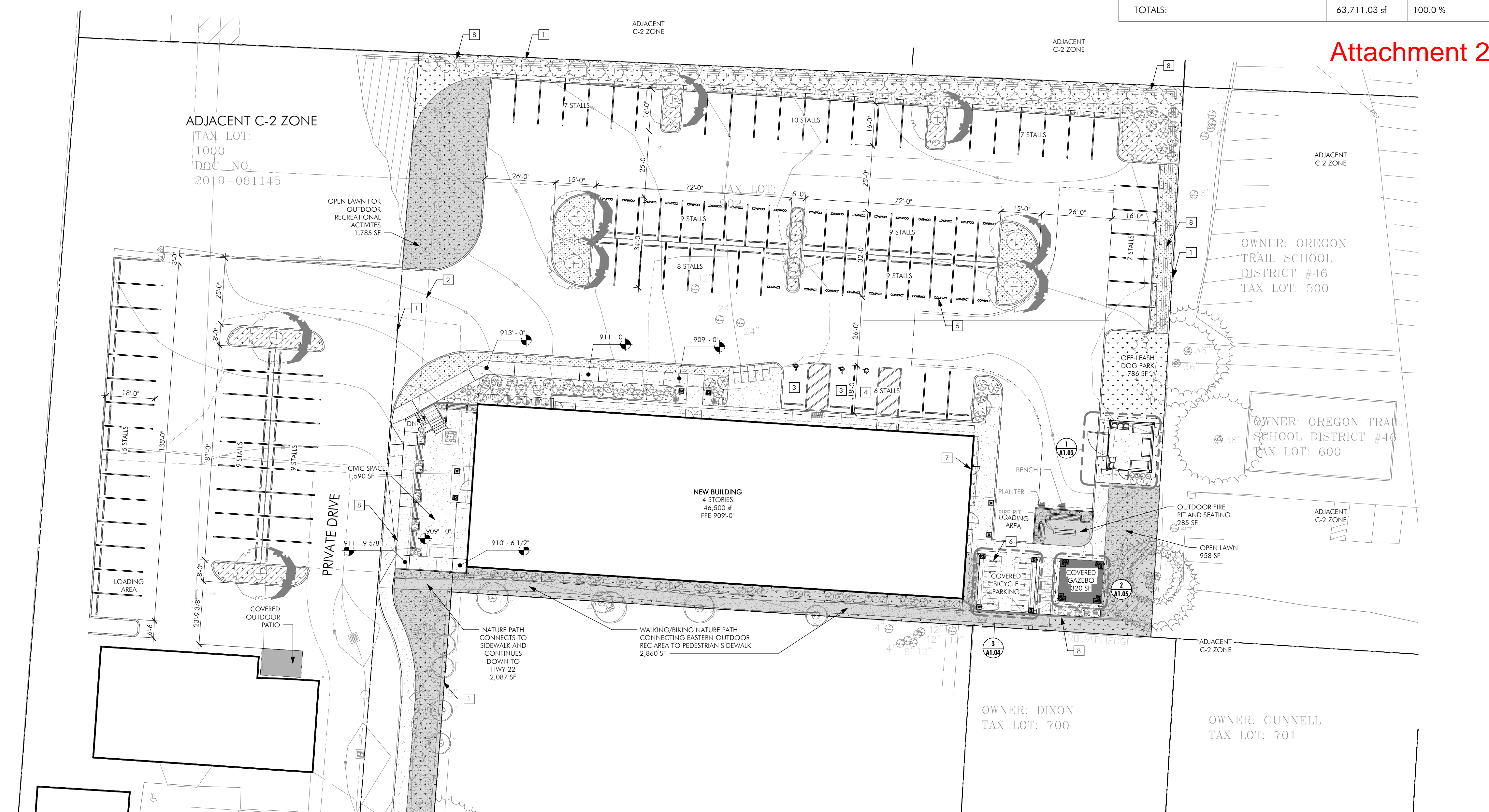
SITE AREA:	63,711 sf = 1.46 ac	CIVIC SPACE REQMT:	3% BUILDING AREA = 1,995 sf <b>PROVIDED = 1,590 sf</b>	PARKING:	1 SPACE PER 2 EMPLOYEES
ZONING:	C-2 General Commercial	OUTDOOR REC AREA:	200 sf PER UNIT = 8,400 sf	STORAGE:	1.5 SPACES PER 1 BD
SETBACKS:	FRONT YARD - 10'-0" SIDE/REAR YARD - NONE	OUTDOOR DOG PARK:	= 786 SF	MULTIFAMILY:	2 SPACES PER 2 BD
BUILDING HEIGHT:	55 FT. <b>PROPOSED: 3 LEVELS OF RES. OVER 1 LEVEL OF STORAGE</b>	COVERED GAZEBO (256 sf x 1.25):	= 320 SF		= 71 SPACES RQ'D
BUILDING AREAS:		OUTDOOR SEATING/FIRE PIT:	= 285 SF		<b>PROVIDED = 72 SPACES</b>
LEVEL 01, STORAGE/LEASING:	11,736 sf	NORTHERN OPEN LAWN:	= 1,785 SF		<b>38% COMPACT</b>
LEVEL 02-04, RESIDENTIAL:	11,736 sf	EASTERN OPEN LAWN:	= 958 SF	BIKE PARKING:	1 PER DWELLING UNIT
<b>OVERALL = 46,500 sf</b>		LANDSCAPED NATURE PATH:	= 2,860 SF	MULTIFAMILY:	= 42 SPACES
		LANDSCAPED NATURE SIDEWALK:	<b>PROVIDED = 9,081 SF</b>		
		UNIT MIX:			
		1 BED / 1 BATH - 30 UNITS			
		2 BED / 2 BATH - 12 UNITS			
		<b>TOTAL UNITS = 42 UNITS</b>			

**SITE PLAN KEYNOTES:**

- PROPERTY LINE
- FRONT SETBACK
- ACCESSIBLE PARKING STALL
- VAN ACCESSIBLE PARKING STALL
- COMPACT PARKING SPACE, PROVIDE PAINTED LETTERING AT EACH STALL AS INDICATED
- SHORT-TERM BIKE PARKING WITH GROUND MOUNTED U-RACKS
- PROVIDE SIGNAGE AT DOOR INDICATING FIRE RISER ROOM
- PROVIDE 3'-6" HIGH GUARDRAIL TOP RETAINING WALL ADJACENT TO RAMP/STAIR WHEN GREATER THAN 30" IN HEIGHT

**SITE CALCULATIONS AND LEGEND:**

SITE ELEMENT DESCRIPTION:	LEGEND:	AREA: (sf)	PERCENTAGE: (%)
BUILDINGS:	[Symbol]	11,279.98 sf	17.70 %
BUILDINGS OVERHANG ABOVE:	[Symbol]		
LANDSCAPING:	[Symbol]	17,328.37 sf	27.21 %
ASPHALT PAVING:	[Symbol]	28,224.39 sf	44.30 %
ACCESSORY STRUCTURES:	[Symbol]	942.48 sf	1.48 %
CONCRETE SIDEWALKS:	[Symbol]	3,322.09 sf	5.21 %
CONCRETE PAVING & CURBS:	[Symbol]	2,613.72 sf	4.10 %
TOTALS:		63,711.03 sf	100.0 %



Attachment 2



275 COURT ST NE  
SALEM, OR 97301-3442  
P: 503.390.6500  
www.studio3architecture.com

FOR PLAN REVIEW ONLY

IN THE EVENT CONFLICTS ARE DISCOVERED BETWEEN THE ORIGINAL SIGNED AND SEALED DOCUMENTS PREPARED BY THE ARCHITECTS AND/OR THEIR CONSULTANTS, AND ANY COPY OF THE DOCUMENTS TRANSMITTED BY MAIL, FAX, ELECTRONICALLY OR OTHERWISE, THE ORIGINAL SIGNED AND SEALED DOCUMENTS SHALL GOVERN.

PROJECT # 2021-146  
DATE: 12/21/2022

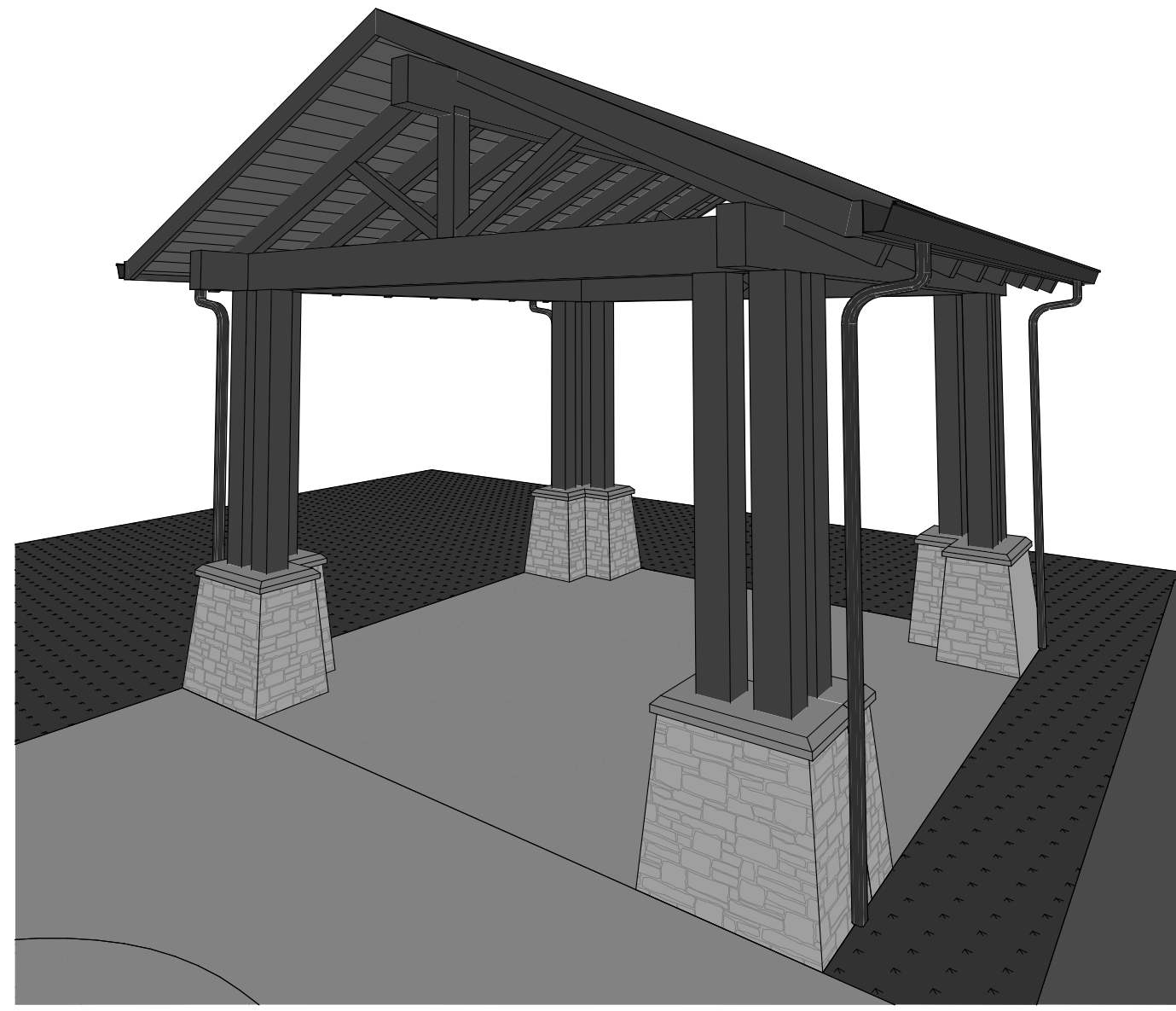
REVISIONS

NEW MULTI-FAMILY DEVELOPMENT  
**SANDY**  
38015 Hwy 26, Sandy, OR

SHEET:  
**A1.02**  
ENLARGED SITE PLAN







Attachment 2

STUDIO



275 COURT ST NE  
SALEM, OR 97301-3442  
P: 503.390.6500  
www.studio3architecture.com



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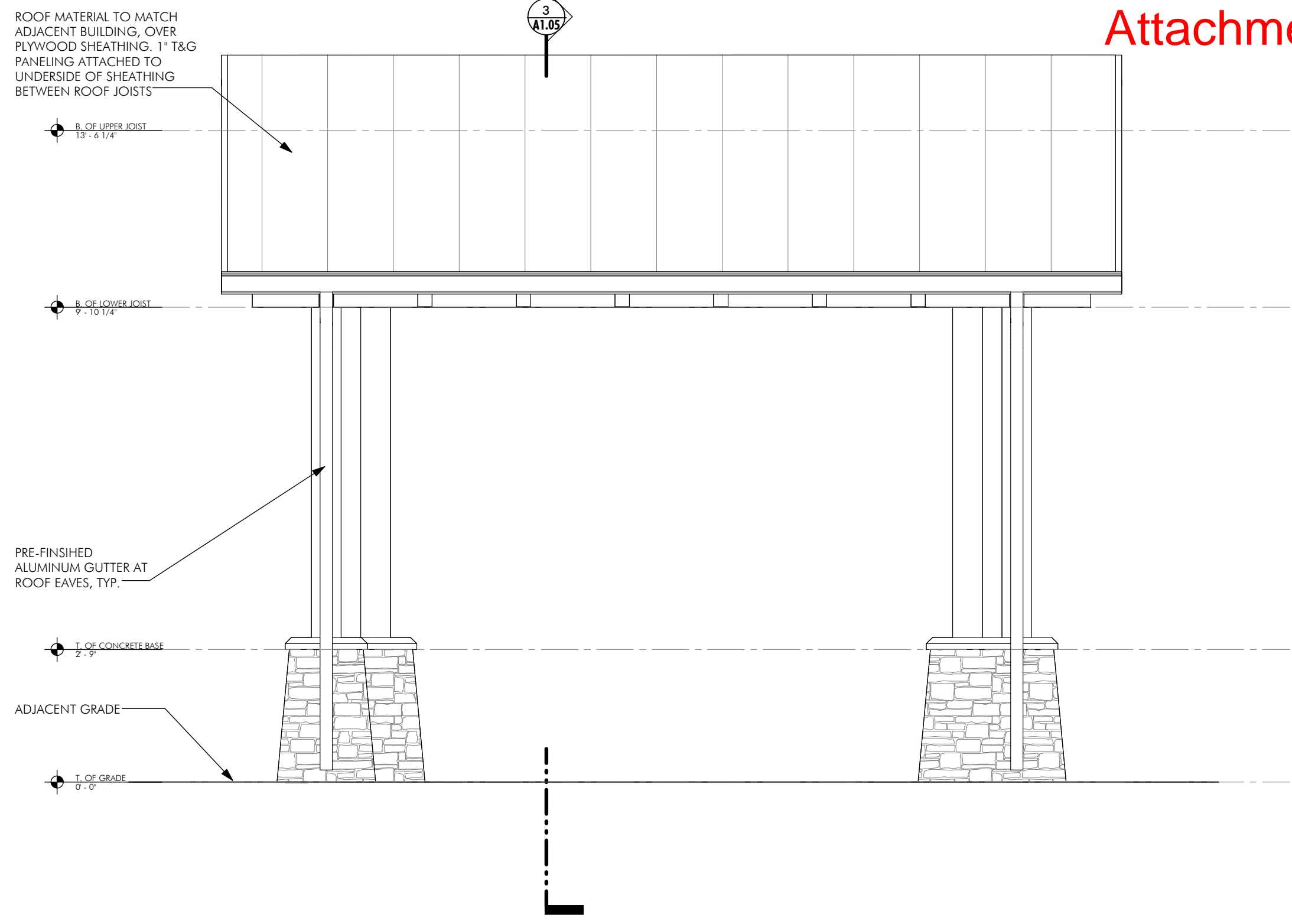
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DATE: 07/29/2022

REVISIONS

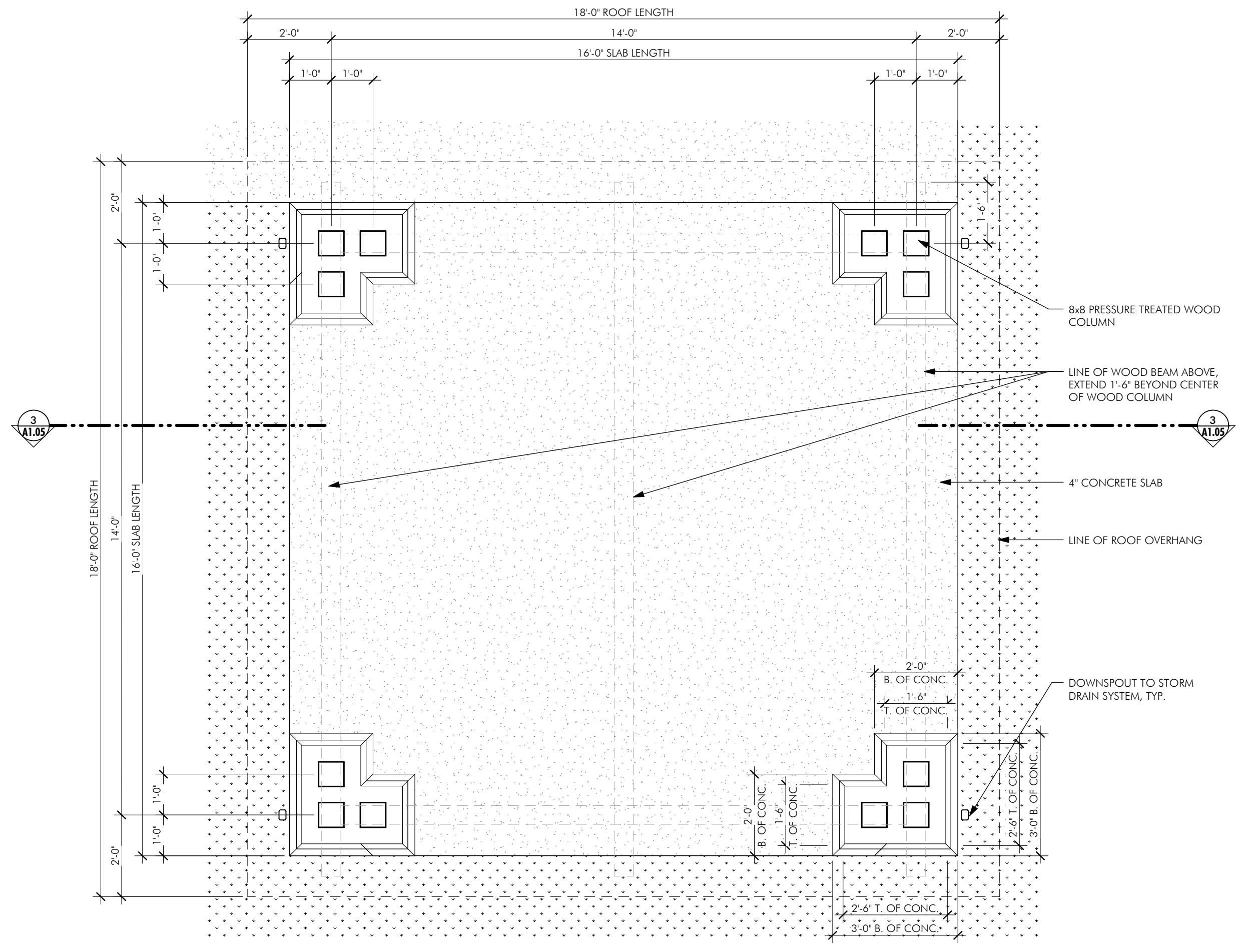
NEW MULTI-FAMILY DEVELOPMENT  
**SANDY**  
38015 Hwy 26, Sandy, OR

SHEET:  
**A1.05**  
GAZEBO

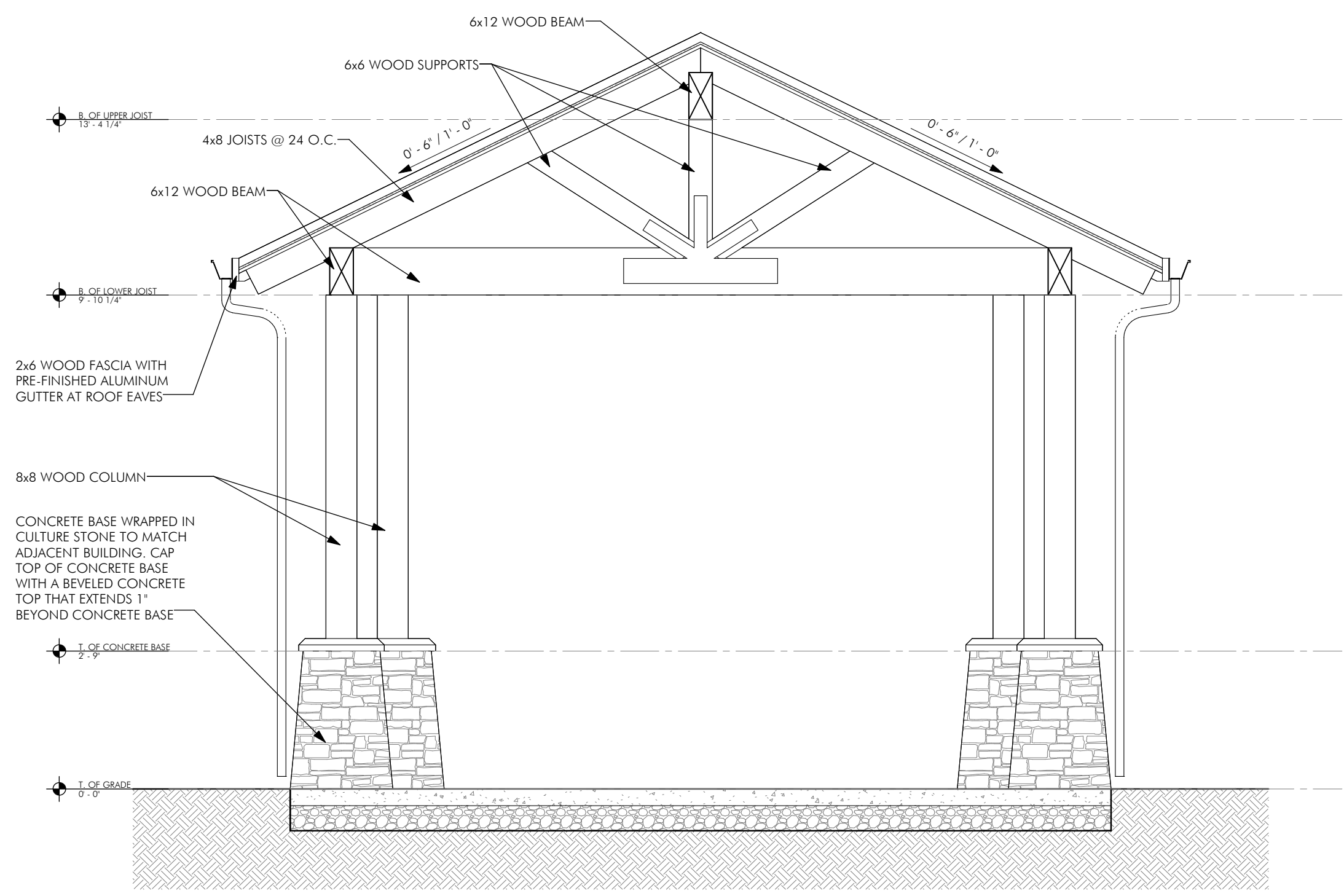
January 19, 2023  
Page 28 of 28



1 GAZEBO - ELEVATION, SIDE  
0 1 2 4 6 1/2" = 1'-0"



2 GAZEBO  
0 1 2 4 6 1/2" = 1'-0"



3 GAZEBO - SECTION  
0 1 2 4 6 1/2" = 1'-0"





# Oregon

Kate Brown, Governor

## EXHIBIT S

### Department of Transportation

Region 1 Headquarters  
123 NW Flanders Street  
Portland, Oregon 97209  
(503) 731.8200  
FAX (503) 731.8259

May 24<sup>th</sup>, 2021

ODOT #12104

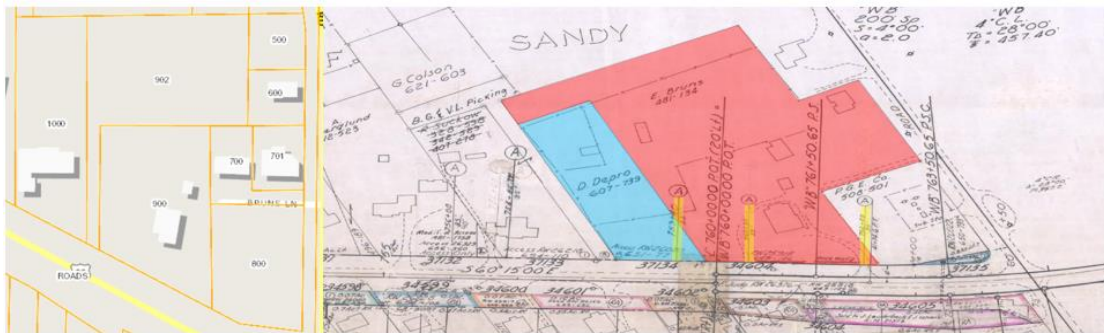
## ODOT Response

<b>Project Name:</b> State Street Homes	<b>Applicant:</b> State Street Homes
<b>Jurisdiction:</b> City of Sandy	<b>Jurisdiction Case #:</b> BKM_PrimJuriCase
<b>Site Location:</b> 2S4E14AD TL902 adjacent to 38015 Hwy 26, Sandy, OR	<b>State Highway:</b> US 26

### ODOT Facilities and Access Control Research

ODOT has permitting authority for US 26 and an interest in ensuring that this proposed land use is compatible with its safe and efficient operation. The applicant is proposing 42 multifamily units with ground floor storage located on the bottom level. The site of this proposed land use action is for TL 902 which is flag lot that is adjacent to US 26.

This section of US26 is access controlled, meaning ODOT has acquired highway access rights along the frontage of TL 1000, TL 902 and TL 900. At the time ODOT acquired access rights TL 902 and TL 900 were part of the same property or had the same owner. Properties only have the right to apply for access to the highway at specific locations identified at specific engineering stations which are called reservations of access. The right of way map below shows reservation locations in yellow. The blue property (TL 1000) has a single reservation of access to serve that tax lot and the property shown in red (TL 902 and TL 900) has two. Based on this research, TL 902 only has the right to apply for access to the highway at reservations of access located on TL 900.



2S-4E-14AD-TL 902 (portion of red area) Access is controlled along US26 (the Mt. Hood Highway) with reservations of access at sta. 760+50 and 762+25.

2S-4E-14AD-TL 1000 (blue) Access is controlled along US26 with a reservation of access at sta. 759+40. For ODOT to review a highway approach that serves TL 902, the property owner needs (1) access rights to the state highway (2) a highway approach permit application.

## Access Options

### Option 1

Work with property of TL 900 to establish a cross over easements to one of reservations located on the frontage of TL 902 (762+25, 35' or 760+50,35').

### Option 2

For ODOT to consider an approach application for a shared access between TL 1000 and TL 902 at the reservation located at engineering station 759+40, the applicant will be required to do the following:

1. Relinquish their interest to access rights at engineering stations 760+50 and 762+25 located on TL 900, in exchange for establishing access rights at 759+40 to benefit TL 902.

To facilitate the exchange of access rights, a Reciprocal Conveyance of Access Rights will be required an Indenture of Access application, checklist and associated fee will be needed:

[https://www.oregon.gov/odot/Engineering/Docs\\_AccessMngt/734-3792.pdf](https://www.oregon.gov/odot/Engineering/Docs_AccessMngt/734-3792.pdf)

2. Establish cross over access easements between TL 1000 and TL 902
3. Submit a State Highway Approach Road Application for highway access at engineering station 759+40. Site access to the state highway is regulated by [OAR 734.51. Application for a Permit to Construct a State Highway Approach.](#)

The recommended conditions of approval below are made under the assumption that the applicant will choose to move forward with Option 2.

## ODOT RECOMMENDED LOCAL CONDITIONS OF APPROVAL

### Access to the State Highway

- A State Highway Approach Road Permit from ODOT for access to the state highway documenting that the existing approach is legal for the proposed use is required. Truck turning templates shall be provided as needed to ensure vehicles can enter and exit the approach safely. Site access to the state highway is regulated by [OAR 734.51. Application for a Permit to Construct a State Highway Approach](#) link.

Note: It may take **2 to 3 months** to process a State Highway Approach Road Permit.

- The applicant shall record a cross-over access easement to TL 1000 with the County Assessor to facilitate shared access. Shared access will improve highway safety by reducing potential conflicts between vehicles and between vehicles and pedestrians and bicyclists at closely spaced driveways and will implement ODOT Access Management Program goals.

### Access Control

- The applicant shall relinquish their interest to access rights at engineering stations 760+50 and 762+25 located on TL 900, in exchange for establishing access rights at 759+40 to benefit TL 902.

To facilitate the exchange of access rights, a Reciprocal Conveyance of Access Rights will be required through an Indenture of Access. An application, checklist and associated fee will be required. [Indenture of Access Application Link.](#)

Permits and Agreements to Work in State Right of Way

- An ODOT Miscellaneous Permit is required for connection to state highway drainage facilities. Connection will only be considered if the site's drainage naturally enters ODOT right of way. The applicant must provide ODOT District with a preliminary drainage plan showing impacts to the highway right of way.

A drainage study prepared by an Oregon Registered Professional Engineer is usually required by ODOT if:

1. Total peak runoff entering the highway right of way is greater than 1.77 cubic feet per second; or
2. The improvements create an increase of the impervious surface area greater than 10,758 square feet.

[Application for ODOT Permit to Occupy or Perform Operations Upon a State Highway Link.](#)

**Please direct the applicant to the District Contact indicated below to determine permit requirements and obtain application information.**

**Send the Land Use Notice to:**

ODOT Region 1 Planning  
Development Review  
123 NW Flanders St  
Portland, OR 97209

[ODOT\\_R1\\_DevRev@odot.state.or.us](mailto:ODOT_R1_DevRev@odot.state.or.us)

Development Review Planner: Marah Danielson	503.731.8258, marah.b.danielson@odot.state.or.us
Traffic Contact: Avi Tayar, P.E.	503.731.8221 Abraham.tayar@odot.state.or.us
District Contact: Loretta Kieffer	503.667.7441 Loretta.l.kieffer@odot.state.or.us





## EXHIBIT T

Emily Meharg <emeharg@ci.sandy.or.us>

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### State Street Homes project in Sandy (38015 Highway 26)

---

**RIKLI Anthony** <Anthony.RIKLI@odot.oregon.gov>  
To: Emily Meharg <emeharg@ci.sandy.or.us>, "Kelly O'Neill Jr." <koneill@ci.sandy.or.us>  
Cc: COX Robert W <Robert.W.COX@odot.oregon.gov>

Wed, Dec 21, 2022 at 1:52 PM

Hi Emily and Kelly,

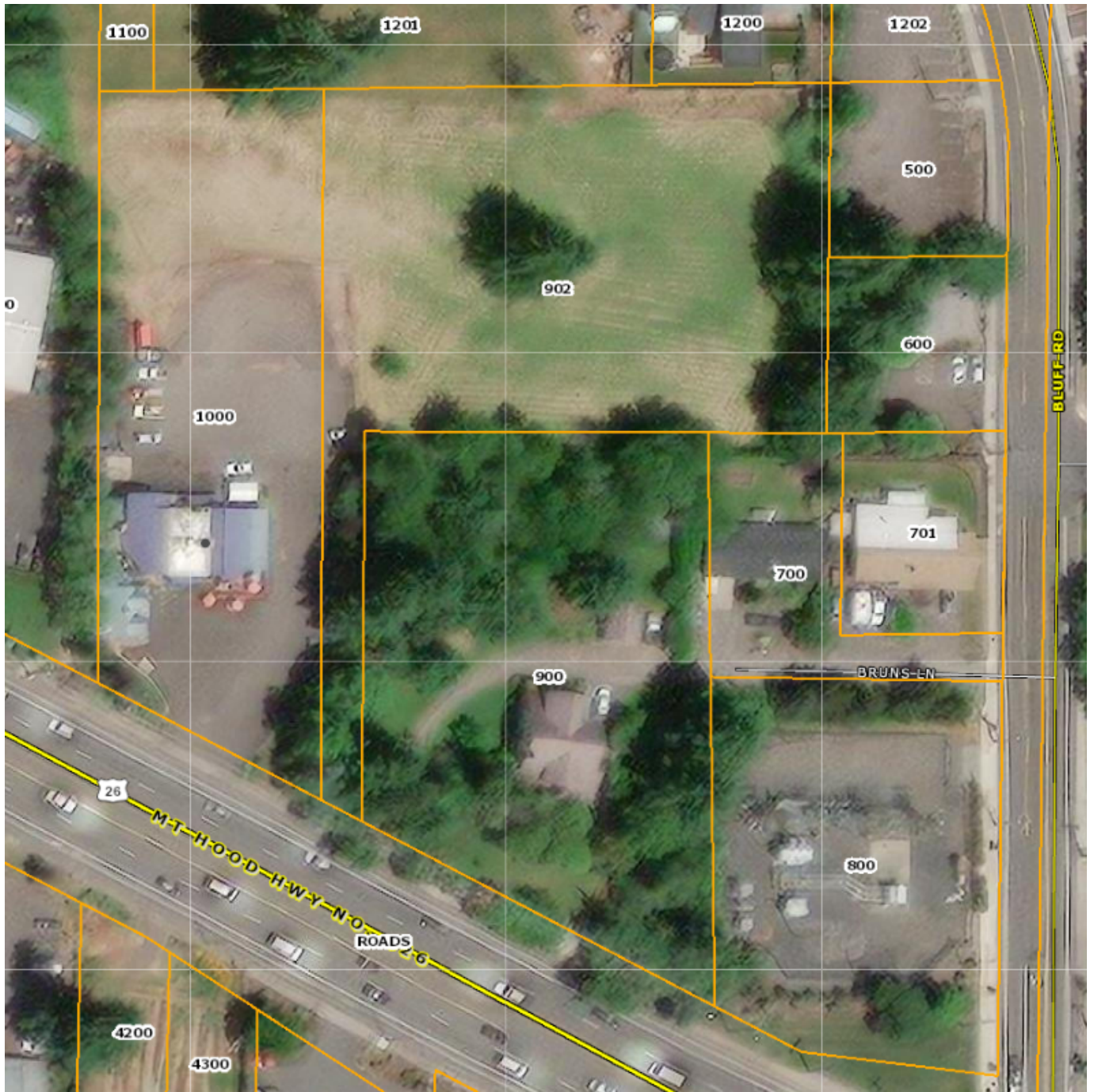
Recently, and I'm sure before my time, with shared accesses we have seen issues where if the access is strictly located on one parcel or another, folks within that parcel have been known to block the access and prevent folks who are legally allowed to use the access entrance onto our facilities. This usually becomes an issue and through some form or another we are fighting an uphill battle to keep the shared access and have to allow another access to our facility. This then creates the potential for more conflict points on our facility, decreasing safety and, more often than not, does not fit within our spacing standard set in Division 51.

That said, the new location for this access will have a center line on the shared tax lot line of TL 902 and TL 1000 therefore removing that likelihood of one owner blocking another's right to access our roadway. A snapshot below shows the general location referenced.

Hope that helps!

Tony

**Tony Rikli, PE**  
Region Access Management Engineer  
ODOT Region 1 Garrett Building  
(503) 731-8563 (office)  
(503) 312-3407 (cell)  
[Anthony.RIKLI@odot.oregon.gov](mailto:Anthony.RIKLI@odot.oregon.gov)



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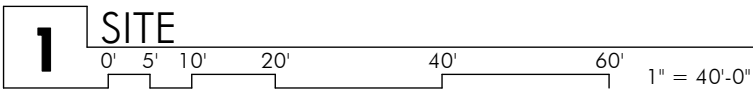
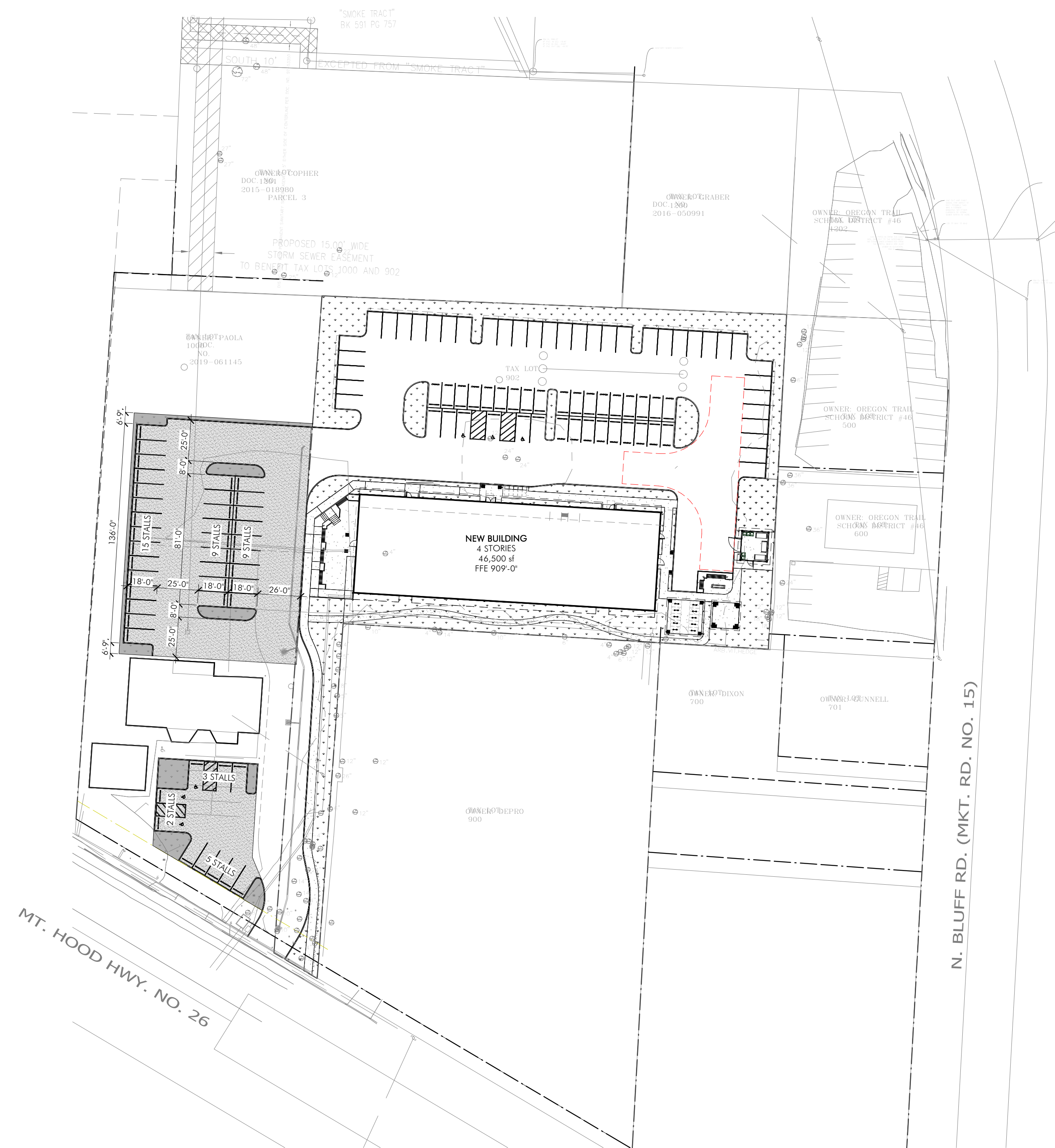


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- PROVIDE CONSTRUCTION FENCING AS REQUIRED TO SECURE SITE AND BUILDING DURING CONSTRUCTION.
- SEE LANDSCAPE DRAWINGS FOR LANDSCAPE AND IRRIGATION ELEMENTS.
- EXTREME CARE SHOULD BE TAKEN TO PRESERVE EXISTING ROOTS OF TREES TO REMAIN.
- SEE ELECTRICAL DRAWINGS FOR SITE LIGHTING.

SITE DEVELOPMENT CODE REVIEW:

- PARKING:
- EATING ESTABLISHMENT: 1 SPACE PER 250 SF (4,421 SF) = 17 SPACES RQ'D  
1 SPACE PER 2 EMPLOYEES (10) = 23 SPACES RQ'D
  - EXISTING PARKING: 44 SPACES  
**PROVIDED = 43 SPACES**  
**0.00% COMPACT**
- BIKE PARKING:
- EATING ESTABLISHMENT: 5% OF RQ'D PARKING, OR 2 SPACES = 2 SPACES
- REQUIRED PARKING LANDSCAPE: 10% OF PARKING LOT
- LOWER PARKING (3,445 SF) = 345 SF
  - UPPER PARKING (15,221 SF) = 1,522 SF
  - **PROVIDED = 1,967 SF**
  - **MINIMUM 5'-0" PLANTERS AT ENDS OF EACH BAY**



275 COURT ST. NE  
SALEM, OR 97301-3442  
P: 503.390.6500  
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PROJECT # 2021-146  
DATE: 02/08/2023

REVISIONS

NEW MULTI-FAMILY DEVELOPMENT  
**SANDY**  
38015 Hwy 26, Sandy, OR

SHEET:  
**A1.01**  
SITE PLAN



**SITE PLAN GENERAL NOTES:**

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**SITE DEVELOPMENT CODE REVIEW:**

SITE AREA: 63,711 sf = 1.46 ac  
 ZONING: C-2 General Commercial  
 SETBACKS: FRONT YARD - 10'-0" SIDE/REAR YARD - NONE  
 BUILDING HEIGHT: 56 FT. PROPOSED: 3 LEVELS OF RES. OVER 1 LEVEL OF STORAGE  
 BUILDING AREAS:  
 • LEVEL 01, STORAGE/LEASING: 11,280 sf  
 • LEVEL 02-04, RESIDENTIAL: 11,736 sf  
**OVERALL = 46,500 sf**

CIVIC SPACE RQ/MT: 3% BUILDING AREA = 1,464 sf PROVIDED = 1,544 sf  
 OUTDOOR REC AREA: 200 sf PER UNIT = 8,400 sf  
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 EASTERN OPEN LAWN = 958 SF  
 LANDSCAPED NATURE PATH = 2,860 SF  
 LANDSCAPED NATURE SIDEWALK = 2,087 SF  
**PROVIDED = 9,081 SF**

UNIT MIX:  
 1 BED / 1 BATH - 32 UNITS  
 2 BED / 2 BATH - 10 UNITS  
**TOTAL UNITS = 42 UNITS**

PARKING:  
 • STORAGE: 1 SPACE PER 2 EMPLOYEES 1.5 SPACES PER 1 BD 2 SPACES PER 2 BD = 70 SPACES RQD PROVIDED = 70 SPACES 38.6% COMPACT  
 • MULTIFAMILY: 1 PER DWELLING UNIT = 42 SPACES

REQUIRED PARKING LANDSCAPE:  
 10% OF PARKING LOT = 2,662 SF PROVIDED = 2,858 SF  
 • MINIMUM 5'-0" PLANTERS AT ENDS OF EACH BAY

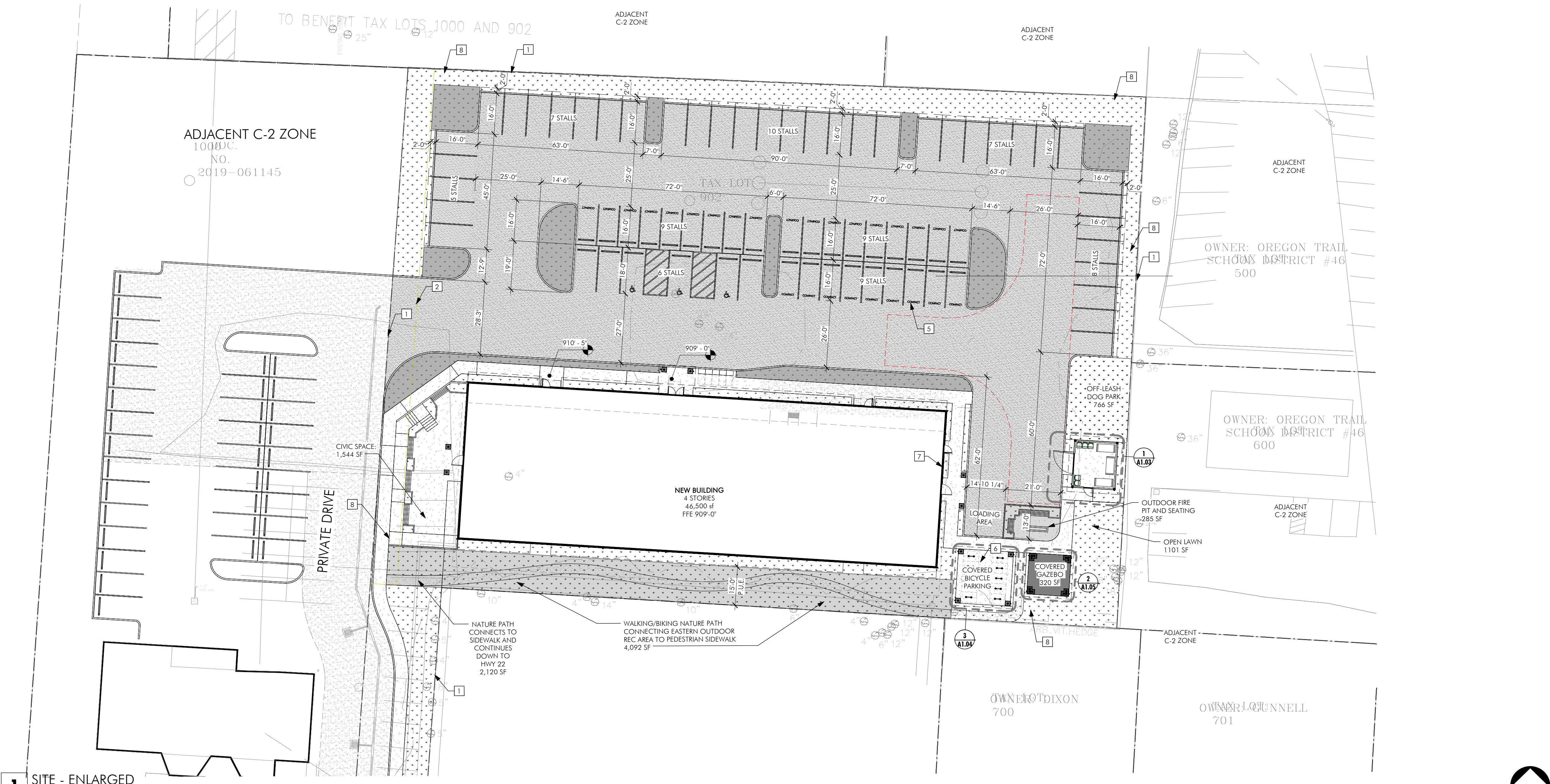
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LANDSCAPING:	[Symbol]	17,328.37 sf	27.21 %
ASPHALT PAVING:	[Symbol]	28,224.39 sf	44.30 %
ACCESSORY STRUCTURES	[Symbol]	942.48 sf	1.48 %
CONCRETE SIDEWALKS:	[Symbol]	3,322.09 sf	5.21 %
CONCRETE PAVING & CURBS:	[Symbol]	2,613.72 sf	4.10 %
TOTALS:		63,711.03 sf	100.0 %



**1 SITE - ENLARGED**  
 0 5 10 20 40 60 1" = 20'-0"



275 COURT ST NE  
 SALEM, OR 97301-3442  
 P: 503.390.6500  
 www.studio3architecture.com

**FOR PLAN REVIEW ONLY**

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PROJECT # 2021-1146  
 DATE: 02/08/2023

REVISIONS

NEW MULTI-FAMILY DEVELOPMENT  
**SANDY**  
 38015 Hwy 26, Sandy, OR

SHEET:  
**A1.02**  
 ENLARGED SITE PLAN



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## EXHIBIT V

The submitted plans are not near enough to determine or effectively predict the future damages to adjacent properties. One cannot determine the proposed wall heights given the height contradictions, and there are no sections or details in the plan set to review and provide comments. The construction of features of work and the methods that might be used are indeterminate given the lack of detail. The methods used may cause damage to my property and I ask for consideration of these factors in your findings.

In accordance with 17.60.00 the potential for flood damage to adjacent properties from improper drainage of the retaining walls and run off from the proposed impermeable surfaces is likely. The proposed drainage is not supported by the appropriate calculations. In addition, the maintenance access is not shown in the plans.

17.66 The variances applied here are only more convenient and they are not more efficient. Many other permutations for property use exist. They are listed in section 17.44 (C-2). A 4-story apartment building is not required to be built here and may not even be an efficient use of the property, certainly not relative to other commercial use ideas that provide more jobs for the area and improve Sandy economics. A multi-use commercial space that includes restaurants, fitness space, office and retail space would most certainly be a more efficient use of the property. Further the retaining wall does not promote innovation or allow for flexibility that would promote innovation. The location of the walls and the size of the wall don't conserve energy. None of the listed adjustments in 17.66 are relevant to a retaining wall in this situation.

In 17.66.70 the circumstances necessitating the variance are in fact the making of the applicant. In D of that same section the construction of this wall on the north side has the potential to cause harm to my property. There is effectively no gap between the proposed wall and my existing fence on my property line. Traditionally a retaining wall has a 'heel' and a 'toe'. The footing and the toe extend to the non-retaining side of the wall and its length is greater than the available space shown on sheet 7/11 "Grading and ESC Plan". This 'toe' side would then extend onto my property and there is no easement currently agreed upon. In addition, the construction of the wall would require construction workers to be on both the north and south side of the wall to install/remove snap ties/formwork and currently the available space shown does not provide for that. How does the designer propose the wall will be built without damaging my property (fence) or needing to be on my property to construct it?

I currently do not experience flooding or water conveyance issues from the adjacent property in review. When the wall is constructed, it will likely require weep holes to be installed to relieve the hydrostatic pressure on the wall. And while there is stormwater management onsite and an impermeable surface on top, water will make its way through to the soil below through joints, cracks, and seams, and it will need to be planned for. This water will make its way to the wall and potentially through the weep holes in the wall. This water will likely make its way on to my property and by code should not be burdened with managing this water. I would like to request more details and information concerning the proposed wall before making final comments.

Bicycles are not allowed on sidewalks for the safety of pedestrians. The proposed 'nature path' is narrow and does not provide safe clearance for pedestrians and cyclists. In addition, it encourages cyclists to break the law to cross onto this path by riding on the sidewalk.

15.30 I am concerned about the potential light pollution from the parking area lights and the exterior lighting on the building. The current property does not provide light pollution to the area and the proposed project may not meet the dark sky code. There isn't enough information to tell if the exterior illumination will be overwhelming or not. There is no mention of reflectors or shields to prevent light

spilling over into the adjacent properties. I would request that we receive more information and time to review the plans and specifications concerning 15.30.

15.44.40 I would like to add my own emphasis on this section to plead that if this project is to be constructed that the erosion control will be tightly monitored. There will be 1000's of yards of nonnative soil imported to this site and the runoff concerns and mobilization of sediment is real. I am a downhill recipient of this potential material, and I would like it to stay on their side of the fence.

In speaking with the resident where the storm water would be sent an easement has not yet been agreed upon.



Kelly O'Neill <koneill@ci.sandy.or.us>

---

## Tolling the 120-day clock

---

**Mark Wilde** <mark@statestreet-homes.com> Tue, Feb 28, 2023 at 9:22 AM  
To: "Kelly O'Neill Jr." <koneill@ci.sandy.or.us>, Mercedes Butchas <Mercedes@studio3architecture.com>, Kelli Grover <kg@firwooddesign.com>  
Cc: Emily Meharg <emeharg@ci.sandy.or.us>, Planning <planning@ci.sandy.or.us>, Brandon Gill <brandon@statestreet-homes.com>, Kosta Fassilis <kosta@statestreet-homes.com>, Emily Moran <emily@statestreet-homes.com>

Kelly,

We agree to toll the 120 clock from February 27, 2023 until April 24, 2023.

**Mark Wilde**  
**Managing Partner**

Direct: 503.593.1529  
Web: [statestreet-homes.com](http://statestreet-homes.com)  
Address: 1233 NW Northrup St #125, Portland, OR 97209



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[Quoted text hidden]

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March 21<sup>st</sup>, 2023

New Mixed Use Development  
38015 Hwy 26  
Sandy, OR  
Zoned C-2, General Commercial

The attached revised drawing package is for a proposed mixed-use project located at 38015 HWY 26. The proposed development has already been submitted for Design Review and reviewed by the Planning Commissioner body. This revised drawing package is to clarify some items addressed in the Planning Commissioner hearing that needed more clarification before a decision could be made. The drawing package does not capture all Conditions of Approval; however, all Conditions of Approval will be captured and address at the time of final Building and Public Works reviews. Outlined below are how/when all items will be addressed:

**Recommended Conditions of Approval:**

- **A.1.a**
  - A 4'-0" colored inlay that connects the pedestrian walkway to the Paola's Pizza Barn entrance has been included.
- **A.1.b**
  - The proposed development will maintain current shared access driveway location at STA 759+40, as well as maintain the existing mature landscape buffer to satisfy this requirement.
- **A.1.c**
  - Mail delivery area is located outside of the building near the front entrance and will be coordinated with the City Engineer and the post office during final review.
- **A.1.d**
  - The revised drawings show a concept of the HWY 26 frontage requirements. The frontage will be refined prior to submitting for final review.
- **A.1.e**
  - Note will be added to the drawing set prior to submitting for final review.
- **A.1.f**
  - All parking on both tax lots meet the minimum standard parking space size requirements (9'-0" x 18'-0"), the parking lot on tax lot 902 has 38.6% compact parking stalls
- **A.1.g**
  - All parking aisles meet aisle width standards noted in 17.98.60(C)

- A.1.h
  - All perimeter parking landscape has a minimum depth of 5'-0"
- A.1.i
  - All parking spaces adjacent to walkways and landscaping are provided with a wheel stop and 5'-0" of perimeter landscaping
- A.1.j
  - 10'-0" x 35'-0" loading area is delineated in the plans
- A.1.k
  - The proposed building on tax lot 902 has been shifted to be outside of the 15'-0" utility easement, including the cantilevered portions of the stories above
- A.1.l
  - Shared access drive has been revised to original location, so this condition no longer applies
- A.2.a
  - Building façade at the ground floor meets this standard through the means of either a protruding gable roof (East, West & North facades) or 9" recessed pockets (North and South facades). No change in wall plane is more than 37'-0" as indicated in the floor plans
- A.2.b
  - **This standard can not be met, thus a variance is being requested. 17.90.120(B) requires an offset every 20'-0" for a depth of 8'-0." This standard is applicable to the typical garden style apartments that Sandy is familiar with, but isn't practical for a building of this scale. 8'-0" building overhangs are not practical in the upper floors without the use of columns at every overhang, which we don't believe would be a better representation of the Sandy style than what we are currently proposing. The proposed building incorporates 4'-0" deep offsets in the upper levels to best reflect the intent of this standard, while keeping the constructability of the building in mind as well.**
- A.2.c
  - Battens have been revised to be 2" wide and a max of 24" o.c.
- A.2.d
  - Revised glazing schedule has been included in the elevations to show that the ground floor glazing requirement on the North façade is met
- A.2.e
  - This will be included at time of Building review
- A.3.a – A.3.c
  - This will be included at time of Building review
- A.4.a – A.4.c
  - These conditions have been captured in the landscape plans
- A.5.a – A.6.e
  - The bulk of these are no longer applicable with the retention of the existing landscape buffer

- **A.7**
  - *This will be included at time of Building Review*
- **A.8**
  - *Parking analysis for Tax lot 1000 is included on A1.01*
- **A.9.a – A.9.d**
  - *These conditions have all been captured in the revised A1.01 & A1.02 sheets*
- **A.10 - G**
  - *This will be included at time of Building Review*

We believe that through the findings above, the proposed project meets all applicable Site and Design approval criteria for a Type II Site and Design Plan Review.

Sincerely,



Mercedes Butchas  
Studio 3 Architecture, Inc  
275 Court Street NE  
Salem, Oregon 97301  
[mercedes@studio3architecture.com](mailto:mercedes@studio3architecture.com)  
503-390-6500



# SITE PLAN & DESIGN REVIEW

# MIXED USE DEVELOPMENT

38105 Hwy 26, Sandy OR

STUDIO  
**3**  
ARCHITECTURE  
INCORPORATED  
275 COURT ST. NE  
SALEM, OR 97301-3442  
P: 503.390.6500  
www.studio3architecture.com

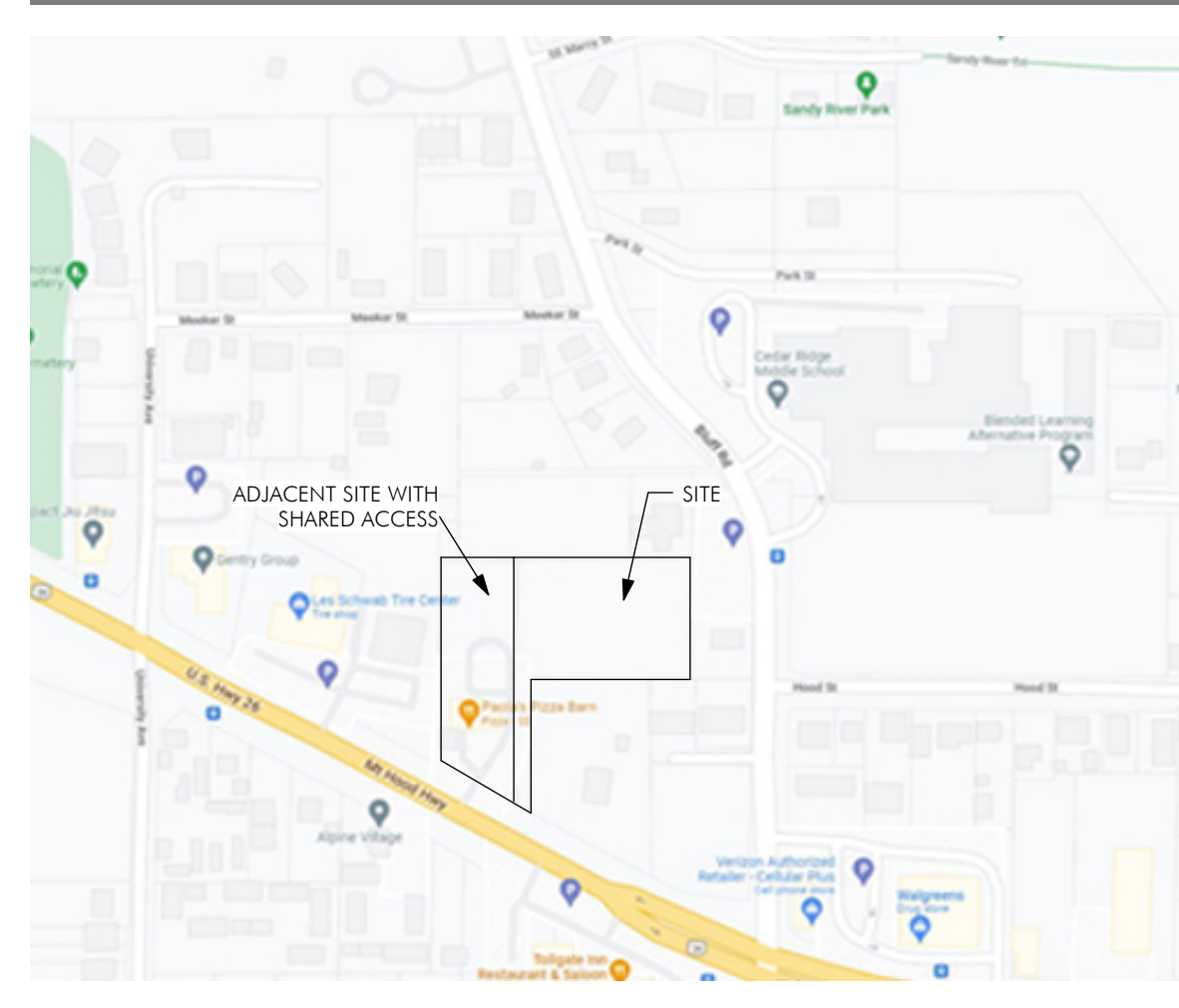
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PROJECT # 2021-146  
DATE: 03/21/2023

REVISIONS

## VICINITY MAP:



## AERIAL PHOTO:



## DRAWINGS LIST:

- GENERAL**  
G0.01 COVER SHEET
- CIVIL**  
C1 COVER SHEET AND NOTES  
C2 EXISTING CONDITIONS AND DEMO PLAN  
C3 COMPOSITE SITE PLAN  
C4 ENTRY UTILITY PLAN  
C5 SITE UTILITY PLAN  
C6 STORMWATER EXTENSION PLAN  
C7 GRADING AND ESC PLAN  
C8 WALL CROSS SECTIONS  
C9 ENTRY GRADING PLAN  
C10 CIVIC AREA GRADING PLAN  
C11 ESC NOTES AND DETAILS  
C12 SITE CIRCULATION PLAN
- LANDSCAPE**  
L1.1 EXISTING TREE INVENTORY  
L2.1 PRELIMINARY PLANTING PLAN
- ARCHITECTURAL**  
A1.01 SITE PLAN  
A1.02 ENLARGED SITE PLAN  
A1.03 TRASH ENCLOSURE  
A1.04 BICYCLE ENCLOSURE  
A1.05 GAZEBO  
A1.21 FLOOR PLAN - LEVEL 01  
A1.22 FLOOR PLAN - LEVEL 02  
A1.23 FLOOR PLAN - LEVEL 03  
A1.24 FLOOR PLAN - LEVEL 04  
A1.25 FLOOR PLAN - ROOF  
A2.01 BUILDING ELEVATIONS  
A2.02 BUILDING ELEVATIONS

## PROJECT TEAM:

**OWNER:**  
State Street Homes, Inc.  
Brandon Gill  
1233 NW Northrup St. #135  
Portland, OR 97209  
P: 503.954.8545  
E: Brandon@statestreet-homes.com

**ARCHITECT:**  
STUDIO 3 ARCHITECTURE, Inc.  
Gene Bolante  
275 Court Street St. NE  
Salem OR 97301  
P: 503.390.6500  
E: Gene@studio3architecture.com

**LANDSCAPE:**  
Laurus Designs, LLC  
Lauara Antonson  
1012 Pine St.  
Silverton, OR 97381  
P: 503.784.6494  
E: laura@laurusdesigns.com

**CIVIL ENGINEER:**  
Firwood Design Group  
Kelli Grover  
359 E. Historic Columbia River HW  
Troutdale, OR 97060  
P: 503.668.3737  
E: kg@firwooddesign.com

## SYMBOL LEGEND:

- ELEVATION DATUM:**  
100.00 F.F.E. ELEVATION DATUM LOCATION
- SECTION REFERENCE:**  
FILLED ARROW DENOTES BUILDING SECTION  
OPEN ARROW DENOTES WALL SECTION/DETAIL  
DETAIL NUMBER  
SHEET NUMBER  
SIDE NOTE IF REQUIRED
- ELEVATION REFERENCE:**  
ELEVATION NUMBER OR DESIGNATION AS OCCURS  
SHEET NUMBER
- DETAIL REFERENCE:**  
DETAIL NUMBER  
SHEET NUMBER  
SIDE NOTE IF REQUIRED  
DETAIL CUT LOCATION IF SHOWN
- WINDOW TYPE:**  
REFER TO WINDOW ELEVATIONS SHOWN ON DRAWINGS AS.1X
- DOOR NUMBER:**  
DOOR SIZE OR NUMBER
- PLAN NOTE DESIGNATION:**  
PLAN OR SIDE NOTE NUMBER  
MARK OR DIAGONAL NOTE NUMBER  
REVISION NUMBER
- ROOM TITLE + NUMBER:**  
ROOM NAME  
ROOM NUMBER
- WALL TYPE MARK:**  
WALL OR PARTITION CONSTRUCTION TYPE. SEE LEGEND.

NEW MULTI-FAMILY DEVELOPMENT

**SANDY**

38015 Hwy 26, Sandy, OR

SHEET:  
**G0.01**  
COVER SHEET



**GENERAL NOTES:**

- ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND THE APPLICABLE PROVISIONS OF THE CITY OF SANDY PUBLIC WORKS STANDARDS. IMPROVEMENTS DEPICTED ON THESE PLANS ARE IN CONFORMANCE WITH THE CITY LAND USE ACTION CASEFILE NO. 12-031 SUB/04.
- IN ORDER TO PROTECT UNDERGROUND FACILITIES, EXCAVATORS PERFORMING THE WORK SET FORTH ON THESE PLANS MUST COMPLY WITH THE PROVISIONS OF ORS 757.541 TO 757.571 (REQUIRES CONTRACTOR TO NOTIFY UTILITIES AT LEAST 48 HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS, PRIOR TO ANY EXCAVATION).
- THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY AND SHOWN FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED PRIOR TO COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.
- VERTICAL DATUM: CITY OF SANDY BENCHMARK #10, ELEVATION=867.035, LOCATED AT THE SE CORNER OF BLUFF ROAD AND MARCY STREET
- TRENCHES WITHIN THE RIGHTS OF WAY SHALL BE BACKFILLED WITH AN APPROVED GRANULAR MATERIAL CONFORMING TO APWA CLASS B SPECIFICATIONS.
- TRENCHES OUTSIDE OF RIGHTS OF WAY MAY BE BACKFILLED IN ACCORDANCE WITH NATIVE MATERIAL AND COMPACTION SPECIFICATIONS FOR APWA CLASS A BACKFILL.
- VEGETATION AND TOPSOIL ARE TO BE STRIPPED TO MINERAL EARTH (AND INSPECTED BY THE PROJECT ENGINEER OR GEOTECHNICAL ENGINEER) PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS.
- IN ADDITION TO ANY REQUIRED COMPACTION TESTING, THE CITY MAY REQUIRE A PROOF ROLL WITH A FULLY LOADED 10-YARD DUMP TRUCK TO CHECK SUBGRADE COMPACTION PRIOR TO PLACEMENT OF ROCK SUBBASE AND AGAIN AT THE COMPLETION OF THE PLACEMENT OF THE BASE ROCK PRIOR TO PAVING THE FIRST LIFT OF ASPHALT.
- ASPHALTIC CONCRETE MIX IS TO BE BATCHED FROM A MIX FORMULA APPROVED BY OSD FOR MATERIAL USED. PAVING CONTRACTOR SHALL PROVIDE A CERTIFICATE OF COMPLIANCE FROM ASPHALT PAVEMENT PLANT.
- SUBSEQUENT SETTLEMENT OR CRACKING OF FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A FAILURE OF THE SUBGRADE AND REPAIRED AT NO COST TO THE CITY AND IN A MANNER ACCEPTABLE TO THE CITY. A PERFORMANCE BOND IS REQUIRED TO GUARANTEE REPAIRS UNDER THE WARRANTY PERIOD.
- THE CONTRACTOR SHALL CONTROL TRAFFIC THROUGH THE PROJECT SITE IN CONFORMANCE WITH THE LATEST EDITION OF "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "OREGON SUPPLEMENTS". THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN LOCAL ACCESS FOR HOMEOWNERS ALONG THE PROJECT SITE.
- THE CONTRACTOR AND/OR SUB-CONTRACTOR SHALL HAVE A MINIMUM OF ONE (1) SET OF APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING THE CONSTRUCTION PHASES.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, TOPSOIL AND OTHER MATERIAL ENCOUNTERED DURING THE CONSTRUCTION OF THE ROADWAY AND WHERE INDICATED ON THE PLANS. MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, REGIONAL AND STATE REGULATIONS AT FACILITIES AUTHORIZED TO ACCEPT SUCH MATERIAL.
- CONTRACTOR SHALL CAREFULLY MAINTAIN BENCHMARKS, PROPERTY CORNERS, MONUMENTS AND OTHER REFERENCE POINTS. IF SUCH POINTS ARE DISTURBED OR DESTROYED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PAY FOR THEIR REPLACEMENT BY EMPLOYING A PROFESSIONAL LAND SURVEYOR TO RESET PROPERTY CORNERS AND OTHER SUCH MONUMENTS.
- EXCESS EXCAVATED MATERIAL SHALL BE HAULED AND DISPOSED OF AT SITES PROVIDED BY THE OWNER AND APPROVED PURSUANT TO AN APPROPRIATE GRADING PERMIT. FILL SITES SHALL BE LEVELED AND GRADED TO DRAIN. THE CONTRACTOR SHALL CORRECT ANY FILL RELATED CONDITIONS.
- FINAL CLEANUP - PRIOR TO FINAL ACCEPTANCE AND PAYMENT, THE CONTRACTOR SHALL CLEAN THE WORK SITE AND ADJACENT AREAS OF ANY DEBRIS, DISCARDED ASPHALTIC CONCRETE MATERIAL OR OTHER ITEMS DEPOSITED BY THE CONTRACTORS PERSONNEL DURING THE PERFORMANCE OF THIS CONTRACT.
- A PERMIT IS REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY, CONTACT THE CITY OF SANDY PUBLIC WORKS DEPARTMENT OR VISIT [www.ci.sandy.or.us](http://www.ci.sandy.or.us) FOR PERMIT APPLICATION FORMS.
- ALL WORK MUST COMPLY WITH CITY OF SANDY GRADING AND EROSION CONTROL PERMIT #xxxx GR/EC ISSUED XX/XX/XX AND THE NPDES 1200C PERMIT ISSUED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY ON YY/YY/YY. ALL WORK MUST COMPLY WITH THE MOST STRINGENT REQUIREMENTS IN BOTH PERMITS.
- ALL WORK MUST COMPLY WITH THE CITY OF SANDY'S EROSION CONTROL STANDARDS. CONTRACTOR TO SCHEDULE INSPECTIONS 48 NORMAL BUSINESS HOURS IN ADVANCE.
- PRIOR TO DEMOLITION OF ANY OF THE EXISTING STRUCTURES ON-SITE, A DEMOLITION PERMIT IS REQUIRED FROM THE CITY OF SANDY.
- ANY EXISTING DOMESTIC OR IRRIGATION WELLS SHALL BE ABANDONED IN CONFORMANCE WITH OAR 690-220-0030. SUBMIT COPY OF WRD ABANDONMENT FORM TO THE CITY. ANY EXISTING ON-SITE SEWAGE DISPOSAL SYSTEM SHALL BE ABANDONED IN CONFORMANCE WITH CLACKAMAS COUNTY WES REGULATIONS. THE CONTRACTOR SHOULD SUBMIT COPY OF THE CERTIFICATES FOR WELL ABANDONMENT AND SEPTIC TANK REMOVAL TO THE CITY.
- IF, AT ANYTIME DURING THE ON-SITE CONSTRUCTION, THE CONTRACTOR OBSERVES AN ENVIRONMENTAL IMPACT ON-SITE SUCH AS OIL TANKS, CONTAMINATION RESIDUE OR HAZARDOUS MATERIALS, SPILLAGE, ETC., IT MUST BE REPORTED, INSPECTED, AND TREATED IN CONFORMANCE WITH THE APPROPRIATE AGENCY'S REQUIREMENTS.

# MIXED USE SITE DEVELOPMENT

38015 HWY 26, SANDY, OR 97055

**SANITARY SEWER NOTES:**

- SEWER PIPE AND FITTINGS TO BE GREEN PVC GRAVITY SEWER PIPE CONFORMING TO ASTM D-3034, SDR 35 FOR 8" AND 6", SDR26 FOR 15", WITH RUBBER RING TYPE JOINTS CONFORMING WITH ASTM D-3212. SUBMIT CERTIFICATE OF COMPLETION OF 95% MANDREL TEST ON ALL PIPES AFTER COMPACTION.
- PIPE BEDDING, PIPE ZONE MATERIALS SHALL BE 3/4" MINUS CRUSHED ROCK. BACKFILL WITHIN THE RIGHT-OF-WAY SHALL BE 3/4" MINUS CRUSHED ROCK COMPACTED TO 95% OF AASHTO T-180 (ASTM D-1557).
- SEWER MAINS TO BE AIR TESTED AS PER APWA PART 00445.72. 95% MANDREL TESTED AS PER APWA PART 00445.73. AND VIDEO INSPECTED AS PER APWA PART 00445.74 FOLLOWING TRENCH BACKFILL AND COMPACTION.
- LATERALS SHALL BE 6" 3034 PVC PIPE, GREEN IN COLOR, AND SHALL BE INSTALLED AT 2% MINIMUM SLOPE UNLESS OTHERWISE NOTED.
- MANHOLE TESTING SHALL BE AS PER APWA PART 00470.71.
- SETTLEMENT OF THE FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A RESULT OF IMPROPER COMPACTION AND SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- ALL AC SAWCUT LINES SHALL BE STRAIGHT. ALL EDGES SHALL BE SEALED AND SANDED UPON COMPLETION.
- ALL SERVICE LATERALS SHALL EXTEND 5 FT. BEYOND THE PROPERTY LINE. THE END SHALL BE MARKED WITH A SINGLE 2X4 WHICH EXTEND 2 FT. ABOVE FINISH GRADE. THE EXPOSED PORTIONS OF THE 2X4 SHALL BE PAINTED WHITE. DEPTH OF LATERAL SHALL BE PAINTED ON THE 2X4, CLEANOUTS SHALL BE INSTALLED FOR EACH STRUCTURE.
- SANITARY LATERAL LOCATIONS SHALL BE STAMPED WITH AN "S" ON THE CURB FACE FOR FUTURE LOCATION.
- SEWER AND WATERLINE CROSSINGS MUST MEET THE REQUIREMENTS OF OAR 333-061-0050(9)
- PRIOR TO CONSTRUCTION, OBTAIN APPROVAL FOR THE SANITARY SEWER SYSTEM FROM THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) AS PER OAR 340-052 AND SUBMIT A COPY OF THE APPROVAL TO THE CITY (ENGINEER TO APPLY FOR APPROVAL).
- CONTRACTOR TO SUBMIT A BYPASS PUMPING PLAN FOR TRUNK LINE RELOCATION, PLAN SHALL INCLUDE DETAILS ON PUMP SIZING FOR PEAK FLOWS, STANDBY, BACKUP PUMP(S), PUMP ATTENDANT AND / OR DIAL-OUT SYSTEM FOR PUMP FAILURE OR MALFUNCTION

**STREET AND STORM DRAINAGE NOTES:**

- STREET AND STORM DRAIN IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF SANDY STANDARDS AND REQUIREMENTS.
- ALL TRENCH EXCAVATION SHALL CONFORM TO STANDARD STORM SEWER SPECIFICATIONS AND SHALL BE UNCLASSIFIED.
- PIPE BEDDING AND PIPE ZONE SHALL CONFORM TO THE EXCAVATION AND BACKFILL DETAILS, AND SHALL BE 3/4"-0" CRUSHED ROCK.
- THE CITY REQUIRES COMPACTION WITHIN THE RIGHT-OF-WAY TO BE 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD USED TO ACHIEVE REQUIRED COMPACTION.
- TRENCH BACKFILL OUTSIDE OF RIGHTS OF WAY OR PAVED AREAS MAY BE EXCAVATED TRENCH MATERIAL. TRENCH BACKFILL IN PAVED AREAS SHALL BE AN APPROVED GRANULAR MATERIAL.
- MATERIAL IN SOFT SPOTS WITHIN THE ROADWAY SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH 1-1/2"-0" CRUSHED ROCK. THE ENTIRE SUBGRADE SHALL BE THOROUGHLY COMPACTED TO 95% AASHTO T-180.
- CONTRACTOR SHALL NOTIFY THE ENGINEER AND CITY OF SANDY WHEN SUBGRADE IS COMPLETE AND 24 HOURS PRIOR TO PLACEMENT OF ROCK BASE MATERIAL AND 24 HOURS PRIOR TO FINAL PAVING FOR AN INSPECTION OF THE WORK. FAILURE TO DO SO WILL MAKE ANY SUBGRADE FAILURE PROBLEMS THE RESPONSIBILITY OF THE CONTRACTOR. A PROOF ROLL WITH A FULLY LOADED 10-YARD DUMP TRUCK MAY BE REQUIRED TO CHECK SUBGRADE COMPACTION PRIOR TO PLACEMENT OF ROCK SUBBASE AND AGAIN AT THE COMPLETION OF THE PLACEMENT OF THE BASE ROCK PRIOR TO PAVING THE FIRST LIFT OF ASPHALT.
- ALL SAWCUT JOINTS SHALL BE STRAIGHT, TACKED AND SAND SEALED UPON PAVING.
- THE CITY REQUIRES A SUCCESSFUL MANDREL PULL ON ONE SECTION OF EACH DIAMETER OF STORM PIPE USED.
- ASPHALT COMPACTION SHALL BE PERFORMED USING NUCLEAR GAUGE. THE RICE DENSITY TESTS SHALL EET 91% FOR THE BASE LIFT AND 92% FOR THE TOP LIFT IN ACCORDANCE WITH ODOT TM305 OR AASHTO T-209. SUBMIT TESTING REPORTS TO THE CITY.
- STORM DRAIN LATERALS SHALL BE 4" 3034 PVC AND WHITE IN COLOR. PLACE 2X4 WOODEN PIPE MARKER AT END OF EACH LATERAL.

**GRADING NOTES:**

- FILLS SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY IN THE BUILDING ENVELOPE AND 92 PERCENT OF MAXIMUM DENSITY ON THE REMAINDER OF THE LOT AS DETERMINED BY ASTM TEST SD 1557-91, METHOD A, OR AN EQUIVALENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE NECESSARY ARRANGEMENTS FOR SUCH TESTING AND FOR SUPPLYING THE RESULTS TO THE CITY OF SANDY.
- ALL CUTS SHALL BE MADE CONSISTENT WITH THE DETAILS NOTED IN THE PLANS. NO CUT SHALL EXCEED A GRADE OF 2 HORIZONTAL TO 1 VERTICAL UNLESS APPROVED BEFOREHAND BY THE ENGINEER AND THE CITY OF SANDY.
- APPROPRIATE BENCHING OF FILLS IS REQUIRED FOR FILLS OVER 5 FEET IN HEIGHT ON SLOPES IN EXCESS OF 5 HORIZONTAL TO 1 VERTICAL. BENCHING MUST BE DONE AS PER THE APPROVED PLANS. THE CITY OF SANDY SHALL INSPECT BENCHES PRIOR TO FILL PLACEMENT.
- CUT AND FILL SLOPES SHALL BE PROTECTED FROM EROSION. SUCH CONTROL MAY CONSIST OF APPROPRIATE REVEGETATION OR OTHER ACCEPTABLE MEANS AND METHODS. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTHWORK OR SITE STRIPPING.
- THE CONTRACTOR SHALL COORDINATE WITH CITY PERSONNEL BY CALLING (503) 668-6941 OR (503) 668-5533 ANYTIME FOR REQUIRED INSPECTIONS AT THE FOLLOWING STAGES OF CONSTRUCTION:

**UTILITY NOTES:**

- THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FROM THE CITY OF SANDY PRIOR TO BEGINNING CONSTRUCTION.

**NOTIFICATION:**

GENERAL - THE CONTRACTOR SHALL, AS A MINIMUM, COORDINATE THE PROPOSED CONSTRUCTION ACTIVITIES WITH THE OWNER AND LOCAL PUBLIC AGENCIES, UTILITIES AND COMPANIES DURING CONSTRUCTION TO AVOID DAMAGE AND TO PREVENT THE INTERRUPTION OF SERVICES AND UTILITIES TO RESIDENTS AND BUSINESSES:

OREGON UTILITY NOTIFICATION CENTER  
1-503-246-6699

CLACKAMAS COUNTY  
(503) 353-4400

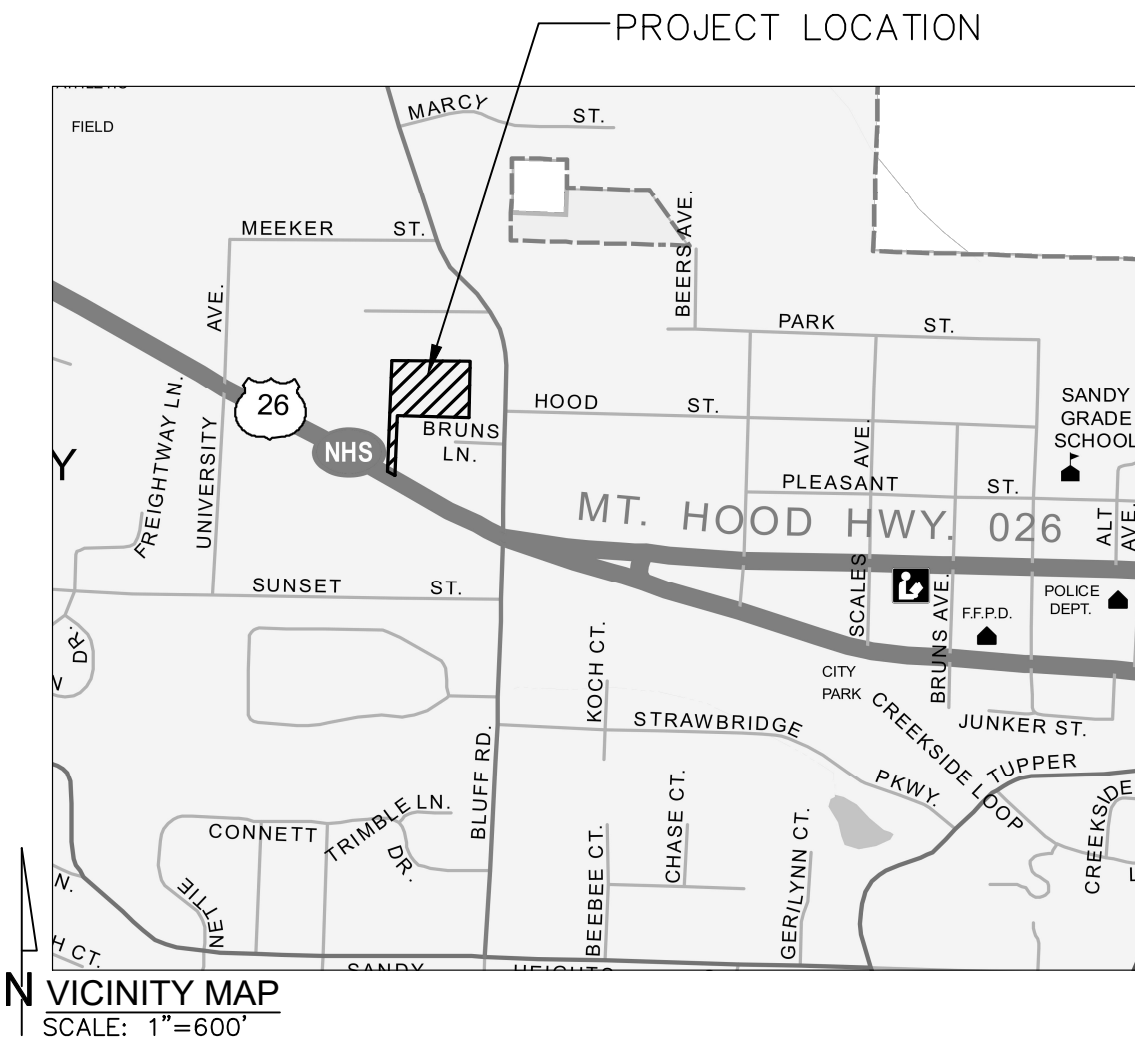
CITY OF SANDY ENGINEERING DEPT. (503) 668-5533  
BUILDING DIVISION INSPECTIONS (503) 668-6941

PORTLAND GENERAL ELECTRIC  
(503) 226-8111

VERIZON NORTHWEST (TELEPHONE)  
1-800-483-4100

NORTHWEST NATURAL GAS  
(503) 226-4211

CHARTER COMMUNICATIONS (CABLE TV)  
1-866-731-5420



**WATERLINE NOTES**

- STENCIL "W" ON CURBS AT WATER METER LOCATION.
- ALL PUBLIC WATERLINE PIPE SHALL BE PRESSURE CLASS 350 DUCTILE IRON. DUCTILE IRON PIPE SHALL BE CEMENT-MORTAR LINED AND SHALL CONFORM TO AWWA STANDARD C151 AND C104 AND SHALL BE U.S. TYTON JOINT PIPE OR APPROVED EQUAL. RUBBER RING GASKETS SHALL CONFORM TO ANSI A-21.10 AND ANSI A-21.4. MORTAR LINING SHALL BE SAME THICKNESS AS FOR PIPE.
- NO PUBLIC WATER VALVES SHALL BE OPENED OR CLOSED (OPERATED) BY ANYONE BUT THE CITY OF SANDY.
- ALL PUBLIC WATERLINES PIPE SHALL HAVE A MINIMUM OF 36" OF COVER IN STREET RIGHT OF WAYS TO FINISH GRADE UNLESS OTHERWISE SHOWN.
- ALL WATERLINES SHALL BE THOROUGHLY FLUSHED AND CHLORINATED AND PORTABLE WATER TEST SHALL BE APPROVED BY THE OREGON STATE HEALTH DEPARTMENT AND THE CITY OF SANDY PRIOR TO ANY METER SERVICE HOOK-UP OR CONNECTION TO EXISTING SYSTEM. DISINFECTION TESTING OF ALL WATERLINES TO BE PER AWWA C-651
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPER SEPARATION BETWEEN SANITARY SEWER LINES AND WATERLINES AS REQUIRED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY AND SATE DEPARTMENT OF HEALTH.
- ALL FILLING, FLUSHING, AND TESTING OF NEW WATERLINE FACILITIES SHALL BE DONE THROUGH A 6" DOUBLE-CHECK DEVICE AND TEMPORARY BLOW-OFFS.
- MECHANICAL RESTRAINT IS REQUIRED AT ALL FITTINGS AS OPPOSED TO THRUST BLOCKING
- PRIOR TO CONSTRUCTION, OBTAIN APPROVAL FOR THE WATER SYSTEM FROM THE OREGON DEPARTMENT OF HUMAN SERVICES, DRINKING WATER PROGRAM AS PER OAR 333-061 AND SUBMIT A COPY OF THE APPROVAL TO THE CITY (ENGINEER TO APPLY FOR APPROVAL)
- ALL WATERLINES TO BE HYDROSTATIC TESTED PER AWWA C-600

**WATER SERVICES**

- WATER SERVICE PIPE SHALL BE COPPER TUBING CONFORMING TO ASTM B88, TYPE K, ANNEALED, THE TUBING SHALL BE COUPLED USING FLARE TYPE COMPRESSION FITTINGS CONFORMING TO THE REQUIREMENTS OF AWWA C800 WITH MINIMUM 150 PSI WORKING PRESSURE.
- SADDLES SHALL BE STAINLESS STEEL, DOUBLE STRAPS OR BAND TYPE WITH STANDARD TAPPING TO MATCH SERVICE REQUIREMENTS.
- CORPORATION STOPS SHALL CONFORM TO AWWA C800 AND SHALL BE OF LEAD-FREE BRONZE ALLOY WITH COLD-FLARE CUTS OR COMPRESSION OUTLET. DIRECT TAP CONNECTIONS SHALL BE AWWA TAPERED THREAD INLET. SADDLE CONNECTIONS SHALL BE IP INLET. REFER TO STANDARD DRAWING #408 FOR APPROVED MANUFACTURERS AND MODEL NUMBERS
- METER STOPS SHALL BE ANGLE PATTERN WITH LOCK WINGS, REFER TO STANDARD DETAIL NO. 408 FOR APPROVED MANUFACTURERS AND MODEL NUMBERS.



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**SHEET INDEX**

- COVER SHEET AND NOTES
- EXISTING CONDITIONS AND DEMO PLAN
- COMPOSITE SITE PLAN
- ENTRY UTILITY PLAN
- SITE UTILITY PLAN
- STORMWATER EXTENSION PLAN
- GRADING AND ESC PLAN
- WALL CROSS SECTIONS
- ENTRY GRADING PLAN
- CIVIC AREA GRADING PLAN
- ESC NOTES AND DETAILS
- SITE CIRCULATION PLAN

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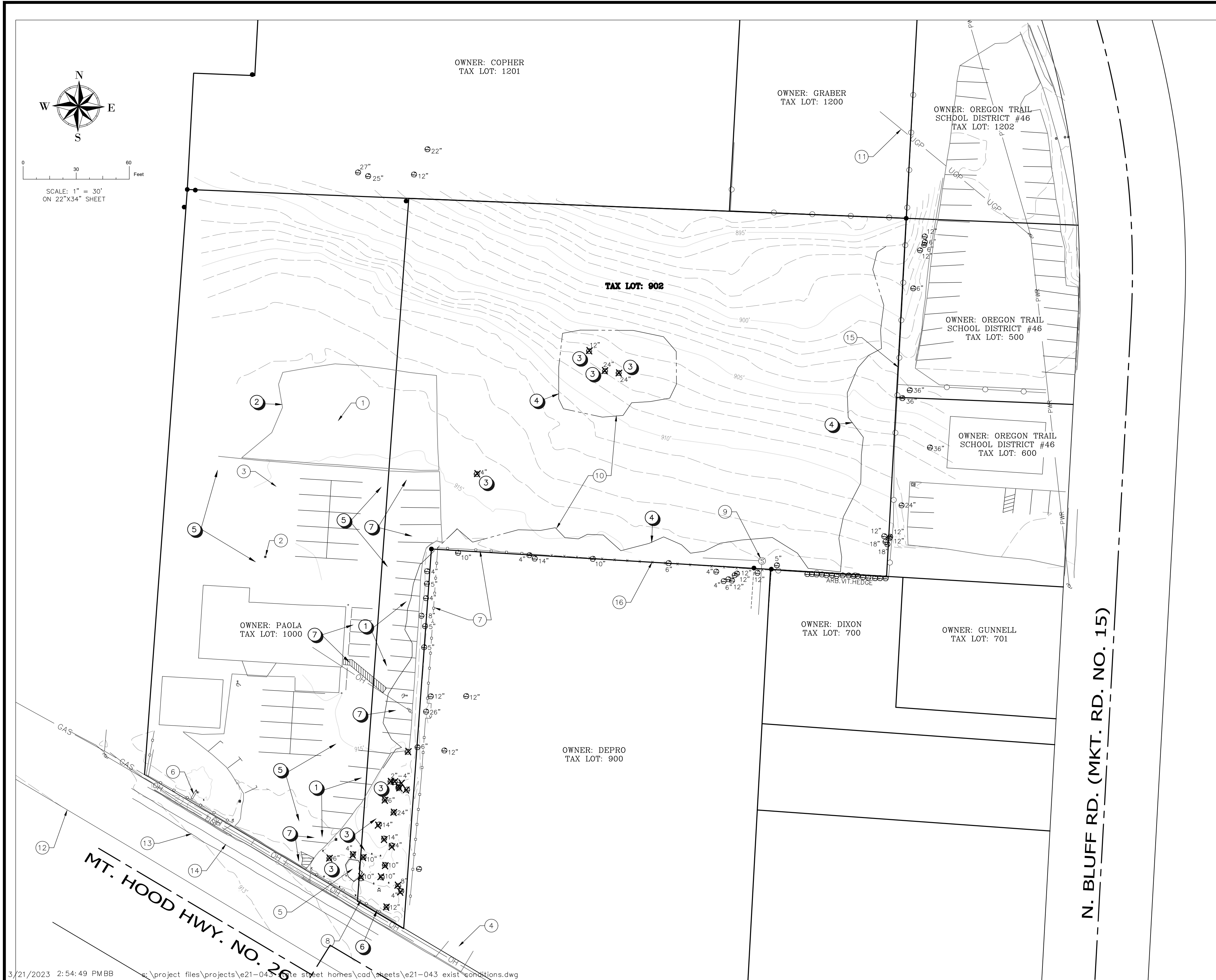
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY  
TROUTDALE, OREGON 97060  
(503) 668-3737

STATE STREET HOMES  
1233 NW NORTHRUP ST. #125  
PORTLAND, OR 97209

COVER SHEET AND NOTES  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

1  
12





**AS-BUILT NOTES**

- 1 GRAVEL PARKING AREA USED FOR DELIVERY SEMIS WITH 35' TRAILER TURNING AND LARGE VEHICLE PARKING.
- 2 STORM DRAIN IN PAVED PARKING LOT.
- 3 PAVED PARKING AREA WITH VERY FADED PARKING LINES.
- 4 NEAREST DRIVEWAY APPROACH
- 5 EXISTING POND LANDSCAPE FEATURE WITH STONE BORDER AND SMALL PATH. SEVERAL ELECTRICAL OUTLETS IN THE AREA TO THE EAST.
- 6 EXISTING PAOLA'S PIZZA SIGN.
- 7 NEWER 6-FOOT WOOD FENCE BELONGING TO DEPRO.
- 8 OLD 2-FOOT WOOD DECORATIVE FENCE RUNS ALONG FRONTAGE ON BOTH SIDES OF APPROACH.
- 9 EXISTING SANITARY SEWER MANHOLE LID.
- 10 TREE DRIP LINE.
- 11 UNDERGROUND POWER TO GRABER RESIDENCE. LOCATION NOT VERIFIED. INFORMED OF IT'S EXISTENCE VIA GRABER AND TOLD IT IS 9' UNDERGROUND.
- 12 NORTHERN MOST LINE OF CENTER TURN LANE.
- 13 FOG LINE.
- 14 BIKE LANE.
- 15 6-FOOT CHAINLINK FENCE.
- 16 3-FOOT WELDED WIRE FENCE WITH GATE JUST WEST OF MANHOLE LID.

CONTOURS: 1' MINOR AND 5' MAJOR

FIELD WORK CONDUCTED ON JULY 14 AND 15, 2021. WATER AND SEWER LOCATES WERE NOT MARKED AT THE TIME OF SURVEY. SEE CITY MAP.

THIS DOES NOT CONSTITUTE A FORMAL BOUNDARY SURVEY. THIS BOUNDARY IS BASED ON A BEST FIT OF S11941 TO FOUND MONUMENTS. RIGHTS-OF-WAYS HAVE NOT BEEN RESOLVED AND MAY NOT BE ACCURATE.

**LEGEND**

- FOUND MONUMENT OF RECORD
- WOOD FENCE
- CHAINLINK FENCE
- BARBWIRE/WOVEN WIRE/FARM FENCE
- ⊙ EXISTING TREE WITH DIAMETER
- ⊙ ELECTRICAL OUTLET
- UGP — UNDERGROUND ELECTRIC
- PWR — OVERHEAD WIRE
- ⊙ UTILITY POLE
- GAS — UNDERGROUND GAS LINE
- ⊙ IRRIGATION CONTROL BOX
- ⊙ 5' LAMP POST
- ⊙ FLOOD LIGHT
- ⊙ SANITARY SEWER MANHOLE
- SS — SANITARY SEWER LINE
- ⊙ STORM SEWER MANHOLE
- ⊙ STORM CATCH BASIN
- ⊙ SPRINKLER HEAD
- CS SURVEY NUMBER, CLACKAMAS COUNTY SURVEY RECORDS
- DOC. NO. DOCUMENT NUMBER, CLACKAMAS COUNTY DEED RECORDS

**DEMO KEY NOTES**

- 1 SAWCUT AND REMOVE PORTION OF EXIST ASPHALT AS NECESSARY TO CONSTRUCT NEW ASPHALT MATCHLINE AND 6" EXPOSURE CURB AND 5' SIDEWALK, SEE SHEET 3
- 2 EXIST GRAVEL AREA TO BE REMOVED
- 3 REMOVE EXIST TREE (24 TOTAL), TYPICAL
- 4 REMOVE EXIST BRUSH
- 5 PROTECT EXIST ASPHALT
- 6 REMOVE EXIST FENCE
- 7 REMOVE EXIST STRIPING

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON  
MAY 26, 2015  
SAMANTHA KAY TANNER  
90079

RENEWS 6/30/2022

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**FIRWOOD DESIGN GROUP**  
Reliable Engineering Solutions

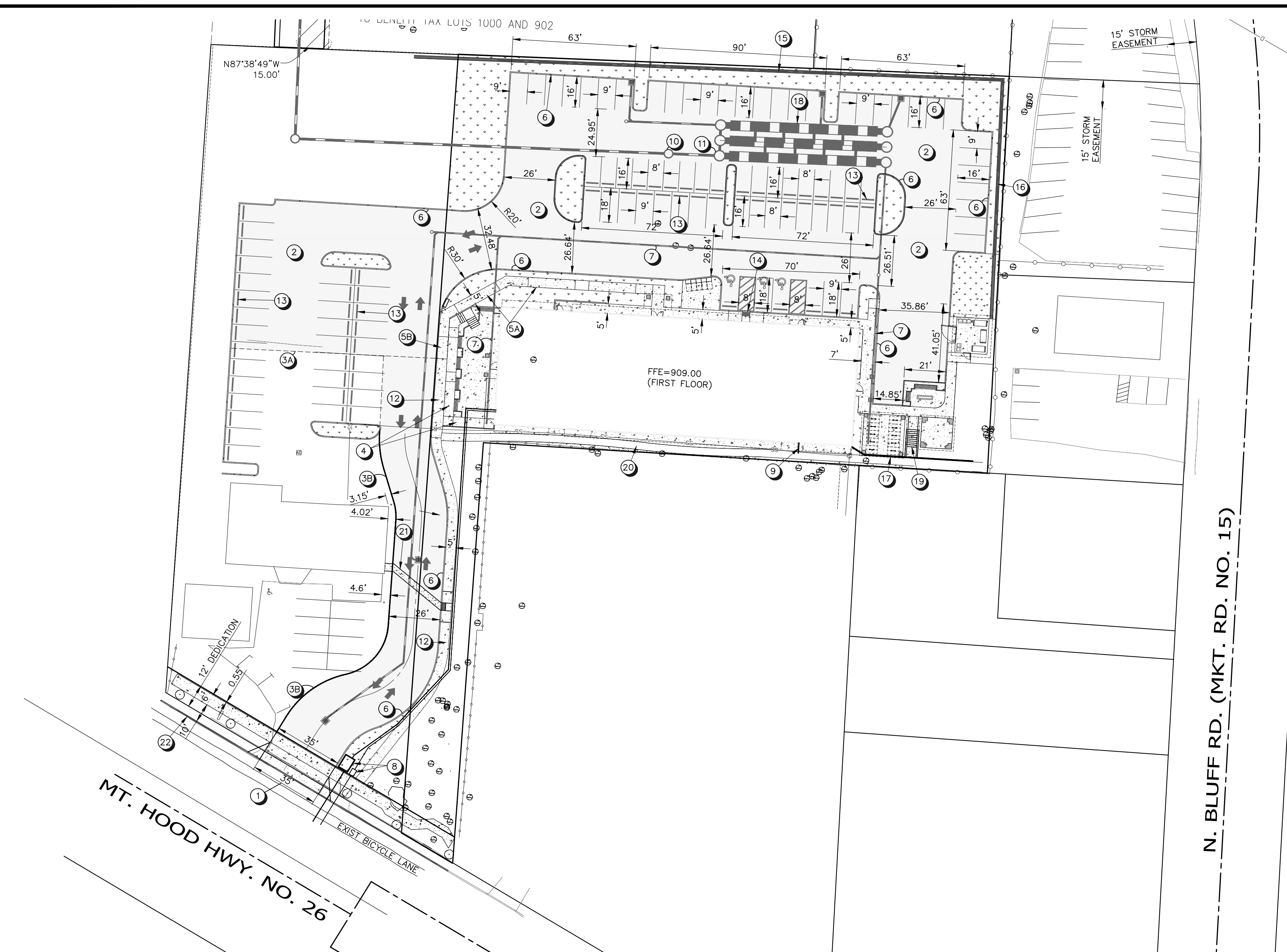
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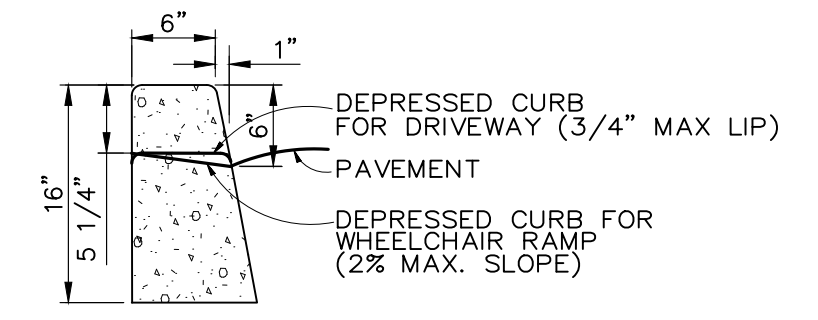
**EXISTING CONDITIONS AND DEMO PLAN**  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

**2**  
**12**

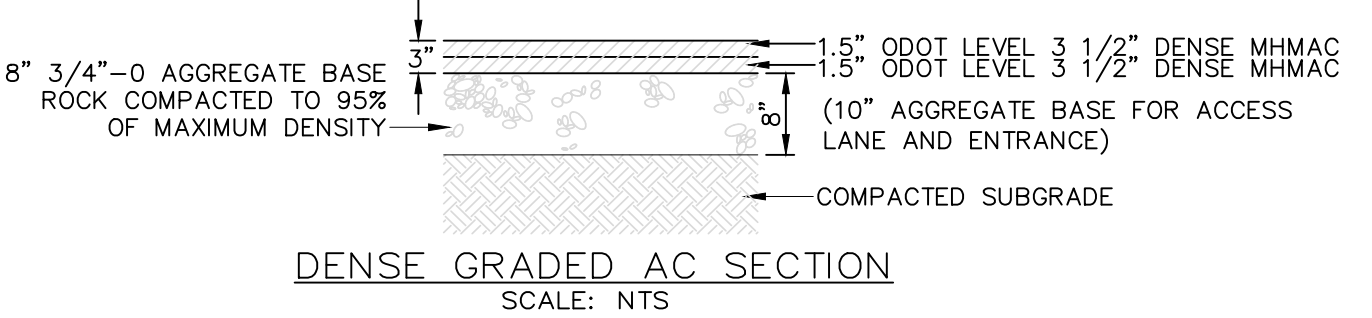
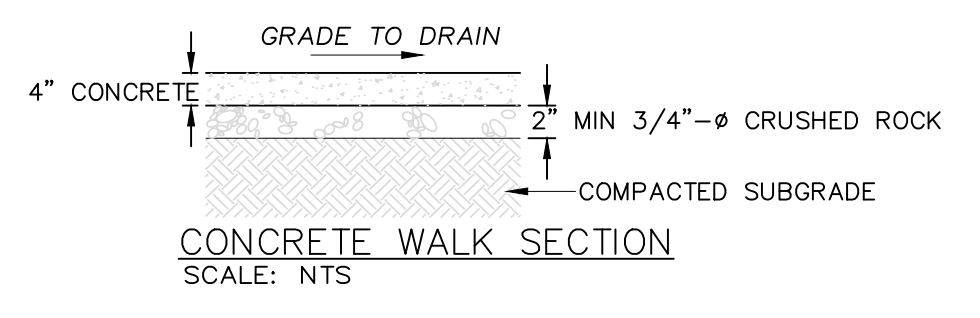




- KEY NOTES**
- 1 35' WIDE COMMERCIAL DRIVEWAY APPROACH PER ODOT STANDARDS, CONSTRUCT IN SAME LOCATION AS EXIST DRIVEWAY APPROACH
  - 2 NEW ASPHALT DRIVELANE AND PARKING AREA, SEE TYPICAL SECTION DETAIL THIS SHEET, SEE SITE CIRCULATION PLAN ON SHEET 12 FOR EMERGENCY VEHICLE ACCESS PLAN
  - 3A SAWCUT MIN 1' FROM EDGE OF EXIST EDGE OF ASPHALT, TYPICAL
  - 3B SAWCUT EXIST ASPHALT FOR MATCH LINE TO EXIST AC PARKING, TYPICAL
  - 4 CONCRETE SIDEWALK RAMP TO CIVIC AREA ACCESS WITH HAND RAILS, SEE ARCHITECTURAL PLANS FOR HAND RAILING DETAILS
  - 5A DOWNWARD RAMP AND LANDING PATHWAY WITH HANDRAILS TO MAIN FLOOR, SEE ARCHITECTURAL PLANS FOR HANDRAIL DETAILS
  - 5B RAMP DOWN PORTION OF SIDEWALK WITH HAND RAILS, SEE ARCHITECTURAL PLANS FOR HANDRAIL DETAILS
  - 6 CURB WITH 6" EXPOSURE UNLESS OTHERWISE NOTED (TYPICAL), SEE TYPICAL SECTION THIS SHEET
  - 7 DOWNSPOUT CONVEYANCE LINES TO STORM SYSTEM
  - 8 DOUBLE DETECTOR CHECK VALVE AND VAULT AND WATER SERVICE METER AND VAULT FOR SPRINKLER AND POTABLE WATER SERVICE
  - 9 CONNECT TO EXIST SEWER MAIN FOR SEWER SERVICE, CONTRACTOR TO VERIFY DEPTH PRIOR TO CONSTRUCTION
  - 10 WATER QUALITY MANHOLE, SEE SHEET 5
  - 11 FLOW CONTROL MANHOLE, SEE SHEET 5
  - 12 PROPOSED 5' WIDE CONCRETE WALKWAY, MAX 2% CROSS SLOPE (1.5% TYPICAL) AND MAXIMUM 5% LONGITUDINAL SLOPE, SEE TYPICAL SECTION DETAIL THIS SHEET
  - 13 CONCRETE WHEEL STOPS WITH STORMWATER UNDERDRAIN (TYPICAL)
  - 14 ADA COMPLIANT SIDEWALK RAMP
  - 15 SEE WALL CROSS SECTIONS SHEET 8
  - 16 NOT USED
  - 17 SEE SPOT GRADES ON SHEET 7 FOR WALL HEIGHT
  - 18 60" DETENTION SYSTEM, SEE SHEET 5
  - 19 10 STAIRS WITH LANDINGS TO TOP OF WALL, SEE SHEET 5 FOR SPOT GRADING PLAN
  - 20 TRAIL
  - 21 4' WIDE COLORED CONCRETE INLAY PEDESTRIAN WALKWAY IN ASPHALT, 1.5% MAX CROSS SLOPE
  - 22 REMOVE EXIST CURB, SIDEWALK, AND DRIVEWAY, CONSTRUCT NEW 6" EXPOSURE CURB WITH 10' LANDSCAPE STRIP AND 6' SIDEWALK, PROVIDE 12' RIGHT OF WAY DEDICATION WITH 0.55' FRONTAGE ZONE: (10.5' FURNISHING ZONE, 6' PEDESTRIAN ZONE, AND 0.55' FRONTAGE ZONE) PER ODOT STANDARDS



- NOTES:**
1. ALL RADII SHALL BE 3/4" EXCEPT AS OTHERWISE SHOWN.
  2. ISOLATION JOINTS SHALL BE PLACED ONLY AS SPECIFIED.
  3. CONTRACTION JOINTS SHALL BE PLACED AT 15' INTERVALS AND SHALL EXTEND AT LEAST 50% THROUGH THE CURB OR CURB AND GUTTER.
  4. A CONTRACTION JOINT SHALL BE PLACED ALONG AND OVER WEEP HOLE THROUGH THE CURB AND THROUGH THE SIDEWALK.
  5. WHEN SIDEWALKS ARE CONSTRUCTED, EXTEND 3" PIPE TO BACK OF SIDEWALK AND INSTALL COUPLING.



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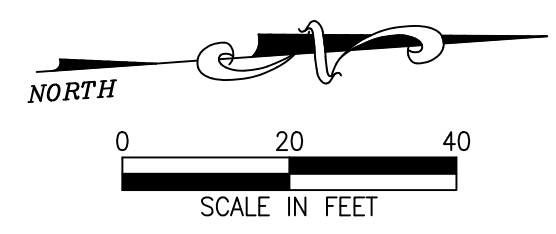
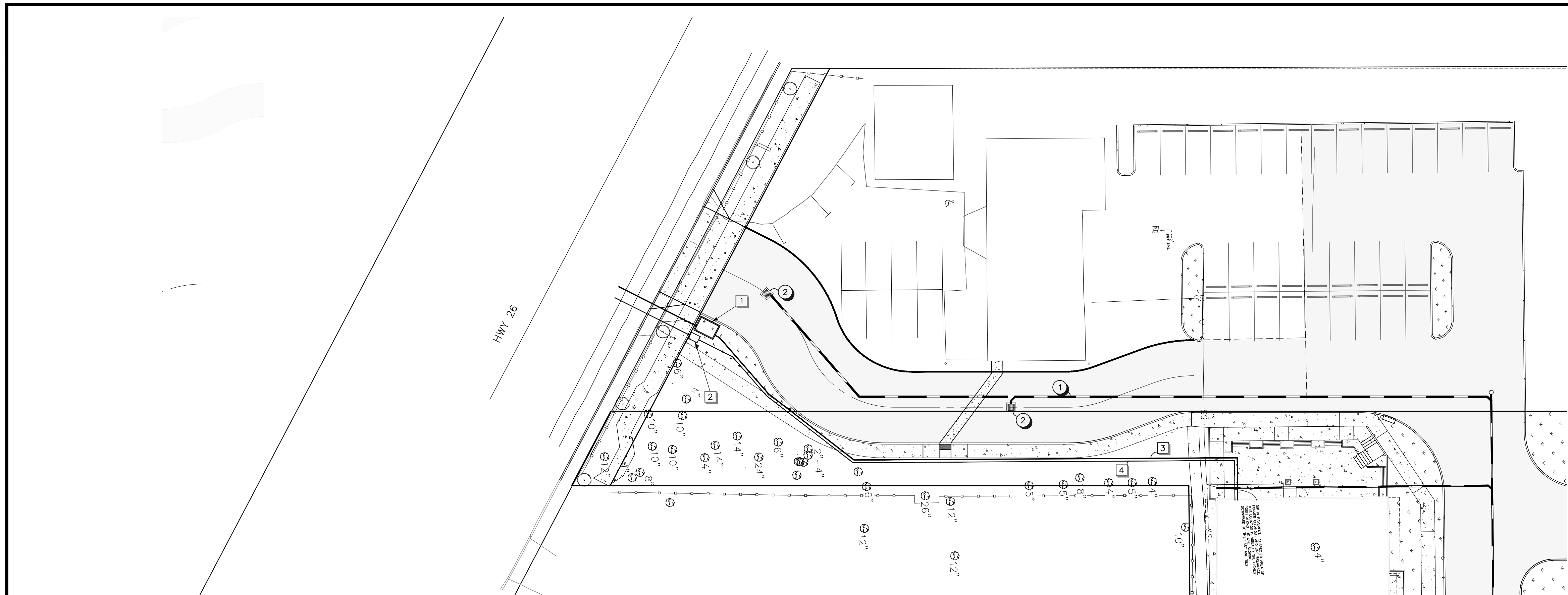
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Reliable Engineering Solutions  
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TROUTDALE, OREGON 97060  
(503) 668-3737

**STATE STREET HOMES**  
1233 NW NORTHRUP ST. #125  
PORTLAND, OR 97209

**COMPOSITE SITE PLAN**  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

**3**  
**12**



- KEY NOTES**
- ① STORM CONVEYANCE LINE TO DETENTION SYSTEM
  - ② LYNCH TYPE TRAP CATCH BASIN

- WATERLINE KEY NOTES**
- ① PROPOSED DOUBLE DETECTOR CHECK VALVE AND VAULT BY FIRE SUPPRESSION DESIGNER
  - ② PROPOSED WATER METER SIZED BY WATER SYSTEM DESIGNER
  - ③ NEW FIRE SUPPRESSION LINE, SIZE PROVIDED BY WATER SYSTEM DESIGNER
  - ④ NEW POTABLE WATER SERVICE LINE, SIZE PROVIDED BY WATER SYSTEM DESIGNER

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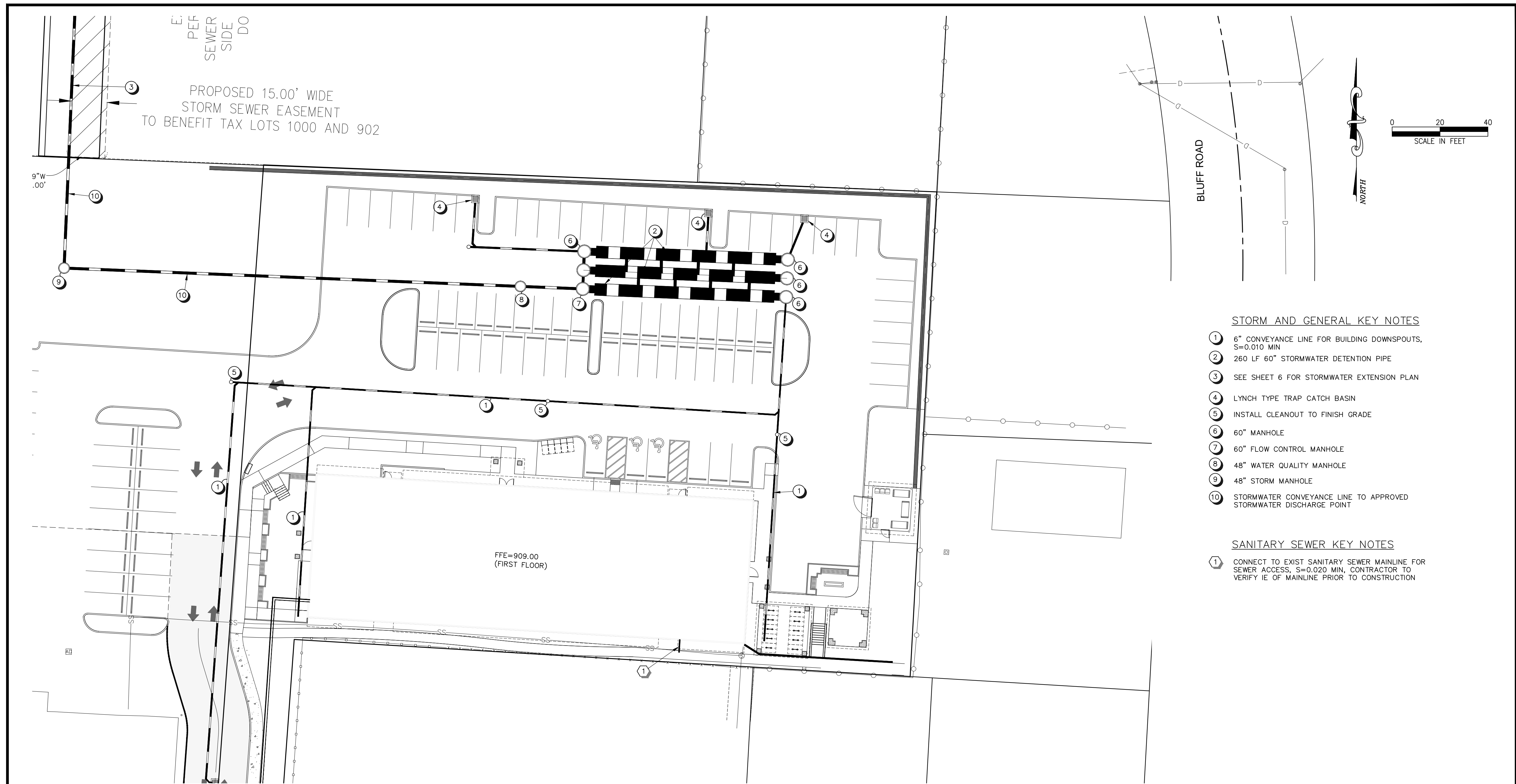
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**ENTRY UTILITY PLAN**  
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**STORM AND GENERAL KEY NOTES**

- ① 6" CONVEYANCE LINE FOR BUILDING DOWNSPOUTS, S=0.010 MIN
- ② 260 LF 60" STORMWATER DETENTION PIPE
- ③ SEE SHEET 6 FOR STORMWATER EXTENSION PLAN
- ④ LYNCH TYPE TRAP CATCH BASIN
- ⑤ INSTALL CLEANOUT TO FINISH GRADE
- ⑥ 60" MANHOLE
- ⑦ 60" FLOW CONTROL MANHOLE
- ⑧ 48" WATER QUALITY MANHOLE
- ⑨ 48" STORM MANHOLE
- ⑩ STORMWATER CONVEYANCE LINE TO APPROVED STORMWATER DISCHARGE POINT

**SANITARY SEWER KEY NOTES**

- ① CONNECT TO EXIST SANITARY SEWER MAINLINE FOR SEWER ACCESS, S=0.020 MIN, CONTRACTOR TO VERIFY IE OF MAINLINE PRIOR TO CONSTRUCTION



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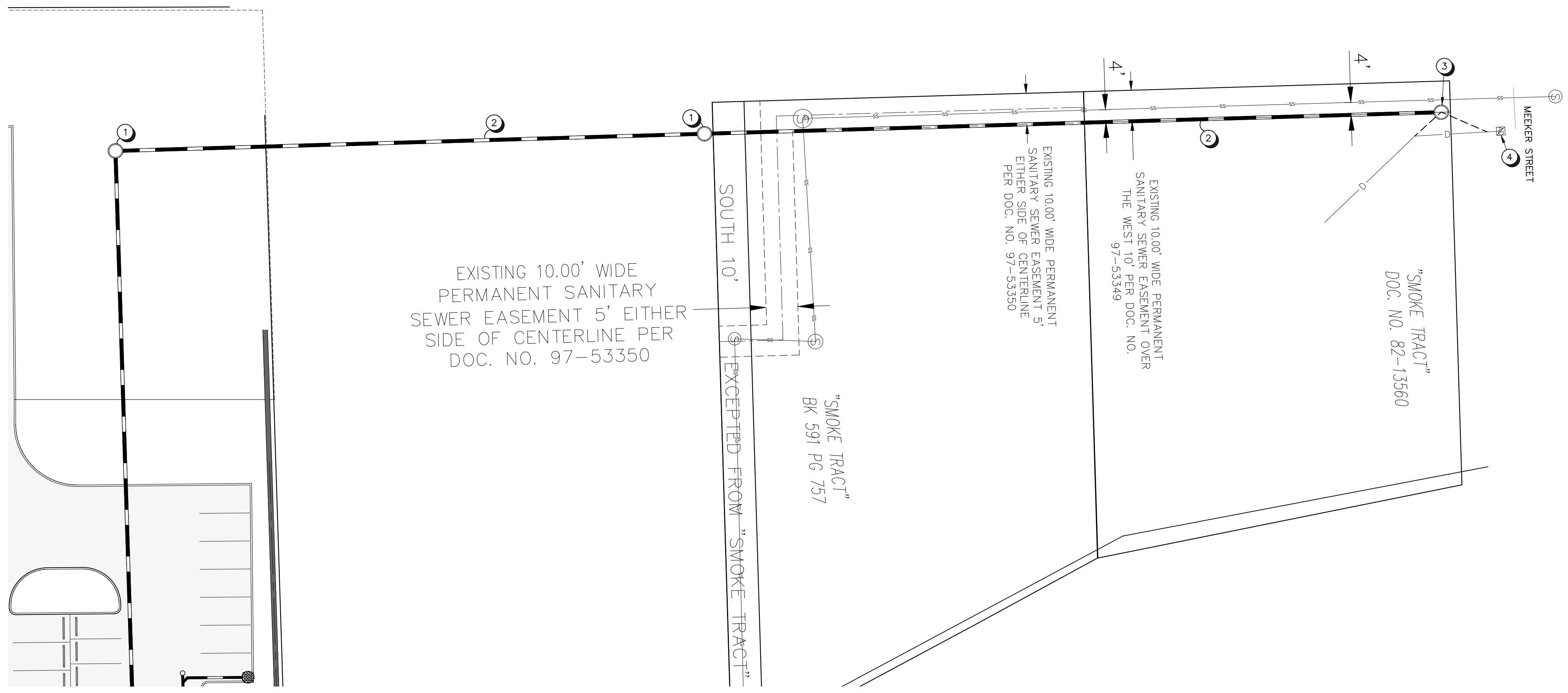
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**SITE UTILITY PLAN**  
 MIXED USE SITE DEVELOPMENT  
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**12**





**KEY NOTES**

- ① 48" STORM MANHOLE
- ② STORMWATER CONVEYANCE LINE TO APPROVED STORMWATER DISCHARGE POINT
- ③ REALIGN EXIST STORMLINE AND CONNECT INTO PROPOSED 48" MANHOLE
- ④ STORMWATER TO CONNECT INTO EXIST DITCH INLET, UTILIZE EXIST STORM LINE CONNECTION INTO DITCH INLET



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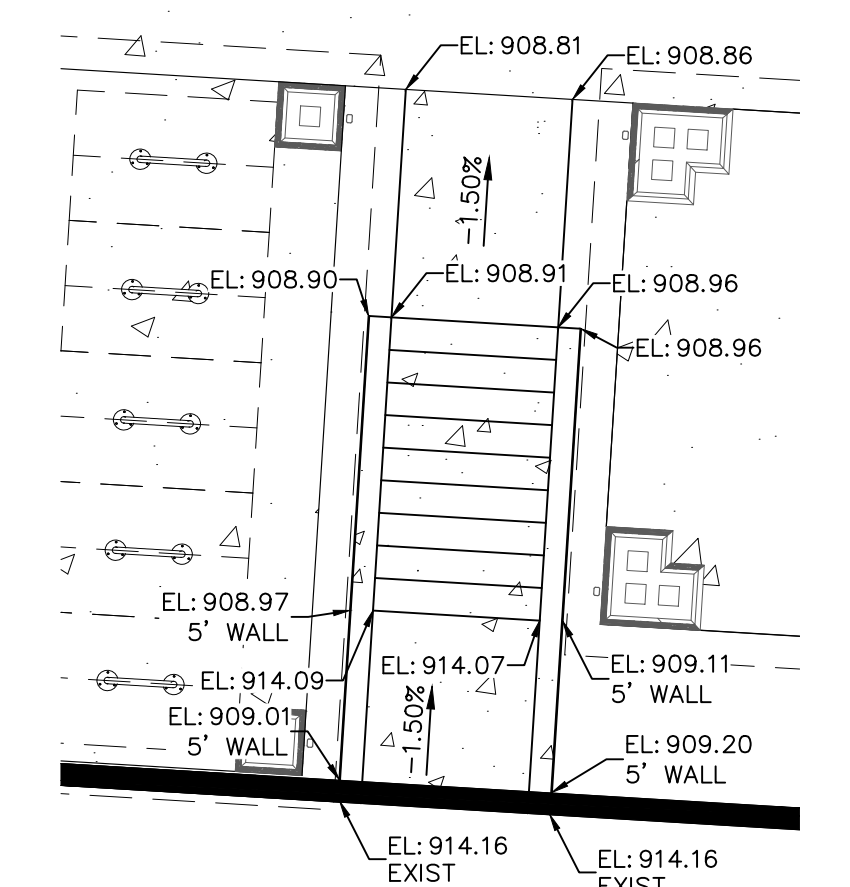
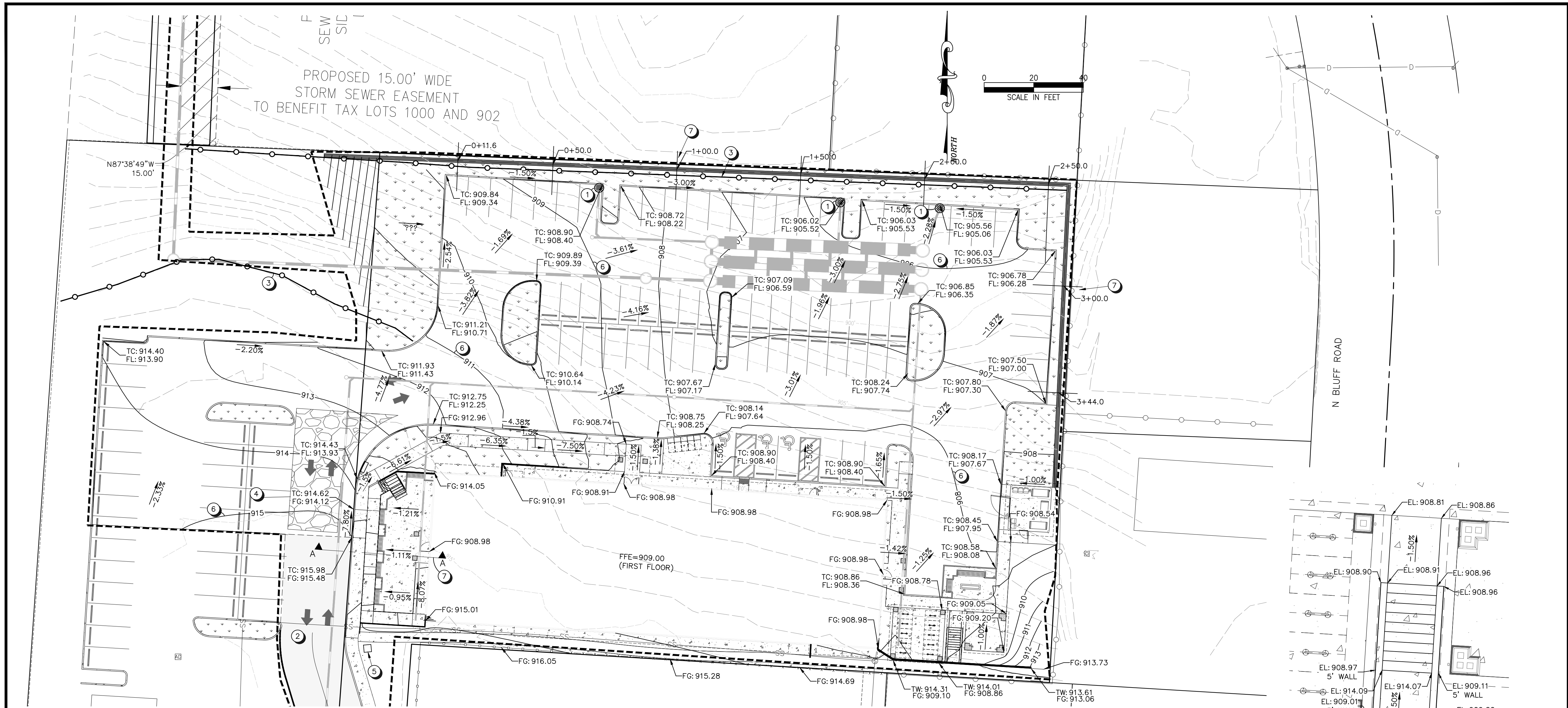
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**STORMWATER EXTENSION PLAN**  
 MIXED USE SITE DEVELOPMENT  
 38015 HWY 26, SANDY, OR 97055

**6**  
**12**





**KEY NOTES**

- 1 CB INSERT INLET PROTECTION FOR AREA DRAIN TYPE CATCH BASIN, SEE DETAILS ON SHEET 11 (TYPICAL)
- 2 PROVIDE TEMPORARY INLET PROTECTION ON ALL STORMWATER INLETS WITHIN 250 LF DOWNSTREAM OF THE PROJECT SITE
- 3 TEMPORARY SILT FENCING, SEE DETAIL ON SHEET 11, ADJUST SILT FENCING AS NECESSARY DURING CONSTRUCTION
- 4 CONSTRUCTION ENTRANCE, SEE DETAIL THIS ON SHEET 11
- 5 CONSTRUCT TEMPORARY 3' X 3' X 2' DEEP SUMP AREA TO BE USED AS WASH AREA FOR CONCRETE TRUCKS, AFTER CURBS AND SIDEWALKS ARE INSTALLED AND BEFORE ROADS ARE PAVED, FILL AND COMPACT SUMP AREA PER STRUCTURAL REQUIREMENTS, DO NOT OVERFILL SUMP AREA, CONTRACTOR TO INCREASE SUMP WIDTH AS NECESSARY TO PROVIDE ADEQUATE VOLUME AS (IF) NEEDED
- 6 PROPOSED FINISH GRADE CONTOURS (TYPICAL)
- 7 SEE SHEET 8 FOR WALL CROSS SECTIONS, TYPICAL

**ESTIMATED INPLACE QUANTITIES:**

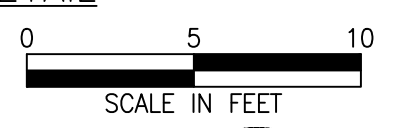
SITE SCRAPING OF ORGANICS AND HARD SURFACES (ASSUMED 4" AVERAGE, TO BE HAUL OFF): 790 CY  
 ASPHALT DATUM TO SITE SCRAPING: 610 CY CUT, 4190 CY FILL  
 SIDEWALK/LANDSCAPE DATUM TO SITE SCRAPING: 361 CY CUT, 940 CY FILL  
 UNDER BUILDING (ASSUME SLAB CONSTRUCTION): 2030 CY CUT, 0 CY FILL

TOTAL CUT: 3,791 CY  
 TOTAL FILL: 5,130 CY

QUANTITY IS AN ESTIMATE FOR INPLACE QUANTITIES AND DOES NOT INCLUDE TRENCH SPOILS, CONTRACTOR RESPONSIBLE FOR DOING OWN QUANTITY ESTIMATE FOR CONSTRUCTION COST

**LEGEND**

- TEMPORARY SEDIMENT FENCE
- BIO-BAG AND INLET INSERT PROTECTION
- LIMITS OF DISTURBANCE (1.9 ACRES)



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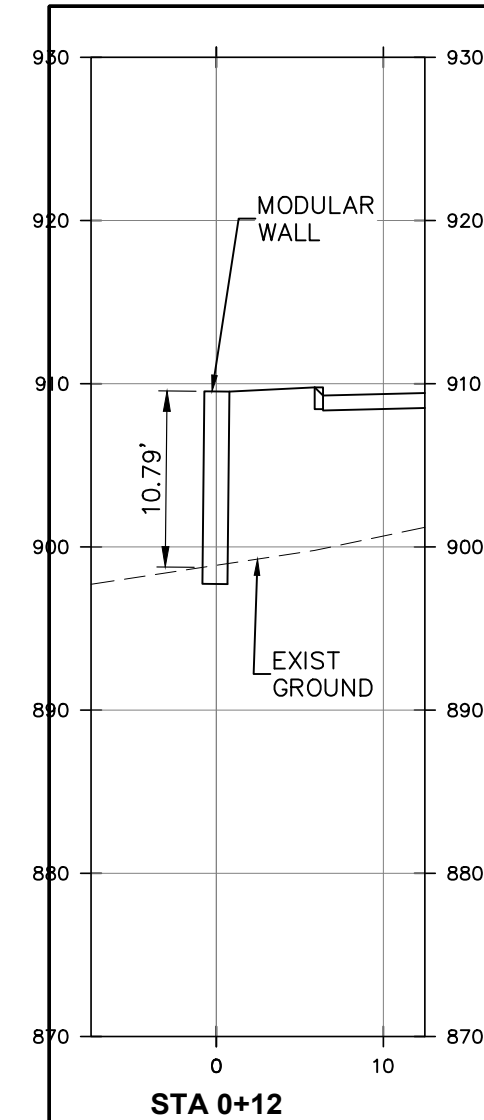
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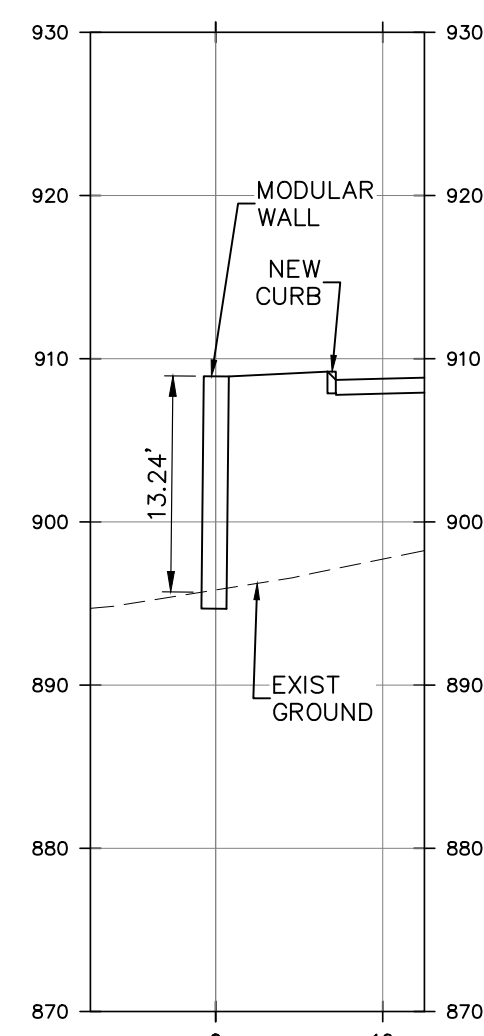
**GRADING AND ESC PLAN**  
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**12**

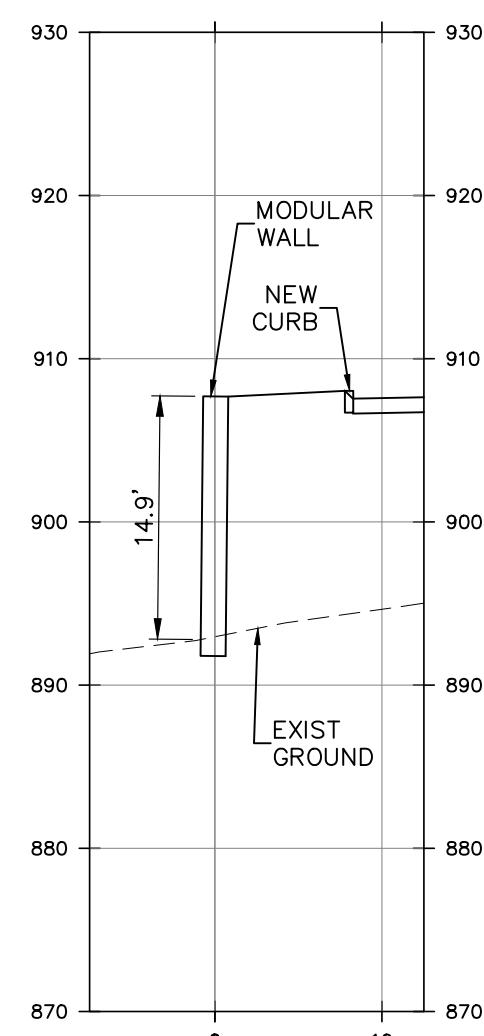




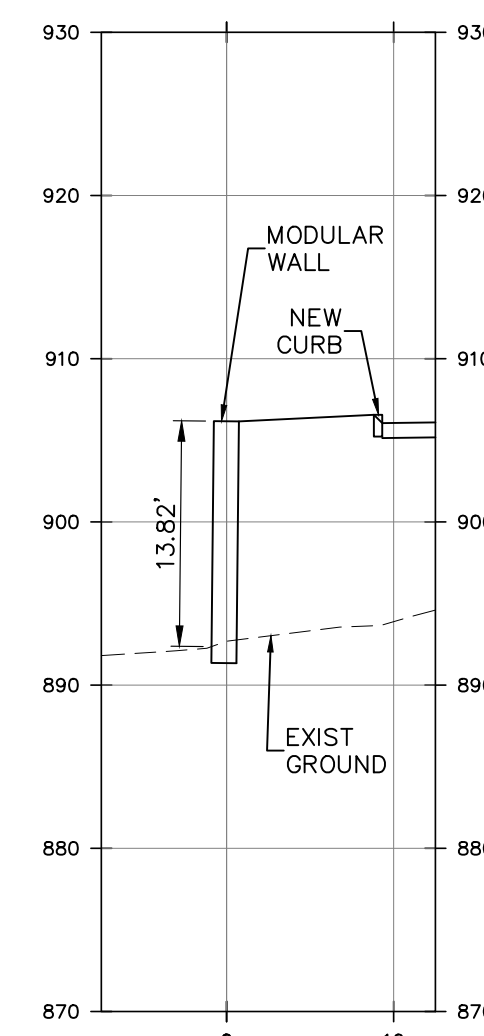
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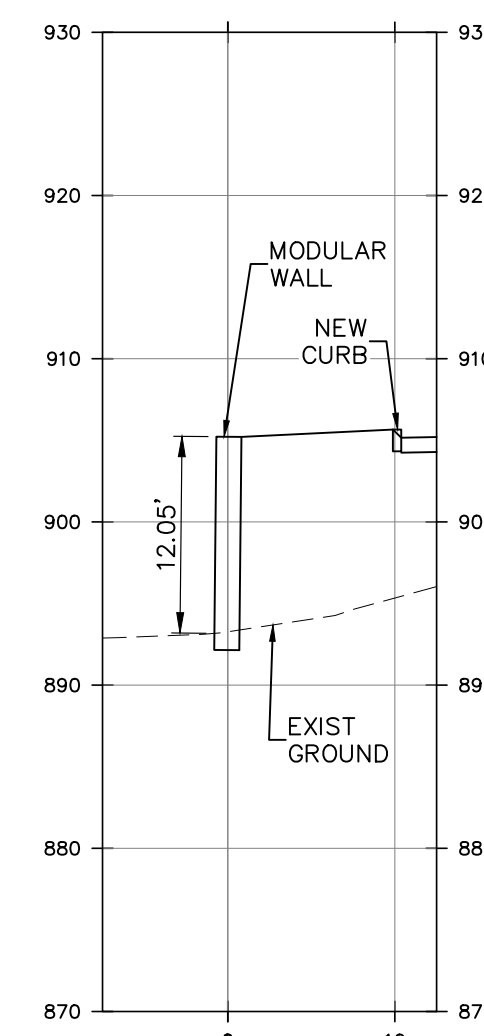
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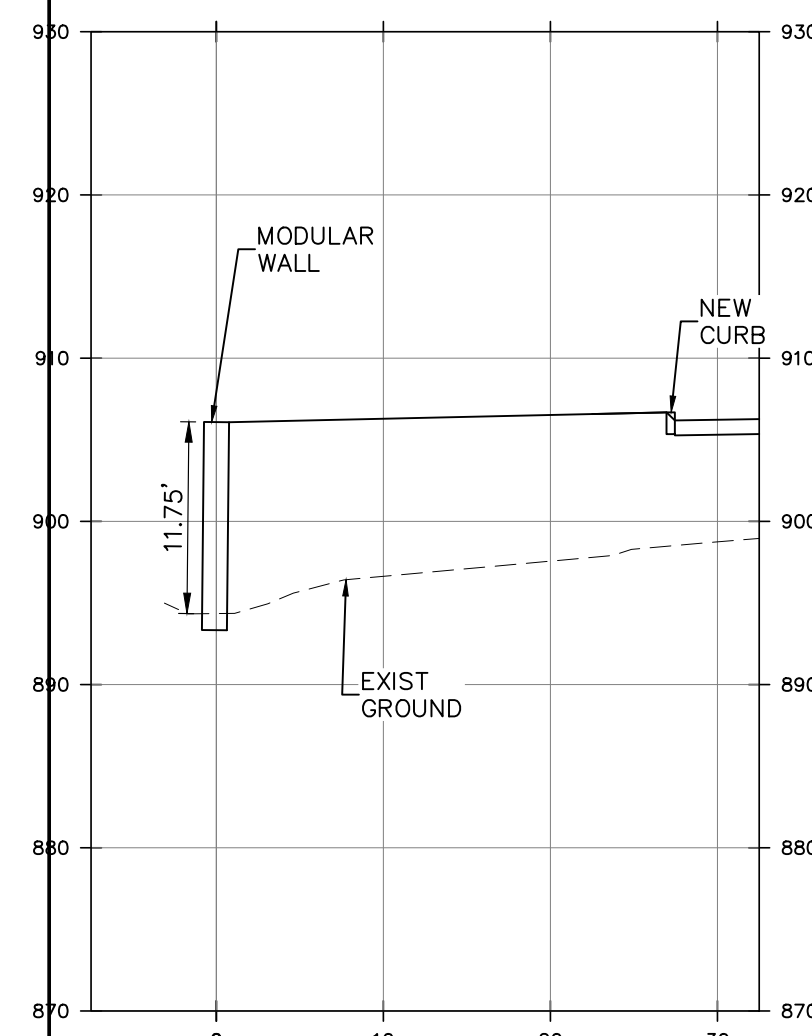


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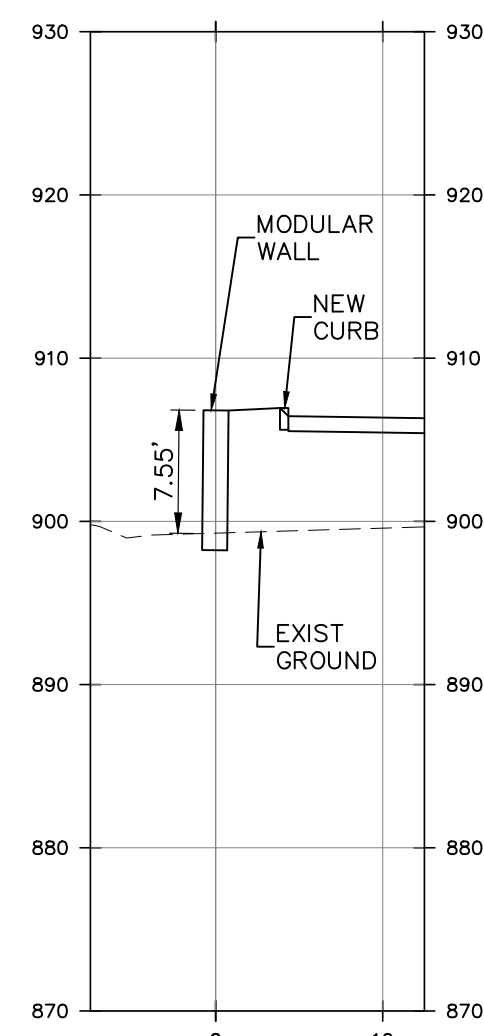


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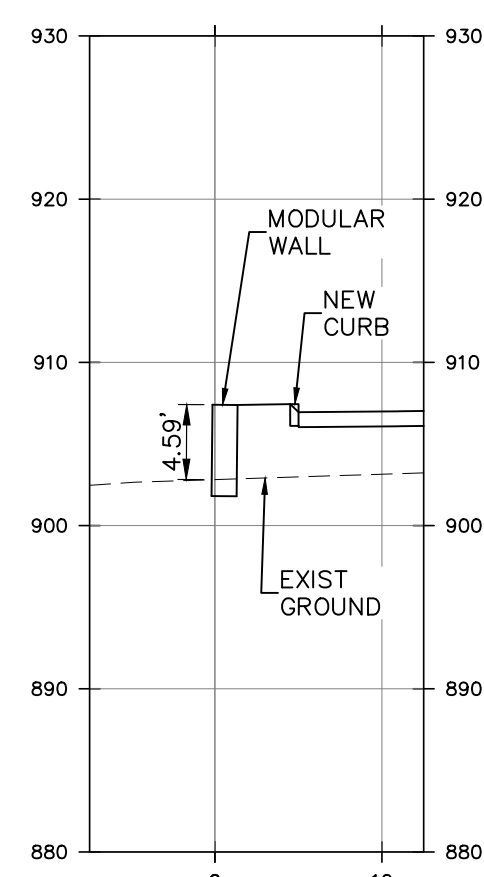
**WALL CROSS SECTIONS**  
SCALE: SEE SCALE BAR  
(SEE SHEET 7 FOR PLAN VIEW)



STA 2+50

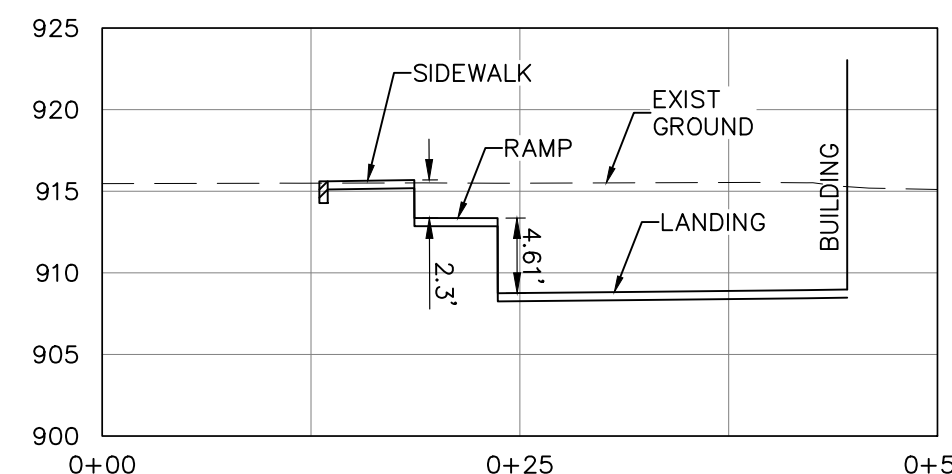


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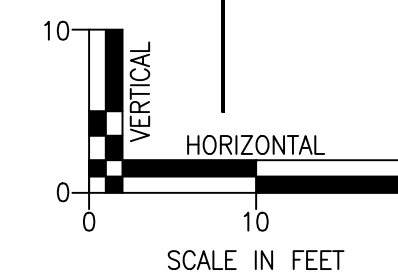


STA 3+44

**WALL CROSS SECTIONS**  
SCALE: SEE SCALE BAR  
(SEE SHEET 7 FOR PLAN VIEW)



**WALL CROSS "A-A"**  
SCALE: SEE SCALE BAR  
(SEE SHEET 7 FOR PLAN VIEW)



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PROJECT NO. E21-043		

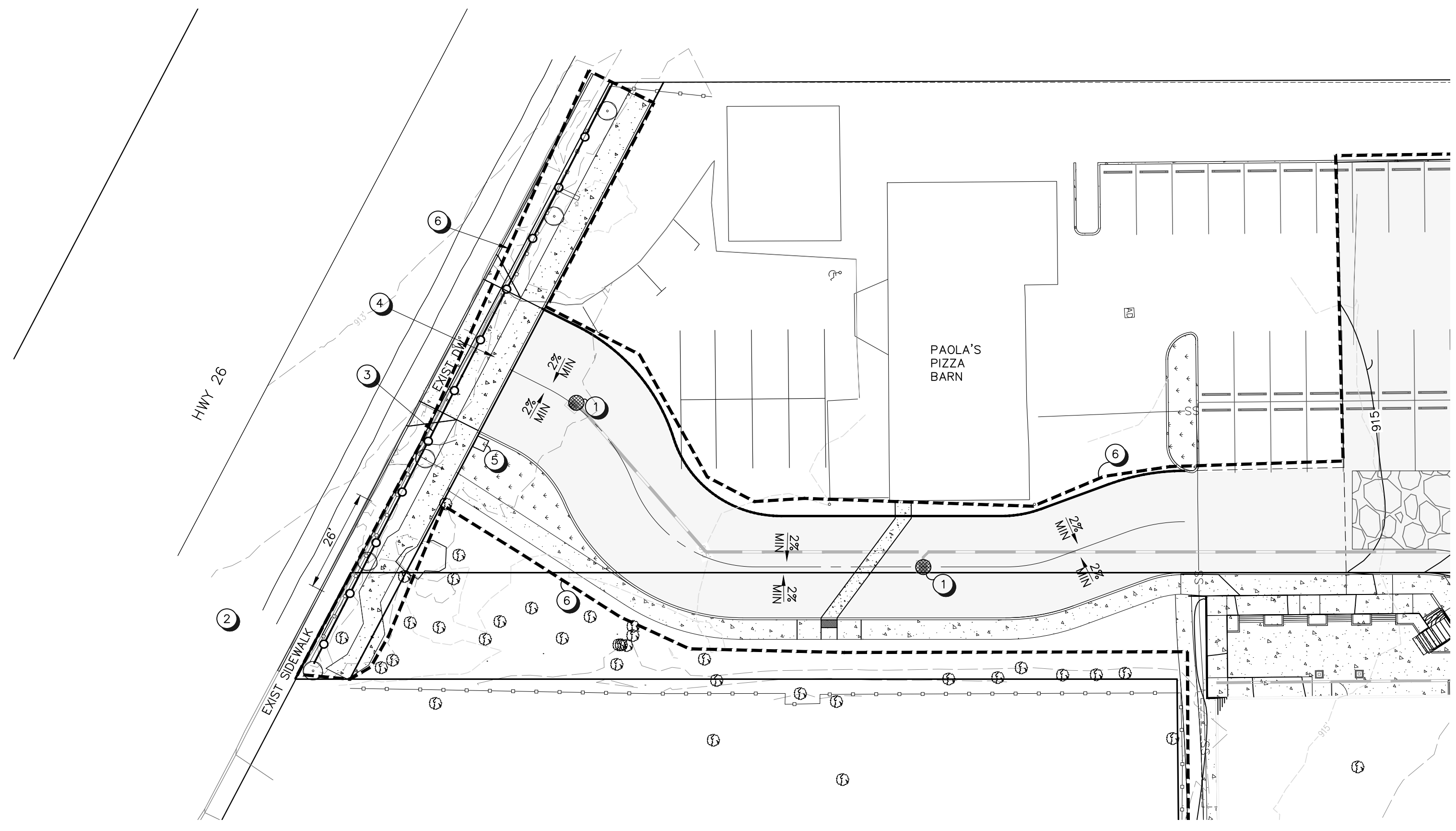
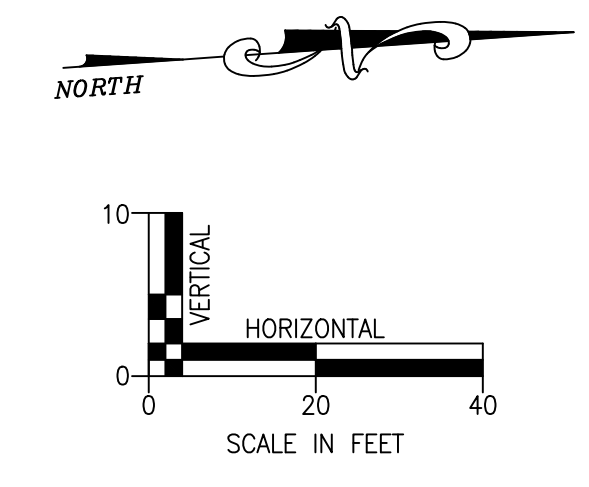


359 EAST HISTORIC COLUMBIA RIVER HIGHWAY  
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(503) 668-3737

STATE STREET HOMES  
1233 NW NORTHRUP ST. #125  
PORTLAND, OR 97209

WALL CROSS SECTIONS  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

8  
12



**KEY NOTES**

- ① CB INSERT INLET PROTECTION FOR AREA DRAIN TYPE CATCH BASIN, SEE DETAILS ON SHEET 11 (TYPICAL)
- ② PROVIDE TEMPORARY INLET PROTECTION ON ALL STORMWATER INLETS WITHIN 250 LF DOWNSTREAM OF THE PROJECT SITE
- ③ TEMPORARY SILT FENCING, SEE DETAIL ON SHEET 11, ADJUST SILT FENCING AS NECESSARY DURING CONSTRUCTION
- ④ CONSTRUCTION ENTRANCE, SEE DETAIL THIS ON SHEET 11
- ⑤ CONSTRUCT TEMPORARY 3' X 3' X 2' DEEP SUMP AREA TO BE USED AS WASH AREA FOR CONCRETE TRUCKS, AFTER CURBS AND SIDEWALKS ARE INSTALLED AND BEFORE ROADS ARE PAVED, FILL AND COMPACT SUMP AREA PER STRUCTURAL REQUIREMENTS, DO NOT OVERFILL SUMP AREA, CONTRACTOR TO INCREASE SUMP WIDTH AS NECESSARY TO PROVIDE ADEQUATE VOLUME AS (IF) NEEDED
- ⑥ LIMITS OF DISTURBANCE

- LEGEND**
- TEMPORARY SEDIMENT FENCE
  - ⊙ BIO-BAG AND INLET INSERT PROTECTION
  - - - - - LIMITS OF DISTURBANCE (1.9 ACRES)



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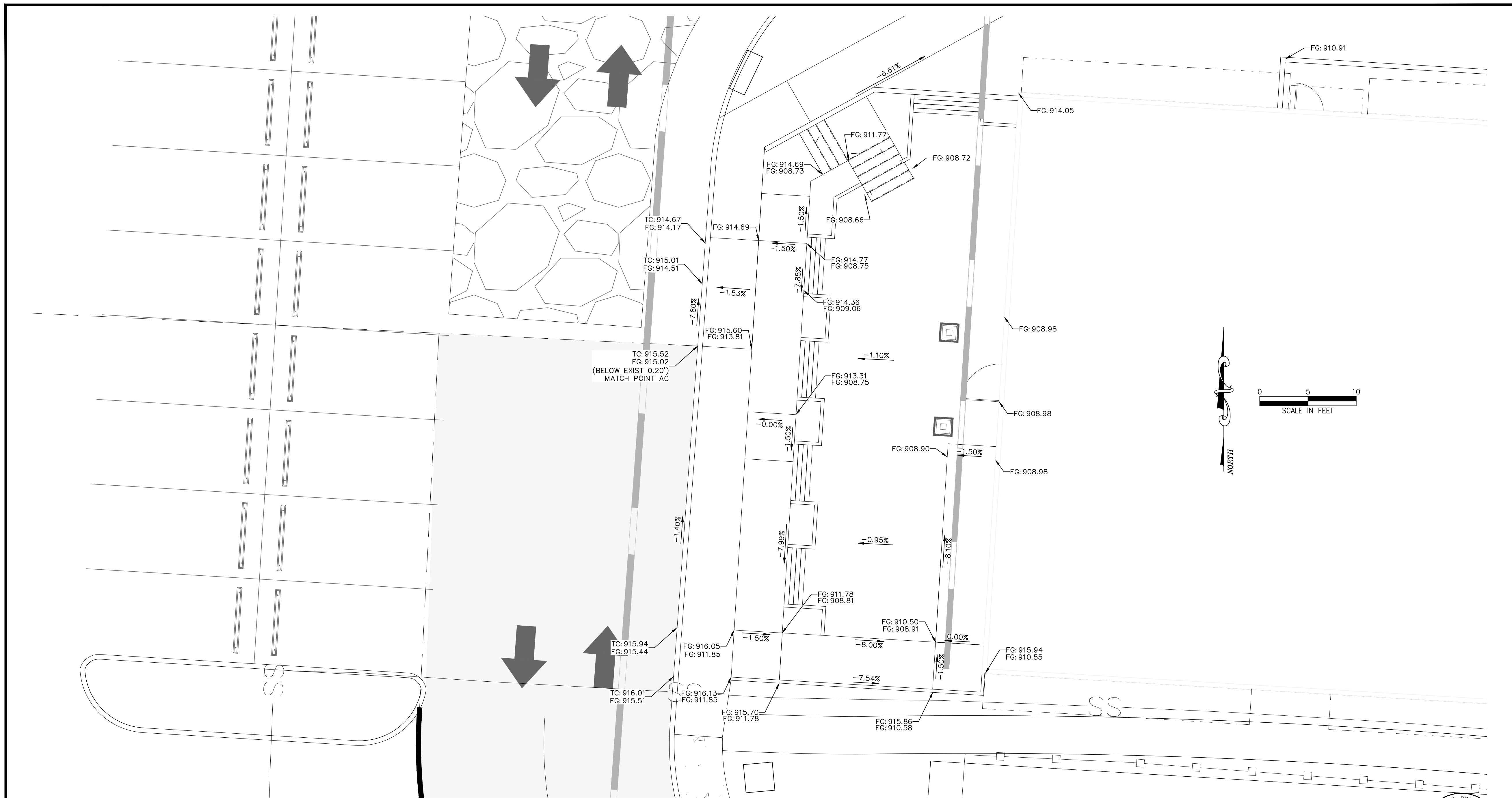
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SCALE: AS SHOWN	DATE: DECEMBER 2021	
PROJECT NO. E21-043		

**FIRWOOD DESIGN GROUP**  
Reliable Engineering Solutions  
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY  
TROUTDALE, OREGON 97060  
(503) 668-3737

**STATE STREET HOMES**  
1233 NW NORTHRUP ST. #125  
PORTLAND, OR 97209

**ENTRY GRADING PLAN**  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055

**9**  
**12**



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PROJECT NO. E21-043		

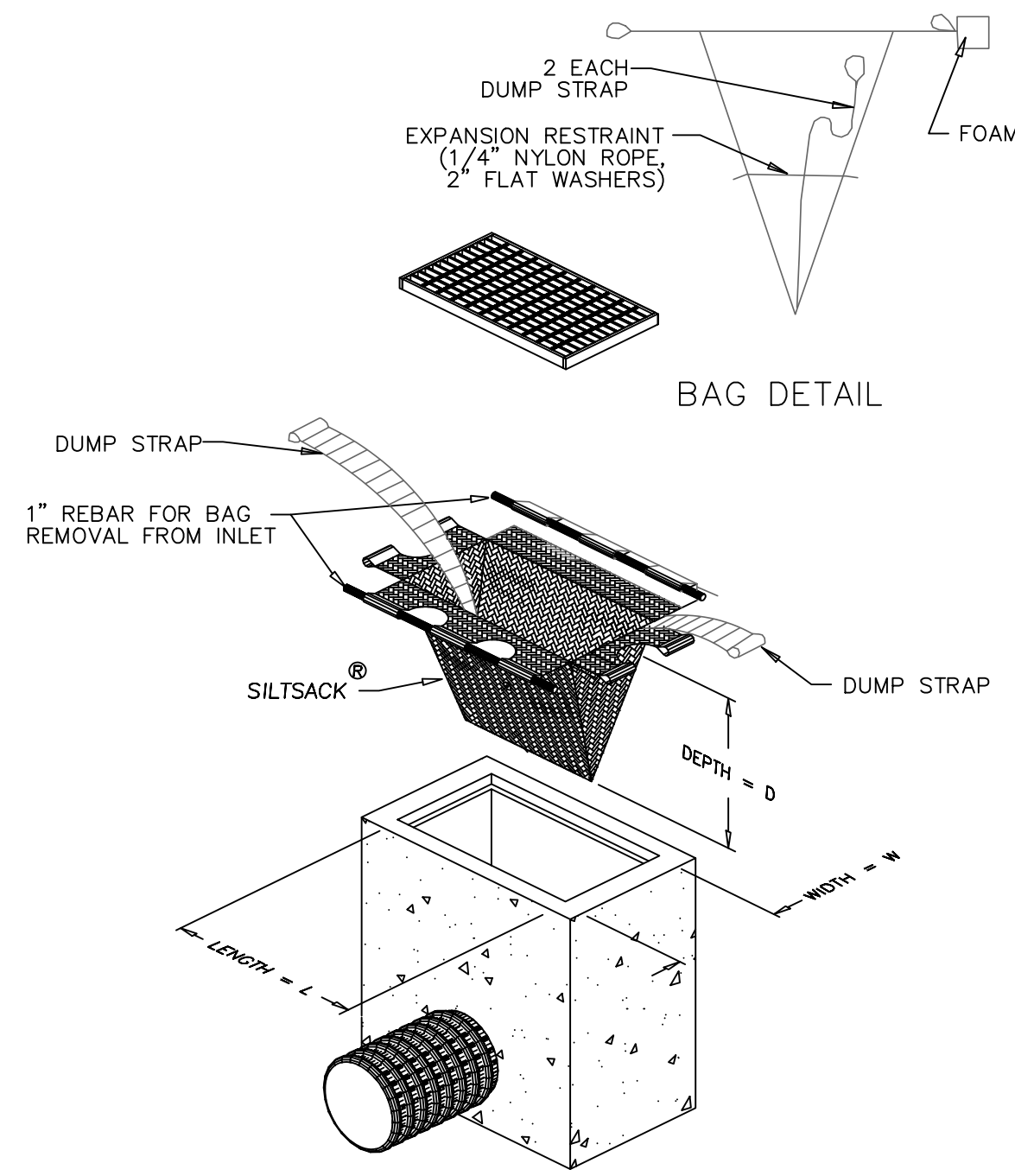
**FIRWOOD DESIGN GROUP**  
**Reliable Engineering Solutions**  
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 (503) 668-3737

**STATE STREET HOMES**  
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**CIVIC AREA GRADING PLAN**  
 MIXED USE SITE DEVELOPMENT  
 38015 HWY 26, SANDY, OR 97055

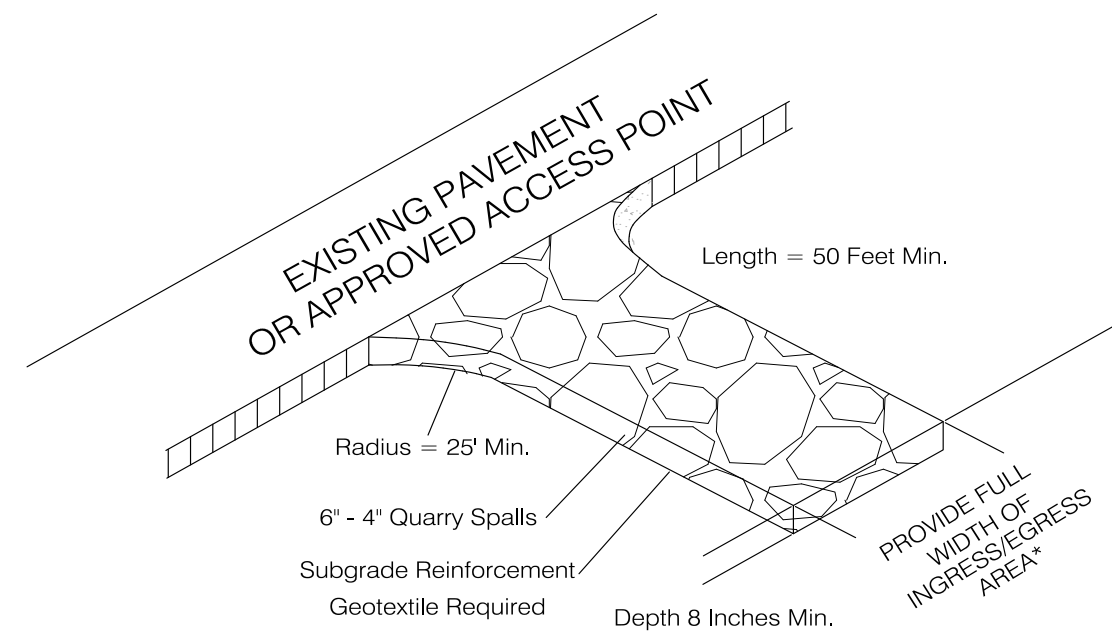
**10**  
**12**





REGULAR FLOW ONLY DO NOT USE HIGH FLOW INSERT BAGS.

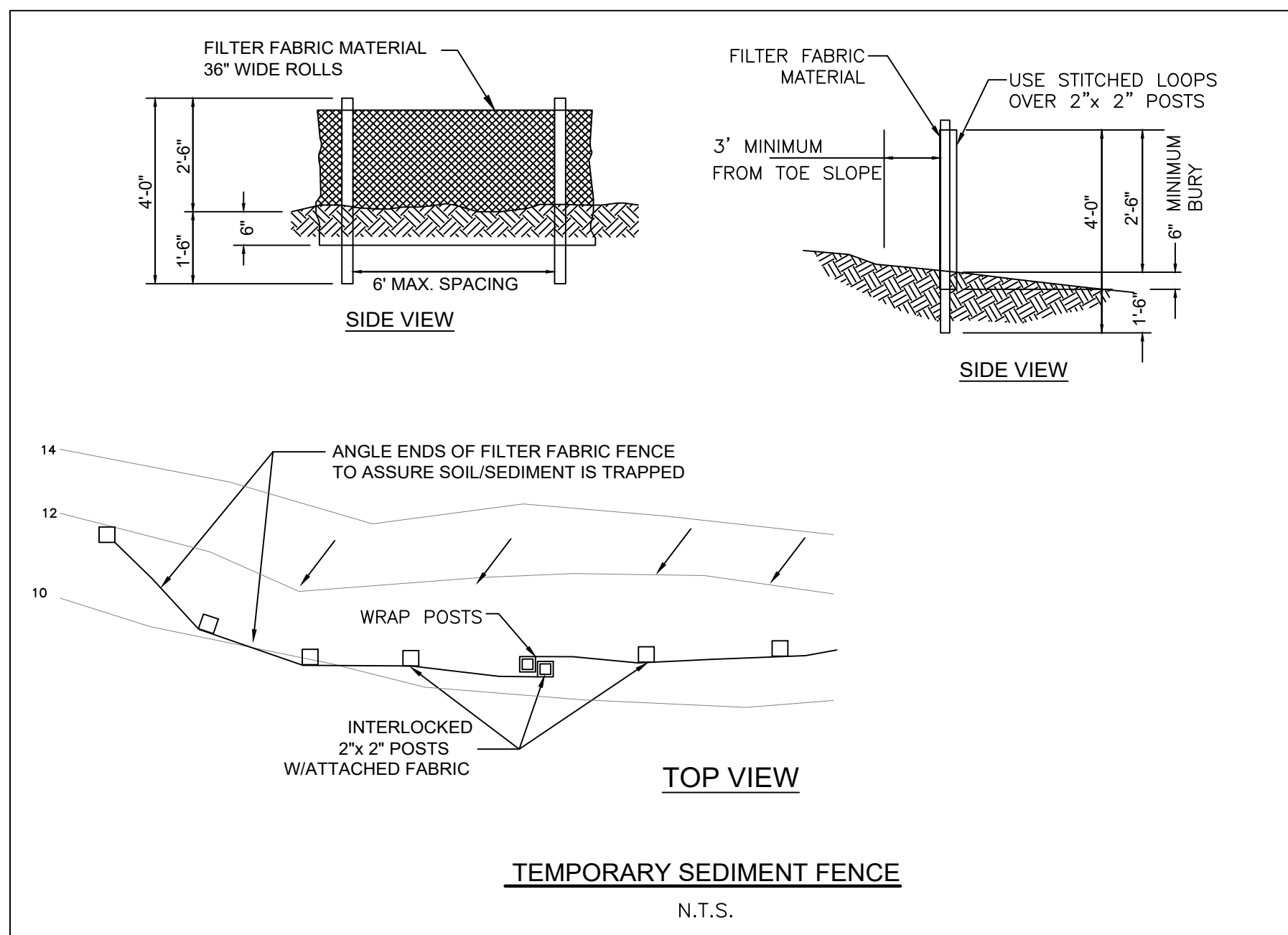
**INLET PROTECTION**



\*20' MIN. FOR SINGLE FAMILY AND DUPLEX RESIDENTIAL

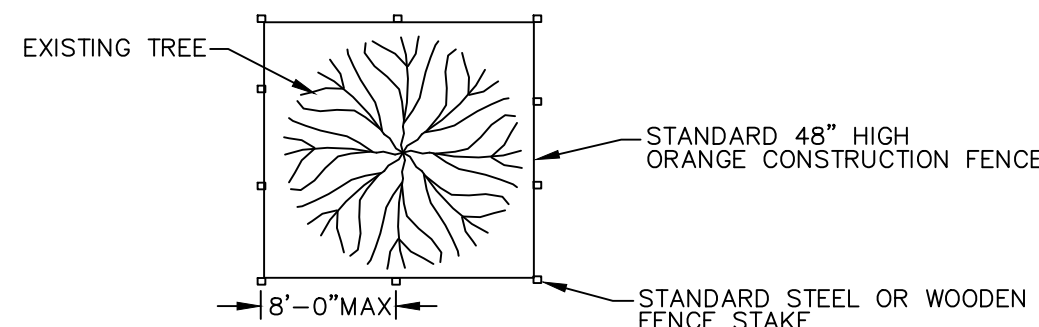
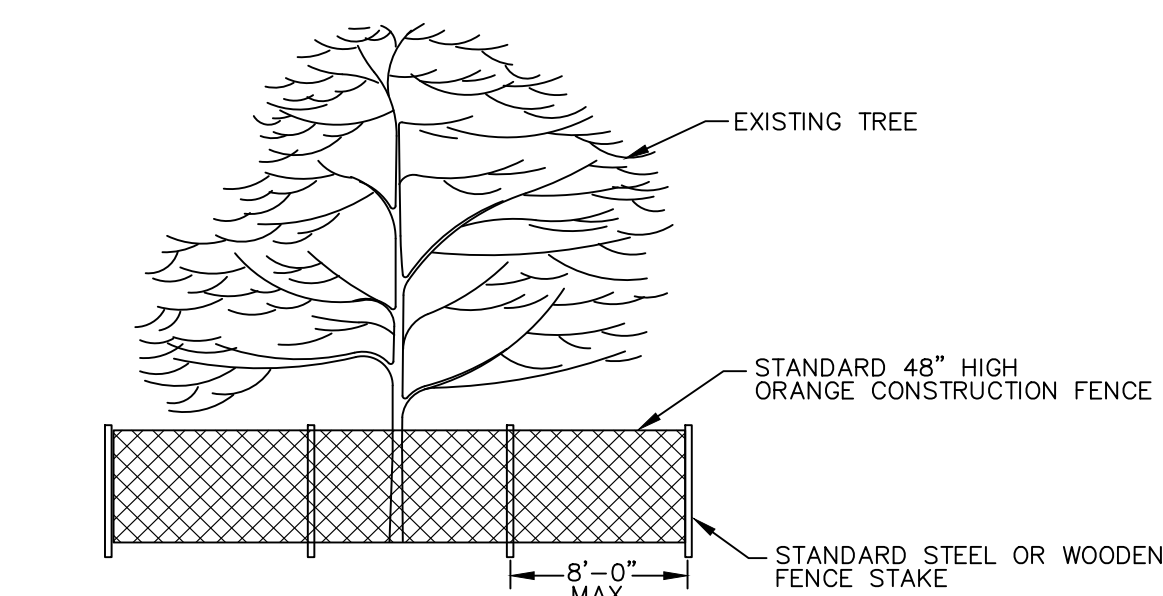
**GRAVEL CONSTRUCTION ENTRANCES :**

1. STABILIZED CONSTRUCTION ENTRANCE(S) SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
2. ALL VEHICLES LEAVING THE SITE SHALL LEAVE BY DRIVING ACROSS THE GRAVEL CONSTRUCTION ENTRANCE(S) IF GRAVEL ENTRANCE BECOME FILLED WITH MUD AND IS NO LONGER FUNCTIONAL. ADDITIONAL GRAVEL SHALL BE PLACED. VEHICLE TIRES SHALL BE FREE FROM DIRT BEFORE LEAVING THE SITE.
3. IF ACCESS IS NEEDED FROM A PAVED SURFACE OVER A CURB TO A GRAVEL SITE ENTRANCE. A WOODEN RAMP SHALL BE BUILT FROM THREE OR MORE PLANKS OF INCREASING SIZE WOOD, OFFSET TO ALLOW FOR DRAINAGE. NO GRAVEL OR ROAD BASE RAMPS ALLOWED.



**SEDIMENT CONTROL FENCES :**

1. AT NO TIME SHALL SEDIMENT BE ALLOWED TO ACCUMULATE BEHIND A SEDIMENT FENCE MORE THAN ONE-THIRD OF THE FENCE HEIGHT ABOVE GROUND. SEDIMENT SHOULD BE REMOVED OR REGRADED ONTO SLOPES, AND THE SEDIMENT FENCES REPAIRED AND REESTABLISHED AS NEEDED.
2. FENCE SHALL BE REMOVED ONLY WHEN UPSLOPE AREAS ARE PERMANENTLY STABILIZED.



NOTE:  
TREE PROTECTION FENCE SHALL BE LOCATED AT THE OUTER PERIMETER OF THE DRIP LINE OR AS NOTED ON THE PLAN. INSTALL FENCING AS PER MANUFACTURER'S SPECIFICATIONS.

FENCE MAY BE LOCATED AROUND THE DRIP LINE OF TREE GROUPINGS RATHER THAN INDIVIDUAL TREES.

**TREE PROTECTION DETAIL**

**EROSION AND SEDIMENT CONTROL NOTES**

**GENERAL :**

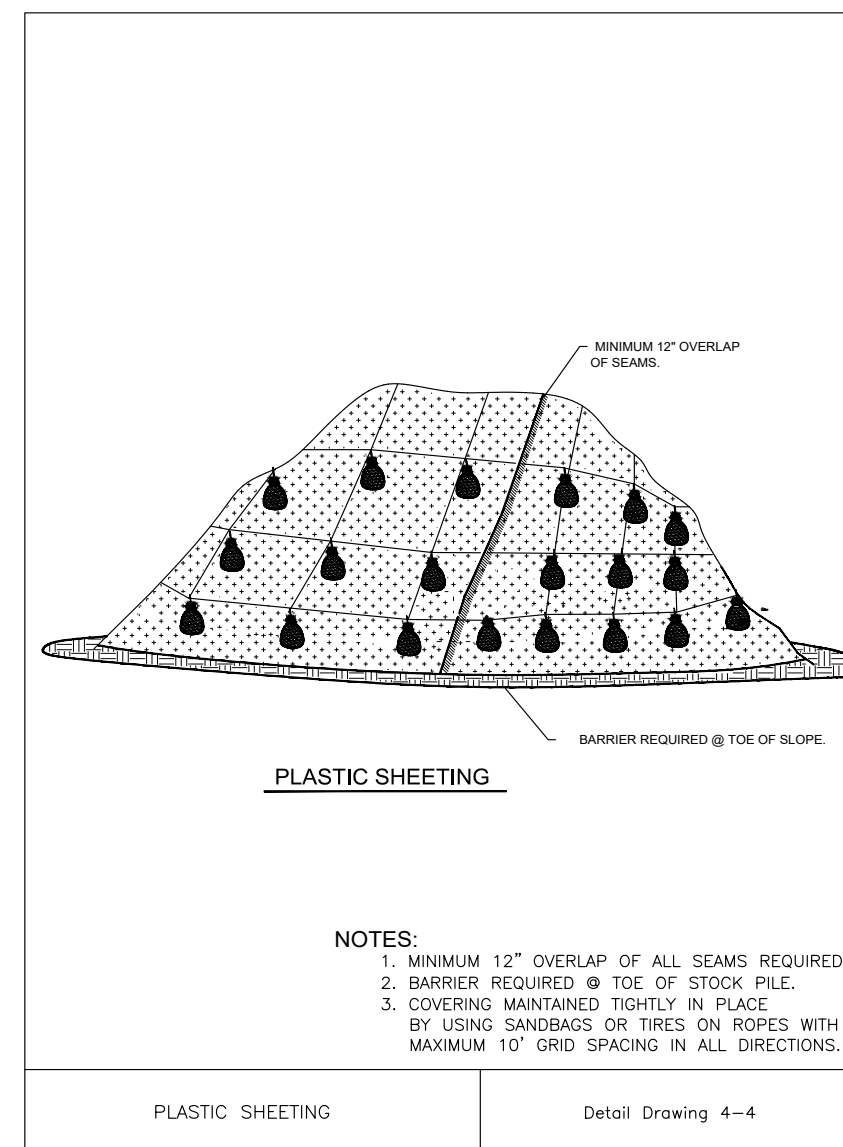
1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF SANDY ORDINANCES & REFERENCED DOCUMENTS & CITY OF PORTLAND EROSION CONTROL MANUAL.
2. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
3. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENT FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR EXPECTED STORM EVENTS AND TO ENSURE THE SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.
4. NO VISIBLE AND MEASURABLE SEDIMENT OR POLLUTANT SHALL EXIT THE SITE, ENTER THE PUBLIC RIGHT-OF-WAY, OR BE DEPOSITED INTO ANY WATER BODY OR STORM DRAINAGE SYSTEM.
5. ANY SOIL THAT ENTERS THE PUBLIC RIGHT-OF-WAY SHALL BE REMOVED WITHIN 24 HOURS.
6. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED TO MEET DEQ AND CITY OF SANDY STANDARDS AS NECESSARY TO PREVENT SEDIMENT DISCHARGE FROM THE SITE.
7. ESC FACILITIES SHALL BE INSPECTED EVERY 24 HOURS DURING STORM OR RAIN EVENTS TO ENSURE THE MEASURES ARE FUNCTIONING PROPERLY.
8. PERMANENT OR TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DENUDED DEVELOPMENT SITES IN CONFORMANCE WITH THE FOLLOWING SCHEDULE:
  - a. BETWEEN OCTOBER 1 AND APRIL 30, ALL DENUDED SITES SHALL IMMEDIATELY BE PROVIDED WITH EITHER TEMPORARY OR PERMANENT SOIL STABILIZATION.
  - b. BETWEEN MAY 1 AND SEPTEMBER 30, TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES TO REDUCE DUST AND SEDIMENT TRANSPORT SHALL BE APPLIED AS SOON AS PRACTICABLE, BUT IN NO CASE MORE THAN SEVEN DAYS AFTER GROUND DISTURBING ACTIVITY OCCURS.
  - c. GROUND COVER SHALL BE INSTALLED ON ANY PORTION OF A SITE THAT IS DENUDED FOR MORE THAN 6 MONTHS.
  - d. TEMPORARY MEASURES SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE ESTABLISHED.
  - e. STOCKPILES SHALL BE SECURED OR PROTECTED THROUGHOUT THE PROJECT WITH TEMPORARY OR PERMANENT SOIL STABILIZATION MEASURES.
  - f. REPLACEMENT GROUND COVER VEGETABLE SHALL NOT INCLUDE PLANTS LISTED AS NUISANCE OR PROHIBITED PLANTS ON THE CITY OF PORTLAND PLANT LIST.
  - g. EROSION CONTROL MEASURES SHALL BE MAINTAINED DURING CONSTRUCTION.
9. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
10. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE EVERY TWO WEEKS, OR WITHIN 24 HOURS FOLLOWING A STORM EVENT. DAILY INSPECTIONS SHALL BE PERFORMED DURING PROLONGED RAINFALL. LOG OF INSPECTIONS TO BE KEPT AVAILABLE AT THE SITE.

**RESEEDING/ESTABLISHMENT OF VEGETATIVE COVER :**

1. RECOMMENDED EROSION CONTROL GRASS SEED MIXES ARE AS SPECIFIED AS BELOW. SIMILAR MIXES DESIGNED TO ACHIEVE EROSION CONTROL MAY BE SUBSTITUTED WITH APPROVAL. IN GENERAL, USE OF QUICK GROWING, STERILE GRASSES AND GRAINS IN MIXTURE WITH PERMANENT VEGETATIVE COVER IS RECOMMENDED TO ACHIEVE QUICK COVER OF EXPOSED SOILS.
  - a. DWARF GRASS MIX (LOW HEIGHT, LOW MAINTENANCE), 100 POUNDS PER ACRE SEED RATE

(MINIMUM):

  1. DWARF PERENNIAL RYEGRASS, 80% BY SEED COUNT.
  2. CREEPING RED FESCUE, 20% BY SEED COUNT.
2. IT IS RECOMMENDED THAT TOP SOIL ON SLOPES BE PREPARED BY ROUGHENING THE SLOPES BEFORE SEEDING.
3. AREAS THAT FAIL TO ESTABLISH GRASS COVER ADEQUATE TO PREVENT EROSION SHALL BE RESEED AS SOON AS SUCH AREAS ARE IDENTIFIED, AND ALL APPROPRIATE MEASURES TAKEN TO ESTABLISH COVER.
4. EROSION CONTROL MEASURES SHALL BE MAINTAINED BY CONTRACTOR UNTIL GRASS COVER IS ESTABLISHED AND UP TO ONE YEAR AFTER COMPLETION OF CONSTRUCTION, WHICHEVER IS SOONER.
5. MULCH SHALL BE SPREAD UNIFORMLY IMMEDIATELY FOLLOWING SEEDING.



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DATE:	NO.	REVISION

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PROJECT NO. E21-043		

**FIRWOOD DESIGN GROUP**  
Reliable Engineering Solutions  
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TROUTDALE, OREGON 97060  
(503) 668-3737

**STATE STREET HOMES**  
1233 NW NORTHRUP ST. #125  
PORTLAND, OR 97209

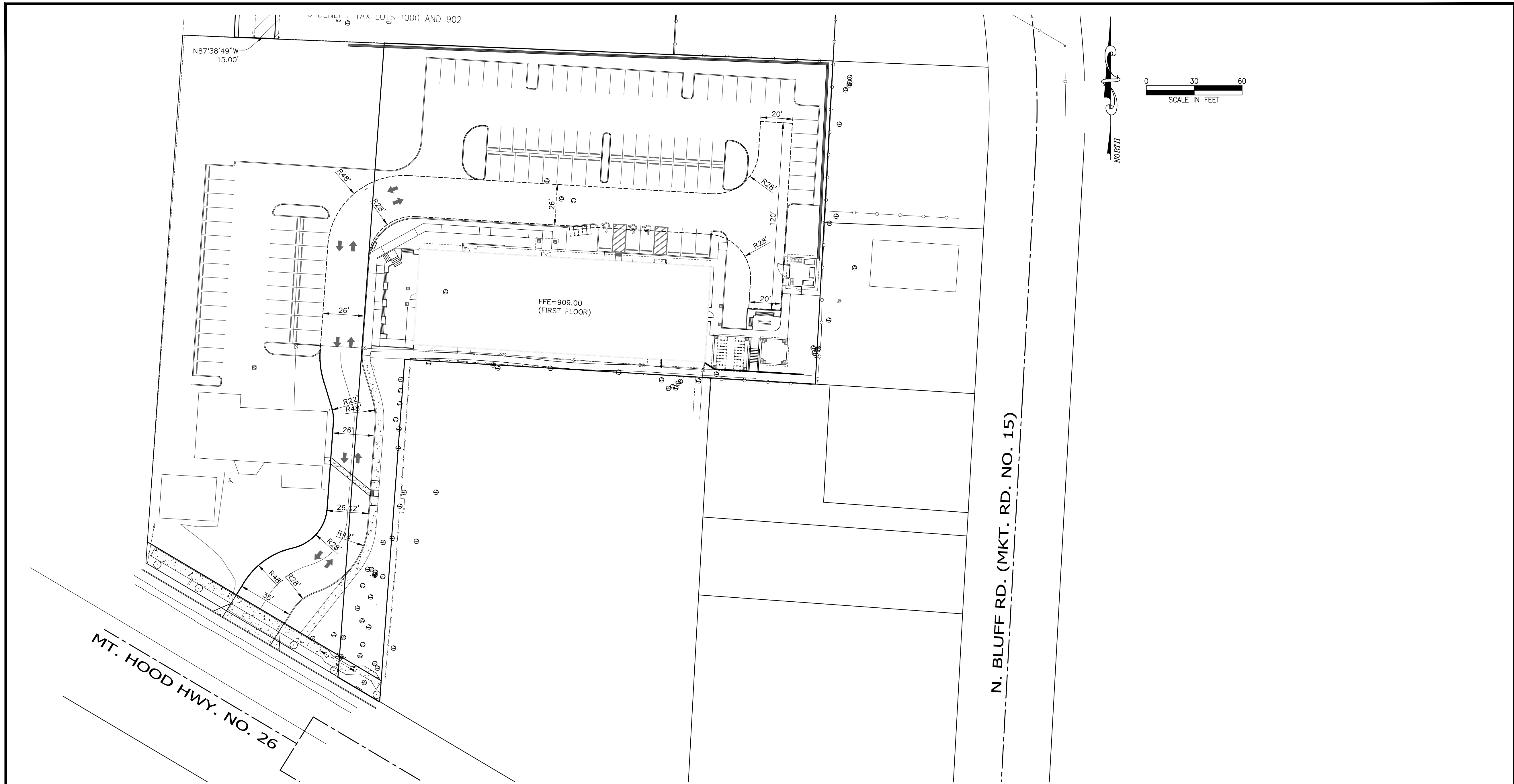
**ESC NOTES AND DETAILS**  
MIXED USE SITE DEVELOPMENT  
38015 HWY 26, SANDY, OR 97055



EXPIRES: 06/30/23  
SIGNATURE: DATE: \_\_\_\_\_

11  
12





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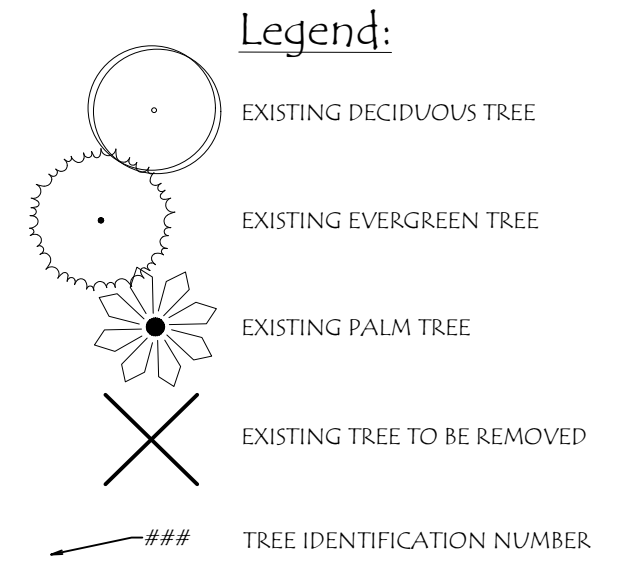
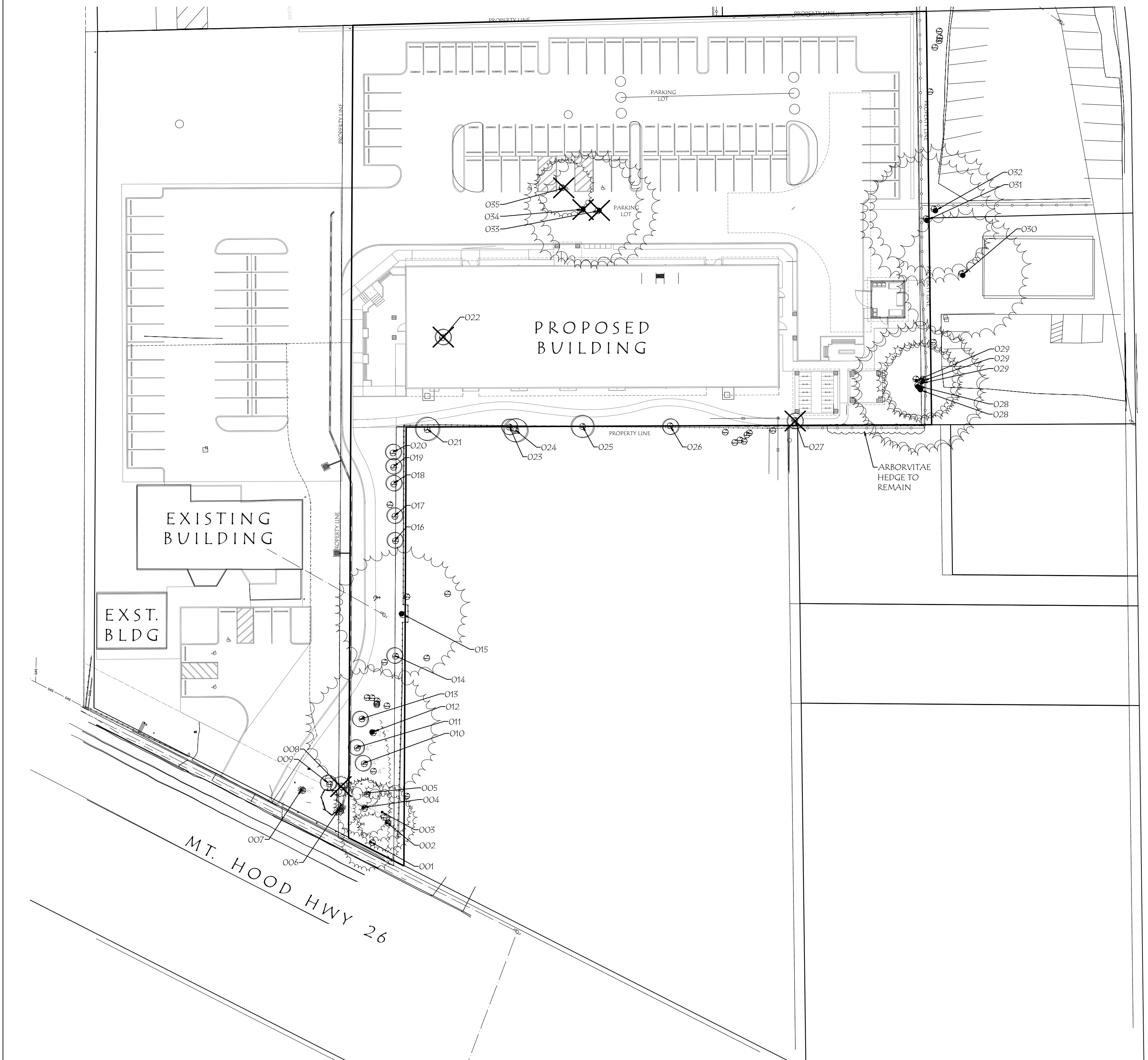
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SCALE: AS SHOWN	DATE: DECEMBER 2021	
PROJECT NO. E21-043		

**FIRWOOD** DESIGN GROUP  
 Reliable Engineering Solutions  
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 (503) 668-3737

**STATE STREET HOMES**  
 1233 NW NORTHRUP ST. #125  
 PORTLAND, OR 97209

**SITE CIRCULATION PLAN**  
 MIXED USE SITE DEVELOPMENT  
 38015 HWY 26, SANDY, OR 97055

12/12



**General Notes:**

1. TREE LOCATIONS BASED ON SITE SURVEY.
2. SEE ARCHITECTURAL PLANS FOR SITE INFORMATION.
3. TREE INVENTORY TABLE SEE THIS SHEET.

**Existing Tree Inventory**

TREE ID	TREE SPECIES	SIZE (DBH)	NOTES	REMAIN/REMOVE
001	Blue Spruce	12"		Remain
002	Western Red Cedar	4"		Remain
003	Western Red Cedar	8"		Remain
004	Blue Spruce	10"		Remain
005	Western Red Cedar	8"		Remain
006	Windmill Palm	10"		Remain
007	Windmill Palm	6"		Remain
008	Conifer (Unknown)	10"	Dead	Remove
009	Holly	4"		Remain
010	Sugar Maple	14"		Remain
011	Cherry	14"		Remain
012	Douglas Fir	24"		Remain
013	Cherry	6"		Remain
014	Filbert	14"		Remain
015	Douglas Fir	26"		Remain
016	Redbud	5"	Located on Property Line	Remain
017	Holly	5"	Located on Property Line	Remain
018	Thundercloud Plum	4"	Located on Property Line	Remain
019	Redbud	5"	Located on Property Line	Remain
020	Thundercloud Plum	4"	Located on Property Line	Remain
021	Red Maple	10"	Located on Adjacent Property	Remain
022	Filbert	6"		Remove, Development Impacts
023	Cherry	4"	Located on Property Line	Remain
024	Red Maple	6"	Located on Adjacent Property	Remain
025	Cherry	10"	Located on Property Line	Remain
026	Cherry	6"	Located on Property Line	Remain
027	Redbud	5"		Remove, Development Impacts
028	Douglas Fir	18", 18"	Located on Property Line	Remain
029	Douglas Fir	12", 12", 12"	Located on Property Line	Remain
030	Douglas Fir	36"	Located on Adjacent Property	Remain
031	Douglas Fir	36"	Located on Adjacent Property	Remain
032	Douglas Fir	36"	Located on Adjacent Property	Remain
033	Douglas Fir	24"		Remove, Development Impacts
034	Douglas Fir	24"		Remove, Development Impacts
035	Douglas Fir	12"		Remove, Development Impacts

**Laurus Designs, LLC**

1012 Pine Street  
Silverton, Oregon  
503.784.6494

**Multi-Family Sandy**

38015 Highway 26  
Sandy, Oregon

REGISTERED  
643  
**PRELIMINARY**  
LAURA A. ANTONSON  
OREGON  
11/16/2007  
LANDSCAPE ARCHITECT

**EXISTING TREE INVENTORY**

SCALE: 1"=30'-0"  
0' 15' 30' 60'  
SCALE

March 21st, 2023

**REVISIONS**

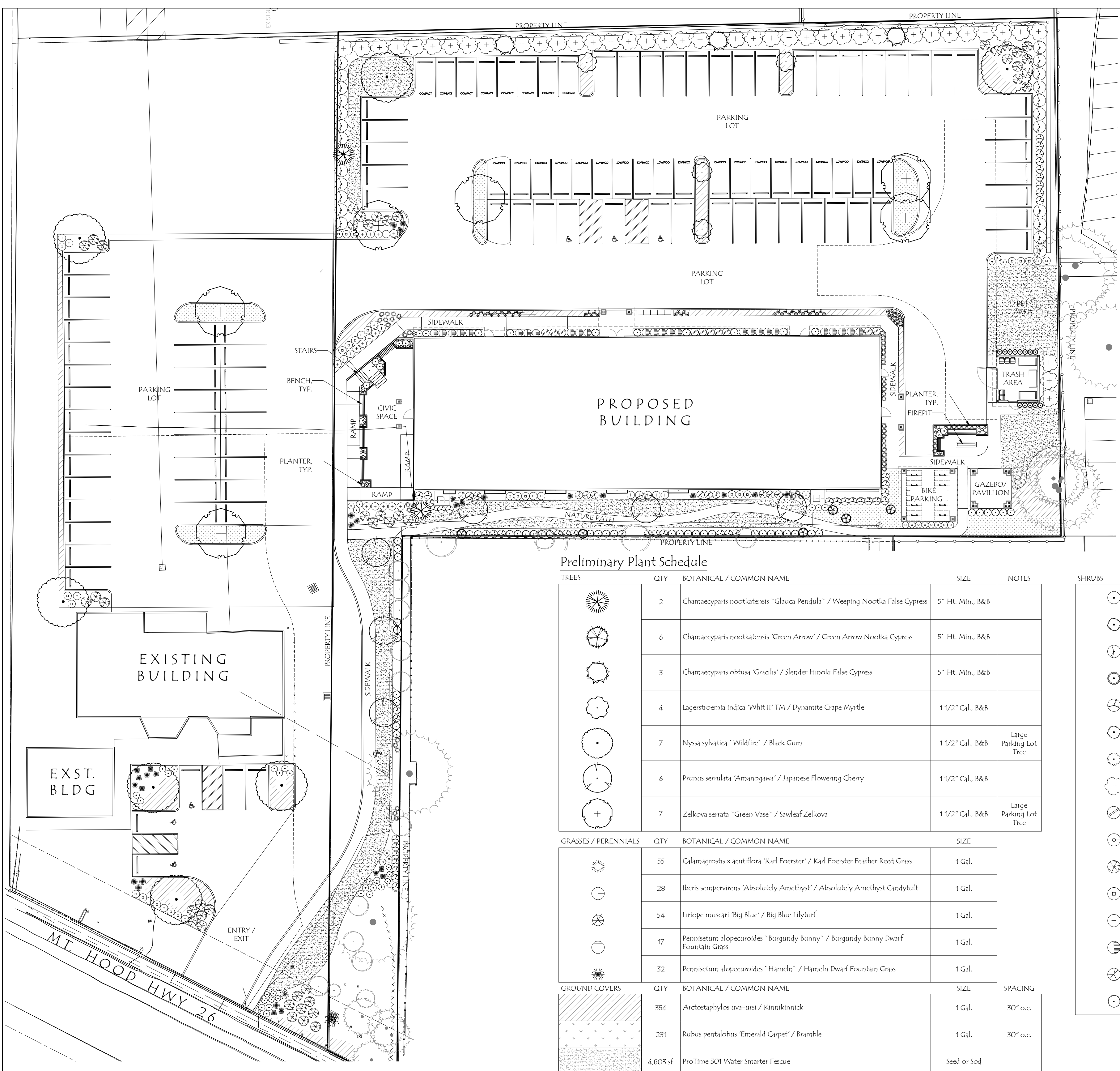
#	DATE	NOTES	INITIALS

**L1.1**

SHEET 1 OF 2

PROJECT #: 1409R





**Legend:**

- EXISTING DECIDUOUS TREE TO REMAIN
- EXISTING EVERGREEN TREE TO REMAIN

**General Notes:**

1. PLANTING PLAN FOR PRELIMINARY USE ONLY. NOT FOR BIDDING OR CONSTRUCTION.
2. TREE INVENTORY FOR EXISTING TREES TO REMAIN AND REMOVE SEE SHEET L1.1.
3. SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN.
4. SEE CIVIL DRAWINGS FOR GRADING AND UTILITIES.
5. PLANT SIZES MEET MINIMUM CITY OF SANDY PLANT REQUIREMENTS OR GREATER.
6. IRRIGATION TO BE AN AUTOMATIC UNDERGROUND SYSTEM DESIGN BUILT BY THE LANDSCAPE CONTRACTOR.

**Landscape Requirements**

Total Site Area (sf): 63,711 sf (1.46 acres)  
 Landscape Area: 15,894 sf  
 Civic Space: 1,614 sf  
 Outdoor Recreation Areas: 9,901 sf  
 Parking Lot: 1 Large Tree Per 12 Spaces  
 Screen/buffer: Evergreen plants to screen within 2 years

**Preliminary Plant Schedule**

TREES	QTY	BOTANICAL / COMMON NAME	SIZE	NOTES
	2	Chamaecyparis nootkatensis 'Glauc Pendula' / Weeping Nootka False Cypress	5" Ht. Min., B&B	
	6	Chamaecyparis nootkatensis 'Green Arrow' / Green Arrow Nootka Cypress	5" Ht. Min., B&B	
	3	Chamaecyparis obtusa 'Gracilis' / Slender Hinoki False Cypress	5" Ht. Min., B&B	
	4	Lagerstroemia Indica 'Whit II' TM / Dynamite Crape Myrtle	11/2" Cal., B&B	
	7	Nyssa sylvatica 'Wildfire' / Black Gum	11/2" Cal., B&B	Large Parking Lot Tree
	6	Prunus serrulata 'Amanogawa' / Japanese Flowering Cherry	11/2" Cal., B&B	
	7	Zelkova serrata 'Green Vase' / Sawleaf Zelkova	11/2" Cal., B&B	Large Parking Lot Tree

SHRUBS	QTY	BOTANICAL / COMMON NAME	SIZE
	38	Abelia x grandiflora 'Kaleidoscope' / Kaleidoscope Abelia	2 Gal.
	8	Cornus sericea 'Kelsey' / Kelsey Dogwood	2 Gal.
	23	Euonymus alatus 'Compactus' / Compact Burning Bush	5 Gal.
	13	Euonymus japonicus 'Greenspire' / Greenspire Upright Euonymus	5 Gal.
	45	Euonymus japonicus 'Silver King' / Silver King Euonymus	5 Gal.
	6	Ilex crenata 'Sky Pencil' / Sky Pencil Japanese Holly	24"-30" Ht.
	8	Leucothoe fontanesiana 'Zeblied' TM / Scarletta Drooping Leucothoe	2 Gal.
	40	Ligustrum japonicum 'Texanum' / Texas Japanese Privet	5 Gal.
	10	Lonicera pileata 'Little Lemon Zest' / Little Lemon Zest Honeysuckle	2 Gal.
	13	Nandina domestica 'Atropurpurea Nana' / Dwarf Nandina	2 Gal.
	45	Prunus laurocerasus 'Mount Vernon' / Mount Vernon Laurel	1 Gal.
	38	Rhaphiolepis umbellata 'Snow White' / Yedda Hawthorn	3 Gal.
	23	Rosa KnockOut 'Radrizz' / Radrizz KnockOut Rose	2 Gal.
	26	Sarcococca confusa / Fragrant Sarcococca	2 Gal.
	12	Spiraea x bumaldii 'Magic Carpet' / Magic Carpet Spirea	2 Gal.
	47	Vaccinium ovatum / Evergreen Huckleberry	2 Gal.

GRASSES / PERENNIALS	QTY	BOTANICAL / COMMON NAME	SIZE
	55	Calamagrostis x acutiflora 'Karl Foerster' / Karl Foerster Feather Reed Grass	1 Gal.
	28	Iberis sempervirens 'Absolutely Amethyst' / Absolutely Amethyst Candytuft	1 Gal.
	54	Liriope muscari 'Big Blue' / Big Blue Lilyturf	1 Gal.
	17	Pennisetum alopecuroides 'Bungundy Bunny' / Bungundy Bunny Dwarf Fountain Grass	1 Gal.
	32	Pennisetum alopecuroides 'Hameln' / Hameln Dwarf Fountain Grass	1 Gal.

GROUND COVERS	QTY	BOTANICAL / COMMON NAME	SIZE	SPACING
	354	Arctostaphylos uva-ursi / Kinnikinnick	1 Gal.	30" o.c.
	231	Rubus pentalobus 'Emerald Carpet' / Bramble	1 Gal.	30" o.c.
	4,805 sf	ProTime 301 Water Smarter Fescue	Seed or Sod	

Laurus Designs, LLC  
  
 1012 Pine Street  
 Silverton, Oregon  
 503.784.6494

Multi-Family  
 Sandy  
 38015 Highway 26  
 Sandy, Oregon

REGISTERED  
 643  
 PRELIMINARY  
 LAURA A. ANTONSON  
 OREGON  
 11/16/2007  
 LANDSCAPE ARCHITECT

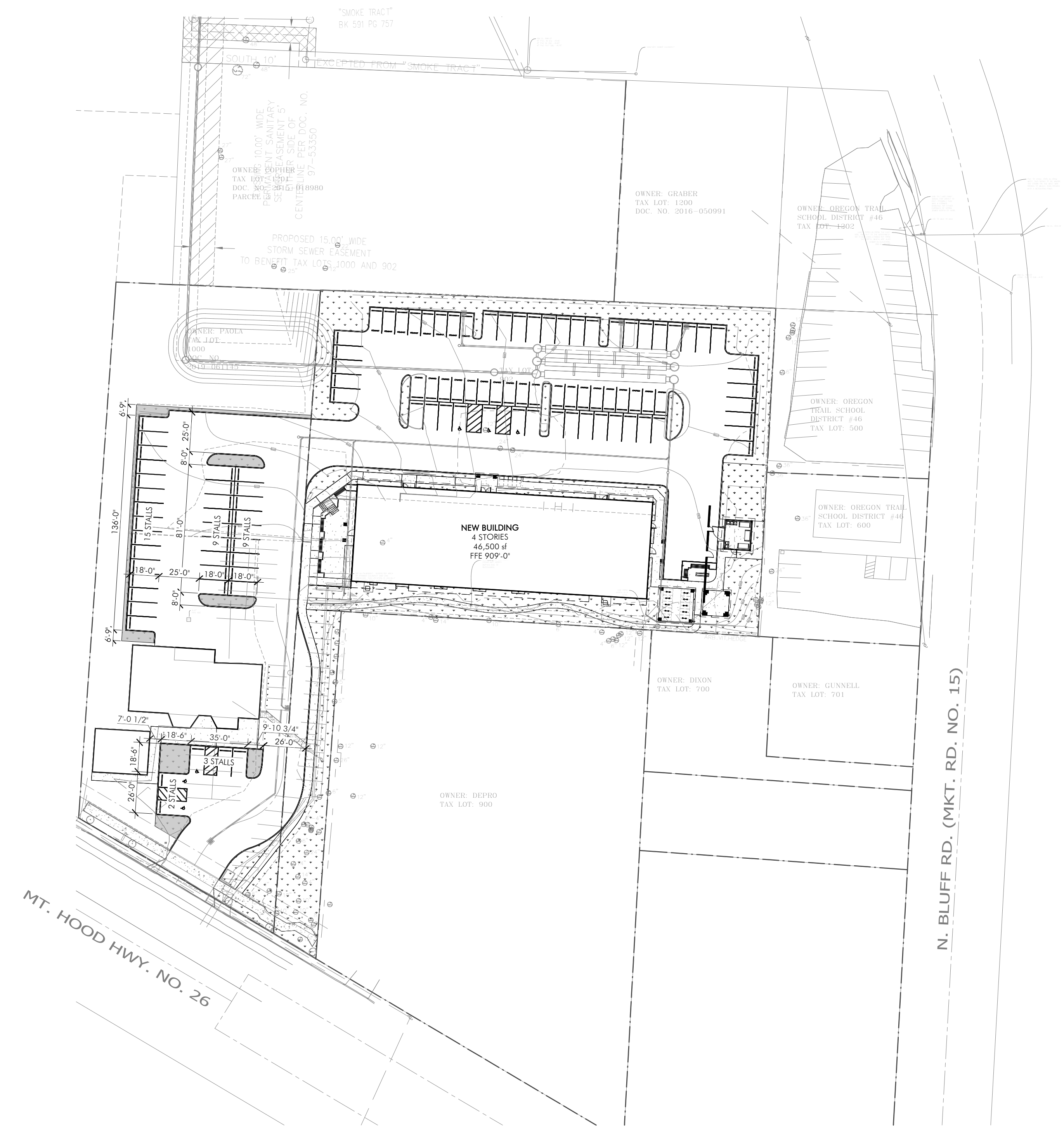
PRELIMINARY  
 PLANTING  
 PLAN  
  
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 0' 10' 20' 40'  
 SCALE  
 March 21st, 2023

**REVISIONS**

#	DATE	NOTES	INITIALS

L2.1  
 SHEET 2 OF 2  
 PROJECT #: 1409R





**SITE PLAN GENERAL NOTES:**

- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- REFER TO CIVIL DRAWINGS FOR GRADING. SITE IS REQUIRED TO MEET THE LAWS OF FHA AND ADA. ACCESSIBLE ROUTES SHALL NOT EXCEED 5% (1 IN 20) OR CROSS SLOPES SHALL NOT EXCEED 2% (1 IN 50). ALL AT GRADE SIDEWALKS ARE ACCESSIBLE ROUTES.
- JOINTS IN CONCRETE WALKS NOTED AS E.J. ARE TO BE CONSTRUCTED AS EXPANSION JOINTS. ALL OTHER JOINTS SHOWN, TO BE TOOLED CONTROL JOINTS, SEE CIVIL.
- PROVIDE CONSTRUCTION FENCING AS REQUIRED TO SECURE SITE AND BUILDING DURING CONSTRUCTION.
- SEE LANDSCAPE DRAWINGS FOR LANDSCAPE AND IRRIGATION ELEMENTS.
- EXTREME CARE SHOULD BE TAKEN TO PRESERVE EXISTING ROOTS OF TREES TO REMAIN.
- SEE ELECTRICAL DRAWINGS FOR SITE LIGHTING.

**SITE DEVELOPMENT CODE REVIEW:**

- PARKING:**
- EATING ESTABLISHMENT: 1 SPACE PER 250 SF (4,421 SF) 1 SPACE PER 2 EMPLOYEES (10 EMPLOYEES) = 23 SPACES RQD
  - EXISTING PARKING: 44 SPACES PROVIDED = 38 SPACES 0.00% COMPACT
- BIKE PARKING:**
- EATING ESTABLISHMENT: 5% OF RQD PARKING, OR 2 SPACES = 2 SPACES
- RQD LANDSCAPE BUFFER:**
- 30% OF HWY FRONTAGE, FOR A DEPTH OR 20'-0" HWY FRONTAGE FOR BOTH TIS = 171'-4" PROVIDED = 64'-0" (37.4%)
- REQUIRED PARKING LANDSCAPE:**
- 10% OF PARKING LOT LOWER PARKING (2,166 SF) = 217 SF
  - UPPER PARKING (15,221 SF) = 1,522 SF
  - TOTAL = 1,739 SF
  - PROVIDED = 2,131 SF
  - MINIMUM 5'-0" PLANTERS AT ENDS OF EACH BAY

**SITE CALCULATIONS AND LEGEND:**

SITE ELEMENT DESCRIPTION:	LEGEND:	AREA: (sf)	PERCENTAGE: (%)
BUILDINGS:	[Symbol]	4,421.10 sf	6.61 %
BUILDINGS OVERHANG ABOVE:	[Symbol]		
LANDSCAPING:	[Symbol]	38,999.03 sf	58.28%
ASPHALT PAVING:	[Symbol]	21,072.24 sf	31.49%
ACCESSORY STRUCTURES	[Symbol]	380.45 sf	0.57 %
CONCRETE SIDEWALKS:	[Symbol]	1,683.43 sf	2.52 %
CONCRETE PAVING & CURBS:	[Symbol]	355.73 sf	0.53 %
TOTALS:		66,911.98 sf	100.0 %



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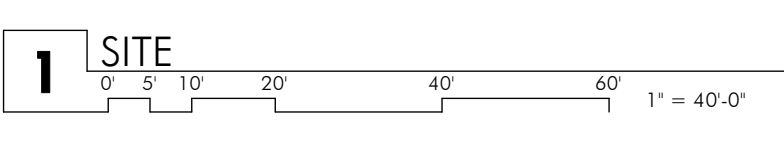
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PROJECT # 2021-146  
DATE: 03/21/2023

REVISIONS

NEW MULTI-FAMILY DEVELOPMENT  
**SANDY**  
38015 Hwy 26, Sandy, OR

SHEET:  
**A1.01**  
SITE PLAN



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**SITE PLAN GENERAL NOTES:**

- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- REFER TO CIVIL DRAWINGS FOR GRADING. SITE IS REQUIRED TO MEET THE LAWS OF FHA AND ADA. ACCESSIBLE ROUTES SHALL NOT EXCEED 5% (1 IN 20) OR CROSS SLOPES SHALL NOT EXCEED 2% (1 IN 50). ALL AT GRADE SIDEWALKS ARE ACCESSIBLE ROUTES.
- JOINTS IN CONCRETE WALKS NOTED AS E.J. ARE TO BE CONSTRUCTED AS EXPANSION JOINTS. ALL OTHER JOINTS SHOWN, TO BE TOOLED CONTROL JOINTS, SEE CIVIL.
- PROVIDE CONSTRUCTION FENCING AS REQUIRED TO SECURE SITE AND BUILDING DURING CONSTRUCTION.
- EXTREME CARE SHOULD BE TAKEN TO PRESERVE EXISTING ROOTS OF TREES TO REMAIN.
- SEE LANDSCAPE DRAWINGS FOR LANDSCAPE AND IRRIGATION ELEMENTS.
- SEE ELECTRICAL DRAWINGS FOR SITE LIGHTING.

**SITE DEVELOPMENT CODE REVIEW:**

SITE AREA: 63,711 sf = 1.46 ac  
 ZONING: C-2 General Commercial  
 SETBACKS: FRONT YARD - 10'-0" SIDE/REAR YARD - NONE  
 BUILDING HEIGHT: 55 FT.  
**PROPOSED: 3 LEVELS OF RES. OVER 1 LEVEL OF STORAGE**  
 BUILDING AREAS:  
 • LEVEL 01, STORAGE/LEASING: 11,199 sf  
 • LEVEL 02-04, RESIDENTIAL: 12,535 sf  
**OVERALL = 48,804 sf**

CIVIC SPACE REQMT: 3% BUILDING AREA = 1,644 sf  
**PROVIDED = 1,544 sf**

OUTDOOR REC AREA: 200 sf PER UNIT = 8,400 sf  
 OUTDOOR DOG PARK = 980 SF  
 COVERED GAZEBO (256 sf x 1.25) = 320 SF  
 OUTDOOR SEATING/FIRE PIT = 263 SF  
 EASTERN OPEN LAWN = 1198 SF  
 LANDSCAPED NATURE PATH = 4,146 SF  
 LANDSCAPED NATURE SIDEWALK = 2,087 SF  
**PROVIDED = 8,994 SF**

UNIT MIX:  
 1 BED / 1 BATH - 32 UNITS  
 2 BED / 2 BATH - 10 UNITS  
**TOTAL UNITS = 42 UNITS**

PARKING:  
 • STORAGE: 1 SPACE PER 1 EMPLOYEE  
 1.5 SPACES PER 1 BD  
 2 SPACES PER 2 BD  
 = 70 SPACES R/O  
**PROVIDED = 70 SPACES**  
**38.6% COMPACT**

REQUIRED PARKING LANDSCAPE:  
 10% OF PARKING LOT = 2,668 SF  
**PROVIDED = 3,870 SF**  
 • MINIMUM 5'-0" PLANTERS AT ENDS OF EACH BAY

BIKE PARKING:  
 • MULTIFAMILY: 1 PER DWELLING UNIT (42 SPACES)  
 = 20 EXTERIOR SPACES  
 = 8 (ON EACH RES. FLOOR)  
**PROVIDED = 44 SPACES**

**SITE PLAN KEYNOTES:**

- PROPERTY LINE
- FRONT SETBACK
- ACCESSIBLE PARKING STALL
- VAN ACCESSIBLE PARKING STALL
- MAILBOXES
- SHORT-TERM BIKE PARKING WITH GROUND MOUNTED U-RACKS
- PROVIDE SIGNAGE AT DOOR INDICATING FIRE RISER ROOM
- PROVIDE 3'-6" HIGH GUARDRAIL AT OP RETAINING WALL/ADJACENT TO RAMP/STAIR WHEN GREATER THAN 30" IN HEIGHT
- 10'-0" X 35'-0" LOADING AREA
- FIRE TRUCK APPARATUS TURN AROUND
- PARKING TO BE UNASSIGNED, MUST BE A MINIMUM OF 10 UNASSIGNED SPACES PROVIDED
- GROUND MOUNTED HEAT PUMP, SEE MECH. SEE LANDSCAPE DRAWINGS FOR VISUAL SCREENING
- WALL MOUNTED ELECTRICAL GEAR, SEE ELECT. SEE LANDSCAPE DRAWINGS FOR VISUAL SCREENING

**SITE CALCULATIONS AND LEGEND:**

SITE ELEMENT DESCRIPTION:	LEGEND:	AREA: (sf)	PERCENTAGE: (%)
BUILDINGS:	[Symbol]	11,279.98 sf	17.70 %
BUILDINGS OVERHANG ABOVE:	[Symbol]		
LANDSCAPING:	[Symbol]	15,707.33 sf	24.66 %
ASPHALT PAVING:	[Symbol]	29,886.82 sf	46.92 %
ACCESSORY STRUCTURES:	[Symbol]	966.99 sf	1.50 %
CONCRETE SIDEWALKS:	[Symbol]	3,997.89 sf	6.28 %
CONCRETE PAVING & CURBS:	[Symbol]	1,872.02 sf	2.94 %
TOTALS:		63,711.03 sf	100.0 %



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 DATE: 03/21/2023

REVISIONS

NEW MULTI-FAMILY DEVELOPMENT

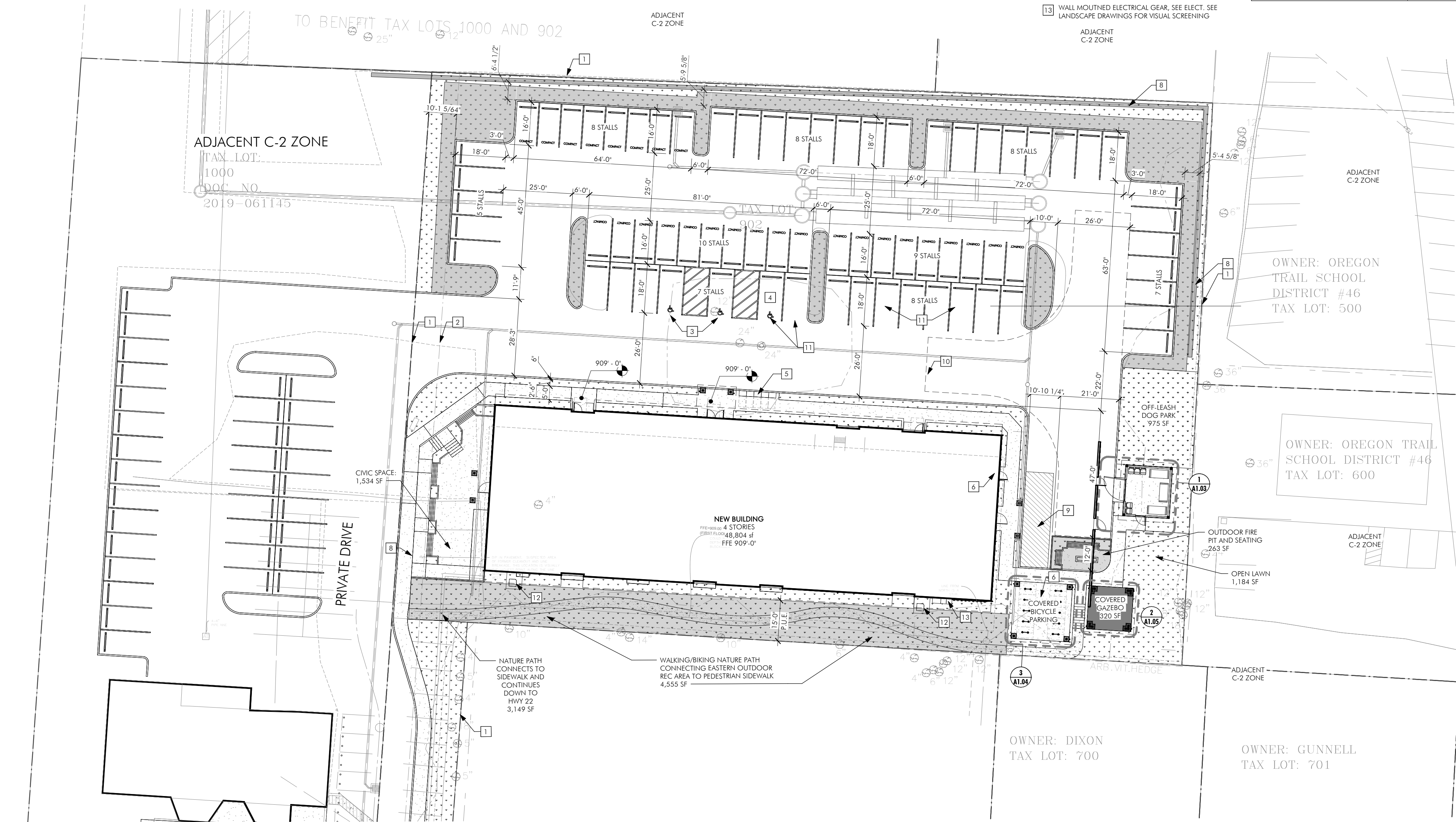
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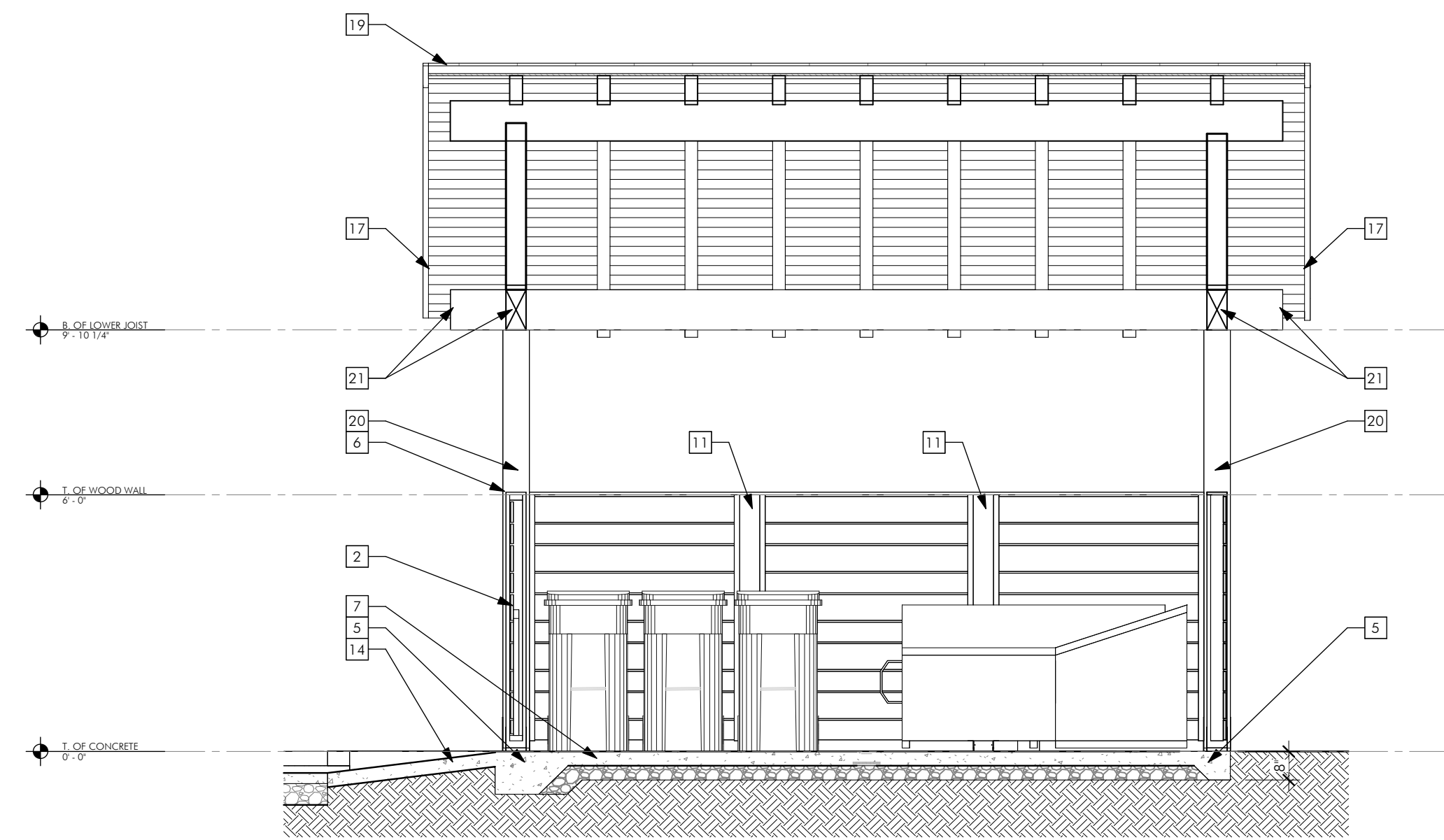
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ENLARGED SITE PLAN

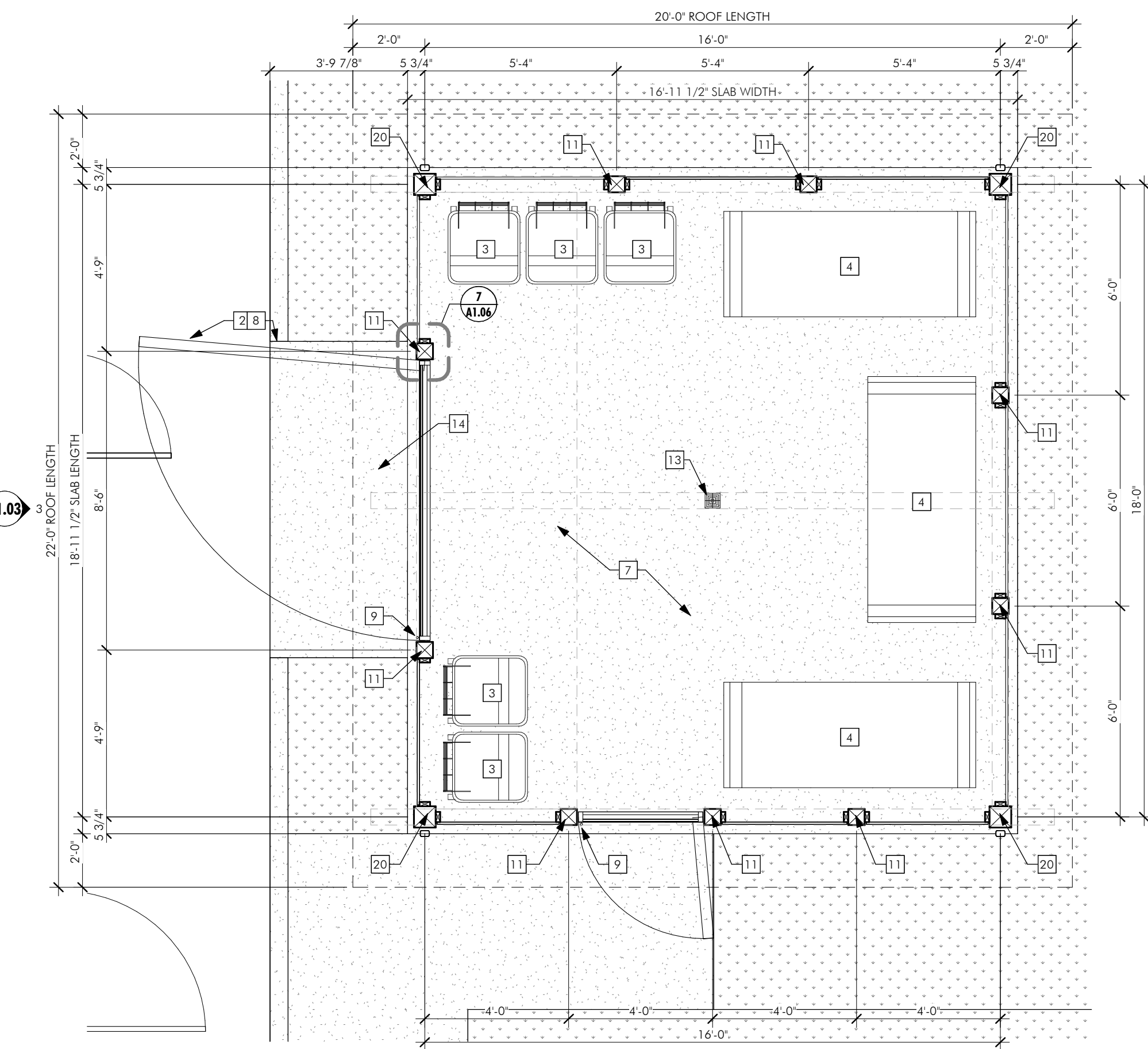


**1 SITE - ENLARGED**  
 0 5 10 20 40 60  
 1" = 20'-0"

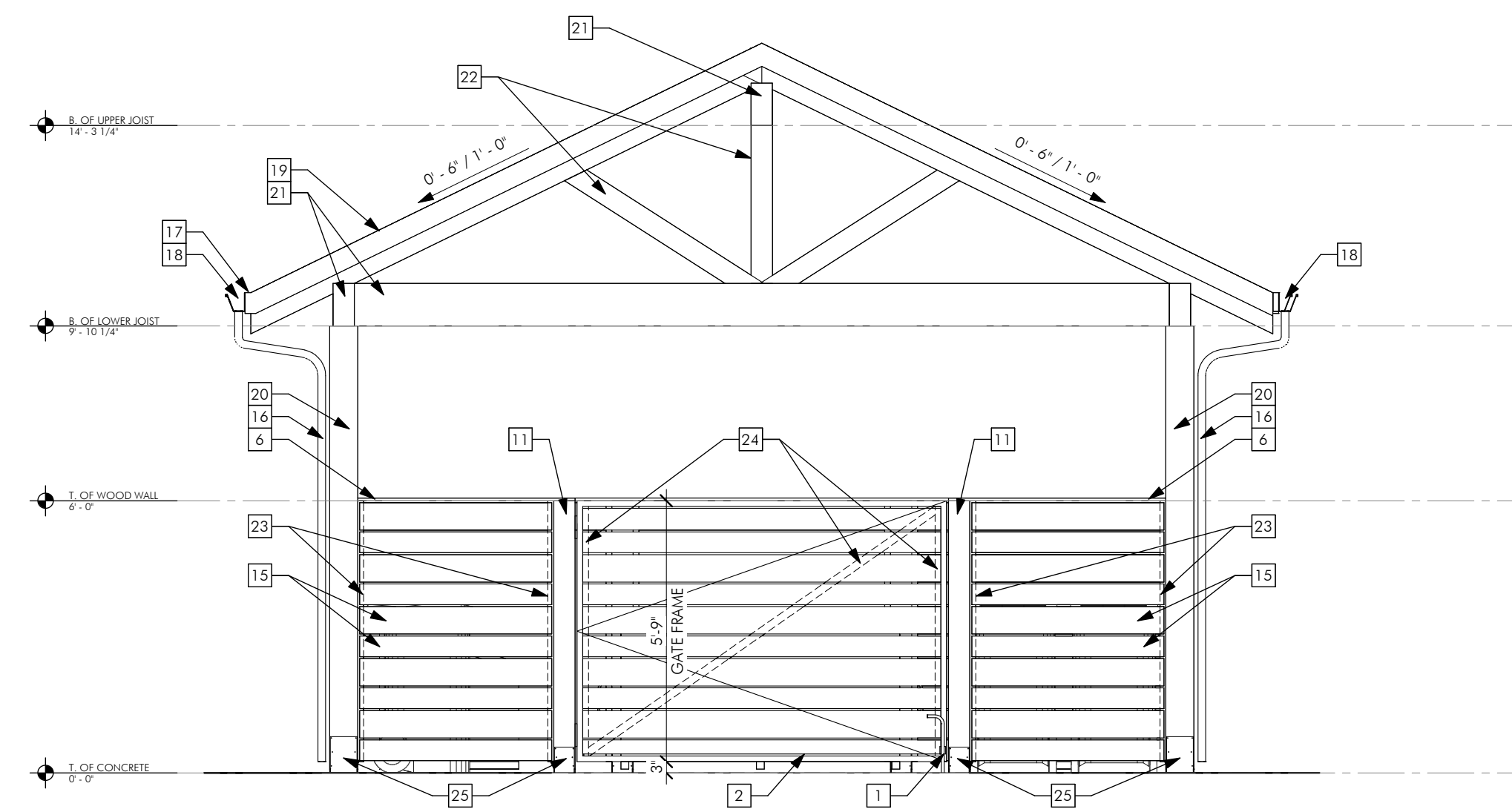
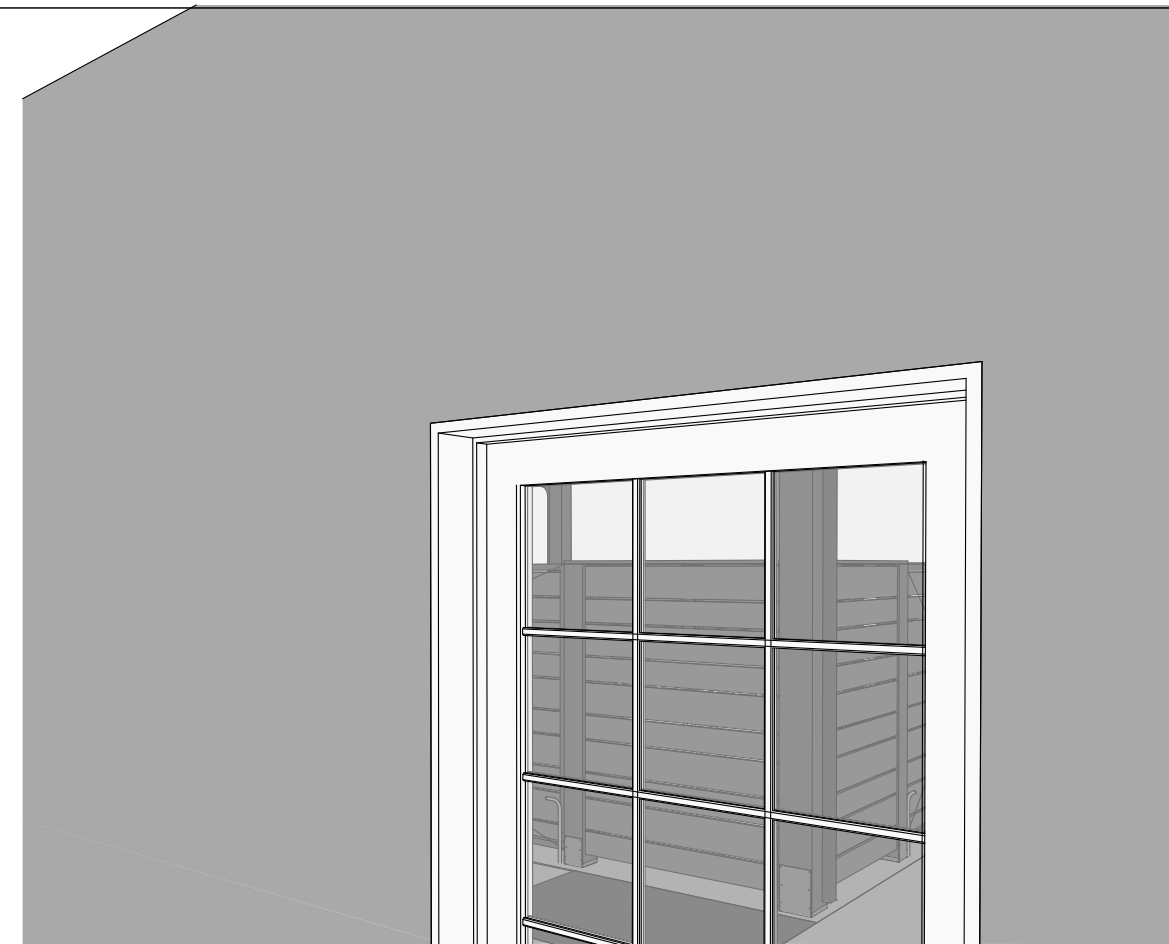
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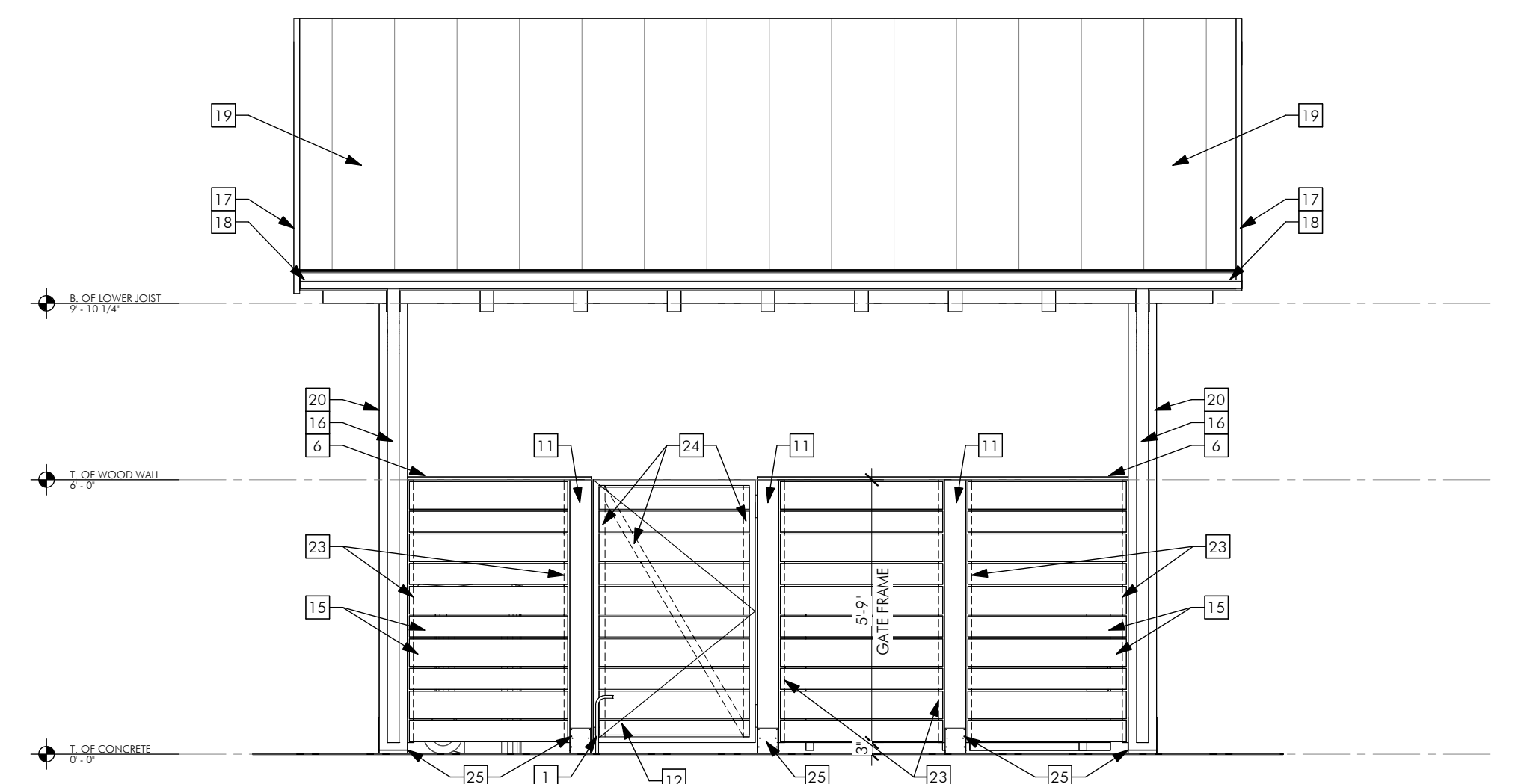
**2 TRASH ENCLOSURE - SECTION**



**1 TRASH ENCLOSURE**



**3 TRASH ENCLOSURE - FRONT**



**4 TRASH ENCLOSURE - SIDE**

**TRASH ENC.NOTES:**

- 1 GALVANIZED STEEL LOCKABLE CANE BOLTS FOR GATE
- 2 8'-0" WIDE GATE WITH HEAVY DUTY GALVANIZED STRAP HINGES AND CANE BOLT WITH SLEEVE IN CONCRETE PAD
- 3 90 GALLON RECYCLING BIN
- 4 2 CUBIC YARD TRASH BIN
- 5 CONCRETE FOOTING / THICKENED SLAB EDGE, SEE STRUCTURAL
- 6 1x6 TOP RAIL
- 7 CONCRETE SLAB, SEE STRUCTURAL. SLOPE FLOOR OF TRASH ENCLOSURE TO INTERIOR DRAIN
- 8 PROVIDE GATE STOP AND HOOK TO RESTRAIN GATE IN OPEN POSITION WHEN IN USE
- 9 GALVANIZED STEEL SLEEVE SET IN CONCRETE (OPEN TO DRAIN BELOW CONCRETE SLAB), TO RECEIVE GATE CANE BOLT
- 10 H.D. WELDABLE HINGES
- 11 6'-0" HIGH, 6"x6" PRESSURE TREATED WOOD POST
- 12 3'-6" WIDE PEDESTRIAN DOOR WITH HEAVY DUTY GALVANIZED STRAP HINGES
- 13 4' X 4' SQUARE FLOOR DRAIN
- 14 SLOPE CONCRETE DOWN TO ASPHALT
- 15 ALTERNATE 1"x6" AND 1"x8" BOARDS HORIZONTALLY WITH A 1/2" GAP BETWEEN EACH. PAINT TO MATCH ADJACENT BUILDING. MILLER PAINT, GROPIUS GRAY
- 16 PRE-FINISHED ALUMINUM DOWNSPOUT
- 17 2"x6" WOOD FASCIA
- 18 PRE-FINISHED ALUMINUM GUTTER
- 19 2" STANDING SEAM METAL ROOF, OVER PLYWOOD SHEATHING, OVER 4"x8" WOOD JOISTS SPACED 24" O.C. 1" T&G PANELING ATTACHED TO UNDERSIDE OF SHEATHING BETWEEN ROOF JOISTS. METAL ROOF COLOR TO MATCH ADJACENT BUILDING
- 20 8"x8" PRESSURE TREATED WOOD POST
- 21 6"x12" WOOD BEAM
- 22 6"x6" WOOD SUPPORTS
- 23 2X4 NAILER, CENTERED ON ADJACENT POST, TYPICAL AT ALL POSTS EXCEPT FOR WHERE GATE IS INSTALLED. NAILER TO BE 3" A.F.F. TO 6'-0" A.F.F.
- 24 2X4 GATE NAILER
- 25 POWDER COATED WOOD TO CONCRETE BASE, WITH 1" STANDOFF, BLACK



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REVISIONS

NEW MULTI-FAMILY DEVELOPMENT

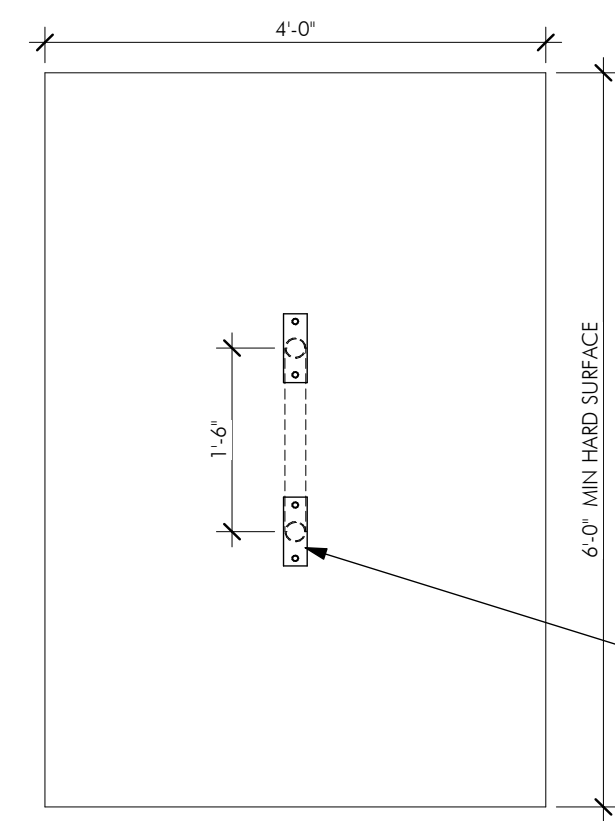
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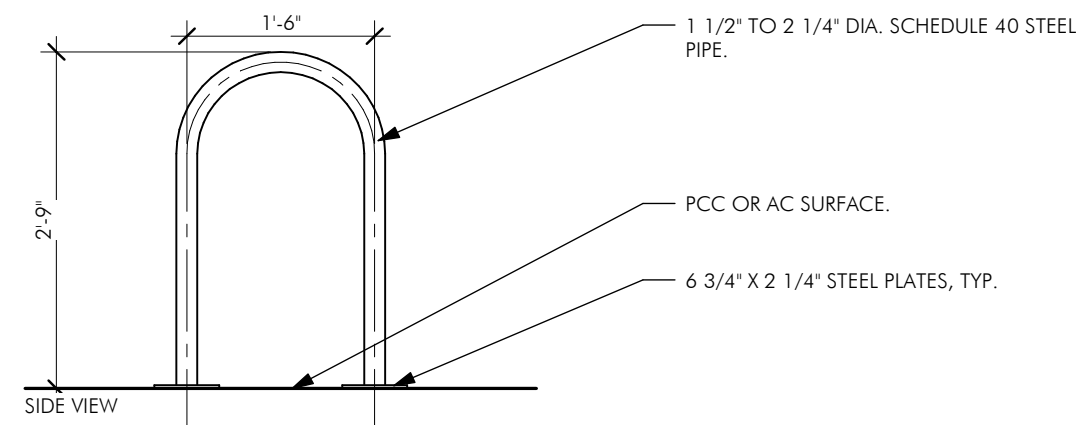
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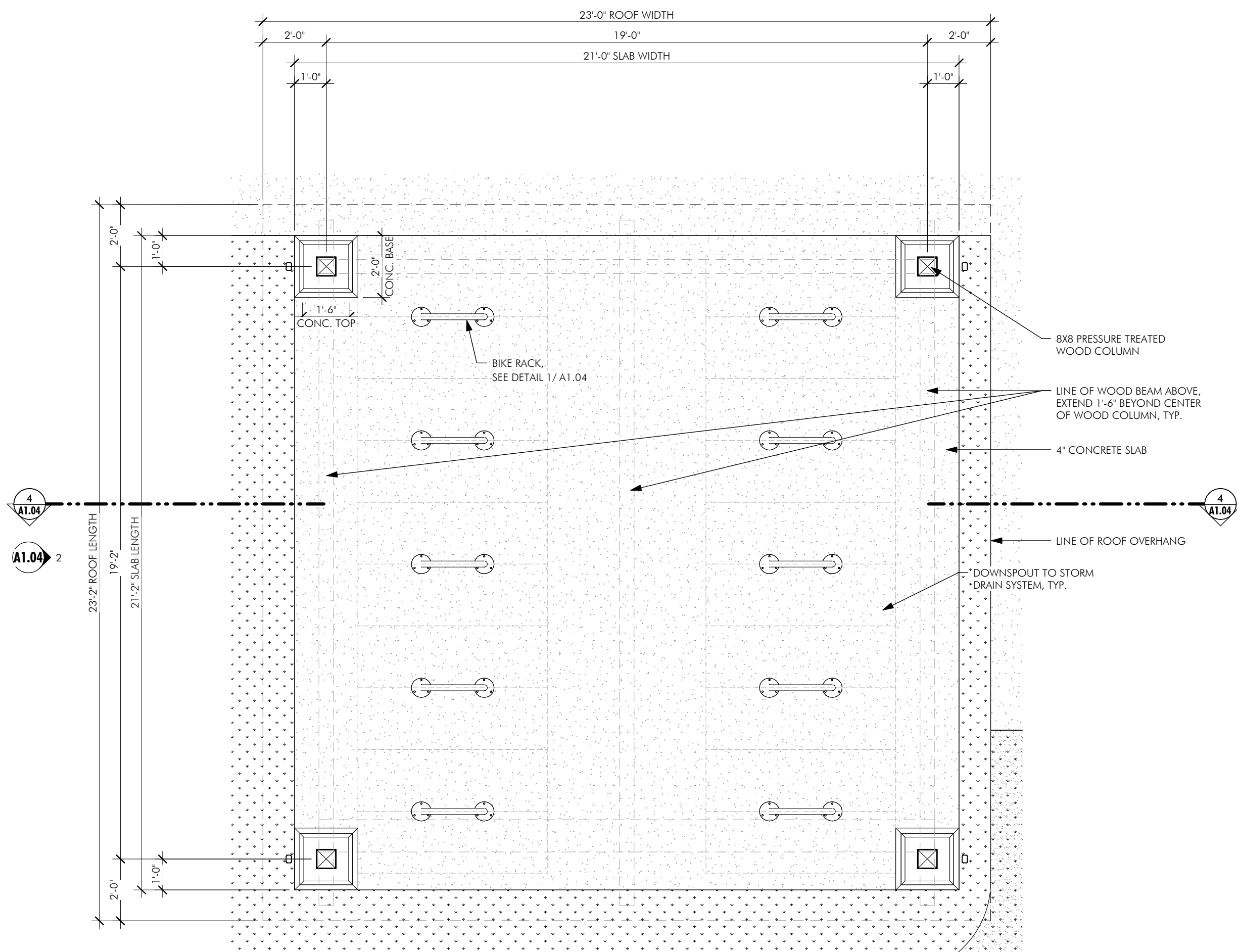
TRASH ENCLOSURE



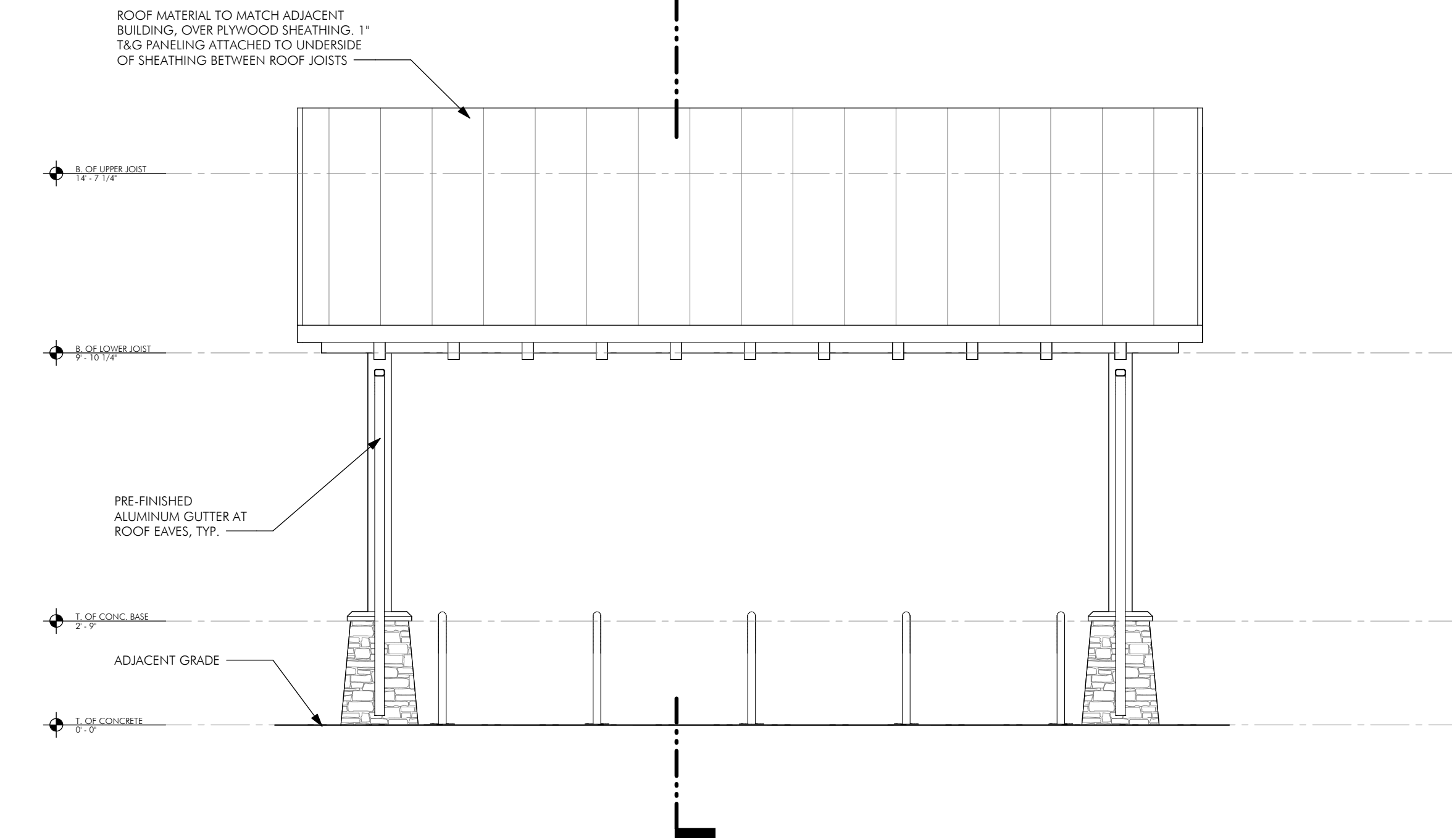
- NOTES:
- BIKE RACKS SHALL HAVE A GLOSS BLACK POLYESTER POWDER COAT FINISH.
  - MOUNTING RAILS SHALL BE FURNISHED WITH MOUNTING HOLES AND VANDAL RESISTANT CONCRETE ANCHOR MOUNTING HARDWARE.
  - EACH 1" SHALL BE WELDED OR MOUNTED TO RAILS OR PLATES WITH VANDAL RESISTANT OR HIDDEN FASTENERS.
  - FOR SINGLE U" INSTALLATION, EACH MOUNTING PLATE WILL BE EQUIPPED WITH TWO ANCHOR BOLT HOLES.



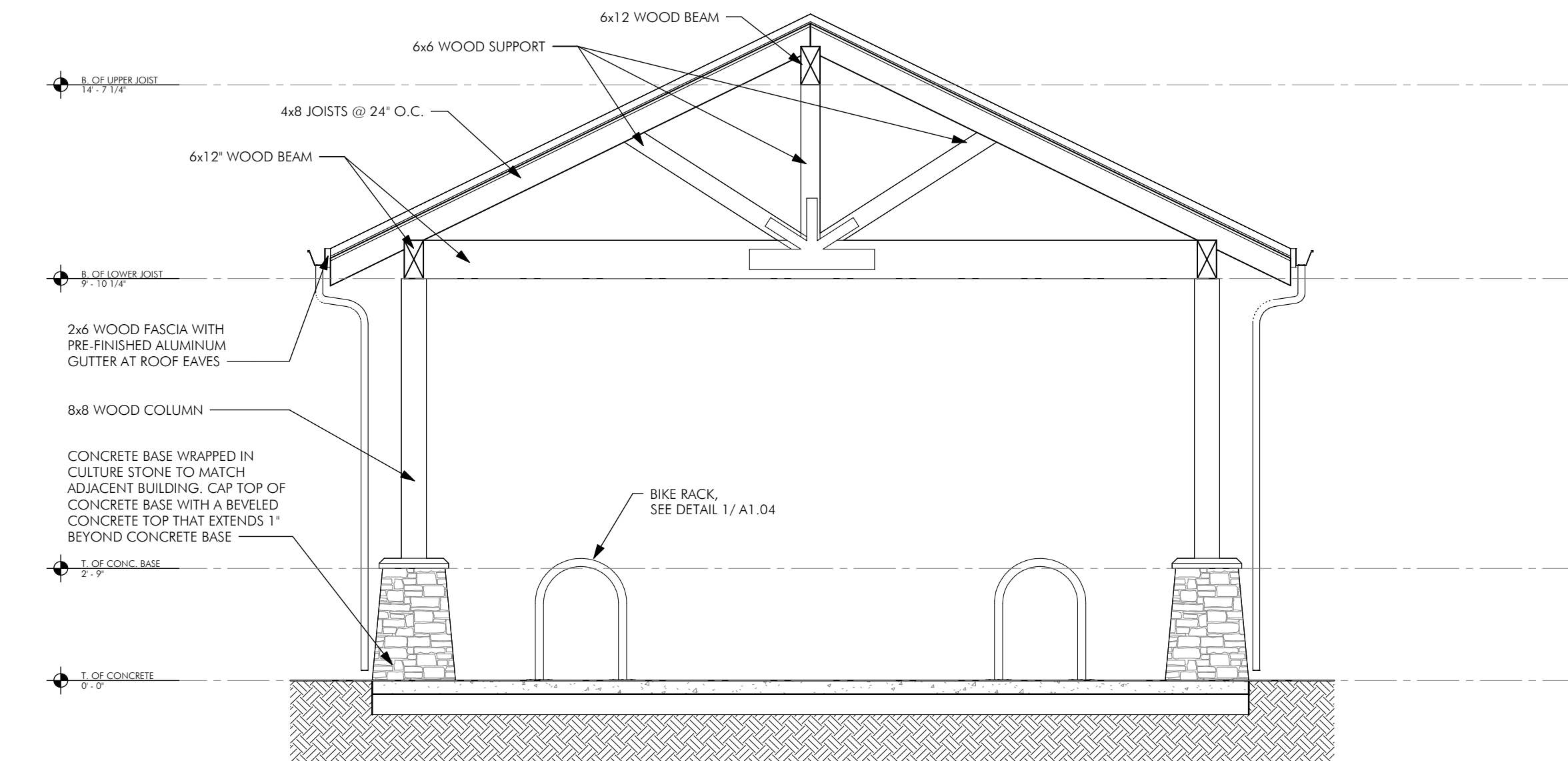
**1** INVERTED U BIKE RACK DETAIL  
3/4" = 1'-0"



**3** BICYCLE ENCLOSURE  
3/8" = 1'-0"



**2** BICYCLE ENCLOSURE - ELEVATION, SIDE  
3/8" = 1'-0"



**4** BIKE ENCLOSURE - SECTION  
3/8" = 1'-0"

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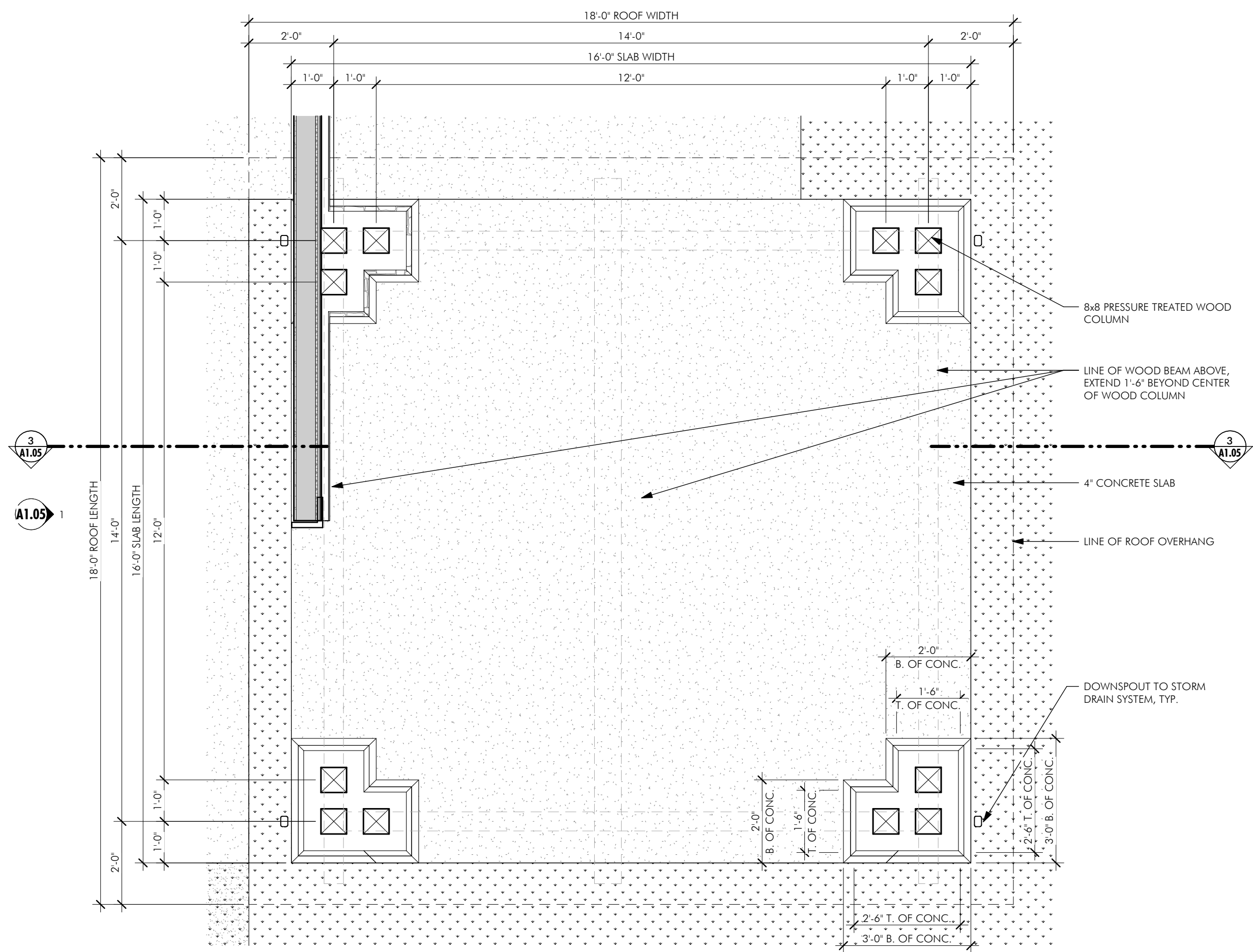
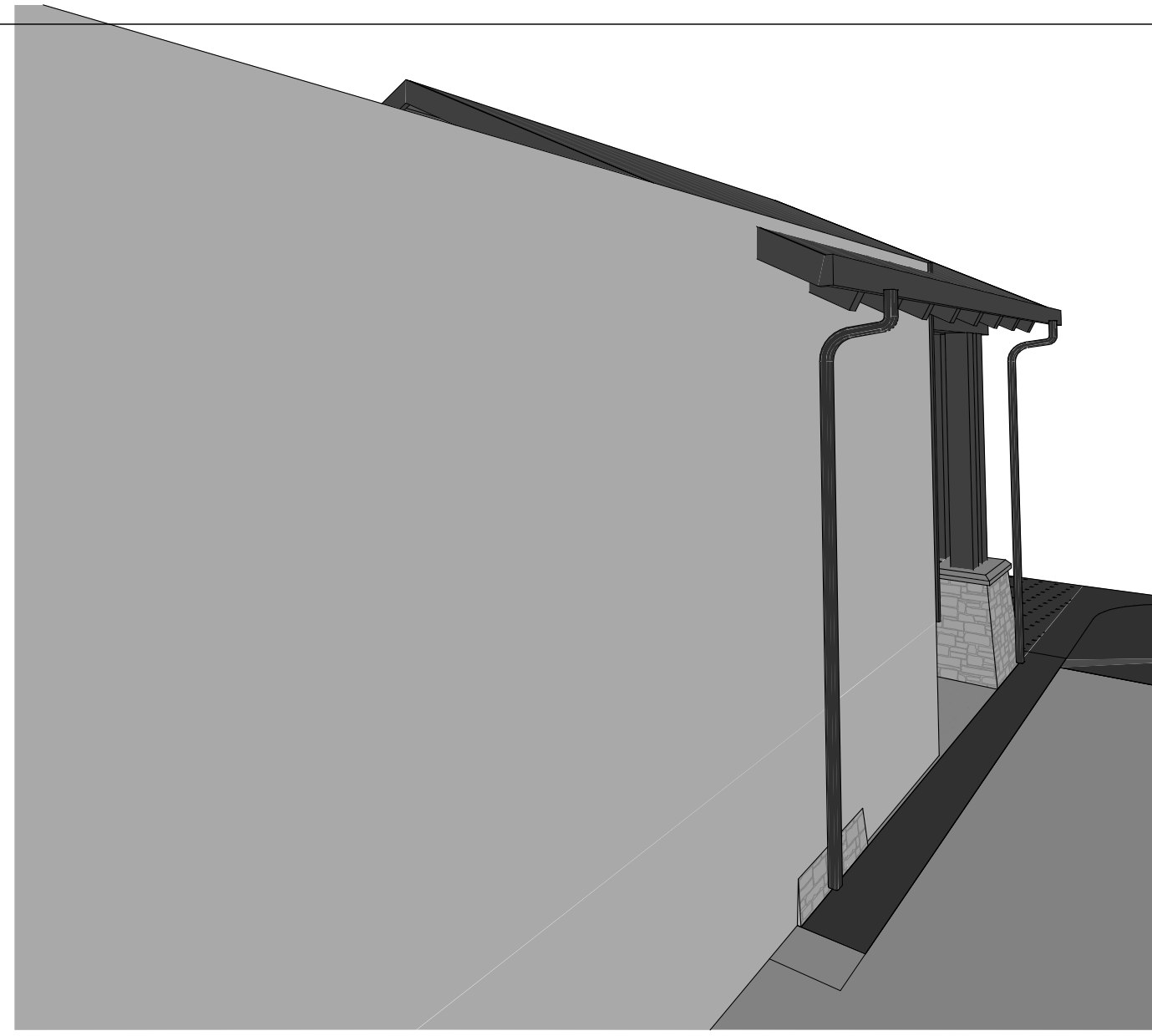
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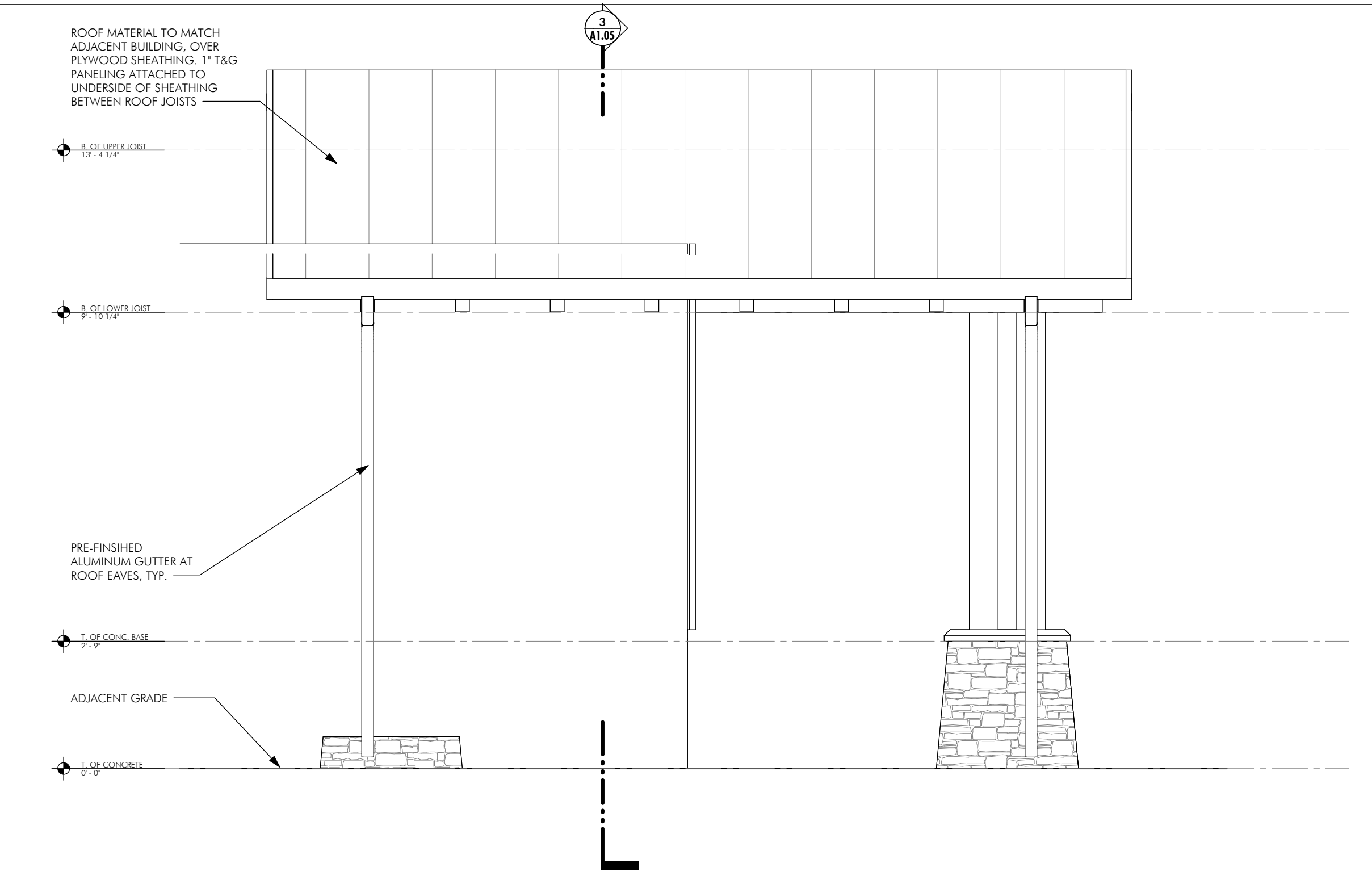
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BICYCLE ENCLOSURE

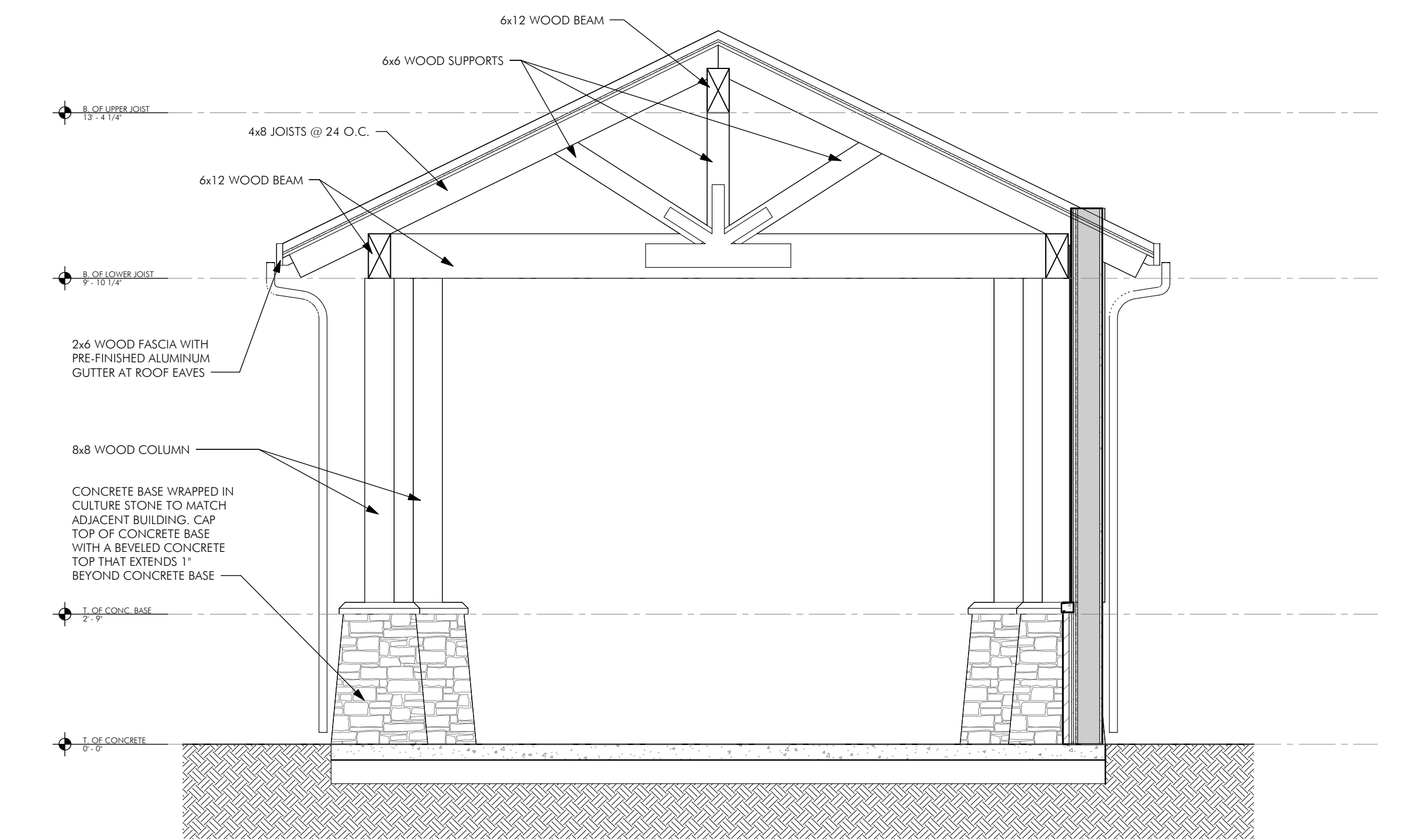




**2** GAZEBO  
0 2 4 6 1/2" = 1'-0"



**1** GAZEBO - ELEVATION, SIDE  
0 2 4 6 1/2" = 1'-0"



**3** GAZEBO - SECTION  
0 2 4 6 1/2" = 1'-0"

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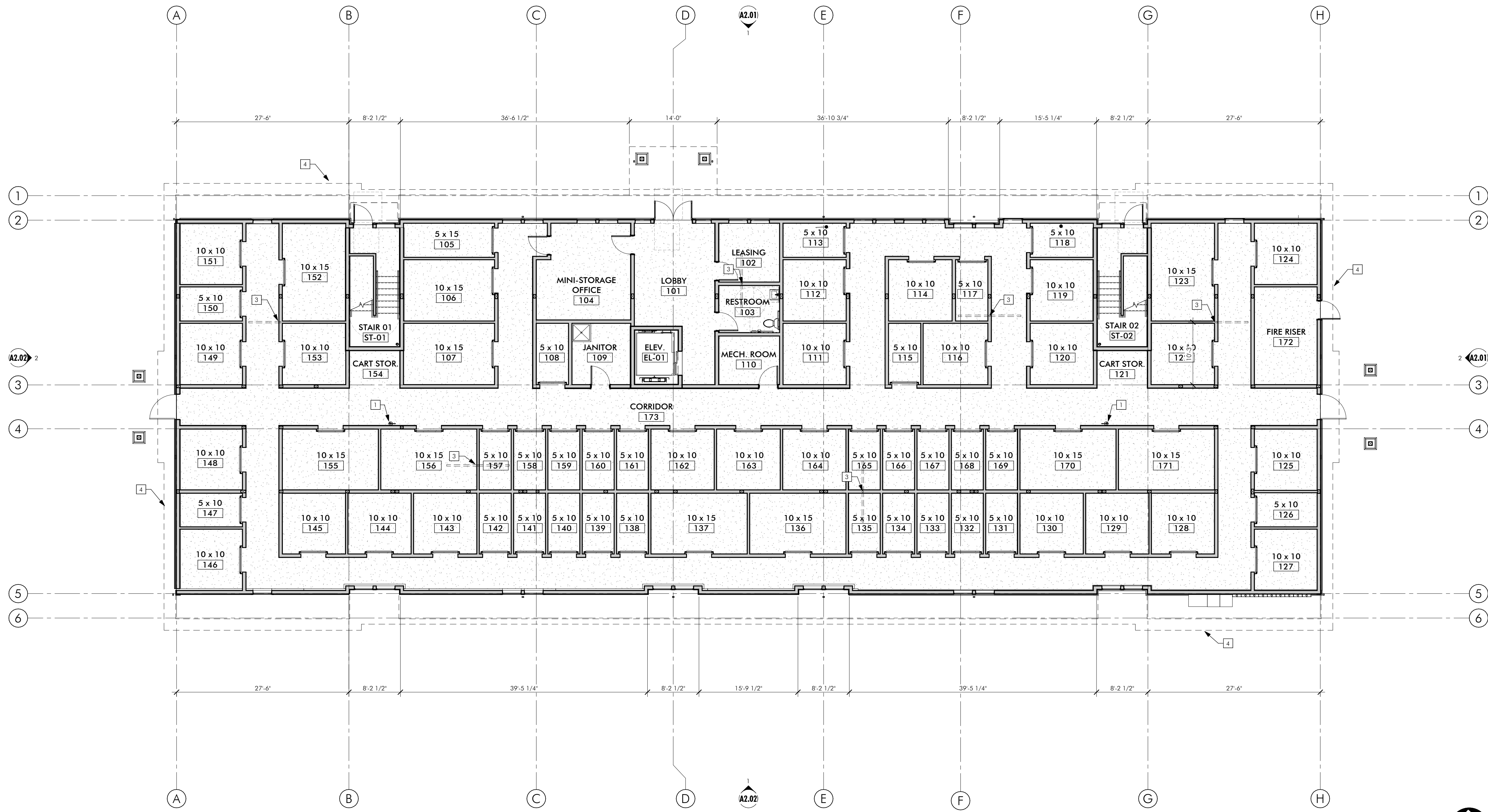
**GENERAL PLAN NOTES:**

- GENERAL NOTES APPLY TO ALL DRAWINGS.
- CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE DRAWINGS AND ON THE JOB SITE PRIOR TO EXECUTION OF ANY WORK, AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCY. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED DUE TO HIS FAILURE TO DO SO.
- WHERE THE INTENT OF THE DRAWINGS IS IN DOUBT, OR WHERE THERE APPEARS TO BE AN ERROR ON THE DRAWINGS, OR WHERE THERE IS A DISCREPANCY BETWEEN THE DRAWINGS AND THE FIELD, THE ARCHITECT (AND ENGINEER WHERE APPLICABLE) SHALL BE NOTIFIED AS SOON AS REASONABLY POSSIBLE FOR THE PROCEDURE TO FOLLOW. DO NOT SCALE THE DRAWINGS.
- ALL REVISIONS MUST BE APPROVED IN WRITING BY BOTH THE OWNER AND THE ARCHITECT PRIOR TO THE CONSTRUCTION OF ANY DEVIATION IN THE SCOPE OF WORK.
- DIMENSIONS ARE TO FACE OF FRAMING, OR FACE OF CONCRETE, U.N.O. DIMENSIONS STATED AS CLEAR ARE FROM FACE OF FINISH TO FACE OF FINISH. DIMENSIONING OF DEMISING UNIT WALLS ARE TO CENTER OF DEMISING UNIT WALL.
- ALL DOORS ARE TO BE 3" FROM FACE OF FRAMING TO ROUGH OPENING, OR CENTERED IN THE WALL, U.N.O. ALL OPENINGS ARE DIMENSIONED FROM FACE OF FRAMING TO CENTER OF OPENING.
- SEE STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS. WHERE NON-SHEAR WALLS ARE IN THE SAME PLANE, CONTINUE SHEATHING LAYER TO NEAREST CORNER TO ENSURE CONTINUITY.
- WALL MATERIAL MAY CHANGE AT WALL INTERSECTIONS, REVIEW SECTIONS AND ELEVATIONS FOR ADDED INFORMATION.
- PROVIDE FIRE BLOCKING IN CONCEALED SPACES OF WALLS, PARTITIONS AND FURRED SPACES AT 10'-0" O.C. IN ALL DIRECTIONS AND AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES.
- ADDITIONAL FRAMING, BLOCKING AND FINISHES SHALL BE PROVIDED AS REQUIRED FOR PLUMBING ACCESS.

- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH ALL STATE AND LOCAL JURISDICTIONS AND REGULATIONS.
- WHERE WALLS WITH DIFFERING LAYERS OF GYP ARE IN THE SAME PLANE, ADD ADDITIONAL LAYERS OF GYP TO ENSURE A CONTINUOUS FINISH SURFACE. CONTINUE ADDITIONAL LAYERS TO NEAREST CORNER.
- AT ALL BATH AND TOILET ROOMS, AS WELL AS ALL WET WALLS IN KITCHENS, PROVIDE WATER RESISTANT GYPSUM BOARDS AS FACE LAYER ON ALL ADJACENT GYPSUM BOARD WALL AND CEILING ASSEMBLIES.
- REFER TO CODE REVIEW SHEETS FOR FIRE RATING. REFER TO WALL TYPE SHEETS FOR CONSTRUCTION OF WALLS AND FLOORS IN RATED CONDITIONS.
- PROVIDE UL APPROVED THROUGH PENETRATION AND MEMBRANE PENETRATION FIRESTOP SYSTEMS AS REQUIRED BY CODE AT ALL ELECT., PLUMB., AND MECH. PENETRATIONS IN FIRE RATED ASSEMBLIES.
- SEE ENLARGED FLOOR PLANS FOR DIMENSIONS AND WALL TAGS NOT SHOWN.

**FIRST FLOOR PLAN KEYNOTES:**

- WALL MOUNTED FIRE EXTINGUISHER
- WALL MOUNTED ELECTRICAL GEAR, METERS, PANELS, DATA PANELS, OR RELATED DEVICES AS SHOWN IN ELECTRICAL DRAWINGS
- RADON MITIGATION, SEE DETAIL 1/A1.06
- BUILDING OVERHANG ABOVE



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SHEET:  
**A1.21**  
FLOOR PLAN - LEVEL 01



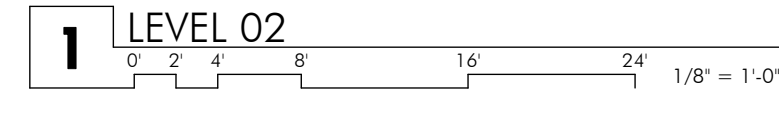
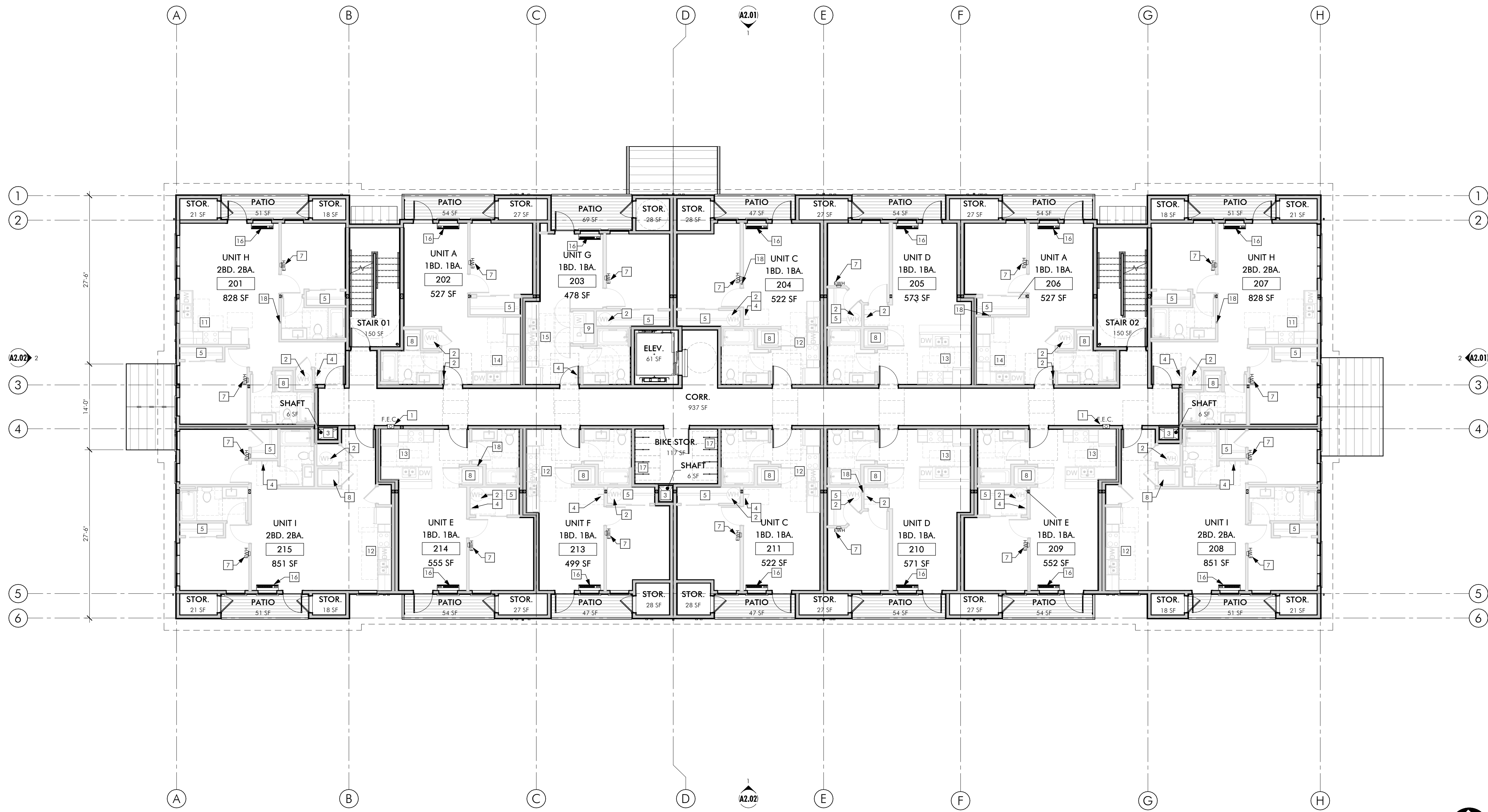


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- SEE STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS. WHERE NON-SHEAR WALLS ARE IN THE SAME PLANE, CONTINUE SHEATHING LAYER TO NEAREST CORNER TO ENSURE CONTINUITY.
- WALL MATERIAL MAY CHANGE AT WALL INTERSECTIONS, REVIEW SECTIONS AND ELEVATIONS FOR ADDED INFORMATION.
- PROVIDE FIRE BLOCKING IN CONCEALED SPACES OF WALLS, PARTITIONS AND FURRED SPACES AT 10'-0" O.C. IN ALL DIRECTIONS AND AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES.
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- REFER TO CODE REVIEW SHEETS FOR FIRE RATING. REFER TO WALL TYPE SHEETS FOR CONSTRUCTION OF WALLS AND FLOORS IN RATED CONDITIONS.

**FIRST FLOOR PLAN KEYNOTES:**

- SEMI-RECESSED FIRE EXTINGUISHER.
- WATER HEATER FOR RESIDENTIAL UNITS. PROVIDE GAS CONNECTION.
- 2-HOUR SHAFT FOR CIRCULATION OF MECH.
- ELECTRICAL PANEL WITH 30" X 48" CLEAR SPACE.
- CLOSET ROD AND SHELF.
- 12" DEEP SHELVING.
- ELECTRICAL WALL HEATER.
- STACKED WASHER/DRYER UNIT W/ 38" X 38" PAN.
- ACCESSIBLE SIDE BY SIDE WASHER AND DRYER SET.
- BALCONY, SEE DETAIL 1/ A5.24.
- KITCHEN TYPE 01, SEE DETAIL 1/ A2.51.
- KITCHEN TYPE 02, SEE DETAIL 2/ A2.51.
- KITCHEN TYPE 03, SEE DETAIL 3/ A2.51.
- KITCHEN TYPE 04, SEE DETAIL 4/ A2.52.
- ACCESSIBLE KITCHEN TYPE 05, SEE DETAIL 5/ A2.52.
- PTAC, THRU WALL GRILL. SEE MECH.
- WALL MOUNTED BIKE STORAGE.
- RADON MITIGATION, SEE DETAIL 1/ A1.06.



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PROJECT # 2021-146  
DATE: 03/21/2023

REVISIONS

NEW MULTI-FAMILY DEVELOPMENT  
**SANDY**  
38015 Hwy 26, Sandy, OR

SHEET:  
**A1.22**  
FLOOR PLAN - LEVEL 02

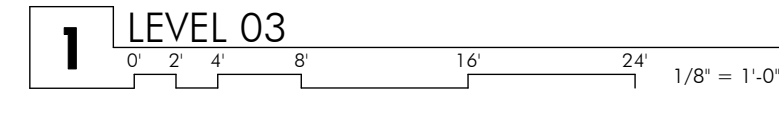
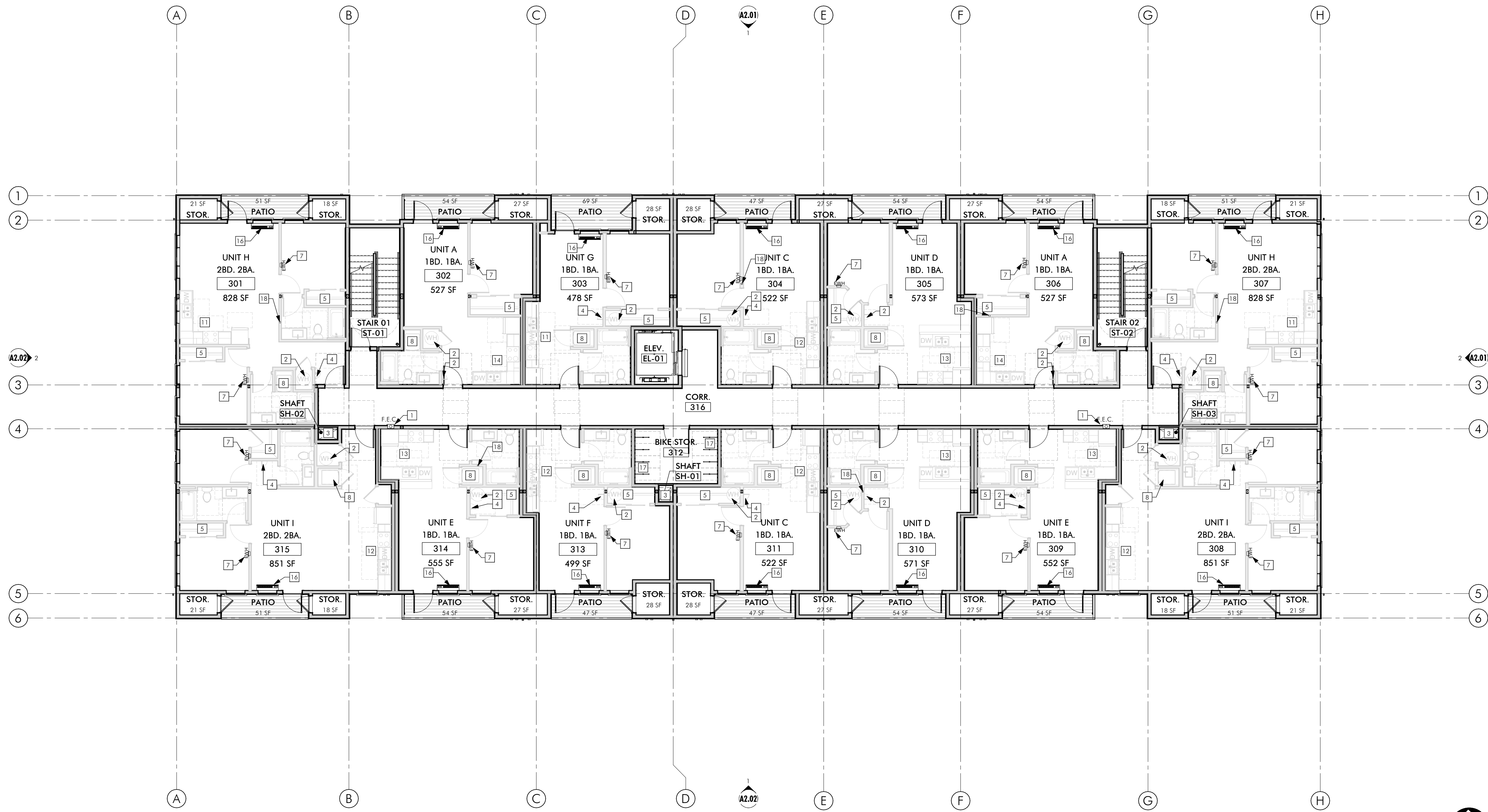


**GENERAL PLAN NOTES:**

- GENERAL NOTES APPLY TO ALL DRAWINGS.
- CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE DRAWINGS AND ON THE JOB SITE PRIOR TO EXECUTION OF ANY WORK, AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCY. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED DUE TO HIS FAILURE TO DO SO.
- WHERE THE INTENT OF THE DRAWINGS IS IN DOUBT, OR WHERE THERE APPEARS TO BE AN ERROR ON THE DRAWINGS, OR WHERE THERE IS A DISCREPANCY BETWEEN THE DRAWINGS AND THE FIELD, THE ARCHITECT (AND ENGINEER WHERE APPLICABLE) SHALL BE NOTIFIED AS SOON AS REASONABLY POSSIBLE FOR THE PROCEDURE TO FOLLOW. DO NOT SCALE THE DRAWINGS.
- ALL REVISIONS MUST BE APPROVED IN WRITING BY BOTH THE OWNER AND THE ARCHITECT PRIOR TO THE CONSTRUCTION OF ANY DEVIATION IN THE SCOPE OF WORK.
- DIMENSIONS ARE TO FACE OF FRAMING, OR FACE OF CONCRETE, U.N.O. DIMENSIONS STATED AS CLEAR ARE FROM FACE OF FINISH TO FACE OF FINISH. DIMENSIONING OF DEMISING UNIT WALLS ARE TO CENTER OF DEMISING UNIT WALL.
- ALL DOORS ARE TO BE 3" FROM FACE OF FRAMING TO ROUGH OPENING, OR CENTERED IN THE WALL, U.N.O. ALL OPENINGS ARE DIMENSIONED FROM FACE OF FRAMING TO CENTER OF OPENING.
- SEE STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS. WHERE NON-SHEAR WALLS ARE IN THE SAME PLANE, CONTINUE SHEATHING LAYER TO NEAREST CORNER TO ENSURE CONTINUITY.
- WALL MATERIAL MAY CHANGE AT WALL INTERSECTIONS, REVIEW SECTIONS AND ELEVATIONS FOR ADDED INFORMATION.
- PROVIDE FIRE BLOCKING IN CONCEALED SPACES OF WALLS, PARTITIONS AND FURRED SPACES AT 10'-0" O.C. IN ALL DIRECTIONS AND AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES.
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- AT ALL BATH AND TOILET ROOMS, AS WELL AS ALL WET WALLS IN KITCHENS, PROVIDE WATER RESISTANT GYPSUM BOARDS AS FACE LAYER ON ALL ADJACENT GYPSUM BOARD WALL AND CEILING ASSEMBLIES.
- REFER TO CODE REVIEW SHEETS FOR FIRE RATING. REFER TO WALL TYPE SHEETS FOR CONSTRUCTION OF WALLS AND FLOORS IN RATED CONDITIONS.

**FIRST FLOOR PLAN KEYNOTES:**

- SEMI-RECESSED FIRE EXTINGUISHER
- WATER HEATER FOR RESIDENTIAL UNITS. PROVIDE GAS CONNECTION
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- KITCHEN TYPE 02, SEE DETAIL 2/A2.51
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SHEET:  
**A1.23**  
FLOOR PLAN - LEVEL 03

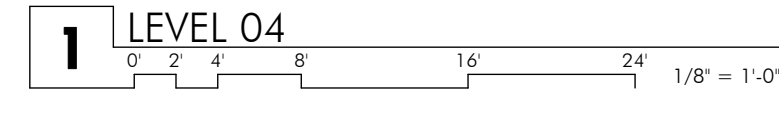
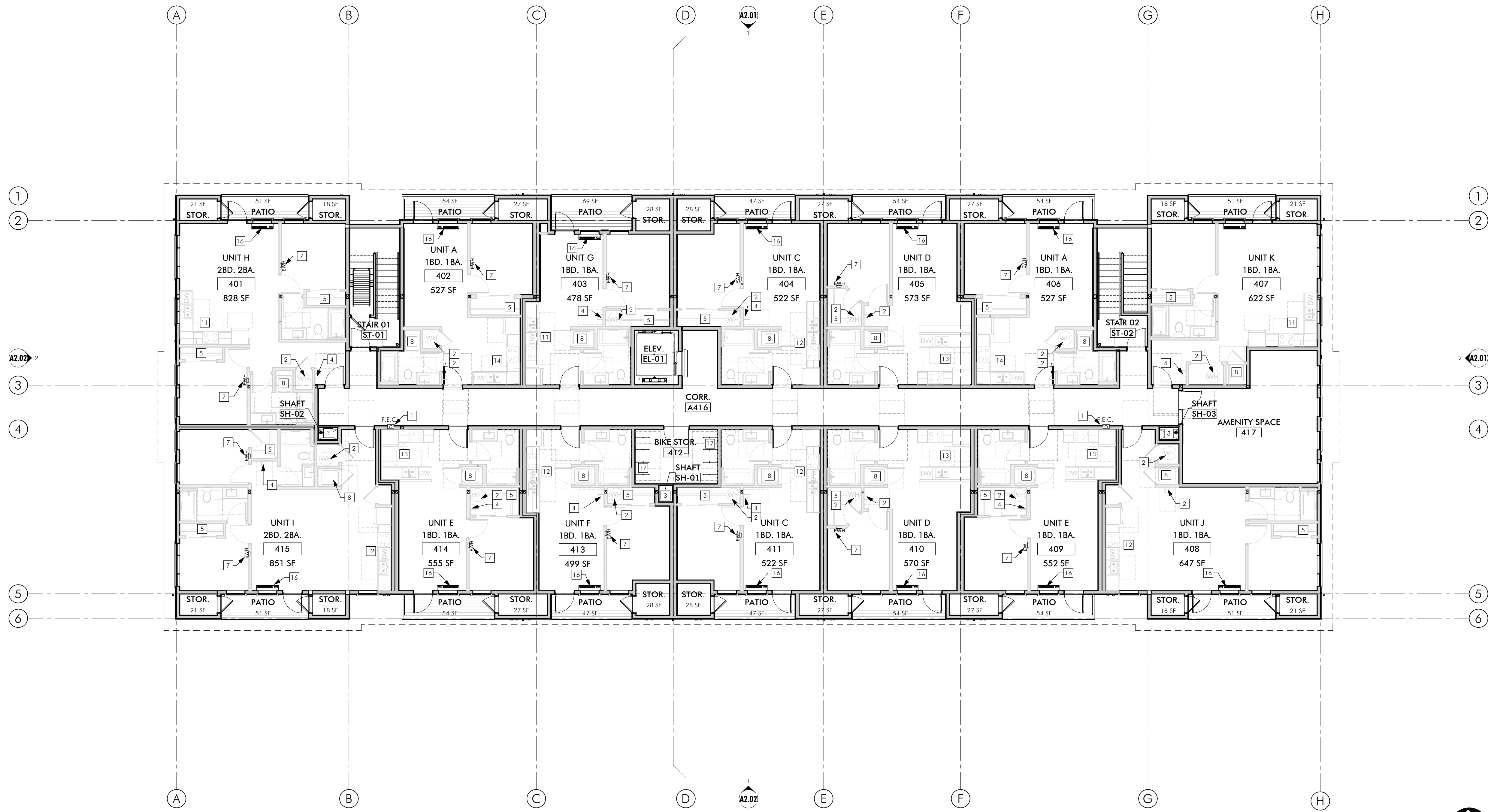


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REVISIONS

NEW MULTI-FAMILY DEVELOPMENT  
**SANDY**  
38015 Hwy 26, Sandy, OR

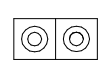
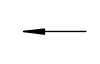
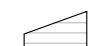
SHEET:  
**A1.24**  
FLOOR PLAN - LEVEL 04



**GENERAL ROOF PLAN NOTES:**

1. ROOFTOP EQUIPMENT IS SHOWN HERE IN A GENERAL WAY AND MAY NOT REPRESENT ALL REQUIRED ROOF PENETRATIONS, CURVES, ETC., THAT WILL BE REQUIRED. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS.
2. THE CONTRACTOR SHALL COORDINATE THE FINAL LOCATIONS OF ALL ROOFTOP EQUIPMENT, ROOF PENETRATIONS, AND REQUIRED CURBS SO THAT ADEQUATE SPACING EXISTS BETWEEN CURBS, OTHER PENETRATIONS, PARAPET WALLS, AND OTHER ROOF EDGES. PROVIDE A MINIMUM OF 12" CLEAR BETWEEN PIPE PENETRATIONS AND CURBS / PARAPETS, AND A MINIMUM OF 24" CLEAR DISTANCE FROM CURVED PENETRATIONS.
3. WHENEVER PRACTICAL, ORIENT CURBS TO BE PARALLEL TO PRIMARY ROOF SLOPES TO MINIMIZE THE NEED FOR EXTRA CRICKETS. AVOID PLACING EQUIPMENT IN VALLEYS. CONSTRUCT CRICKETS SO THAT VALLEYS ARE PLACED TO RESULT IN A MINIMUM OF 24" CLEAR DISTANCE FROM CURVED PENETRATIONS.
4. WHERE CURVES FOR ROOFTOP EQUIPMENT WILL CAUSE PONDING OF WATER, PROVIDE CRICKET BEHIND TO PROMOTE POSITIVE DRAINAGE.
5. ENSURE ALL CURBS HAVE MINIMUM 8" OF HEIGHT ABOVE THE ADJACENT ROOF SURFACE FOR REQUIRED MEMBRANE AND FLASHING SHEETS.
6. THE FINAL POSITION AND ORIENTATION OF DRYER EXHAUST DUCTS CAN BE ADJUSTED AS NECESSARY PROVIDED THAT THE TOTAL EFFECTIVE LENGTH (INCLUDING REDUCTIONS FOR ELBOWS) IS LESS THAN THE ALLOWED LENGTH PER THE DRYER MANUFACTURER.
7. WHERE MECHANICAL DRAWINGS INDICATE ROOFING AND/OR FLASHING SYSTEMS OR COMPONENTS, CORRESPONDING ARCHITECTURAL DETAILS SHALL GOVERN. NOTIFY ARCHITECT OF APPARENT DISCREPANCIES FOR RESOLUTION PRIOR TO WORK.

**ROOF PLAN LEGEND:**

-  ROOF AND OVERFLOW DRAIN
-  SLOPE ARROW (SLOPE PER PLAN, TYP)
-  ROOF CRICKET, TAPERED INSULATION AT STANDARD ROOF

**ROOF PLAN KEYNOTES:**

- 1 PREFINISHED METAL GUTTERS, SEE FLOOR PLANS FOR DOWNSPOUT LOCATIONS
- 2 WALL FRAMING BELOW
- 3 RADON VENTS, SEE DETAIL 1/A1.06

**ROOF VENTILATION:**

PER OSSC 1202.2.1, ATTIC TO BE PROVIDED WITH VENTILATION 1/150 OF OVERALL AREA. 40% MINIMUM AND 50% MAXIMUM OF VENTILATION SHALL BE LOCATED AT THE UPPER PORTIONS

**ROOF AREA A:**  
11,386 SF / 150 = 75.91 SF  
(10,931 SQUARE INCHES) VENTILATION REQUIRED  
VENTILATION PROVIDED AT UPPER ROOF = 4,400 SF  
(4,372.4 MIN / 5,465.5 MAX SI REQUIRED)

**ROOF AREA B:**  
64 SF / 150 = 0.44 SF  
(63.36 SQUARE INCHES) VENTILATION REQUIRED  
VENTILATION PROVIDED AT UPPER ROOF = 32 SI  
(25 MIN / 32 MAX SI REQUIRED)

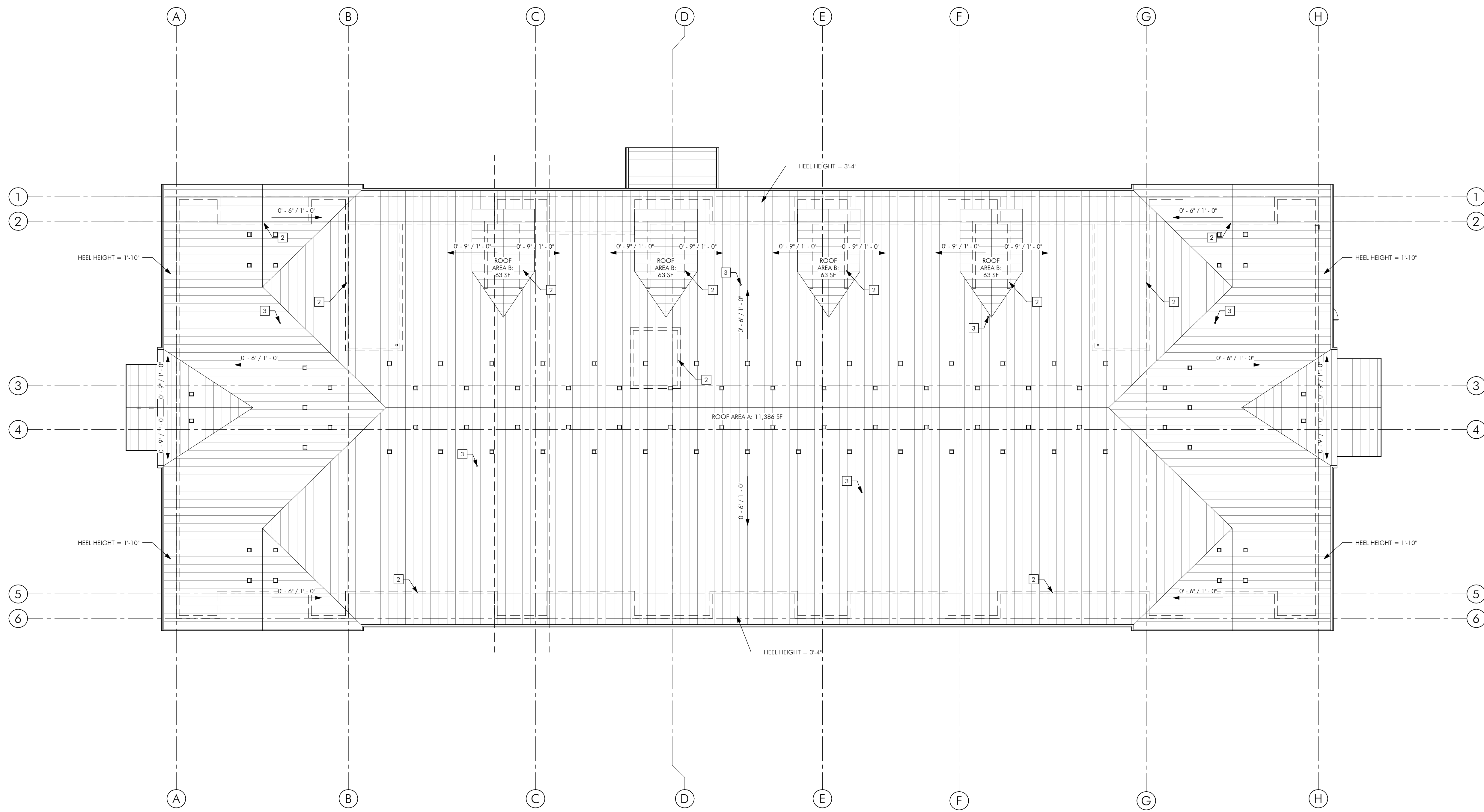
**SQUARE ROOF VENT W/8" ROUND OPENING:**  
88 COUNT (50 SI) = 4,400

VENTILATION PROVIDED AT LOW EAVES = 6,560 SI  
6,531 SI REQ.

4" DIA EAVE VENTS:  
410 COUNT (16 SI) = 6,560 SI

4" DIA EAVE VENTS:  
2 COUNT (16 SI) = 32 SI

4" DIA EAVE VENTS:  
2 COUNT (16 SI) = 32



**1 ROOF PLAN**  
0 2 4 8 16 24  
1/8" = 1'-0"



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DATE: 03/21/2023

REVISIONS

NEW MULTI-FAMILY DEVELOPMENT

**SANDY**

38015 Hwy 26, Sandy, OR

SHEET:

**A1.25**

FLOOR PLAN - ROOF



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38015 Hwy 26, Sandy, OR

SHEET:

**A2.01**

BUILDING  
ELEVATIONS

GROUND FLOOR WALL AREA: 1,693 SF  
WINDOWS REQ'D: 339 SF (20%)  
PROVIDED: 363 SF (21.4%)



**1** NORTH ELEVATION  
0 2 4 8 16 24  
1/8" = 1'-0"

GLAZING SCHEDULE NORTH ELEVATION - GROUND FLOOR			
TYPE	WINDOW / DOOR		TOTAL AREA
	SIZE	GLZ AREA	
DR	3 0 x 7 0	12.75 SF	4 51
FX	2 6 x 5 6	13.75 SF	2 27.5
FX	3 0 x 3 6	10.5 SF	1 10.5
FX	3 0 x 5 6	16.5 SF	16 264
FX	3 2 x 1 1	3.43 SF	1 3.43 SF
FX	6 2 x 1 1	6.68 SF	XX 6.68 SF
GRAND TOTAL			363.11 SF

DR DOOR  
FX FIXED

**ELEVATION NOTES:**

- 1 FIBER CEMENT LAP SIDING W/ ALTERNATING 4" AND 8" EXPOSURE. COLOR: MILLER PAINT-PALOMING.
- 2 FIBER CEMENT LAP SIDING W/ 8" EXPOSURE. COLOR: MILLER PAINT-GROPIUS GRAY.
- 3 5/4 x 12" FIBER CEMENT TRIM BOARD. COLOR: MILLER PAINT-CHOCOLATE.
- 4 CULTURED STONE BASE.
- 5 CEDAR SHAKE SIDING. COLOR: MILLER PAINT-PORTOBELLA.
- 6 STANDING SEAM METAL ROOF.
- 7 VINYL WINDOW. COLOR: WHITE. FIBER CEMENT TRIM SURROUND. PAINT: CHOCOLATE.
- 8 INSULATED HOLLOW METAL DOOR. PAINT WHITE TO MATCH WINDOWS.
- 9 HEAVY TIMBER CANOPY. COLOR: MILLER PAINT-CHOCOLATE.
- 10 FIBERGLASS DOOR. COLOR: WHITE.
- 11 CEDAR FACIA BOARD. COLOR: CHOCOLATE.
- 12 FIBER CEMENT BOARD & BATTEN SIDING, 2" WIDE SPACED A MAX OF 24" O.C. COLOR: MILLER PAINT-JWETT WHITE.
- 13 X2 DECKING OVER WOOD FRAMING WITH 3'-6" HIGH METAL RAILING. PAINT ALL EXPOSED WOOD AND STEEL MILLER PAINT-CHOCOLATE. SEE DETAIL 5/ A5.24
- 14 LIGHT WELL FOR GROUND FLOOR WINDOW. SEE DETAIL 9/ A5.21
- 15 5/4 x 8" FIBER CEMENT TRIM BOARD. COLOR: MILLER PAINT-CHOCOLATE.
- 16 LOWER SHED ROOF OVER ENTRY. SEE DETAIL 9/ A5.26
- 17 UPPER SHED ROOF. SEE DETAIL 10/ A5.26
- 18 SMALL ORNAMENTAL BRACKET. COLOR: MILLER PAINT-CHOCOLATE. SEE DETAIL 8/ A5.26
- 19 LARGE ORNAMENTAL BRACKET. COLOR: MILLER PAINT-CHOCOLATE. SEE DETAIL 11/ A5.26
- 20 WALL MOUNTED ELECTRICAL GEAR. SEE LANDSCAPE DRAWINGS FOR SCREENING
- 21 FOUNDATION RETAINING WALL BEYOND. SEE STRUCTURAL



**2** EAST ELEVATION  
0 2 4 8 16 24  
1/8" = 1'-0"

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**SANDY**

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**A2.02**

BUILDING  
ELEVATIONS



**1** SOUTH ELEVATION  
0 2 4 8 16 24  
1/8" = 1'-0"



**2** WEST ELEVATION  
0 2 4 8 16 24  
1/8" = 1'-0"

GLAZING SCHEDULE NORTH ELEVATION - GROUND FLOOR			
TYPE	WINDOW / DOOR		TOTAL AREA
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DR	3 0 x 7 0	12.75 SF	4 51
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Kelly O'Neill <koneill@ci.sandy.or.us>

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**24E14AD Tax Lots 902 and 1000**

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Dennis <dwpetross@gmail.com>  
To: planning@ci.sandy.or.us

Wed, Apr 12, 2023 at 9:01 AM







The attached photos are an analog for the proposed wall for the subject work. The photos are from work going on currently in Sandy. One can see that water management is difficult during construction when backfilling these types of walls. The applicant does not show in the drawings proper drainage for the proposed wall and has not demonstrated the care or interest required to safeguard the adjacent properties from damage. The applicant has dismissed this valid concern as implausible when I see it on a regular basis in my job and just going for walks in a city that is overwhelmed with growth.

In addition the small gap between the wall and the black fence does not allow for maintenance between the two. It does allow weeds, vines, grass and other organic material to grow and will be nearly impossible to manage without spraying the adjacent property from my side which is not permitted by code.

One can also see the seams in the modular wall. These seams do not have water stops. Water can and will pass through these seams and drain onto my property given the green permeable space above and the close proximity to my property. In addition if one were to discover after construction that the drainage placed does not provide proper egress for the water in the soil. Making changes to this system will inevitably become too costly for all involved; The City and the landowners. While the applicant will have likely sold their interest in the property and moved on.

I'm asking for some assurances and measures to be taken to ensure that the applicant takes care to not directly or indirectly affected or damage adjacent properties. It will save everyone time and money in the future.

Dennis

Sent from a typing impaired device

On Feb 14, 2023, at 6:47 AM, Dennis <[dwpetross@gmail.com](mailto:dwpetross@gmail.com)> wrote:

[Quoted text hidden]  
<Public Comments.docx>

4/13/23, 1:46 PM

City of Sandy Mail - Sandy - HWY 26 - Site Access



Kelly O'Neill <koneill@ci.sandy.or.us>

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## Sandy - HWY 26 - Site Access

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**RIKLI Anthony** <Anthony.RIKLI@odot.oregon.gov>

Thu, Apr 13, 2023 at 1:38 PM

To: "Kelly O'Neill Jr." <koneill@ci.sandy.or.us>

Cc: DORMAN Neelam <Neelam.DORMAN@odot.oregon.gov>, COX Robert W <Robert.W.COX@odot.oregon.gov>

Hi Kelly,

Please see below.

We've had multiple discussions internally about the request from City of Sandy Planning Commission to relocate the access for the shared access for Tax Lots 902 and 1000. Based on our discussions, the processed agreement with owners of Tax Lot 902 and 1000 for the shared access to be located on the tax lot line, and, more importantly, highway and internal land use circulation safety, we will not be entertaining movement of the agreed upon access at approximate MP 23.775 (STA 759+85).

Thanks,

Tony

**Tony Rikli, PE**  
Region Access Management Engineer

ODOT Region 1 Garrett Building

(503) 731-8563 (office)

(503) 312-3407 (cell)

[Anthony.RIKLI@odot.oregon.gov](mailto:Anthony.RIKLI@odot.oregon.gov)

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