

ITEM TITLE: PC 23 08 DR 02 – *Dollar General Design Review*

OVERVIEW:

Application: A Design Review request for a 10,460 sq. ft. Dollar General retail store within the Highway District. This request was applied for by Kirk Farrelly, PE, of Capital Growth Buchalter as represented by Charlie Severs, PE and Nick Wheeler, JSA Civil, LLC, Inc. The subject property is located on the east of the Highway 101 and 36th St. intersection, immediately north of Burger King and south of Chens Family Dish, and shown on Assessor’s Map #. 18-12-23-22, tax lot 06800.

Aside from analyzing the proposed store’s exterior design, materials and colors, the project is reviewed to ensure consistency through its parking, landscaping, stormwater, lighting, access to streets, internal access for emergency vehicles, and utility placement with care taken to prevent possible nuisances, in this instance, to its residential neighbors and zoning to the east in the Seabrook subdivision.

The store proposal is linked to the Burger King site. The driveway approaches from Highway 101 and 35th St. are to be shared between both sites and the foundation for this shared access was put into place during review and approval of the Burger King Design Review. Ensuring that the driveway approaches and internal drive isles could safely handle traffic volumes is vital and both projects required traffic impact analyses that were acceptable to the City and ODOT who maintain and regulate 35th St. and Highway 101, respectively.

Process and Review: This Design Review request represents a Type III land use application requiring quasi-judicial public hearing. The Florence Planning Commission is the review body as set out in Florence City Code Title 10, Chapter 1. The Resolution, Findings of Fact and application materials are attached to this AIS. Additionally, testimony (if any) and, at times, parts of the application are included as separate attachments and are not included as part of the resolution exhibits. The applicable criteria are listed in the “Applicable Criteria” section of the findings. Not only related code sections in this particular instance may be applied in the decision-making process, but also application materials, public testimony and agency referrals that speak to the criteria may also be considered.

The Planning Commission will open and possibly close the public hearing on November 14, 2023. The Planning Commission may then deliberate and provide their final decision on this matter.

ISSUES/DECISION POINTS: None

ALTERNATIVES:

1. Recommend approval of the Design Review request for PC 23 08 DR 02 based on the Commissions' findings that the application meets the requirements of City Code subject to conditions,
2. Recommend denial of the requested extension of PC 23 08 DR 04 based on the Commissions' findings that the application does not meet the requirements of City Code.
3. Continue deliberations and defer the decision.

RECOMMENDATION:

The evidence in the record demonstrates that the proposed Design Review request for PC 23 08 DR 02 is consistent with the policies set forth in state statutes and administrative rules, and Florence City Code based on the findings. Staff recommends that Planning Commission approve the Design Review request for PC 23 08 DR 02 as shown in Alternative 1, above.

AIS PREPARED BY:

Roxanne Johnston, Contract Planner, CFM

ATTACHMENTS:**Attachment 1 - Resolution PC 23 08 EAP 02 (draft)**

- Exhibit A Findings of Fact (proposed)
- Exhibit B Land Use Application and Response to NOIC
- Exhibit C Site Plan
- Exhibit D Elevations and Design
- Exhibit E Landscape Plans
- Exhibit F SIR
- Exhibit G Geotech Report
- Exhibit H Stormwater Report
- Exhibit I TIA
- Exhibit J Lighting Plans and Products
- Exhibit K ODOT Referral
- Exhibit L Public Works Referral
- Exhibit M CTCLUSI Referral
- Exhibit N Lumen Referral
- Exhibit O SVFD Referral

Attachment 2 – Aerial of Site

**CITY OF FLORENCE
PLANNING COMMISSION**

RESOLUTION PC 23 08 DR 02

A REQUEST FOR DESIGN REVIEW OF A 10,640 SQUARE FEET RETAIL STORE AND ASSOCIATED IMPROVEMENTS ON AN UNDEVELOPED ONE ACRE PARCEL AS SHOWN ON ASSESSOR'S MAP # 18-12-23-22, TL 06800 LOCATED AT THE NORTHEAST INTERSECTION OF HIGHWAY 101 AND 36TH ST.

WHEREAS, application was made by Kirk Farelly, on behalf of Ohran Properties Oregon 101, LLC, for a Design Review approval as required by FCC 10-1-1-4, FCC 10-1-1-6-3, and FCC 10-6; and

WHEREAS, the Planning Commission met in a duly-advertised public hearing on November 14, 2023, as outlined in Florence City Code 10-1-1-6-3, to consider the application, evidence in the record, and testimony received; and

WHEREAS, the Planning Commission of the City of Florence, per FCC 10-1-1-4, FCC 10-1-1-6-3, FCC 10-6, and FCC 10-7 finds, based on the Findings of Fact, application, staff recommendation, evidence, and testimony presented to them, that the application meets the applicable criteria through compliance with certain Conditions of Approval.

NOW THEREFORE BE IT RESOLVED that the Planning Commission of the City of Florence finds, based on the Findings of Fact and the evidence in record that:

The request for design review for the 10,640 sq. ft. retail store meets the applicable criteria in Florence City Code and the Florence Realization 2020 Comprehensive Plan with the conditions of approval as listed below.

Conditions of Approval:

The application, as presented, meets or can meet applicable City codes and requirements, provided that the following conditions of approval are met.

Approval shall be shown on conditions of approval as supported by the following record:

"A"	Findings of Fact
"B"	Application and Response to NOIC
"C"	Site Plan Materials
"D"	Elevations and Design
"E"	Landscape Plan
"F"	Phase 1 SIR Application
"G"	Geotechnical Report
"H"	Stormwater Management Report
"I"	Traffic Impact Analysis
"J"	Lighting Plan and Products

"K"	ODOT Referral
"L"	Public Works Referral
"M"	CTCLUSI Referral
"N"	Lumen Referral
"O"	SVFD Referral

Findings of Fact attached as Exhibit "A" are incorporated by reference and adopted in support of this decision.

1. Findings of Fact attached as Exhibit "A" are incorporated by reference and adopted in support of this decision. Any modifications to the approved plans or changes of use, except those changes relating to the structural integrity or ADA access which are regulated by Building Codes, will require approval by the Community Development Director or Planning Commission/Design Review Board.
2. Regardless of the content of material presented, including application text and exhibits, staff reports, testimony and/or discussions, the applicant agrees to comply with all regulations and requirements of the Florence City Code which are current on this date, EXCEPT where variance or deviation from such regulations and requirements has been specifically approved by formal Planning Commission action as documented by the records of this decision and/or the associated Conditions of Approval. The applicant shall submit to the Community Development Department a signed "Agreement of Acceptance" of all conditions of approval prior to issuance of a building permit.
3. Upon encountering any cultural or historic resources during construction, the applicant shall immediately contact the State Historic Preservation Office and the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians. Construction shall cease immediately and shall not continue until permitted by either a SHPO or CTCLUSI representative.

FCC 10-3: Off Street Parking and Loading

- 4-1. Required parking spaces shall be maintained and shall not be eliminated, used for the storage of materials of any type, or used for loading or unloading operations during business hours.
- 4-2. Per FCC 10-3-8, parking areas shall be graded so as not to allow storm water to drain over public sidewalks.
- 4-3. In accordance with FCC 10-4-8 G, fencing and evergreen hedges must be well kept and maintained.
- 4-4. A detailed and dimensioned signage plan that meets requirements outlined in FCC Title 4, Chapter 7 shall be submitted and approved by the Florence Building Department.
- 4-5. Per Table 10-3-3 under FCC 3-9-F, the applicant shall submit a parking plan to

revise the measurements of the 2 (two) required ADA parking stalls from 8' widths to 9' widths.

- 4-6. The bicycle parking area shall be clearly marked and reserved for bicycle parking only in accordance with this FCC 10-3-10G.
- 4-7. Per FCC 10-3-9 B, each parking space shall have double line striping with two feet (2') wide on center.

FCC 10-6: Design Review

- 5-1. All approved design review conditions, unless otherwise stated, shall be met prior to final inspection.
- 5-2. Per FCC 10-6-6-3 A, the applicant shall supply the Planning Department an example of trim, (including the roof) gutter and downspout materials, trim and downspout colors, depths and widths prior to applying for building permits. The south side doors' color shall also be provided.
- 5-3. The request for Design Review approval shall expire on November 14, 2024, unless substantial construction has taken place.

FCC 10-16: Highway District (H)

- 6-1. Prior to final building inspections, the applicant shall submit a signage plan. The Planning Department shall review signage for compatibility with the access and circulation plan.

FCC 10-34: Landscaping

- 7-1. Per FCC 10-34-3-2 D, if any existing trees are to be preserved, these shall be delineated on a recent aerial photo or site plan drawn to scale.
- 7-2. Prior to the issuance of building permits, the Landscape Plan shall remove Landscape Specifications Note numbers 11, 12 and 14, or modify these to a change in plantings.
- 7-3. The applicant shall provide sufficient ground cover plants in the shrub area between the east parking lot aisle and rain garden and in the shrub area surrounding the trash enclosure to meet the minimum requirements of FCC 10-34-3-4 A (1).
- 7-4. The applicant shall provide an irrigation system plan, obtain an irrigation permit, and shall install a backflow prevention device per FCC 9-2-3-5 and in coordination with Florence Public Works.
- 7-5. The two parking islands located north of the Highway 101 driveway approach do not contain trees. Per FCC 10-34-3-6 B, the applicant shall provide a minimum of one tree selected from the Tree and Plant List for the city of Florence installed per island.

- 7-6. Landscape plantings shall be maintained to not interfere with pedestrian and bicycle access in accordance with FCC 10-35-2-13.

FCC 10-35: Access and Circulation

- 8-1. Prior to obtaining City right-of-way construction permits, the applicant shall provide evidence of ODOT access permissions required for the proposed access and circulation plans.
- 8-2. Easements are required to implement the access management plan shared access between this development and the Burger King development. Once crossover easements are drafted, a maintenance agreement would be required. The applicant shall obtain and have this agreement recorded and a copy provided to the Planning Department prior to permitting.
- 8-3. Prior to the construction of driveway improvements and other improvements, including the pedestrian sidewalk connection to Highway 101, approval of the construction plans shall be obtained from Florence Public Works.
- 8-4. Per FCC 10-35-2-12 D, the applicant shall provide notes on the final site plan submittal showing the location of the unobstructed turn-around area for emergency vehicles. The fire lanes shall be marked as "No Stopping'/No Parking."
- 8-5. Landscaping shall be maintained so that plants do not grow to obstruct vision clearance areas at internal intersections or intersections with public streets per FCC 10-34-2-14.

FCC 10-36: Public Facilities

- 9-1. Per the Public Works Director, the applicant shall include City of Florence standard detail drawings in the plan set, including the use of 'Blue Bolts' for water system fittings. Blue Bolts are constructed from corrosion-resistant, high-strength low-alloy steel that conforms to ANSI/AWWA C111/A21.11 and feature a blue fluoropolymer coating.
- 9-2. Prior to obtaining plumbing permits, the applicant shall provide evidence of final approval from the Florence Public Works Department for all water and wastewater improvements
- 9-4. Per FCC 10-36-4, the applicant shall obtain a National Pollution Discharge Elimination (NPDES) permit from the Department of Environmental Quality prior to issuance of a development permit of land use permit as the site is equal to one acre in size.

FCC 10-37: Lighting

- 10-1. Prior to obtaining electrical permits, the applicant shall provide a revised photometric report for lighting levels in all areas of the site. Maximum and minimum

illumination levels shall conform to FCC 10-37-4-B. Additionally, the applicant shall provide information regarding the height at which the wall packs will be mounted.

- 10-2. If signage lighting is proposed, the revised lighting plans shall provide information for the lighted pylon sign shown on the Site Plan in Exhibit C and the storefront sign shown in Exhibit D in accordance with FCC 10-37-4.

FCC 9-5: Stormwater Management Requirements

- 11-1. Prior to issuance of public improvement permits, the applicant shall revise the stormwater plan and any related site plans, so these meet Best Management Practices of the 2010 City of Florence Stormwater Design Manual and the 2008 City of Portland Erosion Sediment Control Manual per FCC 9-5-3-1. The revised materials shall contain dates and the Engineer's signature. Furthermore, the revisions should include a statement indicating that these designs achieve at least 70% removal of the Total Suspended Solids (TSS) from the flow entering the facility for the design storm specified in the Stormwater Manual per FCC 9-5-3-3A.
- 11-2. Prior to final building inspections, the applicant shall submit and obtain City approval of a completed Operations and Maintenance Agreement. The applicant shall bear the costs associated with having the Agreement recorded with Lane County.
- 11-3. Prior to final building inspections, the applicant shall resubmit stormwater facility typical drawings and other materials to reflect conformance with City of Florence standards for growing/filtering media.
- 11-4. Stormwater rain gardens and accompanying underdrain facilities shall not be lined with impermeable materials.

ADOPTED BY THE FLORENCE PLANNING COMMISSION/DESIGN REVIEW BOARD the 14th day of November, 2023.

Sandra Young, Chairperson
Florence Planning Commission

DATE

**FINDINGS OF FACT
FLORENCE PLANNING COMMISSION
Exhibit "A"**

Public Hearing Date: November 14, 2023 **Planner:** Roxanne Johnston

Application: PC 23 08 DR 02

I. PROPOSAL DESCRIPTION

Proposal: A Design Review application for a +/- 10,640 sq. ft. retail store on an undeveloped parcel located at the NE intersection of Highway 101 and 36th St., found on Assessor's Map #18-12-23-22, Tax Lot 06800. The proposal includes considerations of the store's exterior architecture, color pallet, parking, lighting, landscaping, pedestrian walkways, access, and utilities.

Applicant: Kirk Farrelly, PE, of Capital Growth Buchalter as represented by Charlie Severs, PE and Nick Wheeler, JSA Civil, LLC, Inc.

Property Owner: Ohran Properties Oregon 101, LLC

Location: Southeast corner of the intersection of Highway 101 and 36th Street

Site: Map #18-12-23-22, Tax Lot 06800 (unaddressed)

Comprehensive Plan Map Designation: Highway

Zone Map Classification: Highway District

Surrounding Land Use / Zoning:

Site: Undeveloped / Highway District
North: Chens Family Dish Restaurant / Highway District
South: Burger King Restaurant / Highway District
East: Single-unit family detached dwellings / Medium Density Residential
West: Undeveloped lots, abandoned house / Highway District

Streets / Classification:

West – Highway 101 / Major Arterial and 36th St./Local; South – 35th Street / Collector;
North – None; East – Seabrook Lane / Local

II. NARRATIVE:

The applicant is proposing development of a 10,640 sq. ft. single-story retail store on an undeveloped +/- acre parcel located immediately north of the Burger King restaurant and south of Chens Family Dish restaurant on the east side of Highway 101. The project is anticipated to open in 2024.

Two main parking lots, to be located on the east and west side of the store will contain 90° ('head-in' in/perpendicular) parking spaces. The south side of the store allows 4 parallel parking spaces along the store's sidewalk. In total, 31 vehicle parking spaces are planned, two of which are ADA van accessible.

Vehicular access to the project will be provided by two existing site driveways: one along US Highway 101 and one along 35th Street. The driveway along US highway 101 is restricted to right-in-right-out. The driveway along 35th Street provides full access. Both driveways serve the Burger King restaurant directly south of the proposed project.

A pedestrian walkway will connect the store front on the west side to a public sidewalk in the Highway 101 right-of-way. Ideally, pedestrians wishing to access Burger King will use this walkway and highway sidewalk to access Burger King's pedestrian walkway. Internally, a 5' wide curbed sidewalk with ADA-accessible ramps strategically located is to be installed around all but the north side of the store.

A bicycle rack will be placed near the front door within the west parking lot to accommodate up to 4 bicycles.

In recent years, ODOT installed a driveway approach on the northwest side of the subject property, however; the proposed project is not designed to use this approach.

The subject site has experienced several changes to its original subdivision plat, including vacations of two streets, an alleyway, and arrangement of its tax lot. Prior to the construction of Burger King to the south, the subject site and the Burger King site shared a single tax lot, TL 06800. When Burger King was constructed, the tax lot was split into two tax lots and relabeled. Tax lot 06800 is now smaller and is the subject site. Tax lot 06801 is now the Burger King property.

The subject property is originally tied to the 1891 Frasier and Berry's Plat for the City of Florence, Block 10, Lots 1 through 10, which contains a vacated section of 36th St. bordering the north area of the property; and Redwood St., located along the eastern boundary of the subject property. These streets were vacated via Resolution 16, Series 1997. A 1.21' alleyway strip bordering the southern area of the subject property was vacated in 1996 per Resolution 15, Series 1996. These vacated public rights of way are important because they provide seamless utility and access easements between Chens and Burger King. Of note, too, is a narrow western strip out of Lot 10 and portion of said alleyway which were deeded as an easement to the Oregon Department of Transportation, (Sheet SV-1, Exhibit C).

The site also directly abuts the public right-of-way of Seabrook Lane, a Local street which extends west from Spruce Street through the Seabrook subdivision to the eastern property line of the site. In most blocks, Seabrook Ln. would be an alley, not a street, but it was dedicated as a full street to serve the inward-facing homes in the subdivision. The now vacated ally ROW discussed above once connected the area at the end of Seabrook Ln. to Hwy 101. When Seabrook was platted, Seabrook Ln was laid out as a cul-de-sac, but the public ROW was dedicated all the way to the west property line of the subdivision. Although the applicant is not proposing access to Seabrook Ln., the most southeast corner of the property will not contain the landscaping to provide a buffer between the lane and the subject property. An existing wooden fence of unknown condition has been constructed along the

eastern property line. Headlight noise directed towards the east from the site's internal access lane will shine within the cul-de-sac and not directly onto any residences.

Landscaping criteria are reviewed throughout these findings for screening, buffering in setbacks, and treatment of stormwater via a rain garden, for example. Latin names for the landscaping plants are provided within the Landscape Plan in Exhibit E.

III. NOTICES & REFERRALS:

Notice: On October 25, 2023, notice was mailed to surrounding property owners within 100 feet of the property and a sign posted on the property. Notice was published in the Siuslaw News on November 10, 2023.

At the time of this report, the City had received no written comments on the application.

Referrals: Referrals were sent to the Florence Public Works, Police, Code Enforcement, and Building Departments; Central Lincoln PUD; ODOT; OregonFast; CenturyLink/Lumen; USPS; Western Lane Ambulance; Charter Communications; Central Coast Disposal; CTCLUSI; Western Lane Ambulance; and Siuslaw Valley Fire and Rescue on October 26, 2023.

At the time of this report, the City received the following referral comments on the application:

Siuslaw Valley Fire & Rescue Chief Schick (10/26/23 - Exhibit O):

"The Fire Department has no issues with emergency access or water supply for the planned development. We are highly encouraging the installation of an automatic sprinkler system but are not requiring it at this time. We are requiring a key box be placed on the exterior."

Oregon Department of Transportation, Arielle S. Ferber, PE (10/30/23 - Exhibit K):

"ODOT Region 2 Traffic has completed our review of the submitted traffic impact analysis (dated October 23, 2023) to address traffic impacts due to development on the southeast quadrant of US 101 at 36th Street in the city of Florence, with respect to consistency and compliance with ODOT's Analysis Procedures Manual, Version 2 (APM). The APM was most recently updated in September 2023. The current version is published online at: <http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx> As a result, we submit the following comments for the City's consideration:"

"Analysis items to note:

- *The following was noted relating to the crash analysis:*
 - *Total number of reported crashes at the US 101 at 37th Street and Redwood Street at 35th Street should be one and zero, respectively.*
 - *Using the "rule of thumb" crash rate threshold of 1.0 to be indicative of design deficiencies has been replaced as a result of more comprehensive*

data and research in recent years. Rather, it is more appropriate to compare an intersection's crash rate to that of the corresponding 90th percentile crash rate per Section 4.1.1 and Exhibit 4-1 of ODOT's APM. It should be noted that none of the intersections exceed their corresponding 90th percentile crash rate.

- *ODOT mobility targets can be found in the Oregon Highway Plan (OHP). The v/c mobility target for US 101 (statewide highway, within UGB, non-MPO, 40 MPH) at all highway study intersections is 0.85. The study area intersections are projected to operate below this target in the 2024 Build conditions therefore the conclusions of the study remain the same.”*

“Proposed mitigation comments:

1. *ODOT maintains jurisdiction of the Oregon Coast Highway No. 09 (US 101) and ODOT approval shall be required for all proposed mitigation measures to this facility.*
2. *No mitigation measures have been proposed. This conclusion appears reasonable for this proposed development.”*

“Thank you for the opportunity to review this traffic impact analysis. As the analysis software files were not provided, Region 2 Traffic has only reviewed the submitted report.”

“This traffic impact study has been, for the most part, prepared in accordance with ODOT analysis procedures and methodologies. If the City determines any of the above comments will merit the need for reanalysis, we would be willing and able to assist with a second round of review.”

Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians Jillian Hendrix, (11/1/23 - Exhibit M):

*“The Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians have no objections to the proposed project. Please be aware that the property is in proximity to known cultural resource sites and so may contain as yet unlocated cultural resources. **We request that we be contacted immediately if any known or suspected cultural resources are encountered during any phase of the work.**”*

*“Please also be aware that federal and state laws prohibit intentional excavation of known or suspected cultural resources without an archaeological permit and require that we be notified immediately if resources are discovered, uncovered, or disturbed. 43 CFR 10 applies on tribal and federal lands, federal projects, federal agencies, as well as to federal actions and federally funded (directly or indirectly) projects. ORS 97.745 prohibits the willful removal, mutilation, defacing, injury, or destruction of any cairn, burial, human remains, funerary objects, or objects of cultural patrimony of any native Indian. ORS 358.920 prohibits excavation injury, destruction, or alteration of an archaeological site or object or removal of an archaeological object from public or **private lands.**”*

Lumen, Jordan Kienlen (11/2/23 - Exhibit N):

“Upon review, there will be no objection/conflict with Lumen facilities with this project. If the new Dollar General wishes to have service connected to the new building, have them reach out to us directly so we can begin the planning process.”

Public Works, Mike Miller/Civil West Engineering (11/3/23 - Exhibit L):

“Public Works and Civil West Engineering performed a review of the Dollar General Traffic Impact Analysis (TIA) by SCJ Alliance, dated October 2023. Our review was performed in accordance with City Code and the 2012 Transportation System Plan (TSP). Note that Dollar General’s application was made prior to the adoption of the 2023 Transportation System Plan.”

“The study was well performed and no other comments or questions have come up. The requirements set forth by City Code and the 2012 TSP appear to be met and no further action is required. Public Works has also reviewed the comments from ODOT regarding the Dollar General TIA and concur with their findings.”

“Regarding the civil engineering plans from Dollar General, Public Works has provided comments back to the engineer for Dollar General and have requested the following items be addressed prior to the issuance of public improvement permits:

- *Stormwater plans need to be in compliance with the City’s stormwater design manual and stormwater management plans*
- *Include City of Florence standard detail drawings in the plan set, including the use of ‘Blue Bolts’ for water system fittings. Blue bolts are constructed from corrosion-resistant, high-strength low-alloy steel that conforms to ANSI/AWWA C111/A21.11 and feature a blue fluoropolymer coating*
- *Relocation of the existing 8-inch water main away from the proposed building and a minimum 10-foot separation from stormwater, sewer and underground electric lines.”*

Agency referrals are used to determine the need for conditions of approval within their applicable review criteria.

IV. APPLICABLE REVIEW CRITERIA

Criteria Applying to this Matter for the application include:

Florence City Code, Title 10: Zoning Regulations

(found at <http://www.ci.florence.or.us/council/title-10-zoning-regulations>)

- Chapter 1: Zoning Administration, Sections 1-4, 1-5; 1-6-3; 1-7
- Chapter 3: Off-Street Parking and Loading, Sections 2, 3, 4, 5, 8, 9, and 10
- Chapter 6: Design Review, Sections 4, 5, 6-3, 6-4-G, 7, 8, 9, and 11
- Chapter 7: Special Development, Sections 7-6-3-H and 7-6-A
- Chapter 16: Highway District, Sections 1, 2, 4, 5, and 7
- Chapter 34: Landscaping, Sections 3, 4, and 5
- Chapter 35: Access and Circulation, Sections 2, 3, and 4.

Chapter 36: Public Facilities, Sections 2-5, 2-16, 2-17, 2-18, and 3 through 8

Chapter 37: Lighting, Sections 2 through 6

Florence City Code, Title 9: Utilities

Chapter 5: Stormwater Management Requirements, Sections 3, 4, and 7

Florence Realization 2020 Comprehensive Plan

(found at <http://www.ci.florence.or.us/planning/comprehensive-plan>)

Chapter 2, Commercial Policy 9; Chapter 12, Transportation Policies 13 & 29

V. FINDINGS

Code criteria are listed in **bold**, with response beneath. Only applicable criteria have been listed.

FLORENCE CITY CODE

TITLE 10: CHAPTER 1: ZONING ADMINISTRATION

10-1-1-4: APPLICATION:

A. Applications and Petitions required by Title 10 and 11 of this Code shall be on forms prescribed by the City and include the information requested on the application form.

B. Applicability of Review Procedures: All land use and development permit applications, petitions, and approvals shall be decided by using the procedures contained in this chapter. The procedure type assigned to each application governs the decision making process for that permit or approval. There are four types of approval procedures [...]

[...]

3. Type III (Quasi-Judicial) Procedure (Public Hearing). Quasi-Judicial decisions are made by the Planning Commission after a public hearing, with an opportunity for appeal to the City Council; or in the case of a Quasi-Judicial zone change (e.g., a change in zoning on one property to comply with the Comprehensive Plan), a Quasi-Judicial decision is made by the City Council on recommendation of the Planning Commission. Quasi-Judicial decisions involve discretion but implement established policy.

C. Except when this Code provides to the contrary, an application or petition regulated by Titles 10 and 11 of this Code:

1. Shall be reviewed by the Planning Director within thirty (30) days to determine if the application is complete, including required drawings, plans, forms, and statements.

The applicant submitted most of the required documents along with a City-approved application form on June 13, 2023. A Notice of Incompleteness was issued on July 20, 2023. The applicant supplied most of the missing documents, and the application was deemed complete as of

October 3, 2023, for review purposes. The application associated with this request is considered as a quasi-judicial review (Type III) and noticing requirements have been fulfilled per this chapter. Type III applications are heard by the Planning Commission during a duly noticed public hearing. The criteria have been met.

2. **Shall identify the public facilities and access which may be needed to support the development, including but not limited to utilities and transportation infrastructure, and how they will be financed.**
3. **Shall identify off-site conditions including property lines, utility locations and sizes, existing and future streets, land uses, significant grade changes and natural features such as streams, wetlands and sand dunes for an area not less than three hundred (300) feet from the proposed application site that is one (1) acre or larger and within 100 feet from the proposed application site that is less than one (1) acre in size. (Amd. By Ord. No. 4, Series 2011)**

The applicant provided plans identifying public facilities and access that will support the development. Private shared access points to public streets are shown in Exhibit C as is water, sewer, stormwater, and power/communication lines. Pre-existing utilities are located within easements as shown on Sheet SV-2, Exhibit C. Sheet CG-01 in the same exhibit shows where these utilities will be located during development. Although some of these public utilities will be relocated and/or resized, no additional public utilities are planned.

The amount of pre-development stormwater drainage is allowed into the stormwater drainage system located in the 35th St. ROW. Only in the event of stormwater overflow for a possible 25-year, 24-hour storm event (discussed under FCC 9-5), post-development overflow will be conveyed to this storm drain in the 35th St. No other post-development drainage is allowed.

A Transportation Impact Study has been submitted (Exhibit I) and is reviewed elsewhere in these findings.

The project site is under 1 acre in size. There are no existing streams, wetlands nor sand dunes with an area of 1 acre or more within 300' of the site.

4. **Shall be accompanied by a digital copy or two hard copies of required plans of dimensions measuring 11 inches by 17 inches or less. Costs of document reduction may be passed onto the applicant.**
5. **Shall be filed with a narrative statement that explains how the application satisfies each and all of the relevant criteria and standards in sufficient detail for review and decision-making. Additional information may be required under the specific application requirements for each approval.**

The applicant did not supply a narrative statement but did submit a response to a preliminary completeness check by staff (Exhibit B1). Staff worked with the applicant and deemed the application complete on October 3rd, with the agreement that a Traffic Impact Study (TIS) would be forthcoming on October 24th and that an irrigation plan would be conditioned. The applicant provided the TIS on October 23rd. A review of the materials received thus far may now be

carried out to determine whether the proposal is consistent with the applicable regulatory provisions.

- 6. Shall be accompanied by any other information deemed necessary by the City Planning Department.**
- 7. Shall be accompanied by the required, non-refundable fee.**

The applicant submitted payment of the required fees to the Planning Department. This criterion has been met.

D. Evidence Submittal: Except when this Code expressly provides different time limitations, all documents and evidence relied upon by the applicant shall be submitted at least thirty (30) days prior to the hearing as provided in Subsection 10-1-1-6. (Amd. By Ord. No. 30 Series 1990)

At the request of staff, the applicant submitted supplemental evidence less than 30 days from the date of the public hearing on November 14, 2023. These requests were to avoid prolonging the hearing date and the need to condition for minor information.

E. Traffic Impact Studies:

- 1. Purpose of Traffic Impact Study: The purpose of a Traffic Impact Study is to determine:**
 - a. The capacity and safety impacts a particular development will have on the City's transportation system;**
 - b. Whether the development will meet the City's minimum transportation standards for roadway capacity and safety;**
 - c. Mitigating measures necessary to alleviate the capacity and safety impacts so that minimum transportation standards are met; and**
 - d. To implement section 660-012-0045(2)(e) of the State Transportation Planning Rule.**
- 2. Criteria for Warranting a Traffic Impact Study: All traffic impact studies shall be prepared by a professional engineer in accordance with the requirements of the road authority. The City shall require a Traffic Impact Study (TIS) as part of an application for development; a proposed amendment to the Comprehensive Plan, zoning map, or zoning regulations; a change in use, or a change in access, if any of the following conditions are met:**
 - a. A change in zoning or plan amendment designation where there is an increase in traffic or a change in peak-hour traffic impact.**

- b. Any proposed development or land use action that may have operational or safety concerns along its facility(s), as determined by the Planning Director in written findings.
 - c. The addition of twenty-five (25) or more single family dwellings, or an intensification or change in land use that is estimated to increase traffic volume by 250 Average Daily Trips (ADT) or more, per the ITE Trip Generation Manual.
 - d. A change in land use that may cause an increase in use of adjacent streets by vehicles exceeding the 20,000 pound gross vehicle weights by 10 vehicle trips or more per day
 - e. The location of the access driveway does not meet minimum sight distance requirements, or is located where vehicles entering or leaving the property are restricted, or such vehicles queue or hesitate on the State highway, creating a safety hazard.
 - f. A change in internal traffic patterns that may cause safety problems, such as backed up onto a street or greater potential for traffic accidents.
 - g. The Planning Director, based on written findings, determines that a TIS is necessary where traffic safety, street capacity, future planned facility, or multimodal concerns may be associated with the proposed development. The City will consider the following criteria when determining the need for a TIS:
 - i. If there exists any current traffic problems, such as high accident location, poor roadway alignment, or capacity deficiency that are likely to be compounded as a result of the proposed development.
 - ii. If it is anticipated the current or projected level of service of the roadway system in the vicinity of the development will exceed minimum standards.
 - iii. If it is anticipated that adjacent neighborhoods or other areas will be adversely impacted by the proposed development.
 - h. A road authority with jurisdiction within the City may also require a TIS under their own regulations and requirements.
3. **Traffic Study Requirements:** In the event the City determines a TIS is necessary, the information contained shall be in conformance with FCC 10-35-2-5, Traffic Study Requirements.

The applicant submitted a Traffic Impact Analysis (TIA) compiled by SCJ Alliance, dated October 23, 2023. This analysis was requested based on FCC 10-1-1-4-E-2-c, e and f as the business is projected to generate 447 Average Daily Trips, which have the potential to add to

vehicle conflicts in the area, and because the driveway along Highway 101 is restricted to right-in-right-out access. No deficiencies were found and this topic is discussed under FCC 10- 35 in these findings.

10-1-1-5: GENERAL PROVISIONS

- A. 120-Day Rule: The City shall take final action on Type I, II, and III permit applications that are subject to this Chapter, including resolution of all appeals, within 120 days from the date the application is deemed as complete, unless the applicant requests an extension in writing. Any exceptions to this rule shall conform to the provisions of ORS 227.178. (The 120-day rule does not apply to Type IV legislative decisions – plan and code amendments – without an applicant under ORS 227.178.)**

The application was deemed complete by the Planning Department as of October 3, 2023. The Planning Commission’s public hearing was held with proper notification processes on November 14, 2023. This criterion has been met.

10-1-1-6-3: TYPE III REVIEWS – QUASI-JUDICIAL LAND USE HEARINGS:

- A. Hearings are required for Type III (quasi-judicial) land use matters requiring Planning Commission review. Type III applications include, but are not limited to:**

- 5. New construction requiring Design Review by the Planning Commission.**

As new commercial construction, the proposal requires Design Review approval. The criterion is met.

B. Notification of Hearing:

- 1. At least twenty (20) days prior to a Type III (quasi-judicial) hearing, notice of hearing shall be posted on the subject property and shall be provided to the applicant and to all owners of record of property within 100 feet of the subject property, except in the case of hearings for Conditional Use Permits, Variance, Planned Unit Development and Zone Change, which notice shall be sent to all owners of record of property within 300 feet of the subject property.**

[...]

- 2. Prior to a Type III (quasi-judicial) hearing, notice shall be published one (1) time in a newspaper of general circulation. The newspaper’s affidavit of publication of the notice shall be made part of the administrative record.**

Notice of the application was provided to property owners within 101’ feet of the subject property and posted on the property 20 days prior to the public hearing, on October 25, 2023. A public hearing notice was published in Siuslaw News on November 10, 2023. Criterion met.

C. Notice Mailed to Surrounding Property Owners - Information provided:

1. **The notice shall:**
 - a. **Explain the nature of the application and the proposed use or uses which could be authorized;**
 - b. **List the applicable criteria from the ordinance and the plan that apply to the application at issue;**
 - c. **Set forth the street address or other easily understood geographical reference to the subject property;**
 - d. **State the date, time and location of the hearing;**
 - e. **State that failure of an issue to be raised in a hearing, in person or by letter, or failure to provide sufficient specificity to afford the decision maker an opportunity to respond to the issue precludes further appeal based on that issue;**
 - f. **State that application and applicable criteria are available for inspection at no cost and will be provided at reasonable cost;**
 - g. **State that a copy of the staff report will be available for inspection at no cost at least 7 days prior to the hearing and will be provided at reasonable cost;**
 - h. **Include a general explanation of the requirements for submission of testimony and the procedure for conduct of hearings.**
 - i. **Include the name of a local government representative to contact and the telephone number where additional information may be obtained.**

The notice contained all the required information listed in FCC 10-1-1-6-3-C. The criteria have been met.

D. Hearing Procedure: All Type III hearings shall conform to the procedures of Florence City Code Title 2, Chapters 3 and 10.

E. Action by the Planning Commission:

1. **At the public hearing, the Planning Commission shall receive all evidence deemed relevant to the issue. It shall then set forth in the record what it found to be the facts supported by reliable, probative and substantive evidence.**
2. **Conclusions drawn from the facts shall state whether the ordinance requirements were met, whether the Comprehensive Plan was complied with and whether the requirements of the State law were met.**

3. In the case of a rezoning request, it shall additionally be shown that a public need exists; and that the need will be best served by changing the zoning of the parcel of land in question.
4. There is no duty upon the Planning Commission to elicit or require evidence. The burden to provide evidence to support the application is upon the applicant. If the Planning Commission determines there is not sufficient evidence supporting the major requirements, then the burden has not been met and approval shall be denied.

On November 14, 2023, the Planning Commission held a duly noticed public hearing per the procedures of FCC 2-3 and FCC 2-10 to consider the matter, evidence relevant to the issue, the facts within the record, and any applicable public testimony received.

- F. Notice of Decision by the Planning Commission:** A notice of the action or decision of the Planning Commission, and right of appeal shall be given in writing to the applicant. Any party who testified either in writing or verbally at the hearing must provide a mailing address in order to be noticed. The notice may be served personally, or sent by mail. The notice shall be deemed served at the time it is deposited in the United States mail.

Following a decision by the Planning Commission, notice of the action and decision will be mailed to the applicant and any party who has testified either in writing or verbally at the public hearing.

TITLE 10: CHAPTER 3: OFF-STREET PARKING AND LOADING

10-3-2: GENERAL PROVISIONS:

- A. The provision for and maintenance of off-street parking and loading spaces are continuing obligations of the property owners. No building or other permit shall be issued until plans are presented that show property that is and will remain available for exclusive use as off-street parking and loading space.
- B. At the time of new construction or enlargement or change in use of an existing structure within any district in the City, off-street parking spaces shall be provided as outlined in this Chapter, unless requirements are otherwise established by special review or City Council action. Additional parking spaces shall meet current code.

The applicant is proposing new construction with parking spaces provided.

- C. If parking space has been provided in connection with an existing use or is added to an existing use, the parking space shall not be eliminated if elimination would result in less space than is required by this Chapter.
- D. Required parking spaces shall be available for the parking of passenger automobiles of residents, customers, patrons and employees, and shall not be used for storage of materials of any type.

- E. **Ingress and egress for parking and loading shall not endanger or impede the flow of traffic.**
- F. **The required off-street parking for nonresidential uses shall not be used for loading and unloading operations during regular business hours.**

Required parking spaces shall be maintained and shall not be eliminated, used for the storage of materials of any type, or used for loading or unloading operations during business hours. [Condition 4-1]

10-3-3: MINIMUM STANDARDS BY USE: The number of required off-street vehicle parking spaces shall be determined in accordance with the standards in Table 10-3-1. Where a use is not specifically listed in this table, parking requirements are determined by finding that a use is similar to one of those listed in terms of parking needs, or by estimating parking needs individually using the demand analysis option described below:

- A. **Parking that counts toward the minimum requirement is parking in garages, carports, parking lots, bays along driveways, and shared parking. Parking in driveways does not count toward required minimum parking.**

The applicant has proposed parking within a new parking lot with a total of 31 spaces. This criterion is met.

10-3-4: MINIMUM REQUIRED PARKING BY USE: During the largest shift at peak season, fractional space requirements shall be counted as the next lower whole space (rounded down). Square footages will be taken from the gross floor area (measurements taken from exterior of building). Applicants may ask the Planning Commission for a reduction for parking spaces as part of their land use application. The applicant will have to provide the burden of evidence to justify the reduction proposed. The Planning Commission and/or staff may require the information be prepared by a registered traffic engineer. Table 10-3-1 lists the minimum parking spaces required by use, with a minimum no less than two (2) spaces for non-residential uses, plus additional space(s) as needed to meet the minimum accessible parking requirement.

Table 10-3-1, Minimum Required Parking By Use:

- C. **Commercial and Retail Trade Types:**

Retail Sales and Service (See also Drive-Up Uses)	<u>Retail:</u> 1 spaces per 333 sq. ft.[...]
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At 10,640 sq. ft., the proposed retail store requires 31 (31.95, rounded down per FCC 10-3-4) parking spaces. The applicant has proposed 31 parking spaces (Sheet SP-01, Exhibit C). This criterion is met.

10-3-5: VEHICLE PARKING - MINIMUM ACCESSIBLE PARKING:

- A. Accessible parking shall be provided for all uses in accordance the standards in Table 10-3-2; parking spaces used to meet the standards in Table 10-3-2 shall be counted toward meeting off-street parking requirements in Table 10-3-1;
- B. Such parking shall be located in close proximity to building entrances and shall be designed to permit occupants of vehicles to reach the entrance on an unobstructed path or walkway;
- C. Accessible spaces shall be grouped in pairs where possible;
- D. Where covered parking is provided, covered accessible spaces shall be provided in the same ratio as covered non-accessible spaces;
- E. Required accessible parking spaces shall be identified with signs and pavement markings identifying them as reserved for persons with disabilities; signs shall be posted directly in front of the parking space at a height of no less than 42 inches and no more than 72 inches above pavement level. Van spaces shall be specifically identified as such.

Table 10-3-2 - Minimum Number of Accessible Parking Spaces Source: ADA Standards for Accessible Design 4.1.2(5)			
Total Number of Parking Spaces Provided (per lot)	Total Minimum Number of Accessible Parking Spaces (with 60" access aisle, or 96" aisle for vans*)	Van Accessible Parking Spaces with min. 96" wide access aisle	Accessible Parking Spaces with min. 60" wide access aisle
	<i>Column A</i>		
1 to 25	1	1	0
26 to 50	2	1	1
*vans and cars may share access aisles **one out of every 8 accessible spaces ***7 out of every 8 accessible parking spaces			

With 31 total parking spaces proposed, the proposal requires two accessible parking spaces, including at least one van-accessible space. The applicant proposes two accessible parking spaces, one on either side of a van-accessible access aisle, measuring slightly more than 96 in. in width. Provided signage details shown on Sheet SP-01 of Exhibit C meet the requirements of Florence City Code and the Americans with Disabilities Act. These criteria are met.

10-3-8: PARKING AREA IMPROVEMENT STANDARDS: All public or private parking areas, loading areas and outdoor vehicle sales areas shall be improved according to the following: All required parking areas shall have a durable, dust free surfacing of asphaltic concrete, cement concrete, porous concrete, porous asphalt, permeable pavers such as turf, concrete, brick pavers or other materials approved by the City. Driveways aprons shall be paved for the first fifty feet (50') from the street.

[...]

- C. All parking areas except those required in conjunction with a single-family or duplex dwelling shall be graded so as not to drain storm water over public sidewalks. All drainage systems shall be connected to storm sewers where

available. Parking lot surfacing shall not encroach upon a public right of way except where it abuts a concrete public sidewalk, or has been otherwise approved by the City.

All parking areas are proposed to contain asphaltic concrete surfacing which meets the requirements of this section and do not encroach on a public ROW. Parking spaces located nearest the west side of the store are separated from sidewalks by 9"-tall by 6'-wide concrete wheel stops, including the ADA accessible spaces. The parking spaces facing Highway 101 as shown on Sheet SP-01 of Exhibit C include details on the curbs and wheel stops. Four (4) parallel parking spaces are provided along the southern side of the store, sidewalk tight. All parking spaces have access to an accessible sidewalk ramp, including the parking stalls located along the most western area of the west parking lot, which would ideally utilize the pedestrian walkway to access the store.

As discussed earlier, the applicant provided pre-existing conditions in Exhibit C. The Preliminary Grading and Stormwater Plan is located on Sheet CG-01 of the same exhibit. Given referral comments discussed in more detail under FCC 9-5 (Stormwater Management Requirements), the applicant has been conditioned under this Chapter to revise their stormwater plans to be compliant with the City's stormwater design manual and stormwater management plans. Generally, stormwater moving from the north to the south side will be conveyed from a series of catch basins to an at-grade infiltration rain garden. In the event of a 25 year, 24-hour storm event, only then will post-development stormwater be allowed into the public stormwater drainage system. Roof runoff and a portion of landscaping runoff north of the proposed building will be routed to a below-grade soakage trench, according to the current undated Stormwater Report in Exhibit H.

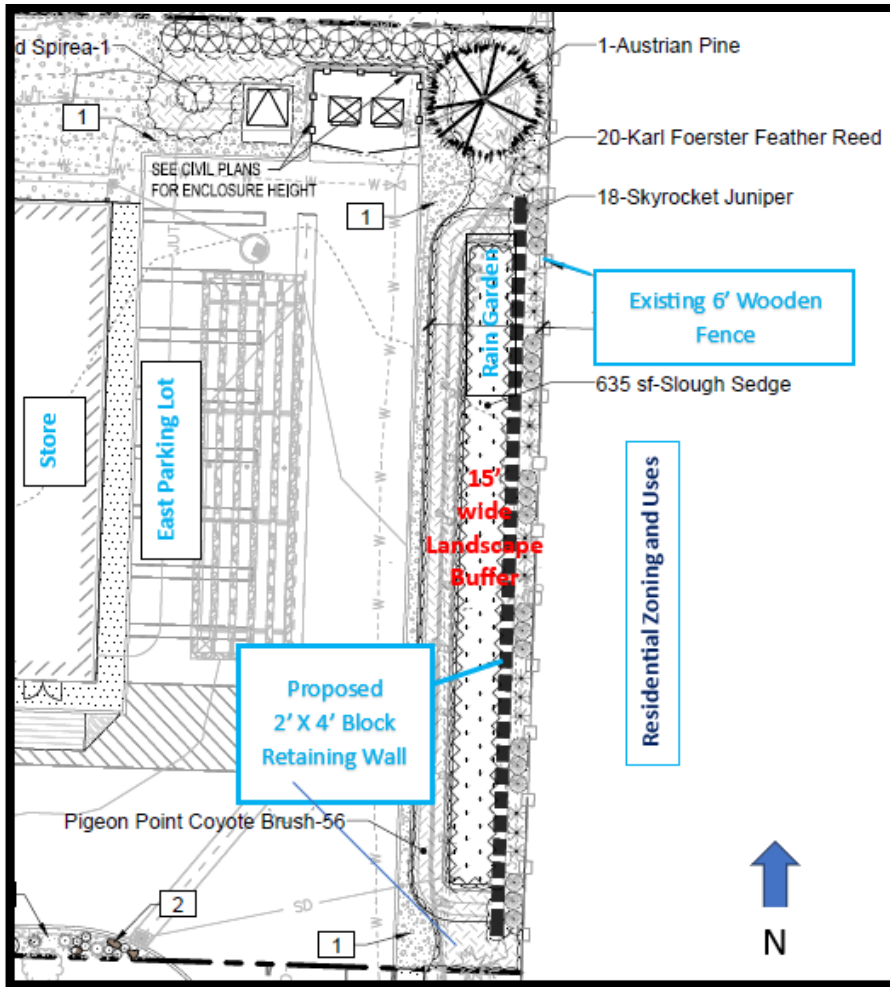
Although stormwater overflow is not anticipated on the sidewalks, the below condition of approval is given to stress this point.

Per FCC 10-3-8, parking areas shall be graded so as not to allow stormwater to drain over public sidewalks. [[Condition 4-2](#)]

D. Parking spaces shall be located or screened so that headlights do not shine onto adjacent residential uses.

Proposed parking spaces on the east and south sides of the store have the potential to allow vehicles to be oriented toward residential uses to the east as shown on Sheet LS-01 of Exhibit E, depending on which direction vehicles are parked within the 90° spaces. Additionally, vehicles accessing the drive isles headed eastward could potentially cast light within the residential area without mitigation. The applicant has provided the required information to reflect screening measures.

An existing 6' high wooden fence of unknown integrity borders the east property line. A 15'-wide landscape buffer along this fence contains sandwiched landscaping features that should mitigate headlight nuisances as shown in the image below:



As shown in the image, a 2' wide by 4' tall block retaining wall is planned along a 40' stretch of the east property line. A series of 18 Skyrocket Juniper (classified as shrubs) clustered in groups of 3 and Karl Foerster Feather Reed Grass is proposed between the wall and the existing fence. Slough Sedge, (a perennial shrub) plantings is proposed immediately west of the block wall as this area will contain a rain garden that will filter stormwater overflow from an underground stormwater infiltration facility located in the east parking lot. Pigeon Point Coyote Brush, (an ornamental grass) will line the gap between the rain garden and the 6'-high curbed drive aisle. Altogether, the combination of block fencing and landscape plantings should serve as adequate screening between the proposed store and the adjacent residential zoning and uses to the east. Maintenance of the fencing and junipers are conditioned under FCC 10-3-8G. Landscaping details are also discussed in review of FCC 10-34 in this report. Criterion met.

- E. **Except for parking areas required in conjunction with a single-family attached or detached, duet, duplex dwelling; or tri-plex, quad-plex, or cluster housing development that provides off-street parking through a carport or garage, all parking areas shall provide:**
 - 1. **A curb of not less than six inches (6") in height near abutting streets and interior lot lines. This curb shall be placed to prevent a motor vehicle from**

encroaching on adjacent private property, public walkways or sidewalks or the minimum landscaped area required in paragraph E2 of this subsection.

The applicant proposes 6" curbs in all locations needed to prevent encroachment in the stated areas as applicable. Those spaces facing the store front will include precast concrete wheel stops discussed elsewhere as detailed on Sheet SP-01 of Exhibit C. A detail of the curbing is also shown within the same sheet. This criterion is met.

- 2. Except for places of ingress and egress, a five foot (5') wide landscaped area wherever it abuts street right-of-way. In areas of extensive pedestrian traffic or when design of an existing parking lot makes the requirements of this paragraph unfeasible, the Planning Commission may approve other landscaped areas on the property in lieu of the required five foot (5') landscaped area. See also FCC 10-34-3-6 and -7 for parking lot landscaping standards.**

The proposed landscaping plan includes landscaped areas in excess of 5' wide between parking spaces and the adjacent Highway 101 sidewalk rights-of-way. This criterion has been met.

F. No parking area shall extend into the public way except by agreement with the City.

The parking areas are internal to the lot and have been designed so as not to extend into the public way. This criterion has been met.

- G. Except for parking in connection with dwellings, parking and loading areas adjacent to a dwelling shall be designed to minimize disturbance by the placement of a sight obscuring fence or evergreen hedge of not less than three feet (3') nor more than six feet (6') in height, except where vision clearance is required. Any fence, or evergreen hedge must be well kept and maintained.**

Screening has been addressed under FCC 10-3-8-D.

In accordance with FCC 10-4-8 G, fencing and evergreen hedges must be well kept and maintained. [[Condition 4-3](#)]

H. Lighting: Refer to Section 10-37 of this Title for requirements.

Lighting is discussed in review of FCC 10-37.

- I. Except for single-family and duplex dwellings, groups of more than two (2) parking spaces shall be so located and served by a driveway that their use will require no backing movements or other maneuvering within a street right of way other than an alley.**

Internal parking is proposed, with all backing movement and maneuvering contained interior to the property. This criterion is met.

- J. Unless otherwise provided, required parking and loading spaces shall not be located in a required front or side yard.**

Parking is not proposed within a required front or side yard. Front yard and side yard requirements are discussed under FCC 10-16-7-B. This criterion is met.

- K. Planning review is required for all parking lot construction or resurfacing.**

Planning review for these parking lot construction projects is a part of this design review application. This criterion is met.

- L. A plan, drawn to a suitable scale, indicating how the off- street parking and loading requirements are to be met shall accompany an application for a building permit. The plan shall indicate in detail all of the following:**

- 1. Individual parking and loading spaces.**
- 2. Circulation area.**
- 3. Access to streets and property to be served.**
- 4. Curb cut dimensions.**
- 5. Dimensions, continuity and substance of screening, if any.**
- 6. Grading, drainage, surfacing and subgrading details.**
- 7. Obstacles, if any, to parking and traffic circulation in finished parking areas.**
- 8. Specifications for signs, bumper guards and curbs.**
- 9. Landscaping and lighting.**

The applicant provided plans meeting most requirements. Pole or monument signage dimensions and materials, however, have not been detailed within this application. Additionally, dimensions are provided for the storefront signage (Dollar General); however, signage lighting on the storefront face, if proposed, is not included in the photometric light plan. This plan is reviewed later in these findings and conditioned as necessary.

A detailed and dimensioned signage plan that meets requirements outlined in FCC Title 4, Chapter 7 shall be submitted and approved by the Florence Building Department. [[Condition 4-4](#)]

10-3-9: PARKING STALL DESIGN AND MINIMUM DIMENSIONS: All off-street parking spaces (except those provided for single-family and duplex homes) shall be improved to conform to City standards for surfacing, stormwater management, and striping and where provisions conflict, the provisions of FCC Title 9 Chapter 5 shall prevail. Standard parking spaces shall conform to minimum dimensions specified in the following standards and Figures 10-3(1) and Table 10-3-3:

- A. Motor vehicle parking spaces shall measure nine (9) feet and six (6) inches wide by nineteen (19) feet long.
- B. Each space shall have double line striping with two feet (2') wide on center.

Per FCC 10-3-9 B, each parking space shall have double line striping with two feet (2') wide on center. [Condition 4-7]

- C. The width of any striping line used in an approved parking area shall be a minimum of 4" wide.

Sheet SP-01 of Exhibit C demonstrates in Construction Notes 2, 3, and 4 that this criterion will be met.

- D. All parallel motor vehicle parking spaces shall measure eight (8) feet six (6) inches by twenty-two (22) feet;
- E. Parking area layout shall conform to the dimensions in Figure 10-3(1), and Table 10-3-3, below;
- F. Parking areas shall conform to Americans With Disabilities Act (ADA) standards for parking spaces (dimensions, van accessible parking spaces, etc.). Parking structure vertical clearance, van accessible parking spaces, should refer to Federal ADA guidelines.

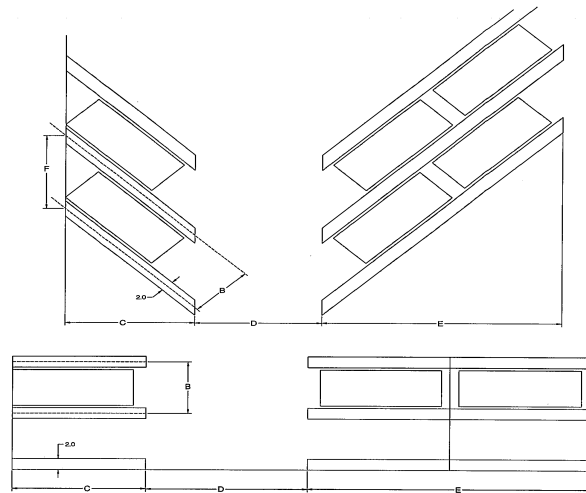


FIGURE 10-3 (1)

Table 10-3-3 – Parking Area Layout							
Space Dimensions in feet	Parking Angle \leq°	Stall Depth		Aisle Width		Stall width (B)	Curb Length (F)
		Single (C)	Double (E)	One Way (D)	Two Way (D)		
	30°	15.6	26.7	12	18	9.5	19.0
	45°	18.4	33.4	13	18	9.5	13.4
	60°	20	38.8	17	18	9.5	11.0
	70°	20.3	40.6	18	19	9.5	10.1
	80°	20	41.2	22	22	9.5	9.6

	90°	19	40.5	23	23	9.5	9.5
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According to the parking plan shown on Sheet SP-01 of Exhibit C, proposed non-ADA parking spaces meet the requirements of this section, with typical stalls measuring 9.5' by 19'. All but 4 of the parking spaces are oriented 90° to the maneuvering aisle. Four parallel parking spaces meet the requirements of FCC 10-3-9 D as they measure 8'6" X 22'. The two-way maneuvering aisles are proposed to be greater than 24' wide, surpassing the requirement of a 23'-wide aisle for 90° parking spaces.

Although the required 8 ft. wide aisle (96") is provided between the two ADA parking spaces, the 2 accessible parking stalls do not meet the appropriate ADA requirements as they are only 8' wide.

As FCC 1-3-9 F states, parking areas shall conform to American With Disabilities Act (ADA) standards. These standards may be accessed at www.ada.gov/topics/parking/. According to this site, the standard minimum width for an ADA parking space is 96", or 8'.

Per Table 10-3-3 under FCC 3-9-F, the applicant shall submit a parking plan to revise the measurements of the 2 (two) required ADA parking stalls from 8' widths to 9' widths. [Condition 4-5]

10-3-10: BICYCLE PARKING REQUIREMENTS: All new development that is subject to Site Design Review, shall provide bicycle parking, in conformance with the standards and subsections A-H, below.

A. Minimum Size Space: Bicycle parking shall be on a two (2) feet by six (6) feet minimum.

Bicycle parking is provided by means of a bike rack located near the front store entrance within the parking area (not on the sidewalk). The parking plan shown on Sheet SP-01 of Exhibit C provides the required bicycle parking measurements. Criterion met.

B. Minimum Required Bicycle Parking Spaces. Short term bicycle parking spaces shall be provided for all non-residential uses at a ratio of one bicycle space for every ten vehicle parking spaces. In calculating the number of required spaces, fractions shall be rounded up to the nearest whole number, with a minimum of two spaces.

Required parking spaces for the store total 31 (including the ADA) spaces. Therefore, required bicycle parking totals 4 spaces (rounded up), which is what is proposed within the parking plan shown Sheet SP-01 of Exhibit C. Criterion met.

D. Location and Design. Bicycle parking should be no farther from the main building entrance than the distance to the closest vehicle space other than handicap parking, or fifty (50) feet, whichever is less and shall be easily accessible to bicyclists entering the property from the public street or multi-use path.

E. Visibility and Security. Bicycle parking for customers and visitors of a use shall be visible from street sidewalks or building entrances, so that it provides sufficient security from theft and damage;

- F. Lighting. For security, bicycle parking shall be at least as well lit as vehicle parking. Refer to Section 10-37 of this Title for requirements.**
- G. Reserved Areas. Areas set aside for bicycle parking shall be clearly marked and reserved for bicycle parking only.**

The applicant has not submitted proposed signage for the bicycle parking area. The proposed bicycle parking is located near the main entrance within a striped stall area. No barriers or curbing surrounds the bicycle parking area to prevent passenger vehicles from accessing this area. The bicycle parking area shall be clearly marked and reserved for bicycle parking only in accordance with this FCC 10-3-10G. [Condition 4-6]

- H. Hazards. Bicycle parking shall not impede or create a hazard to pedestrians. Parking areas shall be located so as to not conflict with vision clearance standards. If bicycle parking cannot be provided safely, the Planning Commission or Community Development Director may waive or modify the bicycle parking requirements.**

The location of the rack on the west side of the store is less than 10 feet from the front doors and meets the requirements for visibility and lighting. Safety through clear reservation (signage) and separation from other uses are conditioned under FCC 10-3-10-G.

TITLE 10: CHAPTER 6: DESIGN REVIEW

10-6-5-1: GENERAL CRITERIA FOR NONRESIDENTIAL DEVELOPMENT: Nonresidential projects shall meet the following criteria. The Planning Commission or Planning Commission or their designee may require any of the following conditions it deems necessary to secure the purpose and intent of this Chapter. The Commission or their designee shall consider the following criteria reviewing applications and may set conditions or standards which regulate and limit the following:

- A. Setbacks, yards, height, density and similar design features according to the underlying zoning district.**
- B. Lot area, dimensions and percentage of coverage according to the underlying zoning district.**

The underlying zoning district for the subject property is the Highway District. The Highway District zoning is regulated under FCC 10-16. The district requires a minimum highway frontage setback of 70' measured from the highway's center line. The required side building setbacks from the abutting properties are 5'.

According to FCC 10-6-7 M, the total allowable impervious lot coverage in the Highway District is 85%. Staff found discrepancies in the submitted materials regarding the total lot area. The March 28, 2023, survey shown on Sheet SV-1 of Exhibit C notes that the site contains 1 acre (43,418 sq. ft). In contrast, the Stormwater Report shown in Exhibit H bases its assumptions on two approximate numbers explaining in its *Project Overview and Description* (page 4) that the acreage totals 0.99 acres; and then a table on page 5 shows the total property area as 0.97 acre, or 42,174 sq. ft. This estimate equals a difference of 1,244 sq. ft. less than that of one acre. The discrepancies within and between the documents do not adversely affect the stormwater calculations nor requirements for landscaping purposes as the pervious area is

more abundant at an exact acre measurement. In other words, the impervious area, which determines coverage for the purposes of this criterion, remains the same regardless of the property size. The Stormwater Report's table shows that the proposed impervious lot coverage is 31,804 sq. ft., or approximately 75% of the property, 10% less than the maximum lot coverage allowed:

Areas	Curve #	Acres (SF)	Percentage
Impervious Area	98	0.73 (31,804)	75%
Pervious Area	61	0.24 (10,370)	25%
Total	N/A	0.97 (42,174)	100%

Had the table calculated its areas based on an exact acre, impervious surfaces percentage would be lower than 75%. Based on an acre, impervious area would total would be 73%. The criteria are met.

C. Installation and maintenance of fences, walls, hedges, screens and landscaping according to standards set forth in FCC 10-34 Landscaping, and any requirements of the underlying zoning district.

Aside from a 4' tall block wall along the eastern side of the site, a 6' high board-on-board perimeter fence is planned for the trash enclosure located within the NE corner of the subject property. Screening has been discussed earlier in these findings and has been found to meet the criteria. Additional landscaping details are discussed further in review of FCC 10-34.

D. The location and design of access and egress points for vehicles and pedestrians, including access points along State highways according to standards set forth in FCC 10-35 Access and Circulation, and any requirements of the underlying zoning district.

Access is discussed in review of FCC 10-35. The access approach along Highway 101 is already installed and features a right in, right out, turn only from the site onto the highway. This approach has been thoroughly vetted by ODOT and the City. Furthermore, the secondary access drive will connect to the existing Burger King drive which provides access to a 35th St. driveway approach. Criterion met.

E. Noise, vibration, smoke, dust, odor, light intensity and electrical interference's.

No vibration, smoke, dust, odor, light, or electrical interference has been proposed other than what is normal from construction and from operation of a store. No noise, vibration, smoke, dust, odor, intense light nor electrical interference will be permitted from the proposed building per the City's nuisance code. This criterion is met.

F. Parking and outside display areas, dimensions, surfacing and on-site traffic circulation according to standards set forth in FCC 10-3 Parking and Loading.

Outside display areas have not been proposed. Parking and circulation are discussed under FCC 10-3.

G. Architectural quality and aesthetic appearance, including compatibility with adjacent buildings.

The proposed building will be similar to many area businesses in terms of scale and colors prevalent to nearby buildings and the coastal community as a whole. The nearest building with slightly higher square footage (17,371 sq. ft.) is Rite Aid Pharmacy, situated at the SW corner of Highway 101 and 35th St.

Most area buildings bear a traditional gabled storefront containing a pediment. Few are more than one story in height. The proposed one-story store includes a false storefront with a pediment facing westward. This false front measures a height of approximately 25'9". The use of false storefronts is common throughout the city. For example, Grocery Outlet, located at 2066 Highway 101, uses a false storefront as does the Gray Day Home Heat business at 3298 Highway 101. The Kyle Building and other downtown buildings also employ false storefronts. The Kyle Building is used as an example of such construction in the *Florence Downtown Architectural Guidelines*, a document in which FCC 10-6 relies on for architectural design. Policy 4, under Commercial in Chapter 2 of the Florence Realization 2020 Comprehensive Plan states: "*The City shall encourage commercial developments which enhance their surroundings through the on-site use of attractive architecture, relative scale, abundant landscaping, vehicular access improvements and appropriate signage.*"

West Storefront Proposal



*Grocery Outlet**



Gray Day Home Heat*



Wm. Kyle and Sons Building*



* Images accessed on November 2, 2023: <https://earth.google.com/web/search/florence,+or/>

H. Color, building materials and exterior appearance in accordance with the policies established by the City in the Downtown Implementation Plan, and in applicable zoning districts.

With the use of split face CMU in Mocha Madness (medium brown), Hardie Plank siding in contrasting muted colors of Mocha Madness (medium brown) and Jute (beige); white or off white trim; bronze pre-fabricated metal awnings; and spandrel glass faux windows all shown in

Exhibit D, the proposed building façade materials are typical to existing facades and lend themselves to its surrounds. Criteria met as conditioned above.

I. Exterior lighting and security.

The proposed lighting will be reviewed in FCC 10-37. Lighting and security are discussed under FCC 10-3 and FCC 10-37.

J. Public health, safety and general welfare.

The proposed development includes ample consideration for public safety and general welfare. As discussed throughout these findings and in consideration of the conditions of approval, hazards from vehicles are adequately managed as conditioned under FCC 10-3 (ADA parking stall widths and bicycle parking separation from vehicles), potential nuisances are controlled, and the site benefits generally from professional and experienced design. Security is addressed through the requiring lighting plan to meet the minimum requirements of FCC 10-37.

K. Provision of public facilities and infrastructure according to standards set forth in FCC 10-36 Public Facilities.

Public facilities and related standards are discussed in review of FCC 10-36.

L. Requiring a time period within which the proposed use or portions thereof shall be developed.

The applicant states in Exhibit B that the project will be completed in 2024. All approved design review conditions, unless otherwise stated, shall be met prior to final inspection. [Condition 5-1]

M. Requiring bonds to insure performance of special conditions. (Ord. 625, 6-30-80)

Public improvements as required by the Public Works Department are conditioned to be met. The requirement for bonds will be at the discretion of the Public Works Director.

N. Such other conditions as are necessary to implement policies contained in the Florence Comprehensive Plan. (Ord. 680, 1- 11-83)

Conditions related to the Florence Comprehensive Plan are discussed later in this report.

10-6-6-3: BUILDING FAÇADES:

A. Horizontal Design Elements: Multi-story commercial storefront buildings shall have a distinctive horizontal base; second floor; and eave, cornice and/or parapet line; creating visual interest and relief. Horizontal articulations shall be made with features such as awnings, overhanging eaves, symmetrical gable roofs, material changes, or applied fascia detail. New buildings and exterior remodels shall generally follow the prominent horizontal lines existing on adjacent buildings at similar levels along the street frontage. Examples of such horizontal lines include but are not limited to: the base below a series of storefront windows; an existing awning or canopy line, or belt course between building stories; and/or an existing cornice or parapet line. Where

existing adjacent buildings do not meet the City's current building design standards, a new building may establish new horizontal lines.

Although the west side of the store fronts the highway, the north and south sides of the store will also be visible from the highway. The store will be single-story with a false store front that will create the illusion that the store contains two stories. The roofing behind the storefront from its highest point on the south side slopes down towards the north end of the building where stormwater will be collected in a gutter and downspout system. The changes in roofing elevation and the false storefront serves to add a facet of visual interest to the store.

Exhibit D contains elevations, proposed colors, materials, and façade design elements. Bronze awnings measuring 10 feet in width along the north, south and east sides, project away from the walls 3 feet, 1 ½ inches. The clearance between the sidewalk and the lower lip of the awnings measures slightly over 9 feet. These awnings are to be mounted over faux spandrel glass windows. The store front will also have these awnings; one on each side of the sliding glass doors. These awnings will measure 17 feet, 4 inches in width, will provide 10 feet of clearance from the sidewalk to the bottom awning lip and protrude 3 feet, one and a half inches away from the walls.

The architects refer to the bottom skirting around the building in Exhibit D as 'split face CMJ', though this may be a simple typo and CMU is most probably more correct. Split face CMU are masonry blocks that visually lends itself to a hand chiseled effect. The CMU skirting will provide an approximate 4' high horizontal break, from ground level around the entire store, broken up only by doors and storefront windows. Above the 4' mark, the CMU meets with Hardie Plank siding, a cement siding shaped to mimic in this instance, horizontal boarding. White trim is shown on the elevation sheets and serves to emphasize both horizontal and vertical breaks.

The west store front will feature a store sign framed by trim. This signage provides a break in the middle top portion of the false front. Trim is shown above the signage, symmetrically arranged vertically, horizontally, and diagonally as shown in the image below taken from Sheet A6 of Exhibit D:



Two colors of horizontal trim are shown along and under the roof line and stationed vertically between windows and building corners. A stormwater gutter system is shown to be installed

on the north elevation (Sheet A7). The exact color and composition of the trim, gutter and downspouts are unknown as this information has not been provided.

Per FCC 10-6-6-3 A, the applicant shall supply the Planning Department an example of trim, (including the roof) gutter and downspout materials, trim and downspout colors, depths and widths prior to applying for building permits. The south side doors' color shall also be provided. [Condition 5-2]

B. Vertical Design Elements: Commercial storefront building faces shall have distinctive vertical lines of emphasis spaced at relatively even intervals. Vertical articulations may be made by material changes, variations in roof heights, applied fascia, columns, bay windows, etc. The maximum spacing of vertical articulations on long, uninterrupted building elevations shall be not less than one break for every 30 to 40 feet.

The east and west elevations measure 57 linear feet. The south and north sides measure approximately 141' linear feet. No walls are uninterrupted, and all contain a series of breaks.

Sheets A2 - 5 of Exhibit D demonstrates several vertical breaks at every elevation. These vertical breaks include trim, canopies, windows:

West Elevation



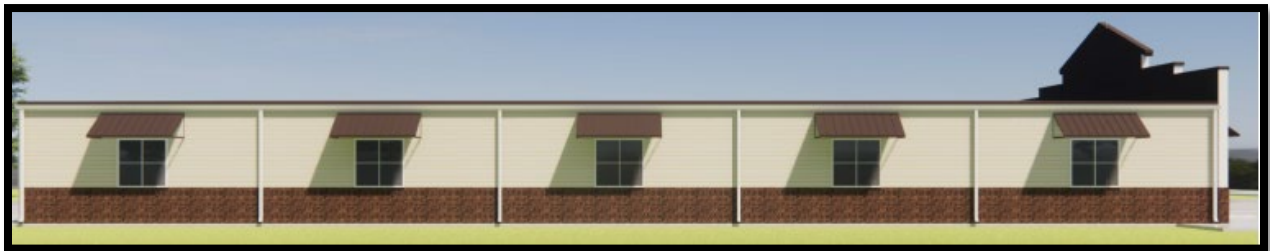
East Elevation



South Elevation



North Elevation



The rooftop slopes from the south to the north with stormwater carried to gutters and downspouts. While the gutter provides a horizontal break along the roofline, the downspouts serve as evenly spaced vertical design elements that provide breaks along the face of the wall. In lieu of downspouts, the south side is shown to contain contrasting colored white or beige trim which has been conditioned elsewhere. Shielded wall pack lighting units shown in dark brown also function as a visual design element and are mounted next to the canopied windows along the east, north and south elevations. The two wall pack lighting units on the west store front will be mounted symmetrically over the bronze canopies on either side of the front door. These wall packs are dark, color unknown will contrast with the proposed Jute Hardie Plank siding.

C. Articulation and Detailing: All building elevations that orient to a street or civic space must have breaks in the wall plane (articulation) of not less than one break for every 30 feet of building length or width, as applicable, as follows:

1. **Plans shall incorporate design features such as varying rooflines, offsets, balconies, projections (e.g., overhangs, porches, or similar features), recessed or covered entrances, window reveals, or similar elements that break up otherwise long, uninterrupted elevations. Such elements shall occur at a minimum interval of 30-40 feet. In addition, each floor shall contain at least two elements meeting the following criteria:**
 - a. **Recess (e.g., porch, courtyard, entrance balcony, or similar feature) that has a minimum depth of 4 feet;**

b. Extension (e.g., floor area, porch, entrance, balcony, overhang, or similar feature) that projects a minimum of 2 feet and runs horizontally for a minimum length of 4 feet; and/or

c. Offsets or breaks in roof elevation of 2 feet or greater in height.

d. A “break,” for the purposes of this subsection, is a change in wall plane of not less than 24 inches in depth. Breaks may include, but are not limited to, an offset, recess, window reveal, pilaster, frieze, pediment, cornice, parapet, gable, dormer, eave, coursing, canopy, awning, column, building base, balcony, permanent awning or canopy, marquee, or similar architectural feature.

Of these criteria, the applicant provides three, and partially a fourth. The main entrance is recessed 2 feet as opposed to 4, extensions are provided with the 2 feet of overhang at the entrance, the offset or break in roof elevation of 2 feet or higher is seen in the false storefront, (which actually provides two separate elevations above the base roof), and wall plane breaks in the form of canopied faux windows measuring 10 feet in width for the south, north and east sides of the building, and 17 feet, four inches for the west storefront. The building base, or skirting, is comprised of split face CMU also discussed elsewhere. These criteria are met.

- 2. The Planning Commission, through Design Review, may approve detailing that does not meet the 24-inch break-in-wall-plan standard where it finds that proposed detailing is more consistent with the architecture of historically significant or historically-contributing buildings existing in the vicinity.**
- 3. Changes in paint color and features that are not designed as permanent architectural elements, such as display cabinets, window boxes, retractable and similar mounted awnings or canopies, and other similar features, do not meet the 24-inch break-in-wall-plane standard.**
- 4. Building elevations that do not orient to a street or civic space need not comply with the 24inch break-in-wall-plan standard, but should complement the overall building design.**

The east side does not orient towards the highway, yet contains similar design features provided for the remaining sides. Criteria are met.

10-6-6-4: PERMITTED VISIBLE BUILDING MATERIALS: Building materials which have the same or better performance may be substituted for the materials below provided that they have the same appearance as the listed materials.

[...]

G. Building and Site Material Colors: Color finishes on all building exteriors shall be approved by the City and be of a muted coastal Pacific Northwest palette. Reflective, luminescent, sparkling, primary, and “day-glow” colors and finishes are prohibited. The Planning Commission/Planning Commission or their designee may approve adjustments to the standards as part of a site Design Review approval.

The material colors and finishes provided appear to meet the requirements for a muted coastal Pacific Northwest palette. Because the trim, gutters and downspouts have been conditioned earlier for specific color and material measurements and composition, these will be evaluated using criteria for FCC 10-6-4 G in addition to any other code requirements necessary upon submission of materials for building permits.

10-6-7: OTHER DISTRICTS: ARCHITECTURAL REQUIREMENTS: In districts other than Mainstreet and Old Town, the architectural design requirements of this section shall apply to all commercial buildings.

- A. All commercial buildings shall meet the standards of FCC 10-6-6-3 and 10-6-6-4-G above.**

Unless conditioned the proposed commercial store meets the above standards.

- B. All commercial buildings shall incorporate not fewer than three types of architectural features from 1 through 6 below. Applicants are encouraged to use those elements that best suit the proposed building style and design.**

- 1. Covered front entrance. Not less than six feet in depth and not less than 10 percent the width of the building, excluding the landing for entrance.**

The front west entrance is less than 6' in depth. Although this specific criterion is unmet, the store contains at least three types of architectural features listed in this subsection.

- 2. Windows: not less than 30 percent of surface area of all street-facing elevation(s) with the following features:**
- a. Trim, reveals, recesses, or similar detailing of not less than four-inches in width or depth as applicable.**
 - b. The use of decorative detailing and ornamentation around windows (e.g., corbels, medallions, pediments, or similar features).**

Spandrel glass windows (mostly faux) contain trim. The width and color are unknown and conditioned. The awnings provide a decorative feature atop these windows. Although not all elevations provide glazing percentages, the west side store front contains 33% of glazed surface area (Exhibit D, Sheet A7). Although visible from the highway, the north and south sides of the store will not directly face the highway. Criterion met as conditioned.

- 3. Pedestrian Shelters: as described in FCC 10-6-6-6-G.**

Pedestrian Shelters are not provided.

- 4. Eaves (where applicable): overhang of not less than 12 inches.**

Eaves are not featured with this store design. Instead, the design leans heavily on awnings.

5. **Decorative top: e.g., cornice or pediment with flat roof or brackets with pitched roof. Towers may be included where building height limitations and surrounding structures deem them appropriate.**

Rooftop design is discussed earlier in this chapter. The main false storefront provides a pediment and the visual appearance of a pitched roof. The roofing is pitched with the south side the highest and slopes downward towards the north side. Criterion met.

6. **Awnings and canopies: extending not less than 30% of the elevation where applied.**

Sheet A7 of Exhibit D provides awning coverages exceeding 30%. The north and south elevations contain 35% of awning coverage, the west side contains 46% and the east side contains 40% of awning coverage. Criterion met.

10-6-8: DRAWING SUBMITTAL: In addition to information required by FCC 10-1-1-4, the owner or authorized agent shall submit the following drawings to the City for review:

- A. **A site plan, drawn to scale, showing the proposed layout of structures and other improvements including, where appropriate, driveways, pedestrian walks, off-street parking and off-street loading areas, landscaped areas, locations of entrances and exits, the direction of traffic flow into and out of off-street parking space and loading berth, and areas for turning and maneuvering vehicles. The site plan shall indicate how utility services and drainage are to be provided.**
- B. **A landscape plan, drawn to scale, in conformance with FCC 10-34-3-2.**
- C. **Architectural drawings or sketches, drawn to scale, including floor plans in sufficient detail to permit computation of yard requirements and showing all elevations of the proposed structures as they will appear upon completion. All exterior surfacing materials and colors shall be specified.**
- D. **Additional information may be required by the City if necessary to determine whether the purposes of this Chapter are being carried out or may authorize omission of any or all the drawings required by this Chapter if they are not necessary. The City shall specify the number of copies of each drawing to be submitted.**

The applicant has provided the required material listed in this section. Any missing information is conditioned to be provided in these Findings.

10-6-11: LAPSE OF DESIGN REVIEW APPROVAL: Authorization of a design review permit shall be void one (1) year after the date of approval of a either a Type II or III design review application, unless a building permit has been issued and substantial construction pursuant thereto has taken place. Substantial construction shall be considered to be completion of a building foundation. The applicant may apply to the Planning Commission for a one-time extension of one (1) year maximum duration based on compliance with the following criteria:

- A. **The request for an extension is made in writing prior to expiration of the original**

- approval.
- B. There are special or unusual circumstances that exist which warrant an extension.
 - C. No material changes of surrounding land uses or zoning has occurred.

The Planning Commission may deny the request for an extension of a design review permit if new land use regulations have been adopted that affect the applicant's proposal. (Ord 26, 2008)

The request for Design Review approval shall expire on November 14, 2024, unless substantial construction has taken place. [Condition 5-3]

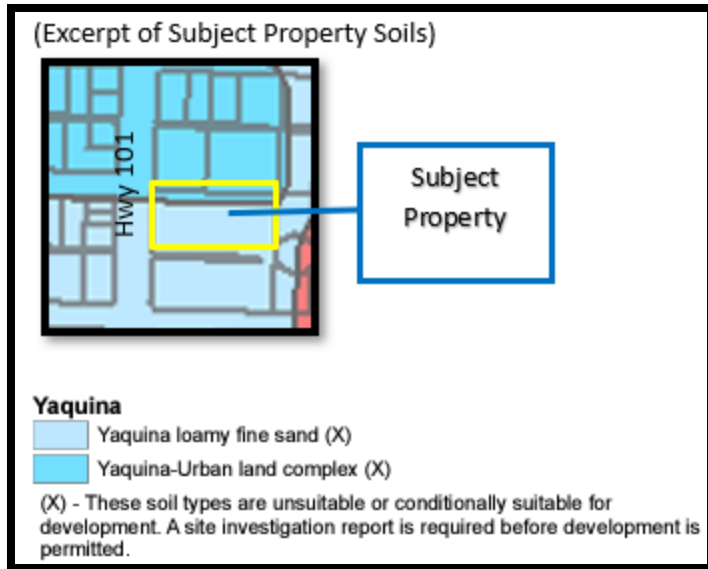
TITLE 10: CHAPTER 7: SPECIAL DEVELOPMENT STANDARDS

10-7-3: DEVELOPMENT STANDARDS FOR POTENTIAL PROBLEM AREAS: The following standards shall be applied to development in potential problem areas unless an approved Phase I Site Investigation Report or an on-site examination shows that the condition which was identified in the Comprehensive Plan or Overlay Zoning Map does not in fact exist on the subject property. These standards shall be applied in addition to any standards required in the Zoning Districts, Comprehensive Plan, and to any requirements shown to be necessary as a result of site investigation. Where conflicts or inconsistencies exist between these Development Standards, City Code, and the Comprehensive Plan, the strictest provisions shall apply unless stated otherwise.

[...]

- H. **Yaquina Soils and Wet Areas (except significant wetlands and riparian areas identified in the 2013 Wetland and Riparian Inventory, as amended):** In areas with seasonal standing water, construction of a drainage system and/or placement of fill material shall be required according to plans prepared by a registered engineer and approved by the City. (Amended Ord. 10, Series 2009)

According to the Natural Resources Conservation Soils Map, 2009, found in Appendix 7, Map C of the *Florence 2020 Realization Comprehensive Plan*, the subject site contains two varieties of Yaquina soils; Yaquina loamy fine sand and Yaquina-Urban land complex. Both soils require the submission of a Site Investigation Report (SIR). The applicant has provided this report in Exhibit F. Below is a combination of excerpts taken from the soils map:



10-7-6: SITE INVESTIGATION REPORTS (SIR):

A. Areas identified in Section 2 and 3 above, are subject to the site investigation requirements as presented in "Beach and Dune Techniques: Site Investigation Reports by Wilbur Ternyik" from the Oregon Coastal Zone Management Association's Beaches and Dunes Handbook for the Oregon Coast (OCZMA Handbook), Appendix 18 of the Florence Comprehensive Plan as modified by the City of Florence. No development permit (such as building permit or land use permit) subject to the provisions of this Title may be issued except with affirmative findings that:

1. Upon specific examination of the site utilizing a Phase I Site Investigation Report (the checklist from the OCZMA Handbook, as modified by the City of Florence), it is found that the condition identified on the "Hazards Map" or "Soils Map" or "Beaches and Dunes Overlay Zone" or other identified problem area does not exist on the subject property; or
2. As demonstrated by the Phase II Site Investigation Report that harmful effects could be mitigated or eliminated through, for example, foundation of structural engineering, setbacks or dedication of protected natural areas. (Amended by Ord. No. 10, Series 2009)

Site investigation requirements may be waived where specific standards, adequate to eliminate the danger to health, safety and property, have been adopted by the City. This exception would apply to flood-prone areas, which are subject to requirements of the National Flood Insurance Program and other problem areas which may be adequately protected through provisions of the Building Code.

As mentioned above, the applicant submitted an SIR application (Exhibit F). The site investigation report application was filled out by Nick Wheeler, PE with JSL Civil, LLC. Review of the application and the Stormwater Report found in Exhibit H, also authored by Wheeler,

reveals that while the site contains the Yaquina soils, with proper grading and a stormwater plan, the soils should not pose any risks to health, safety and property and a Phase 2 Site Investigation Report is not warranted. Nevertheless, the applicant submitted a Geotechnical Report (Exhibit G) which further demonstrates that a Phase 2 SIR is not warranted. The criteria are met.

TITLE 10: CHAPTER 16: HIGHWAY DISTRICT (H)

10-16-2: PERMITTED BUILDINGS AND USES: The following uses shall be permitted only upon affirmative findings by the Planning Commission that the proposed use meets the general criteria in Section 10-16-4 herein.

- A. All uses permitted outright or conditionally in the Commercial District, except single-family dwellings, public buildings and facilities, medical marijuana dispensaries, marijuana retailers, marijuana testing facilities, and single-family residential PUD's.**

As stated in FCC 10-15-1, the purpose of the Commercial District is to preserve and enhance areas within which a wide range of retail sales and businesses will occur. The list of allowed uses does not specifically state that retail stores are allowed; however, the purpose statement is clear and therefore the proposed retail store in the Highway District is allowed outright. Criterion met.

10-16-4: GENERAL CRITERIA: Before a building or use is established within the Highway District, the petitioner must demonstrate to the City that the proposed development will meet the following criteria:

- A. The operating characteristics and intensity of land use will be compatible with and will not adversely affect the development potential of adjacent properties.**

The proposed development is in keeping with adjacent properties. Retail stores and other commercial uses (including restaurants and service-oriented businesses) are prevalent within this stretch of the highway, and potential impacts on nearby residential properties and the northern abutting commercial property have been addressed within these findings. This criterion is met.

- B. The site planning and building design will be as attractive as the nature of the use and the setting will allow.**

Conditions of approval address the building and site design where needed.

- C. The location of the site can accommodate energy efficient traffic circulation routes.**

The proposed traffic circulation will be adequate for the proposed use and site conditions. The Highway 101 curb cut has already been approved by ODOT, is installed to meet the egress/ingress needs of Burger King to the south, and supports right-out and right-in circulation, ensuring vehicles do not stack either on-site or on the highway. The store will

also connect to two existing travel lanes on the Burger King property for a shared access easement to and from 35th St.

- D. The vehicle and pedestrian access to the site can be safely and efficiently provided.**

Access and circulation will be further addressed within FCC 10-35 later in this report.

- E. The necessary utility systems and public facilities are available with sufficient capacity.**

Utilities are available and adequate for the proposed use. This criterion is met.

10-16-5: DEVELOPMENT STANDARDS: The City may require any conditions it deems necessary to secure the purpose and intent of this Chapter. Such conditions may regulate and limit the following:

- A. Setbacks, yards, height, density and similar design features.**

These items have been addressed under FCC 10-6-5 and FCC 10-16 of these findings.

- B. The installation and maintenance of fences, walls, hedges, screens and landscaping according to standards set forth in FCC 10-34 Landscaping, except as modified by specific standards of this zoning district.**

These items, if applicable, are addressed within staff review of FCC 10-34.

- C. The location and design of access points for vehicles and pedestrians according to standards set forth in FCC 10-35 Access and Circulation, except as modified by specific standards of this zoning district.**

Access and Circulation will be addressed later within this report.

- D. Noise, vibration, smoke, dust, odor, lighting and electrical interference.**

Nuisance-causing noise, vibration, smoke, dust, odor, lighting, or electrical interference have not been proposed and will not be permitted, subject to City nuisance standards.

- E. Parking areas and on site traffic circulation according to standards set forth in FCC 10-3 On-site Parking and Loading.**

Parking has been addressed previously within this report.

- F. Signs shall be in accordance with Title 4 Chapter 7 of this Code. (Ord. 4, 2011)**

A lighted pylon sign is shown in the landscaped island near the Highway 101 driveway approach. Signage is also shown on the store front and it is unknown if this is lighted.

Prior to final building inspections, the applicant shall submit a signage plan. The Planning Department shall review signage for compatibility with the access and circulation plan. [Condition 6-1]

Sign permits are required from the Florence Building Department for signage on the site per the requirements of FCC 4-7. (Informational 1)

G. Architectural quality and aesthetic appearance.

The architectural quality of the buildings is sufficient for the use and the district in compliance with the previously written conditions of approval, especially found in review of FCC 10-6 within these findings.

H. Public health and safety.

I. Security.

There are no anticipated threats to public safety, health, or security. These criteria are met.

J. Lot area, dimensions and percent of coverage.

These items are addressed later within this section.

K. Provision of public facilities and infrastructure according to standards set forth in FCC 10-36 Public Facilities.

These items are addressed in review of FCC 10-36.

10-16-7: DESIGN SPECIFICATIONS:

A. Highway Setback (Minimum Allowed Without a Variance; Measured From the Center Line of the Highway Right of Way):

- 1. Commercial: Seventy feet (70'), but one hundred foot (100') setback is recommended.**

B. Setback from Side Streets and Abutting Property: Minimum of five feet (5') unless otherwise determined by the City with consideration given to the existing and proposed uses on the abutting properties.

The proposed building is located in excess of 110' from the highway centerline, approximately 30' from the northern lot line, approximately 69' from the eastern residential properties, and 44.16' from the southern side lot line. The proposed setbacks will be adequate from the Highway, side streets, and abutting properties. Criteria met.

C. Visual Barrier: A fence, wall, hedge, natural vegetation or landscape planting may be required by the City. Such a barrier must include a vision clearance area for driveways to promote vehicle safety. Guidelines (not intended to limit optional solutions) for such a visual barrier are listed below:

- 1. Commercial: At least thirty inches (30") high along entire highway frontage except at points of ingress and egress.**

A total of 151 linear feet of landscaping is planned along Highway 101. The proposal includes 5 Red Sunset Maple trees, 20 Blue Oat Grass (an ornamental grass expected to reach up to 3' in height at maturity), and two species of shrubs including 13 Mexican Orange and 16 Point Reyes Ceanothus (expected to reach 3' in height). An interior landscaped island will serve as a buffer between the Highway 101 access point and the front interior parking lot, is also planned. This island also fronts the highway and is to contain 3 Mexican Feather Grass, 5 Blue Pacific Shore Juniper, and 6 Abbotswood Potentilla; the latter of which will be located around the proposed Dollar General lighted pylon sign. Additionally, 14 Sunset Cloud Stonecrop perennials will be added to this island. These plants reach up to 8" in height at maturity and are offset by decorative rock mulch. A more in-depth review of Landscaping can be found under FCC 10-34 of these findings. Vision clearance is reviewed under FCC 10-34. This criterion is met.

D. Highway Access: For reasons of safety and to reduce congestion, vehicle access to and from the highway shall be limited to street intersections only. Curb cuts shall be authorized on side streets only, unless:

- 1. The property does not abut a side street or the property has at least two hundred feet (200') of highway frontage; or**
- 2. The City specifically authorizes the highway curb cuts.**

Prior to issuance of certificates of occupancy, the Burger King development obtained permission from the City and ODOT for the access driveway on the west side fronting Highway 101. While the Burger King lot takes direct access from 35th Street via a curb cut in the southeast corner of the property, the Dollar General lot will gain indirect access to 35th St. via this same curb cut, or approach. The approach from 35th St. leads to an access drive where drivers can either turn left into the Burger King parking and drive-thru area or continue straight to the future Dollar General site.

The shared approach along Highway 101 accepts only right-turning movements from northbound incoming traffic, and exiting vehicles are only able to make a northbound right turn. The driveway access point on 35th St. provides unrestricted access. Access and circulation are further discussed in review of FCC 10-35, but the restriction on traffic along Highway 101 should reduce conflicts and traffic backup at this access point.

While the Burger King lot takes direct access from 35th Street via a curb cut in the southeast corner of the property, the Dollar General lot will gain indirect access to 35th St. via this same curb cut. The curb cut from 35th St. leads to an access drive where drivers can either turn left into the Burger King parking and drive-thru area or continue straight to the future Dollar General site.

All curb cuts have been installed and approved by the City and/or ODOT. These criteria are met.

E. Parking: Shall be in accordance with Chapter 3 of this Title.

This section has been addressed previously within this report.

H. General Provisions:

1. **Yards and open areas shall not be used for the storage, display or sale of used building materials, scrap or salvage.**
2. **Where there is manufacturing, compounding, processing or treating of products for wholesale, the front twenty five feet (25') of the building's ground floor facing the principal commercial street shall be used for commercial sales, business or professional offices.**
3. **Any use allowed must not cause unreasonable odor, dust, smoke, noise, vibration or appearance.**

The applicant has not proposed nor will be permitted to have any of the above conditions on the property at any time.

I. Minimum Lot Dimensions: The minimum lot width shall be fifty feet (50').

J. Minimum Lot Area: The minimum lot area shall be six thousand (6,000) square feet.

The applicant has proposed development of a site measuring roughly +/-151.17' wide by 287' 2 deep, with a total area of approximately 43,481 square feet, or 0.99-acre. These criteria are met.

K. Height Limitations: The maximum building or structural height shall be thirty-five feet (35'). Residential dwellings and their associated structures refer to Section 10-10-5 of this Title for requirements.

The applicant has proposed a building of 25'8" at its highest peak (top of the false storefront on the west side). This criterion is met.

L. Vision Clearance: Refer to Section 10-2-13 and 10-35-2-14 of this Title for definitions, and requirements. (Ord. 26, 2008)

These sections will be addressed within their respective sections of this staff report.

M. Maximum lot coverage shall be 85%, unless a preservation credit is achieved in accordance with FCC 10-34-2-4.

The site is proposed to include approximately 31,804 square feet of impervious surfaces, or 75% of the site's total 42,174 square feet. This criterion is met.

O. Lighting: Refer to Section 10-37 of this Title for requirements.

Lighting issues will be addressed as part of staff review of FCC 10-37.

TITLE 10: CHAPTER 34: LANDSCAPING

10-34-3: LANDSCAPING.

10-34-3-1: Applicability. Except for single-unit and duplex dwelling uses, this Section shall apply to all new development as well as changes of use and expansions as described below, and shall apply in all districts except where superseded by specific zoning district requirements. These provisions shall be in addition to the provisions of FCC Title 9 Chapter 5 and where there are conflicts, the provisions of Title 9 Chapter 5 shall prevail. A. For new developments, all landscaping shall meet current code requirements. (Ord. 4, 2011) B. For modifications or additions to existing development, landscaping shall be brought up to current code requirements in the same proportion as the increase in use and/or building size. (Ord. 4, 2011)

Landscaping will be required for this development. The code above references FCC Title 9 Chapter 5, which refers to Stormwater Management. Stormwater management criteria are discussed later in these findings. The applicant submitted a Landscaping Plan (Exhibit D), which includes buffering for parking and maneuvering areas. These criteria have been met

10-34-3-1: Applicability. Except for single-family and duplex dwelling uses, this Section shall apply to all new development as well as changes of use and expansions as described below, and shall apply in all districts except where superseded by specific zoning district requirements. These provisions shall be in addition to the provisions of FCC Title 9 Chapter 5 and where there are conflicts, the provisions of Title 9 Chapter 5 shall prevail.

A. For new developments, all landscaping shall meet current code requirements. (Ord. 4, 2011)

{...}

The proposed retail store constitutes new construction, and the development is evaluated using these current code requirements.

10-34-3-2: Landscaping Plan Required. A landscape plan is required. All landscape plans shall include the following information:

- A. The location and height of existing and proposed fences and walls, buffering or screening materials.
- B. The location of existing and proposed terraces, retaining walls, decks, patios, shelters, and play areas.
- C. The location, size, and species of the new proposed plant materials (at time of planting).
- D. The location(s) of areas where existing vegetation will be cleared and the location(s) of areas where existing vegetation will be preserved, delineated on a recent aerial photo or site plan drawn to scale.
- E. Existing and proposed building and pavement outlines.
- F. Specifications for soil at time of planting, irrigation and anticipated planting schedule.

G. Other information as deemed appropriate by the City Planning Official.

The applicant provided a Landscape Plan (Exhibit E). FCC 10-34-3-2 D includes most information regarding existing vegetation; yet existing vegetation is found also on Sheet SV-2 in Exhibit C. This latter exhibit shows two pine trees along the eastern boundary line. The species of these trees is not noted and it is unclear whether all trees will be removed. An existing Hemlock is shown to be located in the southeastern area of the site. For certain, most existing plantings will be removed for construction purposes as the site will be graded. The landscape plan shows these trees.

Per FCC 10-34-3-2 D, if any existing trees are to be preserved, these shall be delineated on a recent aerial photo or site plan drawn to scale. [Condition 7-1]

The Landscape Plan includes a planting schedule, notes, diagrams for plantings (including those in rain garden stormwater management area) and provides the overall square footage of landscaped areas and calculations of linear feet along the highway. Pervious and impervious calculations are not included; however, the proposed building and pavement outlines are provided.

Planting, staking and spacing details are included on Sheet LS-2 of Exhibit E. Care of plantings are noted under the Landscape Specifications section on the Landscape Plan. Notes 11 discuss lawn planting and care; however, lawns are not proposed. Additionally, Note 14 discusses other plantings that are not proposed, including Rhododendrons and Azaleas.

Prior to the issuance of building permits, the Landscape Plan shall remove Landscape Specifications Note numbers 11, 12 and 14, or modify these to a change in plantings. [Condition 7-2]

The submittal of irrigation plans are conditioned elsewhere.

10-34-3-3: Landscape Area and Planting Standards. The minimum landscaping area is 15% of the lot area, unless specified otherwise in the applicable zoning district² for the proposed use. This required minimum landscaping area may be reduced if preservation credits are earned as specified in Section 10-34-2-4.

No landscaping credit was applied for. Although FCC Title 10, Chapter 16, Highway District does not provide a minimum landscaping requirement specific to the district, FCC 10-34-3-3 (above), requires 15% landscaping of the area. The applicant proposes 10,278 sq. ft. of pervious landscaped area equating to 23% (rounded up) of landscaping; exceeding the minimum 15% requirement.

*The footnote referred to under FCC 10-34-3-3 states the following: *2 Mainstreet District (FCC 10-27) and Old Town District, Area A and B (FCC 10-17A and 10-17B) require 10% of the gross lot area to be landscaped.*

A. Landscaping shall include planting and maintenance of the following:

1. One tree per 30 lineal feet as measured along all lot lines that are adjacent to a street.

The sole street frontage of the subject tax lot lies to the west along Highway 101 and totals 151.17 linear feet. Well over 1/3 of this frontage will contain the required pedestrian connection, parking lot landscaping islands and existing driveway access point to and from the highway. The landscaped islands have been designed to provide required vision clearance for safety, and no trees have been proposed within the island. Five Red Sunset Maples, planted at 20 ft. intervals are shown in Sheet LS-01 of Exhibit E. These maples are large enough to count towards the required tree count. This criterion is met.

2. Six shrubs per 30 lineal feet as measured along all lot lines that are adjacent to a street.

As discussed above, there is approximately 151 linear feet of street frontage. This length divided by 30' and the result multiplied by 6 computes to a requirement for 30 shrubs within the front 20' of their respective street abutting lot line. Sheet LS-1 in Exhibit E (Landscape Plan) includes 43 shrubs, thereby surpassing the minimum requirement. This criterion is met.

3. Living plant materials shall cover a minimum of 70 percent of the required landscape area within 5 years of planting.

The proposed Landscape Plan includes two tree species; Red Sunset Maple and Austrian Pine. Also included are shrubs and grasses with growth characteristics to cover the minimum area required. Shrubs include Point Reyes Ceanothus; Mexican Orange; Pink Princess Escallonia; Blue Pacific Shore Juniper; Skyrocket Juniper; Dwarf Mugo Pine; Abbotswood Potentilla; Velour White Mexican Bush Sage; Snowmound Spirea; and Evergreen Huckleberry. Ornamental grasses include Karl Foerster Feather Reed Grass; Lightning Strike Feather Reed Grass; Blue Oat Grass; and Mexican Feather Grass. Sunset Cloud Stonecrop perennials are included as are Pigeon Point Coyote Brush and Slough Sedge, the latter which will be useful for stormwater rain garden area. Aside from the 635 sq. ft. rain garden with sedge plantings, decorative rock mulch will be applied to the shrub beds.

All plantings are expected to meet the 70% requirement providing the planting maintenance notes and irrigation (conditioned elsewhere in these findings) are followed.

4. Except for preservation of existing significant vegetation, the required plant materials on-site shall be located in areas within the first 20 feet of any lot line that abuts a street. Exceptions may be granted where impracticable to meet this requirement or the intent is better served. Required trees may be located within the right-of-way and must comply with Section 10-34-4. Plant materials may be installed in any arrangement and do not need to be equally spaced nor linear in design. Plantings and maintenance shall comply with the vision clearance standards of FCC 10-35-2-13.

The planned location and placement of landscaping plants and trees along Highway 101 are within the required 20' of the lot line and are not expected to create problems with vision clearance standards with ongoing maintenance, as conditioned in FCC 10-35. Species selected for the parking landscape island on the west side abutting the highway. The internal landscape island near the ADA parking space, and along the drive on the south side of the

property line are species not anticipated to grow taller than 3'. No landscaping is planned within the street rights-of-way. These criteria will be met as conditioned.

10-34-3-4: Landscape Materials. Permitted landscape materials include trees, shrubs, ground cover plants, non-plant ground covers, existing native vegetation, outdoor hardscape features and storm water features, as described below.

A. Plant Selection. A combination of deciduous and evergreen trees, shrubs, and ground covers shall be used, consistent with the purpose of this Chapter. A suggested *Tree and Plant List for the City of Florence* and the *Sunset Western Garden Book* are available at City Hall. The selection of plant and tree species shall be based upon site conditions such as wind and sun exposure, space limitations, water availability, and drainage conditions. The use of indigenous plants is encouraged, and may be required where exposure, slope or soil conditions warrant.

1. Ground Cover. Ground cover may consist of separate plants or mowed grass turf. Ground cover plant species shall meet the following minimum standards: plants from 4-inch pots shall be spaced a maximum of 18 inches measured on center, and 1-2 gallon size plants shall be spaced a maximum of 3 feet measured on center.

The Landscape Plan includes a combination of deciduous and evergreen plant species. Container size is provided with all shrubs and grasses with the smallest container being 6" pots for the 150 Sunset Cloud Stonecrop. These plants will be spaced 18" on center, primarily in clusters of 3 plants along the highway frontage. The 1-2 gallon size pots are shown to be spaced at 18" on center. The 1-2 gallon size plants are spaced a maximum of 36" on center except for the 56 Pigeon Point Coyote Brush, which is proposed to be located in a designated shrub area between the east parking lot aisle and rain garden. These plants are proposed to be 1 gallon plants planted 60" on center which does not meet the maximum allowable spacing of 36".

The applicant shall provide sufficient ground cover plants in the shrub area between the east parking lot aisle and rain garden and in the shrub area surrounding the trash enclosure to meet the minimum requirements of FCC 10-34-3-4 A (1). [[Condition 7-3](#)]

2. Shrubs. Shrub plant species shall be planted from 3 gallon containers unless otherwise specified in the *Tree and Plant List for the City of Florence*.

Shrubs include: Point Reyes Ceanothus; Mexican Orange; Pink Princess Escallonia; Blue Pacific Shore Juniper; Skyrocket Juniper; Dwarf Mugo Pine; Abbotswood Potentilla; Velour White Mexican Bush Sage; Snowmound Spirea; and Evergreen Huckleberry. As previously discussed, these plants are proposed to be planted from 3 gallon containers with the exception of the Point Reyes Ceanothus and Velour White Mexican Bush Sage proposed to be planted from 1 gallon containers and the Dwarf Mugo Pine are proposed to be planted from 5 gallon containers. The Velour White Mexican Bush Sage is not included on the *Tree and Plant List* and are anticipated to be adequate. Recommended planting size for Mugo Pine is 3 gallons and exceeds recommended planting size. These criteria are met.

3. **Trees. Evergreen and deciduous tree species shall meet the following minimum standards: deciduous trees shall be a minimum of 1 ¾ inch caliper (diameter) measured 6 inches above grade, and evergreen trees shall be a minimum of 5 feet tall (Nursery Grade 5/6).**

Two species of trees are planned including 5 Red Sunset Maple (deciduous) and 1 Austrian Pine (evergreen). Both species are shown in the Landscape Plan to meet the minimum caliper and height requirements.

The criterion is met.

4. **Non-plant Ground Covers. Bark dust, chips, aggregate, or other non-plant ground covers may be used. Non-plant ground cover located adjacent to pedestrian ways shall be confined to the material within the planting bed to avoid safety hazards by edging 4 inches above-grade or recessing from grade. Non-plant ground covers cannot be a substitute for ground cover plants.**

The Landscape Plan indicates several areas that will contain non-plant ground covers in the form of decorative rock mulch, crushed rock and landscape boulders. These areas in no way substitute for ground cover plants as the plan exceeds landscaping minimums for the subject tax lot.

All planting areas contain curbing to contain groundcover. Criterion met.

- C. **Hardscape features, such as plazas, pathways, patios and other pedestrian amenities may count toward ten (10) percent of the required landscape area, except in the Old Town and Main Street districts where hardscape features may count toward 50 percent of the landscape area, provided that such features conform to the standards of those districts. Swimming pools, sports courts, decks and similar facilities may not be counted toward fulfilling the landscape requirement in any zone.**

The applicant is not proposing reductions in required landscaping area.

- D. **Storm Water Facilities. Storm water facilities, such as detention/retention ponds and swales shall be landscaped. Landscaped bio-swales are encouraged and shall count toward meeting the landscaping requirement of this section if they are designed and constructed in accordance with the standards specified in Title 9 Chapter 5, and approved by the Public Works Department. Storm water facilities shall be landscaped with water-tolerant, native plants.**

The applicant has provided a diagram with Slough Sledge included in what the Stormwater Report in Exhibit H explains is an at-grade infiltration rain garden and shown on Sheet CG-01 of the Site Plan in Exhibit C on the east side of the subject site, however, the rain garden itself is not marked on the Landscape Plan. The design of stormwater facilities are shown on Sheet CG-01; but not detailed in the Landscape Plan. Slough Sledge is just one of many plants recommended for rain garden facilities and are found in Appendix G of the Florence Stormwater Design Manual. A revised stormwater plan has been conditioned elsewhere.

10-34-3-5: Irrigation. Permanent, underground irrigation is required for all landscaping, except existing native vegetation that is preserved in accordance with the specifications of Section 10-34-2-2 and new drought tolerant plants which must have temporary irrigation for plant establishment. All irrigation systems require an irrigation permit and shall be installed with a backflow prevention device per FCC 9-2-3-5.

Neither the Landscape Plan nor the Civil Drawings provide a detailed irrigation plan. Note 13 of the General Landscape Notes states the following:

“ALL LANDSCAPE AREAS SHALL BE COVERED BY AN IRRIGATION SYSTEM WITH AUTOMATIC CONTROLLER AND OVERRIDING RAIN SENSOR SWITCH. PLANTINGS SHALL BE WATERED AT A SUFFICIENT LEVEL FOR PLANT SURVIVAL AND HEALTHY GROWTH.”

Sheet C-7 of Exhibit D illustrates a design for a backflow prevention device. However, no schematic shows where the system will be placed.

The applicant shall provide an irrigation system plan, obtain an irrigation permit, and shall install a backflow prevention device per FCC 9-2-3-5 and in coordination with Florence Public Works. [Condition 7-4]

10-34-3-6: Parking Lot Landscape Standards. All parking lots shall meet Parking Area Improvement Standards set forth in FCC 10-3-8. Parking areas with more than twenty (20) spaces shall include interior landscaped “islands” to break up the parking area. Interior parking lot landscaping shall count toward the minimum landscaping requirement of Section 10-34-3-3. The following standards apply:

A. For every parking space, 10 square feet of interior parking lot landscaping shall be provided;

The total parking spaces provided are 31. The Landscape Plan based its design on 32 spaces. A total of 359 sq. ft. has been provided to meet this requirement. Criterion met.

B. Parking islands shall be evenly distributed to the extent practicable with a minimum of one tree selected from the *Tree and Plant List for the City of Florence* installed per island;

Parking islands are evenly distributed. The two parking islands located north of the Highway 101 driveway approach do not contain trees. Per FCC 10-34-3-6 B, the applicant shall provide a minimum of one tree selected from the Tree and Plant List for the city of Florence installed per island. [Condition 7-5]

C. Parking island areas shall provide a minimum of 30 square feet of planting area and any planting area dimension shall be a minimum of 5 feet on any side (excluding curb dimensions), unless reduced by the Planning Commission where a lesser distance will provide adequate space for healthy plant growth;

The parking islands provide and excess of 5 feet of area on each side of the curb. The largest parking island (located nearest Highway 101) will measure 272 sq. ft. The smallest, adjacent to an ADA parking stall, will measure 87 sq. ft. Criterion met.

- D. Irrigation is required for interior parking lot landscaping to ensure plant survival;**

Irrigation has been conditioned.

- E. Living plant material shall cover a minimum of 70% of the required interior parking lot landscaping within 5 years of planting; and**

- F. Species selection for trees and shrubs shall consider vision clearance safety requirements and trees shall have a high graft (lowest limb a minimum of 5 feet high from the ground) to ensure pedestrian access.**

The applicant has been conditioned to provide at least one tree in each parking island. Assuming these trees are located so as not to impede vision, the criteria can be met.

10-34-3-7: Buffering and Screening. Buffering and screening are required under the conditions listed below. Walls, fences, and hedges shall comply with the vision clearance requirements and provide for pedestrian circulation, in accordance with FCC 10-35-2-13. (See Section 10-34-5 for standards specific to fences and walls.)

- A. Parking/Maneuvering Area Adjacent to Streets and Drives. Where a parking or maneuvering area is adjacent and parallel to a street or driveway, a berm; an evergreen hedge; decorative wall (masonry or similar quality material) with openings; arcade; trellis; or similar partially opaque structure 3-4 feet in height shall be established between street and driveway or parking area. See also FCC 10-3-7-D for standards specific to parking lots adjacent to the street. The required screening shall have breaks or portals to allow visibility (natural surveillance) into the site and to allow pedestrian access to any adjoining walkways. Hedges used to comply with this standard shall be a minimum of 36 inches in height at maturity, and shall be of such species, number, and spacing to provide year-round screening within five (5) years after planting. Vegetative ground cover is required on all surfaces between the wall/hedge and the street/driveway line.**

The chosen shrub species between Highway 101 and the landscape barrier will contain the required vegetative ground cover. These areas are discussed elsewhere.

Landscape plantings shall be maintained to not interfere with pedestrian and bicycle access in accordance with FCC 10-35-2-13. [[Condition 7-6](#)]

- B. Parking/Maneuvering Area Adjacent to Building. Where a parking or maneuvering area or driveway is adjacent to a building, the area shall be separated from the building by a curb and a raised walkway, plaza, or landscaped buffer not less than five (5) feet in width. Raised curbs, bollards, wheel stops, or other design features shall be used to protect pedestrians, landscaping, and buildings from being damaged by vehicles.**

All landscaped areas and pedestrian walkways around the store will be protected by raised curbs above the vehicle maneuvering areas by 6” in height.

Proposed parking along the storefront (west side) will employ precast cement wheel stops measuring 6 inches in height by 6 feet in width. These will separate the parking spaces from the raised Sheet SP-01 in Exhibit C provides details for the wheel stops and curbing. Criteria to protect these areas from vehicle encroachment are met.

Bicycle parking buffering has been conditioned elsewhere.

D. Abutting Land Use Buffers. When a commercial, industrial, or other non-residential use abuts a residential district or residential land use, a visual and noise buffer shall be established and maintained immediately adjacent to the residential property line, consistent with the standards listed in the table below. In no case shall the buffer strip be less than 15 feet in width unless reduced by the Planning Commission where a lesser distance will provide adequate buffering. The buffer strip may include existing vegetation, landscape plantings, evergreen hedge, berm, fence, and/or wall components. Fence and wall structures shall be not less than 6 feet and no more than 8 feet in height (see also Section 10-34-5). The landscaped buffer shall effectively screen at least 70 percent of the view between districts within five (5) years. Significant vegetation in these buffer strips may be preserved in accordance with Section 10-34-2, and replanting of local native vegetation is encouraged.

Adjoining Land Use / Zoning	Landscaped Buffer and/or Fence or Wall
Abutting single family Zoning or use	15 foot buffer with 6’ solid wood fence or block wall or 35 foot landscaped buffer
Abutting Duplex, triplex or townhouse zoning or use	15 foot buffer with 6’ solid wood fence or block wall or 25 foot landscaped buffer
Abutting multiple family or condominiums	15 foot buffer with 6’ solid wood fence or block wall or 15 foot landscaped buffer

Single family residential uses are located east of the project. The applicant proposes a 20’ wide landscaped buffer (with a 6” raised curb ‘against’ the maneuvering area) between the residential and commercial zoning districts. This buffer is described in detail in these findings under FCC 10-34-5.

10-34-3-8: Maintenance. If the plantings fail to survive, the property owner shall replace them with an equivalent specimen (i.e., native Rhododendron replaces native Rhododendron, evergreen shrub replaces evergreen shrub, deciduous tree replaces deciduous tree, etc.) within six (6) months of their dying or removal, whichever comes first. All man-made features required by this Code shall be maintained in good condition, or otherwise replaced by the owner within six (6) months of any such feature being removed or irreversibly damaged (whichever comes first).

10-34-4: STREET TREES: Street trees are trees located within the right-of-way.

Trees are all interior to the project property and are not planned in the street rights-of-way. This section does not apply.

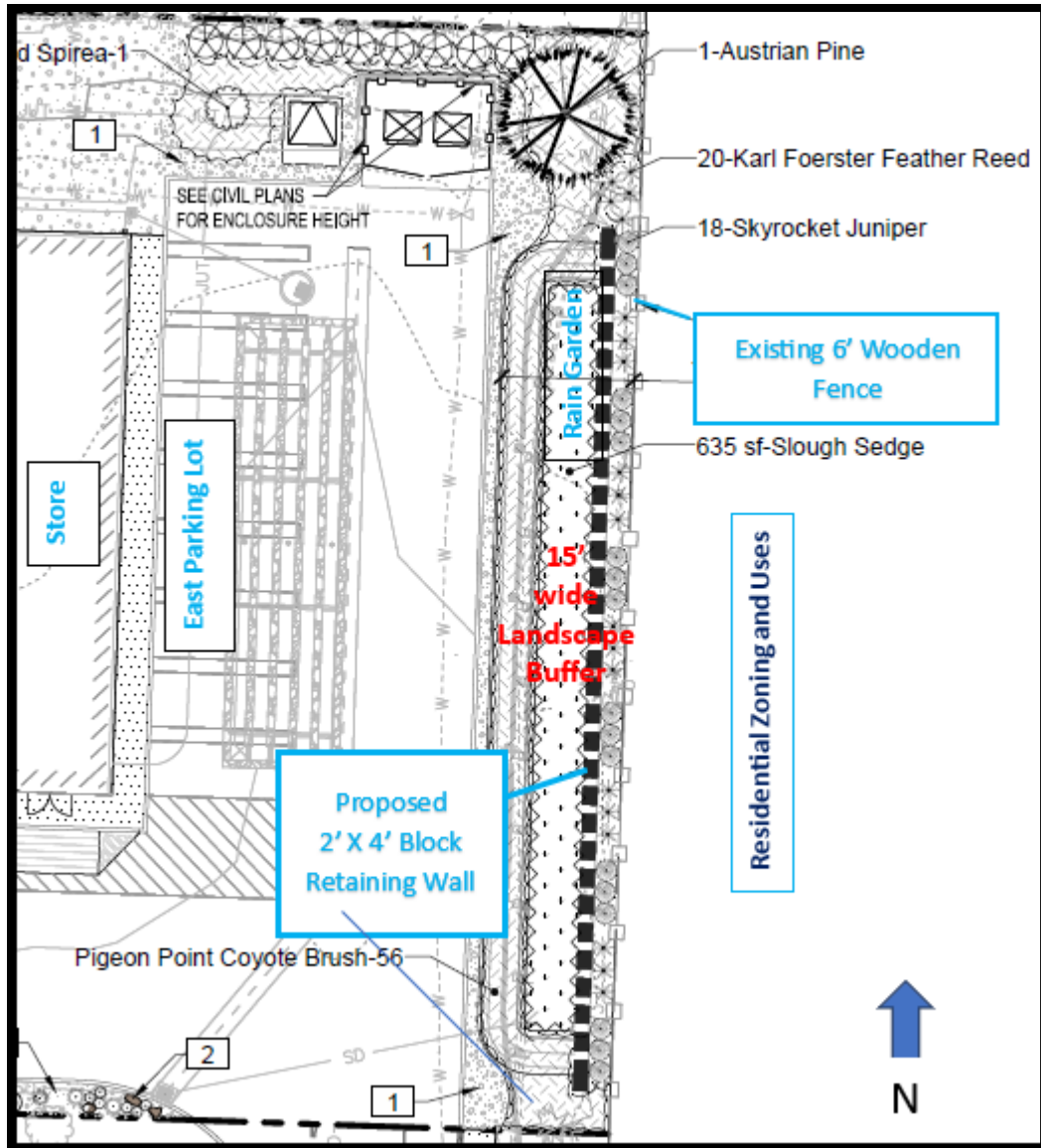
10-34-4: Street Trees sets standards for planting of street trees for shading, water quality, and aesthetic purposes.

According to the Landscape Plan shown in Exhibit E, the applicant proposes to provide 5 street trees (Red Sunset Maples) along the property's west side, abutting the Highway 101 right-of-way within a 7' planting strip. The plans show the maples to be 1 ¾" caliper at 6' in height. These trees are not proposed to be located within the street right-of-way, yett are interior to the project site. This criterion has been met.

10-34-5: Fences and Walls regulate the design of fences and walls, including allowable height and materials, to promote security, personal safety, privacy, and aesthetics.

The Landscape Plan indicates an existing 6' high wooden fence (integrity of the wood unknown) on the east side of the property line in a north /south orientation. This fence separates the Highway District and the Medium Density Residential District.

The Landscape Plan also proposes a 15' wide landscape buffer with a new 40' cement block wall is planned along this east side of the development site and will serve, in part, as a rain garden and screening from parking and maneuvering areas. This block wall is to measure 2' in width and 4' in height. Landscaping is planned between the block wall and the existing fence line along the eastern property line. The existing fence, proposed wall, landscape buffer and rain garden area are shown in the image, taken from the Landscape Plan, below:



The proposed heights of the buffering shrubs between the existing fence line proposed block wall will range from 3 – 5 feet at maturity and are to be comprised of Karl Foerster Feather Reed and Skyrocket Juniper. The rain garden is proposed to contain 635 sq. ft. of Slough Sedge. An Austrian Pine is to be located at the NE corner of the site and should help with screening the fenced trash enclosure area. The proposed trees are all Oregon Myrtle. Mugo Pine will also be featured between these trees. Pigeon Point Coyote Brush is planned between the parking lot driveway and the rain garden. The combination of the existing fencing and proposed block wall and plantings should serve to shield the neighboring development on the east side of the project from vehicle lights and other impacts. Aesthetically, the proposed plantings appear to tie into the configurations of the other proposed plantings within the project to create a unified and balanced design. With considerations for maintenance as discussed in review of FCC 10-35, plantings appear to be planned to both support personal safety and the required visual clearance of 10' as required per FCC 10-35-2-14 (B & C) for vehicular traffic traveling internally and also entering and exiting the project.

TITLE 10: CHAPTER 35: ACCESS AND CIRCULATION

The proposal includes access to Highway 101 and 35th Street. Notably, these access points are related to shared driveway agreements with Burger King, south of the subject lot. The driveway approach on 35th St. thus serves the two businesses. A TIA was submitted for review of the Burger King Design Review. Conditions are found in Resolution PC 20 26 DR 06.

The Dollar General TIA included has been reviewed by ODOT and the City and both agencies have concluded that the proposal in the TIA is reasonable for the development. Further discussion of the TIA and referral comments by ODOT and Public Works is provided under FCC 10-35-2-5.

10-35-2: VEHICULAR ACCESS AND CIRCULATION

10-35-2-3: Access Approval Required: Access will generally be reviewed in conjunction with a land division or building permit. If a property owner wishes to access a public street (e.g., a new curb cut or driveway approach), or make improvements within the public right-of-way (e.g., install or replace sidewalk), the property owner must obtain a "Construction Permit in Right-of-Way". In either case, approval of an access shall follow the procedures and requirements of the applicable road authority.

Driveway approaches have already been installed along the public ROWs. No improvements are proposed by the applicant nor requested by ODOT and the City.

10-35-2-4: State and County Access Permits: ODOT has responsibility and authority in managing access to State Highways and Lane County has responsibility and authority in managing access to County roads within the City. Projects with direct access onto a State Highway or County Road shall be required to obtain a State or County access permit. A State or County complete access permit application must be submitted as part of all land use permits. Conditions placed by the State or County upon these access permits shall be considered conditions of approval for all applicable land use and development approvals. When a transportation improvement is proposed along Highway 101 between the Siuslaw River Bridge and Highway 126, improvements shall be constructed in accordance with the standards specified in the "Highway 101 Access Management Plan." County roads are governed by the Lane County Transportation System Plan and Lane Code Chapter 15.

The applicant is awaiting access permit documentation review which requires a land use decision. In this instance, conditional approval for this design review will suffice and City staff will complete their part of the permit.

Prior to obtaining City right-of-way construction permits, the applicant shall provide evidence of ODOT access permissions required for the proposed access and circulation plans. [\[Condition 8-1\]](#)

10-35-2-5: Traffic Study Requirements: The City may require a traffic study prepared by an Oregon registered professional engineer with transportation expertise to

determine access, circulation, and other transportation requirements in conformance with FCC 10-1-1-4-E, Traffic Impact Studies.

A. The Traffic Impact Study shall:

- 1. Evaluate all streets where direct access is proposed, including proposed access points, nearby intersections, and impacted intersections with the state highway system.**
- 2. Utilize the analysis procedures of the Highway Capacity Manual, latest edition.**
- 3. Document compliance with Florence City Code, the goals and policies of the Transportation System Plan, and any other applicable standards.**
- 4. Be coordinated with other affected jurisdictions and agencies such as Lane County, the Port of Siuslaw, and the Oregon Department of Transportation.**
- 5. Identify mitigation measures that resolve the identified traffic safety problems, address the anticipated impacts from the proposed land use, and meet the city's adopted Level-of-Service standards. The study shall also propose funding for the proposed mitigation measures.**

B. The applicant shall consult with City staff to determine the content and level of analysis that must be included in the TIS. A pre-application conference is encouraged.

C. Conditions of Approval: The City may deny, approve, or approve a development proposal with appropriate conditions needed to meet operations and safety standards and provide the necessary right-of-way and improvements to develop the future planned transportation system. Conditions of approval should be evaluated as part of the land division and site development reviews, and may include but are not limited to:

- 1. Crossover or reciprocal easement agreements for all adjoining parcels to facilitate future access between parcels.**

Easements are required to implement the access management plan shared access between this development and the Burger King development. Once crossover easements are drafted, a maintenance agreement would be required. The applicant shall obtain and have this agreement recorded and a copy provided to the Planning Department prior to permitting. [Condition 8-2]

- 2. Access adjustments, where proposed access points do not meet the designated access spacing standards and/or have the ability to align with opposing access driveways.**

The proposed access points have been approved by ODOT and the City and meet the designating access spacing standards.

3. Right-of-way dedications for future improvements.

No future dedications are anticipated.

4. Street improvements.

Highway 101 and 35th St. have been more recently updated. Even so, the applicant will be expected to pay their fair share of system development charges, or SDCs to be put aside for future street and utility maintenance and upgrades.

5. Turn restrictions such as “right in right out”.

The applicant provided a Traffic Impact Analysis (TIA) completed by SCJ Alliance in October, 2023 (Exhibit I). SCJ Alliance reviewed the Burger King TIA and includes information from that TIA in their own study. SCJ’s study selected October 15 as their data point. They provide existing/predevelopment traffic conditions and traffic counts and calculate future traffic projections for morning and evening peak activity at the intersections of Highway 101 and 35th St.; Highway 101 and 37th St.; Redwood St. and 35th St.; and the site driveway on Highway 101. Peak hours were between 7:50 am and 8:50 am, and 4:00 pm and 5:00 pm. The intersection at Highway 101 and 35th St. is the only signalized intersection out of the 4 studied.

The year 2024 is also included in future forecasted peak hour projections. As per standard practice, the TIA factors in seasonal variation, which is considered in traffic calculations by applying a seasonal adjustment factor based on ODOT’s 11/10/22 Seasonal Trend Table. The rounded seasonal adjustment value of 1.30 was selected and applied to the raw traffic counts to develop the seasonally adjusted volumes used in the TIA.

Public Works provided referral comments on November 3, 2023, (Exhibit L):

“Public Works and Civil West Engineering performed a review of the Dollar General Traffic Impact Analysis (TIA) by SCJ Alliance, dated October 2023. Our review was performed in accordance with City Code and the 2012 Transportation System Plan (TSP). Note that Dollar General’s application was made prior to the adoption of the 2023 Transportation System Plan.

The study was well performed and no other comments or questions have come up. The requirements set forth by City Code and the 2012 TSP appear to be met and no further action is required. Public Works has also reviewed the comments from ODOT regarding the Dollar General TIA and concur with their findings.”

ODOT provided the following referral comments on October 30, 2023, (Exhibit K):

“ODOT Region 2 Traffic has completed our review of the submitted traffic impact analysis (dated October 23, 2023) to address traffic impacts due to development on the southeast quadrant of US 101 at 36th Street in the city of Florence, with respect to consistency and compliance with ODOT’s Analysis Procedures Manual, Version 2 (APM). The APM was most recently updated in September 2023. The current version

is published online at: <http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx> As a result, we submit the following comments for the City's consideration."

"Analysis items to note:

- The following was noted relating to the crash analysis:
 - Total number of reported crashes at the US 101 at 37th Street and Redwood Street at 35th Street should be one and zero, respectively.
 - Using the "rule of thumb" crash rate threshold of 1.0 to be indicative of design deficiencies has been replaced as a result of more comprehensive data and research in recent years. Rather, it is more appropriate to compare an intersection's crash rate to that of the corresponding 90th percentile crash rate per Section 4.1.1 and Exhibit 4-1 of ODOT's APM. It should be noted that none of the intersections exceed their corresponding 90th percentile crash rate.
- ODOT mobility targets can be found in the Oregon Highway Plan (OHP). The v/c mobility target for US 101 (statewide highway, within UGB, non-MPO, 40 MPH) at all highway study intersections is 0.85. The study area intersections are projected to operate below this target in the 2024 Build conditions therefore the conclusions of the study remain the same."

"Proposed mitigation comments:

1. ODOT maintains jurisdiction of the Oregon Coast Highway No. 09 (US 101) and ODOT approval shall be required for all proposed mitigation measures to this facility.
2. No mitigation measures have been proposed. This conclusion appears reasonable for this proposed development."

"Thank you for the opportunity to review this traffic impact analysis. As the analysis software files were not provided, Region 2 Traffic has only reviewed the submitted report."

"This traffic impact study has been, for the most part, prepared in accordance with ODOT analysis procedures and methodologies. If the City determines any of the above comments will merit the need for reanalysis, we would be willing and able to assist with a second round of review."

The engineer's conclusions and recommendations are summarized on page 24 of the TIA:

"All of the study intersections currently operate and are projected to operate at LOS D or better which is within the identified LOS standard."

"A vehicle queue assessment was performed for the study area intersections for existing volumes and projected 2024 with and without project traffic. For all three

scenarios all of the intersections are projected to generate 95th percentile queues within the available storage.”

Overall, the above referrals indicated that the TIA proposal and summary is acceptable to ODOT and the City and no conditions are needed to bring it into compliance with City codes. Both driveway queuing (vehicles waiting to enter the driveways) is acceptable as are the levels of service for the 4 traffic intersections. Criteria met.

10-35-2-6: Conditions of Approval: The roadway authority may require the closing or consolidation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e., for shared driveways), development of a frontage street, installation of traffic control devices, and/or other mitigation as a condition of granting a land use or development approval or access permit, to ensure the safe and efficient operation of the street and highway system.

ODOT and the City have reviewed the proposed plans. The applicant is working with ODOT to obtain an access permit.

Shared access agreements are conditioned elsewhere.

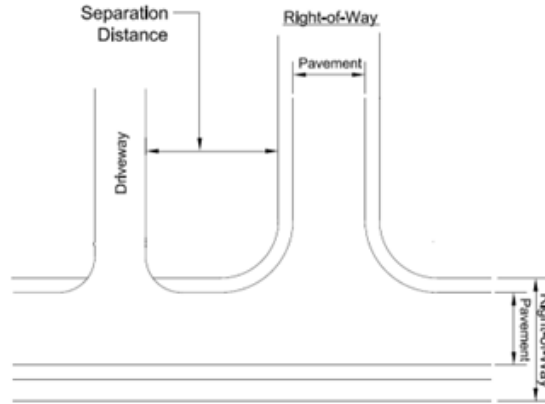
10-35-2-7: Intersection Separation; Backing onto Public Streets: New and modified accesses shall conform to the following standards:

- A. Except as provided under subsection B, below, the distance from a street intersection to a driveway shall meet the following minimum spacing requirements for the street's classification, as measured from side of driveway to street or alley pavement (see Figure 10-35(1)). A greater separation may be required for accesses onto an arterial or collector for compliance with ODOT or County requirements.

Separation Distance from Driveway to Pavement:

Alley	15 feet
Local Street	25 feet
Collector Street	30 feet
Arterial Street	50 feet

Figure 10-35(1): Separation Distance from Driveway to Street



The existing access drive from Highway 101 is roughly 133' from the intersection with 35th Street and well over 100' from the Chens Family Dish restaurant driveway to the north. The proposed driveway on 35th Street is roughly 250' from Highway 101.

- C. Access to and from off-street parking areas shall be designed to prevent backing onto a public street, except that single-family and duplex dwellings are exempt.**

All proposed parking areas are internal to the site, and no backing movements would be necessary onto a public street. This criterion has been met.

10-35-2-8: Access Standards: New development shall gain access primarily from local streets. Access onto arterials and collectors shall be evaluated based on access options, street classifications and the effects of new access on the function, operation and safety of surrounding streets and intersections and possible lower level street alternatives. Where such access to higher level street classification is necessary, shared driveways may be required in conformance with FCC 10-35. If vehicle access off a lower-level street is possible, then the City may prohibit access to the higher-level street.

Vehicular access is proposed from Highway 101 (a major arterial) and to 35th Street (a collector) through use of connected driveways with the Burger King property. Due to past vacations of rights-of-way (Redwood and 36th Streets – discussed earlier), the original local streets platted for access for the block are not available which is why the driveways were conceptualized during design of the Burger King site.

The Dollar General site also directly abuts the public right-of-way of Seabrook Lane, a local street which extends west from Spruce Street through the Seabrook subdivision to the eastern property line of the site, (the applicant has not proposed access via Seabrook Lane). In most blocks, Seabrook Ln. would be considered an alley, not a street, however, it was dedicated as a full street to serve the inward-facing homes in the subdivision. An alley ROW once connected the area at the end of Seabrook Ln. to Highway 101, but it was vacated in years past as discussed in the beginning of these findings. When Seabrook was platted, Seabrook Ln was laid out as a cul-de-sac, but the public ROW was dedicated all the way to the west property line of the subdivision. For the purpose of separating the residential zoning from the commercial zoning, creating a connection between the Dollar General site and

Seabrook Ln. would not contribute to the accessibility of the site in a meaningful way and would create potential conflicts between the two very different zoning classifications.

10-35-2-9: Site Circulation: New developments shall be required to provide a circulation system that accommodates expected traffic on the site. Pedestrian and bicycle connections on the site, including connections through large sites, and connections between sites (as applicable) and adjacent sidewalks, trails or paths, must conform to the provisions in Section 10-35-3.

The development proposal provides a system that accommodates expected vehicular traffic on the site. With proper markings/signage (conditioned later in this chapter), the site also provides access and circulation for emergency vehicles.

Pedestrian and bicycle connections are discussed in review of FCC 10-3 and FCC 10-35-3.

10-35-2-12: Driveway Design: All openings onto a public right-of-way and driveways shall conform to the following:

A. **Driveway Approaches.** Driveway approaches, including private alleys, shall be approved by the Public Work Director and designed and located with preference given to the lowest functional classification street. Consideration shall also be given to the characteristics of the property, including location, size and orientation of structures on site, number of driveways needed to accommodate anticipated traffic, location and spacing of adjacent or opposite driveways.

Driveway approaches have already been vetted and installed.

B. **Driveways.** Driveways shall meet the following standards, subject to review and approval by the Public Works Director:

[...]

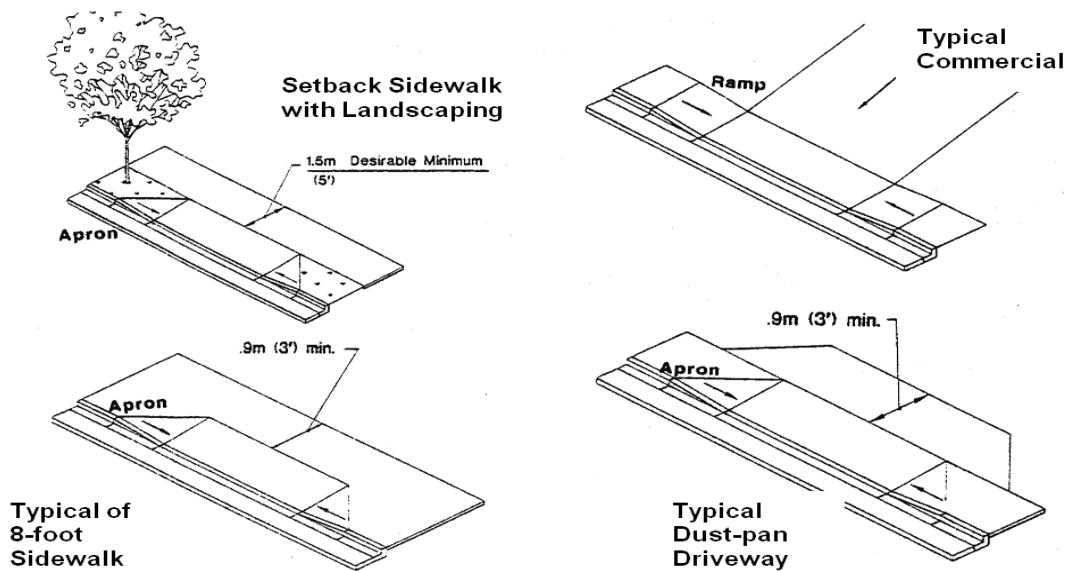
2. Driveways shall have a minimum width of ten (10) feet, except where a driveway serves as a fire apparatus lane, in which case city-approved driveway surface of 12 feet minimum width shall be provided within an unrestricted, twenty (20) foot aisle, or as approved by the Fire Code Official.
3. Where a driveway is to provide two-way traffic, the minimum width shall be 18 feet.
4. One-way driveways shall have appropriate signage designating the driveway as a one-way connection. Fire apparatus lanes shall be so marked (parking prohibited).
5. The maximum allowable driveway grade is fifteen (15) percent, except that driveway grades exceeding fifteen (15) percent may be allowed, subject to review and approval by the Public Works Director and Fire Code Official, provided that the applicant has provided an engineered plan for the driveway. The plan shall be stamped by a registered geotechnical engineer or civil engineer, and approved by the Public Works Director.

The access driveway from Highway 101 consists of a single entrance lane and a single exit lane separated by a curbed “porkchop.” Viewing these physically separated lanes as different driveways for the purposes of this section, each of the lanes is 12’ wide and meets these criteria. The two-way driveway access from 35th Street is 25’ wide, which also meets these criteria. The flat topography of the site does not require steeply sloped driveways. Requirements for signage have been discussed.

These criteria are met.

- C. **Driveway Apron Construction.** Driveway aprons (when required) shall be constructed of concrete and shall be installed between the street right-of-way and the private drive, as shown in Figure 10-35(2). Driveway aprons shall conform to ADA requirements for sidewalks and walkways, which generally require a continuous unobstructed route of travel that is not less than three (3) feet in width, with a cross slope not exceeding two (2) percent, and providing for landing areas and ramps at intersections. Driveways are subject to review by the Public Works Director.

Figure 10-35(2): Examples of Driveway Next to Sidewalks/Walkways



The proposal would add two new driveways that connect to the existing driveway approaches along Highway 101 and 35th Street (after connecting to the most northern drive area of the Burger King site). The provided drawings appear to meet FCC and ADA requirements, but final review of these features will fall to the Public Works Director.

Prior to the construction of driveway improvements and other improvements, including the pedestrian sidewalk connection to Highway 101, approval of the construction plans shall be obtained from Florence Public Works. [Condition 8-3]

- D. **Fire access lanes with turnarounds shall be provided in conformance with the Fire code. Except as waived in writing by the Fire Code Official, a fire equipment**

access drive shall be provided for any portion of an exterior wall of the first story of a building that is located more than 150 feet from an existing public street or approved fire equipment access drive. The drive shall contain unobstructed aisle width of 20 feet and turn-around area for emergency vehicles. The fire lanes shall be marked as “No Stopping/No Parking.” See figure 10-35(3) for examples of fire lane turn-rounds. For requirements related to cul-de-sacs or dead-end streets, refer to FCC 10-36.

After reviewing plans submitted by the applicant, Chief Michael Schick, with Siuslaw Valley Fire and Rescue submitted the following referral comments regarding fire access:

“The Fire Department has no issues with emergency access or water supply for the planned development. We are highly encouraging the installation of an automatic sprinkler system but are not requiring it at this time. We are requiring a key box be placed on the exterior.”

An existing fire hydrant located in the northwestern area of the site will be relocated northward outside of the planned west parking lot. The new location will be inside a landscaped bed at the north terminus of the parking lot. Final plans for the hydrant and connections will be reviewed by Public Works.

Portions of the store will be outside of the 150 feet from an existing public street (Highway 101). Since the store will also be located outside of the 150' area from 35th St., the shared drive isle and driveway apron/approach will provide a secondary access for emergency vehicles. The drive aisle is a minimum 20 feet in width on the Burger King site (connecting to 35th St.). The parking lots and access isles should provide the required area needed to support emergency vehicles.

Per FCC 10-35-2-12 D, the applicant shall provide notes on the final site plan submittal showing the location of the unobstructed turn-around area for emergency vehicles. The fire lanes shall be marked as “No Stopping/No Parking.” [Condition 8-4]

10-35-2-13: Vertical Clearances: Driveways, private streets, aisles, turn-around areas and ramps shall have a minimum vertical clearance of 13' 6” for their entire length and width.

No obstructions below 13'.6” are proposed. The preliminary site plan on Sheet SP-01, Exhibit C indicates that vertical clearance will not exceed the 13' 6” minimum vertical clearance, providing that landscaping is maintained as conditioned elsewhere.

10-35-2-14: Vision Clearance: No visual obstruction (e.g., sign, structure, solid fence, or shrub vegetation) shall block the area between two and one-half feet (2 ½') and eight (8) feet in height in “vision clearance areas” on streets, driveways, alleys, mid-block lanes, or multi-use paths where no traffic control stop sign or signal is provided, as shown in Figure 10-35(4). The following requirements shall apply in all zoning districts:

- A. At the intersection of two (2) streets, minimum vision clearance shall be twenty feet (20').**
- B. At the intersection of an alley or driveway and a street, the minimum vision clearance shall be ten feet (10').**

C. At the intersection of internal driveways, the minimum vision clearance shall be ten feet (10').

The sides of the minimum vision clearance triangle are the curb line or, where no curb exists, the edge of pavement. Vision clearance requirements may be modified by the Public Works Director upon finding that more or less sight distance is required (i.e., due to traffic speeds, roadway alignment, etc.). This standard does not apply to light standards, utility poles, trees trunks and similar objects. Refer to Section 10-2-13 of this Title for definition.

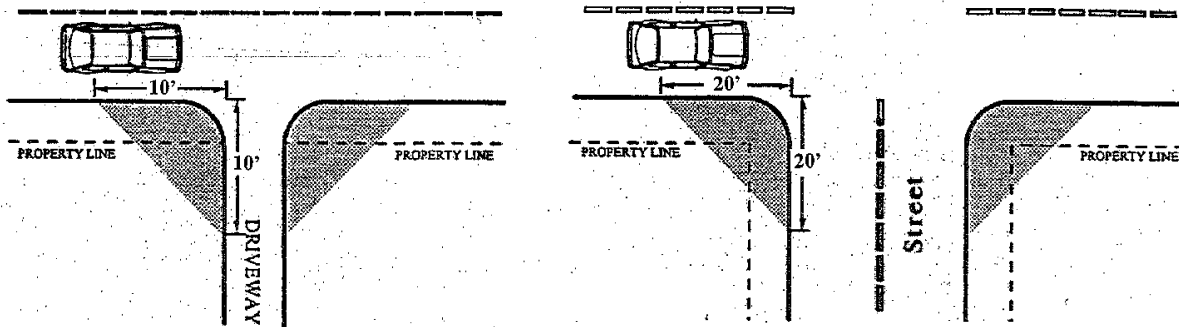


Figure 10-35(4): Vision Clearance Areas
(solid lines indicate curbs or edge of pavement)

The subject site contains one existing intersection of an internal driveway and will contain three proposed internal intersections with landscaping that could conceivably be impacted by the selected landscaping. This landscaping, generally, includes a mix of shrubs, grasses, decorative rock mulch, and strategically placed boulders. Drivers entering the site from the Highway 101 access driveway and turning left into the west parking lot before seeing the pedestrian way would be driving around a curbed interior landscaped island containing Mexican Feather Grass, Blue Pacific Shore Juniper, Sunset Cloud Stonecrop and Abbotswood Potentilla atop decorative rock mulch.

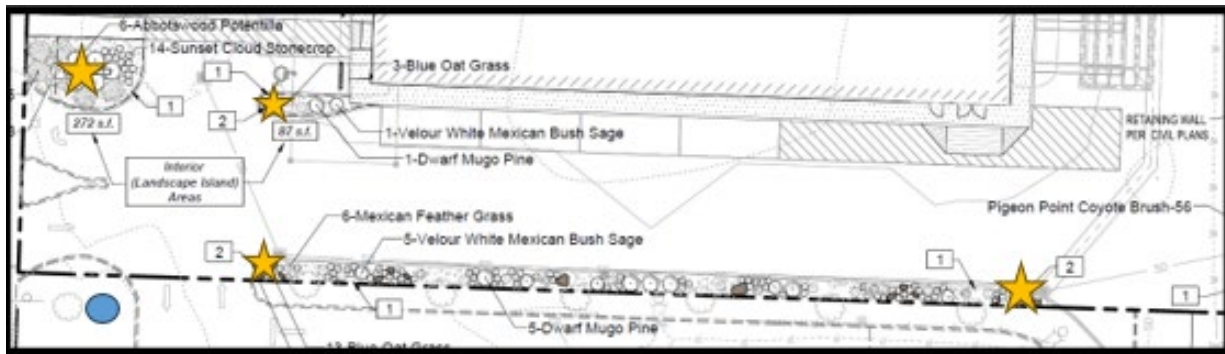
As the Highway 101 controlled entrance is shared with Burger King, landscaping has been installed along the south side of the drive. The following Google Earth image captured 11/4/23 shows this landscaping. The date Google Earth provided the image is unknown, however, although it was taken (at street view) after the 4/20/19 overhead image was taken. Please note that the plants have since grown and that Burger King was conditioned to maintain their vision clearance areas. The trees shown in the background along the drive-thru lane are located along the curbed landscaped strip for the Dollar General store.

Shared approach to Highway 101 <https://earth.google.com/web/search/florence,+or/>
accessed 11/4/23.



This strip also provides an imaginary vision clearance triangle at each side of the strip.

The image below shows the internal landscaped islands areas requiring vision clearance taken from Exhibit E, Sheet LS-01. Three vision clearance areas are marked with an orange star. The landscaped vision clearance on the Burger King site is marked with a blue circle:



Plantings within the south side property line strip include a mixture of Blue Oat Grass, Sunset Cloud Stonecrop, Mexican Feather Grass, Velour White Mexican Brush Sage, and Dwarf Mugo Pine. Materials include decorative rock mulch and landscape boulders. These latter rocks will be located at the ends of the strip island.

For those traveling westward to the west parking lot, and for the nearest ADA accessible van parking space, a landscape island will contain crushed decorative rock with two boulders, three Blue Oat Grass plants, one Velour White Mexican Bush Sage plant, and one Dwarf Mugo Pine. snowberry within 10' of the curb, and the mature size of the snowberry is stated as 3' to 4'. Similar landscaping is present at the intersection of the two-way driveway access to 35th Street and the internal parking lot area. In both cases, it requires a flexible interpretation of code to view these areas as potential violations of this code requirement. Even in that case, standard maintenance of the snowberry would relieve the issue.

With regular maintenance, as conditioned below, all vision clearance should be free of obstructions.

Landscaping shall be maintained so that plants do not grow to obstruct vision clearance areas at internal intersections or intersections with public streets per FCC 10-34-2-14. [Condition 8-5]

10-35-3: PEDESTRIAN ACCESS AND CIRCULATION: All new development shall be required to install sidewalks along the street frontage, unless the City has a planned street improvement, which would require a non-remonstrance agreement.

10-35-3-1: Sidewalk Requirements:

- A. Requirements: Sidewalks shall be newly constructed or brought up to current standards concurrently with development under any of the following conditions:**
- 1. Upon any new development of property.**
 - 2. Upon any redevelopment of property that expands the building square footage by 25% or more.**
 - 3. Upon any change of use that requires more than five additional parking spaces.**

The site is bordered by existing 5'-wide public sidewalks that run along Highway 101. Aside from the interior pedestrian 5'- wide walkway tying into the Highway 101 sidewalk, all site sidewalks are interior and will contain 6" high curbing and be 5' in width. Criteria met.

10-35-3-2: Site Layout and Design: To ensure safe, direct, and convenient pedestrian circulation, all developments shall provide a continuous pedestrian system. The pedestrian system shall be based on the standards in subsections A - C, below:

- A. Continuous Walkway System. The pedestrian walkway system shall extend throughout the development site and connect to all future phases of development, and to existing or planned off-site adjacent trails, public parks, and open space areas to the greatest extent practicable. The developer may also be required to connect or stub walkway(s) to adjacent streets and to private property with a previously reserved public access easement for this purpose in accordance with the provisions of Section 10-35-2, Vehicular Access and Circulation, and Section 10-36-2 Street Standards.**

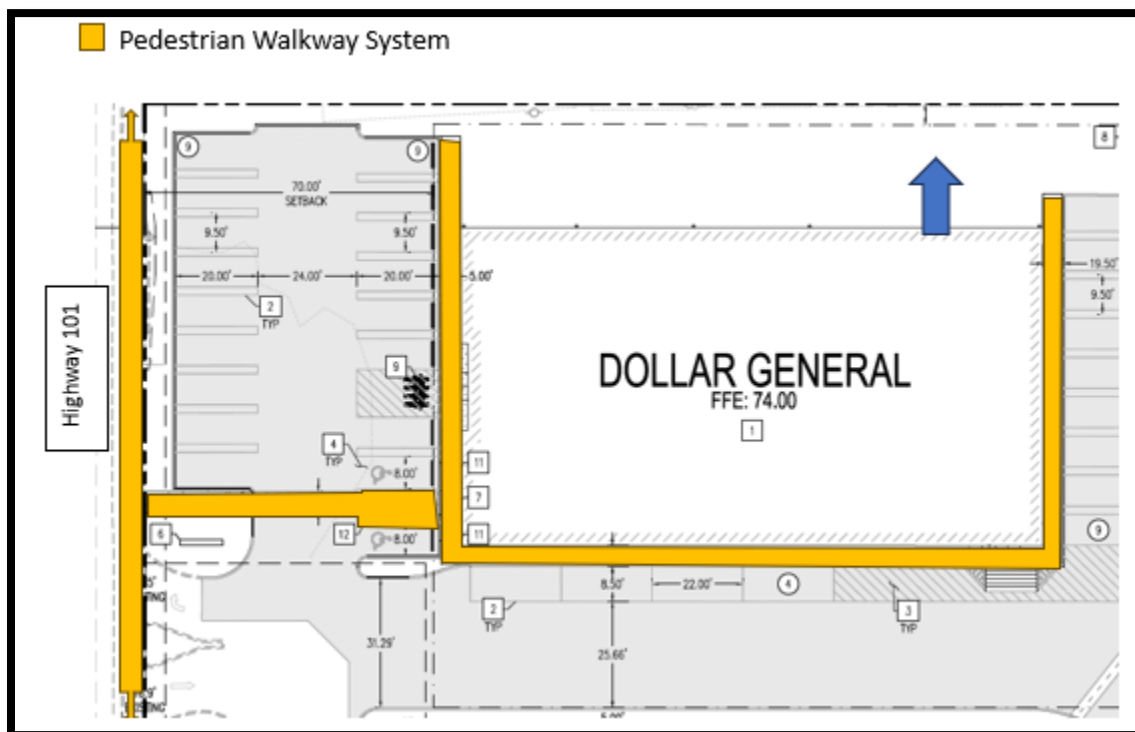
The applicant proposes to connect the Dollar General development to existing Burger King development to the south via the shared driveway from 35th Street as well as the shared Highway 101 access point. While connections between the lots for vehicle travel are addressed in the proposal, considerations for a continuous walkway system between the two uses may be gained through the use of the Highway 101 sidewalk.

The applicant has proposed a single 5'- wide pedestrian connection from the store to the public ROW along Highway 101. The proposed walkway does not extend throughout the development site and no future phases of the development are planned. Criterion met.

B. **Safe, Direct, and Convenient.** Walkways within developments shall provide safe, reasonably direct, and convenient connections between primary building entrances and all adjacent streets, based on the following criteria:

1. **Reasonably direct.** A route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for likely users.
2. **Safe and convenient.** Routes that are reasonably free from hazards and provide a reasonably direct route of travel between destinations.
3. **"Primary entrance" for commercial, industrial, mixed use, public, and institutional buildings** is the main public entrance to the building. In the case where no public entrance exists, street connections shall be provided to the main employee entrance.

Pedestrian street access via a straight walkway between the highway sidewalk and the store front appears to be reasonably direct, safe, and convenient. Pedestrians accessing the proposed 5'-wide sidewalk skirting the west, east and south side of the store should be hazard free given that the only landscaped island at the southwest side of the store is not likely to have plantings that grow over the sidewalk and the routes are primarily straight with turns only at the southwest and southeast corners of the store. The pedestrian walkway system is shown below:



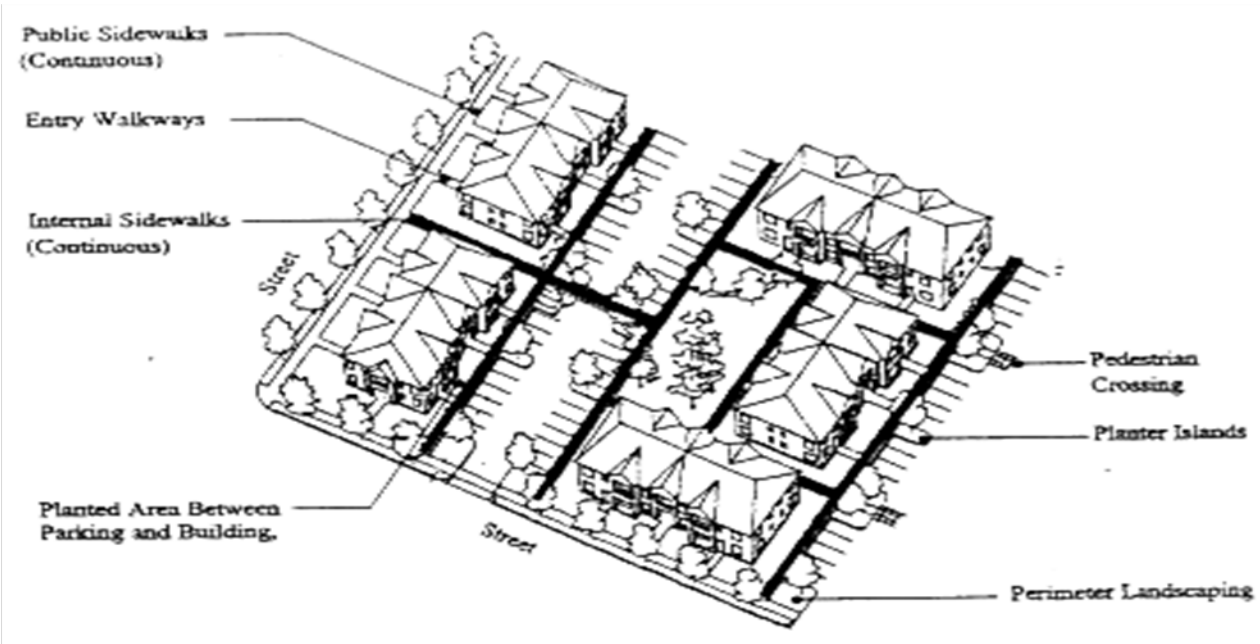
In addition to pedestrian connection to the public sidewalk along the highway, the image above also demonstrates that the following criteria will also be met with regards to

connections within the development. All parking areas are accessible through the internal sidewalk and walkway. Any planned pedestrian access, other than by means of the highway sidewalk, and the Burger King restaurant would not be safe given the drive-thru location on the north side of that development. Burger King developers were conditioned to install a pedestrian walkway between the restaurant and the public sidewalk. This walkway is shown to be south of the drive-thru as demonstrated in a Google Earth image shown under FCC 10-35-14-C. The distance between the Burger King walkway and Dollar General walkway from the Highway 101 sidewalk is approximately 60'.

C. Connections Within Development. Connections within developments shall be provided as required in subsections 1 - 3, below:

1. **Walkways shall be unobstructed and connect all building entrances to one another to the extent practicable, as generally shown in Figure 10-35(5);**
2. **Walkways shall connect all on-site parking areas, storage areas, recreational facilities and common areas, and shall connect off-site adjacent uses to the site to the extent practicable. Topographic or existing development constraints may be cause for not making certain walkway connections; and**

[...]



Review of criterion listed under FCC 10-35-3-2-C subsections 1 and 2 have been answered under FCC 10-35-3-3-B and satisfactorily demonstrate that proposed internal pedestrian connections meet applicable criteria.

10-35-3-3: Walkway and Multi-Use Path Design and Construction: Walkways and multi-use paths shall conform to all applicable standards in subsections A - D, as generally illustrated in Figure 10-35(6):

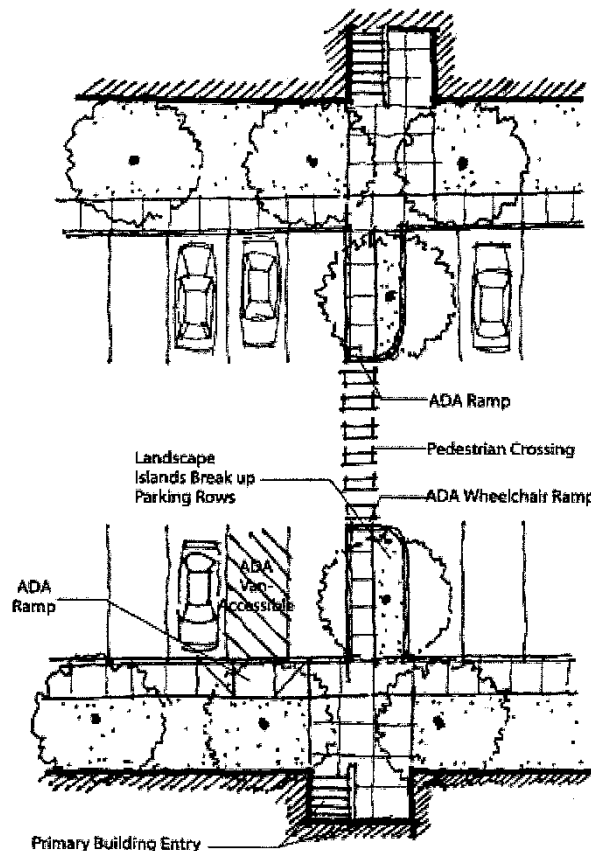
- A. Vehicle/Walkway Separation. Except for pedestrian crossings (subsection B), where a walkway abuts a driveway or street it shall be raised six (6) inches and curbed along the edge of the driveway/street. Alternatively, the decision body may approve a walkway abutting a driveway at the same grade as the driveway if the walkway is protected from all vehicle maneuvering areas. An example of such protection is a row of decorative metal or concrete bollards designed to withstand a vehicle's impact, with adequate minimum spacing between them to protect pedestrians.**

- B. Pedestrian Crossing. Where a walkway crosses a parking area, or driveway, it shall be clearly marked with contrasting paving materials (e.g., light-color concrete inlay between asphalt), which may be part of a raised/hump crossing area. Painted or thermo-plastic striping and similar types of non-permanent applications may be approved for crossings of not more than twenty-four (24) feet in length.**

- C. Width and Surface. Walkway surfaces shall be concrete, asphalt, brick/masonry pavers, or other durable surface, as approved by the Public Works Director, at least five (5) feet wide, without curb. Multi-use paths (i.e., for bicycles and pedestrians) shall be concrete or asphalt, at least ten (10) feet wide. (See also, Section 10-36-2)**

- D. Accessible routes. Walkways and multi-use paths shall conform to applicable Americans with Disabilities Act (ADA) requirements. The ends of all raised walkways, where the walkway intersects a driveway or street shall provide ramps that are ADA accessible, and walkways shall provide direct routes to primary building entrances.**

**Figure 10-35(6):
Pedestrian Walkway Detail (Typical)**



The pedestrian walkway accesses the same ADA accessible ramp as that provided for the ADA parking spaces.

The pedestrian walkway included in the proposal meets these requirements.

10-35-4: Transit Facilities: Proposed uses other than single-family residences and duplexes must provide for transit riders by providing developmental improvements to accommodate current or planned transit stops pursuant to the following:

- A.** If the proposed uses are located on a site within ¼ mile of an existing or planned transit stop, the proposed pedestrian circulation system must demonstrate a safe and direct pedestrian route from building entrances to the transit stop or to a public right-of-way that provides access to the transit stop.

The Rhody Express’s North Route provides transit flag stop opportunities within ¼-mile of the development site on both its northbound and southbound routes. Flag stops are stops other than scheduled stops shown on the Rhody Express Route map. The Express passes nearest the site at the intersection of Redwood and 35th Streets when it turns right toward Spruce Street. It also stops roughly 400’ from the site when it jogs east to Rite Aid as it travels south on Oak Street; however, crossing the highway would be required to catch the Express along that segment of the route.

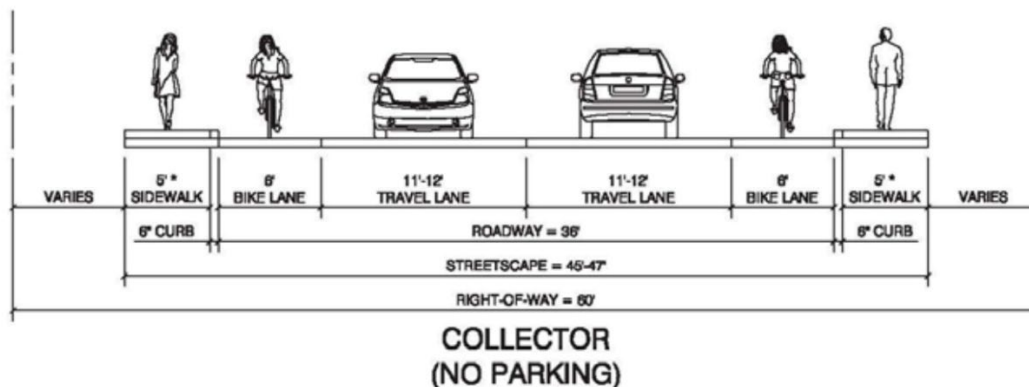
The pedestrian connections included in the proposal and required by conditions of approval are adequate to provide safe and direct pedestrian routes from the transit flag stops, providing pedestrians use the walkways and sidewalks to the Dollar General site.

TITLE 10: CHAPTER 36: PUBLIC FACILITIES

10-36-2: STREET STANDARDS:

10-36-2-5: Rights-of-Way and Street Sections: Street rights-of-way and improvements shall be consistent with the Transportation System Plan and standards specified in Title 8 Chapter 2.

- A.** Street right-of-way and pavement widths shall be based on the following cross section standards. See individual zoning chapters for additional requirements regarding sidewalk width (for sidewalks wider than the standard 5 feet).



10-36-2-16: Sidewalks, Planter Strips, Bicycle Lanes: Sidewalks, planter strips, and bicycle lanes shall be installed in conformance with applicable provisions of the

Florence Transportation System Plan, Comprehensive Plan, adopted street plans, City of Florence Standards and Specifications and the following standards:

- A. Sidewalks may be placed adjacent to the street or at the property line with planter strips where practicable, or as otherwise directed by the Public Works Director.**
- B. In areas with high pedestrian volumes, the City may approve a minimum 12-foot wide sidewalk area, curb tight, with street trees in tree wells and / or landscape planters.**
- C. Bicycle lanes shall be constructed on all newly constructed arterial and collector streets as well as all arterial and collector streets that are widened to provide additional vehicular capacity, as indicated in the TSP, unless otherwise designated.**

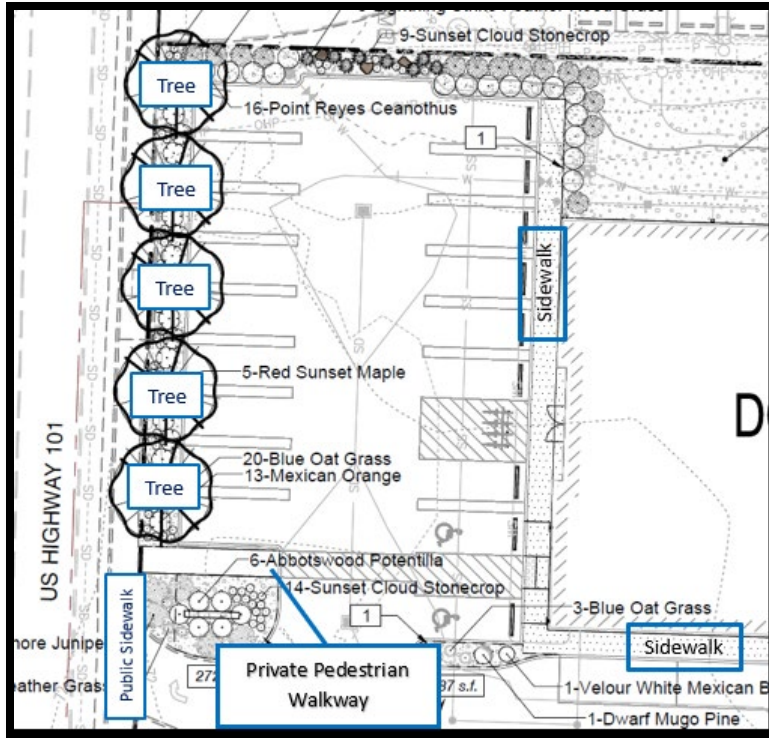
Highway 101 contains a bicycle lane along the west side of the highway. No other street fronts the subject property. This criterion is not required of the applicant.

- D. Sidewalks shall be provided on both sides of the street for all arterial and collector streets. Sidewalks shall be provided on at least one side of the street for local streets. Exceptions may be granted if the City determines that hillsides, drainage facilities, ditches, waters of the state, or natural landscapes are to be preserved, then sidewalks on one side or a multi-use path may be approved. Sidewalks are not required on T-courts (hammer-head).**

This proposal does not require the installation of a new public sidewalk. The Highway 101 sidewalk is newer and the only requirement, other than the provisions of internal private sidewalks is a connection of a pedestrian walkway from the store to the existing Highway 101 sidewalk. The construction plans for this sidewalk will be reviewed by ODOT and Public Works, who will also work with the applicant in coordinating its construction.

- E. Where practical, sidewalks shall be allowed to meander around existing trees if in conformance with the requirements of the Americans with Disabilities Act.**

No trees are proposed that would meander or impede accessible areas are planned. The five trees on the west side are located along a straight line within a privately owned landscaping strip along the Highway 101 sidewalk and should not impede movement. The ADA parking spaces are located along the store front and are not near trees. The pedestrian walkway from the store's sidewalks to the Highway 101 sidewalk is tree-free. The curbed landscaped garden that lies along the east/west drive aisle along the property line (discussed earlier) includes trees planted by Burger King, although trees are not in the vicinity of the ADA parking spaces.



F. Maintenance of sidewalks and planter strips in the right-of-way is the continuing obligation of the adjacent property owner.

No sidewalks nor planter strips are planned in the right-of way.

10-36-2-17: Existing Rights-of-Way: Whenever existing rights-of-way adjacent to or within a proposed development are developed less than standard width, additional rights-of-way shall be provided at the time of subdivision or site development, in conformance with FCC 10-36-2-5.

All existing easements and rights-of-way are adequate for the proposed development and no additional rights-of-way are needed. Criterion met.

10-36-2-18: Curbs, Curb Cuts, Ramps, and Driveway Approaches: Concrete curbs, curb cuts, curb ramps, bicycle ramps and driveway approaches shall be constructed in accordance with Chapter 35, Access and Circulation, City of Florence Standards and Specifications and the following standards:

- A. Curb exposure shall be per City Standards and Specifications.**
- B. There shall be no curbs on alleys unless otherwise approved by the Public Works Director.**

No alley is proposed. Although there was an alleyway, it was formally vacated as discussed earlier in these findings. This criterion is not applicable.

- C. Curb extensions (bulb-outs) at local residential street intersections are optional. If provided, the minimum width between the curb extensions shall be 24-feet,**

unless otherwise approved by the Public Works Director. Curb extensions shall not be used on streets with bike lanes.

No curb extensions are proposed.

10-36-3: SANITARY SEWERS, WATER, STORMWATER, AND FIRE PROTECTION:

- A. Sewers, Water, and Stormwater Mains Required: Sanitary sewers, water mains, and stormwater drainage shall be installed to serve each new development and to connect developments to existing mains in accordance with the City's Wastewater Master Plan, Water System Master Plan, and Stormwater Master Plan, Florence Code Title 9 Chapters 2, 3 and 5, and the applicable construction specifications. When streets are required to be stubbed to the edge of the subdivision; stormwater, sewer and water system improvements shall also be stubbed to the edge of the subdivision for future development.**

Currently, only water, a fire hydrant and power lines are located on the property. Sheet UT-01 in Exhibit C shows a proposal to relocate the water lines, tie into an existing power pole located on the north side of the site and also with a power pole located near the NE corner of the Burger King site. The new power lines will then be buried in a joint utility trench for both the power lines and communication lines.

Sanitary sewer is proposed to connect with a main located at the SW corner of the Chens Family Dish site. The sewer line will run north and southward under the west store parking lot and connect to near the SW corner of the store. Cleanouts are shown on Sheet UT -01 of Exhibit C. Stormwater overflow would connect to an existing storm drain lines within the east driveway connected to the Burger King site and then drain out to an existing curb inlet in 35th St.

- B. Sewer, Water, and Stormwater Plan Approval: Development permits for stormwater drainage, sewer and water improvements shall not be issued until the Public Works Director or their designee has approved all stormwater, sanitary sewer and water plans in conformance with City standards, and Florence Code Title 9 Chapters 2, 3 and 5.**

Public Works has been supplied with the proposed sewer, water and stormwater plans. Although these are reviewed within these findings and comments have been submitted by Public Works and the City Engineer of record, the final plans and any needed revisions will be approved by the Public Works Director in accordance with FCC 9-2, 9-3 and 9-5. The following referral comments applying to this subsection were provided on 11/3/23 (Exhibit L):

“Regarding the civil engineering plans from Dollar General, Public Works has provided comments back to the engineer for Dollar General and have requested the following items be addressed prior to the issuance of public improvement permits:

- *Stormwater plans need to be in compliance with the City's stormwater design manual and stormwater management plans*
- *Include City of Florence standard detail drawings in the plan set, including the use of 'Blue Bolts' for water system fittings. Blue bolts are constructed from*

corrosion-resistant, high-strength low-alloy steel that conforms to ANSI/AWWA C111/A21.11 and feature a blue fluoropolymer coating

- *Relocation of the existing 8-inch water main away from the proposed building and a minimum 10-foot separation from stormwater, sewer and underground electric lines.”*

Per the Public Works Director, the applicant shall include City of Florence standard detail drawings in the plan set, including the use of ‘Blue Bolts’ for water system fittings. Blue Bolts are constructed from corrosion-resistant, high-strength low-allow steel that conforms to ANSI/AWWA C111/A21.11 and feature a blue fluoropolymer coating. [Condition 9-1]

Other conditions or informationals have been addressed in these findings regarding referral comments submitted prior to this report.

- C. Existing Watercourse: Where a proposed development is traversed by a watercourse, drainage way, channel, or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially to the lines of such watercourse and such further width as will be adequate for conveyance and maintenance to protect the public health and safety and consistency with the Stormwater Manual.**

There is no existing watercourse, and this criterion does not apply.

- D. Over-Sizing: The City may require as a condition of development approval that sewer, water, and/or storm drainage systems serving new development be sized to accommodate future development within the area as projected by the applicable Water, Sewer, and/or Storm Drainage Master Plan, and Florence Code Title 9 Chapter 1. The developer may be entitled to credit or reimbursement for over-sizing City master planned improvements.**

No oversizing has been proposed. As discussed, the applicant must secure final plan approval from the Public Works Department.

- E. Fire Protection: All new development shall conform to the applicable provisions of the Oregon Fire Code. Developers shall provide verification of existing and proposed water service mains and hydrant flow supporting the development site. Fire flow analyses and plans for hydrants and water service mains shall be subject to review and approval by the Building Official or Fire Marshal.**

An existing fire hydrant is located within vacated 36th St., near the NW corner of the site and ties to a water main within the vacated street. New fire hydrant improvements are proposed near the current hydrant location, which is planned to be relocated in a curbed landscaped strip at the north end of the west parking lot. Siuslaw Valley Fire and Rescue Chief Schick provided the following referral comment on October 26, 2023 (Exhibit O):

“The Fire Department has no issues with emergency access or water supply for the planned development. We are highly encouraging the installation of an automatic sprinkler system but are not requiring it at this time. We are requiring a key box be placed on the exterior.”

At the request of SVFR Chief Schick, the applicant shall provide a key box placed on the exterior of the store. (Informational 2)

As part of the building permit review process, fire flow analyses, hydrant plans, and water service details shall be subject to review and approval by the Building Official and Fire Marshal. (Informational 3)

- F. Inadequate Facilities: Development permits may be restricted by the City where a deficiency exists in the existing water, sewer or stormwater system that cannot be rectified by the development and that if not rectified will result in a threat to public health or safety, surcharging of existing mains, or violations of state or federal standards pertaining to operation of domestic water and sewerage treatment systems.**

The proposed water, wastewater, and stormwater systems must meet the standards of the City's Wastewater Master Plan, Water System Master Plan, and Stormwater Master Plan. Although the water and sewer capacity in the project area are sufficient for the proposed use, the applicant has been conditioned to relocate the existing 8-inch water main away from the proposed building and also provide a minimum 10-foot separation from stormwater, sewer and underground electric lines.

Prior to obtaining plumbing permits, the applicant shall provide evidence of final approval from the Florence Public Works Department for all water and wastewater improvements. [Condition 9-2]

Public stormwater infrastructure should only be needed in the event of rainfall greater than the design storms specified in the Stormwater Design Manual – a 25-year storm event taking place within 24 hours. Stormwater requirements are reviewed in discussion of FCC 9-5. The applicant has been conditioned per referral comments provided by the Public Works Director and Civil West (Exhibit L) that stormwater plans need to be in compliance with the City's stormwater design manual and stormwater management plans and will need to revise the current undated Stormwater Report provided in Exhibit H and other exhibits as applicable to meet this condition.

These criteria are met.

10-36-4: EROSION CONTROL: In addition to standard City requirements for stormwater, erosion control and sand management, projects that disturb one (1) or more acres of land over a period of time, a National Pollution Discharge Elimination System (NPDES) Permit must be obtained from the Department of Environmental Quality prior to the issuance of a development permit or land use permit based on appropriate criteria.

As discussed at the beginning of these findings, the current site was part of a larger tax parcel that has since been split into two tax parcels. When the Burger King proposal was reviewed, the entire tax lot at that time contained roughly 1.84 acres and Informational 3 of the Burger King findings (PC 20 26 DR 06) state "*The long-term development of this 1.84-acre parcel will require erosion control permits via NPDES*". The applicant has provided erosion control plans for both that development and the current store proposal.

Per FCC 10-36-4, the applicant shall obtain a National Pollution Discharge Elimination (NPEDS) permit from the Department of Environmental Quality prior to issuance of a development permit of land use permit as the site is equal to one acre in size. [Condition 9-3]

FCC Title 4: Building Regulations, Chapter 1 Section 15-3 (Securing Loose, Open or Raw Sand) requires a Sand Management Plan for all construction projects that could negatively impact traffic safety or damage adjacent properties. The applicant will be required to provide such plan to the Building Department and Public Works as required of this Chapter in accordance with the *2008 City of Portland Erosion and Sediment Control Manual*. (Informational 5)

10-36-5: UTILITIES:

A. Underground Utilities:

- 1. Generally. All new utility lines including, but not limited to, those required for electric, communication, lighting, and cable television services and related facilities shall be placed underground, except for temporary utility service facilities during construction, and high capacity electric lines operating at 50,000 volts or above.**

New utility lines are planned to be located underground. This criterion is met.

10-36-6: EASEMENTS:

- A. Provision: Dedication of easements for storm water, sewers, water and for access thereto for maintenance, in order to safeguard the public against flood damage and the accumulation of surface water; dedication of easements for sanitary sewers, and for access thereto for maintenance; and dedication of easements for other public utilities may be required of the land divider by the Planning Commission along lot rear lines, lot side lines or elsewhere as necessary to provide needed facilities for present or future development of the area in accordance with the purpose of this Title. Easements for utility lines shall be not less than fifteen feet (15') in width and the utility shall be located in the center of the easement. Before a partition or subdivision can be approved, there shall appear thereon a restriction, providing that no building, structure, tree, shrubbery or other obstruction shall be placed or located on or in a public utility easement. The City may require an additional five foot (5') easement for utility lines along street frontages when necessary.**
- B. Recordation: As determined by the City all easements for sewers, storm drainage and water quality facilities, water mains, electric lines, or other public utilities shall be recorded with the final plat.**

Existing utility easements lie along the eastern and northern sides of the site; specifically in the areas of vacated Redwood and 36th Streets. Water lines and overhead power lines (CLPUD) are currently located within these easements; however, the power and future communication lines are planned to be relocated to an underground trench as shown on

Sheet UT-01 of Exhibit C. Relocation of the existing 8-inch water main away from the proposed building and a minimum 10-foot separation from stormwater, sewer and underground electric lines has been conditioned

The Planning Commission has the authority to call for additional easement dedication as needed for utilities; however, those provided appear adequate for the proposed use.

10-36-7: CONSTRUCTION PLAN APPROVAL AND ASSURANCES:

- A. Plan Approval and Permit: No public improvements, including sanitary sewers, storm sewers, streets, sidewalks, curbs, lighting, parks, or other requirements shall be undertaken except after the plans have been approved by the City Public Works Director, permit fee paid, and permit issued.**
- B. Performance Guarantee: The City may require the developer or subdivider to provide bonding or other performance guarantees to ensure completion of required public improvements.**

As discussed, the applicant must secure final approval from the Public Works Department.

10-36-8: INSTALLATION:

- A. Conformance Required: Improvements installed by the developer either as a requirement of these regulations or at his/her own option, shall conform to the requirements of this Chapter, approved construction plans, and to improvement standards and specifications adopted by the City.**
- B. Adopted Installation Standards: The Standard Specifications for Public Works Construction, Oregon Chapter APWA, are hereby incorporated by reference; other standards may also be required upon recommendation of the Public Works Director.**
- C. Commencement: Work shall not begin until the City has been notified in advance in writing.**
- D. Resumption: If work is discontinued for more than one month, it shall not be resumed until the City is notified in writing.**
- E. City Inspection: Improvements shall be constructed under the inspection and to the satisfaction of the City Public Works Department. The City may require minor changes in typical sections and details if unusual conditions arising during construction warrant such changes in the public interest. Modifications to the approved design requested by the developer may be subject to City review. Any monuments that are disturbed before all improvements are completed by the subdivider shall be replaced prior to final acceptance of the improvements; it shall be the responsibility of the developer's registered professional land surveyor to provide certification to the City that all boundary and interior monuments have been reestablished and protected.**

- F. **Engineer’s Certification and As-Built Plans:** A registered civil engineer shall provide written certification in a form required by the City that all improvements, workmanship, and materials are in accord with current and standard engineering and construction practices, conform to approved plans and conditions of approval prior to City acceptance of the public improvements, or any portion thereof, for operation and maintenance. The developer’s engineer shall also provide two (2) sets of “as-built” plans along with an electronic copy, in conformance with the City Engineer’s specifications, for permanent filing with the City.

- G. **Acceptance of Public Improvements:** Public improvements shall only be accepted by the City after the “as-built” plans and actual improvements are approved, and all easements are recorded. Upon acceptance of public improvements, the City will accept ownership and maintenance responsibility.

- H. **Warranty of Public Facilities:** All public improvements shall be warranted against defects in materials and workmanship for a period of one year following acceptance of the improvements by the City. Once accepted, a minimum one (1) year warranty agreement on materials and workmanship shall be initiated between the City of Florence and the developer. A warranty bond or other financial security acceptable to the City in the amount of 12 percent of the original public improvement construction cost shall be maintained throughout the warranty period

The proposal requires relocating a public fire hydrant and water mains. Additionally, as power and communication lines will be provided within an underground trench, this proposal will be subject to the construction standards, inspections, approvals, bonds and warranties as outlined in these sections and will be reviewed and required as part of the construction facility infrastructure permitting process.

TITLE 10: CHAPTER 37: LIGHTING

10-37-2: APPLICABILITY: Section 10-37 applies to installation of all lighting fixtures as of the effective date of this Ordinance, except as exempted by provision of this Ordinance. Devices include but are not limited to, lights for: buildings and structures, recreational areas, parking lot and maneuvering areas, landscape areas, streets and street signs, product display areas, building overhangs and open canopies, holiday celebrations, and construction lights.

- A. **Resumption of Use -** If a property with non-conforming lighting is abandoned for a period of one year or more, then all exterior lighting shall be brought into compliance with this Ordinance before any further use of the property occurs.

- B. **Major Additions or Alterations -** If a major addition occurs on a property, lighting for the entire property shall comply with the requirements of this Code. For purposes of this section, the following are considered to be major additions:
 - 1. **Additions of 26 percent or more in terms of additional dwelling units, gross floor area, seating capacity, or parking spaces, either with a single**

addition or with cumulative additions after the effective date of this Ordinance.

2. Single or cumulative additions, modification or replacement of 25 percent or more of installed exterior lighting luminaires existing as of the effective date of this Ordinance.
3. Existing lighting on sites requiring a conditional use permit or variance after the effective date of this ordinance.

C. Amortization - On or before 10 years from the effective date of this code, all outdoor lighting shall comply with this Code. Most outdoor lighting will be fully depreciated at the end of 10 years if not sooner. "Easy fixes" such as re-aiming or lowering lumen output of lamps is recommended in advance of the effective date of the ordinance. Where lighting is judged to be a safety hazard immediate compliance is required.

10-37-3: LIGHTING PLANS REQUIRED: All applications for building permits and land use planning review which include installation of exterior lighting fixtures, not exempted, shall include the number of luminaires, the number of lamps in each luminaire, a photometric report for each type of luminaire and a site plan with the photometric plan of the lumen output.

The City shall have the authority to request additional information in order to achieve the purposes of this Ordinance.

The applicant submitted a photometric site plan demonstrating the lumen output for the proposed development and lighting product specification sheets (Exhibit J). Product details are also provided in Exhibit J.

10-37-4: LIGHTING STANDARDS:

- A. All exterior lighting fixtures subject to this code section must be designed as a full cut-off fixture or have a shielding method to direct light emissions downward below the horizontal plane onto the site and does not shine illumination or glare skyward or onto adjacent or nearby property.
- B. Parking areas shall have lighting to provide at least two (2) foot-candles of illumination at any point in the entire lot with a maximum of five (5) foot-candles over parking spaces and walkways. The Design Review Board may decrease the minimum if the applicant can provide documentation that the overall parking lot has adequate lighting. The Design Review Board may increase the maximum on a case-by-case basis, with no greater than 7



foot-candles measured directly under the light fixture.

The photometric plan shows that all parking spaces and walkways will be lit. The lumen output, however, often exceeds the required maximum five foot-candles and the plan is conditioned below to be revised.

C. Lighting in or adjacent to residential zones or residential uses shall not exceed twenty feet in height as measured from the adjacent grade to the top of the light fixture. Heights in other zoning districts shall not exceed 25 feet unless the Design Review Board adopts findings that the higher light fixtures are necessary to achieve proper illumination levels.

Lighting is not proposed that would shine directly on the residential zoning and use to the east. Although it is not known at what height the wall pack lighting will be mounted on the building, it would be less than 15 feet in height.

D. Main exterior lights for commercial, institutional, and industrial buildings, landscaping and parking lots shall be extinguished at end of business hours with a minimum lighting remaining for personal and building security and safety after hours.

This subsection is conditioned below.

E. A thirty-day review period beginning with the first day in business using the new lighting system shall be required to evaluate and adjust illumination levels of lighting. The City may ask for lighting to be adjusted in this time period based on public comments or staff inspections.

Per FCC 10-37-4 E, lighting shall be reviewed during a 30-day review period following the issuance of a Certificate of Occupancy. Should the proposed lighting not meet the requirements of FCC 10-37, staff may require the lighting to be adjusted. (Informational 4)

F. All externally lit commercial signs should shine from the top and point down toward the ground. Signs with uplighting must be shielded so that illumination is restricted to the sign face and glare is eliminated.

Sheet SP-01 in Exhibit C shows a pylon sign is to be placed in the curbed landscape island on the north side of the Highway 101 approach. Note 6 on the sheet explains that this is a lighted pylon sign. The photometric plan in Exhibit J indicates that the signage lumens are included in the lumen count, but the output levels may be incorrect as Note 6 indicates that the signage is to be provided by a Dollar Tree vendor. This and what may be a lighted storefront sign is conditioned below.

G. Lighting for roadway signs and pedestrian ways must be designed or have an opaque shielding method to direct light emissions downward and below the horizontal plane of the fixture in the permanently installed position.

Fixture types:

The photometric plan shows (11) 40-watt wall pack lights to be mounted to the exterior walls. According to the product specification sheets in Exhibit J, these are all fully shielded. Plans submitted specifically for this lighting do not indicate the heights at these wall packs will be mounted at; however, Exhibit D, which provides building elevations indicates that there will be at least 2 of these mounted approximately 15' above grade on the west side and 5 on the west side of the building at approximately 12' in height. The remaining 4 wall packs are not shown on this elevation sheet although the photometric plan shows 3 wall packs along the eastern elevation which would cover the parking lot area. While none of these exceed 9.9 lumens on the photometric plan, one wall pack shown at the northwest corner of the building facing northward shows as producing 10.1 lumens at its highest intensity.

The photometric plan shows that the applicant is proposing one (1) shielded parking lot light (full cut-off) mounted on a 25' pole within the landscaped area between the Highway 101 sidewalk and west parking lot. This light is not located near any residential zoning or use. Product details shown in Exhibit J show that this is a 150-watt integrated LED luminaire and the brightest this luminaire is projected to shine is 5.4 lumens over a parking space beneath the luminaire. All proposed lighting exceeds the lumen output allowable by FCC 10-37-4, which is a maximum of five (5) foot-candles over parking spaces and sidewalk areas.

Prior to obtaining electrical permits, the applicant shall provide a revised photometric report for lighting levels in all areas of the site. Maximum and minimum illumination levels shall conform to FCC 10-37-4-B. Additionally, the applicant shall provide information regarding the height at which the wall packs will be mounted. [Condition 10-1]

All exterior lighting, both parking and building are subject to the dark sky code provisions. This includes signage. Lighting is not proposed for the trash enclosure area located in the northeast area of the site, according to Sheet SP-01 in Exhibit C.

Signage Lighting: An attached sign is proposed for the store front, (Exhibit E). However, information has not been provided on the photometric plan and it is unknown if the signage is externally or internally illuminated. Furthermore, the photometric plan does not indicate lighting for the proposed monument sign located in the landscape island on the west side of the site near the driveway.

If signage lighting is proposed, the revised lighting plans shall provide information for the lighted pylon sign shown on the Site Plan in Exhibit C and the storefront sign shown in Exhibit D in accordance with FCC 10-37-4. [Condition 10-2]

Lighting—including signage lighting—shall be extinguished at the end of business hours except as needed for safety in accordance with FCC 10-37-4-D. [Condition 10-3]

TITLE 9: UTILITIES

TITLE 9: CHAPTER 5: STORMWATER MANAGEMENT REQUIREMENTS

9-5-3: STORMWATER DESIGN CRITERIA:

9-5-3-1: GENERAL:

A. The criteria in Section 9-5-3 shall be used in the design of public and private stormwater drainage and management systems. Stormwater management facilities shall be constructed in accordance with the Stormwater Manual: the 2008 Portland Stormwater Management Manual, as superseded by the December 2010 City of Florence Stormwater Design Manual; and the 2008 City of Portland Erosion and Sediment Control Manual.

The project's Stormwater Management Report, dated by Charlie Severs, P.E. for JSA Civil, explains that the existing drainage on site sheet flows from the north side to the south side of the site where it eventually is collected in catch basins. An infiltration rain garden with an overflow to below-grade storage (one connected system) is proposed. Stormwater overflow beyond the 25-year, 24-hour storm event will be collected in an overflow structure and connected to the city's stormwater conveyance system in 35th St. (Exhibit H).

The Geotechnical Report (Exhibit G) concludes that groundwater, generally, is approximately 8' below existing grades. Five (5') of separation between the bottom of the storm facilities and the groundwater elevation is feasible.

The Public Works Director, and Civil West, the City Engineer of record, have requested that prior to the issuance of public improvement permits, the "stormwater plans need to be in compliance with the City's stormwater design manual and stormwater management plans," (Exhibit L).

Prior to issuance of public improvement permits, the applicant shall revise the stormwater plan and any related site plans, so these meet Best Management Practices of the 2010 City of Florence Stormwater Design Manual and the 2008 City of Portland Erosion Sediment Control Manual per FCC 9-5-3-1. The revised materials shall contain dates and the Engineer's signature. Furthermore, the revisions should include a statement indicating that these designs achieve at least 70% removal of the Total Suspended Solids (TSS) from the flow entering the facility for the design storm specified in the Stormwater Manual per FCC 9-5-3-3A. [Condition 11-1]

The applicant submitted an Operations and Maintenance Agreement form included in Exhibit H and explains that this will be completed at a later date.

Prior to final building inspections, the applicant shall submit and obtain City approval of a completed Operations and Maintenance Agreement. The applicant shall bear the costs associated with having the Agreement recorded with Lane County. [Condition 11-2]

Note 14 of the preliminary site plan on Sheet SP-01, Exhibit C, refers to the rain garden as a storm retention pond. Both facilities are structured differently. The City's Stormwater Design Manual provides an explanation on rain garden and requirements beginning on page 28 of 49 of the Stormwater Design Manual. Within the submitted materials to the Planning Department, details are lacking regarding growing/filtering media (again, per the Stormwater Design Manual), construction and materials for the rain garden such as permeable linings.

Prior to final building inspections, the applicant shall resubmit stormwater facility typical drawings and other materials to reflect conformance with City of Florence standards for growing/filtering media. [Condition 11-3]

Stormwater rain gardens and accompanying underdrain facilities shall not be lined with impermeable materials. [Condition 11-4]

9-5-3-2: STORMWATER QUANTITY (FLOW CONTROL):

A. A 25-year, return period storm shall be used for the design of all private and public stormwater drainage systems.

The proposed stormwater drainage system will be privately owned and has been designed, according to page 5 of the Stormwater Report in Exhibit H, in accordance with the City's presumptive approach requirements.

The presumptive approach consists of designing to the 25-year, 24-hour storm stored and infiltrated. As discussed below, any overflow exceeding the 25-year, 24-hour event will be conveyed to a stormwater system located in the 35th St. right of way. A revised stormwater plan has been conditioned to ensure it meets the City's requirements discussed elsewhere. The report omitted to include Best Management Practices (BMPs) details that are supposed to be shown in Appendix B of the study; instead, Appendix B contains a basin map displaying proposed pervious and impervious areas on the site. Of note is that the pervious calculations on the basin map differ from the Landscape Plan (Exhibit E). The lot calculations used in the Stormwater Study (42,174 sq. ft., or .97818 acre) is slightly less square footage than the Landscape Plan's calculations. The Landscape Plan may have based its information from the land survey shown on Sheet SV-01 in Exhibit C which provided in Note 4 under a section labeled, '*ALTA/NSPS LAND TITLE SURVEY TABLE A SURVEY NOTES*' which offers that the gross land area is 43,418 sq. ft., or 1 acre. The difference between the figures totals 1,244 square feet.

This small discrepancy in lot size between the Landscape Plan and Stormwater Report may not be in issue. According to the Stormwater Report author, stormwater storage facility has been oversized. Specifically, the retention of stormwater from a 25-year, 24-hour storm event requires 3,500 cubic feet of storage and that 4,100 cubic feet of storage will be provided (p. 5). Appendix F of the report shows that during rainfall events as large as a 25-year storm, the estimated post-development total rainfall will be 5.05 inches, with a total runoff of 3.94 inches and peak runoff will be 0.93 cubic feet per second (cfs).

B. Onsite stormwater management facilities shall be required to prevent the post-development runoff rates from a project site from exceeding the pre-development runoff rates from the site, based on a 2 through 25-year storm. Exemptions to this requirement may be approved by the City Manager or his/her designee if it is determined that a more effective solution is available and that downstream capacity will accommodate the increase in flow.

Runoff rates are discussed under FCC 9-5-3-2 A.

C. Each new development project is responsible for mitigating its impacts on the stormwater system. This mitigation requirement can be satisfied through the use of any of the following techniques, subject to the other limitations identified by this Code:

1. **Construction of onsite facilities to limit the flow rate of stormwater runoff leaving the development site, in accordance with the Stormwater Manual.**
2. **Enlargement or improvement of the down gradient conveyance system in accordance with the requirements of this Code and the City of Florence Stormwater Management Plan.**

The applicant proposes mitigating the project's impacts via on-site facilities. Again, the applicant has been conditioned to revise the stormwater plans to align with the City's Stormwater Manual.

D. The development of any land requiring a Drainage Plan shall address onsite and off-site drainage concerns, both up gradient and down gradient (a minimum of 1/4-mile) of the project, including:

1. **Modifications to the existing onsite stormwater drainage and management facilities and drainage patterns shall not restrict or redirect flows creating backwater or direct discharge onto off-site property to levels greater than the existing condition unless approved by the affected off-site property owners and the City. Proof of off-site property owners approval shall be provided by having the affected property owner(s) sign an easement identifying the location of the backwater storage or impoundment area. This area shall be clearly shown on the submitted Drainage Plan site sheet(s). The easement shall be in a form approved by the City and recorded with the Lane County Deeds and Records Office.**
2. **Stormwater facilities shall be designed and constructed to accommodate all flows generated from the project property in accordance with the land use zoning as shown in the most recent approved City Code.**
3. **Capacity of the downstream drainage system to determine if increases in peak flow rates resulting from the proposed development can be accommodated.**

The applicant's stormwater report indicates that the development will not exacerbate water flow issues onto other properties. The facilities are designed to accommodate flow from the project property as required by this section. The site will only route water to downstream drainage systems during very large storms and only at rates less than or equal to the pre-development condition, meaning there will be no significant increase in peak flow rate to the public stormwater drainage system. These criteria are met.

E. The types of stormwater management controls presented in the Stormwater Manual are available for owners and developers to use in satisfying the pre-developed and post-development runoff requirement. More than one of these types of controls may be needed to satisfy the runoff requirement. In areas where the runoff requirement in Section 9-5-3-2-F are exempt or partially exempt, the City may require improvements to the down gradient conveyance system.

The project is required to calculate stormwater flows using the Presumptive Approach, which is detailed in the Stormwater Manual. No additional improvements are necessary to the down gradient conveyance system (the public storm drain located in the 35th St. ROW).

9-5-3-3: STORMWATER QUALITY:

- A. Stormwater management facilities to treat stormwater are required for certain types of projects. These water quality facilities shall be designed and constructed for all projects requiring a Drainage Plan and for other projects as required by this section. Stormwater management facilities required for development shall be designed, installed and maintained in accordance with the Stormwater Manual, which is based on achieving at least 70% removal of the Total Suspended Solids (TSS) from the flow entering the facility for the design storm specified in the Stormwater Manual.**
- B. Water quality facilities shall be designed and constructed for all projects requiring a Drainage Plan.**
- C. Projects located in the Zones of Contribution must have pre-treatment facilities prior to infiltration facilities as prescribed in the Stormwater Manual. When a wellhead protection plan is developed and adopted by the City, this specific requirement may be rescinded or modified by the City.**
- D. The water quality design storm shall be based on an intensity of 0.25 inches per hour, or 0.83 inches for a 24-hour SCS Type 1A rainfall return event.**
- E. Water quality facilities must be designed to prevent damage to the facility for flows exceeding the water quality design storm and to ensure no re-suspension of pollutants, consistent with the Stormwater Manual.**
- G. The types of stormwater management facilities presented in the Stormwater Manual are available for owners and developers to use in satisfying the stormwater quality requirement. More than one of these types of facilities may be required to satisfy this requirement.**

According to Exhibit H, the stormwater treatment methodology states that roof runoff and a portion of landscaping runoff north of the proposed building will be routed to a series of catch basins to an existing storm water system. This system is not shown for pre-development; only post development in Sheet UT-01 in Exhibit C, the Preliminary Grading and Stormwater Plan.

Exhibit C, Sheet UT-01 shows the design and location of the at-grade rain garden and infiltration facilities. The rain garden, as proposed, is to measure 3 feet in height from its bottom elevation and to be contained within two rows of stacked cement concrete ecology blocks measuring 2' wide, 2' tall and 40' long within a landscaped area east of the eastern parking lot and access isle. Parking lot and remaining landscaping runoff is to be conveyed to an at-grade infiltration rain garden located on the east side of the east parking lot, which is also shown on the same sheet. The below-ground infiltration facility would be located within the east parking stall area and measure 16' in width with variable depths of approximately 2'.

The Stormwater Report does not include drawings of these facilities. Lining and soil fill are not included in the rain garden proposal. Infiltration rates are not included.

In addition to the below-grade soakage trench and rain garden, other on-site rainwater is to be conveyed to a series of drainage basins that connect to the soakage trench. The survey provided in Exhibit C, Sheet SV-02 provides existing conditions yet on-site existing drainage is not shown as suggested in Exhibit H (the Stormwater Management Report). The wording under 'Methodology' on page 4 is confusing because the first sentence is not entirely clear on existing and proposed stormwater: The report states:

“The existing drainage on site sheet flows from the north side to the south side of the site where it eventually is collected in catch basins and directed to the existing storm water system. Roof runoff and a portion of landscaping runoff north of the proposed building will be routed to a below grade soakage trench. Parking lot and the remaining landscaping runoff will be conveyed to an at-grade infiltration rain garden.”

The first sentence gives the reader the impression that there are existing catch basins that convey stormwater to the 35th St. stormwater system. According to this same exhibit, any stormwater overflow beyond the 25-year, 24-hour storm event is to be collected in an overflow structure and connected to the city's stormwater conveyance system in 35th Street.

Stormwater management facilities required for development shall be designed, installed and maintained in accordance with the Stormwater Manual, which is based on achieving at least 70% removal of the Total Suspended Solids (TSS) from the flow entering the facility for the design storm specified in the Stormwater Manual. At this time, it is unknown if at least 70% of the TSS from the flow entering the stormwater facilities has been achieved. A revised Stormwater plan has been conditioned.

9-5-4: MAINTENANCE RESPONSIBILITY:

- A. Private stormwater facilities must be maintained in accordance with the Operations and Maintenance Plan approved as part of the Drainage Plan. The Operations and Maintenance Agreement will be recorded with the Lane County Deeds and Records Office. The Stormwater Manual contains the Operations and Maintenance Agreement Form to be used. A log of all maintenance activity shall be kept by the owner and made available to the City upon request. The City may, at its option, inspect the facilities for compliance with the requirements. If a property owner fails to maintain their facilities, the City may issue a written notice specifying the required actions. If corrective actions are not completed in a timely manner, the City may pursue legal remedies to enforce the provisions of the Operations and Maintenance Plan. The City will only enter the property to perform the required FLORENCE CITY CODE TITLE 9 12 STORMWATER MANAGEMENT UTILITY 9-5 corrections if the public's health and public property are in imminent danger. In this situation, reasonable attempts will be made to contact the property owner(s), but a written notice may not be required. The property owner(s) will be billed for City incurred expense.**

- B. The Maintenance Agreement shall provide that upon notification by the City of any violation, deficiency or failure to comply with the agreement or this Code, corrections shall be completed within ten (10) days after notice thereof.**

Thereafter the City may pursue legal action to enforce the provisions of the agreement. In an emergency situation, the City may provide for all necessary work to place the facility in proper working conditions. The persons specified as responsible for maintenance in the Maintenance Agreement shall be charged the costs of the work performed by the City or its agents.

A draft Operations and Maintenance Agreement has been provided and a completed agreement has been conditioned prior to final building inspections.

REALIZATION 2020, FLORENCE COMPREHENSIVE PLAN

Chapter 2: Land Use

Commercial

Goal: To utilize appropriately designated land for the development of commercial businesses and establishments in a manner that provides for the needs and desires of the Florence resident, tourist, and regional marketplace while enhancing the attractive nature of this coastal community.

Policies

- 9. Commercial facilities along highways and arterials shall be designed to avoid congestion through alternative local street access or consistent with the City's access management guidelines found within its Transportation System Plan.**

The proposal is consistent with this policy. The proposal includes a shared highway access point with Burger King and that access has been restricted to right-in/right-out only to reduce potential congestion and traffic conflicts. ODOT has expressed support for this highway access strategy prior to the construction of Burger King. No local streets are available for access, but access to 35th Street (a collector) has been discussed in review of FCC 10-35.

Chapter 12: Transportation

Goal 6: To provide a balanced transportation system that provides options for meeting the travel needs of all modes of transportation.

Policies

- 13. Streets, bikeways and walkways shall be designed to meet the needs of pedestrians and cyclists to promote safe and convenient bicycle and pedestrian circulation within the community. To promote bicycling and walking, marked bicycle lanes and sidewalks are required on all arterial and collector streets (other than those collectors identified as scenic drives) when those streets are newly constructed, reconstructed, or widened to provide additional vehicular capacity. For collector streets that are identified as scenic drives, provision shall be made to adequately accommodate bicycles and pedestrians when those streets are newly**

constructed, reconstructed, or widened to provide additional vehicular capacity.

- **Development shall provide adequate on-site circulation for vehicles, buses, bicycles, and pedestrians and shall provide off-site transportation improvements necessary to ensure that the incremental demands placed on the transportation system by the development are met.**

The proposal is consistent with this policy with the addition of conditions of approval. The requirements for pedestrian facilities such as the striped crosswalk, which can double as a method for bicyclists to walk their bicycles to the racks, creates a connection to Highway 101, allows for safe access to Burger King to the south indirectly through use of the highway sidewalk and reduces potential conflicts between vehicular and pedestrian traffic on the site.

- 29. The City shall notify ODOT and Lane County of all major development proposals which will generate more than 50 trips during an average peak hour, or more than 500 daily trips, or which require a traffic study.**

ODOT was duly notified of the application, and the applicant had been in contact with ODOT for the review of a change of use proposal specifically for the access drive on Highway 101. The TIA (Exhibit I) estimates that this development will generate approximately 47 trips during the PM peak hour and a daily average 447 total trips. ODOT supplied referral comments after reviewing the TIA (Exhibit K) as discussed above. Lane County was not notified simply because FCC 10-35-24 states that the access authority requires an access permit. In this instance, ODOT and the City's roadways are involved; not Lane County's.

VI. CONCLUSION—Planning Commission decision at the conclusion of the hearing

The proposed application meets the requirements of City Code subject to conditions.

OR—

The proposed application does not meet the requirements of City Code and is denied.

VII. INFORMATIONALS

1. Sign permits are required from the Florence Building Department for signage on the site per the requirements of FCC 4-7.
2. At the request of SVFR Chief Schick, the applicant shall provide a key box placed on the exterior of the store.
3. As part of the building permit review process, fire flow analyses, hydrant plans, and water service details shall be subject to review and approval by the Building Official and Fire Marshal.
4. Per FCC 10-37-4 E., lighting shall be reviewed during a 30-day review period following the issuance of a Certificate of Occupancy. Should the proposed lighting

not meet the requirements of FCC 10-37, staff may require the lighting to be adjusted.

5. FCC Title 4: Building Regulations, Chapter 1 Section 15-3 (Securing Loose, Open or Raw Sand) requires a Sand Management Plan for all construction projects that could negatively impact traffic safety or damage adjacent properties. The applicant will be required to provide such plan to the Building Department and Public Works as required of this Chapter in accordance with the *2008 City of Portland Erosion and Sediment Control Manual*.

VIII. EXHIBITS

“A”	Findings of Fact
“B”	Application and Applicant Response to NOIC
“C”	Site Plan Materials
“D”	Site Plan Materials
“E”	Landscape Plan
“F”	Phase 1 SIR Application
“G”	Geotechnical Report
“H”	Stormwater Management Report
“I”	Traffic Impact Analysis
“J”	Lighting Plans and Products
“K”	ODOT Referral Comments on TIA
“L”	Public Works/ Civil West Referral Comments
“M”	CTCLUSI Referral Comments
“N”	Lumen Referral Comments
“O”	SVFD Referral Comments

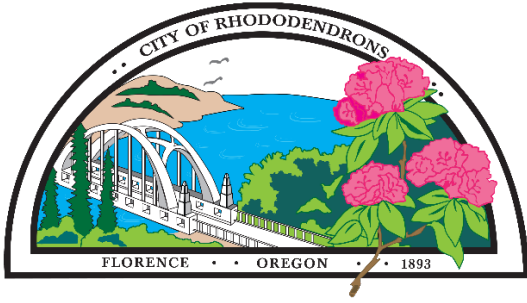


Exhibit B

250 Highway 101
Florence, OR 97439
Phone: (541) 997 - 8237
Fax: (541) 997 - 4109
www.ci.florence.or.us

Type of Request

THIS SECTION FOR OFFICE USE ONLY

Type I Type II Type III Type IV

Proposal: _____

Applicant Information

Name: Capital Growth Buchalter, Inc. | Attn: Mr. Kirk Farrelly, PE Phone 1: 205-263-4589

E-mail Address: kfarrelly@cgpre.com Phone 2: _____

Address: 361 Summit Blvd, Suite 110, Birmingham, AL 35243

Signature: *James Kirk Farrelly* Date: 6/8/2023

Applicant's Representative (if any): JSA Civil, LLC | Representatives: Charlie Severs, PE (Engineer of Record) and Nick Wheeler

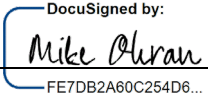
Property Owner Information

Name: Ohran Properties Oregon 101 LLC Phone 1: _____

E-mail Address: _____ Phone 2: _____

Address: PO Box 61, Emmett, ID 83617

Signature: *Mike Ohran* Date: 6/12/2023



Applicant's Representative (if any): _____

NOTE: If applicant and property owner are not the same individual, a signed letter of authorization from the property owner which allows the applicant to act as the agent for the property owner must be submitted to the City along with this application. The property owner agrees to allow the Planning Staff and the Planning Commission onto the property. Please inform Planning Staff if prior notification or special arrangements are necessary.

For Office Use Only:

Received

Approved

Exhibit

Property Description

Site Address: 0 Oregon Coast Highway Florence, OR (no address assigned)

General Description: Subject site is a +/- 1.0-acre vacant lot fronting Oregon Coast Hwy (US-101). A portion of the site contains an existing driveway off US-101 providing access to the Burger King restaurant to the south.

Assessor's Map No.: _ 181 _ 223 _ 22 Tax lot(s): 18-12-23-22-06800-0000

Zoning District: Highway District (H)

Conditions & land uses within 300 feet of the proposed site that is one-acre or larger and within 100 feet of the site that is less than an acre OR add this information to the off-site conditions map (FCC 10-1-1-4-B-3): Adjacent uses include a commercial restaurant facility (Chen's) to the north, single-family residential homes to the east, a commercial fast food restaurant with drive-thru (Burger King) to the south, and U.S. HWY 101 to the west.

Project Description

Square feet of new: +/- 32,600 sf total impervious Square feet of existing: 0

Hours of operation: 8 am - 10 pm Existing parking spaces: 0

Is any project phasing anticipated? (Check One): Yes No

Timetable of proposed improvements: Construction February 2024 - July 2024 (estimated).

Will there be impacts such as noise, dust, or outdoor storage? Yes No

If yes, please describe: During construction, noise will be created from heavy equipment and contractor's tools. Work will be limited to typical daytime hours (or as required by City Code) to reduce noise impacts. At completion, noise will be created from traffic entering/exiting the Dollar General store but is anticipated to be minor.

Proposal: (Describe the project in detail, what is being proposed, size, objectives, and what is desired by the project. Attach additional sheets as necessary)

Project proposes construction of a new +/- 10,640 sq. ft. single-story Dollar General retail facility including an on-site parking lot, underground utilities, perimeter landscaping, and below-grade stormwater facilities +/- 1.0-acres. The subject site is currently vacant and fronts Oregon Coast Hwy (US-101) to the west. The existing Burger King driveway off US-101 will be utilized as a shared access to serve the Dollar General and Burger King facilities; a secondary access will be extended north from 35th Street within an easement through the Burger King property to serve the Dollar General store.

For Office Use Only:

Date Submitted: _____ Fee: _____

Received by: _____

Paid

September 6, 2023

Ms. Clare Kurth, Assistant Planner
City of Florence
250 HWY 101
Florence, OR 97439

Re: **Land Use Review PC 23 08 DR 02**
Florence, OR Dollar General
Response to Notice of Incompleteness Comments

Dear Ms. Kurth,

Thank you for providing the City's Land Use Application PC 23 08 DR 02 notice of incompleteness review comments dated July 20, 2023. Please find the City's comments repeated below with JSA Civil's responses bulleted beneath each in blue.

- **FCC 10-3: Off-Street Parking and Loading**
 - **10-3-01:** Minimum parking by use is 31 parking spaces
 - $10640 / 333 = 31.95$ spaces (rounded down) 31 parking spaces required.
 - 32 spaces provided. Please correct sheet LS-01 for consistency.
 - Sheet SP-01 indicates 32 parking stalls provided
 - LS-01 indicates 23 parking stalls provided
 - Sheet SP-01 has been revised to include 31 parking spaces. LS-01 has been updated to match the number of stalls provided.
 - **10-3-5-E:** Please provide examples of all ADA accessible parking signage on the parking plan.
 - ADA signage has been added to the parking plan.
 - **10-3-8-L:** Please provide a complete parking lot plan. Items that appear to be missing include:
 - Specifications for signs
 - Specification on bumper guards or curb dimensions
 - Cement concrete curb is included on CG-01 Legend. Please include dimension.
 - Specification of curb cut dimensions, both Hwy and adjacent properties if applicable.
 - Site illumination does not meet code. If parking lot lights are proposed to meet minimum illumination levels please include specifications of location, height, and fixtures on sheet SP-01 and the photometric plan.
 - Sign and wheel stop details have been added. Additional dimensioning has been provided. Site illumination has been revised. See revised documents.
 - **10-3-9:** ADA parking spaces meet criteria of FCC 10-3-5 for minimum required, but do not meet minimum dimensions of FCC 10-3-9 for minimum parking stall dimension.
 - Please provide updated parking plan indicating minimum parking stall dimensions for ADA spaces

- ADA parking dimensions meet national standards.
- **10-3-10:** Please review bicycle parking standards for visibility, security, and location
 - Current location does not meet code criteria.
 - Bicycle parking has been relocated to the front parking lot area. See SP-01 for additional information.
- **FCC 10-6: Design Review**
 - **10-6-7:** Require architectural detailing from 10-6-6-3 and 3 of the 6 architectural features listed in subsection B of this section.
 - Options from subsection B: 1) Covered front entrance, 2) Windows, 3) Pedestrian shelters, 4) Eaves, 5) Decorative top, 6) Awnings and canopies.
 - Architectural details included on exterior elevation drawings: 1) Windows, 2) Decorative top, 3) Awnings and canopies.
 - Please ensure these meet code requirements.
 - Please provide list of materials to be used on exterior building
 - Depth of the stone veneer
 - Width of the window and door trims
 - Materials used for trim and veneer
 - Please provide exterior elevations drawn to scale
 - Include measurements and material details of awnings
 - Extending not less than 30% of the elevation
 - Windows to be not less than 30% of street facing elevations.
 - Please provide % of windows on street facing elevations
 - See revised building elevations and color renderings.
 - **10-6-6-3:** Provide scale drawings and measurements of breaks in elevation
 - Also provide dimensions of signs. FCC 4-7 permits no more than 6% of elevation square footage for sign size.
 - See revised building elevations and color renderings.
- **FCC 10-34: Landscaping:**
 - **10-34-3-2:** Please provide a landscaping plan that meets code criteria
 - Please provide number of each species proposed and location to be planted.
 - Please provide proposed planting schedule and soil specifications at time of planting
 - See revised landscaping plans.
 - **10-34-3-3:** Minimum landscaping area is 15%. Sheet LS-01 states minimum lot coverage at 15%, but incorrectly states this requirement at 4,323 sq. ft.
 - Please correct minimum lot coverage requirement.
 - See revised landscaping plans.
 - **10-34-3-6:** Please specify landscape area(s) to be counted towards landscape “islands”
 - Parking plan states 32 parking spaces provided, landscaping states 23.
 - Please correct landscaping plan for consistency with parking requirements
 - Please verify that all criteria are met:

- A) 10 sq ft per parking space provided, B) Landscape islands to be evenly distributed where practical, C) minimum 30 sq. ft. each with min. 5-foot dimension on any side, D) Irrigation required, E) Living plant material to cover min. 70% in 5 years, F) Plant selection for vision clearance.
 - [See revised landscaping plans.](#)
 - **10-34-4:** Please provide species of “Street Trees”
 - Please specify the species of street trees to be planted.
 - Recommended Tree and Plant List enclosed
 - [See revised landscaping plans.](#)
 - **10-34-5:** Please provide the fence height for trash enclosure.
 - [Fence will be 6’ tall. See revised civil plans.](#)
- **FCC 10-35: Access and Circulation:**
 - **10-35-2-4:** ODOT access permit is required due to property’s direct access to Hwy 101.
 - Please complete the access permit with ODOT and submit to the application to the City as part of this design review process.
 - The access permit can be processed concurrent with this land use review.
 - [An ODOT Access Permit application has been included with the resubmittal documents.](#)
 - **10-35-3-3-C:** All pedestrian walkways are required to be a minimum 5 feet in width (Also see 10-34-3-7-B)
 - Please provide revised site plan indicating all pedestrian walkways meeting minimum width.
 - [Site plan has been revised to meet minimum width requirements.](#)
- **FCC 10-37: Lighting:**
 - **10-37-3:** Please provide specifics and details (illustrations and descriptions) of lighting fixtures to be used.
 - **10-37-4-A** Light fixtures to be full-cut off
 - [See revised lighting plan.](#)
 - **10-37-4-B:** A lighting plan including photometric was provided, but does not meet code criteria
 - Parking areas standards are 2-foot candles (fc) minimum and 5 fc maximum.
 - Footcandles in the parking areas range from 0.2 to 9.9-fc
 - Both exceeding maximum foot candles and below minimum
 - Please provide photometric plan that meets illumination requirements and/or request exceptions in accordance with 10-37-4-B.
 - [See revised lighting plan.](#)
 - **10-37-4-C:** Please provide specifics and details of any parking lot lighting height.
 - Maximum height from average grade to top of fixture is 20 feet.
 - [See revised lighting plan.](#)
- **FCC 9-5:** Stormwater Management & [Stormwater Design Manual](#)

- Vegetative infiltration is the BMP of choice. Soakage trenches are a structural facility. (p. 2)
 - 3.4.4 states that in a hardship up to 50% of the run-off may be treated with non-vegetated facilities. (p. 9)
 - Section 5 states soakage trenches are a Simplified design approach. (p. 18)
 - Non-residential soakage trench use must be pre-approved and if granted then sized for Presumptive Approach. (p. 33)
 - Section 5.7 states soakage trenches require pollution reduction facilities unless residential roof drains. (p. 33)
 - Other than residential roof run-off 10' separation is required from the bottom of the trench to the top of the high groundwater. (p. 34)
- A vegetative infiltration facility is included with the revised documents. Additional below-grade storage is required to meet the city's storm requirements, which is hydraulically connected to the vegetative facility.

If you have any questions regarding the comment responses provided, please contact me directly at charlie.severs@jsa-civil.com or 360.515.9600.

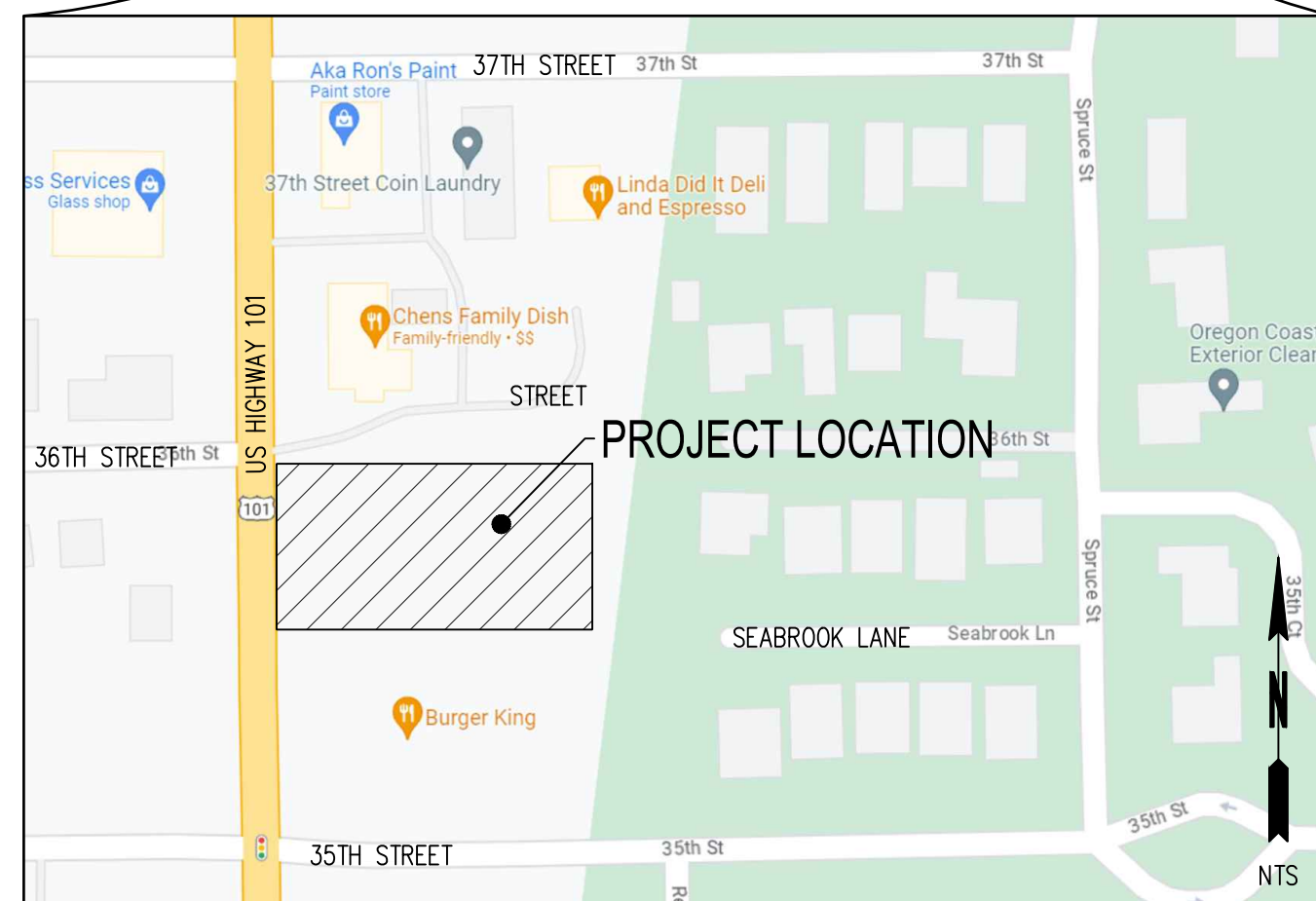
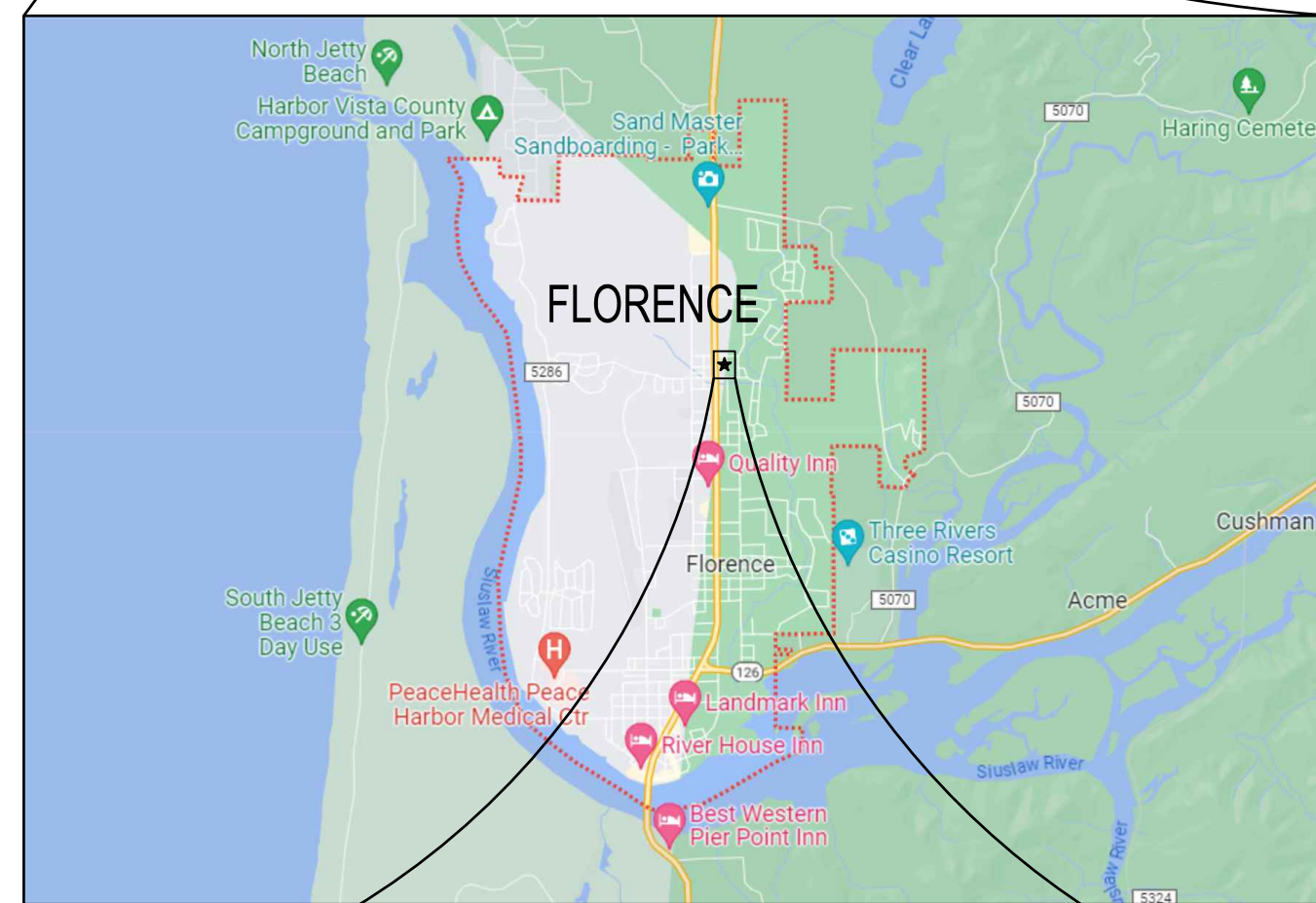
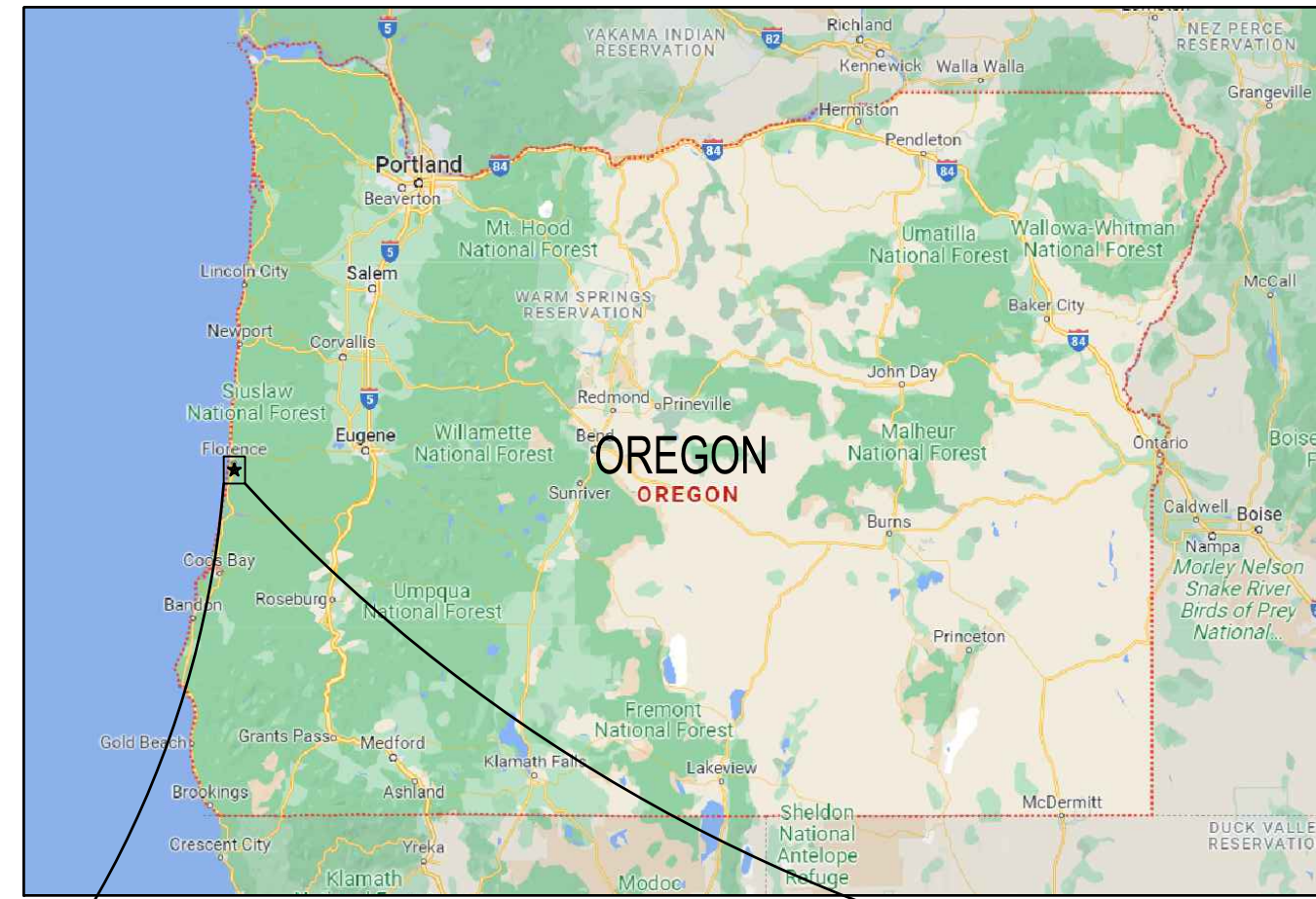
Respectfully,



Charlie Severs, PE
Principal
JSA Civil, LLC

DOLLAR GENERAL CIVIL SITE PLAN REVIEW DOCUMENTS FLORENCE, OR

Exhibit C



APPLICANT

CAPITAL GROWTH BUCHALTER, INC.
361 SUMMIT BLVD, SUITE 110
BIRMINGHAM, AL 35243
PHONE: 205.263.4589
CONTACT: KIRK FARRELLY

ENGINEER

JSA CIVIL, LLC
111 TUMWATER BLVD SE, SUITE C210
TUMWATER, WA 98512
PHONE: 360.515.9600
CONTACT: CHARLIE SEVERS

ARCHITECT

NWS ARCHITECTS INC.
CHADHA+ASSOCIATES
200 WEST MONROE ST, SUITE 2070
CHICAGO IL, 60606
PHONE: 312.332.2062
CONTACT: YESENIA FLORES

LANDSCAPE ARCHITECT

SCJ ALLIANCE
8730 TALLON LANE NE, SUITE 200
LACEY, WA
PHONE: 360.352.1509
CONTACT: JEFF GLANDER

GEOTECHNICAL

GN NORTHERN, INC.
81006 US-395
HERMISTON, OR 97838
PHONE: 541.564.0991
CONTACT: KARL HARMON

SURVEYOR

MTN2COAST, LLC
2320 MOTTMAN ROAD SW, SUITE 106
TUMWATER, WA 98512
PHONE: 360.688.1949
CONTACT: BLAIR PRIGGE

GOVERNING AGENCY

CITY OF FLORENCE
PHONE: 541.997.3437

UTILITIES

WATER/SEWER
CITY OF FLORENCE PUBLIC WORKS
PHONE: 541.997.4109

POWER
CENTRAL LINCOLN PUD
PHONE: 877.264.3211

SITE INFORMATION

ADDRESS: US HIGHWAY 101
PARCEL: 1812232206800
ACRES: ±1.0
ZONING: H - HIGHWAY

LEGAL DESCRIPTION

SEE ALTA SURVEY

HORIZONTAL DATUM

OREGON STATE PLANE COORDINATES, SOUTH ZONE, NAD 83/2011 BASED ON GPS TIES TO LANE COUNTY MONUMENT B8GV26.

VERTICAL DATUM

NAVD 88 BASED ON GPS TIES TO LANE COUNTY MONUMENT B8GV26, ELEVATION OF 50.19.

SHEET INDEX

SHEET	TITLE
CV-01	COVER SHEET
SV-01	TOPOGRAPHIC SURVEY
SV-02	TOPOGRAPHIC SURVEY
SP-01	PRELIMINARY SITE PLAN
CG-01	PRELIMINARY GRADING & STORMWATER PLAN
UT-01	PRELIMINARY WATER & SEWER PLAN

REVISIONS

PROJECT NO:
152.001

DRAWN
S. JANIK

CHECKED
C. SEVERS

SUBMITTAL DATES

OTB DATE

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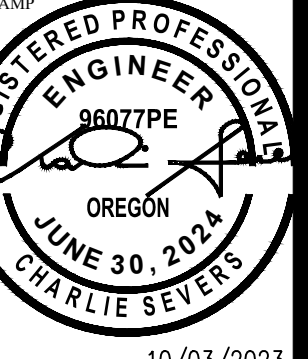
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JSA CIVIL
 Engineering | Planning | Management
 111 TUMWATER BLVD SE, SUITE C210
 TUMWATER, WA 98501



10/03/2023

FLORENCE, OR DOLLAR GENERAL
 COMMERCIAL DEVELOPMENT PROJECT
 US HIGHWAY 101
 FLORENCE, OR



SHEET TITLE

COVER SHEET

SHEET

CV-01

DEWATERING NOTE

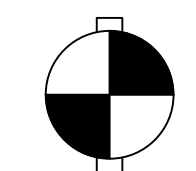
THE CONTRACTOR SHALL UTILIZE APPROPRIATE DEWATERING SYSTEMS AND TECHNIQUES TO MAINTAIN THE EXCAVATED AREA SUFFICIENTLY DRY FROM GROUNDWATER AND/OR SURFACE RUNOFF SO AS NOT TO ADVERSELY AFFECT CONSTRUCTION PROCEDURES OR CAUSE EXCESSIVE DISTURBANCE OF UNDERLYING NATURAL GROUND. THE CONTRACTOR SHALL REPAIR ANY DAMAGE RESULTING FROM THE FAILURE OF THE DEWATERING OPERATIONS OR FROM A FAILURE TO MAINTAIN ALL THE AREAS OF WORK IN A SUITABLE DRY CONDITION. UNLESS OTHERWISE SPECIFIED, CONTINUE DEWATERING UNINTERRUPTED UNTIL THE STRUCTURES, PIPES, AND APPURTENANCES TO BE BUILT HAVE BEEN PROPERLY INSTALLED, BACKFILLED, AND COMPACTED. WHERE SUBGRADE MATERIALS ARE UNABLE TO MEET THE SUBGRADE DENSITY REQUIREMENTS DUE TO IMPROPER DEWATERING TECHNIQUES, REMOVE AND REPLACE THE MATERIALS AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL NOTE

THE CONTRACTOR SHALL PROVIDE ALL FLAGGERS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES AS NECESSARY TO COMPLETE THE WORK. THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL CONSTRUCTION SIGNS, WARNING SIGNS, DETOUR SIGNS, AND OTHER TRAFFIC CONTROL DEVICES NECESSARY TO WARN AND PROTECT THE PUBLIC AT ALL TIMES FROM INJURY OR DAMAGE AS A RESULT OF THE CONTRACTOR'S OPERATIONS THAT MAY OCCUR IN HIGHWAYS, ROADS, OR STREETS. NO WORK SHALL BE DONE ON OR ADJACENT TO THE ROADWAY UNTIL ALL NECESSARY SIGNS AND TRAFFIC CONTROL DEVICES ARE IN-PLACE. THE CONTRACTOR SHALL NOT CLOSE DOWN THROUGH TRAFFIC ON CITY/COUNTY/STATE ROADS. ACCESS FOR BOTH VEHICULAR AND PEDESTRIAN TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, EXCEPT WHERE THE CONTRACTOR OBTAINS PERMISSION TO TEMPORARILY CLOSE A SIDEWALK. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO CITY OF FLORENCE & ODOT FOR REVIEW AND APPROVAL PRIOR TO STARTING ANY WORK IN THE RIGHT-OF-WAY.

CALL BEFORE YOU DIG

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

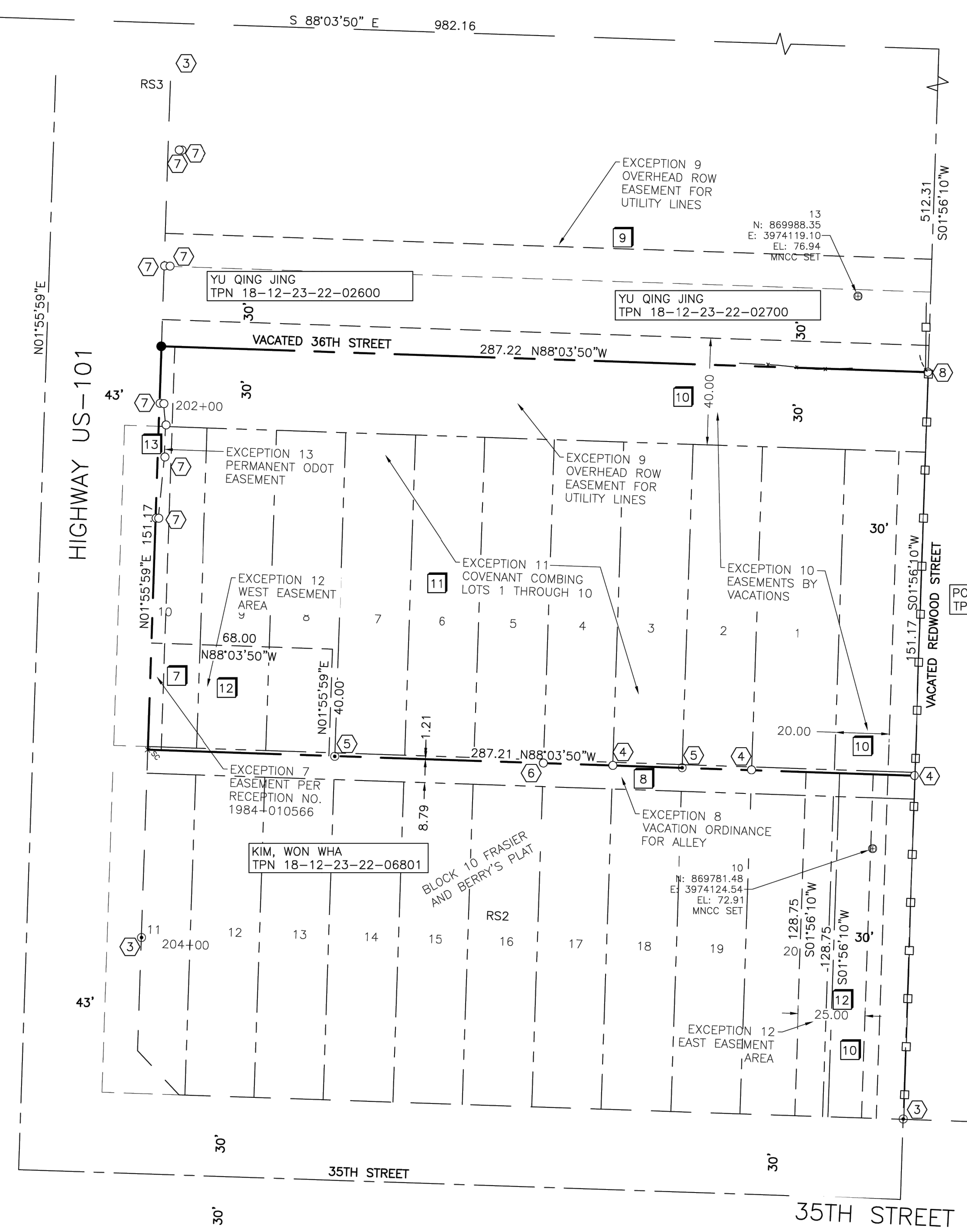


VERTICAL DATUM
NAVD 88

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22 23

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5,305.82

22 23
27 26



LEGAL DESCRIPTION

(LEGAL DESCRIPTION PER CASCADE TITLE COMPANY PRELIMINARY TITLE REPORT NO. 0337881:)

LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, AND 10, BLOCK 10, PLAT OF FRASIER AND BERRY'S PART OF THE CITY OF FLORENCE, AS PLATTED AND RECORDED IN BOOK 2, PAGE 1, LANE COUNTY OREGON PLAT RECORDS, IN LANE COUNTY, OREGON;

ALSO THAT PORTION OF VACATED 36TH STREET AND VACATED REDWOOD STREET (FORMERLY BERRY STREET) ADJOINING THE HEREIN ABOVE DESCRIBED LAND AND INURING THERETO AS VACATED BY RESOLUTION NO. 16, SERIES 1997, RECORDED MAY 29, 1997, RECEPTION NO. 9736101, LANE COUNTY OFFICIAL RECORDS, IN LANE COUNTY, OREGON;

EXCEPT THEREFROM THE SOUTHERN 3.79 FEET OF VACATED REDWOOD STREET (FORMERLY BERRY STREET) THAT INURES TO LOT 1, BLOCK 10, PLAT OF PLAT OF FRASIER AND BERRY'S PART OF THE CITY OF FLORENCE, AS PLATTED AND RECORDED IN BOOK 2, PAGE 1, LANE COUNTY OREGON PLAT RECORDS, IN LANE COUNTY, OREGON;

ALSO THAT PORTION OF THE VACATED ALLY ADJOINING THE HEREIN DESCRIBED LAND AND INURING THERETO AS VACATED BY RESOLUTION NO. 17, SERIES 1996, RECORDED DECEMBER 6, 1996, RECEPTION NO. 9681557, LANE COUNTY OFFICIAL RECORDS, IN LANE COUNTY, OREGON;

EXCEPT THEREFROM THE SOUTHERN 3.79 FEET OF THE NORTH ONE-HALF OF SAID VACATED ALLY, IN LANE COUNTY, OREGON.

EXCEPT THEREFROM THAT PORTION DESCRIBED IN WARRANTY DEED TO THE STATE OF OREGON, BY AND THROUGH ITS DEPARTMENT OF TRANSPORTATION RECORDED MARCH 20, 1984, RECEPTION NO. 8410566, LANE COUNTY OFFICIAL RECORDS, IN LANE COUNTY, OREGON.

PORTER LINDELIN FAMILY TRUST
TPN 18-12-23-22-09100

LEGEND (MONUMENTS)

- BRASS CAP
- + PK NAIL
- REBAR AND CAP AS NOTED
- ⊙ REBAR AND CONROL CAP
- ⦿ REBAR WITHOUT CAP
- SET 5/8" REBAR WITH ORANGE CAP MARKED "PRIGGE 38985"
- +SC SET SCRIBE ON CONCRETE
- RSx REFERENCE SURVEY NO.
- CSN COUNTY SURVEY NO.

NARRATIVE

MTN2COAST, LLC WAS RETAINED TO SURVEY TAX LOT #6800 ASSESSORS MAP NO. 18 12 23 2 2. WE ESTABLISHED THE BOUNDARIES BY RETRACING SURVEY COMPLETED BY WOBBER, CSN 45252. ALL CORNERS MATCHED HIS SURVEY AND TIES TO THE SECTION CORNERS WELL. FOUND ODOT MARKERS AT THE CORNERS OF EASEMENT EXCEPTION NO. 13. NO SURVEY FOUND IN THE RECORD FOR THESE MONUMENTS.

EXCEPTION ABBREVIATIONS

- S - SHOWN ON SURVEY
- N - NOT SURVEYABLE
- A - AFFECTS PART OF THE SITE
- B - COVERS ENTIRE SITE
- DN - DOES NOT AFFECT SITE
- AS - ADJACENT SURVEYS
- NS - NOT SHOWN ON MAP

TITLE EXCEPTIONS FROM CASCADE TITLE COMPANY, COMMITMENT NO. 0337881, DATED DECEMBER 12, 2022

SCHEDULE B EXCEPTIONS 1 THROUGH 5 AND SPECIAL EXCEPTION 6 AND 14 ARE GENERAL EXCEPTIONS AND ARE NOT APPLICABLE TO SURVEY.

- S 7. PERMANENT EASEMENT INCLUDING THE TERMS AND PROVISIONS THEREOF;
GRANTEE: STATE OF OREGON DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION
PURPOSE: OREGON STATE HIGHWAY RIGHT OF WAY
RECORDING DATE: MARCH, 20 1984
RECEPTION NO.: 1984-010566
AREA AFFECTED: SAID PREMISES
SURVEYORS NOTE: A STRIP OF LAND 43' IN WIDTH LYING ON THE EASTERLY SIDE OF THE CENTER LINE OF THE OREGON COAST HIGHWAY.
- S 8. EASEMENT INCLUDING THE TERMS AND PROVISIONS THEREOF;
GRANTEE: STATE OF OREGON
PURPOSE: UTILITIES, IF ANY, OVER AND ACROSS
RECORDING DATE: DECEMBER 6, 1996
RECEPTION NO.: 1996-081557
AREA AFFECTED: SAID PREMISES
SURVEYOR'S NOTE: 10' WIDE ALLEY RUNNING EAST AND WEST BETWEEN 35TH AND 36TH STREETS, HIGHWAY 101, AND SPRUCE STREET. NO EASEMENT RESERVATION INCLUDED IN VACATION.
- S 9. EASEMENT INCLUDING THE TERMS AND PROVISIONS THEREOF;
GRANTEE: CENTRAL LINCOLN PEOPLE'S UTILITY DISTRICT
PURPOSE: OVERHEAD ELECTRIC POWER AND COMMUNICATIONS LINES
RECORDING DATE: MAY 22, 1997
RECEPTION NO.: 1997-034853
AREA AFFECTED: SAID PREMISES
SURVEYOR'S NOTE: 10' WIDE EASEMENT OVERHEAD POWER LINES TO PLACE, CONSTRUCT, OPERATE, AND MAINTAIN, INSPECT, RECONSTRUCT, REPAIR, REPLACE, AND KEEP CLEAR. DESCRIPTION MAY BE WRONG AS IT DOESN'T FALL ON PROPERTY THE WAY IT IS DESCRIBED.
- S 10. EASEMENT AND THE TERMS AND PROVISIONS THEREOF;
GRANTEE: CITY OF FLORENCE
PURPOSE: UTILITIES, IF ANY, OVER, UNDER AND ACROSS
RECORDING DATE(S): MAY 29, 1997, JUNE 25, 1997, AND MARCH 30, 1998
RECEPTION NO(S): 1997-036101, 1997-042718, AND 1998-022492
AREA AFFECTED: SAID PREMISES
SURVEYOR'S NOTE: TWO 20' WIDE STRIPS RUNNING NORTH AND SOUTH ALONG THE WESTERLY AND EASTERLY EDGES OF THE REDWOOD RIGHT OF WAY AND THE SOUTH 40' OF 36TH STREET RIGHT OF WAY.
- B 11. COVENANT, INCLUDING THE TERMS AND PROVISIONS THEREOF, FOR THE GOOD AND SAFETY OF THE PUBLIC, IN COMPLIANCE WITH THE BUILDING AND PLANNING REGULATIONS OF THE CITY OF FLORENCE.
RECORDING DATE: SEPTEMBER 02, 2020
RECEPTION NO.: 2020-049434
- S 12. EASEMENT INCLUDING THE TERMS AND PROVISIONS THEREOF;
GRANTEE: AMBROSIA QSR OREGON, LLC
PURPOSE: PRIVATE ACCESS EASEMENT AND MAINTENANCE AGREEMENT
RECORDING DATE: DECEMBER 23, 2020
RECEPTION NO.: 2020-076013
AREA AFFECTED: SAID PREMISES
- S 13. PERMANENT EASEMENT INCLUDING THE TERMS AND PROVISIONS THEREOF;
GRANTEE: STATE OF OREGON DEPARTMENT OF TRANSPORTATION
PURPOSE: CONSTRUCT, RECONSTRUCT, REPAIR, AND MAINTAIN A PUBLIC HIGHWAY AND ITS APPURTENANCES AND FACILITIES, AND ALSO TO CONSTRUCT AND MAINTAIN WATER, GAS, ELECTRIC AND COMMUNICATION SERVICE LIES, FIXTURES, AND FACILITIES, AND APPURTENANCES THEREFORE, UPON, OVER, UNDER, AND ACROSS
RECORDING DATE: APRIL 14, 2021
RECEPTION NO.: 2021-025809

ALTA/NSPS LAND TITLE TABLE A SURVEY NOTES

COMMITMENT FOR TITLE INSURANCE BY CASCADE TITLE COMPANY, COMMITMENT NO. 0337881, DATED DECEMBER 22, 2022.

1. MONUMENTS PLACED OR FOUND AT ALL MAJOR CORNERS OF THE BOUNDARY OF THE PROPERTY ARE SHOWN ON MAP.
2. UNASSIGNED, NO ADDRESS PROVIDED.
3. ACCORDING TO FEMA FIRM MAP 41039C0938G DATED 06/05/2020, THE PROPERTY LIES IN FLOOD ZONE "X", AREA OF MINIMAL FLOOD HAZARD.
4. GROSS LAND AREA: 43418 SQUARE FEET. 1.00 ACRES.
5. VERTICAL RELIEF, SEE CONTOURS ON MAP (SEE SV-2).
6. ZONING 200, COMMERCIAL VACANT. ZONING REPORT NOT PROVIDED BY CLIENT.
7. NO BUILDINGS AT GROUND LEVEL.
9. NO PARKING SPACES DESIGNATED ON SITE.
11. LOCATION OF UTILITIES SHOWN ON MAP (ALSO SEE UTILITY NOTE ON SV-2).
13. NAMES OF ADJOINING OWNERS ACCORDING TO LANE COUNTY DATABASE SHOWN ON SV-1.

CERTIFICATION

TO: CAPITAL GROWTH BUCHALTER, INC.
CASCADE TITLE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6(A), 7(A), 9, 11(B), AND 13 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED IN MARCH 2023.

DATE OF PLAT OR MAP: MARCH 28, 2023.

Blair E Prigge
BLAIR E PRIGGE, PLS 38985

DATUM

HORIZONTAL - OREGON STATE PLANE COORDINATES, SOUTH ZONE, NAD 83/2011 BASED ON GPS TIES TO LANE COUNTY MONUMENT BBGV26.

VERTICAL - NAVD 88 BASED ON GPS TIES TO LANE COUNTY MONUMENT BBGV26, ELEVATION OF 50.19.

MONUMENT NOTES

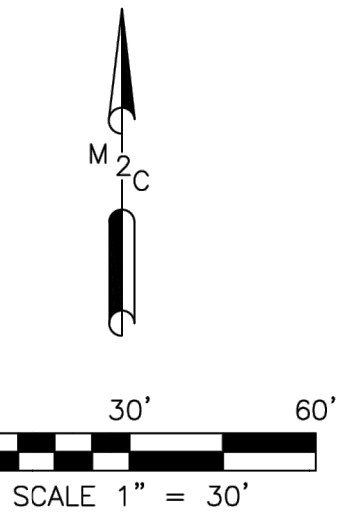
1. FOUND 2-3/8" BRASS CAP SURFACE MONUMENT MARKED "LANE COUNTY SURVEYORS OFFICE" ±4" BELOW SURFACE AND ±2" NORTHEAST OF BOARD AND CHAIN LINK FENCE INTERSECTION; LANE COUNTY MONUMENT BBGV26 IS THE SOUTHWEST CORNER OF SECTION 23.
2. FOUND BRASS CAP SURFACE MONUMENT IN THE CENTER OF THE NORTHBOUND LANE OF OAK STREET WITH ASPHALT ENCROACHING OVER THE EDGE; NORTHWEST CORNER OF SECTION 23.
3. FOUND 5/8" REBAR WITH NO CAP ±0.2' SOUTHWEST OF BOARD FENCE CORNER.
4. FOUND 5/8" REBAR WITH YELLOW CAP MARKED "WOBBER ASSOC".
5. FOUND BENT 5/8" REBAR; SHOT AT BASE.
6. FOUND 5/8" REBAR WITH REBAR SMASHED THROUGH THE TOP OF YELLOW CAP.
7. FOUND 5/8" REBAR WITH YELLOW CAP MARKED "ODOT R/W" WITH PINK FLAGGING ATTACHED.
8. FOUND 5/8" REBAR WITH YELLOW CAP MARKED "WOBBER PLS 1093".

RS(X) REFERENCED SURVEYS

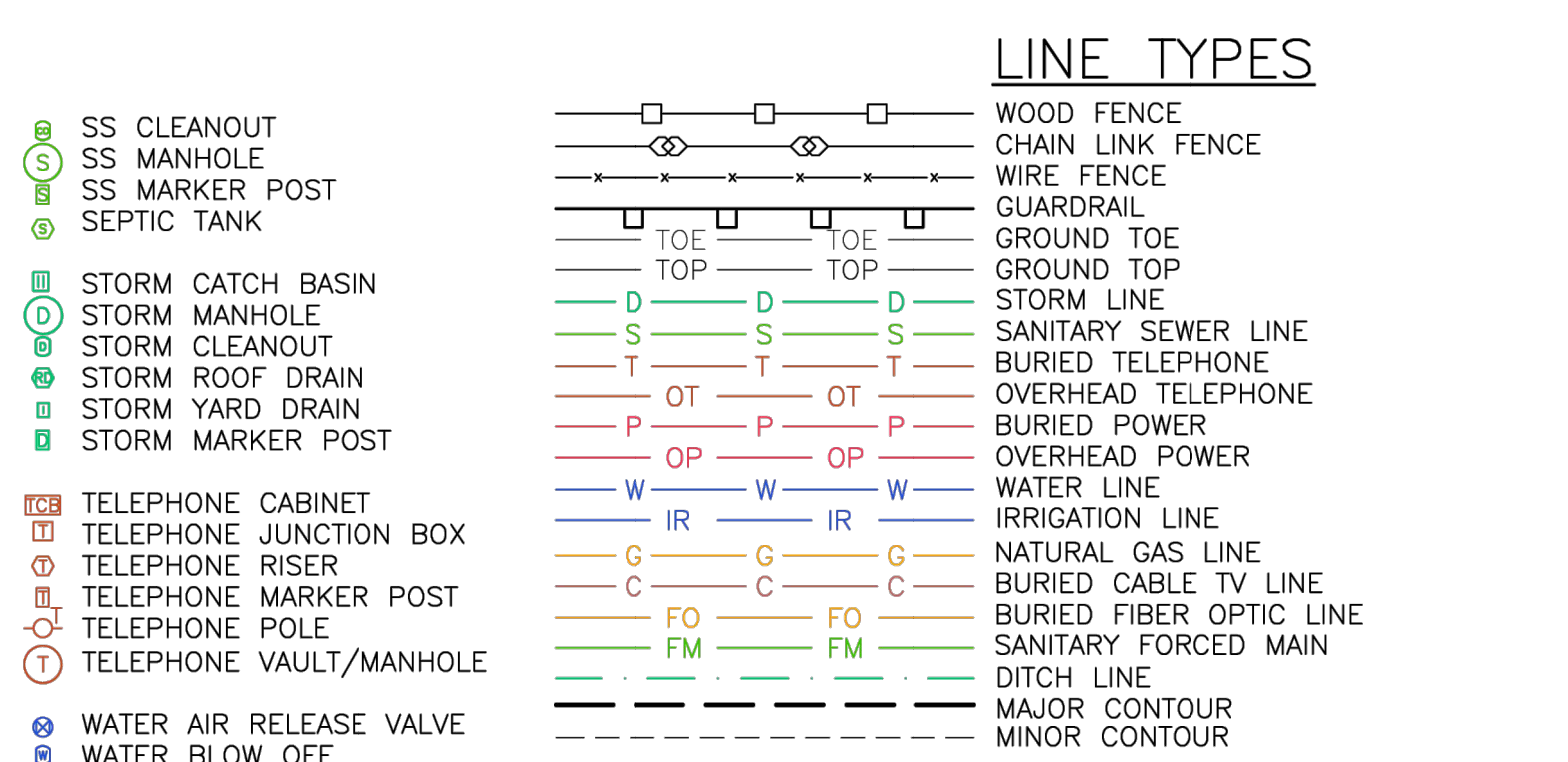
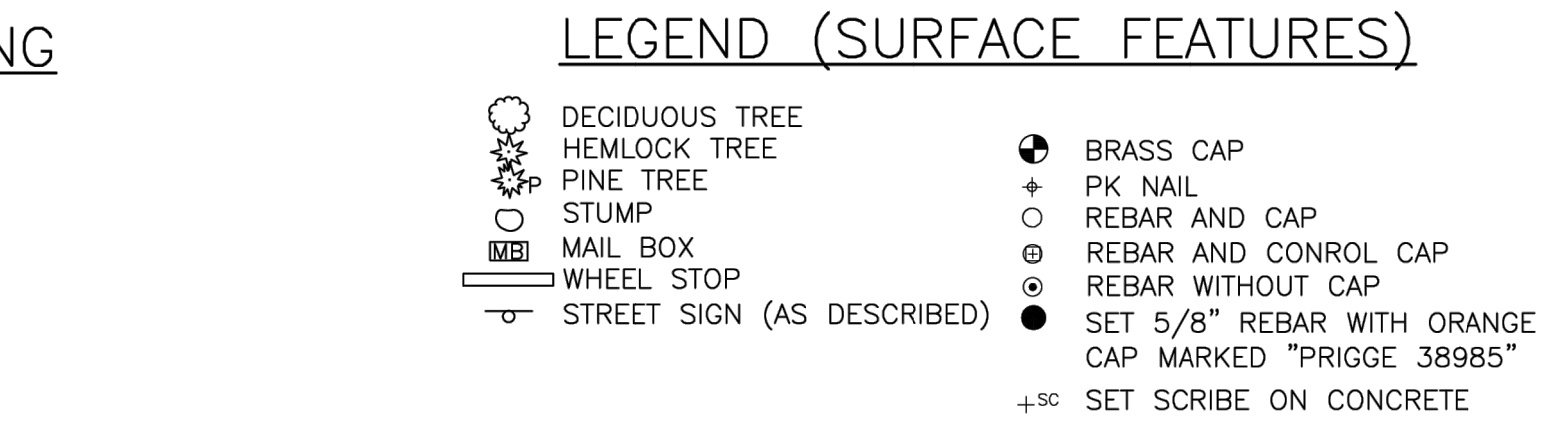
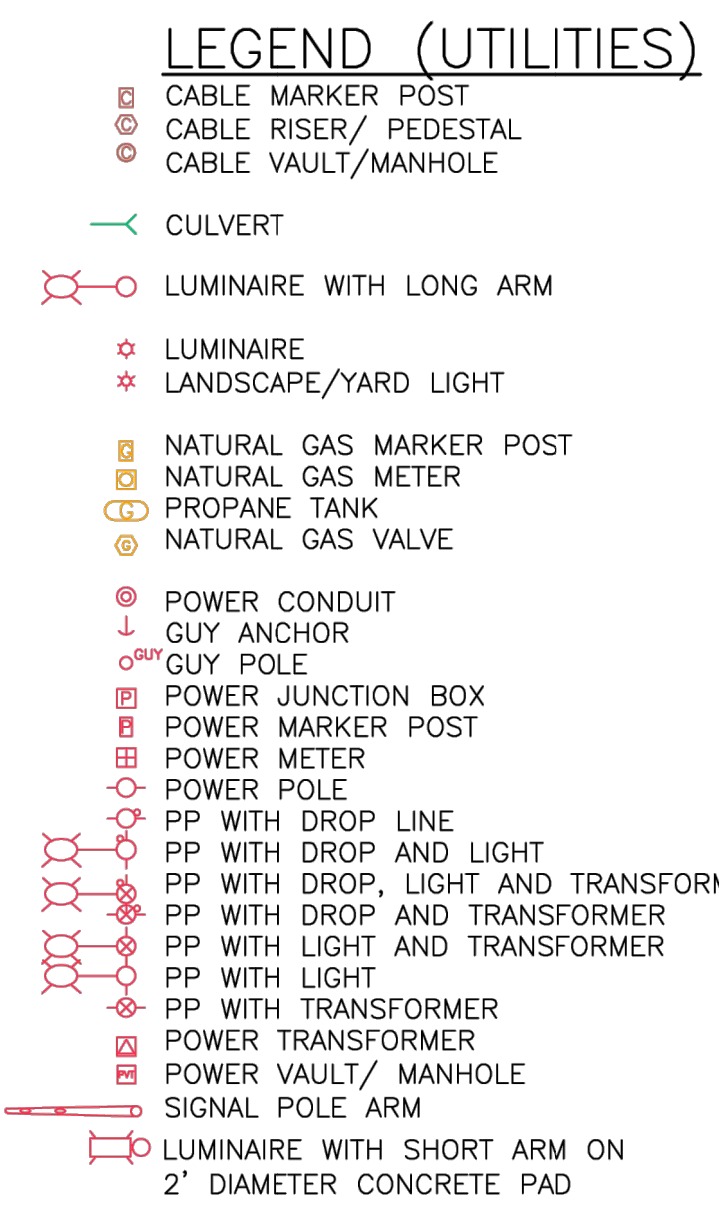
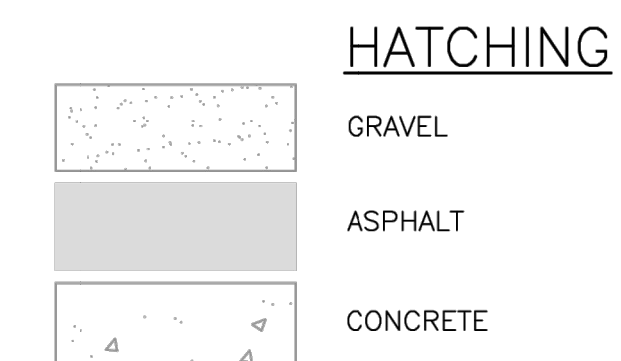
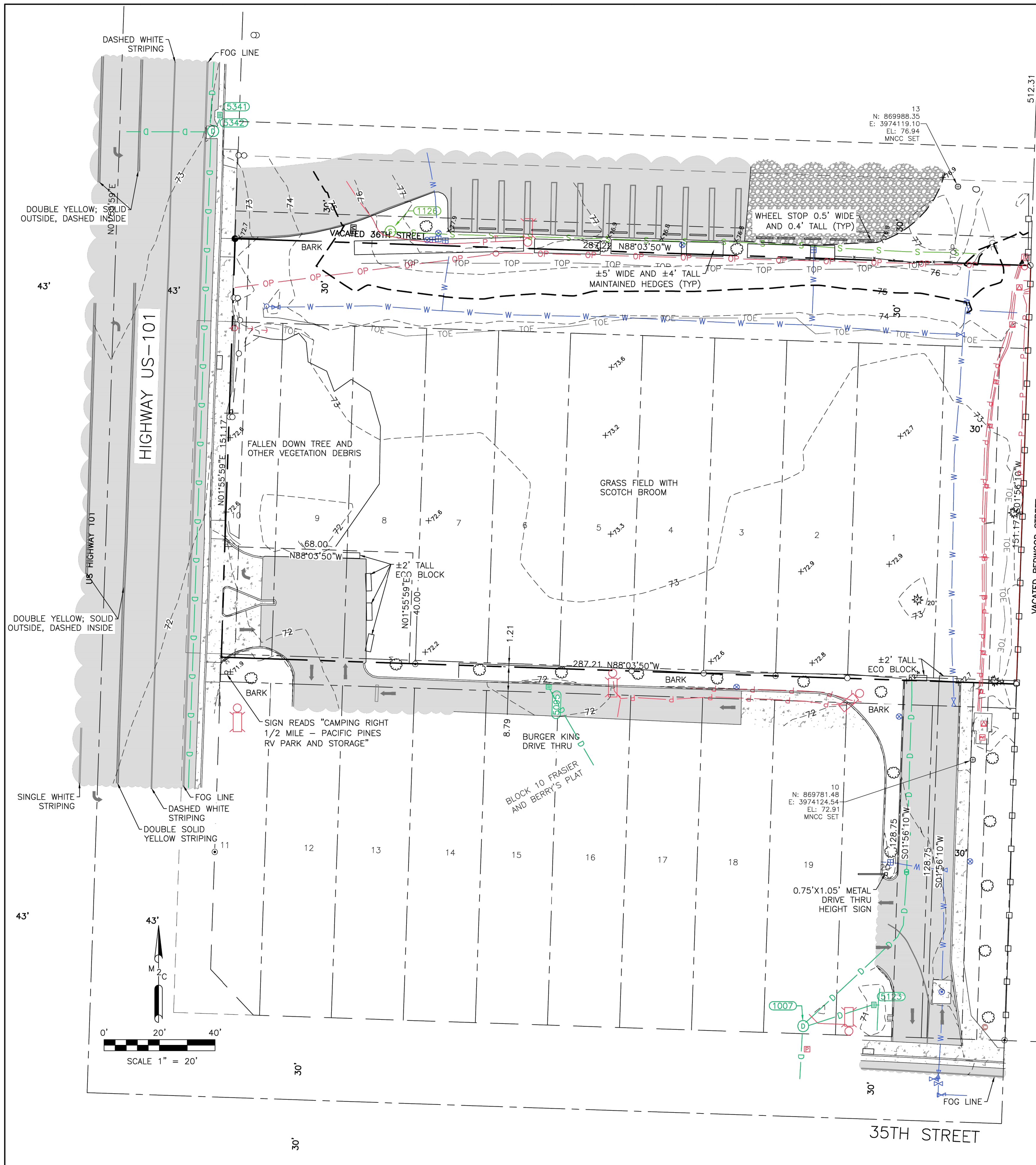
1. PLAT OF FRASIER & BERRY'S PART OF THE CITY OF FLORENCE, LANE COUNTY, OREGON.
2. RECORD OF SURVEY UNDER CSN 45252.
3. RECORD OF SURVEY UNDER CSN 30445
4. RECORD OF SURVEY UNDER CSN 23807

SHEET INDEX

- SV-1 ALTA TITLE SHEET, MONUMENT NOTES, DATUM, REFERENCE SURVEYS
- SV-2 TOPOGRAPHIC MAP, LEGEND, LEGAL DESCRIPTION, UTILITY NOTE, SURVEY NOTES



DATE 03/29/2023	REGISTERED PROFESSIONAL LAND SURVEYOR <i>Blair E Prigge</i>	 MTN2 COAST PROFESSIONAL LAND SURVEYORS 2320 MOTTMAN RD SW, STE 106 TUMWATER, WA 98512 360.688.1949	PROJECT NAME: FLORENCE, OREGON DOLLAR GENERAL ALTA/NSPS LAND TITLE SURVEY	SHEET NAME: SV-1
SCALE 1" = 30'	M2C PROJECT NO.: 23-053		CLIENT NAME: JSA CIVIL	SHEET NO. 1 OF 2
DRAWN TLM	CHECKED PBJ	APPROVED BEP	RENEWALS 12/31/2024	



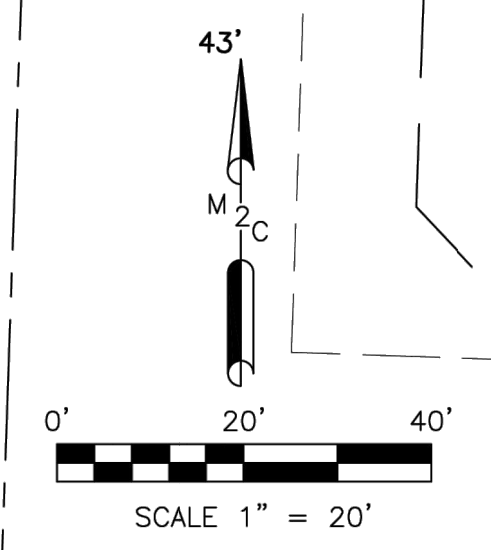
- ### SURVEY NOTES
- INSTRUMENT USED: SOKKIA IX TOTAL STATION AND TOPCON VR GPS.
 - SURVEY COMPLETED 03/09/2023.
 - ALL MONUMENTS SHOWN AS FOUND VISITED 03/2023.
 - PURPOSE OF TOPOGRAPHICAL MAPPING IS FOR FUTURE DEVELOPMENT OF SITE.
 - CONTOURS WERE ESTABLISHED FROM FIELD MAPPING, 1' CONTOURS SHOWN.
 - MTN2COAST (M2C) WAS RETAINED BY CHARLIE SEVERS WITH JSA CIVIL TO COMPLETE AN ALTA/NSPS LAND TITLE SURVEY OF LANE COUNTY TAX PARCEL 1812232206800.

UTILITY NOTE

UTILITIES SHOWN HEREON ARE FROM FIELD MAPPING VISIBLE SURFACE APPURTENANCES, AND MAPPING UTILITY PAINT MARKS FROM A UTILITY LOCATING SERVICE. BURIED UTILITIES ARE ONLY SHOWN AS APPROXIMATE AND SHOULD BE VERIFIED BEFORE CONSTRUCTION.

UTILITY STRUCTURES

PT NO.	DESCRIPTION	ELEV
1007	SDMH	71.57
	CL CHANNEL 8"	69.2
	4 PIPE ON NORTH SIDE OF STRUCTURE	
1126	SSMH	76.28
	IE 8" PVC E	67.8
5342	SDMH LID HAS "S" ON IT	73.02
	IE CHANNEL 24" RCP , N, S	67.9
	IE 8" RCP W	68.5
	IE 12" RCP NE	69.9
5095	SDCB	71.63
	FULL OF DEBRIS	
5123	SDCB	70.87
	IE 4" PVC E	67.9
5341	SDCB	72.69
	IE 12" RCP S	69.9



DATE 03/29/2023
 SCALE 1" = 20'
 M2C PROJECT NO.: 23-053
 DRAWN TLM
 CHECKED PBJ
 APPROVED BEP

REGISTERED PROFESSIONAL LAND SURVEYOR
Blair E. Prigge
 OREGON
 JULY 09, 2002
 BLAIR E. PRIGGE
 38985
 RENEWS: 12/31/2024

MTN2COAST
 PROFESSIONAL LAND SURVEYORS
 2320 MOTTMAN RD SW, STE 106
 TUMWATER, WA 98512
 360.688.1949

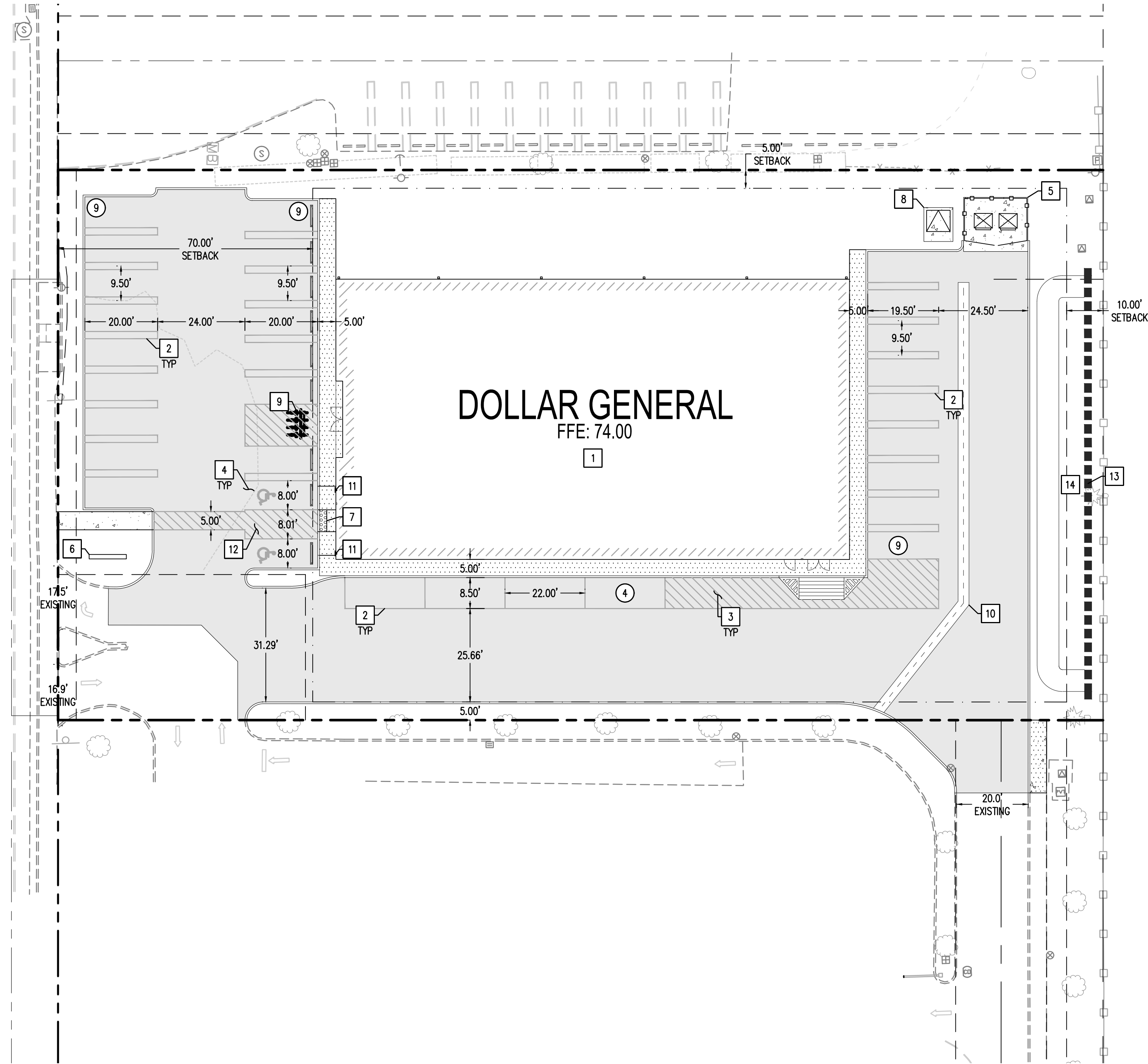
PROJECT NAME:
 FLORENCE, OREGON
 DOLLAR GENERAL
 ALTA/NSPS LAND TITLE SURVEY

CLIENT NAME:
 JSA CIVIL

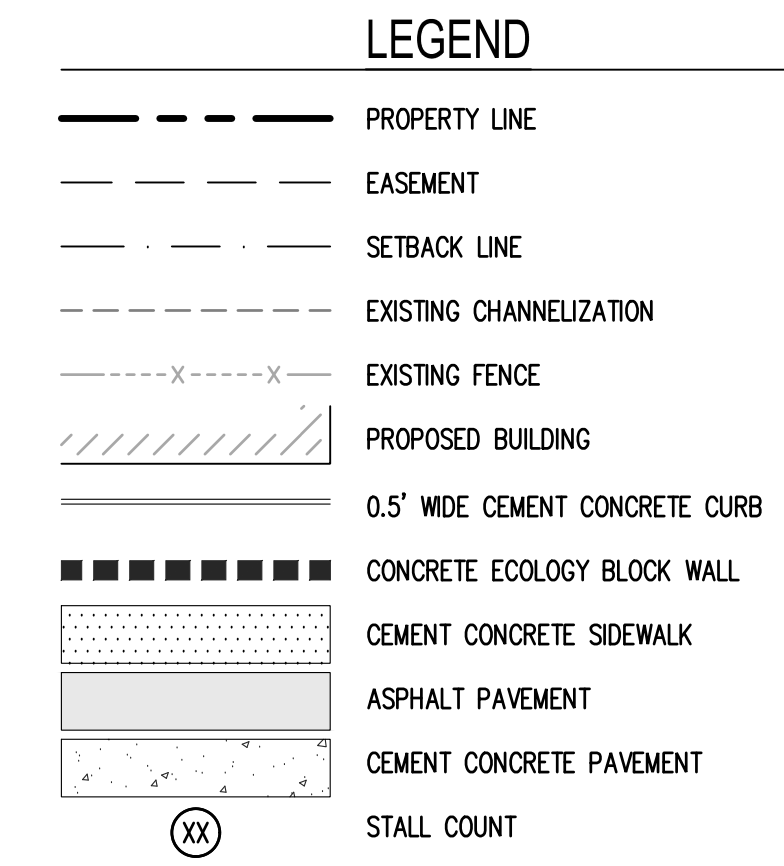
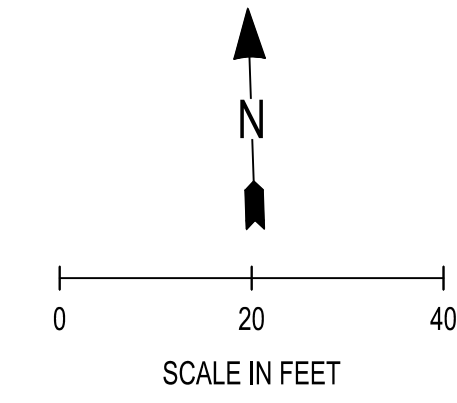
SHEET NAME:
 SV-2

SHEET NO.
 2 OF 2

US HIGHWAY 101

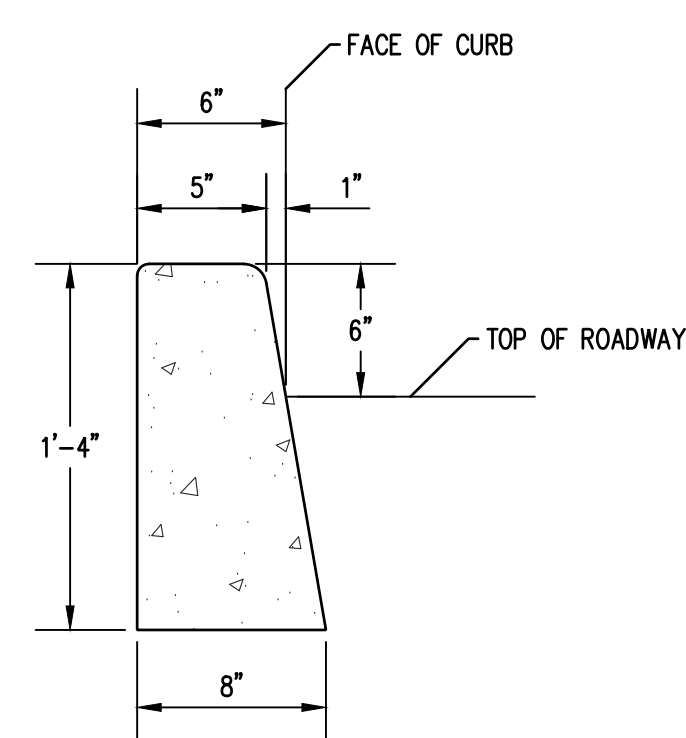


SITE DATA AND ZONING INFORMATION	
APPROXIMATE ACREAGE	0.99 ACRES ± (43,418 SF)
ZONING	H-C HIGHWAY COMMERCIAL
PARKING REQUIRED	1 PER 333 SF FLOOR SPACE = 10,640 SF / 333 SF 31.95 TOTAL SPACES
PARKING PROVIDED	31 TOTAL SPACES / 2 ACCESSIBLE SPACES
BIKE SPACES REQUIRED	1 PER 10 VEHICLE PARKING SPACES = 31 / 10 = 3.1 TOTAL REQUIRED = 4 SPACES
BIKE SPACES PROVIDED	4 TOTAL BIKE SPACES



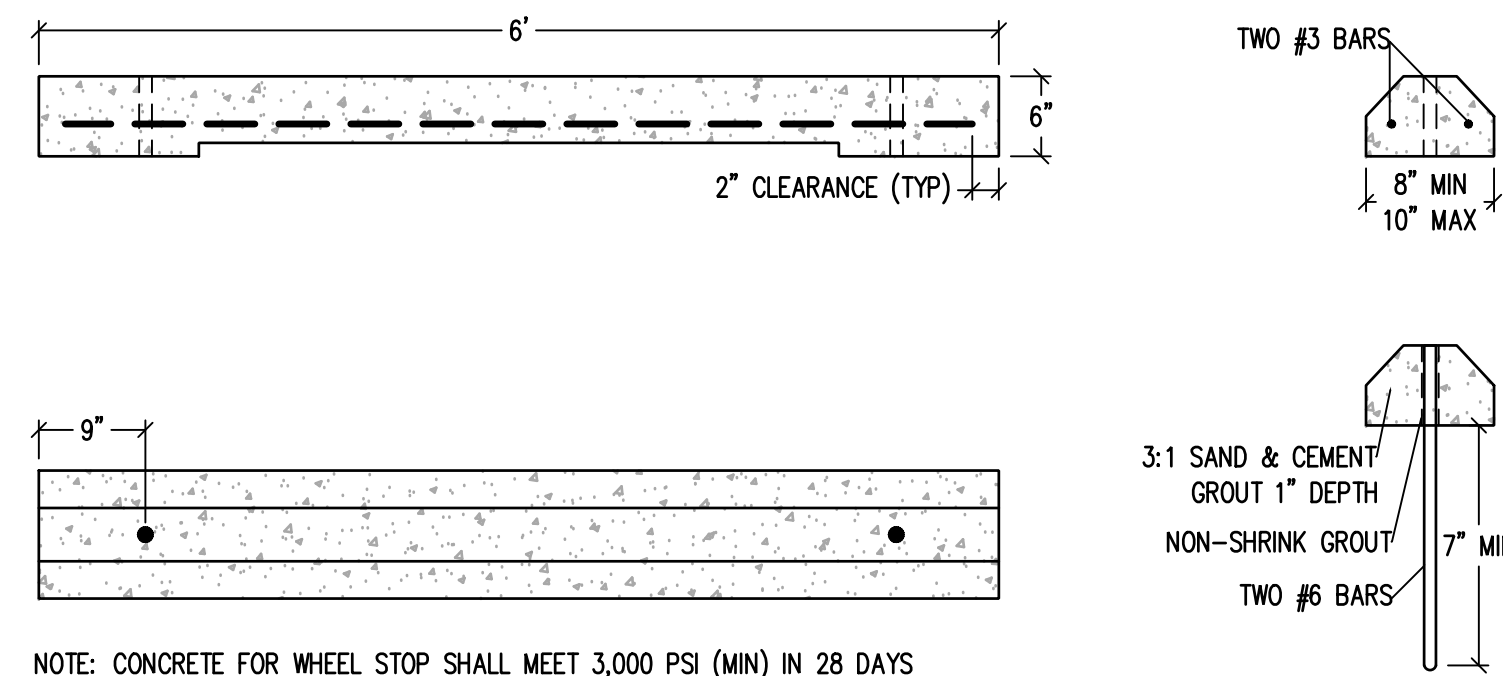
X CONSTRUCTION NOTES

1. PROPOSED BUILDING: SEE ARCHITECTURAL PLANS
2. 4" WIDE 90° PARKING STALL STRIPING
TWO (2) COATS OF YELLOW PAINT
W/ 7 MIL DFT PER COAT
3. 4" WIDE 45° DIAGONAL STRIPING AT 18" O.C.
TWO (2) COATS OF YELLOW PAINT
W/ 7 MIL DFT PER COAT
4. ACCESSIBLE PARKING STALL
4" WIDE 90° PARKING STALL STRIPING
TWO (2) COATS OF WHITE PAINT
W/ 7 MIL DFT PER COAT
5. TRASH ENCLOSURE: 6' TALL BOARD-ON-BOARD FENCING AROUND PERIMETER
6. LIGHTED PYLON SIGN: BY DOLLAR GENERAL SIGN VENDOR
7. PARALLEL CURB RAMP
8. CEMENT CONCRETE PAD FOR PAD MOUNT TRANSFORMER
9. FOUR 2' WIDE x 6' LONG BICYCLE PARKING STALLS
10. CEMENT CONCRETE VALLEY GUTTER
11. ACCESSIBLE PARKING PLACARD AFFIXED TO BUILDING
12. 4" WIDE 45° DIAGONAL STRIPING AT 18" O.C.
TWO (2) COATS OF WHITE PAINT
W/ 7 MIL DFT PER COAT
13. 2' WIDE x 4' TALL x 40' LONG CEMENT CONCRETE ECOLOGY BLOCK WALL
14. STORM RETENTION POND



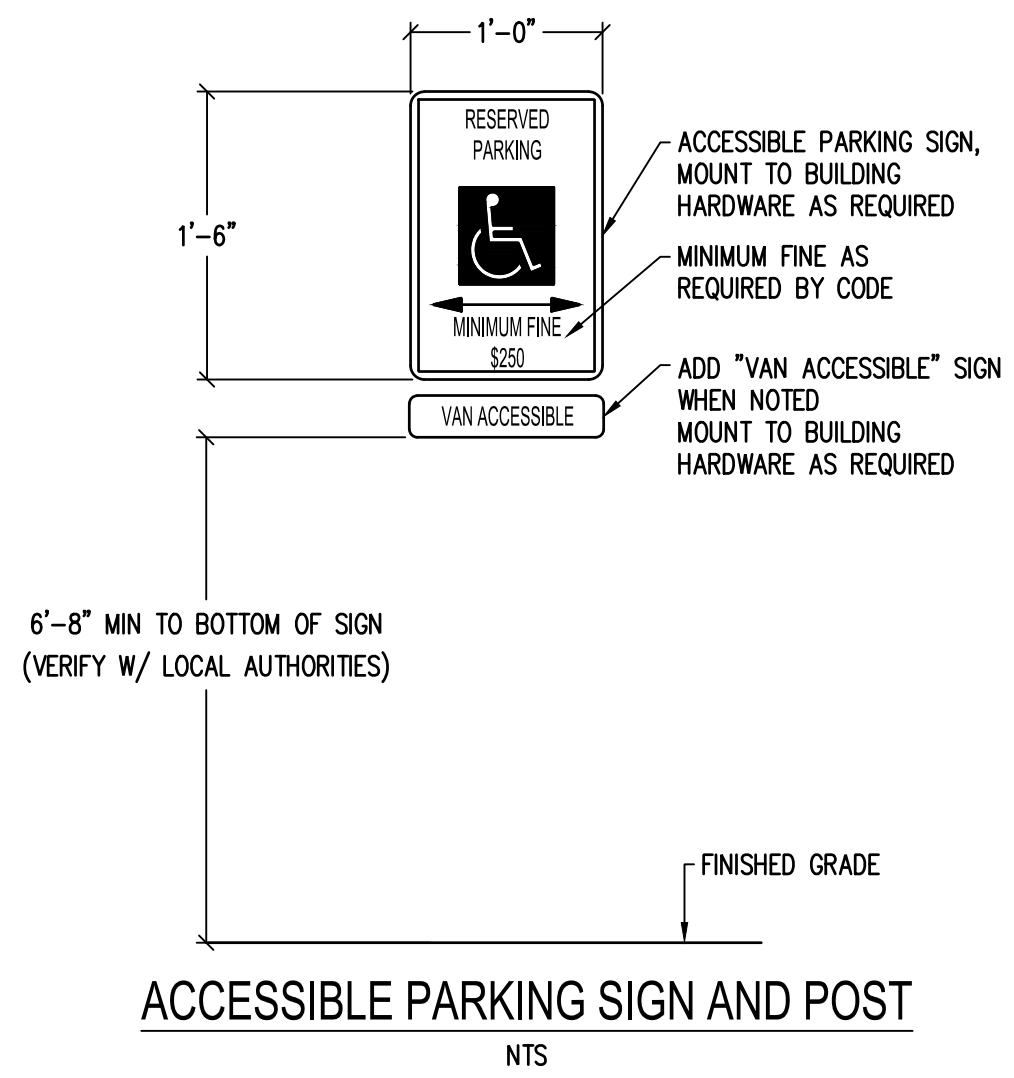
CEMENT CONCRETE BARRIER CURB
NTS

NOTES:
1. CONCRETE SHALL BE 4,000 PSI.
2. EXPANSION JOINT MATERIAL TO BE 3/8" THICK PERMOLDED JOINT FILLER FULL THICKNESS OF CONCRETE SPACE EVERY 15'.



PRECAST CEMENT CONCRETE WHEELSTOP
NTS

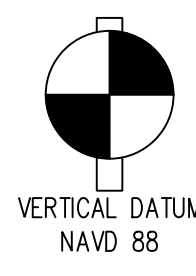
NOTE: CONCRETE FOR WHEEL STOP SHALL MEET 3,000 PSI (MIN) IN 28 DAYS



ACCESSIBLE PARKING SIGN AND POST
NTS

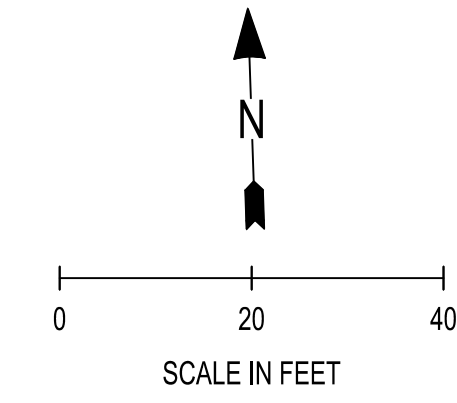
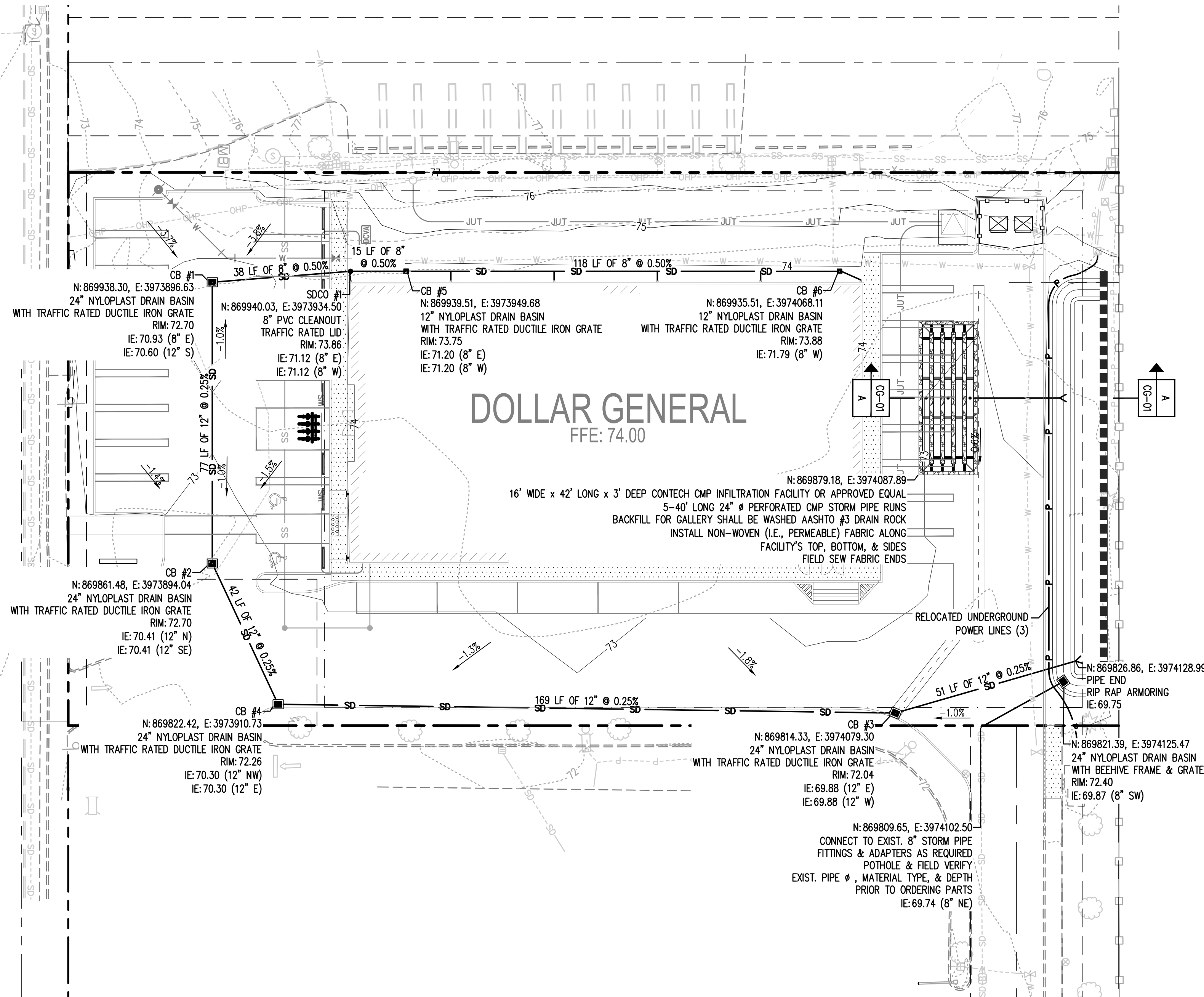
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CALL BEFORE YOU DIG
 THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.



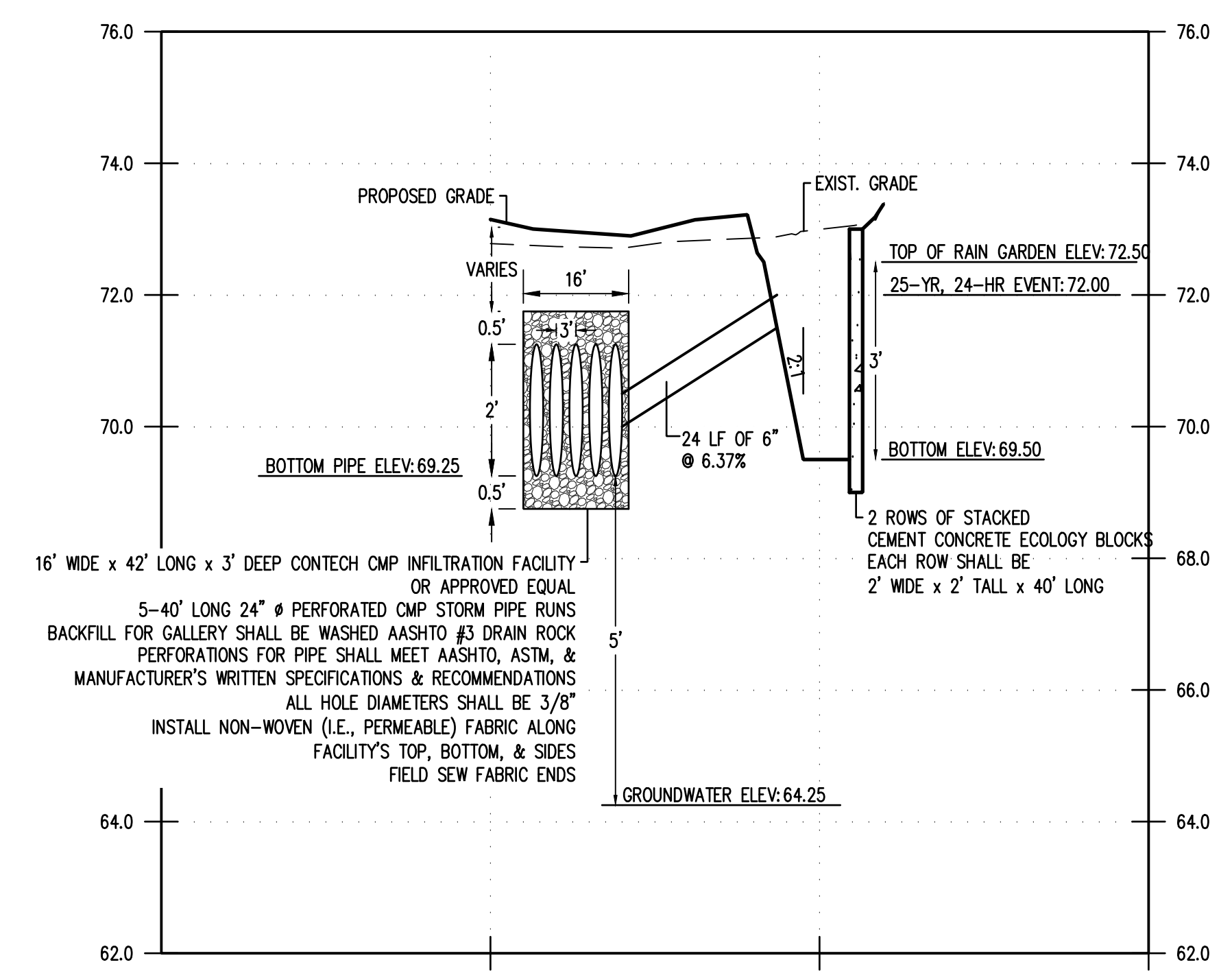
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PROJECT NO: 152.001 DRAWN: S. JANIK CHECKED: C. SEVERS SUBMITTAL DATES:
OTB DATE:
JSA CIVIL Engineering Planning Management 111 TUMWATER BLVD SE, SUITE C210 TUMWATER, WA 98501
REGISTERED PROFESSIONAL ENGINEER 96077PE OREGON JUNE 30, 2024 CHARLIE SEVERS 10/03/2023
FLORENCE, OR DOLLAR GENERAL COMMERCIAL DEVELOPMENT PROJECT US HIGHWAY 101 FLORENCE, OR
CAPITAL GROWTH BUCHALTER
SHEET TITLE PRELIMINARY SITE PLAN
SHEET SP-01

US HIGHWAY 101

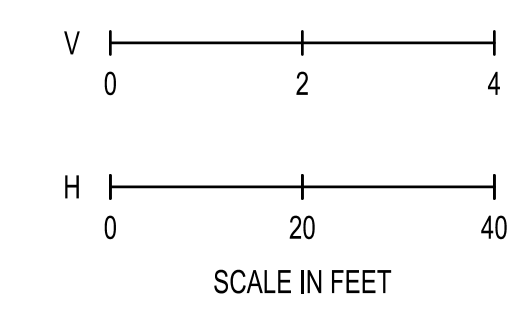


LEGEND

	PROPERTY LINE
	EXISTING CONTOURS
	PROPOSED CONTOURS
	GRADE BREAK
	EXISTING CHANNELIZATION
	EXISTING STORM LINE
	EXISTING CATCH BASIN
	PROPOSED BUILDING
	CEMENT CONCRETE CURB
	SAWCUT
	WATER LINE
	SEWER LINE
	STORM LINE
	CATCH BASIN
	AREA DRAIN
	STORM CLEANOUT



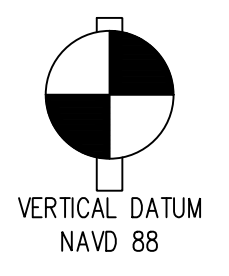
RAIN GARDEN WITH OVERFLOW STORAGE SECTION A-A



04/03/2023 0:08:15 PM User: severs
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CALL BEFORE YOU DIG

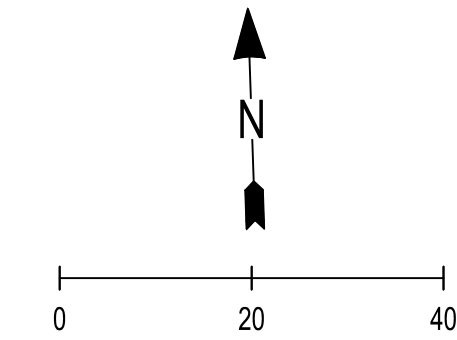
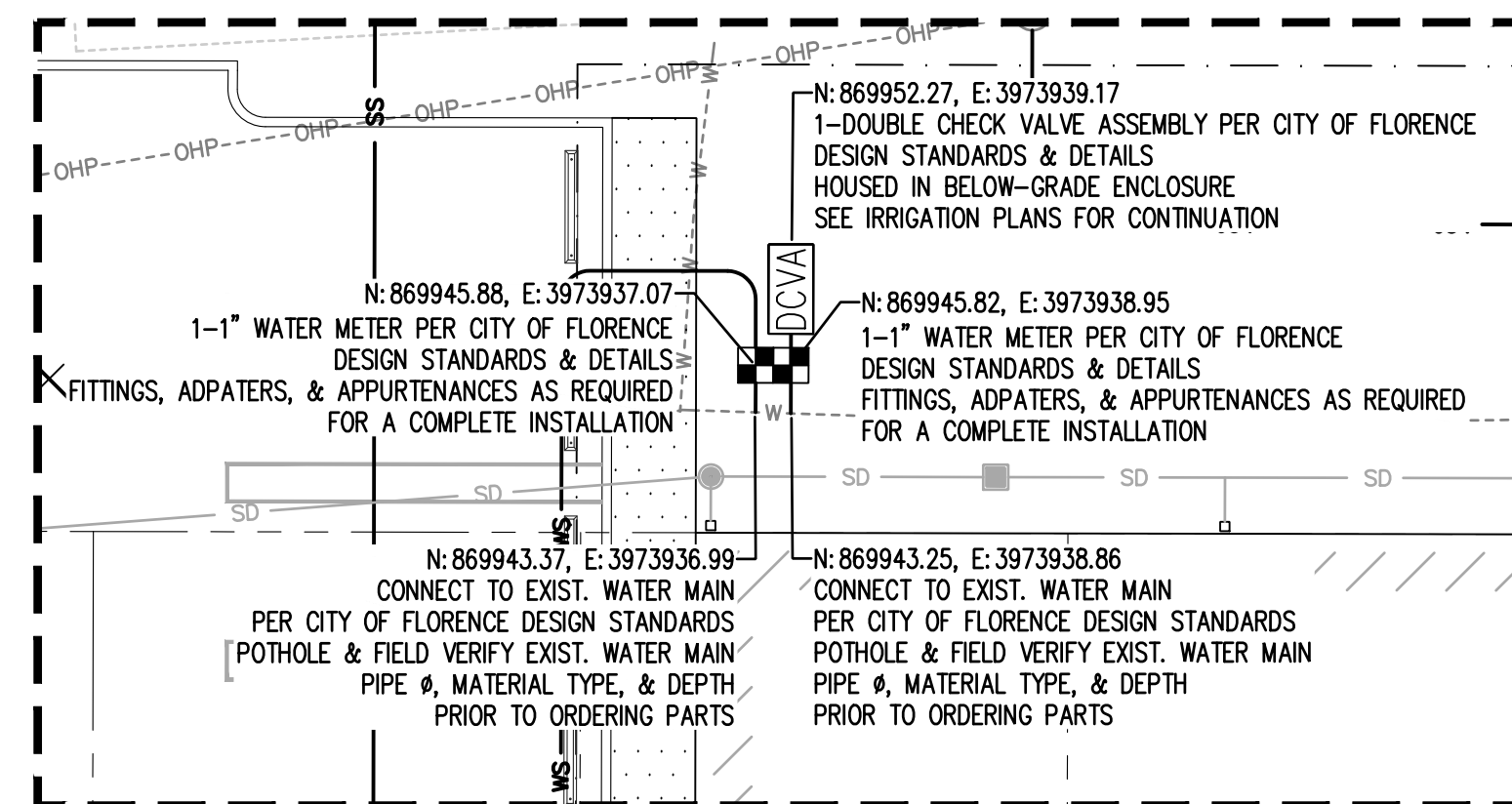
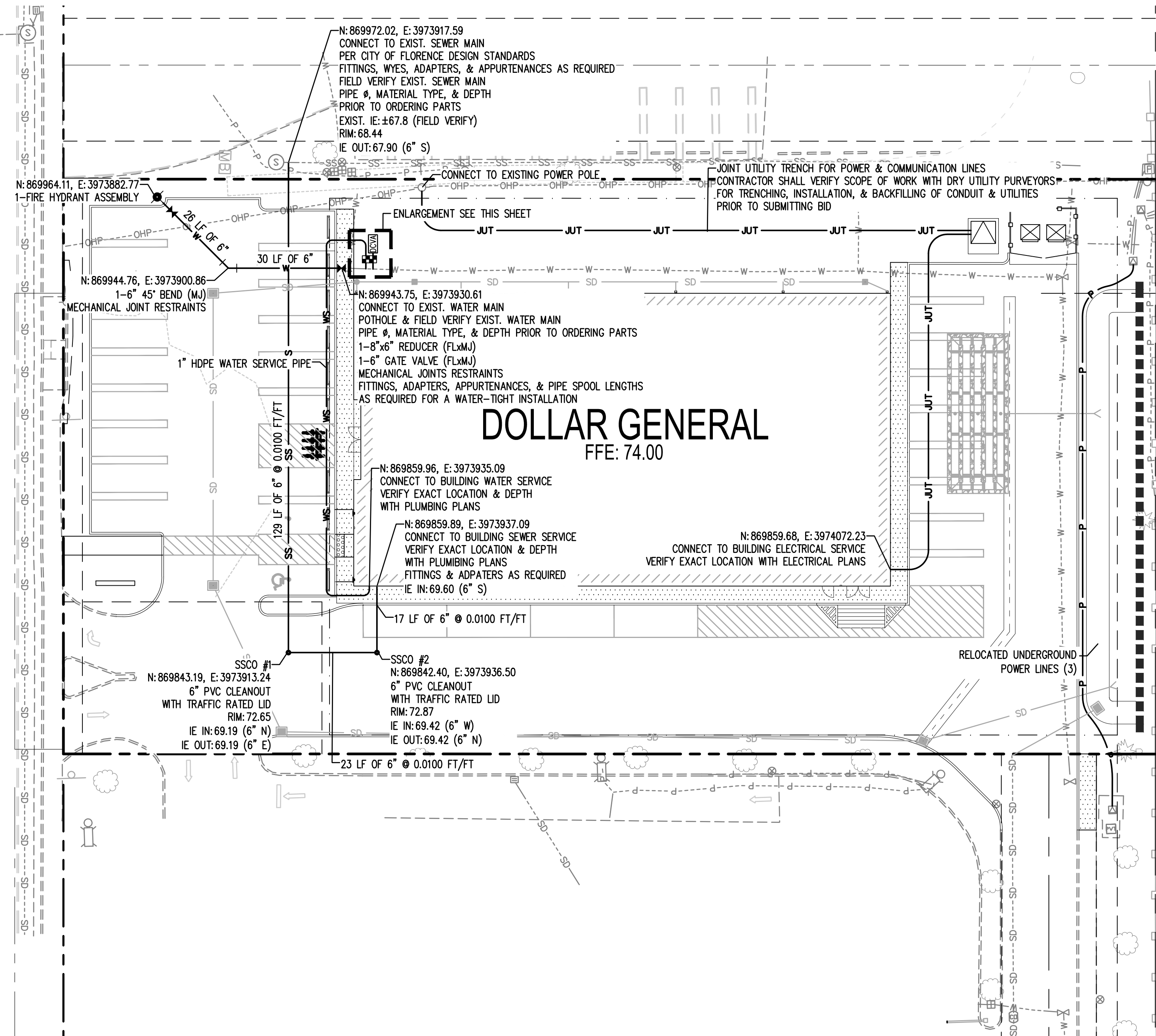
THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.



VERTICAL DATUM
NAVD 88

REVISIONS
PROJECT NO: 152.001 DRAWN: S. JANIK CHECKED: C. SEVERS SUBMITTAL DATES:
OTB DATE:
 Engineering Planning Management 111 TUMWATER BLVD SE, SUITE C210 TUMWATER, WA 98501
 10/03/2023
FLORENCE, OR DOLLAR GENERAL COMMERCIAL DEVELOPMENT PROJECT US HIGHWAY 101 FLORENCE, OR
SHEET TITLE PRELIMINARY GRADING & STORMWATER PLAN
SHEET CG-01

US HIGHWAY 101



LEGEND

	PROPERTY LINE
	EXISTING CHANNELIZATION
	EXISTING STORM LINE
	EXISTING WATER LINE
	EXISTING SEWER LINE
	EXISTING OVERHEAD LINE
	EXISTING UNDERGROUND POWER
	EXISTING CATCH BASIN
	EXISTING WATER METER
	EXISTING WATER VALVE
	EXISTING SEWER MANHOLE
	PROPOSED BUILDING
	CEMENT CONCRETE CURB & GUTTER
	STORM LINE
	WATER LINE
	WATER SERVICE LINE
	SEWER LINE
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	REDUCED PRESSURE BACKFLOW ASSEMBLY
	SEWER CLEANOUT

REVISIONS

PROJECT NO: 152.001
DRAWN: S. JANIK
CHECKED: C. SEVERS
SUBMITTAL DATES

OTB DATE

JSA CIVIL
Engineering | Planning | Management
111 TUMWATER BLVD SE, SUITE C210
TUMWATER, WA 98501

STAMP
REGISTERED PROFESSIONAL ENGINEER
96077PE
OREGON
JUNE 30, 2024
CHARLIE SEVERS
10/03/2023

FLORENCE, OR DOLLAR GENERAL
COMMERCIAL DEVELOPMENT PROJECT
US HIGHWAY 101
FLORENCE, OR

CAPITAL GROWTH BUCHALTER

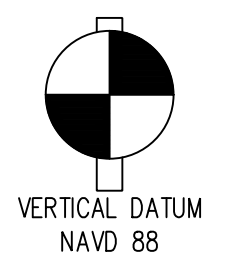
SHEET TITLE
PRELIMINARY
WATER & SEWER
PLAN

SHEET
UT-01

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CALL BEFORE YOU DIG

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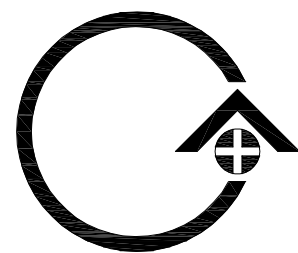


OREGON COAST HWY & 35TH AVE FLORENCE, OREGON

Exhibit D

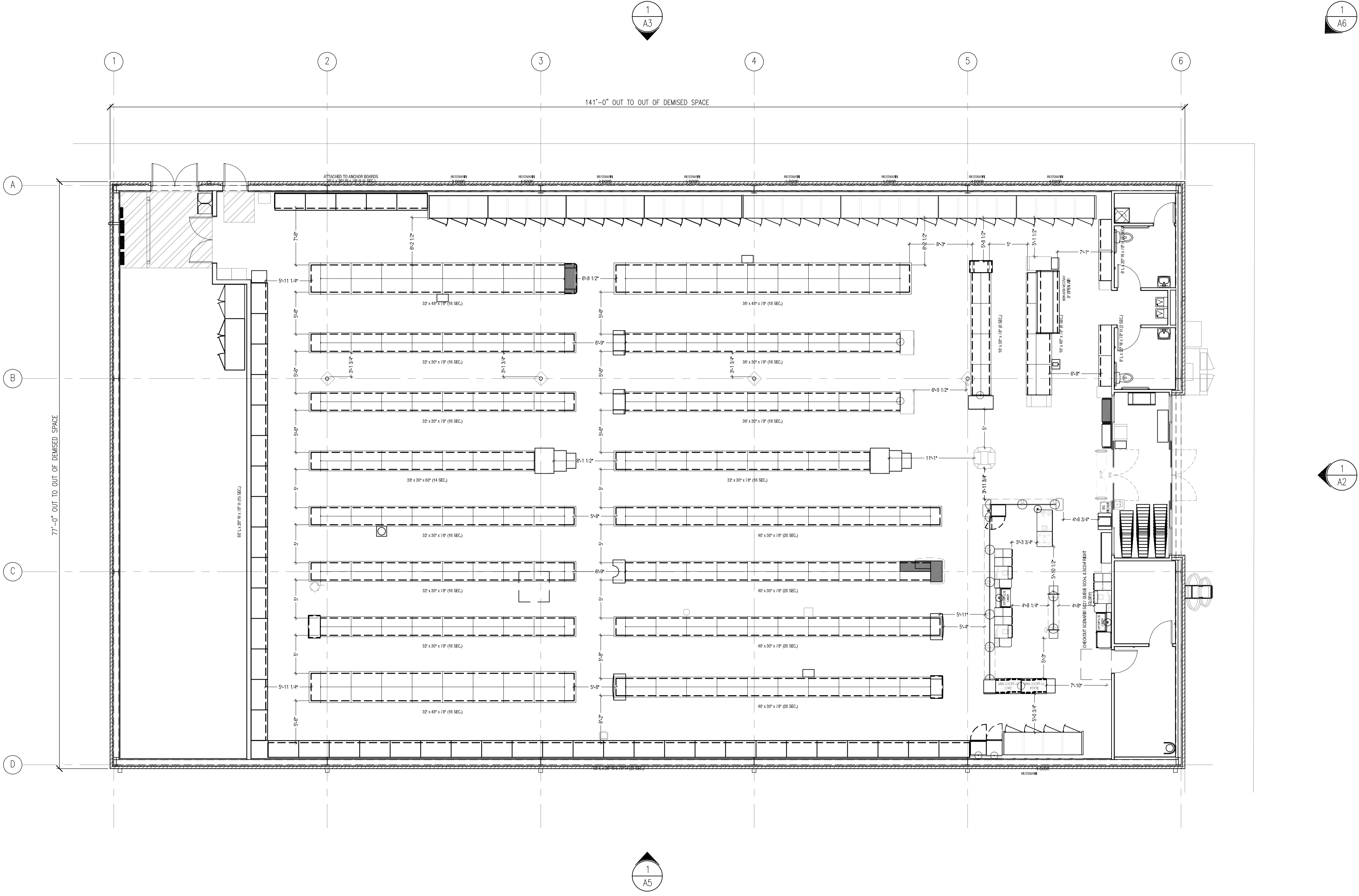
chadha + associates

architecture + interiors + design



200 WEST MONROE STREET SUITE 2070 CHICAGO ILLINOIS 60606
T 312 332 2062 | www.nwsarchitects.com | F 312 332 9894

CG BUCHALTER, LLC
361 SUMMIT BLVD., SUITE 110
BIRMINGHAM, AL 35243
PHONE: (205) 263-4584



FLOOR/FIXTURE PLAN

SCALE: NOT TO SCALE



**NEW ONE STORY
RETAIL BUILDING**
DOLLAR GENERAL 10,640 SF PROTOTYPE B PLUS
OREGON COAST HWY & 35th STREET
FLORENCE, OREGON 97439

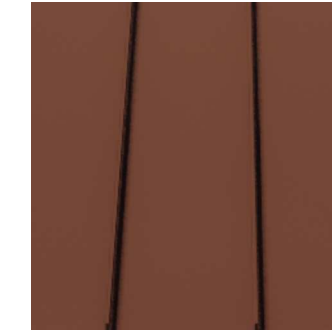
ISSUE FOR		

NO.	DESCRIPTION	DATE	SHEET TITLE
1.	DESIGN APPROVAL	06/06/2023	

**FLOOR/FIXTURE
PLAN**

A1

BUILDING FACADE MATERIALS



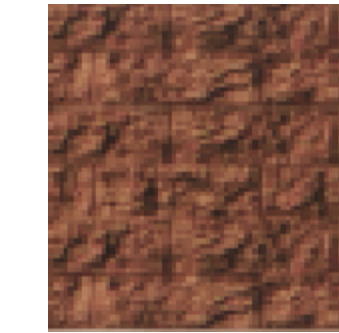
BRONZE PRE-FAB METAL AWNING



MOCHA MADNESS HARDIE PLANK SIDING



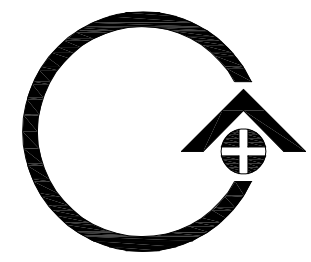
JUTE HARDIE PLANK SIDING



3-5/8" MOCHA MADNESS SPLIT FACE CMU



SPANDREL GLASS FAUX WINDOWS



CG BUCHALTER, LLC
361 SUMMIT BLVD., SUITE 110
BIRMINGHAM, AL 35243
PHONE: (205) 263-4584

DOLLAR GENERAL

NEW ONE STORY
RETAIL BUILDING

DOLLAR GENERAL 10,640 SF PROTOTYPE 'B PLUS'
OREGON COAST HWY & 35th STREET
FLORENCE, OREGON 97439

ISSUE FOR

2.	DESIGN APPROVAL REVISIONS	09/06/2023
1.	DESIGN APPROVAL	06/06/2023
NO.	DESCRIPTION	DATE

SHEET TITLE

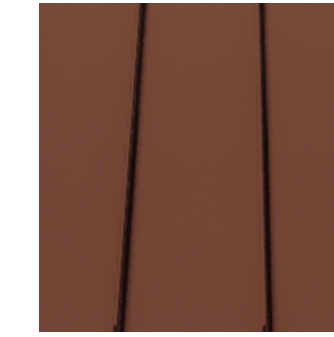
**OREGON COAST
HIGHWAY - WEST**

SHEET NO.

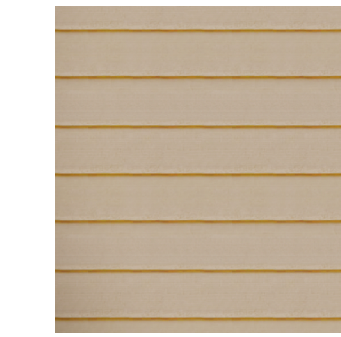
A2

1
A2 OREGON COAST HIGHWAY (HWY 101) - WEST
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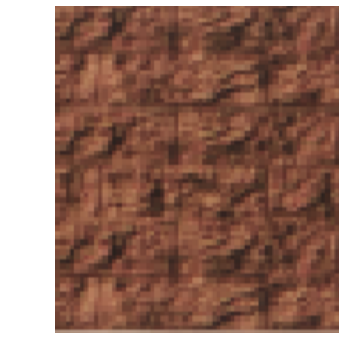
BUILDING FACADE MATERIALS



BRONZE PRE-FAB
METAL AWNING



JUTE
HARDIE PLANK SIDING



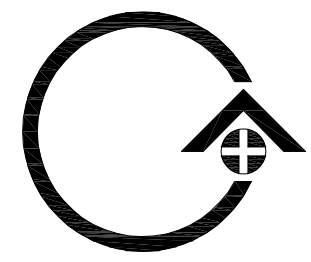
3-5/8" MOCHA
MADNESS SPLIT
FACE CMU



SPANDREL GLASS
FAUX WINDOWS



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361 SUMMIT BLVD., SUITE 110
BIRMINGHAM, AL 35243
PHONE: (205) 263-4584

DOLLAR GENERAL

NEW ONE STORY
RETAIL BUILDING

DOLLAR GENERAL 10,640 SF PROTOTYPE 'B PLUS'
OREGON COAST HWY & 35th STREET
FLORENCE, OREGON 97439

ISSUE FOR

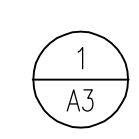
2.	DESIGN APPROVAL REVISIONS	09/06/2023
1.	DESIGN APPROVAL	06/06/2023
NO.	DESCRIPTION	DATE

SHEET TITLE

**35th STREET
(DELIVERY) - SOUTH**

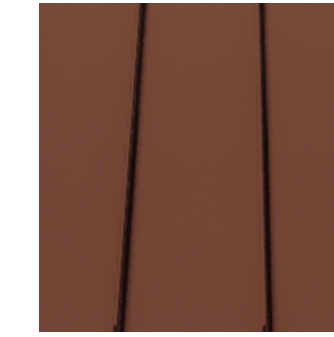
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A3



35th STREET (DELIVERY) - SOUTH
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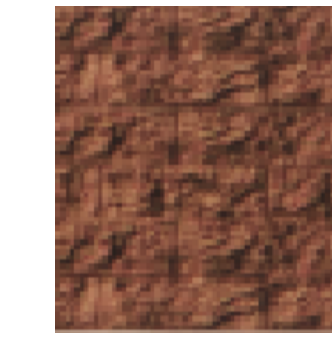
BUILDING FACADE MATERIALS



BRONZE PRE-FAB
METAL AWNING



JUTE
HARDIE PLANK SIDING



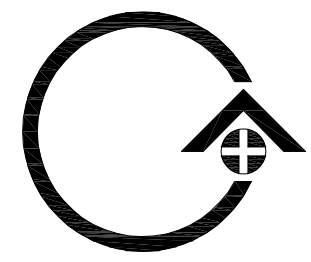
3-5/8" MOCHA
MADNESS SPLIT
FACE CMU



SPANDREL GLASS
FAUX WINDOWS



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361 SUMMIT BLVD., SUITE 110
BIRMINGHAM, AL 35243
PHONE: (205) 263-4584

DOLLAR GENERAL

NEW ONE STORY
RETAIL BUILDING

DOLLAR GENERAL 10,640 SF PROTOTYPE 'B PLUS'
OREGON COAST HWY & 35th STREET
FLORENCE, OREGON 97439

ISSUE FOR

2.	DESIGN APPROVAL REVISIONS	09/06/2023
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NO.	DESCRIPTION	DATE

SHEET TITLE

REAR - EAST

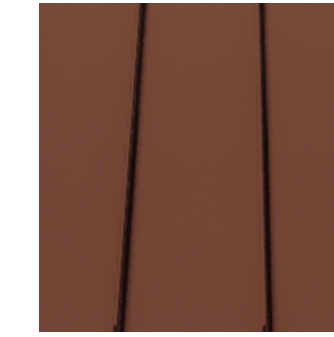
SHEET NO.

A4

C+A JOB NO. 5522-03

REAR - EAST
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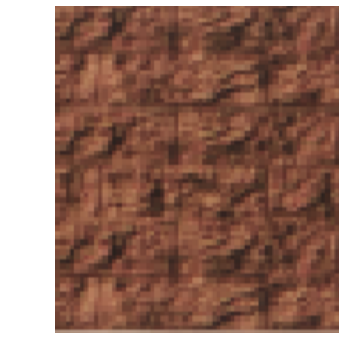
BUILDING FACADE MATERIALS



BRONZE PRE-FAB
METAL AWNING



JUTE
HARDIE PLANK SIDING



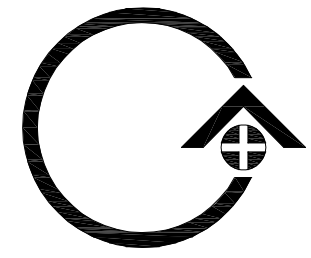
3-5/8" MOCHA
MADNESS SPLIT
FACE CMU



SPANDREL GLASS
FAUX WINDOWS



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200 WEST MONROE STREET SUITE 2070 CHICAGO ILLINOIS 60606
T 312 332 2062 | www.nwsarchitects.com | F 312 332 9894

CG BUCHALTER, LLC
361 SUMMIT BLVD., SUITE 110
BIRMINGHAM, AL 35243
PHONE: (205) 263-4584

DOLLAR GENERAL

**NEW ONE STORY
RETAIL BUILDING**

DOLLAR GENERAL 10,640 SF PROTOTYPE 'B PLUS'
OREGON COAST HWY & 35th STREET
FLORENCE, OREGON 97439

ISSUE FOR

NO.	DESCRIPTION	DATE
1.	DESIGN APPROVAL	06/06/2023

SHEET TITLE

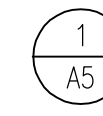
LEFT SIDE - NORTH

SHEET NO.

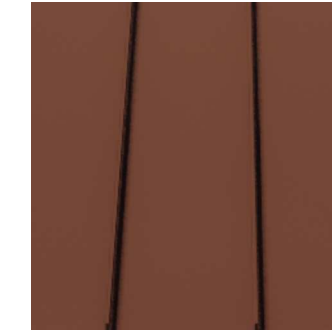
A5

C+A JOB NO. 5522-03

LEFT SIDE - NORTH
SCALE: NOT TO SCALE



BUILDING FACADE MATERIALS



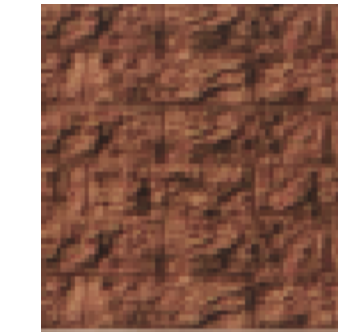
BRONZE PRE-FAB METAL AWNING



MOCHA MADNESS HARDIE PLANK SIDING



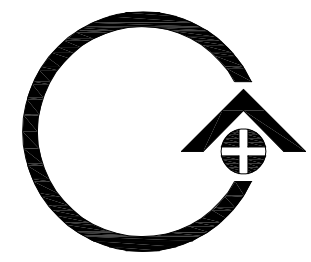
JUTE HARDIE PLANK SIDING



3-5/8" MOCHA MADNESS SPLIT FACE CMU



SPANDREL GLASS FAUX WINDOWS



CG BUCHALTER, LLC
361 SUMMIT BLVD., SUITE 110
BIRMINGHAM, AL 35243
PHONE: (205) 263-4584

DOLLAR GENERAL

NEW ONE STORY
RETAIL BUILDING

DOLLAR GENERAL 10,640 SF PROTOTYPE 'B PLUS'
OREGON COAST HWY & 35th STREET
FLORENCE, OREGON 97439

ISSUE FOR

2.	DESIGN APPROVAL REVISIONS	09/06/2023
1.	DESIGN APPROVAL	06/06/2023
NO.	DESCRIPTION	DATE

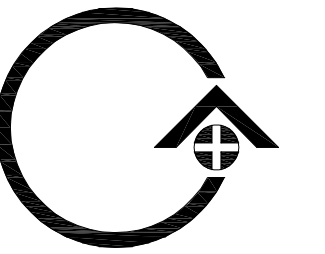
SHEET TITLE

PERSPECTIVE VIEW

SHEET NO.

A6

PERSPECTIVE VIEW
SCALE: NOT TO SCALE



CG BUCHALTER, LLC

361 SUMMIT BLVD., SUITE 110

BIRMINGHAM, AL 35243

PHONE: (205) 263-4584

DOLLAR GENERAL

**NEW ONE STORY
RETAIL BUILDING**

DOLLAR GENERAL 10,640 SF PROTOTYPE B PLUS
OREGON COAST HWY & 35th STREET
FLORENCE, OREGON 97439

ISSUE FOR

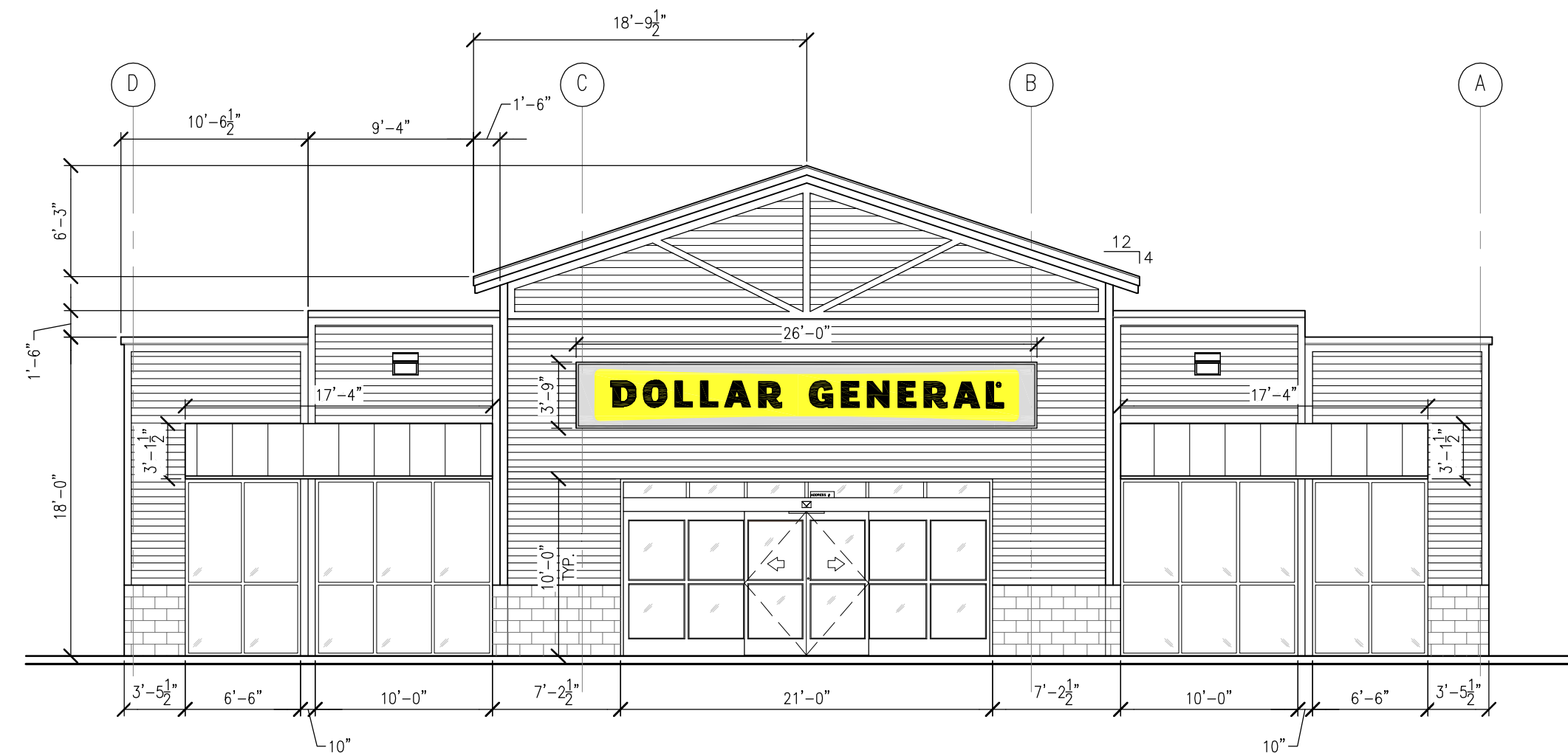
NO.	DESCRIPTION	DATE
1.	DESIGN APPROVAL REVISIONS	09/06/2023

SHEET TITLE

ELEVATIONS

SHEET NO.

A7

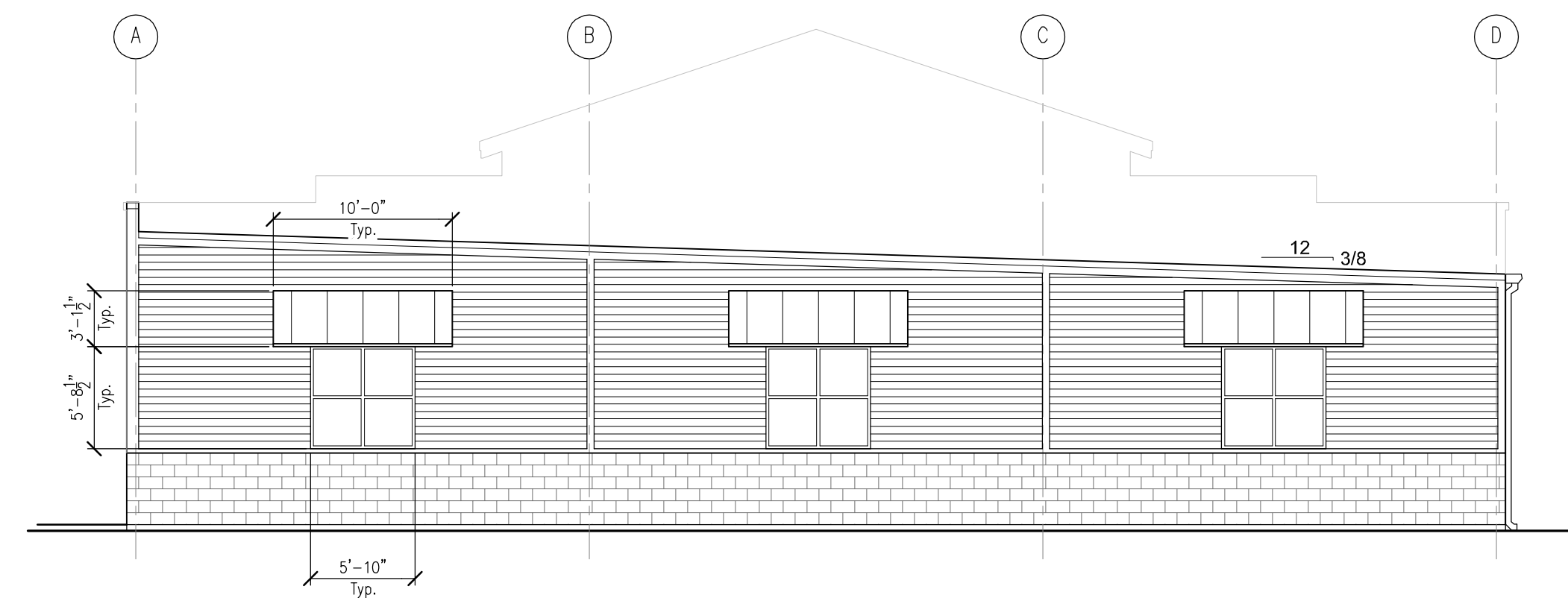


FRONT ELEVATION - WEST

SCALE: 1/8" = 1'-0"

GLAZING: 33% OF FACADE AREA

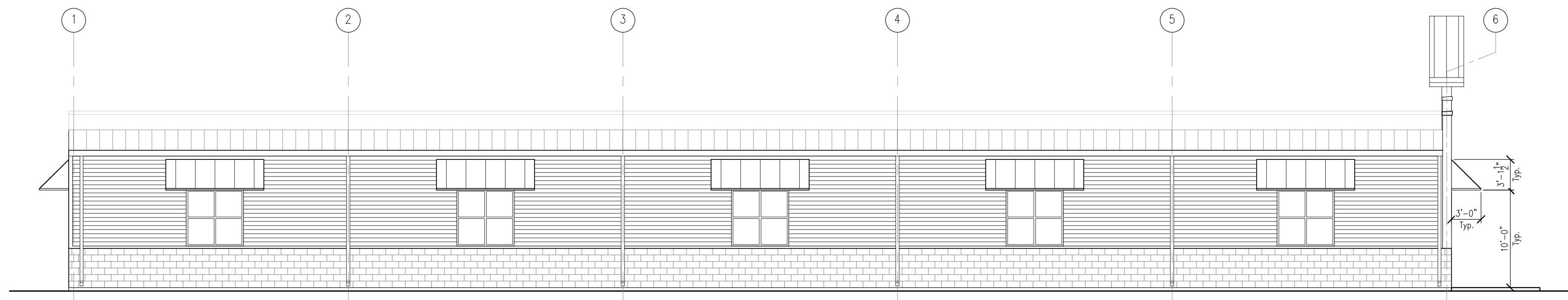
AWNINGS: 46% OF FACADE LI. FT. - 34'-8" LI. FT.



REAR ELEVATION - EAST

SCALE: 1/8" = 1'-0"

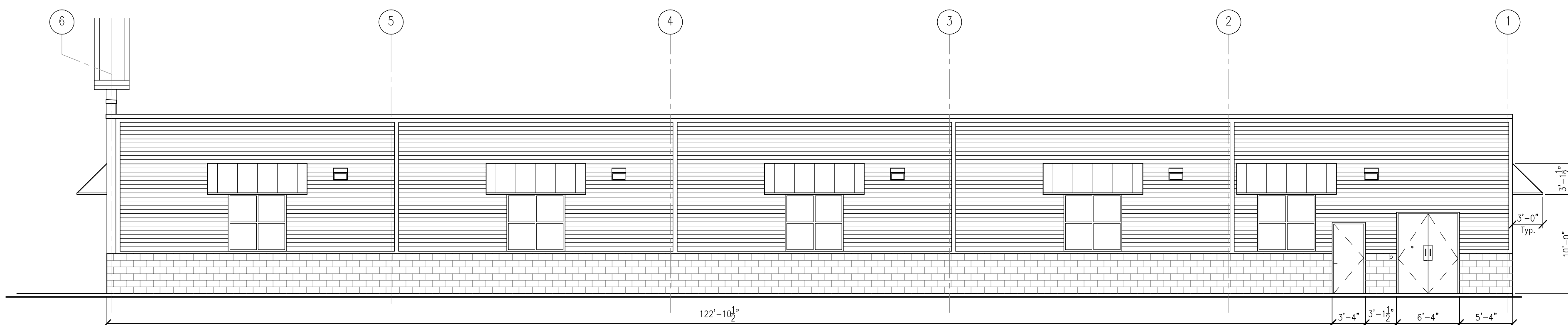
AWNINGS: 40% OF FACADE LI. FT. - 30'-0" LI. FT.



LEFT ELEVATION - NORTH

SCALE: 1/8" = 1'-0"

AWNINGS: 35% OF FACADE LI. FT. - 50'-0" LI. FT.

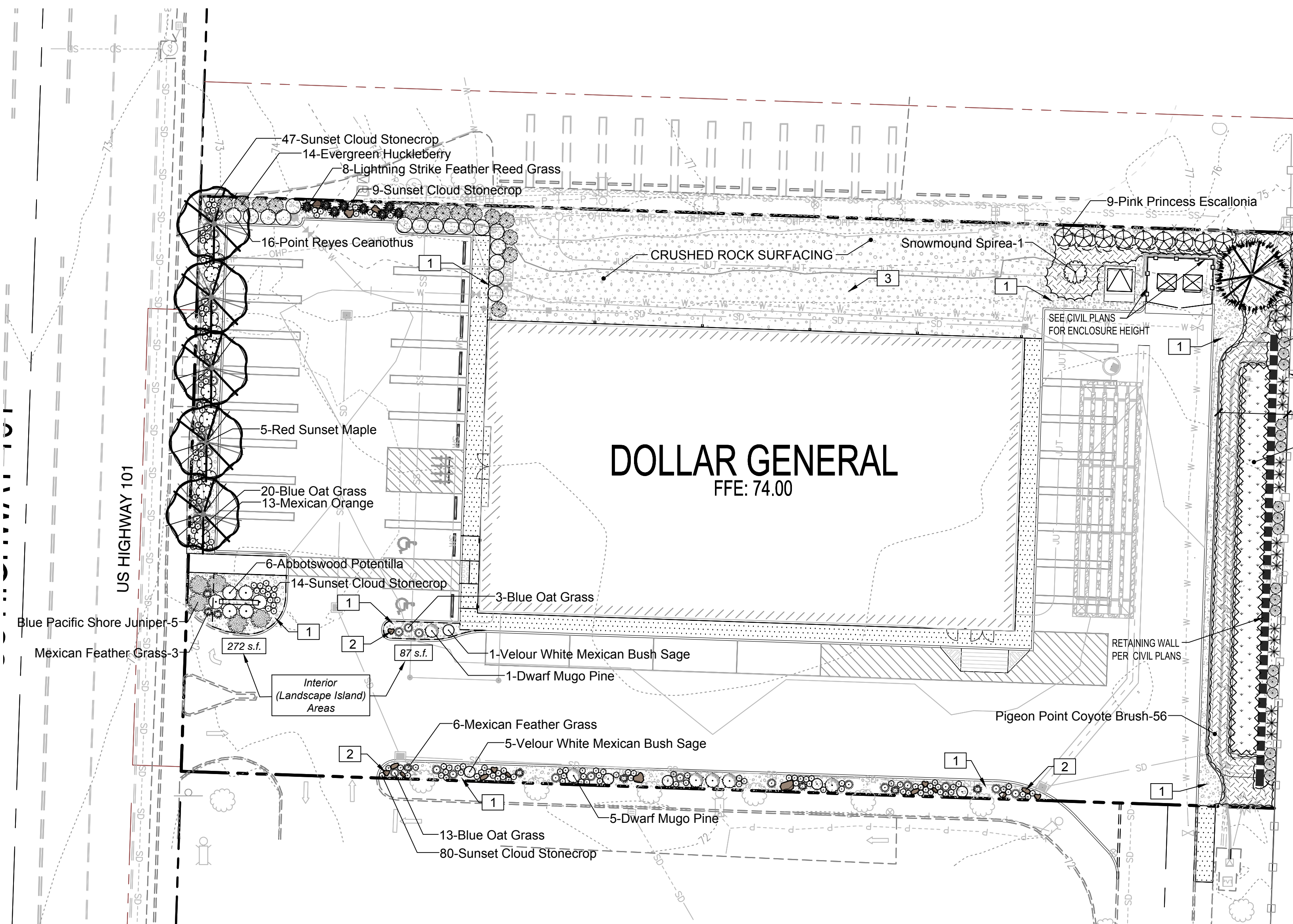


RIGHT ELEVATION - SOUTH

SCALE: 1/8" = 1'-0"

AWNINGS: 35% OF FACADE LI. FT. - 50'-0" LI. FT.

Exhibit E



LANDSCAPE CODE - CALCULATIONS

Landscape Island Requirement		Total Lot Area	43,418 s.f.
10 s.f. / parking stall		Required Landscape Area (15% of lot area)	6,513 s.f.
Number of parking stalls	32	Landscape Area Provided	10,278 s.f.
Required Landscape Island Area	320 s.f.	Required Landscape Area	6,513 s.f.
Landscape Island Area Provided	359 s.f.	Required "Living plant material" coverage (70%)	4,559 s.f.
		"Living plant material" coverage provided	4,607 s.f.

Landscape Area Calculations	
Lawn Area	0 s.f. (0%)
Shrub Bed Area	4,607 s.f. (100%)
Trees (Qty.)	6 trees
Total Landscape Area	4,607 s.f. (100%)

Street Frontage Requirements	
Street Frontage	151 l.f.
Street Trees Required (1/30 l.f. of frontage)	5 trees
Street Trees Provided	5 trees
Shrubs Required (6/30 l.f.)	30 shrubs
Shrubs Provided	43 shrubs

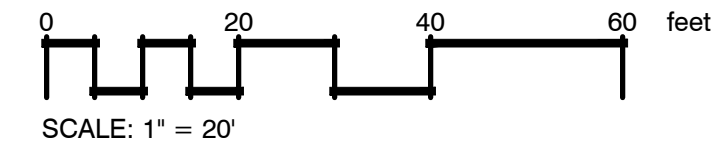
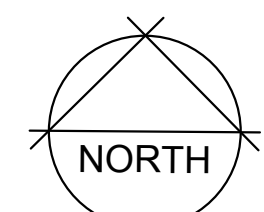
NOTE: ALL PLANTINGS SHALL BE IRRIGATED BY A PERMANENT UNDERGROUND IRRIGATION SYSTEM. DESIGN TO FOLLOW IN SUBSEQUENT SUBMITTAL.

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	DECORATIVE ROCK MULCH
2	LANDSCAPE BOULDER
3	CRUSHED ROCK SURFACING. 4" DEPTH COMPACTED 5/8" MINUS

PLANT SCHEDULE

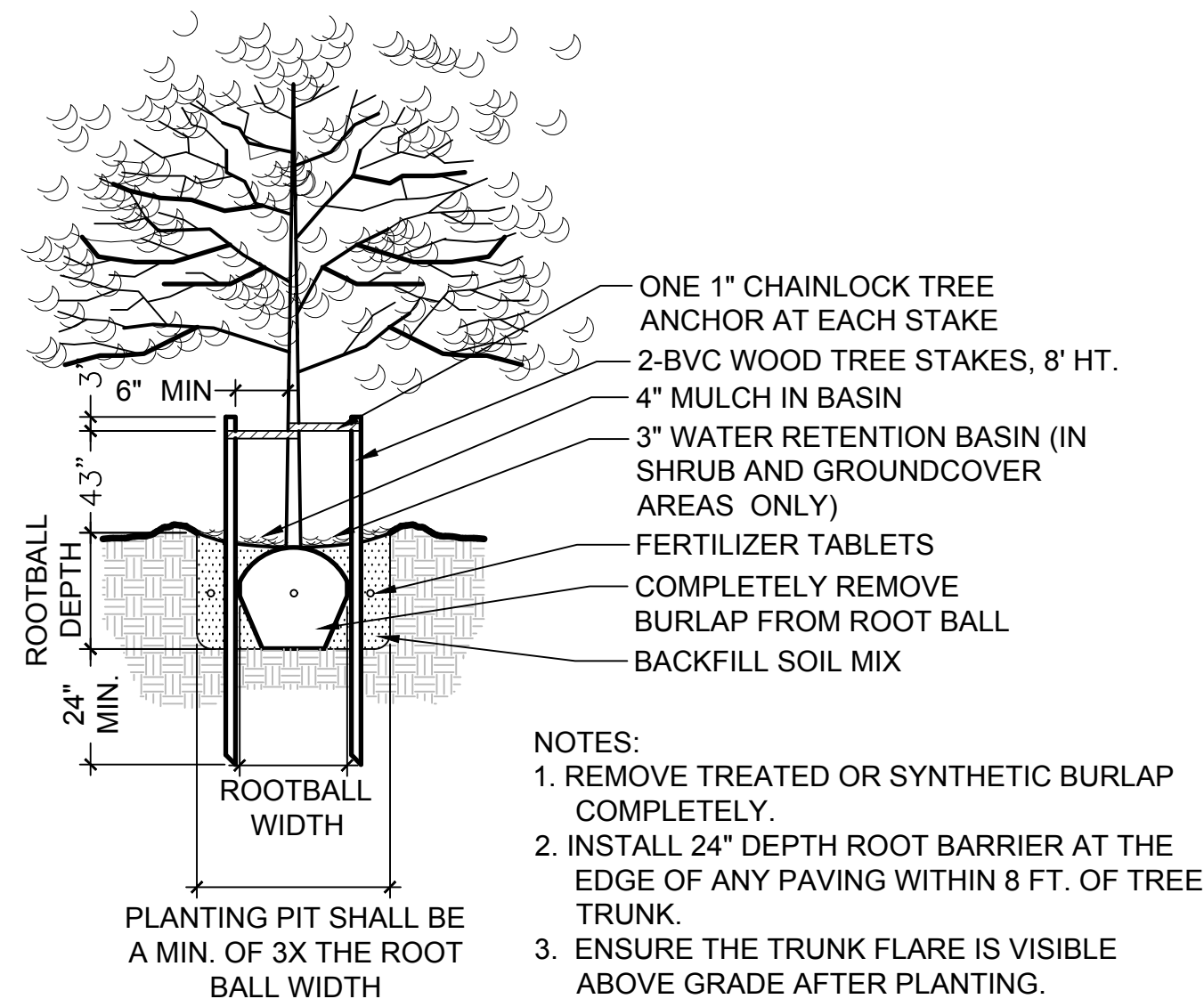
TREES	QTY	COMMON / BOTANICAL NAME	SIZE	
	5	RED SUNSET MAPLE ACER RUBRUM 'FRANKSRED'	1.75" CAL. B&B/CONT	
	1	AUSTRIAN PINE PINUS NIGRA	5' MIN. HT., B&B/CONT.	
SHRUBS	QTY	COMMON / BOTANICAL NAME	SIZE	SPACING
	16	POINT REYES CEANOTHUS CEANOTHUS GLORIOSUS	1 GAL	48" o.c.
	13	MEXICAN ORANGE CHOISYA TERNATA	3 GAL	48" o.c.
	9	PINK PRINCESS ESCALLONIA ESCALLONIA X EXONIENSIS 'FRADESII'	3 GAL	60" o.c.
	5	BLUE PACIFIC SHORE JUNIPER JUNIPERUS CONFERTA 'BLUE PACIFIC'	3 GAL	60" o.c.
	18	SKYROCKET JUNIPER JUNIPERUS SCOPULORUM 'SKYROCKET'	3 GAL	36" o.c.
	6	DWARF MUGO PINE PINUS MUGO 'PUMILIO'	5 GAL	48" o.c.
	6	ABBOTSWOOD POTENTILLA POTENTILLA FRUTICOSA 'ABBOTSWOOD'	3 GAL	48" o.c.
	6	VELOUR WHITE MEXICAN BUSH SAGE SALVIA LEUCANTHA 'VELOUR WHITE'	1 GAL	36" o.c.
	1	SNOWMOUND SPIREA SPIRAEA NIPPONICA	3 GAL	72" o.c.
	14	EVERGREEN HUCKLEBERRY VACCINIUM OVATUM	3 GAL	48" o.c.
ORNAMENTAL GRASSES	QTY	COMMON / BOTANICAL NAME	SIZE	SPACING
	20	KARL FOERSTER FEATHER REED GRASS CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	1 GAL	36" o.c.
	8	LIGHTNING STRIKE FEATHER REED GRASS CALAMAGROSTIS X ACUTIFLORA 'LIGHTNING STRIKE'	1 GAL	36" o.c.
	36	BLUE OAT GRASS HELICTOTRICHON SEMPERVIRENS	1 GAL	30" o.c.
	9	MEXICAN FEATHER GRASS NASSELLA TENUISSIMA	1 GAL	30" o.c.
PERENNIALS	QTY	COMMON / BOTANICAL NAME	SIZE	SPACING
	150	SUNSET CLOUD STONECROP SEDUM TELEPHIUM 'SUNSET CLOUD'	6" POT	18" o.c.
SHRUB AREAS	QTY	COMMON / BOTANICAL NAME	CONT	SPACING
	56	PIGEON POINT COYOTE BRUSH BACCHARIS PILULARIS 'PIGEON POINT'	1 GAL	60" o.c.
	635 SF	SLOUGH SEDGE CAREX OBNUPTA	1 GAL	



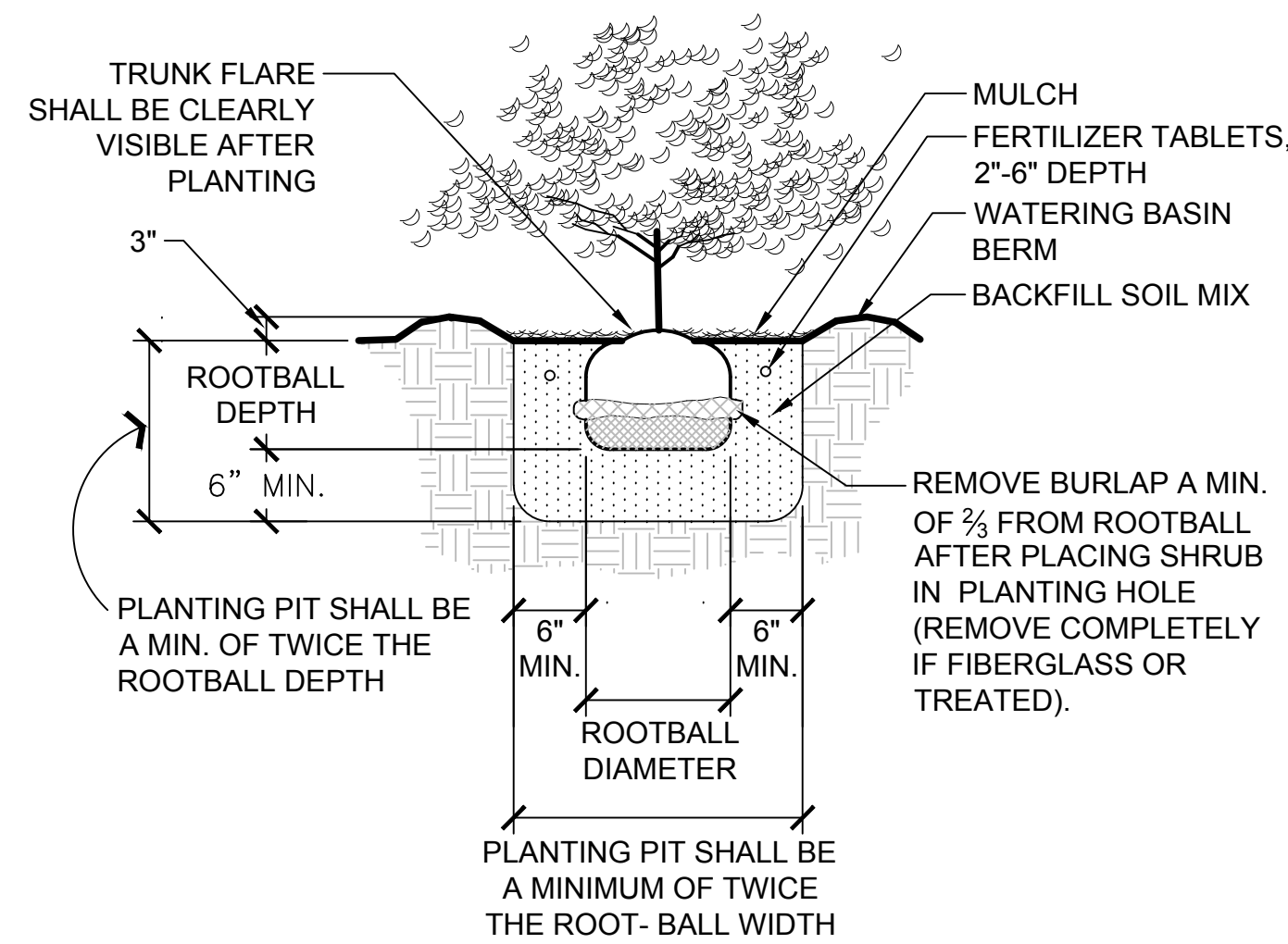
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BY	
DATE	
REVISIONS	
 SCJ ALLIANCE CONSULTING SERVICES 8730 TALLON LANE, NE, SUITE 200, LACEY, WA 98516 P: 360.352.1465 SCJALLIANCE.COM	
LANDSCAPE PLAN - SPR LEVEL DOLLAR GENERAL FLORENCE, OREGON	
DESIGNER:	A. VOS
DRAWN BY:	A. VOS
APPROVED BY:	J. GLANDER
DATE:	AUGUST 2023
JOB NO.:	23-000186
DRAWING FILE NO.:	22-000186-X-LS
DRAWING NO.:	LS-01
SHEET NO.:	1 OF 2

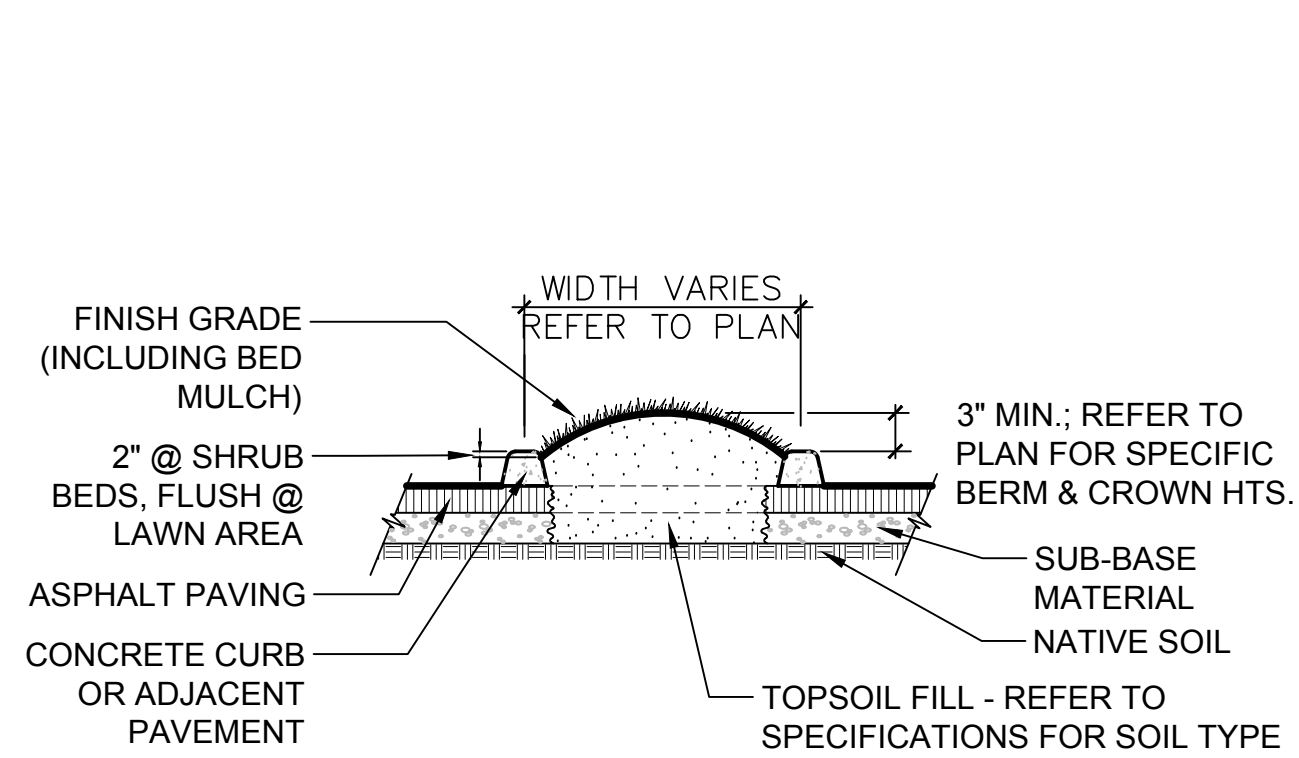
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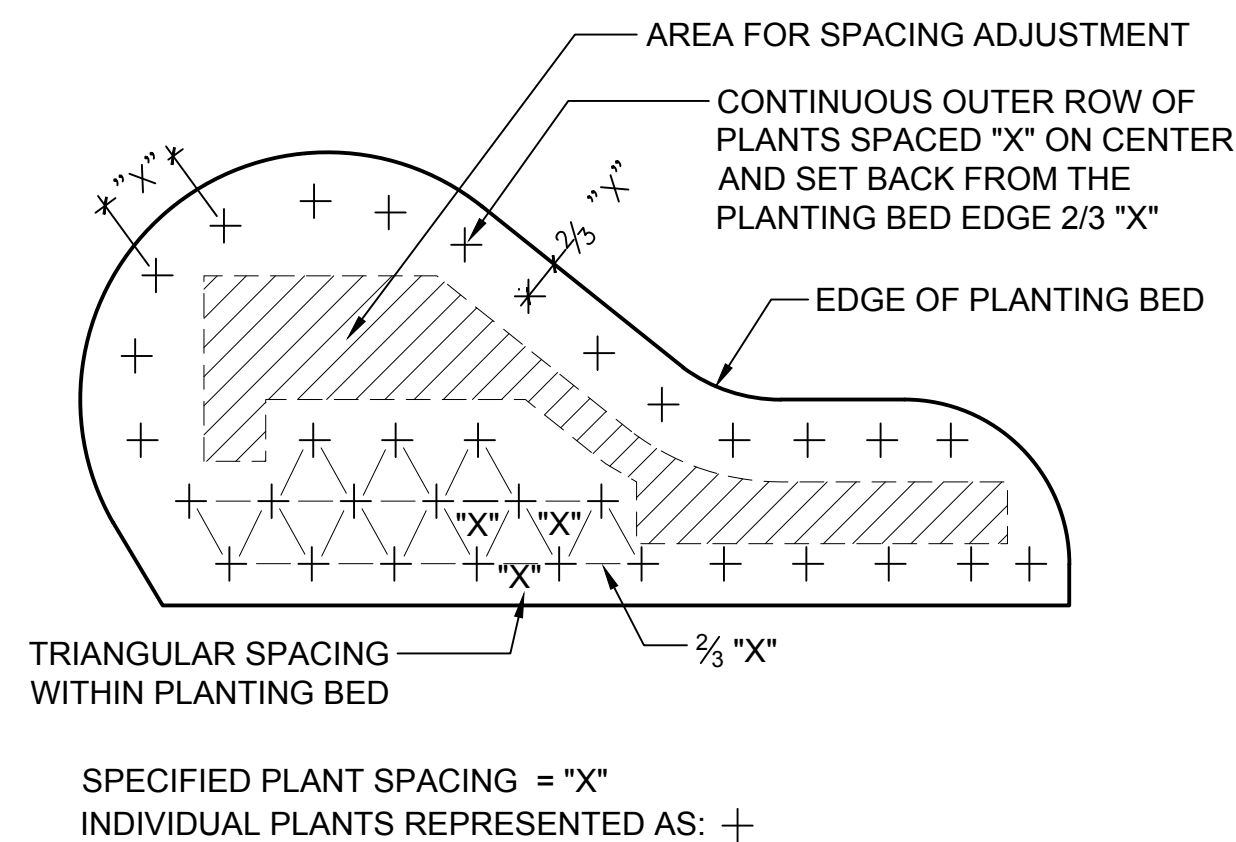
1 TREE PLANTING & STAKING DETAIL
NTS P-CO-DOL14-08



2 SHRUB PLANTING DETAIL (B&B OR CONT.)
NTS P-CO-DOL14-04



3 PARKING ISLAND PLANTER DETAIL
NTS P-CO-DOL14-02



4 PLANT SPACING DETAIL
NTS P-CO-DOL14-01

LANDSCAPE SPECIFICATIONS

- Refer to details for additional information.
- Chemically kill and remove from site all existing weeds and vegetation not shown to remain on plans.
- Distribute imported sandy loam topsoil (approved by the Landscape Architect) in areas shown and at depths indicated for crowning and berming of landscape areas, and backfill of retaining walls (if required). Dotted lines indicate 1' contour intervals. All landscape areas shall receive topsoil, whether indicated on plans or not, so that finish grades of all shrub beds shall be 2" below tops of adjacent curbs and pavement, and lawn areas shall be 1/2" below tops of adjacent curbs and pavement. Structural fill areas: Any landscape areas occurring within structural fill zones shall have said structural fill materials excavated to a depth of 12" below finish grades in shrub areas and 6" below grade in lawn areas, and replaced with specified topsoil. Dispose of excavated material off site.
- Fine grade all landscape beds prior to planting operations.
- No plant substitutions shall be permitted without prior approval of Landscape Architect/Owner.
- All plants shall conform to the latest edition of the American Standard for Nursery Stock.
- All plant materials and plant locations shall be approved by the Landscape Architect prior to installation.
- Root barrier shall be incorporated adjacent and parallel to paving, curb and sidewalk, a minimum of 15 linear feet (7.5' on either side of trunk), 24" deep, where any tree is within 8' of paving, curb or sidewalk. Root barrier shall be DeepRoot UB-24 as available from Ewing Irrigation Products, 2901 S Tacoma Way, Tacoma, WA 98409 (253) 476-9530 or approved equal.
- Soil amendment for soil preparation and planting backfill shall be a screened 5/8" minus nitrified wood residual compost equal to:
 - "Silver Springs Top Grade Compost" brand compost as available from Corliss Resources Lake Tapps, WA (253) 279-9102.
 - "Cedar Grove Compost" brand compost as available from Cedar Grove Compost, Maple Valley, WA (877) 764-5748.
 - PREP/LRI compost as available from Randles Sand and Gravel, Inc., Puyallup, WA (253) 537-6828.
- Soil Preparation - (all landscape areas). Spread 9 c.y. of specified soil amendment per 1000 s.f. (approx. 3" depth) of area. Spread 100 lbs./1000 s.f. of dolomite lime (in lawn areas only), 150 lbs./1000 s.f. of Agricultural Gypsum and 15 lbs./1000 s.f. of 16-8-8 commercial fertilizer over soil amendment. Roto-till all of the above to a 6"-8" depth and grade smooth, compacting as required and removing all rocks, clods and debris.
- Lawn areas (seed or sod refer to plans) shall consist of one of the following turf types:

60% Turf-Type Perennial Rye Grass Varieties	60% Turf-Type Perennial Rye Grass Varieties
20% Bluegrass	40% Turf-Type Fescue
20% Hard Fescue	
- Seed and sod shall be equal to that as grown by Country Green Turf Farms; Olympia, WA or JB Instant Lawn, Redmond, WA. Seed shall be applied at 7 lbs/1000 s.f. and include 10 lbs./1000 s.f. of United Horticulture 15-5-10 fertilizer in all lawn areas.
- All trees in lawn areas shall be planted in a 3' diameter circle of bed mulch.
- Backfill mix for all plants (except Rhododendrons & Azaleas) shall be a blend of 1/3 existing site soil, 1/3 coarse sand, and 1/3 soil amendment specified in No. 9. Backfill mix for Rhododendrons and Azaleas shall consist of 2/3 above specified backfill mix and 1/3 fine grind hem-fir bark mulch.
- Apply Osmocote 18-6-12, 9 month slow release fertilizer over the surface of all plant pits at the following rates:

Trees Over 10' Height	2 Cups	Trees Under 10' Height:	1 Cup
All Shrubs Except 1 Gallons:	1/2 Cup	1 Gallon Plants:	1/4 Cup
Ground Covers:	1/4 Cup		
- Fertilizer tablets for all plants shall be Agriform (20-10-5) 21 gram or 10 gram tablets distributed as follows: All trees: 4-21 gram tablets, all shrubs (except 1 gallons): 3-21 gram tablets, all 1 gallons: 1-21 gram tablet, all 2-1/4" and 4" pot ground covers: 1-10 gram tablet each. Set tablets directly next to rootball.
- All shrub and ground cover beds shall receive a 2" depth (6 c.y. per 1000 s.f.) of "Fine Grind" hem/fir bark mulch as top dressing.
- Apply a granular pre-emergent herbicide to all shrub and groundcover beds at the conclusion of the maintenance period. Do not use Casaron or Norasac Brands.
- All work shall be performed to the satisfaction of the Landscape Architect/Owner.
- All plants shall be guaranteed for one full year from date of project acceptance. All replaced plants shall be re-guaranteed. All replacements shall be made within 21 days of receiving written notice from the Owner. Contractor shall not be responsible for plants dying due to Owner neglect or vandalism, after the maintenance period.
- Plant list quantities are shown for reference only. Contractor is responsible for verifying all quantities in list with actual plan call-outs, and installing plantings per the landscape plan. Groundcover and/or mass shrub quantities shall be adjusted as required for field conditions at the specified spacing.
- Final inspection shall occur at the conclusion of a 60-day maintenance & plant establishment period. Maintenance period shall commence upon completion of all landscape installation activities and shall include the following:
 - Mow lawns once per week.
 - Remove all weeds over 1" in height.
 - Replace dead or unhealthy plants.
 - Ensure proper function of irrigation system.
 - Ensure adequate moisture is delivered to all landscape beds including non-irrigated areas.
 - Fertilize all lawns at conclusion of maintenance and plant establishment period.

SCJ ALLIANCE
CONSULTING SERVICES
8730 TALLON LANE, SUITE 200, LACEY, WA 98516
P: 360.352.1465
SCJALLIANCE.COM

SHEET TITLE: **LANDSCAPE DETAILS & SPECS - SPR LEVEL**
PROJECT NAME: **DOLLAR GENERAL FLORENCE, OREGON**

SEAL: **REGISTERED**
LA 634
TRENT L. GRANTHAM
OREGON
07/19/07
LANDSCAPE ARCHITECT
EXP. 07/31/2024

DESIGNER: A VOS
DRAWN BY: A VOS
APPROVED BY: J. GLANDER
DATE: AUGUST 2023
JOB NO: 23-000186
DRAWING FILE NO: 22-000186-X-LS
DRAWING NO: LS-02
SHEET NO: 2 OF 2

NOT FOR CONSTRUCTION

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**CITY OF FLORENCE
PHASE I SITE INVESTIGATION REPORT**

Capital Growth Buchalter, Inc. | Attn: Mr. Kirk Farrelly, PE
Applicant

June 7, 2023
Date

Dollar General retail store
Proposal or Project

18122322 18-12-23-22-06800-000
Map No. Tax Lot

New commercial retail store
Purpose of Proposal or Project (attach additional sheets, as needed)

Highway
Comprehensive Plan Designation
(H) Highway District
Zoning District

0 Oregon Coast Hwy (US-101) - address not assigned
Street Address

N/A
Overlay District

Based on submitted information, zoning and comprehensive plan requirements, and the completed Site Investigation Report, this proposal **does** **does not** comply with Title 10 of the City Code and the Comprehensive Plan. The proposal **will** **will not** achieve the stated purpose. The site and/or building design **will** **will not** have adverse impacts and **will** **will not** mitigate any adverse impacts.

The completed Site Investigation Report is available at the Planning Department.

This investigation was done by:

Nick Wheeler | JSA Civil, LLC
Print


Signature

Business Manager
Title

**PHASE I SITE INVESTIGATION
INITIAL PROPOSED DEVELOPMENT APPLICATION CHECKLIST**

YES	NO	
<u>X</u>	_____	1. <u>LOCAL ZONING REGULATIONS</u> Does the proposed development site plan conform to City, or County Zoning Regulations regarding setback lines and other code provisions? (Contact the City or County Engineer for details.)
<u>X</u>	_____	2. <u>COMPREHENSIVE PLAN SETBACK LINE OR DESIGNATION</u> a. Has a Coastal Construction Setback line (CCSBL) been adopted for this County or city? (Inquire from the County or City Engineer.) b. If a CCSBL has been adopted for this County or City is the proposed site seaward of the CCSBL? c. If the proposed site is seaward of the adopted CCSBL, has application for a variance or exception been made to the Planning Commission having jurisdiction?
_____	<u>X</u>	
_____	<u>N/A</u> _____	

**PHASE 1 SITE INVESTIGATION
INITIAL PROPOSED DEVELOPMENT APPLICATION CHECKLIST**

YES	NO	
		3. <u>DUNAL FORMS</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Does the property contain any of the following dune formations?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Active Dune
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Newer Stabilized Dune
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Older Stabilized Dune
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Deflation Plan
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. leading Edge of Sand dune
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Foredune
		3. <u>IDENTIFIED HAZARDOUS CONDITIONS</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Has any portion of the property been identified as being affected by any potential or existing geological hazard? (Contact County or City Planning Departments for information published by the State Department of Geology and Mineral Industries, US Department of Agriculture-Soil Conservation Service, US Geological Survey, US Army Corps of Engineers and other government agencies.)
		b. Are any of the following identified hazards present?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. foredune
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Active Dunes
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Water erosion
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Flooding
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Wind erosion
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Landslide or sluff activity
		7. leading edge of active Sand Dune
		c. Are there records of these hazards ever being present of the site? Describe:
		4. <u>EXISTING SITE VEGETATION</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Does the vegetation on the site, afford adequate protection against soil erosion from wind and surface water runoff?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Does the condition of vegetation present constitute a possible fire hazard or contributing factor to slide potential? (If answer is Yes, full details and possible remedies will be required.) <i>The site currently contains Scotch Broom. All existing vegetation at the site will be removed for project development.</i>
		5. <u>FISH AND WILDLIFE HABITAT</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Does the site contain any identified rare or endangered species or unique habitat (feeding, nesting or resting)?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Will any significant habitat be adversely affected by the development? (Contact Oregon Department of Fish and Wildlife.)
		6. <u>HISTORICAL AND ARCHEELOGICAL SITES</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Are there any identified historical or archaeological sites within the area proposed for development? (Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians.)
		7. <u>FLOOD PLAIN ELEVATION</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. If the elevation of the 100 year flood plain or storm tide has been determined, does it exceed the existing ground elevation at the proposed building site? (Contact the Federal Insurance Administration, City or County Planning

**PHASE 1 SITE INVESTIGATION
INITIAL PROPOSED DEVELOPMENT APPLICATION CHECKLIST**

YES NO

- _____ N/A _____
- _____ X _____
- _____ X _____
- _____ X _____
- _____ X _____
- _____ X _____
- X _____
8. CONDITION OF ADJOINING AND NEARBY AREAS
Are any of the following natural hazards present on the adjoining or nearby properties that would pose a threat to this site?
- _____ X _____ a. Active dunes
- _____ X _____ b. foredune
- _____ X _____ c. Storm runoff erosion
- _____ X _____ d. Wave undercutting or wave overtopping
- _____ X _____ e. Slide areas
- X _____ f. Combustible vegetative cover Scotch Broom is currently present on-site which will be removed for development.
(Contact County and City Planning staffs for local hazard information.)
9. DEVELOPMENT IMPACTS
- _____ X _____ a. Will there be adverse off-site impacts as a result of this development?
- _____ X _____ b. Identify possible problem type
- _____ X _____ 1. Increased wind exposure
- _____ X _____ 2. Open sand movement
- _____ X _____ 3. Vegetative destruction
- _____ X _____ 4. Increased water erosion (storm runoff, driftwood removal, reduction of
foredune, etc.)
- _____ X _____ 5. Increased slide potential
- _____ X _____ 6. Affect on aquifer
- X _____ c. Has landform capability (density, slope failure, groundwater, vegetation, etc)
been a consideration in preparing the development proposal?
- X _____ d. Will there be social and economic benefits from the proposed development?
- _____ X _____ e. Identified benefits
- _____ X _____ 1. New jobs
- _____ X _____ 2. Increased tax valuation
- _____ X _____ 3. Improved fish and wildlife habitat
- _____ X _____ 4. Public access
- _____ X _____ 5. Housing needs
- _____ X _____ 6. Recreation potential
- _____ X _____ 7. Dune stabilization (protection of other features)
- _____ X _____ 8. Other _____
10. PROPOSED DESIGN
- X _____ a. Has a site map been submitted showing in detail exact location of proposed
structures?
- _____ X _____ b. Have detailed plans showing structure foundations been submitted?
- _____ N/A _____ c. Have detailed plans and specifications for the placement of protective
structures been submitted if need is indicated?
- X _____ d. Has a plan for interim stabilization, permanent revegetation and continuing
vegetative maintenance been submitted?
- _____ _____ e. Is the area currently being used by the following?

**PHASE 1 SITE INVESTIGATION
INITIAL PROPOSED DEVELOPMENT APPLICATION CHECKLIST**

YES	NO
_____	<u> X </u>
_____	<u> X </u>
_____	<u> X </u>
<u> N/A </u>	_____

1. Off-road vehicles
 2. motorcycles
 3. horses
- f. Has a plan been developed to control or prohibit the uses of off-road vehicles, motorcycles and horses?

11. LCDC COASTAL GOAL REQUIREMENTS

<u> X </u>	_____
_____	<u> X </u>
<u> X </u>	_____
<u> X </u>	_____

- a. Have you read the LCDC Goals affecting the site? (contact LCDC, City or County office for copies of Goals.)
- b. Have you identified any possible conflicts between the proposed development and the Goals or acknowledged comprehensive plans? (If so, list them and contact local planning staff for possible resolution.)
- c. Have all federal and state agency consistency requirements been met? (Contact local planning office.)
- d. Has applicant or investigator determined that the development proposal is compatible with the LCDD Beaches and Dunes Goal and other appropriate statewide land use planning laws?

Rev. 4/09



GEOTECHNICAL SITE INVESTIGATION REPORT

NEW DOLLAR GENERAL STORE

TAX LOT 6800 OF TAX MAP 18122322

SOUTHEAST CORNER OF 36TH STREET AND HIGHWAY 101

FLORENCE, LANE COUNTY, OREGON

GNN PROJECT NO. 223-1642

MAY 2023

Prepared for

CAPITAL GROWTH BUCHALTER, INC.

361 SUMMIT BLVD., SUITE 110

BIRMINGHAM, AL 35243

Prepared by

GN NORTHERN, INC.

CONSULTING GEOTECHNICAL ENGINEERS

HERMISTON, OREGON

(541) 564-0991

*Common Sense Approach to Earth and Engineering
Since 1995*



At GN Northern our mission is to serve our clients in the most efficient, cost-effective way using the best resources and tools available while maintaining professionalism on every level. Our philosophy is to satisfy our clients through hard work, dedication, and extraordinary efforts from all of our valued employees working as an extension of the design and construction team.

May 18, 2023

GNN Project No. 223-1642

Capital Growth Buchalter, Inc.
361 Summit Blvd., Suite 110
Birmingham, AL 35243

Attn: Mark Bush, Project Coordinator

Subject: Geotechnical Site Investigation Report
New Dollar General Store
Southeast Corner of 36th Street and Highway 101
Florence, Lane County, Oregon

Dear Mr. Bush,

As requested, GN Northern (GNN) has completed a geotechnical site investigation for the proposed new Dollar General Store to be constructed at the ~1-acre single parcel identified as Tax Lot 6800 of Tax Map 18122322 located at the southeast corner of 36th Street and Highway 101 in Florence, Lane County, Oregon.

Based on the findings of our subsurface study, we conclude that the site is suitable for the proposed construction provided that our geotechnical recommendations presented in this report are followed during the design and construction phases of the project. Based on the findings of our site exploration and review of available geologic data, the risk of liquefaction at the project site is considered to be High. Development at the site will require ground improvement with appropriate engineered remedial grading to increase the strength and stability of the bearing subgrade soils in addition to an enhanced structural foundation design.

This report describes in detail the results of our investigation, summarizes our findings, and presents our recommendations concerning earthwork and the design and construction of foundations for the proposed project. ***It is very important that GNN be retained by the owner/developer to provide geotechnical engineering consultation during the design phase, and field geotechnical monitoring and compaction testing services during earthwork to ensure proper implementation of the geotechnical recommendations.***

If you have any questions regarding this report, please contact us at 541-564-0991.

Respectfully submitted,


GN Northern, Inc.



Aaron B. Cleveland, GIT
Project Geologist



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Karl A. Harmon, CEG, PE
Senior Geologist/Engineer



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APPENDICES

- APPENDIX I – VICINITY MAP (FIGURE 1), SITE EXPLORATION MAP (FIGURE 2), GEOLOGIC MAP (FIGURE 3), LIQUEFACTION SUSCEPTIBILITY MAP (FIGURE 4), EARTHQUAKE HAZARD MAP (FIGURE 5), CASCADIA EARTHQUAKE HAZARD MAP (FIGURE 6)
- APPENDIX II – EXPLORATORY BORING LOGS, KEY CHART (FOR SOIL CLASSIFICATION)
- APPENDIX III – SITE & EXPLORATION PHOTOGRAPHS
- APPENDIX IV – NRCS SOIL SURVEY
- APPENDIX V – OREGON WATER RESOURCES DEPARTMENT WELL LOGS

1.0 PURPOSE AND SCOPE OF SERVICES

This report has been prepared for the proposed new Dollar General retail store to be constructed at southeast corner of Highway 101 and 36th Street in the City of Florence, Lane County, Oregon. The project site location is shown on the *Vicinity Map* (Figure 1, Appendix I). Our investigation was conducted to collect information regarding subsurface conditions and present recommendations for suitability of the subsurface materials to support the planned site development and allowable bearing capacity for the proposed construction.

GN Northern, Inc. has prepared this report for use by the client and their design consultants in the design of the proposed development. Do not use or rely upon this report for other locations or purposes without the written consent of GN Northern, Inc.

Our study was conducted in general accordance with our *REVISED Proposal for Geotechnical Investigation and Infiltration Testing* dated May 15, 2023; notice to proceed was provided in the form of a signed copy of the proposal dated May 15, 2023.

You provided a *Preliminary Site Plan* prepared by JSA Civil, LLC (dated 2/2/2023) showing the proposed building and site layout. Field exploration, consisting of seven (7) borings and two (2) infiltration tests, was completed on May 16 & 17, 2023. Boring and infiltration test locations are shown on the *Site Exploration Map* (Figure 2, Appendix I). Detailed boring logs are presented in Appendix II.

This report has been prepared to summarize the data obtained during this study and to present our recommendations based on the proposed construction and the subsurface conditions encountered at the site. Results of the field exploration were analyzed to develop recommendations for site development, earthwork, foundation bearing capacity and pavements. Design parameters and a discussion of the geotechnical engineering considerations related to construction are included in this report.

2.0 PROPOSED CONSTRUCTION

Based on the information provided, we understand that site development will include a new building and parking area. The new building will likely be a pre-engineered metal structure with a concrete slab on-grade. Asphalt paved drive-lanes and 32 parking spaces are currently planned on the west, south, and east sides of the building. Access to the site will be from Highway 101 to the west. Although final plans have not been prepared, we understand that stormwater runoff will be managed and disposed of on-site via new stormwater facilities.

Structural loading information was not available at the time of this report. Based on our experience with similar projects, we anticipate maximum wall loads to be on the order of 2.0 to 3.0 klf and column loads to be less than 20 kips. It shall be noted that assumed loading is based on information provided at the time of this report. If loading conditions differ from those described herein, GNN should be given an opportunity to perform re-analysis. Settlement tolerances for the structures are assumed to be limited to 1 inch, with differential settlement limited to ½ inch.

3.0 FIELD EXPLORATION

Our field exploration was completed on May 16 and 17, 2023 by The Galli Group. A local public utility clearance was obtained prior to the field exploration. Seven (7) borings and two (2) infiltration tests were completed at locations shown on the *Site Exploration Map* (Figure 2, Appendix I). Borings were drilled by The Galli Group using an ATV mounted drill rig with 4” solid stem auger to depths ranging from approximately 11.5 to 20 feet below existing ground surface (BGS). The borings were logged by a Galli Group field geologist/engineer. Upon completion, the borings were backfilled in general accordance with the Oregon State guidelines. Detailed boring logs are presented in Appendix II.

Samples were obtained from the test borings using a Standard Penetration (SPT) sampler. The SPT sampler has a 2-inch outside diameter and a 1.38-inch inside diameter. Samples were obtained by driving the sampler with a 140-pound automatic hammer, dropping 30 inches in general accordance with ASTM D1586. The number of blows required to advance the samplers through each 6-inch increment is recorded in the field. The SPT resistance, or N-value, is defined as the number of blows required to drive the sampler from 6 inches to 18 inches below the auger tip, with the value reported as the number of blows per one foot of penetration. The SPT N-value, adjusted

for hammer efficiency and sampler size, provides an indication of the relative density or consistency of the soil and is indicated on the boring logs.

The soils observed during our field exploration were classified according to the Unified Soil Classification System (USCS), utilizing the field classification procedures as outlined in ASTM D2488. A copy of the USCS Classification Chart is included in Appendix II. Photographs of the site and exploration are presented in Appendix III. Depths referred to in this report are relative to the existing ground surface elevation at the time of our investigation. The surface and subsurface conditions described in this report are as observed at the time of our field investigation.

4.0 SITE CONDITIONS

The ~1-acre subject *Property* is located southeast of the intersection of US Highway 101 and 36th Street in Florence, Lane County, Oregon. The site is situated in the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 23, Township 18 South & Range 12 West, Willamette Meridian. The site is bound by US Highway 101 to the west, an existing Burger King restaurant to the south, an existing Chinese food restaurant to the north, and single-family residential development to the east. The site is relatively flat and generally level with adjacent properties to the south, east, and west, and is approximately four feet lower in elevation than the property to the north. Based on a review of published topographic maps, the regional gradient generally slopes down towards the south. The site is covered with scattered brush and grasses with some surface gravels visible in the center towards the south and southeast corner of lot.

This geotechnical site investigation was performed in conjunction with a Phase I Environmental Site Assessment which included research of the historic and past use of the project site. Based on a review of selected available historic aerial photographs, aside from a previously pioneered alignment of a planned cul-de-sac, we did not observe any evidence of prior development on the subject site.

4.1 Regional Geology

The project site is located in the Coastal Range Geologic Province and is situated atop Quaternary sand dune deposits near the mouth of the Siuslaw River along the Pacific Ocean coastline of Oregon. This site is mapped as having Quaternary-aged surficial deposits of fine-grained sediments, including aeolian and beach deposits. Based on our knowledge of groundwater in the

project vicinity, we anticipate that fluctuating groundwater levels will generally range between approximately 5- to 8-feet below the ground surface.

4.2 Geologic Hazards

Potential geologic hazards that may affect the proposed development include: [i] landslides & slope instability, [ii] seismic hazards (ground shaking, surface fault rupture, soil liquefaction, and other secondary earthquake-related hazards), and [iii] flooding & erosion. A discussion of all the pertinent geologic hazards follows.

Site Slopes: The site is generally flat and level with surrounding properties. Slope gradients do not exceed 15% and are not deemed hazardous. We anticipate future site grading will not require large amounts of cuts and fills.

Regional Faulting and Surface Fault Rupture: For the purpose of this report, an active fault is defined as a fault that has had displacement within the Holocene epoch or last 11,700 years. Due to the lack of any known active fault traces in the immediate site vicinity, the risk of surface fault rupture to occur at the subject property is low. While future fault rupture could occur at other locations, rupture would most likely occur along previously established fault traces.

Soil Liquefaction: Liquefaction is the loss of soil strength from sudden shock or vibration (usually earthquake shaking), causing the soil to become a fluid mass. Liquefaction results in a loss of soil strength and can cause the structure/utility to settle if it occurs in the bearing zone. Soil liquefaction is a natural phenomenon that occurs when saturated granular soils (below the water table) are subjected to vibratory motions, causing an increase in the water pressure within soil pores, as the soil tends to reduce in volume. When the pore water pressure reaches the vertical effective stress, the soil particles become suspended in water causing a complete loss in soil strength. Liquefaction can cause excessive structural settlement, ground rupture, lateral spreading (movement), or failure of shallow bearing foundations.

Based on review of the published Oregon Department of Geology and Mineral's HazVu; Statewide Geohazards Viewer Map, the project site is mapped within area identified with a 'High' risk for *Earthquake Liquefaction Hazard*.

In general, for the effects of liquefaction to be manifested at the surface, groundwater levels must be within 50 feet of the ground surface and the soils within the saturated zone must also be susceptible to liquefaction. Soils that are most susceptible to liquefaction are saturated, loose sands with little fines content. Generally speaking, saturated soils with less than 15 percent fines and with SPT blow counts less than 20 to 30 are potentially susceptible to liquefaction, depending on the severity of seismic loading. The following four conditions are generally required before liquefaction can occur:

- The soils must be saturated below a relatively shallow groundwater level (< 50-ft).
- The soils must be loosely deposited (low to medium relative density).
- The soils must be relatively cohesionless (not clayey). Clean, poorly graded sands are the most susceptible. Silt (fines) content increase the liquefaction resistance in that more cycles of ground motions are required to fully develop pore pressures.
- Ground shaking must be of sufficient intensity to act as a trigger mechanism. Two important factors that affect the potential for soil liquefaction are duration as indicated by earthquake magnitude (M) and intensity as indicated by peak ground acceleration (PGA).

Based on the findings of our site exploration and review of available geologic data, the onsite soils are susceptible to liquefaction, therefore the risk from liquefaction at the project site is considered to be High. A detailed liquefaction analysis would be required to fully evaluate the risk of liquefaction induced settlement at the project site which would include a 50-foot-deep boring with continuous SPT sampling below the groundwater or CPT sounding.

In lieu of a site-specific liquefaction analysis, provided the owner/developer accepts the risk of liquefaction settlement of the building pad/foundation from a seismic event, adherence to the recommendations provided in this report can reduce the risk from earthquake-induced liquefaction settlement.

Development at the site will require shallow ground improvement with appropriate engineered remedial grading to increase the strength and stability of the bearing subgrade in addition to an enhanced structural foundation design. As part of remedial grading much of the shallow loose soils within the proposed foundation bearing zone footprint will be excavated and replaced with

compacted granular structural fill as part of building pad preparation. This process will reduce the potential for loose soil directly below the building pad to liquefy should they become saturated.

Lateral Spreading: Considering the site and surrounding area are relatively flat the risk of lateral spreading is considered low.

Secondary Seismic Hazards: Additional secondary seismic hazards related to ground shaking include ground subsidence, tsunamis, and seiches. The site is located at an elevation of approximately 75’ above mean sea-level, so the hazard from tsunamis is very low. The potential hazard from seiches is also very low due to the distance and elevation difference between the site and any nearby water body.

Flooding and Erosion: The subject property is not mapped within a designated flood zone. The need for and design of erosion protection measures is within the purview of the design Civil Engineer. Appropriate erosion and sediment control plan(s) and a drainage plan shall be prepared by the project civil engineer with the final construction drawings. Erosion should be mitigated with appropriate BMPs consisting of proper drainage design including collecting and disposal (conveyance) of water to approved points of discharge in a non-erosive manner. Appropriate project design, construction, and maintenance will be necessary to mitigate the risk of site erosion.

4.3 Seismic Considerations

Based on the findings of our subsurface exploration and information from nearby well logs, a **Site Class ‘D’** (ASCE 7-05, Table 20.1-1) may be used for seismic design purposes. Site Class ‘D’ corresponds to ‘stiff soil’. The following site-specific design values may be used:

Table 1: IBC 2018 Design Response Spectra Parameters

Seismic Design Parameter	Value (unit)	Definition
S _S	1.405 (g)	MCE spectral response acceleration at short periods
S ₁	0.738 (g)	MCE spectral response acceleration at 1-second period
F _a	1 (unitless)	Site coefficient for short periods
F _v	N/A	Site coefficient for 1-second period
S _{MS}	1.405 (g)	MCE spectral response acceleration at short periods as adjusted for site effects
S _{M1}	N/A	MCE spectral response acceleration at 1-second period as adjusted for site effects
S _{DS}	0.936 (g)	Design spectral response acceleration at short periods
S _{D1}	N/A	Design spectral response acceleration at 1-second period

5.0 SUBSURFACE CONDITIONS

Based on the findings of our field exploration, the apparent native subsurface soils encountered within the test-pits consist primarily of Poorly Graded Sand (SP) and occasional layers of Poorly Graded Sand with Silt (SP-SM). The native soils were generally observed to have an apparent ‘very loose’ to ‘medium dense’ relative in-place density and were typically observed to range from ‘damp’ to ‘saturated.’ Boring B-3 was terminated at a depth of 17.5 feet BGS due to apparent collapse of bore hole. SPT sampling at depths below the groundwater was typically blocked/prevented by sand heave. Boring logs in Appendix II show detailed descriptions and stratification of the soils encountered.

5.1 NRCS Soil Survey

The soil survey map of the site prepared by the Natural Resources Conservation Service (NRCS) identifies native site soils as *Yaquina loamy fine sand* and *Yaquina-Urban land complex*. The parent material is described as *eolian sand of mixed origin*. The typical soil profile for these soils is described as *slightly decomposed plant material over loamy fine sand over fine sand*. According to the NRCS map (Appendix IV), the natural drainage class for these units is described as *somewhat poorly drained*.

5.2 Groundwater

Groundwater was encountered in the exploratory borings ranging in depths from ~6.5’ to ~8’ BGS at the time of our exploration. One of the bore holes collapsed during drilling below the groundwater. To further assist in our evaluation, we reviewed the Oregon Water Resources Department Well Log database of nearby well logs (see Appendix V) to estimate groundwater levels in the site vicinity. Based on a review of nearby well logs, the groundwater table in the site vicinity has been noted at depths ranging from approximately 8 to 9 feet BGS. Note that groundwater levels can fluctuate with precipitation, irrigation, drainage, and regional pumping from wells.

6.0 SOIL INFILTRATION TESTING

Two infiltration tests were conducted at the site in general accordance with the EPA falling head method. The location of the infiltration tests are shown on *Site & Exploration Map* (Figure 2) attached to this report. The tests were performed within the augured borehole drilled to an

approximate depth of 4.5 feet below ground surface. The soils at this depth were classified as sand (SP). The test hole was filled with water and allowed to presoak for a period of time prior to testing. Timed measurements of the drop in water level were taken within the test hole until a stabilized rate was established. The test result is generally indicative of the infiltration characteristic of the soils encountered at the test depth interval. The following table presents the field results of the infiltration test performed at this site:

Test ID	Test Depth, BGS	Field Measured Soil Infiltration Rate (inch/hour)
IT-1	~4 feet	14
IT-2	~4.5 feet	15

The infiltration rate presented herein represents the un-factored field soil infiltration rate. An appropriate factor of safety should be applied to the field infiltration rate to determine long-term design infiltration rates. Determination of safety factors for long-term design infiltration should consider the following: pretreatment, potential for bio-fouling, system maintainability, horizontal and vertical variability of soils, and type of infiltration testing. Typical factors of safety for these soils generally range from 2.5 to 3.

The design of onsite stormwater management facilities should consider adequate separation from the highest groundwater levels.

7.0 GEOTECHNICAL RECOMMENDATIONS

The following geotechnical recommendations are based on our current understanding of the proposed project as described in Section 2.0 of this report. Note that Soil Design Parameters and Recommendations presented in this report are predicated upon appropriate geotechnical monitoring and testing of the site preparation and foundation and building pad construction by a representative of GNN's **Geotechnical-Engineer-of-Record (EOR)**. Any deviation and nonconformity from this requirement may invalidate, partially or in whole, the following recommendations. We recommend that GNN shall be engaged to review grading and foundation plans in order to provide revised, augmented, and/or additional geotechnical recommendations as required.

The applicability of our recommendations is contingent upon good construction practices. Poor construction techniques may alter conditions from those on which our recommendations are based and, therefore, result in reduced foundation capacity, additional settlement and/or movement, or inadequate subgrade stability, as appropriate. The following sections present construction considerations for this project.

7.1 Clearing and Grubbing

At the start of site grading, existing vegetation, roots, undocumented fills, any trash/debris, and any abandoned underground utilities shall be **fully removed** from proposed building, structural and pavement areas. The surface shall be stripped of all organic growth (vegetation). Based on our explorations, we estimate approximately 12 inches of material must be stripped from most development footprint; deeper and possibly shallower stripping depths may be necessary as identified by GN Northern during construction. The strippings are not suitable for use in engineered fill. Strippings may be used in landscaped areas or deposited off-site. Areas disturbed during clearing shall be properly backfilled and compacted as described below.

7.2 Site Grading

Site grading shall incorporate the requirements of IBC 2018 Appendix J. Do not commence site clearing and grading operations until temporary erosion and sedimentation control measures are in place. A representative of the EOR should observe site clearing, grading, and the bottoms of excavations before placing fills. Local variations in soil conditions may warrant increasing the depth of over-excavation and recompaction. Do not place backfill or fill soil material on surfaces that are saturated, muddy, frozen, or contain frost, snow, or ice. To prevent potential pumping and unstable ground conditions and improve compaction efforts, we strongly recommend performing site grading during dryer periods of the year. Site grading and excavations should be avoided during winter and wet weather periods of the year.

Some limited areas of surficial fill materials were found in some borings at the site. The thickness of undocumented and potentially unsuitable fill material was generally observed to range from ~0.5 to ~1 foot. We recommend chasing the undocumented fill material to the full depth. Existing fill and unsuitable materials shall be fully removed and replaced with suitable onsite soils or

imported fill material placed as engineered structural fill. Note that the vertical and lateral extent of fill and potentially unsuitable materials cannot be quantified based on the scope of our exploration.

Prior to fill placement on cut ground surfaces, remove loose soil and debris. Scarify the cut and/or stripped soil subgrade a minimum 12 inches. Moisture-condition the exposed subgrade soils to within 2 percent of optimum, then compact to a minimum in-place dry density of 95 percent of the maximum dry density as determined by ASTM D 1557.

Subgrade preparation may be complicated due to the shallow groundwater. Our experience indicates kneading-type compactors (e.g., sheepsfoot roller) are preferable for fine sand and silt subgrade compaction. Vibratory-type compactors are not advisable within approximately 2 feet of the native materials based on the sensitivity of the subgrade soils to moisture.

Soil conditions shall be evaluated by in-place density testing, visual evaluation, probing, and proof-rolling of the imported fill and re-compacted on-site soil as it is prepared to check for compliance with recommendations of this report. A moisture-density curve shall be established in accordance with the ASTM D1557 method for all onsite soils and imported fill materials used as structural fill.

7.3 Suitability of the Onsite Soils as Engineered Fill

The onsite soil, free of organics or deleterious materials including trash and debris, is generally suitable for use as engineered structural fill, general fill and utility trench backfill. Engineered fill should be placed in maximum 8-inch-thick loose lifts and each lift compacted to at least 95% of the Modified Proctor maximum dry density, as determined by ASTM D1557 (Laboratory Compaction Characteristics of Soil Using Modified Effort) near optimum moisture content.

7.4 Soil Moisture Conditioning

Appropriate moisture conditioning of fill soils may be required to facilitate compaction and to achieve the required degree of compaction. Uniformly moisten subgrade and each subsequent fill or backfill soil layer before compaction to near optimum moisture content, unless indicated otherwise. A laboratory proctor test to determine optimum moisture content is required prior to field compaction testing. Maintain fills soils to near-optimum moisture content at time of compaction. Assume a plus/minus maximum tolerance of approximately 2% to 3% unless compaction efforts prove a wider tolerance from optimum moisture content is acceptable to meet

compaction requirements. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds near-optimum moisture content and is too wet to compact to specified dry density.

7.5 Temporary Excavations

It shall be the responsibility of the contractor to maintain safe temporary slope configurations since the contractor is at the job site, able to observe the nature and conditions of the slopes, and able to monitor the encountered subsurface conditions. Unsupported vertical cuts deeper than 4 feet are not recommended if worker access is necessary. The cuts shall be adequately sloped, shored or supported to prevent injury to personnel from caving and sloughing. The contractor and subcontractors shall be aware of, and familiar with, applicable local, state and federal safety regulations including the current OSHA Excavation and Trench Safety Standards, and OSHA Health and Safety Standards for Excavations, 29 CFR Part 1929, or successor regulations.

It is our opinion that the soil encountered at the site is classified as Type C soils. For excavation planning purposes, we recommend that temporary, unsupported, open cut slopes shall be no steeper than 1.5 feet horizontal to 1.0 feet vertical (1.5H:1V) in Type C soils. No heavy equipment should be allowed near the top of temporary cut slopes unless the cut slopes are adequately braced. Final (permanent) fill slopes should be graded to an angle of 2H:1V or flatter. We recommend that permanent slopes be hydroseeded and/or planted with vegetation after construction. Where unstable soils are encountered, flatter slopes may be required. We recommend protecting slopes with waterproof covering during periods of wet weather to reduce sloughing and erosion.

The native loose sandy soil will be prone to significant caving and sloughing in open excavations. Excavation stability may be achieved by sloping excavation banks or widening shallow excavations in the anticipation of caving. Deeper excavations may require external support such as shoring or bracing to provide excavation bank stability.

7.6 Utility Excavation, Pipe Bedding and Trench Backfill

To provide appropriate support and bedding for the pipe, we recommend the utilities be founded on suitable bedding material consisting of clean sand and/or sand & gravel mixture. Pipe bedding should provide a firm uniform cradle for support of the pipes. A minimum 4-inch thickness of bedding material beneath the pipe should be provided. Prior to installation of the pipe, the pipe

bedding should be shaped to fit the lower part of the pipe exterior with reasonable closeness to provide uniform support along the pipe. Pipe bedding material should be used as pipe zone backfill and placed in layers and tamped around the pipes to obtain complete contact. To protect the pipe, bedding material should extend at least 6 inches above the top of the pipe, however initial lift thickness could be increased to levels recommended by the manufacturer to protect utilities from damage by compacting equipment.

Placement of bedding material is particularly critical where maintenance of precise grades is essential. Backfill placed within the first 12 inches above utility lines should be compacted to at least 90% of the maximum dry density (ASTM D1557), such that the utility lines are not damaged during backfill placement and compaction. In addition, rock fragments greater than 1 inch in maximum dimension should be excluded from this first lift. The remainder of the utility excavations should be backfilled and compacted to 95% of the maximum dry density as determined by ASTM D1557.

Suitable backfill for the pipe bedding, pipe zone material and trench backfill shall meet the specifications of *2018 Oregon Standard Specification for Construction* sections 00405.12, 00405.13 and 00405.14, respectively. Onsite soils may be considered suitable for utility trench backfill provided they are free of significant organic matter and oversize material, and can be adequately compacted. All excavations should be wide enough to allow for compaction around the haunches of pipes. We recommend that utility trenching, installation, and backfilling conform to all applicable federal, state, and local regulations such as OSHA for open excavations.

Compaction of backfill material should be accomplished with soils within $\pm 2\%$ of their optimum moisture content in order to achieve the minimum specified compaction levels recommended in this report. Backfill operations shall be observed and tested to monitor compliance with these recommendations.

7.7 Use of Imported Fill Soils as Engineered Fill

If needed, imported fill material should consist of a clean, non-plastic, free draining crushed gravel and sand, which is free of organic matter, oversized material or other deleterious materials. Imported fill material should be pit or quarry run rock and should meet the ODOT Standard

Specification 00330.14 -Selected Granular Backfill and 00330.15 - Selected Stone Backfill. The imported fill material should have less than 5 percent fines (based on the ¾-inch fraction).

7.8 Imported Crushed Rock Structural Fill

Imported crushed rock structural fill shall consist of well-graded, crushed aggregate material meeting the grading and quality requirements of *2018 Oregon Standard Specifications for Construction* Section 02630.10 (Dense-Graded Aggregate, 1½ inch minus) presented in the table below:

Table 2: ODOT Standard Spec. Table 02630-1

Sieve Size	Percent Passing (by Weight)
2 Inch Square	100
1½ Inch Square	95 – 100
¾ Inch Square	55 – 75
¼ Inch Square	35 – 50
U.S. No. 10	*

* Of the fraction passing the ¼ inch sieve, 40-60% shall pass the No. 10 sieve

A fifty (50) pound sample of each imported fill material shall be collected by GNN personnel prior to placement to ensure proper gradation and establish a moisture-density relationship (proctor curve).

7.9 Compaction Requirements for Structural/ Engineered Fill

All fill or backfill shall be approved by a representative of our Geotechnical engineer (EOR), placed in uniform lifts, and compacted to a minimum 95% of the maximum dry density as determined by ASTM D1557. The compaction effort must be verified in the field using a nuclear density gauge in accordance with ASTM D6938. The thickness of the loose, non-compacted, lift of structural fill shall not exceed 8 inches for heavy-duty compactors or 4 inches for hand operated compactors.

7.10 Building Pad & Foundation Subgrade Improvement

The following two options will address the life safety concerns in the event of a design-level earthquake. However, each option has a varying degree of cost, which translates to different levels of protection of the building in terms of repairs or viability of the building after a design-level earthquake.

A ground improvement method that will provide highest level of protection of the building after an earthquake include installation of Rammed Aggregate Piers (RAP). While feasible, this method may be cost prohibitive, considering the type of construction, occupancy and extent of development.

Considering the owner/developer accepts the risk of liquefaction settlement, for a lightly loaded metal building with slab-on-grade with a seismic Risk Category II, a more cost-effective means to mitigate potential liquefaction settlement damage of the building after an earthquake, but does not prevent its occurrence, include an enhanced foundation system that is structurally designed (provide additional interior grade beams to stiffen the foundations at the column locations) to withstand some differential movement or tilting, along with shallow foundation ground improvements.

The minimum goal of liquefaction induced settlement mitigation for the proposed retail store facility should be to provide a foundation system with improved ground support that can withstand the expected movement without causing significant structural damage so as to pose a life-safety hazard.

To minimize the effects of seismically induced settlement, we recommend a uniform over-excavation (sub-cut) of 4.5 to 5 feet (depending on the groundwater elevation at the time of grading) below the design finish floor elevation across the entire building pad footprint plus 4 feet laterally on all sides. Scarify the cut subgrade a minimum 12 inches, moisture-condition the subgrade soils to within 2 percent of optimum, then compact to a minimum in-place dry density of 90 percent of the maximum dry density as determined by ASTM D 1557 and proof-rolled to a dense and non-yielding surface. Backfill the over-excavation with angular ballast rock structural fill material. The structural fill section shall be reinforced with 2 layers of geogrid consisting of Tensar TX160. The first layer of geogrid shall be placed over the prepared cut subgrade (bottom of over-excavation) after recomaction and the second geogrid layer at mid depth within the structural fill section. The bottom 18-inches of the over-excavation shall be backfilled with 4- to 5-inch size angular ballast rock and placed in 9-inch lifts. Complete several dozer passes over the ballast materials in entirety and compact to a firm and non-yielding surface before placing the next lift. Proof-roll the compacted ballast rock with a loaded dump truck and observe deflections for

indications of inadequate subgrade performance. The remainder of the over-excavation shall be backfilled with compacted 1½” minus crushed base rock placed over the ballast rock.

7.11 Foundation Bearing Support & Allowable Bearing Capacity

In our opinion, the proposed building may be supported on shallow enhanced foundations bearing on a layer of imported crushed rock placed atop a reinforced engineered fill section in accordance with the recommendations of this report. The minimum footing depth shall be 18 inches below adjacent grades for frost protection.

All foundations and building pad shall bear on a minimum of 12 inches of imported crushed rock structural fill. The crushed rock structural fill should extend laterally a minimum distance of four (4) foot beyond the outer edge of all footings. The crushed rock structural fill shall be compacted to minimum 95% of ASTM D1557.

Footings constructed in accordance with the above recommendations may be designed for an allowable **1,500 pounds per square foot (psf)** bearing pressure. The allowable bearing pressure may be increased by 1/3 for short-term, transient loading conditions. Provided footing subgrades are prepared in accordance with the recommendations presented in this report, we estimate total foundation settlements of approximately 1-inch. We anticipate differential settlement will be about half of total settlements between adjacent columns and along approximately 20 feet of continuous footings. We assume there is no stress overlap from adjacent footings. Footings located less than two times the footing width (2B) from each other will increase stresses beneath the adjacent footing, resulting in increased settlement. We expect elastic settlements to generally occur as loads are applied.

These settlement estimates do not account for seismically induced settlement (liquefaction) which will be greater based on the earthquake magnitude and intensity of ground shaking but is expected to be relatively uniform across the building footprint.

Lateral forces on foundations from short term wind and seismic loading would be resisted by friction at the base of foundations and passive earth pressure against the buried portions. We recommend an allowable passive earth pressure for compacted imported fill of **200 pcf**. This lateral foundation resistance value includes a factor of safety of 1.5. We recommend a coefficient

of friction of **0.45** be used between cast-in-place concrete and imported crushed rock. An appropriate factor of safety should be used to calculate sliding resistance at the base of footings.

Note: Typically for seismic life-safety design (per the building code for liquefaction analysis) the non-collapse allowable differential seismic settlements are around 3 inches over 40 feet and are acceptable for mostly single story lightly loaded buildings. Most buildings, both concrete and steel construction, allows up to 2 inches of differential seismic settlement. Note that this settlement is only applicable to the design earthquake which per building code is seismic event with a 2,475-year return period and the building code only mandates life-safety and non-collapse (not damage). Recently, documents such as 2015 NEHRP (National Earthquake Hazards Reduction Program) have quantified the amount of acceptable differential settlement from liquefaction. Allowable liquefaction differential settlement could be 3 inches over 40 feet. Also the 2015 NEHRP stresses the importance of making sure bearing capacity loss due to liquefaction does not occur as it has been shown in previous earthquakes that catastrophic loss of bearing capacity causes most building failures.

7.12 Slab-on-Grade Floors

A minimum 12-inch layer of ¾” minus crushed aggregate fill shall be placed beneath the building slab extending to the compacted ballast rock section. Material shall meet the *Oregon Standard Specification for Construction*, specification section 02630-1, provided it contains less than 5% passing the No. 200 sieve (fines). The crushed rock material shall be compacted to at least 95% of the maximum dry density as determined by ASTM D1557 method.

We recommend a modulus of subgrade reaction equal to **120 pounds per cubic inch (pci)** based on a value for gravel presented in the Portland Cement Association publication No. EB075.01D. Slab thickness, reinforcement and joint spacing shall be determined by a licensed engineer based on the intended use and loading.

An appropriate vapor retarder (15-mil polyethylene liner) shall be used (ASTM E1745/E1643) beneath areas receiving moisture sensitive resilient flooring/VCT where prevention of moisture migration through slab is essential. The slab designer should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder. The architect shall determine the need and use of a vapor retarder.

7.13 Lateral Earth Pressures

We recommend the following lateral earth pressures, in terms of equivalent fluid unit weight, for design of retaining walls or below-grade structures:

Drained Condition

At-Rest = 60 pcf Active = 40 pcf

Un drained Condition

At-rest = 91 pcf Active = 82 pcf

We assume that the structural wall backfill is adequately drained to avoid saturation and introduction of hydrostatic pressures. For calculation of active pressures, we assume that the wall can deflect in order to develop an active condition. Use at-rest pressures for restrained or braced walls. The horizontal resultant force (pressure x H/2 where H is height of buried wall) should be applied at an H/3 distance from the base of the wall.

If any surface, surcharge loads are closer than one-half of the wall height (horizontal distance) to the edge of the below-grade and/or retaining wall, increase the design wall pressure by $q/2$ over the whole area of the retaining wall. In this expression, q is the surface surcharge load in psf. GNN should review anticipated surcharge loading to confirm that the appropriate design values are considered. The horizontal surcharge resultant force (pressure x H where H is height of buried wall) should be applied at an H/2 distance from the base of the wall.

For seismic design increase earth pressure by 0.7 of the peak ground acceleration (PGA) and apply at 0.4H above the base of the wall, where H is the wall height in feet.

7.14 Flexible Pavement

Pavement subgrade soils are generally expected to consist of the native sandy gravelly soil. A California Bearing Ratio (CBR) value of 5 has been estimated for the onsite soils for use in the pavement analysis. Using an empirical relationship, this CBR value corresponds to a resilient modulus value of approximately 7,500 psi. Pavement analyses are based on *1993 AASHTO Guide for Design of Pavement Structures*. The table below presents recommended pavement sections for this project:

Table 3: Recommended Asphalt Concrete Paving Sections

Traffic	Asphalt Thickness (inches)	Crushed Aggregate Base Course (inches)	Subgrade
Heavy Duty [†]	4.0	10*	upper min. 12 inches scarified, moisture conditioned and re-compacted to at least 95% of the maximum dry density as determined by ASTM D1557
Standard Duty ^{††}	2.5	8*	

[†]Heavy duty applies to pavements section for entrance drives, and trash enclosure drive lanes

^{††}Standard duty applies to general parking areas

*The upper 2” of crushed rock should be top course rock placed over the base course layer

Pavement design recommendations assume proper and positive drainage and construction monitoring and are based on AASHTO Design parameters for a 20-year design period. Asphalt pavements tend to develop thermal and fatigue cracking over time from environmental factors and traffic loads. Asphalt, being a viscoelastic material, weakens from temperature influx. Timely preventative measures for continual flexible maintenance such as crack filling and seal coating at 8-10 year intervals to control the progression of surface cracking and distress to prevent water from infiltrating into the base course and subgrade shall be considered. Performing this intermediate level of maintenance will net at least a 20-year service life/performance life

Soils containing roots or organic materials shall be completely removed from the proposed paved areas prior to subgrade construction. The upper 12 inches of native sandy subgrade soils beneath the pavement section shall be scarified, moisture conditioned and re-compacted to at least 95% of the maximum dry density as determined by ASTM D1557. All fills used to raise low areas must be compacted onsite soils or structural gravel fill and shall be placed under engineering control conditions. The finished surface shall be smooth, uniform and free of localized weak/soft spots. All subgrade deficiency corrections and drainage provisions shall be made prior to placing the aggregate base course. All underground utilities shall be protected prior to grading.

The HMAC utilized for the project should be designed and produced in accordance with Section 00744 Asphalt Concrete Pavement of the *2018 Oregon Standard Specifications for Construction* (ODOT Specifications). Aggregate Base material shall comply with Section 02630.10 (Dense-Graded Aggregate, 1½ inch minus) of the ODOT Specifications. Aggregate base or pavement materials should not be placed when the surface is wet.

7.15 Subgrade Protection

The degree to which construction grading problems develop is expected to be dependent, in part, on the time of year that construction proceeds and the precautions which are taken by the contract to protect the subgrade. We recommend that the site shall be graded to prevent water from ponding within construction areas and/or flowing into excavations. Accumulated water must be removed immediately along with any unstable soil. Foundation concrete should be placed, and excavations backfilled as soon as possible to protect the bearing grade.

7.16 Subgrade Inspection and Compaction Verification

A representative of our Geotechnical engineer (soils inspector) shall be onsite during earthwork to inspect and test subgrade and each fill layer. Proceed with subsequent earthmoving only after inspections confirm previously completed work complies with requirements of this report. Inspections and tests include:

1. Determine prior to placement of fill that subgrade has been prepared in compliance with requirements of this Geotechnical Report.
2. Determine that fill material and maximum lift thickness and moisture comply with requirements of this Geotechnical Report.
3. Determine, during placement and compaction, that in-place density of compacted fill complies with requirements of this Geotechnical Report.

When the soils inspector indicates that subgrades, and fills have not achieved subgrade acceptance criteria or degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

7.17 Wet Weather Conditions

The onsite soils may be susceptible to pumping during wet weather when excessively wet and disturbed by construction traffic. Soil disturbance will negatively impact the soil's performance below slabs, pavement, and hardscape. Fine sandy soils are susceptible to erosion in the presence of moving water. During or subsequent to wet weather, compacting the on-site soils may be difficult. If earthwork takes place in wet weather or wet conditions, the following recommendations should be followed:

1. Accomplish earthwork in small sections and carry such work through to completion to reduce exposure to wet weather. Soils that become too wet for compaction are to be removed and replaced with clean, imported granular material.
2. Carefully stage equipment and/or stockpiles, route construction equipment away from subgrades, and implement aggressive site drainage procedures to help reduce saturating subgrades.
3. Cover work areas and stockpiles with plastic. Use straw bales, straw wattles, geotextile silt fences, and/or other measures as appropriate to control soil erosion.
4. Equipment with large tracks, lugs, or having toothed buckets has a significant potential to disturb the site soil prior to or following compaction. Rubber-tired vehicles should not access prepared subgrades unless the subgrade is sufficiently stiff to allow construction traffic without disturbance.
5. Maintain the subgrade in a compacted condition and protect subgrades from construction traffic disturbance after they have been prepared and meet compaction requirements. Consequently, do not operate construction equipment or vehicles on prepared subgrade areas during wet weather conditions. After inclement weather, inspect all subgrade areas prepared before the inclement weather conditions.
6. Prior to rain and other events that may cause fine sandy or silty soils to exceed optimum moisture content, stabilize such soils to minimize potential for erosion into adjacent excavations.
7. If necessary for continuing operations after wet weather, provide a layer of quarry spalls course for access or haul roads, underlying with geotextile fabric.

7.18 Surface Drainage

With respect to surface water drainage, we recommend that the ground surface be sloped to drain away from the structure. Final exterior site grades shall promote free and positive drainage from the building areas. Water shall not be allowed to pond or to collect adjacent to foundations or within the immediate building area. We recommend that a gradient of at least 5% for a minimum distance of 10 feet from the building perimeter be provided, except in paved locations. In paved areas, a minimum gradient of 1% should be provided unless provisions are included for

collection/disposal of surface water adjacent to the structure. Catch basins, drainage swales, or other drainage facilities should be aptly located. All surface water such as that coming from roof downspouts and catch basins be collected in tight drain lines and carried to a suitable discharge point, such as a storm drain system. Surface water and downspout water should not discharge into a perforated or slotted subdrain, nor should such water discharge onto the ground surface adjacent to the building. Cleanouts should be provided at convenient locations along all drain lines.

8.0 CONTINUING GEOTECHNICAL SERVICES

GNN recommends that the Client should maintain an adequate program of geotechnical consultation, construction monitoring, and soils testing during the final design and construction phases to monitor compliance with GNN's geotechnical recommendations. **Maintaining GNN as the geotechnical consultant from beginning to end of the project will provide continuity of services.** If GN Northern, Inc. is not retained by the owner/developer and/or the contractor to provide the recommended geotechnical inspections/observations and testing services, the geotechnical engineering firm or testing/inspection firm providing tests and observations shall assume the role and responsibilities of Geotechnical Engineer-of-Record.

GNN can provide construction monitoring and testing as additional services. The costs of these services are not included in our present fee arrangement but can be obtained from our office. The recommended construction monitoring and testing includes, but is not necessarily limited to, the following:

- Consultation during the design stages of the project.
- Review of the grading and drainage plans to monitor compliance and proper implementation of the recommendations in GNN's Report.
- Observation and quality control testing during site preparation, grading, and placement of engineered fill as required by the local building ordinances.
- Geotechnical engineering consultation as needed during construction.

Construction observation allows the Geotechnical engineer to observe the actual soil conditions exposed during construction, determine if the proposed design is compatible with the design recommendations, and if the conditions encountered at the site are consistent with those observed during site investigation. Construction observation is conducted to reduce the potential for problems arising during and after construction. However, in all cases, the Contractor is responsible for the quality and completeness of their work and for adhering to the plans, specifications, and recommendations on which their work is based.

9.0 LIMITATIONS OF THE GEOTECHNICAL SITE INVESTIGATION REPORT

This GEOTECHNICAL SITE INVESTIGATION REPORT (“Report”) was prepared for the exclusive use of the Client. GN Northern, Inc.’s (GNN) findings, conclusions and recommendations in this Report are based on selected points of field exploration, laboratory testing, and GNN’s understanding of the proposed project at the time the Report is prepared. Furthermore, GNN’s findings and recommendations are based on the assumption that soil, rock and/or groundwater conditions do not vary significantly from those found at specific exploratory locations. Variations in soil, bedrock and/or groundwater conditions could exist between and beyond the exploration points. The nature and extent of these variations may not become evident until during or after construction. Variations in soil, bedrock and groundwater may require additional studies, consultation, and revisions to GNN’s recommendations in the Report.

In many cases the scope of geotechnical exploration and the test locations are selected by others without consultation from the geotechnical engineer/consultant. GNN assumes no responsibility and, by preparing this Report, does not impliedly or expressly validate the scope of exploration and the test locations selected by others.

This Report’s findings are valid as of the issued date of this Report. However, changes in conditions of the subject property or adjoining properties can occur due to passage of time, natural processes, or works of man. In addition, applicable building standards/codes may change over time. Accordingly, findings, conclusions, and recommendations of this Report may be invalidated, wholly or partially, by changes outside of GNN’s control. Provided that the site conditions are not disturbed or altered after the planned grading is completed, the report will be valid for a period of 3 to 5 years from the issued date of the Report.

In the event that any changes in the nature, design, or location of structures are planned, the findings, conclusions and recommendations contained in this Report shall not be considered valid unless the changes are reviewed by GNN and the findings, conclusions, and recommendations of this Report are modified or verified in writing.

This Report is issued with the understanding that the owner or the owner’s representative has the responsibility to bring the findings, conclusions, and recommendations contained herein to the attention of the architect and design professional(s) for the project so that they are incorporated

into the plans and construction specifications, and any follow-up addendum for the project. The owner or the owner's representative also has the responsibility to verify that the general contractor and all subcontractors follow such recommendations during construction. It is further understood that the owner or the owner's representative is responsible for submittal of this Report to the appropriate governing agencies. The foregoing notwithstanding, no party other than the Client shall have any right to rely on this Report and GNN shall have no liability to any third party who claims injury due to reliance upon this Report, which is prepared exclusively for Client's use and reliance.

GNN has provided geotechnical services in accordance with generally accepted geotechnical engineering practices in this locality at this time. GNN expressly disclaims all warranties and guarantees, express or implied.

Client shall provide GNN an opportunity to review the final design and specifications so that earthwork, drainage and foundation recommendations may be properly interpreted and implemented in the design and specifications. If GNN is not accorded the review opportunity, GNN shall have no responsibility for misinterpretation of GNN's recommendations.

Although GNN can provide environmental assessment and investigation services for an additional cost, the current scope of GNN's services does not include an environmental assessment or an investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater, or air on, below, or adjacent to the subject property.

APPENDICES

Appendix I

Vicinity Map (Figure 1)

Site Exploration Map (Figure 2)

Geologic Map (Figure 3)

Liquefaction Susceptibility Map (Figure 4)

Earthquake Hazard Map (Figure 5)

Cascadia Earthquake Hazard Map (Figure 6)



Source: Bing Maps



Source: Google Earth

FIGURE 1: VICINITY MAP





5' SETBACK
TYPICAL SIDE
AND REAR

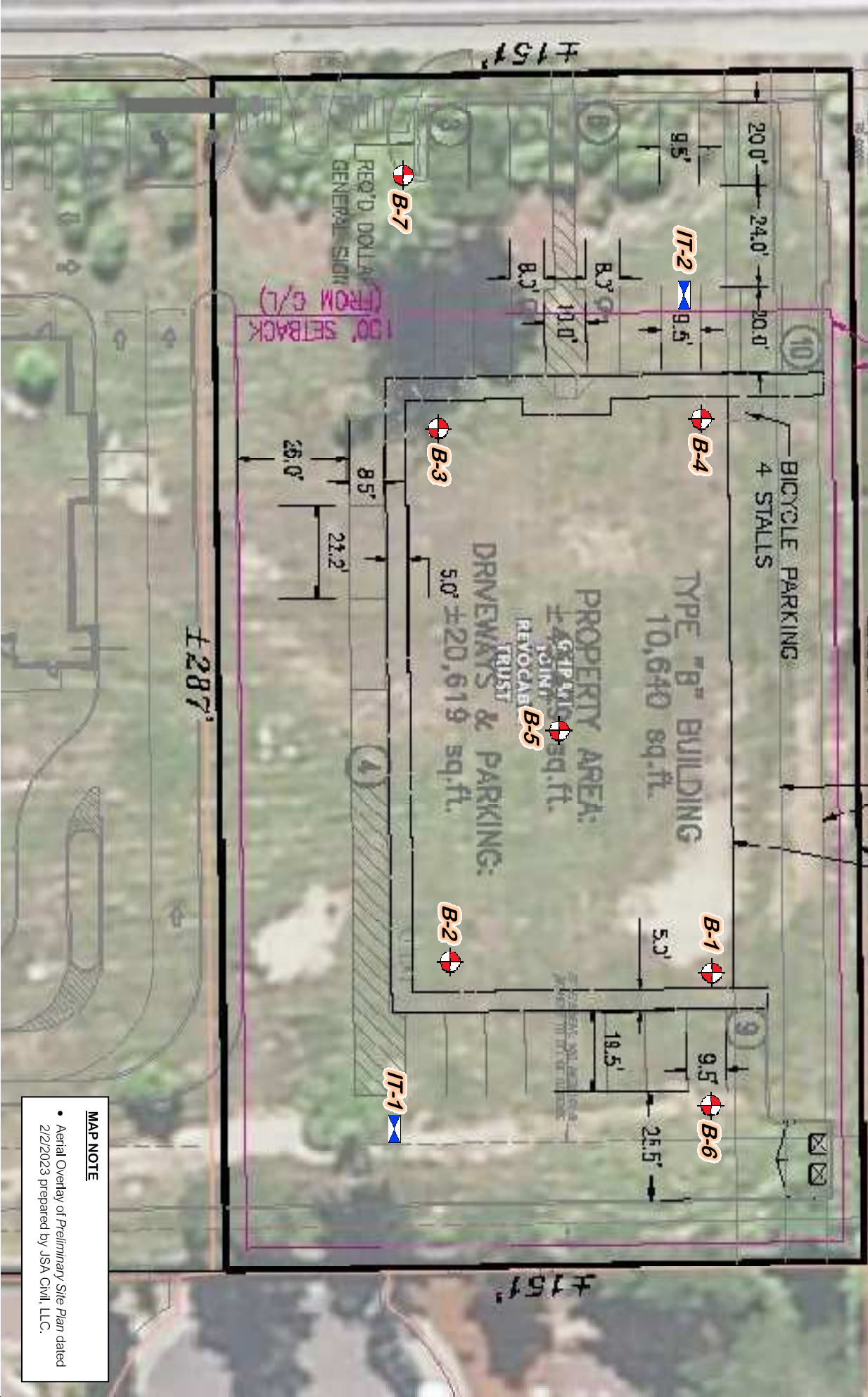
LINCOLN PEOPLES
UTILITY EASEMENT

±287'

30' EASEMENT
CITY OF FLORENCE

LEGEND

-  Exploratory Boring
-  Infiltration Test



MAP NOTE

- Aerial Overlay of Preliminary Site Plan dated 2/2/2023 prepared by JSA Civil, LLC.

FIGURE 2: SITE EXPLORATION MAP



LEGEND

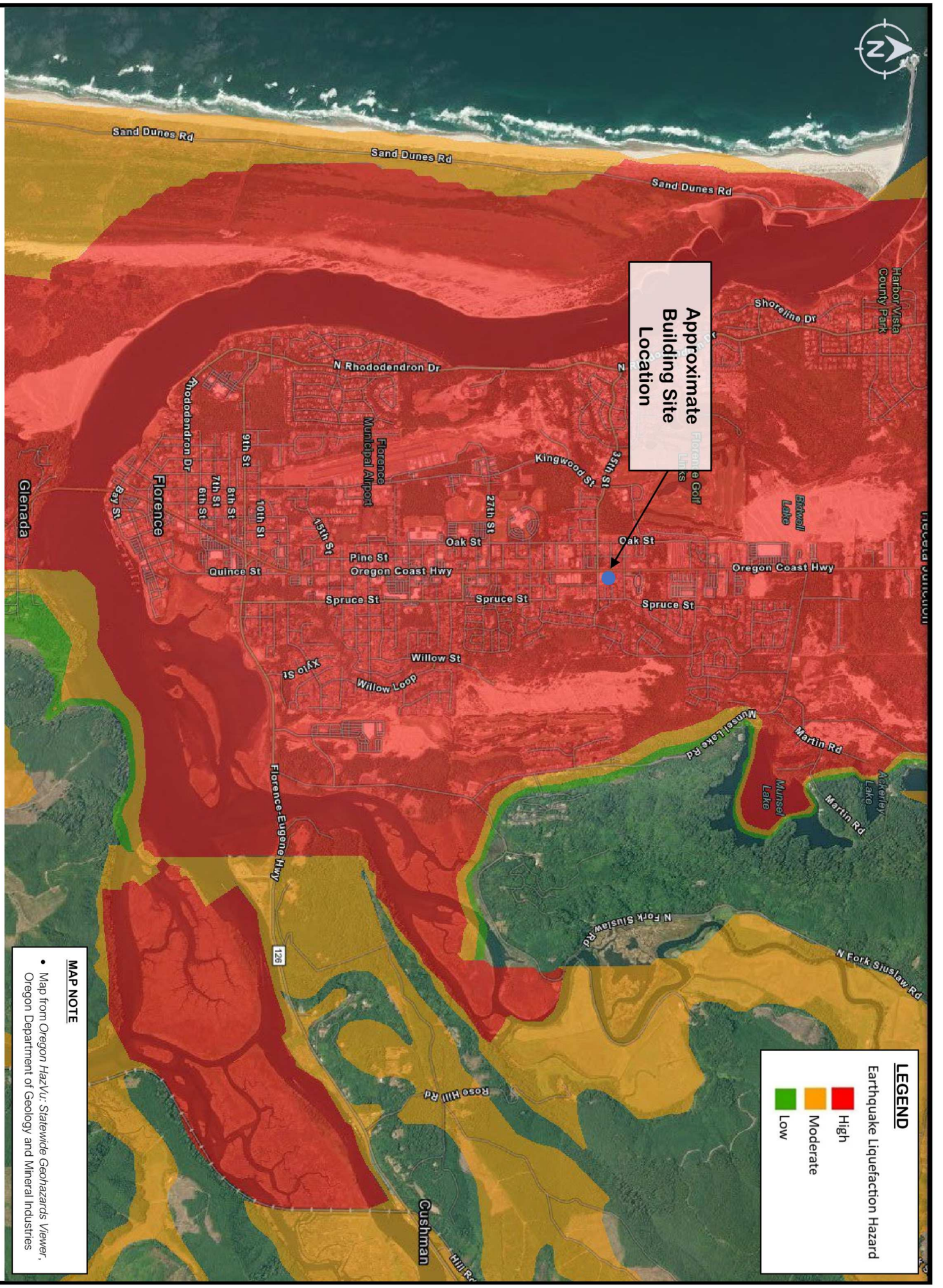
- Quaternary Surficial Deposits
- Tye Group

MAP SOURCE

- Geologic Map of Oregon, Oregon Department of Geology and Mineral Industries

FIGURE 3: GEOLOGIC MAP

PROJECT NO. 223-1642



Approximate Building Site Location

LEGEND

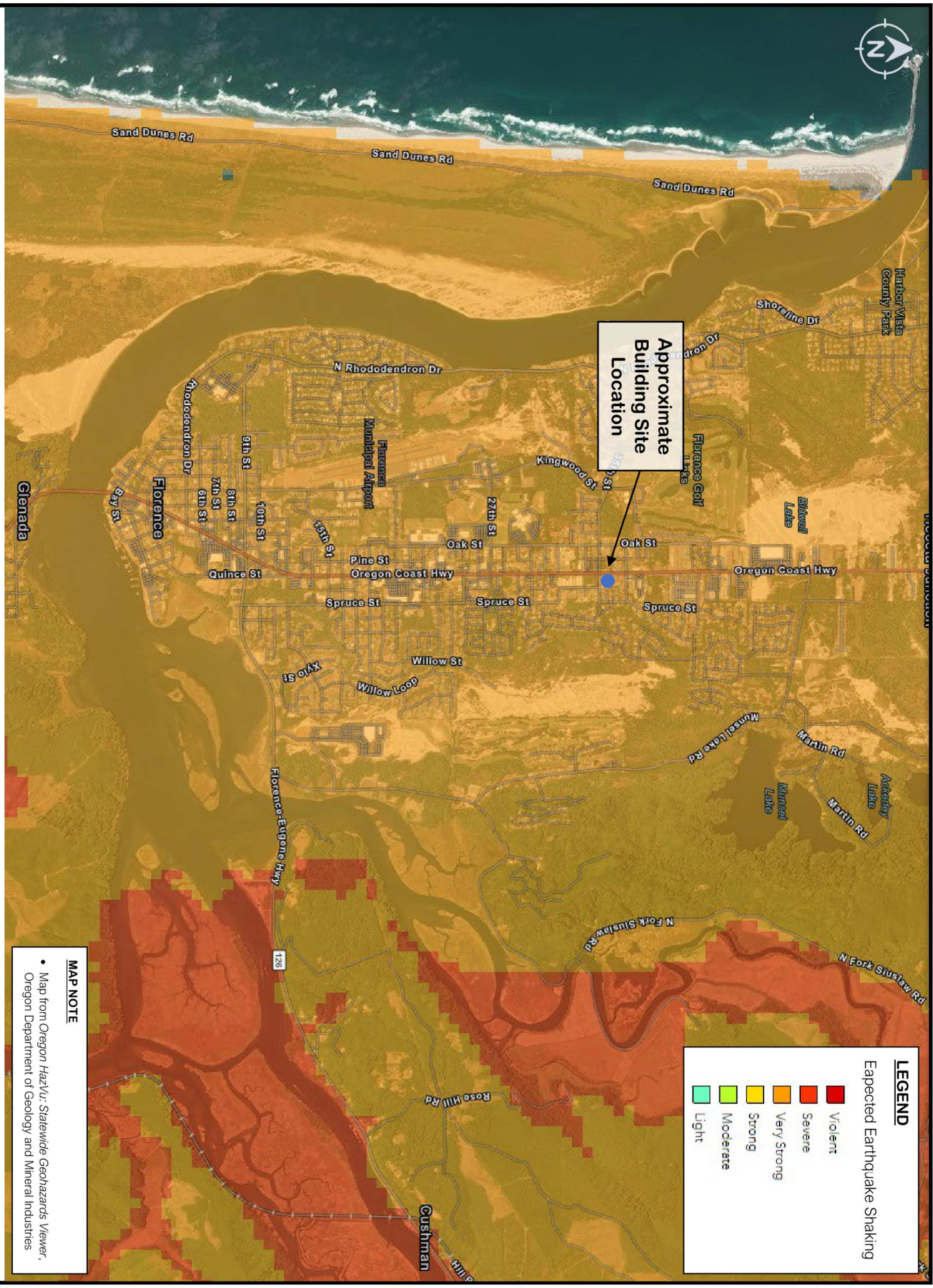
Earthquake Liquefaction Hazard

- High
- Moderate
- Low

MAP NOTE

- Map from Oregon HazVU: Statewide Geohazards Viewer, Oregon Department of Geology and Mineral Industries

FIGURE 4: LIQUEFACTION SUSCEPTIBILITY MAP



Approximate Building Site Location

LEGEND

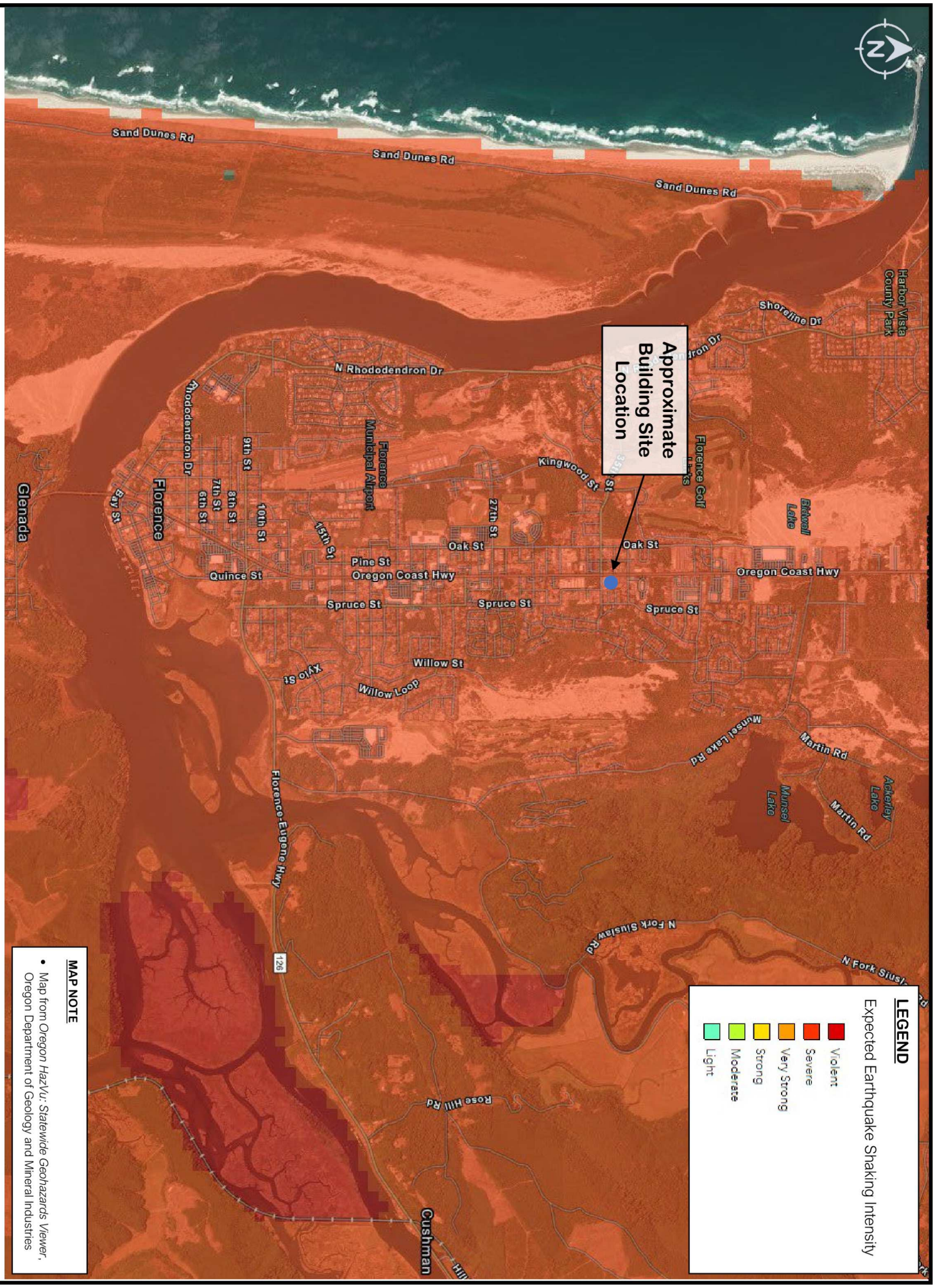
Expected Earthquake Shaking

- Violent
- Severe
- Very Strong
- Strong
- Moderate
- Light

MAP NOTE

- Map from Oregon HazVU: Statewide Geohazards Viewer, Oregon Department of Geology and Mineral Industries

FIGURE 5: EARTHQUAKE HAZARD MAP



Approximate Building Site Location

LEGEND

Expected Earthquake Shaking Intensity

Red	Violent
Orange	Severe
Yellow-Orange	Very Strong
Yellow	Strong
Light Green	Moderate
Light Blue	Light

MAP NOTE

- Map from Oregon HazVu: Statewide Geohazards Viewer, Oregon Department of Geology and Mineral Industries

FIGURE 6: CASCADIA EARTHQUAKE HAZARD MAP

Appendix II

Exploratory Boring Logs* ***Key Chart (for Soil Classification)**



GN Northern, Inc
 722 N. 16th Ave Suite 31
 Yakima, WA 99802
 Telephone: (509) 248-9798

BORING NUMBER B-1

CLIENT Capital Growth Buchalter, Inc.
PROJECT NUMBER 222-1642
DATE STARTED 4/17/23 **COMPLETED** 4/17/23
DRILLING CONTRACTOR The Galli Group
DRILLING METHOD ATV Mounted Drill rig w/ 4' soil stem auger
LOGGED BY LC **CHECKED BY** IM
NOTES Approx. GPS Coords.: 43.997696°, -124.100520°

PROJECT NAME New Dollar General
PROJECT LOCATION NE of Intersection of Hwy. 101 & 35th St, Florence OR
GROUND ELEVATION 74 ft **HOLE SIZE** 4 inches
GROUND WATER LEVELS:
 ▽ **AT TIME OF DRILLING** 6.25 ft / Elev 67.75 ft
AT END OF DRILLING ---
AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 5/17/23 15:00 - C:\USERS\KHARMONEDRIVE\PUBLIC\ACTIVE PROJECTS\1 - CURRENT PROJECTS\223-1642 DOLLAR GENERAL, FLORENCE OR\223-1642 LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0					
	SPT	2-2-3 (5)	SP		POORLY GRADED SAND, (SP) light brown to orangeish brown, fine grained, moist, loose
	SPT	2-3-2 (5)			
5	SPT	2-2-2 (4)			very loose to loose, some orange sand
	SPT	2-3-2 (5)			▽ caving brown, loose
10	SPT	3-4-6 (10)	SP-SM		POORLY GRADED SAND WITH SILT, (SP-SM) brown, fine grained, loose to medium dense with dark brown sand lenses, trace roots
15					
20					

- Groundwater encountered at ~6.25' BGS at time of drilling
 - Referenced elevations are approximate and based on Google Earth topography
 Bottom of borehole at 20.0 feet.



GN Northern, Inc
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BORING NUMBER B-2

CLIENT Capital Growth Buchalter, Inc.
PROJECT NUMBER 222-1642
DATE STARTED 4/17/23 **COMPLETED** 4/17/23
DRILLING CONTRACTOR The Galli Group
DRILLING METHOD ATV Mounted Drill rig w/ 4' soil stem auger
LOGGED BY LC **CHECKED BY** IM
NOTES Approx. GPS Coords.: 43.997517°, -124.100519°

PROJECT NAME New Dollar General
PROJECT LOCATION NE of Intersection of Hwy. 101 & 35th St, Florence OR
GROUND ELEVATION 74 ft **HOLE SIZE** 4 inches
GROUND WATER LEVELS:
 ▽ **AT TIME OF DRILLING** 6.70 ft / Elev 67.30 ft
AT END OF DRILLING ---
AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 5/17/23 15:00 - C:\USERS\KHARMONEDRIVE\PUBLIC\ACTIVE PROJECTS\11 - CURRENT PROJECTS\223-1642 DOLLAR GENERAL, FLORENCE OR\223-1642 LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0					
0.3			SM		GRASS AND ROOTS
0.5					SILTY SAND, (SM) dark brown, fine grained, damp, loose, with organics
					POORLY GRADED SAND, (SP) orange to light brown, fine grained, damp, loose
	SPT	2-3-3 (6)			
	SPT	2-3-5 (8)			damp to moist, trace organics
5			SP		
	SPT	3-3-4 (7)			
					▽ loose
	SPT	3-4-5 (9)			
10					9.5 POORLY GRADED SAND WITH SILT, (SP-SM) light brown, fine grained, medium dense
	SPT	3-5-7 (12)			~1/2" thick dark brown band
15			SP-SM		
20					20.0 64.5 54.0

- Groundwater encountered at ~6.7' BGS at time of drilling
 - Referenced elevations are approximate and based on Google Earth topography
 Bottom of borehole at 20.0 feet.



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BORING NUMBER B-3

CLIENT Capital Growth Buchalter, Inc.
PROJECT NUMBER 222-1642
DATE STARTED 4/16/23 **COMPLETED** 4/16/23
DRILLING CONTRACTOR The Galli Group
DRILLING METHOD ATV Mounted Drill rig w/ 4' soil stem auger
LOGGED BY LC **CHECKED BY** IM
NOTES Approx. GPS Coords.: 43.997509°, -124.101004°

PROJECT NAME New Dollar General
PROJECT LOCATION NE of Intersection of Hwy. 101 & 35th St, Florence OR
GROUND ELEVATION 74 ft **HOLE SIZE** 4 inches
GROUND WATER LEVELS:
 ▽ **AT TIME OF DRILLING** 8.00 ft / Elev 66.00 ft
AT END OF DRILLING ---
AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 5/17/23 15:00 - C:\USERS\KHARMONEDRIVE\PUBLIC\ACTIVE PROJECTS\11 - CURRENT PROJECTS\223-1642 DOLLAR GENERAL, FLORENCE OR\223-1642 LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0					
1-1-1	SPT	1-1-1 (2)	SP		POORLY GRADED SAND, (SP) orangeish brown, fine grained, damp, very loose
1-1-1	SPT	1-1-1 (2)			trace organics
2-5-3	SPT	2-5-3 (8)			trace roots
3-4-5	SPT	3-4-5 (9)			moist
9.0					▽ 65.0
10			SP-SM		POORLY GRADED SAND WITH SILT, (SP-SM) orangeish brown to gray, fine grained, medium dense
4-5-7	SPT	4-5-7 (12)			with thin layer of organics
3-3-4	SPT	3-3-4 (7)			brown, loose, with silt and organics
3-4-8	SPT	3-4-8 (12)			wood/roots at tip
17.5					56.5

- Drilling terminated at ~17.5' BGS due to collapse
- Groundwater encountered at ~8' BGS at time of drilling
- Referenced elevations are approximate and based on Google Earth topography
Bottom of borehole at 17.5 feet.



GN Northern, Inc
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BORING NUMBER B-4

CLIENT Capital Growth Buchalter, Inc.
PROJECT NUMBER 222-1642
DATE STARTED 4/16/23 **COMPLETED** 4/16/23
DRILLING CONTRACTOR The Galli Group
DRILLING METHOD ATV Mounted Drill rig w/ 4' soilid stem auger
LOGGED BY LC **CHECKED BY** IM
NOTES Approx. GPS Coords.: 43.997689°, -124.101013°

PROJECT NAME New Dollar General
PROJECT LOCATION NE of Intersection of Hwy. 101 & 35th St, Florence OR
GROUND ELEVATION 74 ft **HOLE SIZE** 4 inches
GROUND WATER LEVELS:
 ▽ **AT TIME OF DRILLING** 7.00 ft / Elev 67.00 ft
AT END OF DRILLING ---
AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 5/17/23 15:00 - C:\USERS\KHARMONEDRIVE\PUBLIC\ACTIVE PROJECTS\11 - CURRENT PROJECTS\223-1642 DOLLAR GENERAL, FLORENCE OR\223-1642 LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0					
0.3					GRASS / BRUSH AND ROOTS TO ~4" BGS
0.6			SM		SILTY SAND, (SM) dark brown, fine grained, moist, loose
	SPT	2-3-3 (6)			POORLY GRADED SAND, (SP) light brown, fine grained, moist, loose
	SPT	3-3-3 (6)			
5					
	SPT	2-3-3 (6)			~2" band of dark brown sand
	SPT	3-3-4 (7)			▽
10			SP		medium dense
	SPT	4-7-7 (14)			
15					
20					

- Groundwater encountered at ~7' BGS at time of drilling
 - Referenced elevations are approximate and based on Google Earth topography
 Bottom of borehole at 20.0 feet.

54.0



GN Northern, Inc
 722 N. 16th Ave Suite 31
 Yakima, WA 99802
 Telephone: (509) 248-9798

BORING NUMBER B-5

CLIENT Capital Growth Buchalter, Inc.
PROJECT NUMBER 222-1642
DATE STARTED 4/16/23 **COMPLETED** 4/16/23
DRILLING CONTRACTOR The Galli Group
DRILLING METHOD ATV Mounted Drill rig w/ 4' soil stem auger
LOGGED BY LC **CHECKED BY** IM
NOTES Approx. GPS Coords.: 43.997595°, -124.100735°

PROJECT NAME New Dollar General
PROJECT LOCATION NE of Intersection of Hwy. 101 & 35th St, Florence OR
GROUND ELEVATION 74 ft **HOLE SIZE** 4 inches
GROUND WATER LEVELS:
 ▽ **AT TIME OF DRILLING** 6.50 ft / Elev 67.50 ft
AT END OF DRILLING ---
AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 5/17/23 15:00 - C:\USERS\KHARMONEDRIVE\PUBLIC\ACTIVE PROJECTS\11 - CURRENT PROJECTS\223-1642 DOLLAR GENERAL, FLORENCE OR\223-1642 LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft)
0						
0.3					GRASS AND ROOTS	73.8
0.8			SM		SILTY SAND, (SM) dark brown, fine grained, damp, loose, some orange sand	73.2
1.0					FILL ~2" of 1" MINUS CRUSHED ROCK	73.0
	SPT	3-3-3 (6)			POORLY GRADED SAND, (SP) light brown, fine grained, damp, loose	
	SPT	2-3-3 (6)				
5					light brown, moist, very loose to loose	
	SPT	2-2-2 (4)				
					▽	
	SPT	3-4-5 (9)			loose	
10					brown	
	SPT	3-3-6 (9)	SP		with scattered lenses of dark brown sand	
15						
20						54.0

- Groundwater encountered at ~6.5' BGS at time of drilling
 - Referenced elevations are approximate and based on Google Earth topography
 Bottom of borehole at 20.0 feet.



GN Northern, Inc
 722 N. 16th Ave Suite 31
 Yakima, WA 99802
 Telephone: (509) 248-9798

BORING NUMBER B-6

CLIENT Capital Growth Buchalter, Inc.
PROJECT NUMBER 222-1642
DATE STARTED 4/17/23 **COMPLETED** 4/17/23
DRILLING CONTRACTOR The Galli Group
DRILLING METHOD ATV Mounted Drill rig w/ 4' soilid stem auger
LOGGED BY LC **CHECKED BY** IM
NOTES Approx. GPS Coords.: 43.997692°, -124.100393°

PROJECT NAME New Dollar General
PROJECT LOCATION NE of Intersection of Hwy. 101 & 35th St, Florence OR
GROUND ELEVATION 73 ft **HOLE SIZE** 4 inches
GROUND WATER LEVELS:
 ▽ **AT TIME OF DRILLING** 6.00 ft / Elev 67.00 ft
AT END OF DRILLING ---
AFTER DRILLING ---

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 5/17/23 15:00 - C:\USERS\KHARMONEDRIVE\PUBLIC\ACTIVE PROJECTS\11 - CURRENT PROJECTS\223-1642 DOLLAR GENERAL, FLORENCE OR\223-1642 LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0					
0.3					GRASS AND ROOTS
	SPT	2-2-2 (4)	SP		POORLY GRADED SAND, (SP) orange to light brown, fine grained, damp to moist, very loose to loose
	SPT	2-3-4 (7)	SP		light brown, moist, loose
5					68.5
	SPT	2-3-3 (6)	SP-SM		POORLY GRADED SAND WITH SILT, (SP-SM) light brown, fine grained, moist to wet, loose
					▽ ~1/2" thick dark brown band
	SPT	3-4-7 (11)	SP-SM		medium dense
10					63.5
	SPT	3-4-6 (10)	SP		POORLY GRADED SAND, (SP) light brown, fine grained, loose to medium dense
					11.5
					~1/2" thick dark brown band

- Groundwater encountered at ~6' BGS at time of drilling
 - Referenced elevations are approximate and based on Google Earth topography
 Bottom of borehole at 11.5 feet.



GN Northern, Inc
 722 N. 16th Ave Suite 31
 Yakima, WA 99802
 Telephone: (509) 248-9798

BORING NUMBER B-7

CLIENT Capital Growth Buchalter, Inc.
PROJECT NUMBER 222-1642
DATE STARTED 4/16/23 **COMPLETED** 4/16/23
DRILLING CONTRACTOR The Galli Group
DRILLING METHOD ATV Mounted Drill rig w/ 4' soild stem auger
LOGGED BY LC **CHECKED BY** IM
NOTES Approx. GPS Coords.: 43.997491°, -124.101235°

PROJECT NAME New Dollar General
PROJECT LOCATION NE of Intersection of Hwy. 101 & 35th St, Florence OR
GROUND ELEVATION 73 ft **HOLE SIZE** 4 inches
GROUND WATER LEVELS:
 ▽ **AT TIME OF DRILLING** 7.00 ft / Elev 66.00 ft
AT END OF DRILLING ---
AFTER DRILLING ---

















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








DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft)
0						
0.3					GRASS / BRUSH AND ROOTS TO ~4" BGS	72.7
0.6			SM		SILTY SAND, (SM) brown, fine grained, damp, loose	72.4
	SPT	5-5-5 (10)			POORLY GRADED SAND, (SP) orange and light brown, fine grained, damp, loose loose to medium dense	
	SPT	4-4-2 (6)			loose	
5			SP			
	SPT	2-3-3 (6)			~2" band of dark brown sand	
					▽	
	SPT	2-3-3 (6)				
10						
	SPT	3-5-6 (11)			medium dense	
						61.5

- Groundwater encountered at ~7' BGS at time of drilling
 - Referenced elevations are approximate and based on Google Earth topography
 Bottom of borehole at 11.5 feet.

KEY CHART

RELATIVE DENSITY OR CONSISTENCY VERSUS SPT N-VALUE					
COARSE-GRAINED SOILS			FINE-GRAINED SOILS		
DENSITY	N (BLOWS/FT)	FIELD TEST	CONSISTENCY	N (BLOWS/FT)	FIELD TEST
Very Loose	0 – 4	Easily penetrated with ½-inch reinforcing rod pushed by hand	Very Soft	0 – 2	Easily penetrated several inches by thumb
Loose	4 – 10	Difficult to penetrate with ½-inch reinforcing rod pushed by hand	Soft	2 – 4	Easily penetrated one inch by thumb
Medium -Dense	10 – 30	Easily penetrated with ½-inch rod driven with a 5-lb hammer	Medium-Stiff	4 – 8	Penetrated over ½-inch by thumb with moderate effort
Dense	30 – 50	Difficult to penetrate with ½-inch rod driven with a 5-lb hammer	Stiff	8 – 15	Indented about ½-inch by thumb but penetrated with great effort
Very Dense	> 50	penetrated only a few inches with ½-inch rod driven with a 5-lb hammer	Very Stiff	15 – 30	Readily indented by thumb
			Hard	> 30	Indented with difficulty by thumbnail

USCS SOIL CLASSIFICATION					
MAJOR DIVISIONS			GROUP DESCRIPTION		
Coarse-Grained Soils <50% passes #200 sieve	Gravel and Gravelly Soils <50% coarse fraction passes #4 sieve	Gravel (with little or no fines)	 GW	Well-graded Gravel	
		Gravel (with >12% fines)	 GP	Poorly Graded Gravel	
			 GM	Silty Gravel	
		 GC	Clayey Gravel		
	Sand and Sandy Soils >50% coarse fraction passes #4 sieve	Sand (with little or no fines)	 SW	Well-graded Sand	
			 SP	Poorly graded Sand	
Sand (with >12% fines)		 SM	Silty Sand		
	 SC	Clayey Sand			
Fine-Grained Soils >50% passes #200 sieve	Silt and Clay Liquid Limit < 50		 ML	Silt	
			 CL	Lean Clay	
			 OL	Organic Silt and Clay (low plasticity)	
	Silt and Clay Liquid Limit > 50		 MH	Inorganic Silt	
			 CH	Inorganic Clay	
 OH	Organic Clay and Silt (med. to high plasticity)				
Highly Organic Soils		 PT	Peat		Top Soil

LOG SYMBOLS		
	2S	2" OD Split Spoon (SPT)
	3S	3" OD Split Spoon
	NS	Non-Standard Split Spoon
	ST	Shelby Tube
	CR	Core Run
	BG	Bag Sample
	TV	Torvane Reading
	PP	Penetrometer Reading
	NR	No Recovery
	GW	Groundwater Table
		

MODIFIERS	
DESCRIPTION	RANGE
Trace	<5%
Little	5% – 12%
Some	>12%

MOISTURE CONTENT	
DESCRIPTION	FIELD OBSERVATION
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but not visible water
Wet	Visible free water

SOIL CLASSIFICATION INCLUDES

- Group Name
- Group Symbol
- Color
- Moisture content
- Density / consistency
- Cementation
- Particle size (if applicable)
- Odor (if present)
- Comments

MAJOR DIVISIONS WITH GRAIN SIZE							
SIEVE SIZE							
12"	3"	3/4"	4	10	40	200	
GRAIN SIZE (INCHES)							
12	3	0.75	0.19	0.079	0.0171	0.0029	
Boulders	Cobbles	Gravel		Sand			Silt and Clay
		Coarse	Fine	Coarse	Medium	Fine	

Conditions shown on boring and testpit logs represent our observations at the time and location of the fieldwork, modifications based on lab test, analysis, and geological and engineering judgment. These conditions may not exist at other times and locations, even in close proximity thereof. This information was gathered as part of our investigation, and we are not responsible for any use or interpretation of the information by others.

Appendix III

Site & Exploration Photographs



View of site conditions adjacent to Burger King looking east



View of site conditions on southeast corner looking east



View of site conditions



View of site conditions



View of site conditions



View of site conditions from northeast corner looking southeast



View of site conditions



Utilities located near northeast corner



View of site conditions looking north from southeast corner



View of site conditions



ATV mounted drill rig used for borings



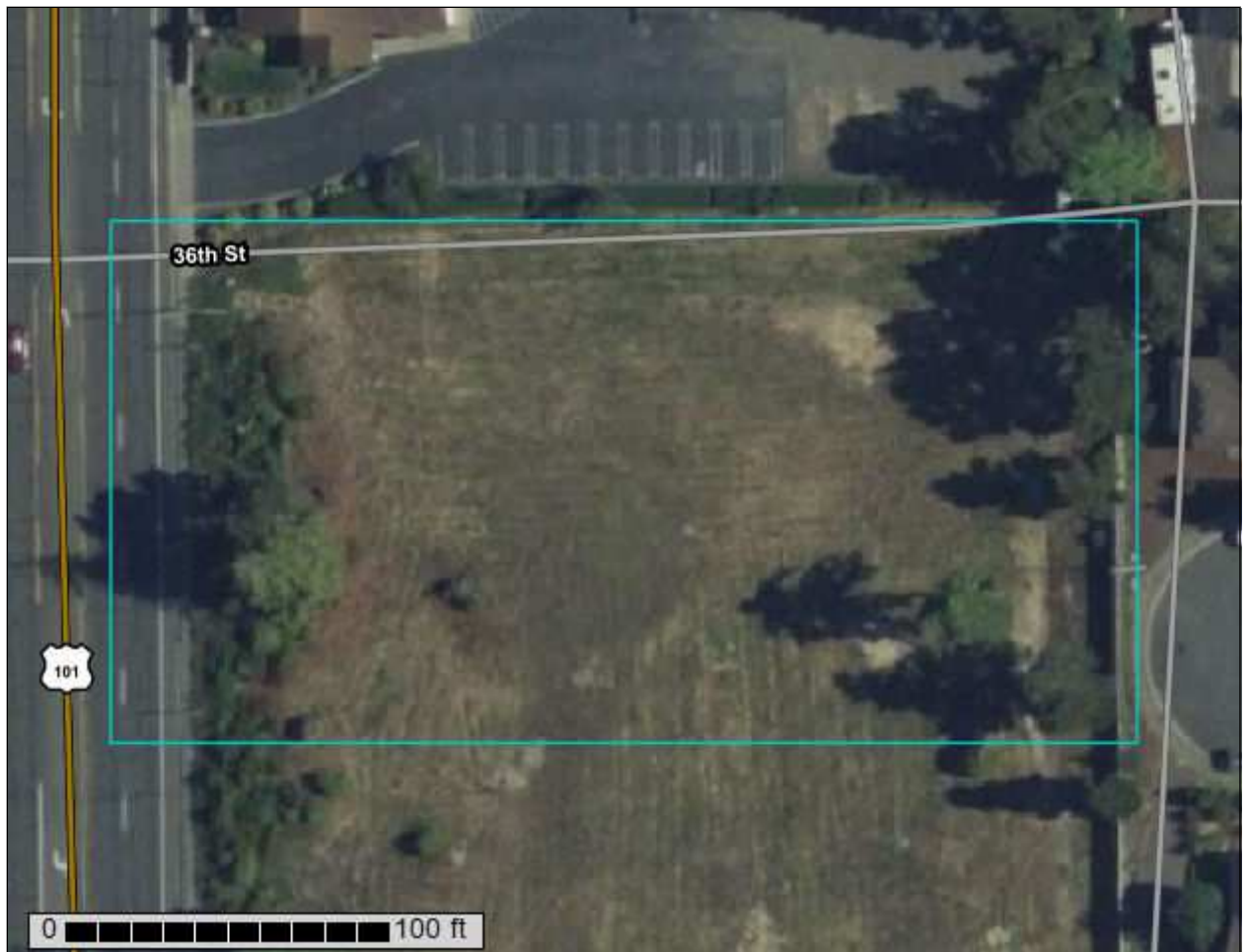
Drilling of boring B-6

Appendix IV

NRCS Soil Survey

Custom Soil Resource Report for Lane County Area, Oregon

**New Dollar General
Florence, OR**



Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.

Map Scale: 1:532 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

Lane County Area, Oregon

140—Yaquina loamy fine sand

Map Unit Setting

National map unit symbol: 2359

Elevation: 20 to 130 feet

Mean annual precipitation: 70 to 80 inches

Mean annual air temperature: 50 to 52 degrees F

Frost-free period: 180 to 210 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Yaquina and similar soils: 85 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Yaquina

Setting

Landform: Dune slacks

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Eolian sand of mixed origin

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

H1 - 1 to 9 inches: loamy fine sand

H2 - 9 to 30 inches: fine sand

H3 - 30 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: About 0 to 24 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: A/D

Ecological site: F004AB202OR - Dune Forest

Forage suitability group: Somewhat Poorly Drained (G004AY017OR)

Other vegetative classification: Somewhat Poorly Drained (G004AY017OR)

Hydric soil rating: Yes

141—Yaquina-Urban land complex

Map Unit Setting

National map unit symbol: 235b

Elevation: 20 to 130 feet

Mean annual precipitation: 70 to 80 inches

Mean annual air temperature: 50 to 52 degrees F

Frost-free period: 180 to 210 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Yaquina and similar soils: 50 percent

Urban land: 40 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Yaquina

Setting

Landform: Dune slacks

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Eolian sand of mixed origin

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

H1 - 1 to 9 inches: loamy fine sand

H2 - 9 to 30 inches: fine sand

H3 - 30 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: About 0 to 24 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: A/D

Ecological site: F004AB202OR - Dune Forest

Forage suitability group: Somewhat Poorly Drained (G004AY017OR)

Other vegetative classification: Somewhat Poorly Drained (G004AY017OR)

Hydric soil rating: Yes

Custom Soil Resource Report

Description of Urban Land

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydric soil rating: No

Appendix V

Oregon Water Resources Department Well Logs

STATE OF OREGON
WATER SUPPLY WELL REPORT

LANE 71472

(ORS 537.765 & OAR 690-205-0210)

WELL LABEL # L _____
START CARD # 208165
ORIGINAL LOG # _____

Instructions for completing this report are on the last page of this form.

(1) LANDOWNER Owner Well I.D. _____
First Name MIKE Last Name MILLER
Company CITY OF FLORENCE
Address 250 HWY 101
City FLORENCE State OR Zip 97439

(2) TYPE OF WORK New Conversion Deepening
 Alteration (complete Sections 2a & 10) Abandonment (complete Section 5a)

(2a) PRE-ALTERATION: Well Depth _____ ft.
Seal Material _____
Casing Type: Steel Plastic Other _____
Casing Gauge _____ Casing Diameter _____

(3) DRILL METHOD Rotary Air Rotary Mud Auger
 Cable Cable Mud Reverse Rotary Other jetting

(4) PROPOSED USE Domestic Irrigation Community
 Industrial/Commercial Livestock Dewatering Injection
 Thermal Other COLLECTION WELL

(5) BORE HOLE CONSTRUCTION
Depth of Completed Well 12 ft. Special Standard: Yes (attach copy)

BORE HOLE			SEAL				
Dia	From	To	Material	From	To	Amount	Scks/lbs
2"	0	12	NONE				

How was seal placed: Method A B C D E
 Other NONE
Backfill placed from _____ ft. to _____ ft. Material _____
Filter pack from _____ ft. to _____ ft. Material _____ Size _____

(5a) ABANDONMENT USING UNHYDRATED BENTONITE:
Calculated Amount Proposed to be Used: _____ sacks/lbs
Actual Amount Used: _____ sacks/lbs

Csng	Lnr	Dia	+	From	To	Gauge	Steel	Plastic	Welded	Thrd
X		2		0	12	.188	X			X

Shoe Inside Outside Other Location of shoe(s) _____
Temporary casing Yes Diameter _____ From _____ To _____

(7) PERFORATIONS/SCREENS
Perforations Method _____
Screens Type _____ Material _____

Perf	Scrn	Csng	Lnr	Screen Dia	From	To	Screen/slot width	Slot length	# of slots	Tele/pipe size
X		X			10.5	12				

(8) WELL TESTS: Minimum testing time is 1 hour
 Pump Bailer Air Flowing Artesian
Yield gal/min 20-50 Drawdown _____ Drill stem/Pump depth _____ Duration (hr) 1 hr
Temperature 11-15 °F Lab analysis Yes By _____
Water quality concerns? Yes (describe below) TDS _____ ppm
From _____ To _____ Description _____ Amount _____ Units _____

(9) LOCATION OF WELL (legal description)
County LANE Twp 18 Nlo Range 12 E of W.M.
Sec 23 NW 1/4 of the NW 1/4 Tax Lot _____
Tax Map Number _____ Lot ROW
Lat _____ or _____ DMS or DD
Long _____ or _____ DMS or DD
Street Address of Well (or nearest address) 32ND & OAK ST.
IN FLORENCE

(10) STATIC WATER LEVEL				
	Date	SWL (psi)	+	SWL (ft)
Existing Well/Pre-Alteration				
Completed Well				8 FT

Flowing Artesian? Yes Dry Hole? Yes

WATER BEARING ZONES Depth water was first found _____

SWL Date	From	To	Est Flow	SWL (psi)	+	SWL (ft)
10/27/11	8	12	20-50			8 FT

(11) WELL LOG Ground Elevation _____

Material	From	To
SAND	0	12
100 2" INCH WELL POINTS PER EACH 6" INCH HEADER		

Date Started 10/27/11 Completed 10/27/11

(unbonded) Water Well Constructor Certification
I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
License Number _____ Date _____
Signed _____ NOV 14 2011

(bonded) Water Well Constructor Certification
I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
License Number _____ Date 11/14/11
Signed _____
Contact Info. (optional) LAND OWNER PERMIT

Florence, OR Dollar General

US Highway 101
Florence, OR 97439

PREPARED FOR



361 SUMMIT BLVD, SUITE 110
BIRMINGHAM, AL 35243

PREPARED BY

JSA CIVIL

Engineering | Planning | Management

111 TUMWATER BLVD SE, SUITE C210

TUMWATER, WA 98501

CONTACT: CHARLIE SEVERS, PE

PHONE: 360|515|9600

DESIGNER’S CERTIFICATION AND STATEMENT:

I hereby certify that this Stormwater Management Report for Florence Oregon, Dollar General has been prepared by me or under my supervision and meets minimum standards of the City of Florence and normal standards of engineering practice. I hereby acknowledge and agree that the jurisdiction does not and will not assume liability for the sufficiency, suitability, or performance of drainage facilities designed by me.

Charlie Severs, PE
Principal

Date



Contents

1. PROJECT OVERVIEW AND DESCRIPTION	4
2. METHODOLOGY	4
3. ANALYSIS	4
DESIGN ASSUMPTIONS	5
CALCULATIONS.....	5
4. ENGINEERING CONCLUSIONS	5
5. STORMWATER FACILITY DETAILS/EXHIBITS.....	5
6. OPERATIONS AND MAINTENANCE AGREEMENT	5
7. ADDITIONAL FORMS	5

1. PROJECT OVERVIEW AND DESCRIPTION

This Stormwater Management Report was prepared for the proposed commercial development project that will be located at NE INT Oregon Coast Highway & 35th Street Florence, OR. The Stormwater Management Report was prepared to comply with the minimum technical standards and requirements that are set forth in the 2010 City of Florence Stormwater Design Manual. The proposed commercial developed will be constructed on Lane County Tax Parcel No. 1812232206800. Specifically, the proposed site improvements / construction activities include the following:

- Site Preparation, grading, and erosion control activities
- Construction of a 10,460 ft² commercial development retail building
- Construction of an impervious parking lot
- Construction of on-site stormwater facilities
- Extension of utilities (water, power, sewer, etc.)

This existing site is approximately 0.99 acres in size and currently undeveloped in a Highway Commercial H-C zone. The proposed site is bounded by a Burger King restaurant on a parcel directly south, US Highway 101 to the west, a restaurant (Chens Family Dish) to the north and residential homes to the east. The proposed site improvements will disturb the entire site. The project area generally slopes in the north to south direction. According to the National Wetland Inventory mapping center, there are no on-site wetlands. Q

Permits required for this project include City of Florence Type III Planning Commission Review, Oregon Department of Transportation Access Permit, and final building permit.

See Appendix A for Vicinity MAP

2. METHODOLOGY

The existing drainage on site sheet flows from the north side to the south side of the site where it eventually is collected in catch basins and directed to the existing storm water system. Roof runoff and a portion of landscaping runoff north of the proposed building will be routed to a below-grade soakage trench. Parking lot and the remaining landscaping runoff will be conveyed to an at-grade infiltration rain garden.

The geotechnical report concludes that groundwater, generally, is approximately 8' below existing grades. 5' of separation between the bottom of the storm facilities and the groundwater elevation is feasible.

3. ANALYSIS

Using Autodesk's Storm and Sanitary Analysis (SSA). This computer program was used to model, analyze, and design the drainage basin using Santa Barbara UH Hydrology Method and SCS TR-55 TOC Method. The report can be seen in the appendix.

DESIGN ASSUMPTIONS

According to the City of Florence Stormwater manual the presumptive approach will be used for this site. The presumptive approach consists of designing to the 25-year, 24-hour storm stored and infiltrated. After reviewing the geotechnical report, the soil infiltration rate that will be used is 4 inches/hour. The curve numbers used are 98 for impervious area and 61 for pervious areas.

CALCULATIONS

Flow Control:

Using the presumptive method Flow Control Storm event is a 25-year, 24-hour event.

The following table identifies the different land-type designation and theory respective areas for the on-site threshold discharge area.

Areas	Curve #	Acres (SF)	Percentage
Impervious Area	98	0.73 (31,804)	75%
Pervious Area	61	0.24 (10,370)	25%
Total	N/A	0.97 (42,174)	100%

Water Quality:

An infiltration rain garden will be constructed on the east side of the project area for treatment and infiltration of parking lot runoff.

4. ENGINEERING CONCLUSIONS

A SSA model was-up for the threshold discharge area and was completed in accordance with the city's presumptive approach requirements. To retain the 25-year, 24-hour storm event, approximately 3,500 ft³ of storage is required. 4,100 ft³ of storage will be provided. An infiltration rain garden with an overflow to below-grade storage (one connected system) is proposed. Stormwater overflow beyond the 25-year, 24-hour storm event will be collected in an overflow structure and connected to the city's stormwater conveyance system in 35th Street.

5. STORMWATER FACILITY DETAILS/EXHIBITS

See Appendix B for stormwater facility BMP Details

6. OPERATIONS AND MAINTENANCE AGREEMENT

See Appendix A.4 for Operations and Maintenance Plan and O&M Form. The property owner will be responsible for all long-term Operations and Maintenance costs.

Note: O&M manual will be provided with the final report.

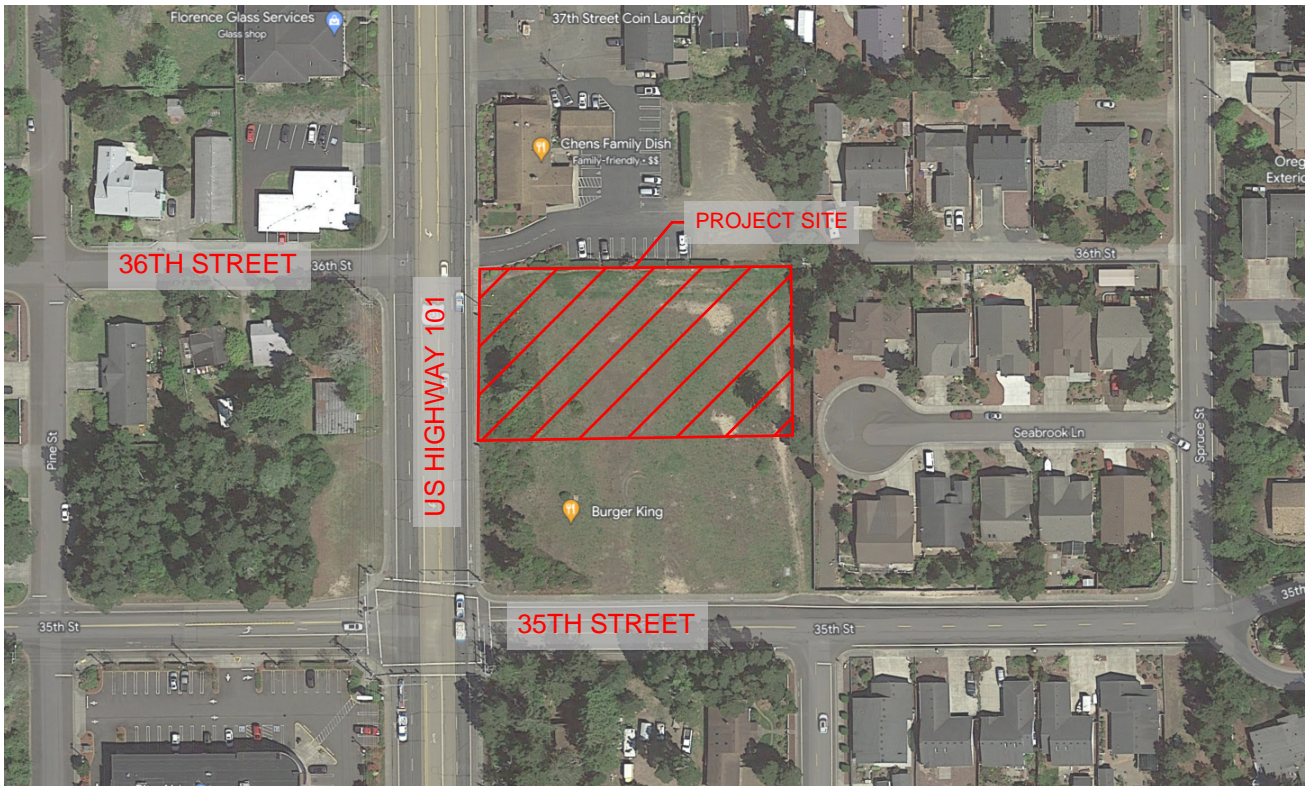
7. ADDITIONAL FORMS

Appendix A.3 and A.4 from the Florence Stormwater Design Manual.

APPENDIX A VICINITY MAP

JSA CIVIL

Engineering | Planning | Management



JSACIVIL

Engineering | Planning | Management

111 Tumwater Blvd SE | Tumwater, WA | 98501

FLORENCE, OR DOLLAR GENERAL

APPENDIX A - VICINITY MAP

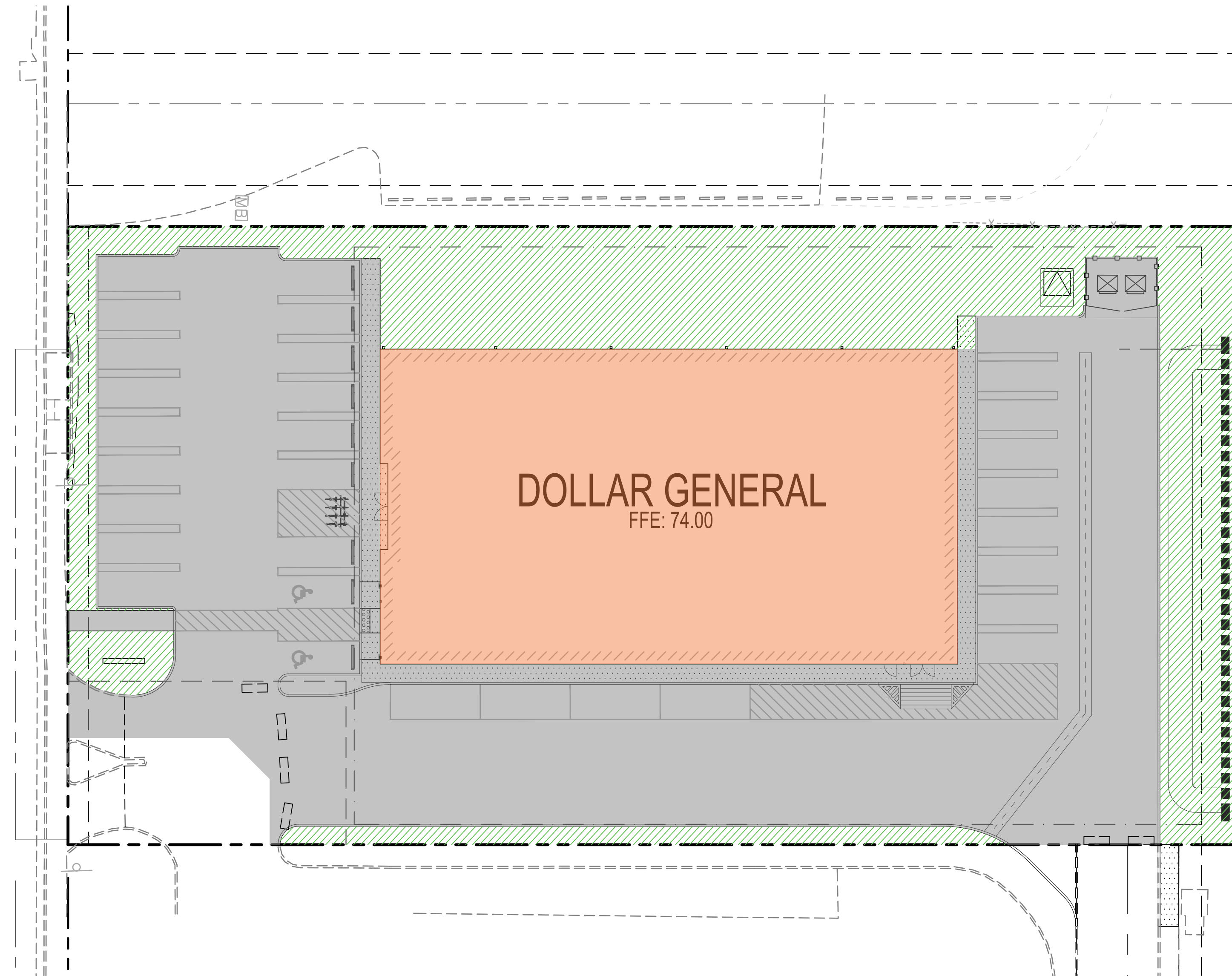
APPENDIX B BASIN MAP

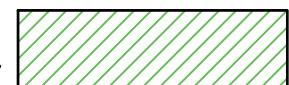


JSA CIVIL

Engineering | Planning | Management

BASIN MAP EXHIBIT

US HIGHWAY 101



- 10,370 SQ. FT.  PERVIOUS LANDSCAPE AREA
- 20,934 SQ. FT.  PARKING LOT & SIDEWALK AREA
- 10,870 SQ. FT.  ROOF AREA

APPENDIX C

STORMWATER FACILITY BMP

JSA CIVIL

Engineering | Planning | Management

APPENDIX D
A.3 - STORMWATER MANAGEMENT
REPORT CHECKLIST

JSA CIVIL

Engineering | Planning | Management

APPENDIX A.3 Stormwater Management Report Checklist

The Stormwater Management Report is required for every site improvement where the Presumptive or Performance Approach is used and the minimum submittal requirements are as follows. All reports shall be paginated and securely fastened (including maps and exhibits).

- Engineers scale: Maximum 1"=10' Minimum 1"=50'
- All site topography with existing and proposed contours and spot elevations as necessary
- If there are streets, provide the names
- If curbs and no section view, show the curb height
- Utility structures, underground and overhead lines
- Sidewalks
- Surface materials
- Dimensions

1) Cover Sheet

- Project name and owner
- Site address
- Associated permit numbers
- Submittal date
- Engineer
- Firm
- Address
- Contact information

2) Designer's Certification and Statement

"I hereby certify that this Stormwater Management Report for _____
(name of project) has been prepared by me or under my supervision and meets minimum standards of the City of Florence and normal standards of engineering practice. I hereby acknowledge and agree that the jurisdiction does not and will not assume liability for the sufficiency, suitability, or performance of drainage facilities designed by me."

Requires Design Professional's Oregon registration stamp

3) Table of Contents

4) Project Overview and Description

- Size and location of project site (vicinity map)
- Property zoning
- Type of development/proposed improvements
- Watershed description
- Permits required (local, state, federal)
- Existing vs. post-construction conditions

7) Engineering Conclusions

- Based on compliance with Stormwater Design Manual
- How water quality, flow control, and discharge requirements are satisfied
- Post-construction peak flow=pre-development peak flow (2-yr 24-hr events)

8) Stormwater Facility Details/Exhibits

- Contour maps of pre and post development
- Impervious area identification
- Watershed delineation
- Existing and new drainageways
- Point(s) of discharge
- Delineation of each catchment (area treated by one facility)
- Landscape plans (see Appendix D.1)

9) Operations and Maintenance Plan and O&M Form (See Appendix A.4)

- Must include entity responsible for long-term fiscal responsibilities of O&M

10) Additional Forms

- Source Control Special Circumstances Installations (if applicable)
- Special Circumstances (if applicable)

11) Associated Reports Submitted

APPENDIX E
A.4 - OPERATIONS AND
MAINTENANCE PLAN

JSA CIVIL

Engineering | Planning | Management

After Recording Return to:

Name:

Address:

Place Recording Label Here

APPENDIX A.4

Form O&M: Operations and Maintenance Plan

Permit Application No . _____

Owner Name: _____

Phone: *(area code required)* _____

Mailing Address: *(return address for records)* _____

City/State/Zip: _____

Site Address: _____

City/State/Zip: _____

Site Legal Description:

1 Responsible Party for Maintenance *(check one)*

Homeowner association Property Owner Other *(describe)*

2 Contact Information for Responsible Party(ies) if Other than Owner

Daytime Phone: *(area code required)* _____ - _____ - _____

Emergency/After Hours Phone: _____ - _____ - _____

Contact Name and Address:

Instructions

Simplified Sizing Approach: Attach O&M Specifications from the Florence Stormwater Design Manual Appendix H.

Presumptive and Performance Sizing Approach: Attach the site-specific O&M Plan (See Stormwater Design Manual Section 6).

3 Site Plan

Show all facility locations in relation to labeled streets, buildings, or other permanent features on the site. Also show the sources of runoff entering the facility, and the final onsite/offsite discharge point.

Please complete the table below

Maintaining the stormwater management facility on this site plan is a required condition of building permit approval for the identified property. The property owner is required to operate and maintain this facility in accordance with the O&M specifications or plan on file with the City of Florence. That requirement is binding on all current and future

owners of the property. Failure to comply with the O&M specifications or plan may result in enforcement action, including penalties. The O&M specifications or plan may be modified by written consent of new owners and written approval by re-filing with the Community Development Department.

Complete and recorded O&M Forms shall be submitted to:

Community Development Department, 250 Highway 101, Florence, OR, 97439
Office hours are 8 - 5, Monday through Friday. Call 541-997-3436 for assistance.

Required Site Plan (insert here or attach separate sheet)

I Have Attached a Site Plan

Please complete this table

Facility Type	Size (sf)	Drainage is from:	Impervious Area Treated (sf)	Discharge Point

BY SIGNING BELOW filer accepts and agrees to the terms and conditions contained in this O&M Form and in any document executed by filer and recorded with it. To be signed in the presence of a notary.

Filer signature

INDIVIDUAL Acknowledgement
STATE of OREGON county of:

This instrument was acknowledged before me on:

By: _____

Notary Signature: _____

My Commission Expires: _____ *for notary seal*

CORPORATE Acknowledgement
STATE of OREGON county of:

This instrument was acknowledged before me on:

By:

As (title):

Of (corporation):

Notary Signature:

My Commission Expires: _____

APPENDIX F SSA REPORT

JSA CIVIL

Engineering | Planning | Management

RAIN GARDEN WITH ADDITIONAL BELOW-GRADE STORAGE

Project Description

File Name

Project Options

Flow Units CFS
 Elevation Type Elevation
 Hydrology Method Santa Barbara UH
 Time of Concentration (TOC) Method SCS TR-55
 Link Routing Method Hydrodynamic
 Enable Overflow Ponding at Nodes YES
 Skip Steady State Analysis Time Periods YES

Analysis Options

Start Analysis On 00:00:00 0:00:00
 End Analysis On 00:00:00 0:00:00
 Start Reporting On 00:00:00 0:00:00
 Antecedent Dry Days 0 days
 Runoff (Dry Weather) Time Step 0 01:00:00 days hh:mm:ss
 Runoff (Wet Weather) Time Step 0 00:05:00 days hh:mm:ss
 Reporting Time Step 0 00:05:00 days hh:mm:ss
 Routing Time Step 30 seconds

Number of Elements

	Qty
Rain Gages	1
Subbasins.....	1
Nodes.....	2
<i>Junctions</i>	0
<i>Outfalls</i>	1
<i>Flow Diversions</i>	0
<i>Inlets</i>	0
<i>Storage Nodes</i>	1
Links.....	1
<i>Channels</i>	0
<i>Pipes</i>	1
<i>Pumps</i>	0
<i>Orifices</i>	0
<i>Weirs</i>	0
<i>Outlets</i>	0
Pollutants	0
Land Uses	0

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfall Depth (inches)	Rainfall Distribution
1	RAIN_GAGE	Time Series	25-YEAR, 24-HOUR EVENT	Cumulative	inches	Oregon	Lane	25.00	5.06	SCS Type IA 24-hr

Subbasin Summary

SN Subbasin ID	Area (ac)	Impervious Area (%)	Impervious Area Curve Number	Pervious Area Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1 DEVELOPED_CONDITIONS	0.97	61.00	98.00	76.00	5.05	3.94	3.82	0.93	0 00:05:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft ²)	Peak Inflow (cfs)	Max HGL Elevation (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	Out-01	Outfall	0.00					0.00	0.00					
2	Stor-01	Storage Node	69.50	72.50	0.00		0.00	0.93	72.00				0.00	0.00

Subbasin Hydrology

Subbasin : DEVELOPED_CONDITIONS

Input Data

Area (ac) 0.97
 Impervious Area (%) 61
 Impervious Area Curve Number 98
 Pervious Area Curve Number 76
 Rain Gage ID RAIN_GAGE

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
32	0.97		89.42
Composite Area & Weighted CN	0.97		89.42

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

$$T_c = (0.007 * ((n * L_f)^{0.8})) / ((P^{0.5}) * (S_f^{0.4}))$$

Where :

Tc = Time of Concentration (hr)
 n = Manning's roughness
 Lf = Flow Length (ft)
 P = 2 yr, 24 hr Rainfall (inches)
 Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^{0.5}) (unpaved surface)
 V = 20.3282 * (Sf^{0.5}) (paved surface)
 V = 15.0 * (Sf^{0.5}) (grassed waterway surface)
 V = 10.0 * (Sf^{0.5}) (nearly bare & untilled surface)
 V = 9.0 * (Sf^{0.5}) (cultivated straight rows surface)
 V = 7.0 * (Sf^{0.5}) (short grass pasture surface)
 V = 5.0 * (Sf^{0.5}) (woodland surface)
 V = 2.5 * (Sf^{0.5}) (forest w/heavy litter surface)
 Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
 Lf = Flow Length (ft)
 V = Velocity (ft/sec)
 Sf = Slope (ft/ft)

Channel Flow Equation :

$$V = (1.49 * (R^{2/3}) * (S_f^{0.5})) / n$$

$$R = A_q / W_p$$

$$T_c = (L_f / V) / (3600 \text{ sec/hr})$$

Where :

Tc = Time of Concentration (hr)
 Lf = Flow Length (ft)
 R = Hydraulic Radius (ft)
 Aq = Flow Area (ft²)
 Wp = Wetted Perimeter (ft)
 V = Velocity (ft/sec)
 Sf = Slope (ft/ft)
 n = Manning's roughness

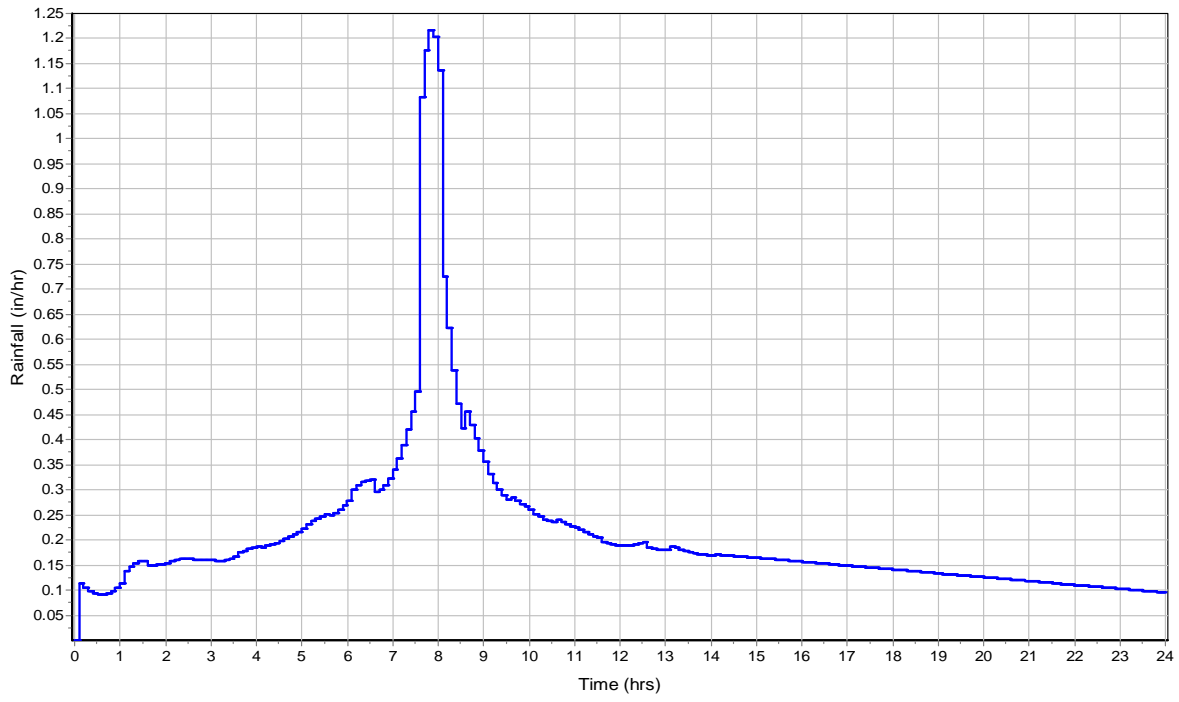
User-Defined TOC override (minutes): 5.00

Subbasin Runoff Results

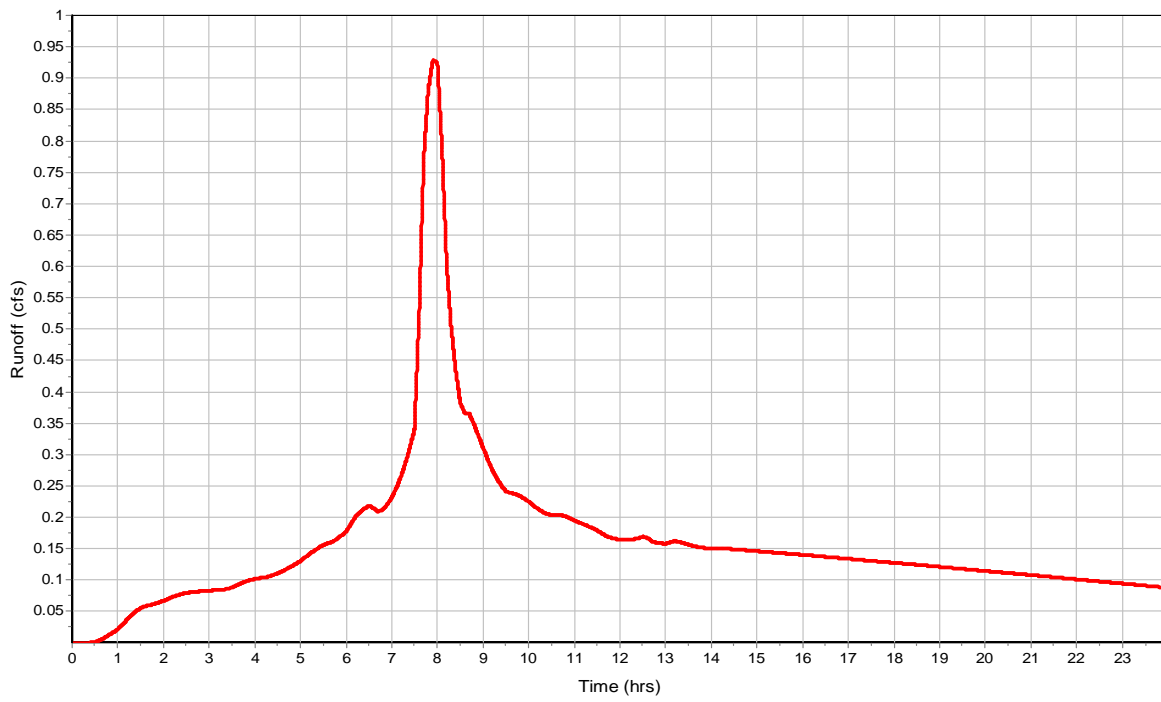
Total Rainfall (in) 5.05
 Total Runoff (in) 3.94
 Peak Runoff (cfs) 0.93
 Weighted Curve Number 89.42
 Time of Concentration (days hh:mm:ss) 0 00:05:00

Subbasin : DEVELOPED_CONDITIONS

Rainfall Intensity Graph



Runoff Hydrograph



Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Pipe Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Initial Flow Gate (cfs)	Flap No	No. of Barrels
1	Link-01	10.00	72.25	2.75	69.50	69.50	2.75	27.5000	CIRCULAR	18.000	18.000	0.0150	0.5000	0.5000	0.0000	0.00	No	1

Pipe Results

SN	Element ID	Peak Flow	Time of Peak Flow Occurrence	Design Flow Capacity	Peak Flow/Design Flow Ratio	Peak Flow Velocity	Travel Time	Peak Flow Depth	Peak Flow Depth/Total Depth Ratio	Total Time Surcharged	Froude Number	Reported Condition
		(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)		
1	Link-01	0.00	0 00:00	47.74	0.00	0.00		0.00	0.00	0.00		Calculated

Storage Nodes

Storage Node : Stor-01

Input Data

Invert Elevation (ft) 69.50
Max (Rim) Elevation (ft) 72.50
Max (Rim) Offset (ft) 3.00
Initial Water Elevation (ft) 0.00
Initial Water Depth (ft) -69.50
Ponded Area (ft²) 0.00
Evaporation Loss 0.00

Infiltration/Exfiltration

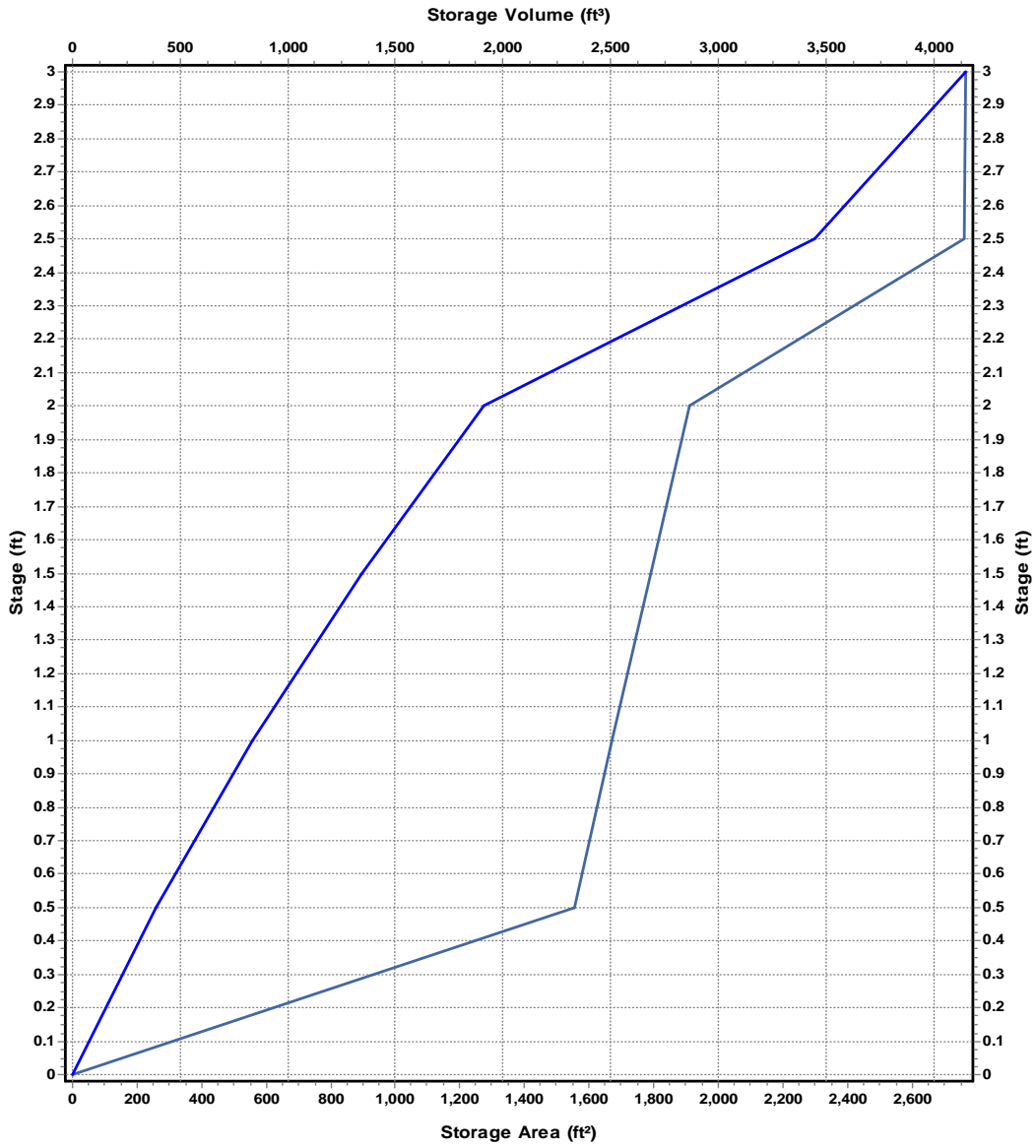
Constant Flow Rate (cfs) 0.15

Storage Area Volume Curves

Storage Curve : RAIN GARDE W/ BELOW-GRADE STORAGE

Stage (ft)	Storage Area (ft ²)	Storage Volume (ft ³)
0	0	0
0.5	1556	389
1	1670	835
1.5	1789.33	1342
2	1911	1911
2.5	2760	3450
3	2766.67	4150

Storage Area Volume Curves



— Storage Area — Storage Volume

Storage Node : Stor-01 (continued)

Output Summary Results

Peak Inflow (cfs)	0.93
Peak Lateral Inflow (cfs)	0.93
Peak Outflow (cfs)	0
Peak Exfiltration Flow Rate (cfm)	9
Max HGL Elevation Attained (ft)	72
Max HGL Depth Attained (ft)	2.5
Average HGL Elevation Attained (ft)	71.16
Average HGL Depth Attained (ft)	1.66
Time of Max HGL Occurrence (days hh:mm)	0 14:20
Total Exfiltration Volume (1000-ft ³)	11.456
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0

Traffic Impact Analysis

Florence Dollar General

Florence, Oregon

Prepared For:

Capital Growth Buchalter, Inc

Prepared By:

SCJ Alliance

8730 Tallon Lane NE, Suite 200

Lacey, WA 98516

360.352.1465

October 2023



Traffic Impact Analysis

Project Information

Project: Florence Dollar General

Prepared for: Capital Growth Buchalter, Inc

Reviewing Agency

Jurisdiction: City of Florence

Project Representative

Prepared by: SCJ Alliance
8730 Tallon Lane NE, Suite 200
Lacey, WA 98516
360.352.1465
scjalliance.com

Contact: Ryan Shea, PTP, Senior Transportation Planner
Eric Johnston, PE, Principal

Project Reference: SCJ #21-000186

Path: N:\Projects\5275 JSA Civil, LLC\23-000186 Florence, OR Dollar General\Traffic\02 - Dels\2023-1013 Traffic Impact Analysis Florence Dollar General Final.docx

Signature

The technical material and data contained in the Traffic Impact Analysis were prepared under the supervision and direction of the undersigned, whose seal, as a professional engineer licensed to practice as such, is affixed below.



Prepared by Ryan Shea, PTP, Senior Transportation
Planner



Approved by Eric Johnston, PE, Principal



10/23/2023

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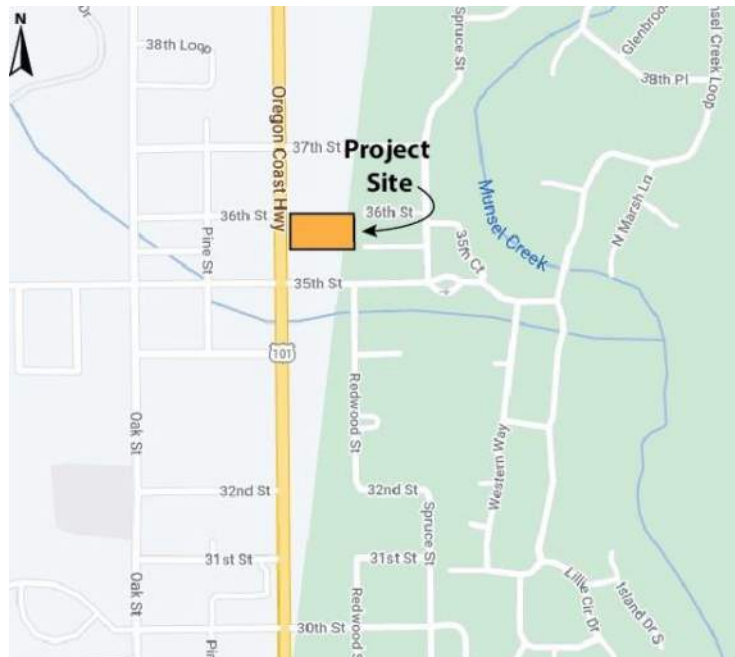
Appendix A	Traffic Volume Counts
Appendix B	Traffic Volume Calculation Worksheets
Appendix C	Capacity Analysis Worksheets

1 Introduction

1.1 Project Overview

Capital Growth Buchalter, Inc. proposes to construct a new Dollar General neighborhood store to be located along US Highway 101 in Florence, Oregon. The proposed store will be 10,640 square feet in size. **Figure 1** illustrates the site vicinity and the transportation network serving the project area.

Figure 1. Site Vicinity Map



1.2 Study Context

This report has been prepared to provide the traffic analysis and project information for the City of Florence in reviewing the development proposal. The report describes the existing and forecasted operation of the following study area intersections:

- ◆ US 101/37th Street
- ◆ US 101/35th Street
- ◆ Redmond Street/35th Street
- ◆ Site Driveway/US 101

Operational analysis has been prepared for existing 2023 AM and PM peak hour conditions and forecasted 2024 AM and PM peak hour conditions with and without completion of the development.

2 Project Description

2.1 Development Proposal

The proposed project would construct a new 10,640 square foot Dollar General neighborhood store on undeveloped land in Florence, OR. The project will provide thirty-one parking stalls, including two ADA stalls, and will provide four bicycle parking stalls. Access to the project will be provided by two existing site driveways: one along US Highway 101 and one along 35th Street. The driveway along US highway 101 is restricted to right-in-right-out (RIRO) and the driveway along 35th Street provides full access. Both driveways also serve an existing Burger King restaurant directly south of the proposed project. The project is anticipated to open in 2024.

The preliminary site plan is provided on **Figure 2**.

US HIGHWAY 101

DOLLAR GENERAL
FFE: 74,000

US HIGHWAY 101
FLORENCE, OR
COMMERCIAL DEVELOPMENT PROJECT

CAPITAL GROWTH
BUCHALTER

FLORENCE, OR DOLLAR GENERAL
US HIGHWAY 101
COMMERCIAL DEVELOPMENT PROJECT

JSA CIVIL
Engineering | Planning | Management
1111 TIMMATER ROAD SE SUITE C140
TUMWATER, WA 98563

SP-01
PRELIMINARY SITE PLAN

SCALE
0 25 50

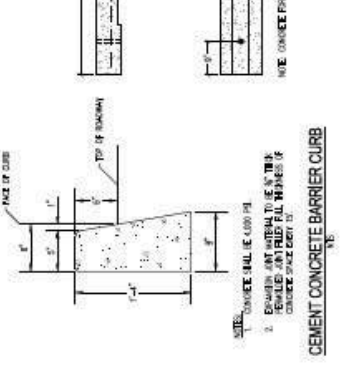
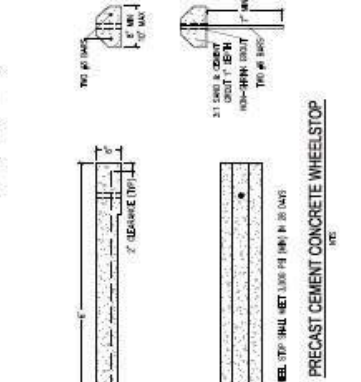
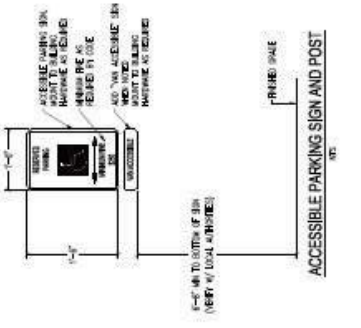
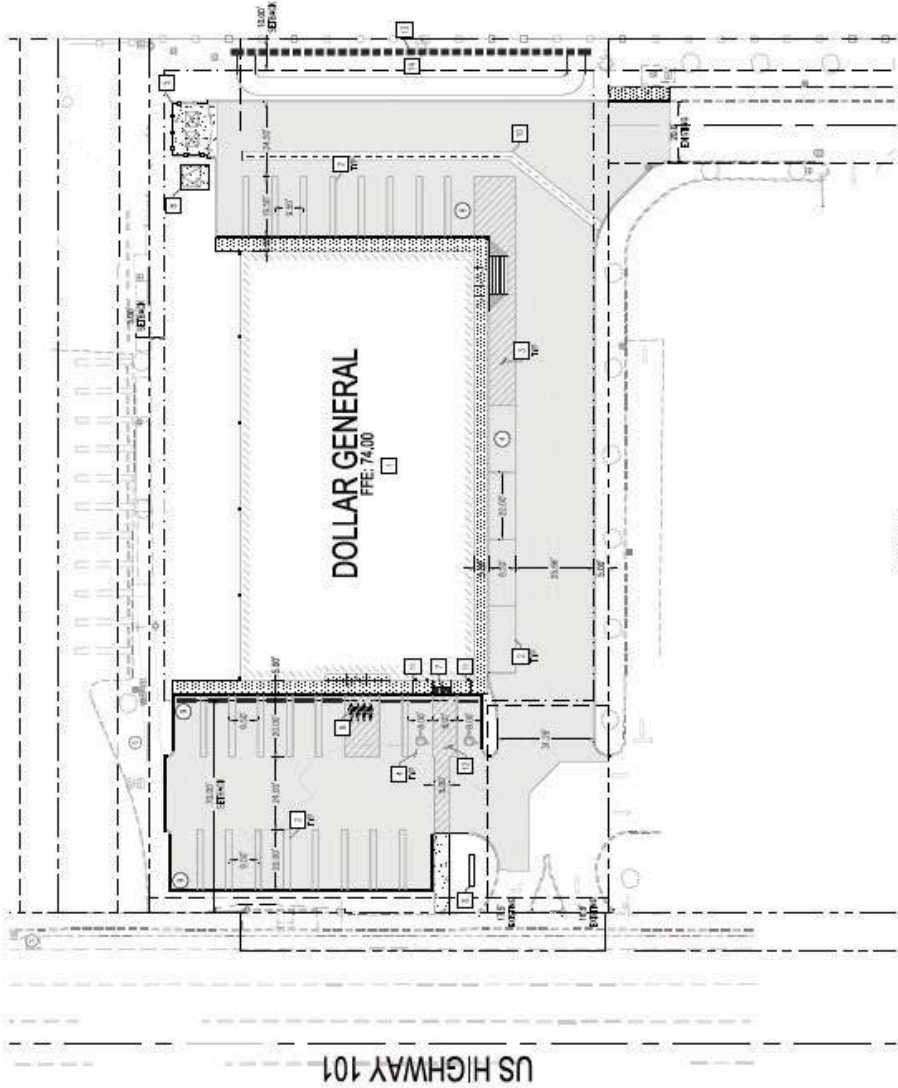
LEGEND

- PROPERTY LINE
- EXISTING
- SETBACK LINE
- SETBACK DIMENSION
- ENTRANCE
- PROPOSED WALKING
- 0.5' W/ 4" DEBT CONCRETE CURB
- CONCRETE EDGELINE ALONG WALL
- CONCRETE CURB
- APPLY FINISH
- CONCRETE FINISH
- STALL COUNT

SITE DATA AND ZONING INFORMATION

APPROXIMATE ACCESSIBLE CURB ACROSS 2 FEET OF 10' WALKWAY	NO. OF PARKING SPACES = 10,000 / 1300' F
ZONING: RC - RECREATION COMMERCIAL	NO. OF TOTAL SPACES
PARKING REQUIRED: 10,000	NO. OF TOTAL SPACES
PARKING PROVIDED: 10,000	NO. OF TOTAL SPACES
WALKWAY SPACE REQUIRED: 10,000	NO. OF TOTAL SPACES
WALKWAY SPACE PROVIDED: 10,000	NO. OF TOTAL SPACES

- CONSTRUCTION NOTES**
1. WALKING SURF TO BE APPLICABLE, 10' W/ 4" DEBT CONCRETE CURB
 2. 4" W/ 4" DEBT CONCRETE CURB
 3. 2" W/ 4" DEBT CONCRETE CURB
 4. ACCESSIBLE WALKING SURF
 5. 4" W/ 4" DEBT CONCRETE CURB
 6. 2" W/ 4" DEBT CONCRETE CURB
 7. 1" W/ 4" DEBT CONCRETE CURB
 8. 0.5" W/ 4" DEBT CONCRETE CURB
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 89. 0.5" W/ 4" DEBT CONCRETE CURB
 90. 0.5" W/ 4" DEBT CONCRETE CURB
 91. 0.5" W/ 4" DEBT CONCRETE CURB
 92. 0.5" W/ 4" DEBT CONCRETE CURB
 93. 0.5" W/ 4" DEBT CONCRETE CURB
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 95. 0.5" W/ 4" DEBT CONCRETE CURB
 96. 0.5" W/ 4" DEBT CONCRETE CURB
 97. 0.5" W/ 4" DEBT CONCRETE CURB
 98. 0.5" W/ 4" DEBT CONCRETE CURB
 99. 0.5" W/ 4" DEBT CONCRETE CURB
 100. 0.5" W/ 4" DEBT CONCRETE CURB



CALL BEFORE YOU DIG

THE STATE OF OREGON HAS A PUBLIC UTILITY LOCATING SYSTEM. IF YOU ARE PLANNING TO EXCAVATE, BORE, OR DRILL, YOU MUST CALL 800-452-5734 AT LEAST 48 HOURS BEFORE YOU BEGIN WORK.

3 Existing Conditions

3.1 Area Land Uses

The *Florence Dollar General* project will be constructed on undeveloped land in Florence, OR. The adjacent land uses are primarily residential and commercial.

3.2 Roadway Inventory

3.2.1 US Highway 101 (Oregon Coast Highway)

US Highway 101 (Oregon Coast Highway) is a north-south highway/major arterial that extends through the state of Oregon along the western coastline. Within the study area, this is a five-lane roadway with two travel lanes in each direction and a two-way left-turn lane. Bike lanes and sidewalks are provided on both sides of the road. Along the project frontage this roadway has a posted speed limit of 40 mph.

3.2.2 35th Street

35th Street is an east-west collector providing one lane in each direction with a posted speed limit of 25 mph. Along the project frontage bike lanes and sidewalks are provided.

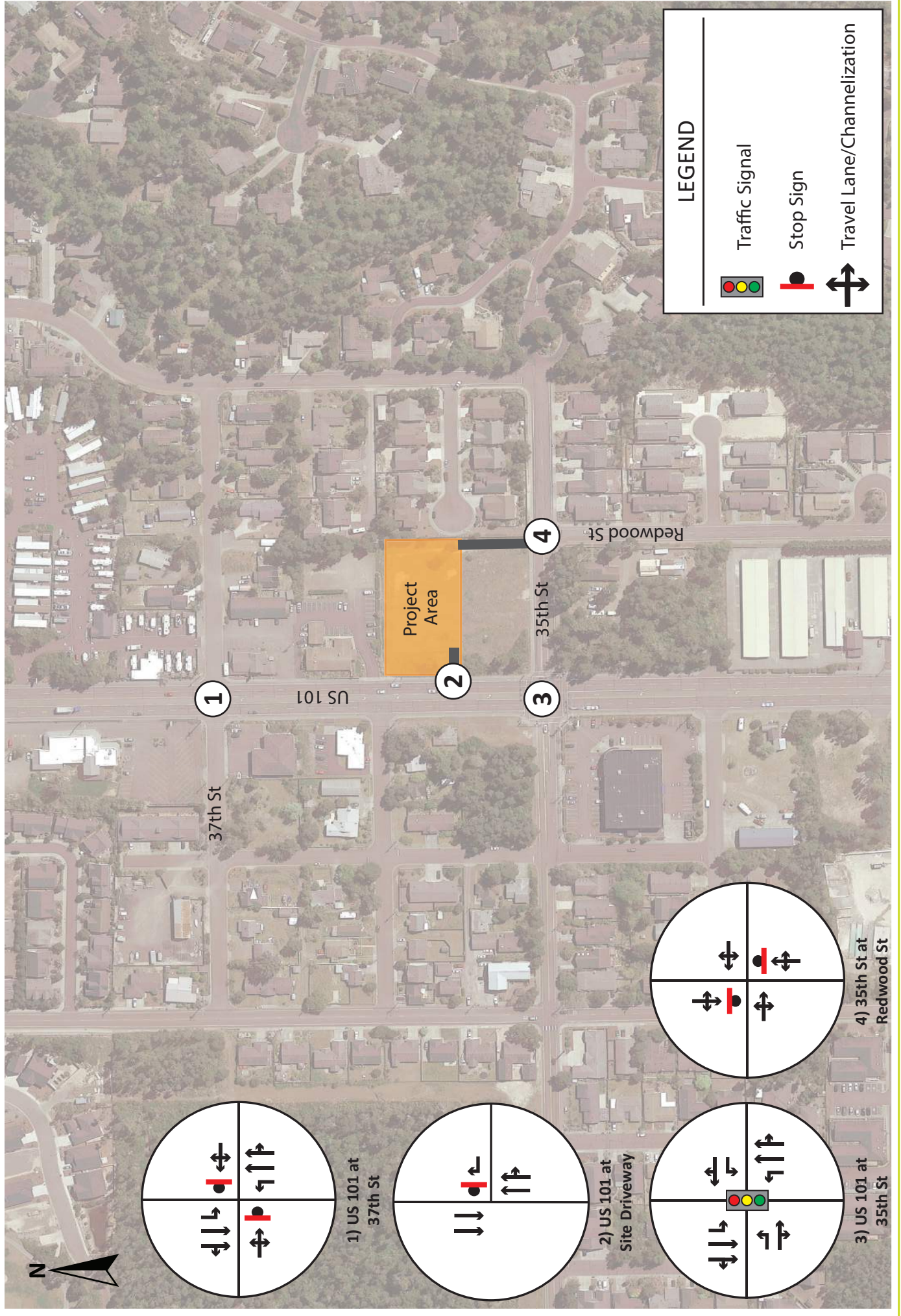
3.2.3 37th Street

37th Street is an east-west local road extending from Oak Street to Spruce Street. This roadway provides one lane in each direction with a speed limit of 25 mph.


3.2.4 Redwood Street

Redwood Street is a north-south collector providing one lane in each direction. Within the project vicinity, this roadway provides bike lanes and sidewalks and has a posted speed limit of 25 mph. Redwood Street has its northern terminus at 35th Street, with the project site driveway extending north of 35th Street.

A summary of the existing intersection channelization and control type for the study intersection is provided in **Figure 3**.



LEGEND

-  Traffic Signal
-  Stop Sign
-  Travel Lane/Channelization

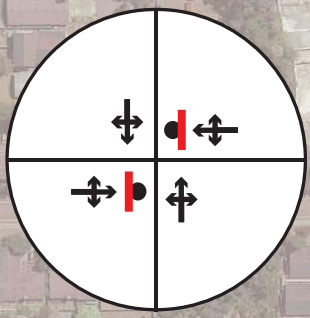
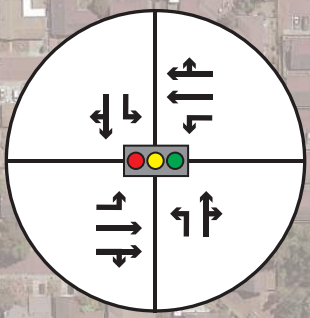
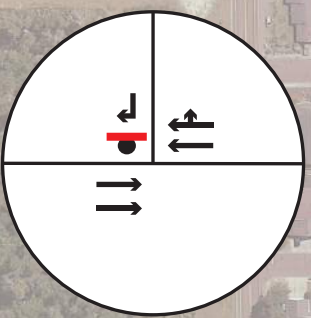
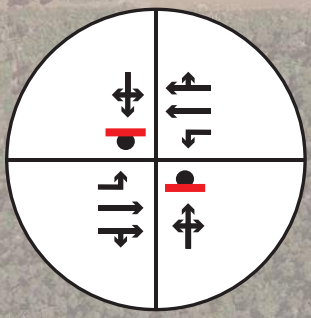


Figure 3
Existing Channelization

Dollar General
Florence, Oregon
Traffic Impact Analysis

3.3 Traffic Volume Data

Quality Counts, a transportation data collection service, provided AM and PM peak period turning movement counts at the following study intersections:

- ◆ US 101/37th Street
- ◆ US 101/35th Street
- ◆ Redmond Street/35th Street

The counts were conducted on October 10, 2023 between 7:00 am and 9:00 am for the morning peak period and between 4:00 pm and 6:00 pm for the evening peak period.

The existing right-in-right-out driveway serving the Burger King property, which will also provide access to the proposed project site, was not counted. Given its proximity to the US 101 and 25th Street intersection, through volumes were taken from that count. The right turns associated with the Burger King site were taken from the Traffic Impact Analysis. To be conservative the right turns for the Burger King were added to the total through traffic on US 101.

The turning movement count diagrams are provided in **Appendix A**

3.3.1 Seasonal Adjustment

The Oregon DOT *Analysis Procedures Manual* (APM) Chapter 5 provides guidance for performing seasonal adjustments to traffic volume data to develop 30th highest hourly design volumes (30 HV). Data from the seasonal trend table (updated 11/10/2022) was reviewed to identify the most appropriate traffic count seasonal adjustment factors. The seasonal trend data for Coastal Destination was used. Following procedures in the APM, the data month (October, 15th) and the seasonal trend peak period factor were used to calculate the adjustment value. The October 15th data point was selected as it was nearest the count day, October 10th. The October 1st data point was a lower factor than October 15th, so while using interpolation to identify a factor specific to October 10th is possible with the available data, using the adjustment factor for October 15th provides a more conservative volume adjustment by providing higher adjusted volumes.

The rounded seasonal adjustment value of 1.30 was selected and applied to the raw traffic counts to develop the seasonally adjusted volumes that are used in this Traffic Impact Analysis.

The existing, seasonally adjusted 2023 traffic volumes for the study intersections for the AM peak hour are presented in **Figure 4** and the PM peak hour in **Figure 5** for the study intersections.

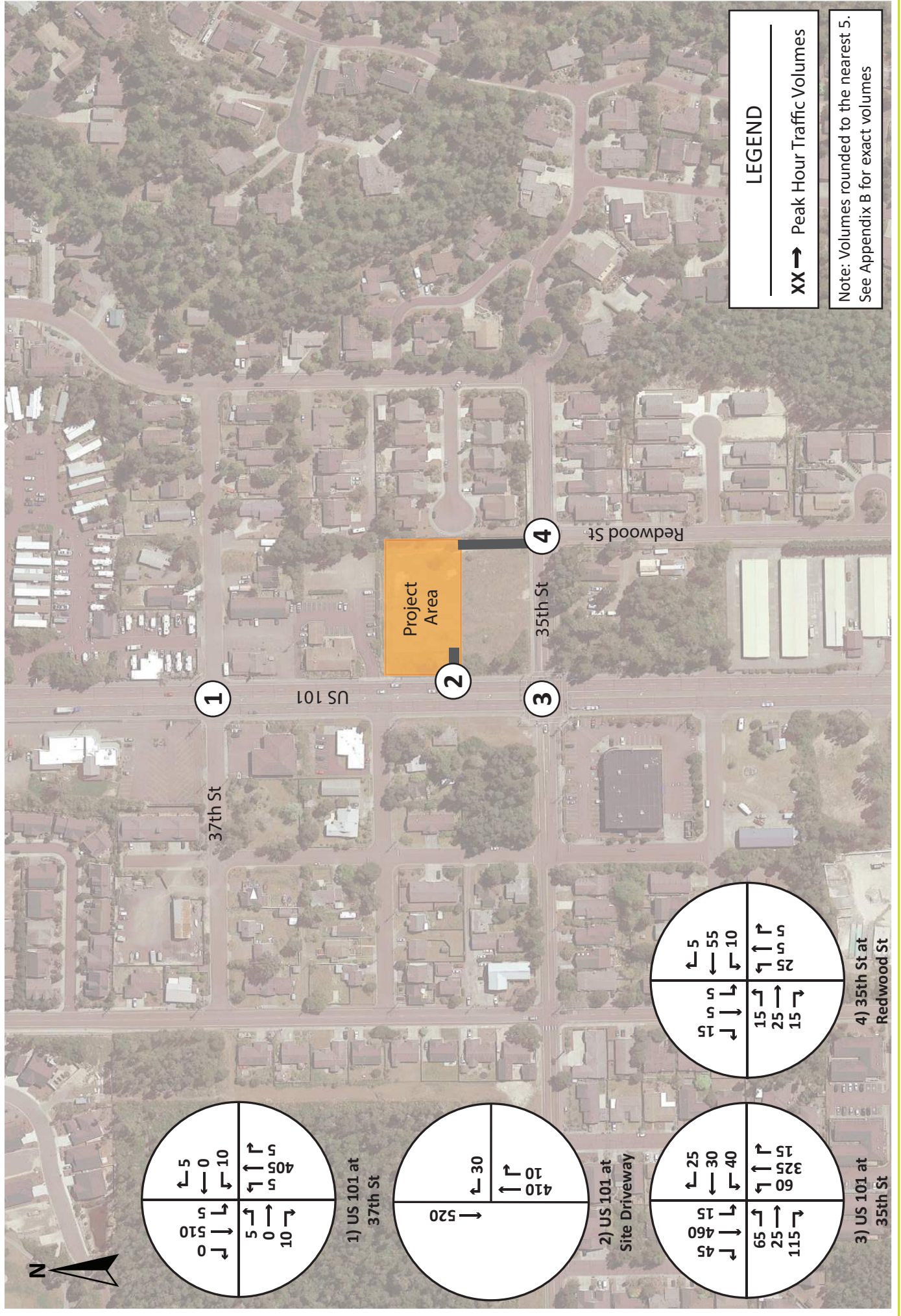


Figure 4
 Existing 2023 Seasonally Adjusted
 AM Peak Hour Traffic Volumes

Dollar General
 Florence, Oregon
 Traffic Impact Analysis

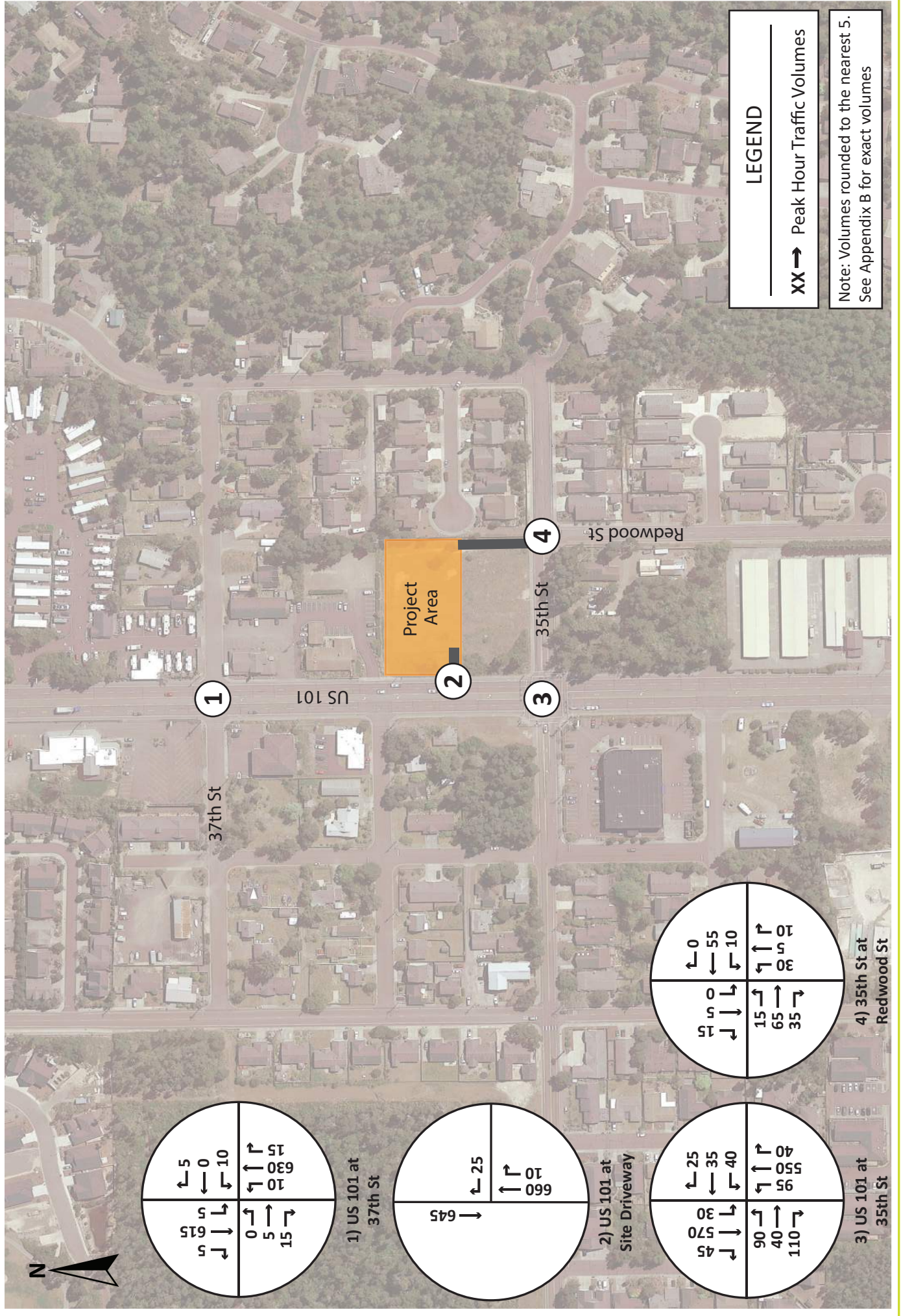


Figure 5
 Existing 2023 Seasonally Adjusted
 PM Peak Hour Traffic Volumes

Dollar General
 Florence, Oregon
 Traffic Impact Analysis

3.4 Crash History

ODOT crash data records were reviewed to determine if any crashes had occurred in the study area over the five-year period from January 1, 2017 to December 31, 2021. A crash frequency rate per Millions of Entering Vehicles (MEV) was calculated for the study intersections based on the following formula:

$$\text{Crash Rate} = \frac{1,000,000 \times \text{Total Crashes}}{365 \times \text{Number of Years} \times \text{Average Daily Entering Traffic}}$$

The average daily traffic entering the study intersection was estimated by adding the entering PM peak hour turning movements and multiplying by a factor of 10. We have summarized the crash data for the study intersections in **Table 1**.

Table 1. Existing Crash Severity by Study Intersection

Intersection	Total Daily Entering Traffic	Total Number of Reported Crashes	Number of Injury Crashes	Average crashes per Year	Crashes per MEV
US Highway 101 at 35 th Street	12,830	10	5	2	0.43
Redwood Street at 35 th Street	1,810	1	1	0.2	0.30
US Highway 101 at 37 th Street	10,010	0	0	0	0.00

Within the study area, there are no intersections that have a crash rate greater than 1.0 crashes per million entering vehicles. There were no fatal or major injury crashes reported.

3.5 Transit and Non-Motorized Facilities

Rhody Express currently provides transit services in the City of Florence. The project site and vicinity are served by the North Loop transit route. The closest transit stop is located approximately 0.35 miles southwest of the project site.

In the project vicinity, sidewalks and bicycle lanes are provided along US Highway 101 (Oregon Coast Highway) and 35th Street.

4 Project Traffic Characteristics

4.1 Site-Generated Traffic Volumes

The two project-related characteristics having the most effect on area traffic conditions are peak hour trip generation and the directional distribution of traffic volumes on the surrounding roadway network. These are discussed in the following paragraphs.

Site-Generated Traffic Volumes

Vehicle trip generation was calculated using the trip generation rates contained in the 11th edition of the Trip Generation Manual by the *Institute of Transportation Engineers (ITE)*. The Variety Store category (land-use code #814) was determined to be the most applicable to this project based on the following ITE description of this project type:

A variety store is a retail store that sells a broad range of inexpensive items often at a single price. These stores are typically referred to as “dollar stores.”

It is anticipated that this project will attract some traffic from people already driving on area roadways. These trips are not new trips added to the local roadways by a project (primary trips) but represent “pass-by” trips according to the following definition:

Pass-by Trips are trips made as an intermediate stop from an origin to a primary destination by vehicles passing directly by the project driveway.

The 3rd edition of the ITE Trip Generation Handbook provides information on pass-by rates for different land uses. The PM peak hour new-to-network trip total reflects an estimated 34 percent occurrence of “pass-by” vehicles which should be deducted from total project trip generation estimates on the surrounding street system but included in the estimated driveway volumes. The ITE Handbook does not provide a pass-by rate for the AM peak hour. For daily, the PM peak hour pass-by rate was used.

The trip generation used for the AM peak hour and PM peak hour trips are shown in **Table 2**.

Table 2. Trip Generation Rates for Variety Store (LU 814)

Time Period	Unit	Trip Rate	Pass-By %	% Enter	% Exit
AM Peak Hour	1,000 sf	3.04	0%	55%	45%
PM Peak Hour	1,000 sf	6.70	34%	51%	49%
Daily	1,000 sf	63.66	34%	50%	50%

The total trip generation expected from this project is calculated by applying the unit measure for each land use category to the appropriate trip generation rate. The trip generation calculations are shown in **Table 3**.

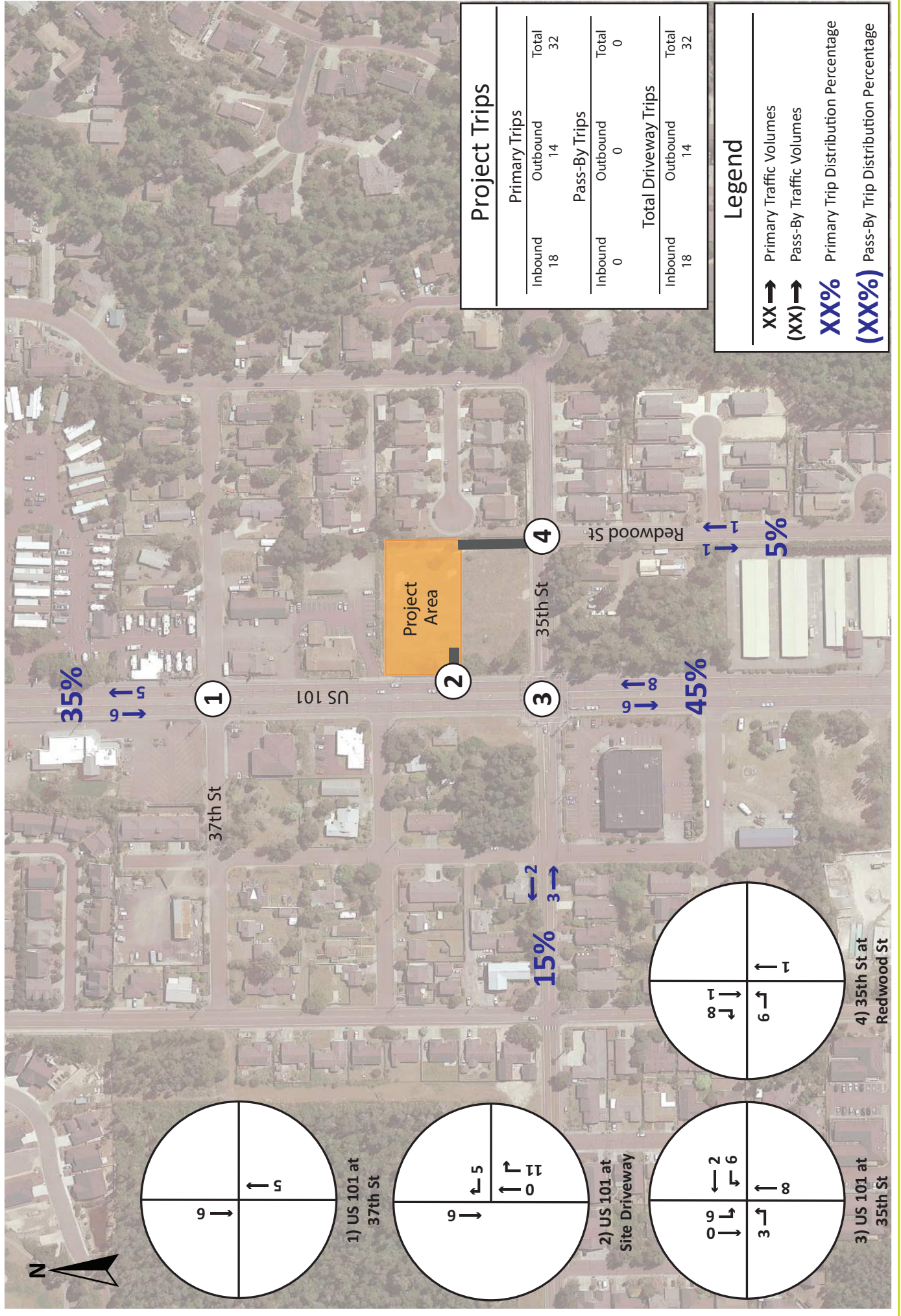
Table 3. Project Trip Generation

Time Period	Size (1,000 sf)	Total Trips	Pass-By Trips*	New-to-Network Trips		
				Enter	Exit	Total
AM Peak Hour	10.640	32	0	18	45	32
PM Peak Hour	10.640	71	25	24	23	47
Daily	10.640	677	230	224	223	447

*Pass by trips were assigned evenly to US Highway 101

4.2 Site Traffic Distribution and Assignment

The regional distribution of traffic to and from the proposed project was estimated based on the trip distribution identified in the approved Traffic Impact Analysis prepared by Branch Engineering for the adjacent Burger King project. The regional traffic distribution percentages and site traffic assignment for the proposed development for the AM peak hour are shown on **Figure 6** and the PM peak hour is shown on **Figure 7**.



Project Trips

Primary Trips		Total
Inbound	18	32
Outbound	14	
Pass-By Trips		Total
Inbound	0	0
Outbound	0	
Total Driveway Trips		Total
Inbound	18	32
Outbound	14	

Legend

- XX** → Primary Traffic Volumes
- (XX)** → Pass-By Traffic Volumes
- XX%** Primary Trip Distribution Percentage
- (XX%)** Pass-By Trip Distribution Percentage

Figure 6
 Site-Generated Traffic Volumes
 AM Peak Hour

Dollar General
 Florence, Oregon
 Traffic Impact Analysis

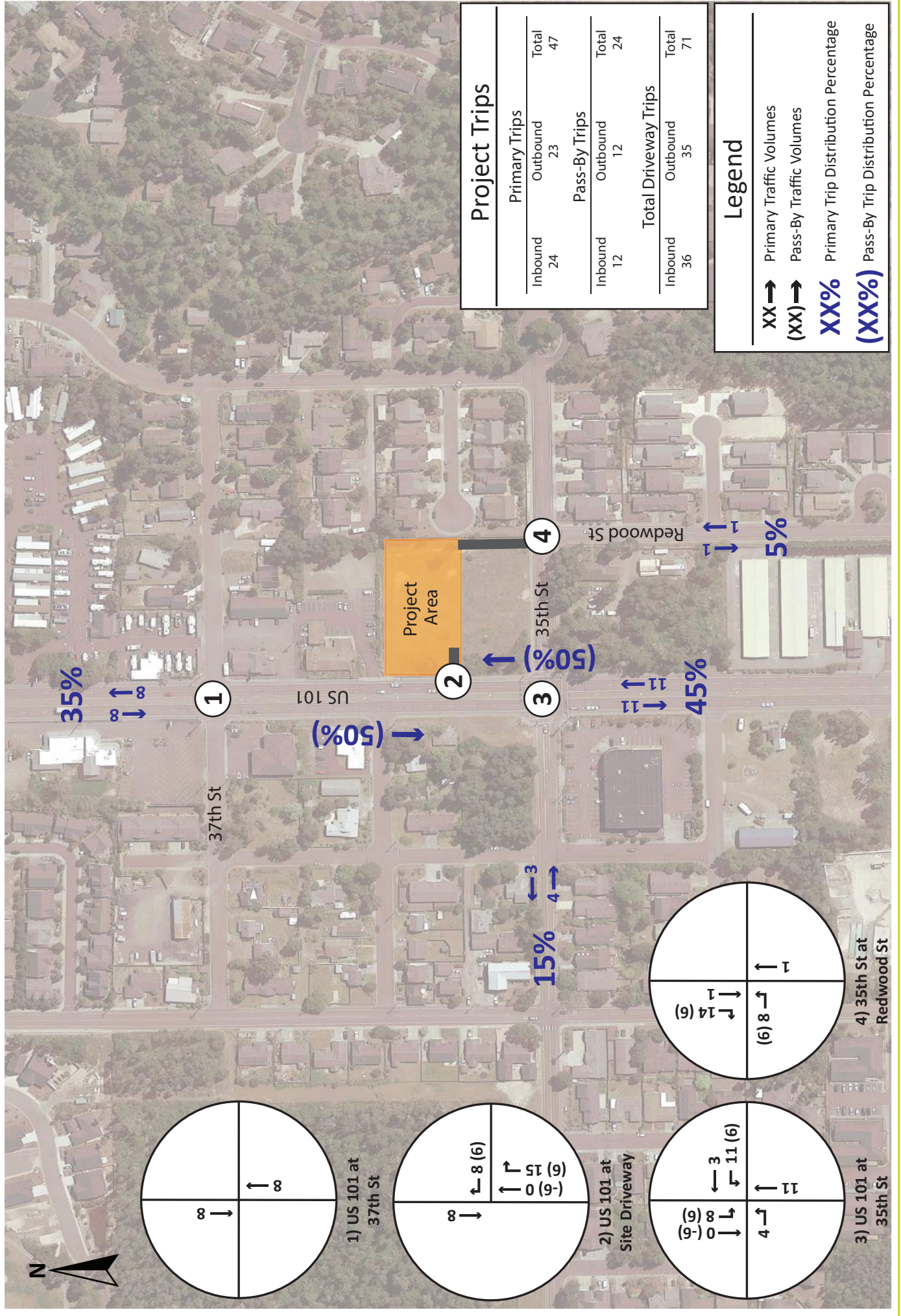


Figure 7
 Site-Generated Traffic Volumes
 PM Peak Hour

Dollar General
 Florence, Oregon
 Traffic Impact Analysis

5 Future Traffic Conditions

This section describes any planned roadway or intersection improvements within the study area and traffic volume forecast calculations. These two elements will contribute to the projected 2024 operational analysis.

5.1 Planned Roadway Improvements

The *Florence Transportation System Plan (TSP)*, published in 2012, does not include identified project strategies that could affect the study area. The *Oregon 2024-2027 State Transportation Improvement Program (STIP)* was reviewed and no projects were identified in the project area.

5.2 Future Traffic Volumes

Oregon Department of Transportation Development Review Guidelines, Table 3.3; Future Year Analysis: Suggested Time lines, identifies the horizon year to be the year of opening for single phase projects with up to 999 ADT. Based on these guidelines, traffic volume forecasts were prepared for the 2024 opening year. The future year analysis was completed for both the AM and PM peak hour conditions.

The future traffic volume forecast includes non-specific background traffic growth, pipeline developments and estimated traffic generated by the proposed *Florence Dollar General* project.

The non-specific background traffic growth rate was calculated using the ODOT Future Volumes Table. The average annual growth rate of 0.037%, was calculated using volumes from site 1172 for the years 2021 and 2042. To be conservative an annual growth rate of 1.0% was used which equates to a growth factor of 1.01. This rate was applied to existing adjusted traffic volumes at the study area intersections to obtain future 2024 turning movement projections.

One pipeline development was identified within the study area, as provided from the Burger King TIA, and is described below:

- ◆ Florence Residential Subdivision - A single family homes and apartment units development located west of the project site along Rhododendron Drive.

The projected 2024 AM and PM traffic volumes without the *Florence Dollar General* project are shown on **Figure 8** and **Figure 9**. The projected 2024 AM and PM traffic volumes with the project are shown on **Figure 10** and **Figure 11**. The traffic volume calculations for the study intersections are included in **Appendix B**.

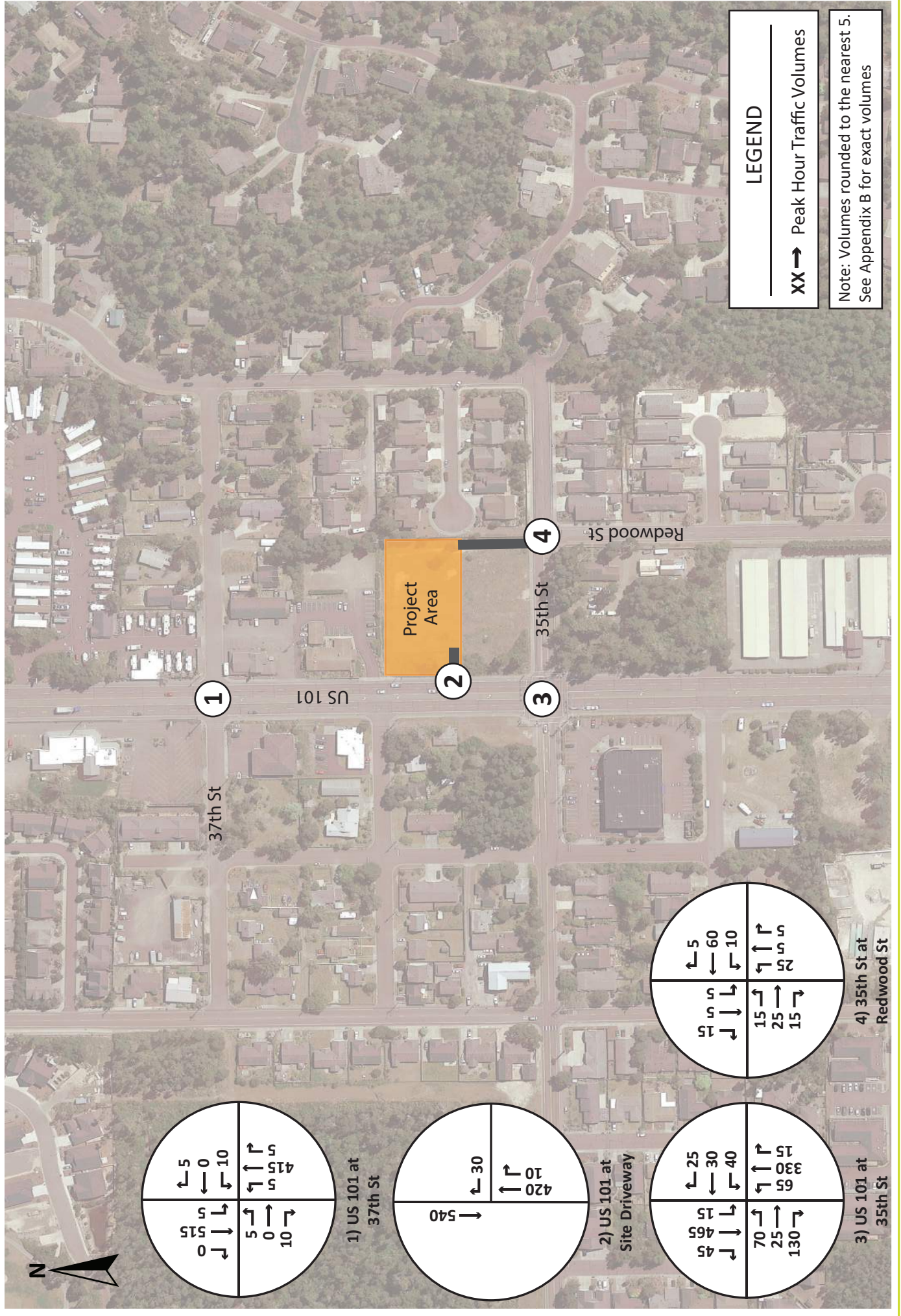


Figure 8
 Projected 2024 AM Peak Hour
 Traffic Volumes Without Project

Dollar General
 Florence, Oregon
 Traffic Impact Analysis

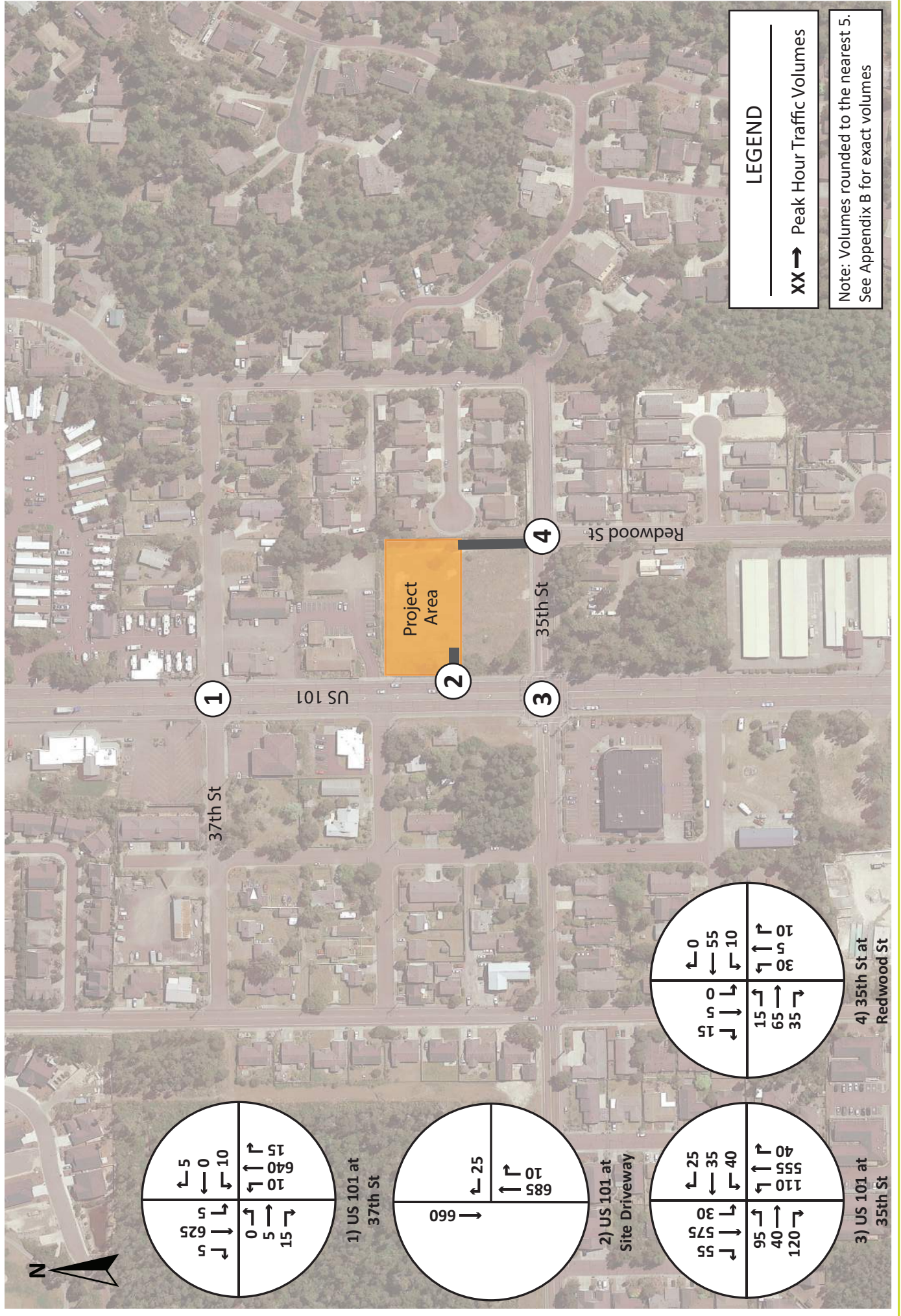


Figure 9
 Projected 2024 PM Peak Hour
 Traffic Volumes Without Project

Dollar General
 Florence, Oregon
 Traffic Impact Analysis

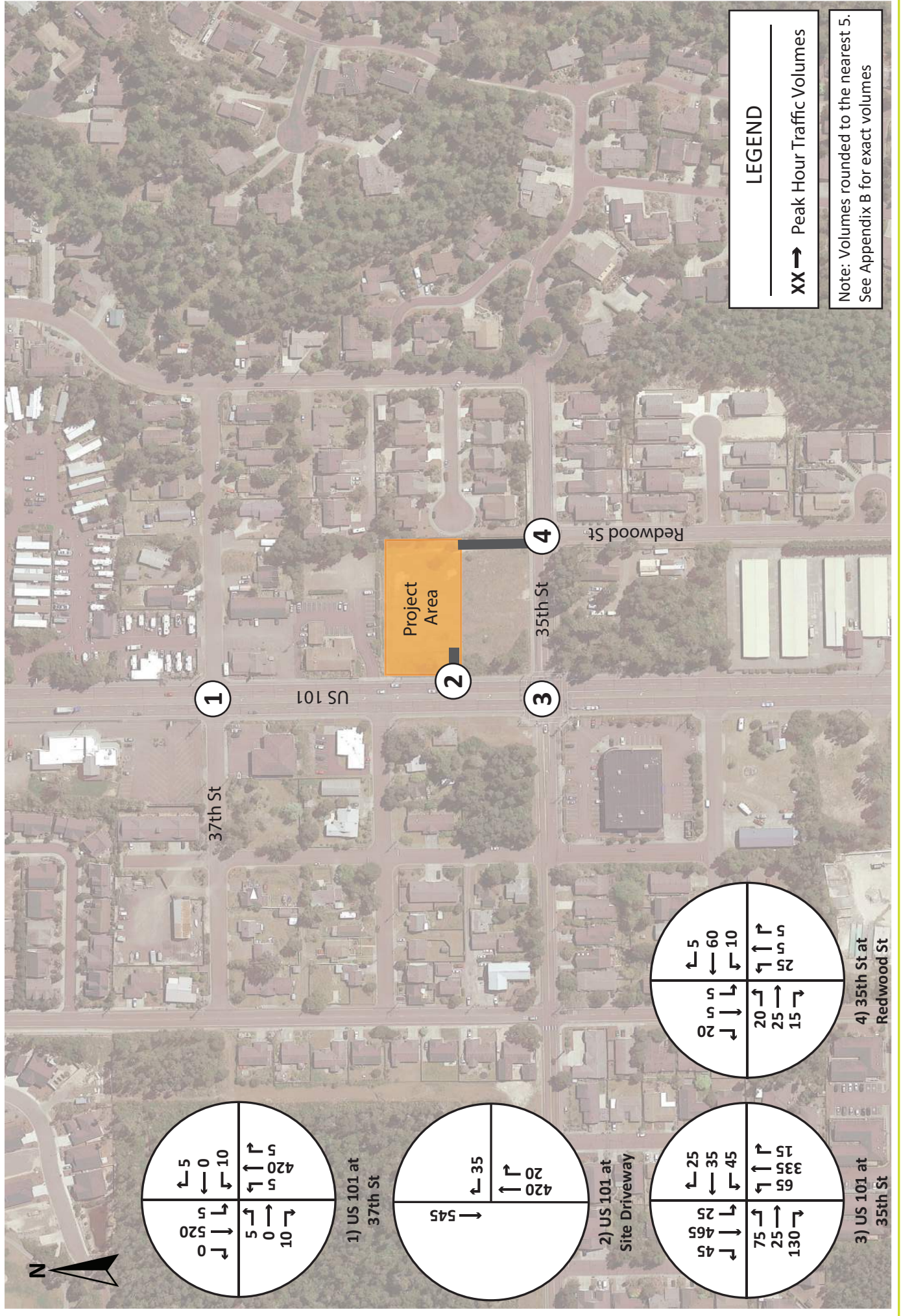


Figure 10
 Projected 2024 AM Peak Hour
 Traffic Volumes With Project

Dollar General
 Florence, Oregon
 Traffic Impact Analysis

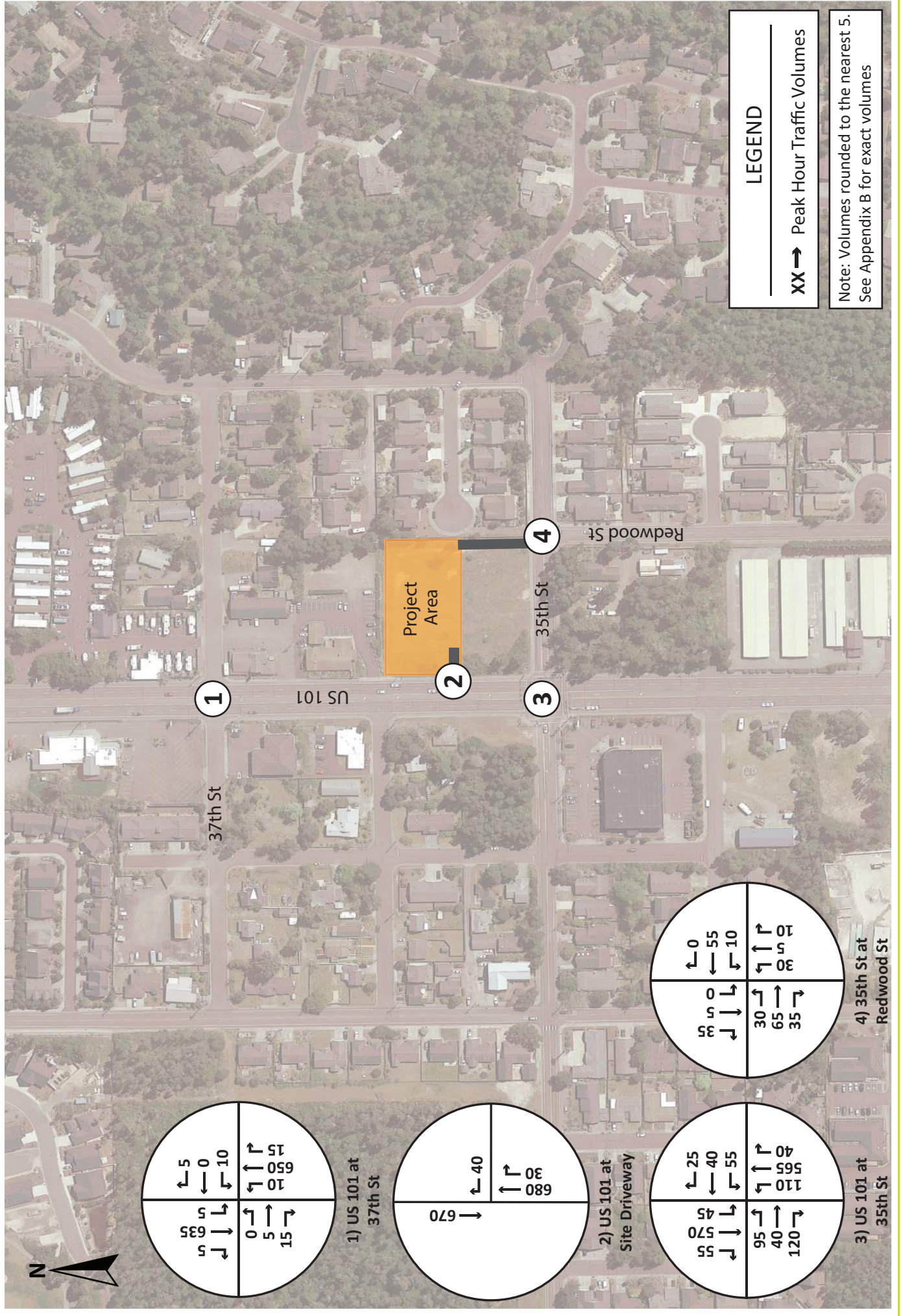


Figure 11
 Projected 2024 PM Peak Hour
 Traffic Volumes With Project

Dollar General
 Florence, Oregon
 Traffic Impact Analysis

6 Traffic Operations Analysis

Traffic analyses were conducted to identify any deficiencies within the study area for the AM peak hour and the PM peak hour in the 2023 base year and the 2024 project opening year.

6.1 Intersection Operations

The acknowledged source for determining overall capacity for arterial segments and independent intersections is the current edition of the Highway Capacity Manual (HCM). Capacity analyses were completed for the base year and projected 2024 AM and PM peak hour traffic volume scenarios for all study intersections. Intersection analysis was performed using Synchro version 11, with the HCM6 output of the Synchro software. The Synchro software packages implement the methodologies described in the current HCM.

6.1.1 Level of Service

Level of service calculations for intersections determine the amount of control delay (in seconds) that drivers will experience while proceeding through an intersection. Control delay includes all deceleration delay, stopped delay and acceleration delay caused by the traffic control device. The Level of Service is directly related to the amount of delay experienced. For intersections under minor street stop-control, the LOS of the most difficult movement (typically the minor street left-turn) represents the intersection Level of Service for purposes of assessing potential impacts. **Table 4** shows the Level of Service criteria for stop-controlled intersections and for signalized intersections.

Table 4. Level of Service Criteria for Intersections

Level of Service	Signalized Intersection Average Control Delay (seconds/vehicle)	Stop-Controlled Intersection Average Control Delay (seconds/vehicle)
A	≤ 10	≤ 10
B	> 10-20	> 10-15
C	> 20-35	> 15-25
D	> 35-55	> 25-35
E	> 55-80	> 35-50
F	> 80	> 50

6.1.2 Volume to Capacity Ratio

Another measure of the performance of an intersection is the “degree of saturation” which is typically presented as the “volume to capacity” (v/c) ratio. Many factors affect the volume of traffic an intersection can accommodate during a specific time interval. These factors include the number of lanes, lane widths, the type of signal phasing, the number of parking maneuvers on the adjacent street, etc. Based on these factors, the intersection (or individual lane group) is determined to have a total vehicle carrying capacity “c” for the analysis period. The analysis period volume “v” is compared to the calculated carrying capacity and presented as a ratio. If the v/c ratio is below 1.0, the demand volume is less than the maximum capacity. If the v/c ratio is over 1.0, the demand volume exceeds the available capacity.

The City of Florence *Transportation System Plan* identifies the following operating standards:

- ◆ LOS D standard for signalized and all-way stop intersections, with a V/C ratio of less than 1.0 for the sum of the critical movements.
- ◆ LOS E for the worst approach at two-way stop intersections. LOS F is considered acceptable when a signal is not warranted.

6.2 Intersection Analysis

The analysis was conducted for the following scenarios:

- ◆ Existing 2023 traffic volumes
- ◆ Projected 2024 background traffic volumes without the *Florence Dollar General* project
- ◆ Projected 2024 traffic volumes with the *Florence Dollar General* project

The operational analysis results of the study intersections for the AM peak hour are provided in **Table 5** and the PM peak hour in **Table 6**. The LOS analysis worksheets are included in **Appendix C**.

Table 5. AM Peak Hour Intersection Level of Service

Intersection	Control Type	Base Year 2023		Projected 2024			
		LOS (delay)	Worst V/C Ratio	Without Project		With Project	
				LOS (delay)	Worst V/C Ratio	LOS (delay)	Worst V/C Ratio
1 US Hwy 101 / 37th St	TWSC ¹	C (19.7)	0.07	C (20.0)	0.08	C (20.3)	0.08
2 US Hwy 101/Site Driveway	TWSC ¹	A (9.9)	0.04	A (9.9)	0.04	B (10.0)	0.05
3 US Hwy 101 / 35th St	Signal	B (10.2)	0.60	B (10.5)	0.61	B (10.7)	0.62
4 Redwood St/35th St	TWSC ¹	B (10.0)	0.05	B (10.0)	0.05	B (10.0)	0.05

¹Two-Way-Stop-Control

Table 6. PM Peak Hour Intersection Level of Service

Intersection	Control Type	Base Year 2023		Projected 2024			
		LOS (delay)	Worst V/C Ratio	Without Project		With Project	
				LOS (delay)	Worst V/C Ratio	LOS (delay)	Worst V/C Ratio
1 US Hwy 101 / 37 th St	TWSC ¹	D (27.2)	0.11	D (28.1)	0.11	D (28.7)	0.11
2 US Hwy 101/Site Driveway	TWSC ¹	B (10.9)	0.04	B (11.1)	0.04	B (11.3)	0.07
3 US Hwy 101 / 35 th St	Signal	B (11.2)	0.68	B (11.5)	0.69	B (12.0)	0.70
4 Redwood St/35 th St	TWSC ¹	B (10.1)	0.07	B (10.1)	0.07	B (10.6)	0.07

¹Two-Way-Stop-Control

6.2.1 US Highway 101 at 37th Street

This is a four-leg intersection under stop control for the eastbound and westbound approaches. During the AM peak hour this intersection currently operates at LOS C and is projected to remain LOS C for the 2024 horizon with and without the project.

During the PM peak hour this intersection currently operates at LOS D and is projected to remain LOS D for the 2024 horizon with and without the project.

6.2.2 US Highway 101 at Site Driveway

This is a three-leg intersection under stop control for the westbound approach. In both the AM and PM peak hours, this intersection currently operates at LOS B or better and is projected to operate at LOS B or better for the 2024 horizon with and without the project.

6.2.3 US Highway 101 at 35th Street

This is a four-leg intersection under traffic signal control. During the AM peak hour this intersection currently operates at LOS B and is projected to remain LOS B for the 2024 horizon with and without the project.

During the PM peak hour this intersection currently operates at LOS B and is projected to remain LOS B for the 2024 horizon with and without the project.

6.2.4 Redwood Street at 35th Street

This is a four-leg intersection under stop control for the northbound and southbound approaches. In both the AM and PM peak hours, this intersection currently operates at LOS B and is projected to remain LOS B for the 2024 horizon with and without the project.

6.3 Vehicle Queuing

A vehicle queue is the number of stopped vehicles waiting to travel through an intersection. The queue length includes all vehicles that stop at an intersection even after vehicles at the front begin to move forward. The 95th percentile queue value reflects the “peak typical” queue that occurs during the analysis period, discarding the highest 5 percent of queue occurrences. The queue study was performed using the SimTraffic microsimulation program. The average of five simulations was calculated. The SimTraffic queue analysis worksheets are attached.

Analysis results for the AM peak hour are presented in **Table 7** and PM peak hour in **Table 8** and are rounded to the nearest five feet.

Table 7. 2023 Existing and 2024 Project Opening AM Peak Hour Queuing

Intersection/Movement	95 th Percentile Queues (Feet)			
	Available Storage (ft)	Base Year 2023	2024	
			Without Project	With Project – Phase 1
US Hwy 101 at 37th St				
<i>Eastbound Left/Through/Right</i>	250 ft	35 ft	35 ft	40 ft
<i>Westbound Left/Through/Right</i>	100 ft	45 ft	45 ft	55 ft
<i>Northbound Left</i>	100 ft	15 ft	15 ft	15 ft
<i>Northbound Through/Right</i>	100 ft	10 ft	10 ft	5 ft
<i>Southbound Left</i>	100 ft	20 ft	20 ft	15 ft
US Hwy 101 at Site Driveway				
<i>Westbound Right</i>	75 ft	45 ft	45 ft	50 ft
US Hwy 101 at 35th St				
<i>Eastbound Left</i>	100 ft	65 ft	65 ft	75 ft
<i>Eastbound Through/Right</i>	250 ft	85 ft	85 ft	80 ft
<i>Westbound Left</i>	150 ft	55 ft	55 ft	55 ft
<i>Westbound Through/Right</i>	250 ft	60 Ft	60 Ft	60 Ft
<i>Northbound Left</i>	150 ft	50 ft	50 ft	50 ft
<i>Northbound Through</i>	250 ft	80 ft	80 ft	80 ft
<i>Northbound Through/Right</i>	250 ft	55 ft	55 ft	55 ft
<i>Southbound Left</i>	100 ft	35 ft	35 ft	40 ft
<i>Southbound Through</i>	250 ft	105 ft	105 ft	105 ft
<i>Southbound Through/Right</i>	250 ft	90 ft	90 ft	95 ft
Redwood St at 35th St				
<i>Eastbound Left/Through/Right</i>	250 ft	10 ft	10 ft	10 ft
<i>Westbound Left/Through/Right</i>	275 ft	0 ft	0 ft	5 ft
<i>Northbound Left/Through/Right</i>	250 ft	55 ft	55 ft	55 ft
<i>Southbound Left/Through/Right</i>	100 ft	40 ft	40 ft	45 ft

Table 8. 2023 Existing and 2024 Project Opening PM Peak Hour Queuing

Intersection/Movement	Available Storage (ft)	95 th Percentile Queues (Feet)		
		Base Year 2023	2024	
			Without Project	With Project – Phase 1
US Hwy 101 at 37th St				
<i>Eastbound Left/Through/Right</i>	250 ft	40 ft	40 ft	40 ft
<i>Westbound Left/Through/Right</i>	100 ft	35 ft	35 ft	40 ft
<i>Northbound Left</i>	100 ft	25 ft	25 ft	35 ft
<i>Northbound Through/Right</i>	100 ft	0 ft	0 ft	5 ft
<i>Southbound Left</i>	100 ft	10 ft	15 ft	20 ft
US Hwy 101 at Site Driveway				
<i>Westbound Right</i>	75 ft	50 ft	50 ft	50 ft
US Hwy 101 at 35th St				
<i>Eastbound Left</i>	100 ft	85 ft	70 ft	80 ft
<i>Eastbound Through/Right</i>	250 ft	80 ft	85 ft	85 ft
<i>Westbound Left</i>	150 ft	55 ft	55 ft	65 ft
<i>Westbound Through/Right</i>	250 ft	55 Ft	55 Ft	60 Ft
<i>Northbound Left</i>	150 ft	65 ft	70 ft	70 ft
<i>Northbound Through</i>	250 ft	100 ft	95 ft	100 ft
<i>Northbound Through/Right</i>	250 ft	70 ft	70 ft	80 ft
<i>Southbound Left</i>	100 ft	50 ft	60 ft	60 ft
<i>Southbound Through</i>	250 ft	125 ft	120 ft	125 ft
<i>Southbound Through/Right</i>	250 ft	110 ft	105 ft	110 ft
Redwood St at 35th St				
<i>Eastbound Left/Through/Right</i>	250 ft	5 ft	5 ft	15 ft
<i>Westbound Left/Through/Right</i>	275 ft	5 ft	10 ft	10 ft
<i>Northbound Left/Through/Right</i>	250 ft	50 ft	50 ft	55 ft
<i>Southbound Left/Through/Right</i>	100 ft	40 ft	40 ft	50 ft

As shown in the tables, all of the study intersections are projected to provide sufficient vehicle storage for all movements through the 2024 horizon after completion of the Florence Dollar General project.

Summary

Capital Growth Buchalter, Inc. proposes to construct a new Dollar General neighborhood store to be located along US Highway 101 in Florence, Oregon. The proposed store will be 10,640 square feet in size and is expected to open 2024. Access to the project will be provided by two existing site driveways: one along US Highway 101 and one along 35th Street. The driveway on US Highway 101 is restricted to right-in-right-out (RIRO) and the driveway on 35th Street provides full access.

At full occupancy and operation, the project is estimated to generate approximately 32 new trip ends during the AM peak hour and 47 new trips ends during the PM peak hour. An evaluation of the existing 2023 and project opening year (2024) with and without the project traffic was performed. All of the study intersections currently operate and are projected to operate at LOS D or better which is within the identified LOS standard.

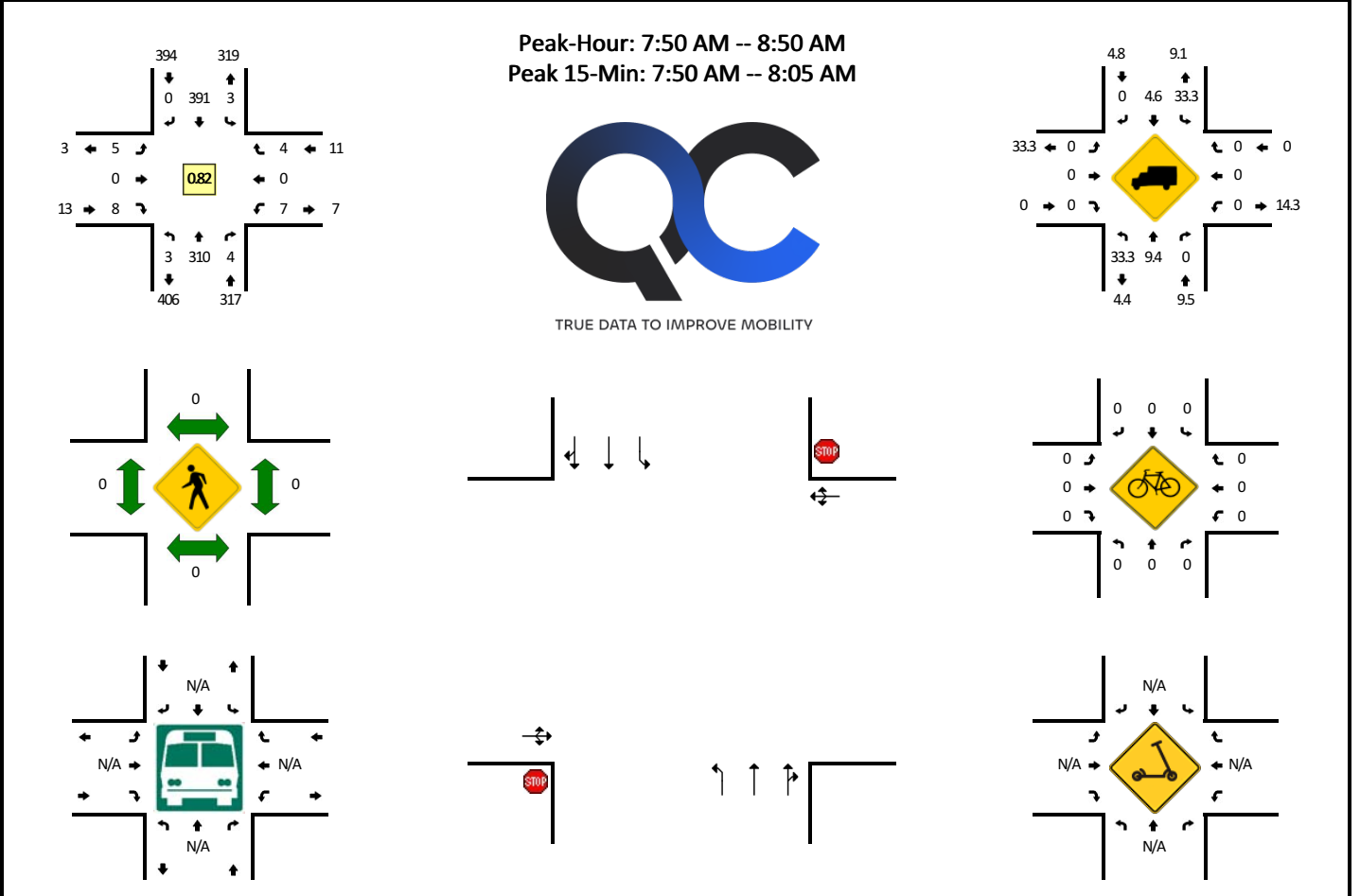
A vehicle queue assessment was performed for the study area intersections for existing volumes and projected 2024 with and without project traffic. For all three scenarios all of the intersections are projected to generate 95th percentile queues within the available storage.

Appendix A

Traffic Volume Counts

LOCATION: US 101 -- 37th St
CITY/STATE: Florence, OR

QC JOB #: 16365205
DATE: Tue, Oct 10 2023

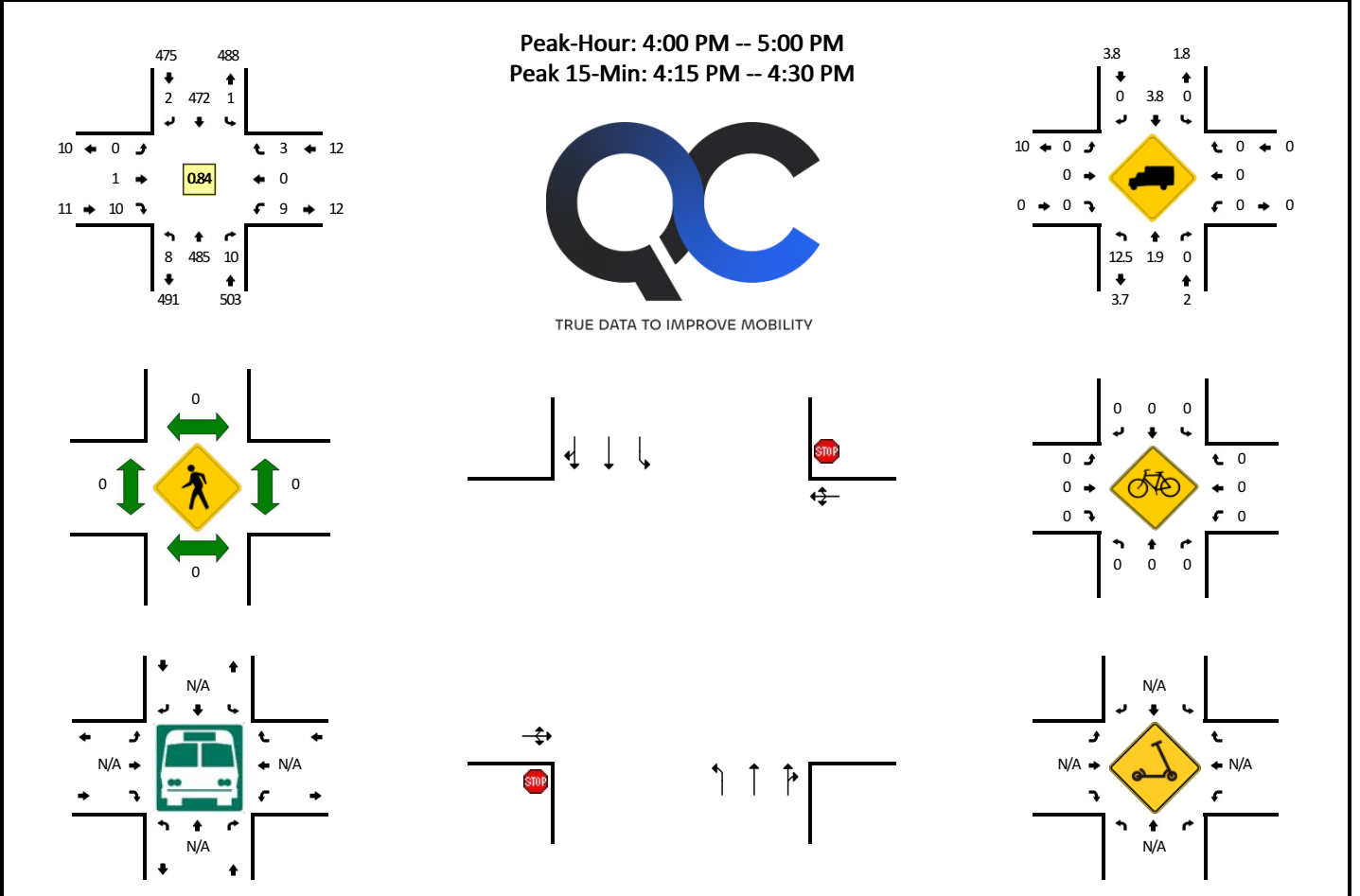


5-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				37th St (Eastbound)				37th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	15	0	0	0	15	0	0	0	0	0	0	0	0	0	0	31	
7:05 AM	0	11	1	0	0	19	1	0	0	0	0	0	0	0	0	0	32	
7:10 AM	0	12	0	0	0	10	0	0	0	0	0	0	1	0	0	0	23	
7:15 AM	2	16	0	0	0	17	0	0	0	0	0	1	0	0	0	0	37	
7:20 AM	1	13	1	0	1	23	0	0	0	0	0	0	1	0	0	0	40	
7:25 AM	0	15	0	0	0	13	0	0	0	0	0	1	0	1	0	0	31	
7:30 AM	0	13	0	0	1	25	0	0	0	0	0	2	0	1	0	0	43	
7:35 AM	1	29	1	0	0	22	0	0	0	0	0	0	0	2	0	0	55	
7:40 AM	0	24	1	0	0	35	0	0	0	0	0	1	0	2	0	1	64	
7:45 AM	1	18	0	0	0	31	0	0	0	0	0	0	0	0	0	0	50	
7:50 AM	1	34	0	0	0	45	0	0	1	0	1	0	1	0	1	0	84	
7:55 AM	0	38	0	0	0	31	0	0	0	0	0	0	1	0	0	0	70	560
8:00 AM	1	29	0	0	0	38	0	0	0	0	0	0	1	0	0	0	69	598
8:05 AM	1	30	1	0	0	33	0	0	0	0	0	0	1	0	2	0	68	634
8:10 AM	0	35	0	0	1	36	0	0	1	0	0	0	1	0	0	0	74	685
8:15 AM	0	31	0	0	0	34	0	0	0	0	0	0	0	0	1	0	66	714
8:20 AM	0	11	0	0	1	20	0	0	0	0	4	0	0	0	0	0	36	710
8:25 AM	0	16	1	0	0	26	0	0	2	0	0	0	2	0	0	0	47	726
8:30 AM	0	18	1	0	1	21	0	0	0	0	1	0	0	0	0	0	42	725
8:35 AM	0	24	0	0	0	34	0	0	0	0	1	0	0	0	0	0	59	729
8:40 AM	0	25	1	0	0	24	0	0	1	0	1	0	0	0	0	0	52	717
8:45 AM	0	19	0	0	0	49	0	0	0	0	0	0	0	0	0	0	68	735
8:50 AM	0	30	2	0	0	38	1	0	0	0	0	0	1	0	1	0	73	724
8:55 AM	0	25	0	0	0	32	0	0	0	0	2	0	1	0	0	0	60	714
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	8	404	0	0	0	456	0	0	4	0	4	0	12	0	4	0	892	
Heavy Trucks	4	24	0	0	0	20	0	0	0	0	0	0	0	0	0	0	48	
Buses																		
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters																		

Comments:

LOCATION: US 101 -- 37th St
CITY/STATE: Florence, OR

QC JOB #: 16365206
DATE: Tue, Oct 10 2023



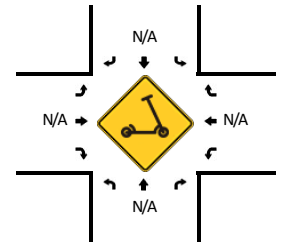
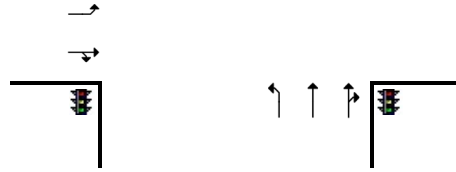
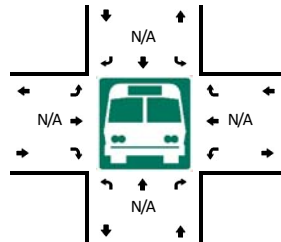
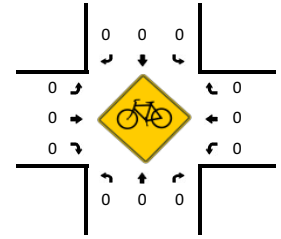
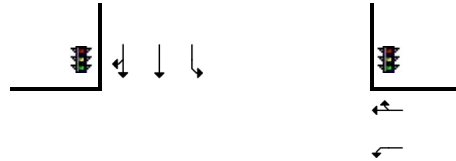
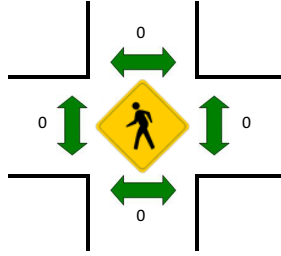
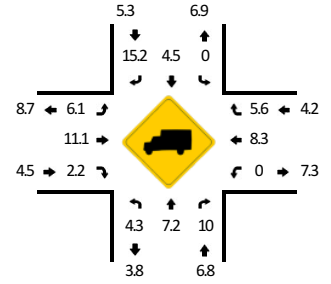
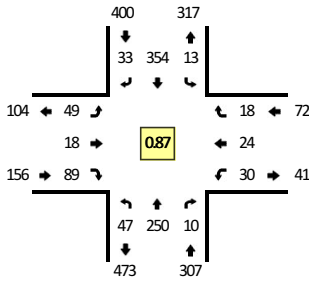
5-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				37th St (Eastbound)				37th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	40	0	0	0	39	1	0	0	0	2	0	0	0	1	0	83	
4:05 PM	1	34	1	0	0	39	0	0	0	0	1	0	1	0	0	0	77	
4:10 PM	1	49	1	0	1	37	1	0	0	0	1	0	1	0	1	0	93	
4:15 PM	0	67	1	0	0	39	0	0	0	0	2	0	0	0	0	0	109	
4:20 PM	2	43	0	0	0	35	0	0	0	0	2	0	2	0	0	0	84	
4:25 PM	0	42	1	0	0	61	0	0	0	0	1	0	1	0	0	0	106	
4:30 PM	1	33	1	0	0	43	0	0	0	0	0	0	0	0	0	0	78	
4:35 PM	1	38	1	0	0	29	0	0	0	0	1	0	2	0	0	0	72	
4:40 PM	2	33	1	0	0	39	0	0	0	0	1	0	1	0	0	0	77	
4:45 PM	0	36	1	0	0	48	0	0	0	0	0	0	0	0	1	0	86	
4:50 PM	0	35	0	0	0	28	0	0	0	0	0	0	1	0	0	0	64	
4:55 PM	0	35	2	0	0	35	0	0	0	0	0	0	0	0	0	0	72	1001
5:00 PM	0	33	1	0	0	40	1	0	0	0	0	0	0	0	0	0	75	993
5:05 PM	1	41	0	0	0	31	0	0	0	0	0	0	0	0	0	0	73	989
5:10 PM	1	42	0	0	0	37	0	0	0	0	0	0	0	0	0	0	80	976
5:15 PM	0	42	0	0	0	35	0	0	0	0	0	0	1	0	0	0	78	945
5:20 PM	0	42	2	0	0	31	0	0	0	0	1	0	1	0	1	0	78	939
5:25 PM	0	29	1	0	0	37	1	0	1	0	0	0	0	0	0	0	69	902
5:30 PM	0	34	2	0	0	27	0	0	0	0	0	0	0	0	0	0	63	887
5:35 PM	0	33	0	0	1	39	0	0	0	0	0	0	1	0	0	0	74	889
5:40 PM	0	31	0	0	0	34	1	0	0	0	0	0	2	0	0	0	68	880
5:45 PM	0	30	3	0	0	40	0	0	0	0	0	0	2	0	0	0	75	869
5:50 PM	0	28	0	0	0	23	0	0	0	0	1	0	0	0	1	0	53	858
5:55 PM	0	22	0	0	2	21	0	0	1	0	0	0	1	0	0	0	47	833
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	8	608	8	0	0	540	0	0	0	0	20	0	12	0	0	0	1196	
Heavy Trucks	4	8	0		0	24	0		0	0	0		0	0	0		36	
Buses																		
Pedestrians	0	0				0				0				0			0	
Bicycles	0	0			0	0				0	0		0	0			0	
Scoters																		

Comments:

LOCATION: US 101 -- 35th St
CITY/STATE: Florence, OR

QC JOB #: 16365201
DATE: Tue, Oct 10 2023

Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 7:50 AM -- 8:05 AM

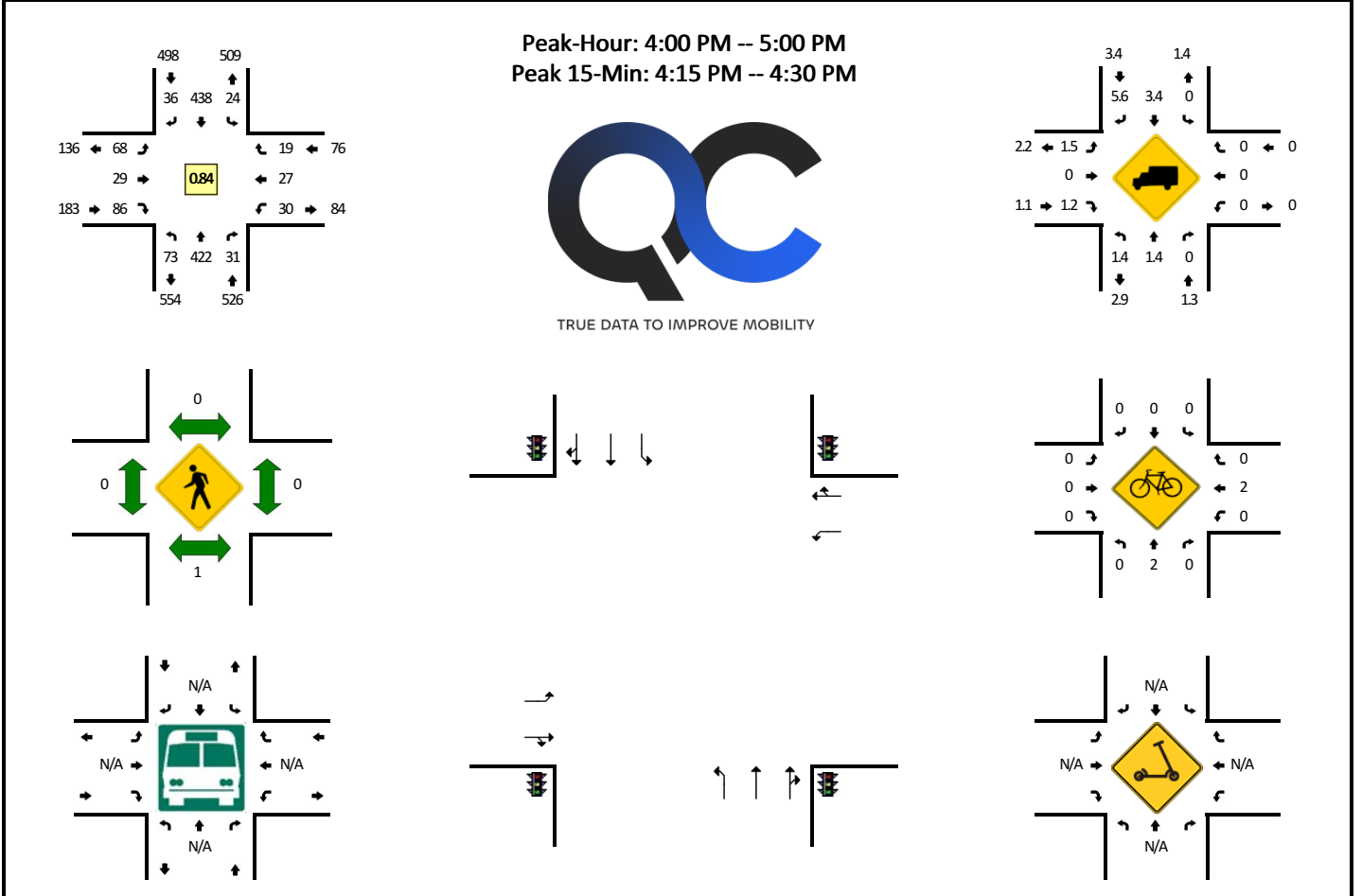


5-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	17	0	0	0	13	1	0	1	0	2	0	1	0	0	0	37	
7:05 AM	1	12	0	0	0	18	2	0	0	0	0	0	1	0	1	0	35	
7:10 AM	1	13	1	0	1	10	1	0	4	0	6	0	0	0	0	0	37	
7:15 AM	2	14	1	0	0	15	2	0	3	0	6	0	0	2	1	0	46	
7:20 AM	1	13	0	0	0	23	0	0	4	0	4	0	0	0	0	0	45	
7:25 AM	2	12	3	0	1	15	1	0	0	0	3	0	0	0	0	0	37	
7:30 AM	3	9	0	0	1	23	5	0	3	0	4	0	0	1	1	0	50	
7:35 AM	4	31	1	0	0	19	2	0	2	0	8	0	1	3	0	0	71	
7:40 AM	4	19	1	0	0	33	3	0	6	1	4	0	2	1	0	0	74	
7:45 AM	3	17	0	0	0	25	7	0	2	2	5	0	1	2	1	0	65	
7:50 AM	1	33	0	0	2	39	5	0	2	1	7	0	2	5	1	0	98	
7:55 AM	1	26	0	0	0	28	1	0	8	2	8	0	3	3	2	0	82	677
8:00 AM	2	23	0	0	0	42	0	0	4	0	12	0	4	1	2	0	90	730
8:05 AM	1	23	2	0	0	27	3	0	7	2	8	0	2	1	3	0	79	774
8:10 AM	4	22	5	0	1	32	7	0	8	1	6	0	4	0	1	0	91	828
8:15 AM	7	34	1	0	2	31	0	0	0	3	9	0	2	3	1	0	93	875
8:20 AM	5	8	0	0	4	19	1	0	2	0	5	0	2	1	0	0	47	877
8:25 AM	8	15	1	0	1	27	3	0	5	3	7	0	4	5	0	0	79	919
8:30 AM	6	12	0	0	1	18	3	0	3	1	10	0	2	1	5	0	62	931
8:35 AM	5	18	0	0	2	33	0	0	2	2	8	0	2	1	2	0	75	935
8:40 AM	0	16	4	0	1	22	1	0	7	0	4	0	3	0	1	0	59	920
8:45 AM	1	16	0	0	0	39	6	0	2	2	8	0	4	0	0	0	78	933
8:50 AM	3	25	1	0	0	39	1	0	5	1	8	0	7	1	3	0	94	929
8:55 AM	3	20	1	0	1	33	1	0	2	2	9	0	2	1	3	0	78	925
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	16	328	0	0	8	436	24	0	56	12	108	0	36	36	20	0	1080	
Heavy Trucks	0	16	0	0	0	16	0	0	0	0	0	0	0	8	0	0	40	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scooters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

LOCATION: US 101 -- 35th St
CITY/STATE: Florence, OR

QC JOB #: 16365202
DATE: Tue, Oct 10 2023

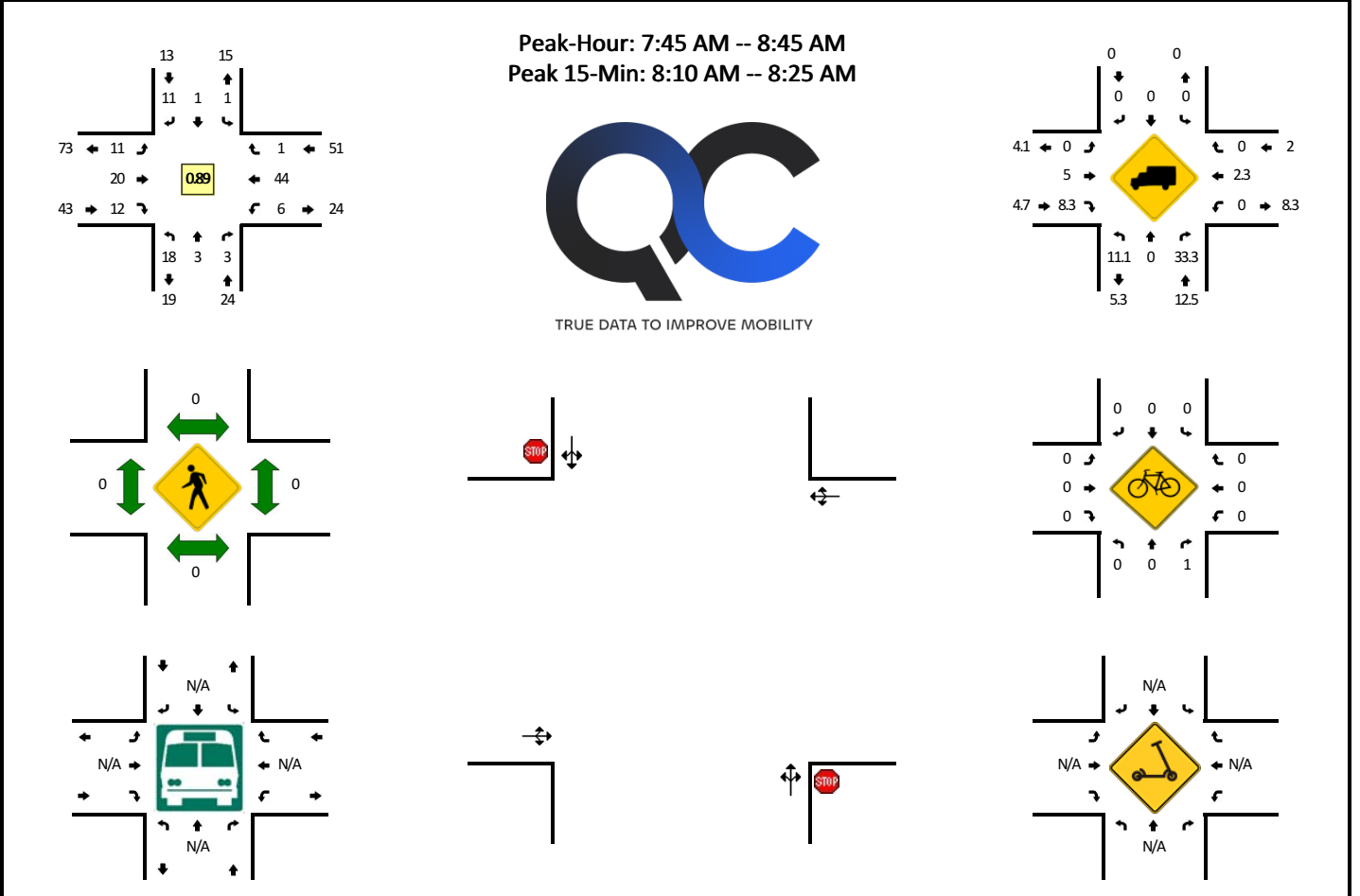


5-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	28	1	0	3	36	6	0	10	2	2	0	3	3	1	0	97	
4:05 PM	4	22	4	0	2	35	5	0	9	2	13	0	3	0	3	0	102	
4:10 PM	7	50	2	0	2	31	6	0	6	4	13	0	1	2	3	0	127	
4:15 PM	12	58	4	0	0	36	4	0	4	8	6	0	0	3	1	0	136	
4:20 PM	6	34	3	0	2	36	1	0	7	1	11	0	3	4	2	0	110	
4:25 PM	10	41	3	0	3	59	2	0	3	1	8	0	3	1	1	0	135	
4:30 PM	4	34	1	0	2	40	1	0	2	4	6	0	2	4	1	0	101	
4:35 PM	5	33	2	0	1	29	2	0	1	2	7	0	1	2	3	0	88	
4:40 PM	6	29	0	0	3	35	3	0	10	3	7	0	3	1	1	0	101	
4:45 PM	11	27	3	0	2	42	3	0	7	2	3	0	3	1	1	0	105	
4:50 PM	1	30	6	0	2	27	2	0	3	0	6	0	5	3	1	0	86	
4:55 PM	5	36	2	0	2	32	1	0	6	0	4	0	3	3	1	0	95	1283
5:00 PM	5	28	1	0	1	35	6	0	1	1	8	0	2	1	0	0	89	1275
5:05 PM	3	38	5	0	4	30	0	0	5	4	4	0	5	1	3	0	102	1275
5:10 PM	7	44	6	0	1	32	3	0	3	4	2	0	2	5	0	0	109	1257
5:15 PM	6	34	4	0	1	31	4	0	4	1	5	0	2	0	3	0	95	1216
5:20 PM	5	43	0	0	0	32	2	0	2	3	5	0	3	1	2	0	98	1204
5:25 PM	8	27	1	0	1	35	0	0	1	3	5	0	6	3	1	0	91	1160
5:30 PM	1	30	2	0	1	24	5	0	2	0	2	0	3	1	3	0	74	1133
5:35 PM	10	33	3	0	1	37	1	0	4	3	4	0	1	1	0	0	98	1143
5:40 PM	5	33	3	0	1	31	1	0	7	1	3	0	4	2	1	0	92	1134
5:45 PM	5	22	2	0	1	40	3	0	5	3	3	0	2	3	1	0	90	1119
5:50 PM	4	20	2	0	3	20	1	0	5	2	7	0	1	4	5	0	74	1107
5:55 PM	8	21	2	0	0	21	2	0	3	0	2	0	1	2	1	0	63	1075
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	112	532	40	0	20	524	28	0	56	40	100	0	24	32	16	0	1524	
Heavy Trucks	0	8	0		0	24	0		0	0	0		0	0	0		32	
Buses																		
Pedestrians	0	0			0	0			0	0			0	0			0	
Bicycles	0	0			0	0			0	0			0	4			4	
Scoters																		

Comments:

LOCATION: Redwood St -- 35th St
CITY/STATE: Florence, OR

QC JOB #: 16365203
DATE: Tue, Oct 10 2023

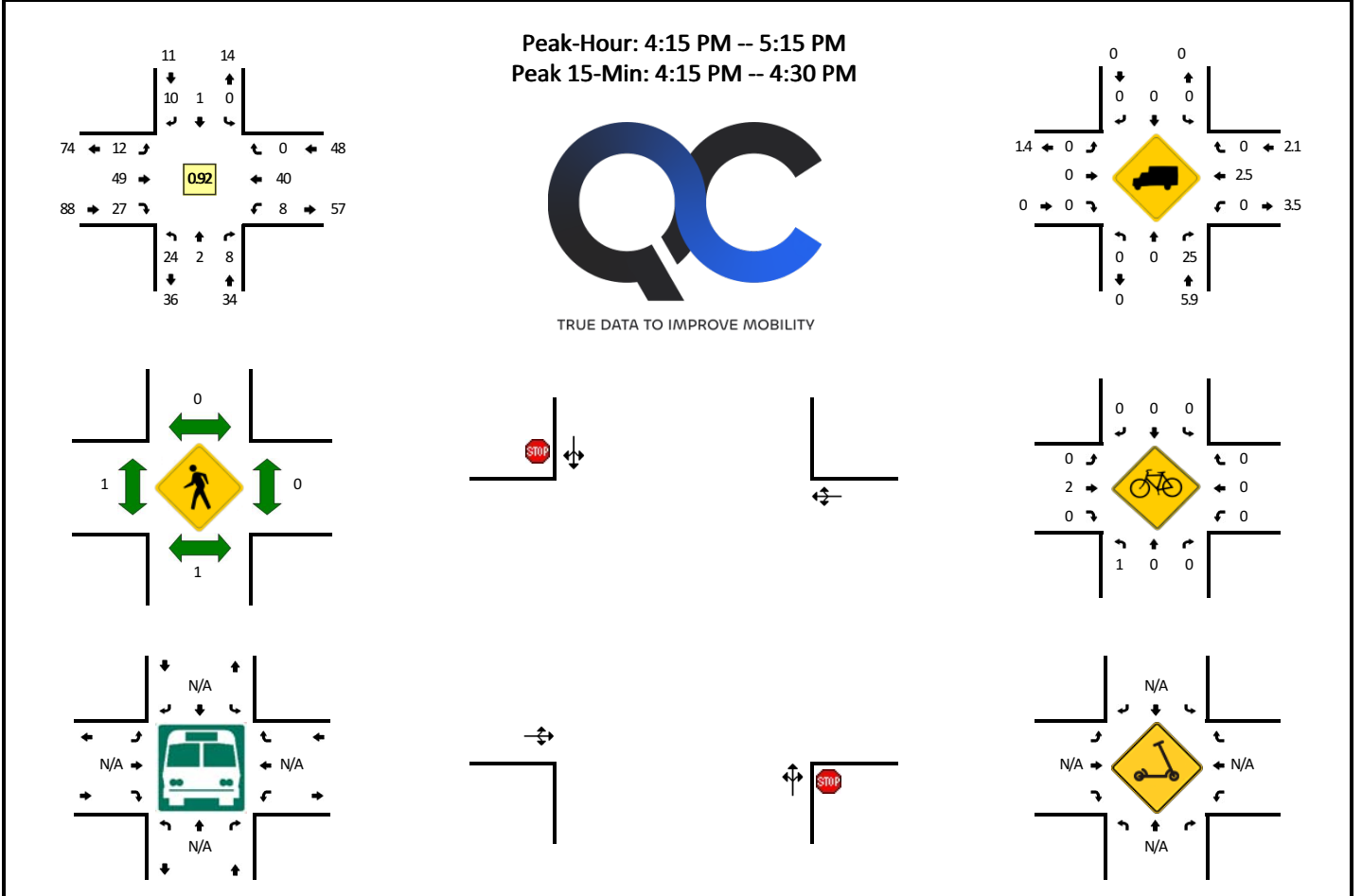


5-Min Count Period Beginning At	Redwood St (Northbound)				Redwood St (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2		
7:05 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	
7:10 AM	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	4	
7:15 AM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	3	
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:25 AM	0	0	0	0	0	0	0	0	0	2	2	0	0	1	0	0	0	5	
7:30 AM	0	0	2	0	0	0	1	0	0	0	0	1	0	0	1	0	0	5	
7:35 AM	2	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	5	
7:40 AM	1	0	1	0	0	0	0	0	0	0	1	1	0	0	2	0	0	6	
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	1	5	0	0	8	
7:50 AM	3	1	1	0	0	0	1	0	0	1	1	1	0	1	5	0	0	15	
7:55 AM	3	0	0	0	0	0	0	0	0	0	1	1	0	1	3	0	0	9	65
8:00 AM	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	8	71
8:05 AM	2	1	1	0	0	0	0	0	0	2	1	1	0	1	2	0	0	11	79
8:10 AM	1	1	0	0	0	0	1	0	0	2	3	2	0	0	5	0	0	15	90
8:15 AM	0	0	0	0	0	0	0	0	0	1	2	2	0	0	4	0	0	9	96
8:20 AM	1	0	1	0	0	0	1	0	0	1	4	0	0	1	4	0	0	13	109
8:25 AM	1	0	0	0	0	0	2	0	0	1	2	1	0	0	3	0	0	10	114
8:30 AM	2	0	0	0	1	0	5	0	0	1	1	1	0	0	1	0	0	12	121
8:35 AM	0	0	0	0	0	0	1	0	0	2	0	2	0	0	4	0	0	9	125
8:40 AM	1	0	0	0	0	1	0	0	0	0	3	1	0	1	4	1	0	12	131
8:45 AM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	6	129
8:50 AM	4	0	3	0	0	0	0	0	0	1	2	0	0	0	5	0	0	15	129
8:55 AM	1	0	1	0	0	0	0	0	0	0	1	3	0	0	5	0	0	11	131
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	8	4	4	0	0	0	8	0	16	36	16	0	4	52	0	0	148		
Heavy Trucks	0	0	4		0	0	0		0	0	0		0	0	0		4		
Buses																			
Pedestrians		0				0				0				0			0		
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0		
Scoters																			

Comments:

LOCATION: Redwood St -- 35th St
CITY/STATE: Florence, OR

QC JOB #: 16365204
DATE: Tue, Oct 10 2023



5-Min Count Period Beginning At	Redwood St (Northbound)				Redwood St (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	0	1	0	0	0	1	0	0	6	1	0	0	3	0	0	15	
4:05 PM	3	0	1	0	0	0	0	0	2	2	2	1	0	2	0	0	13	
4:10 PM	2	0	0	0	0	0	1	0	3	3	3	0	1	4	0	0	17	
4:15 PM	1	1	1	0	0	0	0	0	2	5	5	0	2	2	0	0	19	
4:20 PM	1	0	0	0	0	0	2	0	1	4	1	0	2	6	0	0	17	
4:25 PM	2	0	0	0	0	0	1	0	1	3	3	0	0	3	0	0	13	
4:30 PM	2	0	3	0	0	0	1	0	1	3	4	0	0	3	0	0	17	
4:35 PM	1	1	2	0	0	0	2	0	1	1	1	0	1	2	0	0	12	
4:40 PM	1	0	1	0	0	1	1	0	0	3	4	0	0	4	0	0	15	
4:45 PM	3	0	0	0	0	0	0	0	1	4	2	0	0	4	0	0	14	
4:50 PM	3	0	0	0	0	0	0	0	1	5	2	0	0	3	0	0	14	
4:55 PM	1	0	0	0	0	0	1	0	1	3	1	0	1	6	0	0	14	180
5:00 PM	1	0	0	0	0	0	0	0	0	2	0	0	1	1	0	0	5	170
5:05 PM	4	0	0	0	0	0	2	0	2	7	3	0	0	3	0	0	21	178
5:10 PM	4	0	1	0	0	0	0	0	1	9	1	0	1	3	0	0	20	181
5:15 PM	3	0	0	0	0	0	1	0	3	2	1	0	0	2	0	0	12	174
5:20 PM	3	0	5	0	1	0	0	0	1	1	0	0	0	5	0	0	16	173
5:25 PM	4	0	0	0	0	1	1	0	2	4	1	0	1	3	1	0	18	178
5:30 PM	3	1	3	0	0	0	3	0	0	3	0	0	1	1	0	0	15	176
5:35 PM	1	0	0	0	0	1	0	0	2	4	1	0	1	1	0	0	11	175
5:40 PM	2	0	1	0	0	0	1	0	1	4	0	0	0	4	0	0	13	173
5:45 PM	4	0	2	0	0	1	0	0	0	5	1	0	1	2	0	0	16	175
5:50 PM	5	0	1	0	0	0	2	0	0	2	5	0	1	3	0	0	19	180
5:55 PM	1	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	6	172
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	16	4	4	0	0	0	12	0	16	48	36	0	16	44	0	0	196	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Buses																		
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters																		

Comments:

SEASONAL TREND TABLE (Updated: 11/10/2022)																									
TREND	1-Jan	15-Jan	1-Feb	15-Feb	1-Mar	15-Mar	1-Apr	15-Apr	1-May	15-May	1-Jun	15-Jun	1-Jul	15-Jul	1-Aug	15-Aug	1-Sep	15-Sep	1-Oct	15-Oct	1-Nov	15-Nov	1-Dec	15-Dec	Seasonal Trend Peak Period Factor
INTERSTATE URBANIZED	1.0937	1.1592	1.1547	1.1502	1.0841	1.0180	0.9963	0.9746	0.9815	0.9885	0.9625	0.9366	0.9211	0.9056	0.9175	0.9295	0.9470	0.9645	0.9721	0.9796	0.9885	0.9973	1.0384	1.0794	0.9056
INTERSTATE NONURBANIZED	1.2128	1.3303	1.3475	1.3647	1.2141	1.0634	1.0236	0.9838	0.9687	0.9536	0.9130	0.8724	0.8404	0.8084	0.8293	0.8501	0.8889	0.9276	0.9583	0.9889	1.0037	1.0185	1.1007	1.1830	0.8084
COMMUTER	1.1005	1.1479	1.1341	1.1204	1.0651	1.0099	0.9836	0.9574	0.9663	0.9752	0.9544	0.9336	0.9338	0.9341	0.9453	0.9566	0.9608	0.9649	0.9693	0.9736	0.9935	1.0134	1.0465	1.0796	0.9336
COASTAL DESTINATION	1.1584	1.2243	1.2052	1.1862	1.1005	1.0149	0.9887	0.9625	0.9672	0.9720	0.9181	0.8642	0.8386	0.8130	0.8299	0.8468	0.8926	0.9384	0.9940	1.0496	1.0999	1.1502	1.1960	1.2419	0.8130
COASTAL DESTINATION ROUTE	1.2909	1.3694	1.3728	1.3763	1.2315	1.0867	1.0419	0.9972	0.9581	0.9191	0.8590	0.7989	0.7607	0.7225	0.7389	0.7554	0.8235	0.8916	0.9820	1.0724	1.1507	1.2291	1.3629	1.4967	0.7225
AGRICULTURE	1.4312	1.4915	1.4980	1.5046	1.3605	1.2164	1.1152	1.0141	0.9356	0.8572	0.8266	0.7960	0.8137	0.8315	0.8448	0.8581	0.8336	0.8092	0.8496	0.8901	0.9684	1.0467	1.2566	1.4666	0.7960
RECREATIONAL SUMMER	1.4118	1.5326	1.6112	1.6898	1.4761	1.2623	1.1772	1.0921	0.9752	0.8582	0.7947	0.7311	0.7197	0.7082	0.7395	0.7708	0.8006	0.8304	0.8977	0.9651	1.0781	1.1910	1.4205	1.6501	0.7082
RECREATIONAL SUMMER WINTER	0.7518	0.8394	0.9654	1.0914	1.0422	0.9930	1.0357	1.0785	1.0310	0.9834	0.9358	0.8882	0.7824	0.6767	0.7712	0.8658	0.9973	1.1289	1.2850	1.4412	1.5833	1.7254	1.3952	1.0650	0.6767
RECREATIONAL WINTER	0.5086	0.5112	0.5988	0.6864	0.7354	0.7845	0.9435	1.1025	1.2219	1.3414	1.2723	1.2032	1.0545	0.9058	1.0033	1.1007	1.2108	1.3209	1.4791	1.6373	2.0741	2.5110	1.7317	0.9524	0.5086
SUMMER	1.2166	1.2914	1.2738	1.2563	1.1530	1.0496	1.0061	0.9625	0.9423	0.9220	0.8906	0.8591	0.8435	0.8279	0.8550	0.8821	0.9088	0.9355	0.9732	1.0109	1.0420	1.0731	1.1534	1.2337	0.8279
SUMMER < 2500	1.2683	1.3194	1.3010	1.2826	1.1889	1.0952	1.0262	0.9573	0.9119	0.8664	0.8549	0.8434	0.8442	0.8451	0.8727	0.9003	0.9080	0.9157	0.9406	0.9654	1.0279	1.0903	1.1996	1.3089	0.8434

* Seasonal Trend Table factors are based on previous year ATR data. The table is updated yearly.

* Grey shading indicates months where seasonal factor is greater than or less than 30%

Seasonal adjustment Factor 1.291021

Appendix B

Traffic Volume Calculation Worksheets



Dollar General
Trip Generation Summary
 Florence, OR

AM Peak Hour Trip Generation															
Site Plan Description	LUC	ITE Description	Variable	Value	ITE Rate	Distribution		Total Trips			Pass-By Trips		Net New Trips		
						In	Out	In	Out	Total	%	Total	In	Out	Total
Dollar General	814	Variety Store	ksqft	10.640	3.04	55%	45%	18	14	32		0	18	14	32
Total								18	14	32		0	18	14	32

PM Peak Hour Trip Generation															
Site Plan Description	LUC	ITE Description	Variable	Value	ITE Rate	Distribution		Total Trips			Pass-By Trips		Net New Trips		
						In	Out	In	Out	Total	%	Total	In	Out	Total
Dollar General	814	Variety Store	ksqft	10.640	6.70	51%	49%	36	35	71	34.0%	24	24	23	47
Total								36	35	71		24	24	23	47

Daily Trip Generation															
Site Plan Description	LUC	ITE Description	Variable	Value	ITE Rate	Distribution		Total Trips			Pass-By Trips		Net New Trips		
						In	Out	In	Out	Total	%	Total	In	Out	Total
Dollar General	814	Variety Store	ksqft	10.640	63.66	50%	50%	339	338	677	34.0%	230	224	223	447
Total								339	338	677		230	224	223	447



Dollar General

PM Peak Hour Volumes

Annual Growth Rate 1.0%
30th Hour Adjustment 1.3

Intersection	Movement		Existing	Adjusted	Background	Housing Project	Baseline	Primary	Pass-By	Site	Projected
			2023	2023	2024	Pipeline	2024	Traffic	Traffic	Generated	2024
			Volumes	Volumes	Growth	Volumes	Volumes	Volumes	Volumes	Volmes	Volumes
1 US 101 37th St TMC Date: 10/10/2023 7:50 - 8:50 PHF: 0.82	EB	L	5	7	0	0	7	0	0	0	7
		T	0	0	0	0	0	0	0	0	0
		R	8	10	0	0	10	0	0	0	10
		L	7	9	0	0	9	0	0	0	9
	WB	T	0	0	0	0	0	0	0	0	0
		R	4	5	0	0	5	0	0	0	5
	NB	L	3	4	0	0	4	0	0	0	4
		T	310	403	4	7	414	5	0	5	419
		R	4	5	0	0	5	0	0	0	5
		L	3	4	0	0	4	0	0	0	4
SB	T	391	508	5	2	515	6	0	6	521	
	R	0	0	0	0	0	0	0	0	0	
			735		7		742				984
2 US 101 Site Driveway	EB	L	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0
		R	0	0	0	0	0	0	0	0	0
		L	0	0	0	0	0	0	0	0	0
	WB	T	0	0	0	0	0	0	0	0	0
		R	24	31	0	0	31	5	0	5	36
	NB	L	0	0	0	0	0	0	0	0	0
		T	317	412	4	4	420	0	0	0	420
		R	7	9	0	0	9	11	0	11	20
		L	0	0	0	0	0	0	0	0	0
SB	T	400	520	5	14	539	6	0	6	545	
	R	0	0	0	0	0	0	0	0	0	
			748		7		755				1,021
3 US 101 35th St TMC Date: 10/10/2023 7:40 - 8:40 PHF: 0.87	EB	L	49	64	1	7	72	3	0	3	75
		T	18	23	0	0	23	0	0	0	23
		R	89	116	1	14	131	0	0	0	131
		L	30	39	0	0	39	6	0	6	45
	WB	T	24	31	0	0	31	2	0	2	33
		R	18	23	0	0	23	0	0	0	23
	NB	L	47	61	1	4	66	0	0	0	66
		T	250	325	3	0	328	8	0	8	336
		R	10	13	0	0	13	0	0	0	13
		L	13	17	0	0	17	6	0	6	23
SB	T	354	460	5	0	465	0	0	0	465	
	R	33	43	0	2	45	0	0	0	45	
			935		9		944				1,278
4 Redwood St 35th St TMC Date: 10/10/2023 7:45 - 8:45 PHF: 0.89	EB	L	11	14	0	0	14	6	0	6	20
		T	20	26	0	0	26	0	0	0	26
		R	12	16	0	0	16	0	0	0	16
		L	6	8	0	0	8	0	0	0	8
	WB	T	44	57	1	0	58	0	0	0	58
		R	1	1	0	0	1	0	0	0	1
	NB	L	18	23	0	0	23	0	0	0	23
		T	3	4	0	0	4	1	0	1	5
		R	3	4	0	0	4	0	0	0	4
		L	1	1	0	0	1	0	0	0	1
SB	T	1	1	0	0	1	1	0	1	2	
	R	11	14	0	0	14	8	0	8	22	
			131		1		132				186



Dollar General

PM Peak Hour Volumes

Annual Growth Rate 1.0%
30th Hour Adjustment 1.3

Intersection	Movement		Existing	Adjusted	Background	Housing Project	Baseline	Primary	Pass-By	Site	Projected
			2023	2023	2024	Pipeline	2024	Traffic	Traffic	Generated	2024
			Volumes	Volumes	Growth	Volumes	Volumes	Volumes	Volumes	Volmes	Volumes
1 US 101 37th St TMC Date: 10/10/2023 4:00 - 5:00 PHF: 0.84	L		0	0	0	0	0	0	0	0	0
	EB	T	1	1	0	0	1	0	0	0	1
		R	10	13	0	0	13	0	0	0	13
		L	9	12	0	0	12	0	0	0	12
	WB	T	0	0	0	0	0	0	0	0	0
		R	3	4	0	0	4	0	0	0	4
		L	8	10	0	0	10	0	0	0	10
		NB	485	631	6	4	641	8	0	8	649
		R	10	13	0	0	13	0	0	0	13
		L	1	1	0	0	1	0	0	0	1
	SB	472	614	6	6	626	8	0	8	634	
	R	2	3	0	0	3	0	0	0	3	
			1,001		10	1,011					1,340
2 US 101 Site Driveway	L		0	0	0	0	0	0	0	0	0
	EB	T	0	0	0	0	0	0	0	0	0
		R	0	0	0	0	0	0	0	0	0
		L	0	0	0	0	0	0	0	0	0
	WB	T	0	0	0	0	0	0	0	0	0
		R	20	26	0	0	26	8	6	14	40
		L	0	0	0	0	0	0	0	0	0
		NB	509	662	7	16	685	0	-6	-6	679
		R	6	8	0	0	8	15	6	21	29
		L	0	0	0	0	0	0	0	0	0
	SB	498	647	6	9	662	8	0	8	670	
	R	0	0	0	0	0	0	0	0	0	
			1,033		10	1,043					1,418
3 US 101 35th St TMC Date: 10/10/2023 4:00 - 5:00 PHF: 0.84	L		68	88	1	4	93	4	0	4	97
	EB	T	29	38	0	0	38	0	0	0	38
		R	86	112	1	9	122	0	0	0	122
		L	30	39	0	0	39	11	6	17	56
	WB	T	27	35	0	0	35	3	0	3	38
		R	19	25	0	0	25	0	0	0	25
		L	73	95	1	16	112	0	0	0	112
		NB	422	549	5	0	554	11	0	11	565
		R	31	40	0	0	40	0	0	0	40
		L	24	31	0	0	31	8	6	14	45
	SB	438	569	6	0	575	0	-6	-6	569	
	R	36	47	0	6	53	0	0	0	53	
			1,283		13	1,296					1,760
4 Redwood St 35th St TMC Date: 10/10/2023 4:15 - 5:15 PHF: 0.92	L		12	16	0	0	16	8	6	14	30
	EB	T	49	64	1	0	65	0	0	0	65
		R	27	35	0	0	35	0	0	0	35
		L	8	10	0	0	10	0	0	0	10
	WB	T	40	52	1	0	53	0	0	0	53
		R	0	0	0	0	0	0	0	0	0
		L	24	31	0	0	31	0	0	0	31
		NB	2	3	0	0	3	1	0	1	4
		R	8	10	0	0	10	0	0	0	10
		L	0	0	0	0	0	0	0	0	0
	SB	1	1	0	0	1	1	0	1	2	
	R	10	13	0	0	13	14	6	20	33	
			181		2	183					273

Appendix C

Capacity Analysis Worksheets

HCM 6th TWSC
 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Existing 2023
 AM Peak Hour

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	5	1	10	10	1	5	5	405	5	5	510	1
Future Vol, veh/h	5	1	10	10	1	5	5	405	5	5	510	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	33	9	0	0	0	0	33	5	2
Mvmt Flow	6	1	12	12	1	6	6	494	6	6	622	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	895	1147	312	833	1144	250	623	0	0	500	0	0
Stage 1	635	635	-	509	509	-	-	-	-	-	-	-
Stage 2	260	512	-	324	635	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	8.16	6.68	6.9	4.1	-	-	4.76	-	-
Critical Hdwy Stg 1	6.5	5.5	-	7.16	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	7.16	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.83	4.09	3.3	2.2	-	-	2.53	-	-
Pot Cap-1 Maneuver	239	201	690	214	188	756	968	-	-	871	-	-
Stage 1	438	476	-	442	519	-	-	-	-	-	-	-
Stage 2	728	540	-	583	454	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	234	198	690	207	186	756	968	-	-	871	-	-
Mov Cap-2 Maneuver	234	198	-	207	186	-	-	-	-	-	-	-
Stage 1	435	473	-	439	516	-	-	-	-	-	-	-
Stage 2	716	537	-	567	451	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.7		19.7		0.1		0.1	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	968	-	-	391	265	871	-	-
HCM Lane V/C Ratio	0.006	-	-	0.05	0.074	0.007	-	-
HCM Control Delay (s)	8.7	-	-	14.7	19.7	9.2	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	30	410	10	0	520
Future Vol, veh/h	0	30	410	10	0	520
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	8	2	5	2
Mvmt Flow	0	33	446	11	0	565

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	229	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	774	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	774	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	774
HCM Lane V/C Ratio	-	-	0.042
HCM Control Delay (s)	-	-	9.9
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.1

Lanes, Volumes, Timings
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

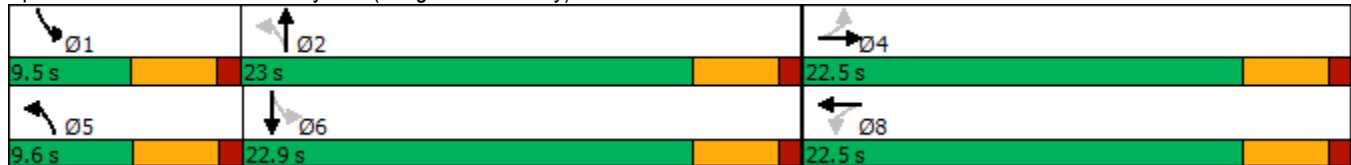
Existing 2023
 AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	25	115	40	30	25	60	325	15	15	460	45
Future Volume (vph)	65	25	115	40	30	25	60	325	15	15	460	45
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	125		0	150		0	150		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40				40
Link Distance (ft)		675			318			615				184
Travel Time (s)		18.4			8.7			10.5				3.1
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt		NA
Protected Phases		4			8		5	2		1		6
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0		5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5		22.5
Total Split (s)	22.5	22.5		22.5	22.5		9.6	23.0		9.5		22.9
Total Split (%)	40.9%	40.9%		40.9%	40.9%		17.5%	41.8%		17.3%		41.6%
Maximum Green (s)	18.0	18.0		18.0	18.0		5.1	18.5		5.0		18.4
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5		4.5
Lead/Lag							Lead	Lag		Lead		Lag
Lead-Lag Optimize?							Yes	Yes		Yes		Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		3.0
Recall Mode	None	None		None	None		None	Min		None		Min
Walk Time (s)	7.0	7.0		7.0	7.0			7.0				7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0				11.0
Pedestrian Calls (#/hr)	0	0		0	0			0				0

Intersection Summary

Area Type: Other
 Cycle Length: 55
 Actuated Cycle Length: 36.5
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St



HCM 6th Signalized Intersection Summary
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Existing 2023
 AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	25	115	40	30	25	60	325	15	15	460	45
Future Volume (veh/h)	65	25	115	40	30	25	60	325	15	15	460	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1668	1600	1723	1695	1654	1614	1750	1641	1668	1750	1682	1545
Adj Flow Rate, veh/h	75	29	132	46	34	29	69	374	17	17	529	52
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	6	11	2	4	7	10	0	8	6	0	5	15
Cap, veh/h	446	51	232	347	167	143	469	1058	48	523	877	86
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.07	0.35	0.35	0.02	0.30	0.30
Sat Flow, veh/h	1297	251	1143	1206	825	703	1667	3037	138	1667	2939	288
Grp Volume(v), veh/h	75	0	161	46	0	63	69	191	200	17	287	294
Grp Sat Flow(s),veh/h/ln	1297	0	1394	1206	0	1528	1667	1559	1616	1667	1598	1630
Q Serve(g_s), s	1.6	0.0	3.3	1.1	0.0	1.1	0.9	2.9	2.9	0.2	4.9	4.9
Cycle Q Clear(g_c), s	2.7	0.0	3.3	4.4	0.0	1.1	0.9	2.9	2.9	0.2	4.9	4.9
Prop In Lane	1.00		0.82	1.00		0.46	1.00		0.09	1.00		0.18
Lane Grp Cap(c), veh/h	446	0	283	347	0	310	469	543	563	523	477	486
V/C Ratio(X)	0.17	0.00	0.57	0.13	0.00	0.20	0.15	0.35	0.35	0.03	0.60	0.60
Avail Cap(c_a), veh/h	922	0	794	789	0	870	618	912	946	750	930	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.6	0.0	11.4	13.3	0.0	10.5	6.9	7.7	7.7	7.4	9.5	9.5
Incr Delay (d2), s/veh	0.2	0.0	1.8	0.2	0.0	0.3	0.1	0.4	0.4	0.0	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.9	0.3	0.0	0.3	0.2	0.6	0.6	0.0	1.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.8	0.0	13.2	13.5	0.0	10.8	7.1	8.0	8.0	7.4	10.7	10.7
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	B	B
Approach Vol, veh/h		236			109			460			598	
Approach Delay, s/veh		12.7			11.9			7.9			10.6	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	15.5		10.9	6.8	13.9		10.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	2.2	4.9		5.3	2.9	6.9		6.4				
Green Ext Time (p_c), s	0.0	1.7		1.0	0.0	2.5		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				10.2								
HCM 6th LOS				B								

HCM 6th TWSC
4: Redwood St/Site Driveway & 35th St

Existing 2023
AM Peak Hour

Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	25	15	10	55	5	25	5	5	5	5	15
Future Vol, veh/h	15	25	15	10	55	5	25	5	5	5	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	5	8	0	2	0	11	2	33	0	0	0
Mvmt Flow	17	28	17	11	62	6	28	6	6	6	6	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	68	0	0	45	0	0	170	161	37	164	166	65
Stage 1	-	-	-	-	-	-	71	71	-	87	87	-
Stage 2	-	-	-	-	-	-	99	90	-	77	79	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.21	6.52	6.53	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.599	4.018	3.597	3.5	4	3.3
Pot Cap-1 Maneuver	1546	-	-	1576	-	-	774	731	953	805	730	1005
Stage 1	-	-	-	-	-	-	917	836	-	926	827	-
Stage 2	-	-	-	-	-	-	886	820	-	937	833	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1546	-	-	1576	-	-	746	718	953	785	717	1005
Mov Cap-2 Maneuver	-	-	-	-	-	-	746	718	-	785	717	-
Stage 1	-	-	-	-	-	-	907	827	-	916	821	-
Stage 2	-	-	-	-	-	-	859	814	-	915	824	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	1	10	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	765	1546	-	-	1576	-	-	884
HCM Lane V/C Ratio	0.051	0.011	-	-	0.007	-	-	0.032
HCM Control Delay (s)	10	7.4	0	-	7.3	0	-	9.2
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

HCM 6th TWSC
 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Existing 2023
 PM Peak Hour

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	1	5	15	10	1	5	10	630	15	5	615	5
Future Vol, veh/h	1	5	15	10	1	5	10	630	15	5	615	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	13	2	0	0	4	0
Mvmt Flow	1	6	18	12	1	6	12	750	18	6	732	6

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1147	1539	369	1164	1533	384	738	0	0	768	0	0
Stage 1	747	747	-	783	783	-	-	-	-	-	-	-
Stage 2	400	792	-	381	750	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.36	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.33	-	-	2.2	-	-
Pot Cap-1 Maneuver	156	117	634	152	118	620	795	-	-	855	-	-
Stage 1	376	423	-	357	407	-	-	-	-	-	-	-
Stage 2	603	404	-	619	422	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	151	114	634	140	115	620	795	-	-	855	-	-
Mov Cap-2 Maneuver	151	114	-	140	115	-	-	-	-	-	-	-
Stage 1	370	420	-	352	401	-	-	-	-	-	-	-
Stage 2	586	398	-	589	419	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19	27.2	0.1	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	795	-	-	283	181	855	-	-
HCM Lane V/C Ratio	0.015	-	-	0.088	0.105	0.007	-	-
HCM Control Delay (s)	9.6	-	-	19	27.2	9.2	-	-
HCM Lane LOS	A	-	-	C	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	25	660	10	0	645
Future Vol, veh/h	0	25	660	10	0	645
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	27	717	11	0	701

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	364	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	633	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	633	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	633
HCM Lane V/C Ratio	-	-	0.043
HCM Control Delay (s)	-	-	10.9
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.1

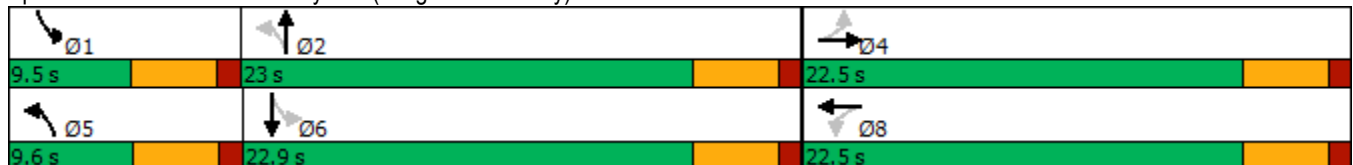
Lanes, Volumes, Timings
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Existing 2023
 PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	40	110	40	35	25	95	540	40	30	570	45
Future Volume (vph)	90	40	110	40	35	25	95	540	40	30	570	45
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	125		0	150		0	150		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40				40
Link Distance (ft)		675			318			615				184
Travel Time (s)		18.4			8.7			10.5				3.1
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt		NA
Protected Phases		4			8		5	2		1		6
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0		5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5		22.5
Total Split (s)	22.5	22.5		22.5	22.5		9.6	23.0		9.5		22.9
Total Split (%)	40.9%	40.9%		40.9%	40.9%		17.5%	41.8%		17.3%		41.6%
Maximum Green (s)	18.0	18.0		18.0	18.0		5.1	18.5		5.0		18.4
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5		4.5
Lead/Lag							Lead	Lag		Lead		Lag
Lead-Lag Optimize?							Yes	Yes		Yes		Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		3.0
Recall Mode	None	None		None	None		None	Min		None		Min
Walk Time (s)	7.0	7.0		7.0	7.0			7.0				7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0				11.0
Pedestrian Calls (#/hr)	0	0		0	0			0				0

Intersection Summary
 Area Type: Other
 Cycle Length: 55
 Actuated Cycle Length: 41.9
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St



HCM 6th Signalized Intersection Summary
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Existing 2023
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕	↗	↖	↗	
Traffic Volume (veh/h)	90	40	110	40	35	25	95	540	40	30	570	45
Future Volume (veh/h)	90	40	110	40	35	25	95	540	40	30	570	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1750	1736	1750	1750	1750	1736	1736	1750	1750	1709	1668
Adj Flow Rate, veh/h	107	48	131	48	42	30	113	643	48	36	679	54
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	0	1	0	0	0	1	1	0	0	3	6
Cap, veh/h	419	84	229	320	192	137	455	1187	89	438	1004	80
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.09	0.38	0.38	0.04	0.33	0.33
Sat Flow, veh/h	1328	415	1132	1224	950	678	1654	3112	232	1667	3047	242
Grp Volume(v), veh/h	107	0	179	48	0	72	113	340	351	36	362	371
Grp Sat Flow(s),veh/h/ln	1328	0	1546	1224	0	1628	1654	1650	1695	1667	1624	1665
Q Serve(g_s), s	2.6	0.0	3.8	1.3	0.0	1.3	1.5	5.8	5.8	0.5	6.9	6.9
Cycle Q Clear(g_c), s	4.0	0.0	3.8	5.1	0.0	1.3	1.5	5.8	5.8	0.5	6.9	6.9
Prop In Lane	1.00		0.73	1.00		0.42	1.00		0.14	1.00		0.15
Lane Grp Cap(c), veh/h	419	0	313	320	0	330	455	629	646	438	535	549
V/C Ratio(X)	0.26	0.00	0.57	0.15	0.00	0.22	0.25	0.54	0.54	0.08	0.68	0.68
Avail Cap(c_a), veh/h	813	0	771	682	0	812	533	846	869	599	828	849
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	13.0	15.3	0.0	12.0	7.2	8.7	8.7	7.5	10.4	10.4
Incr Delay (d2), s/veh	0.3	0.0	1.6	0.2	0.0	0.3	0.3	0.7	0.7	0.1	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.2	0.3	0.0	0.4	0.3	1.4	1.4	0.1	1.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.0	0.0	14.6	15.5	0.0	12.3	7.5	9.4	9.4	7.6	11.9	11.9
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	B	B
Approach Vol, veh/h		286			120			804			769	
Approach Delay, s/veh		14.4			13.6			9.2			11.7	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	18.3		11.8	7.9	16.4		11.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	2.5	7.8		6.0	3.5	8.9		7.1				
Green Ext Time (p_c), s	0.0	3.0		1.1	0.0	2.9		0.3				

Intersection Summary

HCM 6th Ctrl Delay				11.2								
HCM 6th LOS				B								

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	65	35	10	50	1	30	5	10	1	5	15
Future Vol, veh/h	15	65	35	10	50	1	30	5	10	1	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	3	0	0	0	25	0	0	0
Mvmt Flow	16	71	38	11	54	1	33	5	11	1	5	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	55	0	0	109	0	0	209	199	90	207	218	55
Stage 1	-	-	-	-	-	-	122	122	-	77	77	-
Stage 2	-	-	-	-	-	-	87	77	-	130	141	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.45	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.525	3.5	4	3.3
Pot Cap-1 Maneuver	1563	-	-	1494	-	-	753	700	908	755	684	1018
Stage 1	-	-	-	-	-	-	887	799	-	937	835	-
Stage 2	-	-	-	-	-	-	926	835	-	878	784	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1563	-	-	1494	-	-	726	687	908	731	671	1018
Mov Cap-2 Maneuver	-	-	-	-	-	-	726	687	-	731	671	-
Stage 1	-	-	-	-	-	-	877	790	-	927	828	-
Stage 2	-	-	-	-	-	-	898	828	-	852	775	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.2			10.1			9.1		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	755	1563	-	-	1494	-	-	892
HCM Lane V/C Ratio	0.065	0.01	-	-	0.007	-	-	0.026
HCM Control Delay (s)	10.1	7.3	0	-	7.4	0	-	9.1
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

HCM 6th TWSC
1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Projected 2024 without Project
AM Peak Hour

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	5	1	10	10	1	5	5	415	5	5	515	1
Future Vol, veh/h	5	1	10	10	1	5	5	415	5	5	515	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	33	9	0	0	0	0	33	5	2
Mvmt Flow	6	1	12	12	1	6	6	506	6	6	628	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	907	1165	315	848	1162	256	629	0	0	512	0	0
Stage 1	641	641	-	521	521	-	-	-	-	-	-	-
Stage 2	266	524	-	327	641	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	8.16	6.68	6.9	4.1	-	-	4.76	-	-
Critical Hdwy Stg 1	6.5	5.5	-	7.16	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	7.16	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.83	4.09	3.3	2.2	-	-	2.53	-	-
Pot Cap-1 Maneuver	234	196	687	209	184	749	963	-	-	861	-	-
Stage 1	434	473	-	434	513	-	-	-	-	-	-	-
Stage 2	722	533	-	581	451	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	229	193	687	202	182	749	963	-	-	861	-	-
Mov Cap-2 Maneuver	229	193	-	202	182	-	-	-	-	-	-	-
Stage 1	431	470	-	431	510	-	-	-	-	-	-	-
Stage 2	710	530	-	565	448	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.8		20		0.1		0.1	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	963	-	-	385	259	861	-	-
HCM Lane V/C Ratio	0.006	-	-	0.051	0.075	0.007	-	-
HCM Control Delay (s)	8.8	-	-	14.8	20	9.2	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	30	420	10	0	540
Future Vol, veh/h	0	30	420	10	0	540
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	8	2	5	2
Mvmt Flow	0	33	457	11	0	587

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	234	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	768	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	768	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	768
HCM Lane V/C Ratio	-	-	0.042
HCM Control Delay (s)	-	-	9.9
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.1

Lanes, Volumes, Timings
3: US Hwy 101 (Oregon Coast Hwy) & 35th St

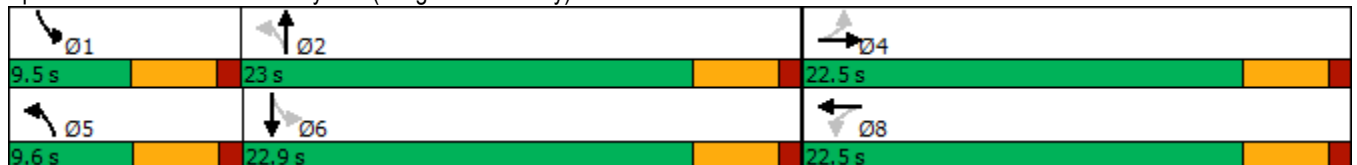
Projected 2024 without Project
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	25	130	40	30	25	65	330	15	15	465	45
Future Volume (vph)	70	25	130	40	30	25	65	330	15	15	465	45
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	125		0	150		0	150		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		675			318			615			184	
Travel Time (s)		18.4			8.7			10.5			3.1	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.6	23.0		9.5	22.9	
Total Split (%)	40.9%	40.9%		40.9%	40.9%		17.5%	41.8%		17.3%	41.6%	
Maximum Green (s)	18.0	18.0		18.0	18.0		5.1	18.5		5.0	18.4	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	

Intersection Summary

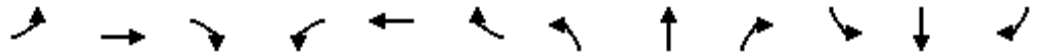
Area Type: Other
 Cycle Length: 55
 Actuated Cycle Length: 36.6
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St



HCM 6th Signalized Intersection Summary
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Projected 2024 without Project
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↘		↗	↘		↗	↕	↘	↗	↘	
Traffic Volume (veh/h)	70	25	130	40	30	25	65	330	15	15	465	45
Future Volume (veh/h)	70	25	130	40	30	25	65	330	15	15	465	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1668	1600	1723	1695	1654	1614	1750	1641	1668	1750	1682	1545
Adj Flow Rate, veh/h	80	29	149	46	34	29	75	379	17	17	534	52
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	6	11	2	4	7	10	0	8	6	0	5	15
Cap, veh/h	455	49	249	338	177	151	464	1063	48	515	871	85
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.08	0.35	0.35	0.02	0.30	0.30
Sat Flow, veh/h	1297	227	1164	1187	825	703	1667	3039	136	1667	2942	286
Grp Volume(v), veh/h	80	0	178	46	0	63	75	194	202	17	289	297
Grp Sat Flow(s),veh/h/ln	1297	0	1390	1187	0	1528	1667	1559	1616	1667	1598	1630
Q Serve(g_s), s	1.8	0.0	3.8	1.2	0.0	1.1	1.0	3.0	3.0	0.2	5.1	5.1
Cycle Q Clear(g_c), s	2.9	0.0	3.8	4.9	0.0	1.1	1.0	3.0	3.0	0.2	5.1	5.1
Prop In Lane	1.00		0.84	1.00		0.46	1.00		0.08	1.00		0.18
Lane Grp Cap(c), veh/h	455	0	298	338	0	327	464	545	565	515	473	483
V/C Ratio(X)	0.18	0.00	0.60	0.14	0.00	0.19	0.16	0.36	0.36	0.03	0.61	0.61
Avail Cap(c_a), veh/h	893	0	768	739	0	844	599	885	917	734	902	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	0.0	11.5	13.8	0.0	10.5	7.2	7.9	7.9	7.7	9.9	9.9
Incr Delay (d2), s/veh	0.2	0.0	1.9	0.2	0.0	0.3	0.2	0.4	0.4	0.0	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.1	0.3	0.0	0.3	0.2	0.6	0.6	0.1	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.8	0.0	13.5	13.9	0.0	10.8	7.3	8.3	8.3	7.7	11.2	11.2
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	B	B
Approach Vol, veh/h		258			109			471			603	
Approach Delay, s/veh		13.0			12.1			8.1			11.1	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	15.9		11.5	7.0	14.1		11.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	2.2	5.0		5.8	3.0	7.1		6.9				
Green Ext Time (p_c), s	0.0	1.8		1.1	0.0	2.5		0.3				

Intersection Summary												
HCM 6th Ctrl Delay				10.5								
HCM 6th LOS				B								

HCM 6th TWSC
4: Redwood St/Site Driveway & 35th St

Projected 2024 without Project
AM Peak Hour

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	25	15	10	60	5	25	5	5	5	5	15
Future Vol, veh/h	15	25	15	10	60	5	25	5	5	5	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	5	8	0	2	0	11	2	33	0	0	0
Mvmt Flow	17	28	17	11	67	6	28	6	6	6	6	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	73	0	0	45	0	0	175	166	37	169	171	70
Stage 1	-	-	-	-	-	-	71	71	-	92	92	-
Stage 2	-	-	-	-	-	-	104	95	-	77	79	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.21	6.52	6.53	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.599	4.018	3.597	3.5	4	3.3
Pot Cap-1 Maneuver	1540	-	-	1576	-	-	768	727	953	799	726	998
Stage 1	-	-	-	-	-	-	917	836	-	920	823	-
Stage 2	-	-	-	-	-	-	880	816	-	937	833	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1540	-	-	1576	-	-	740	714	953	779	713	998
Mov Cap-2 Maneuver	-	-	-	-	-	-	740	714	-	779	713	-
Stage 1	-	-	-	-	-	-	907	827	-	910	817	-
Stage 2	-	-	-	-	-	-	853	810	-	915	824	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	1	10	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	760	1540	-	-	1576	-	-	878
HCM Lane V/C Ratio	0.052	0.011	-	-	0.007	-	-	0.032
HCM Control Delay (s)	10	7.4	0	-	7.3	0	-	9.2
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

HCM 6th TWSC
1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Projected 2024 without Project
PM Peak Hour

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	1	5	15	10	1	5	10	640	15	5	625	5
Future Vol, veh/h	1	5	15	10	1	5	10	640	15	5	625	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	13	2	0	0	4	0
Mvmt Flow	1	6	18	12	1	6	12	762	18	6	744	6

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1165	1563	375	1182	1557	390	750	0	0	780	0	0
Stage 1	759	759	-	795	795	-	-	-	-	-	-	-
Stage 2	406	804	-	387	762	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.36	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.33	-	-	2.2	-	-
Pot Cap-1 Maneuver	152	113	628	147	114	614	786	-	-	846	-	-
Stage 1	369	418	-	351	402	-	-	-	-	-	-	-
Stage 2	598	398	-	614	416	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	147	111	628	135	111	614	786	-	-	846	-	-
Mov Cap-2 Maneuver	147	111	-	135	111	-	-	-	-	-	-	-
Stage 1	363	415	-	346	396	-	-	-	-	-	-	-
Stage 2	581	392	-	584	413	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.3	28.1	0.1	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	786	-	-	277	175	846	-	-
HCM Lane V/C Ratio	0.015	-	-	0.09	0.109	0.007	-	-
HCM Control Delay (s)	9.7	-	-	19.3	28.1	9.3	-	-
HCM Lane LOS	A	-	-	C	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.4	0	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	25	685	10	0	660
Future Vol, veh/h	0	25	685	10	0	660
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	27	745	11	0	717

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	378	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	620	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	620	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	620
HCM Lane V/C Ratio	-	-	0.044
HCM Control Delay (s)	-	-	11.1
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.1

Lanes, Volumes, Timings
3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Projected 2024 without Project
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	40	120	40	35	25	110	555	40	30	575	55
Future Volume (vph)	95	40	120	40	35	25	110	555	40	30	575	55
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	125		0	150		0	150		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		675			318			615			184	
Travel Time (s)		18.4			8.7			10.5			3.1	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.6	23.0		9.5	22.9	
Total Split (%)	40.9%	40.9%		40.9%	40.9%		17.5%	41.8%		17.3%	41.6%	
Maximum Green (s)	18.0	18.0		18.0	18.0		5.1	18.5		5.0	18.4	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	

Intersection Summary

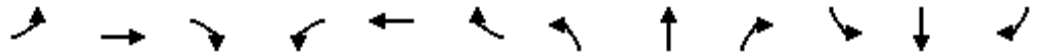
Area Type: Other
 Cycle Length: 55
 Actuated Cycle Length: 42.3
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St



HCM 6th Signalized Intersection Summary
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Projected 2024 without Project
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕	↗	↖	↗	
Traffic Volume (veh/h)	95	40	120	40	35	25	110	555	40	30	575	55
Future Volume (veh/h)	95	40	120	40	35	25	110	555	40	30	575	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1750	1736	1750	1750	1750	1736	1736	1750	1750	1709	1668
Adj Flow Rate, veh/h	113	48	143	48	42	30	131	661	48	36	685	65
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	0	1	0	0	0	1	1	0	0	3	6
Cap, veh/h	421	81	241	310	198	142	452	1211	88	430	991	94
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.10	0.39	0.39	0.04	0.33	0.33
Sat Flow, veh/h	1328	388	1155	1211	950	678	1654	3119	226	1667	2997	284
Grp Volume(v), veh/h	113	0	191	48	0	72	131	349	360	36	371	379
Grp Sat Flow(s),veh/h/ln	1328	0	1542	1211	0	1628	1654	1650	1696	1667	1624	1658
Q Serve(g_s), s	2.9	0.0	4.2	1.4	0.0	1.4	1.8	6.1	6.2	0.5	7.4	7.4
Cycle Q Clear(g_c), s	4.2	0.0	4.2	5.6	0.0	1.4	1.8	6.1	6.2	0.5	7.4	7.4
Prop In Lane	1.00		0.75	1.00		0.42	1.00		0.13	1.00		0.17
Lane Grp Cap(c), veh/h	421	0	322	310	0	340	452	640	658	430	537	548
V/C Ratio(X)	0.27	0.00	0.59	0.15	0.00	0.21	0.29	0.55	0.55	0.08	0.69	0.69
Avail Cap(c_a), veh/h	784	0	743	640	0	784	513	816	839	584	799	816
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	0.0	13.4	15.9	0.0	12.2	7.5	8.9	8.9	7.8	10.9	10.9
Incr Delay (d2), s/veh	0.3	0.0	1.7	0.2	0.0	0.3	0.4	0.7	0.7	0.1	1.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.4	0.4	0.0	0.4	0.4	1.5	1.5	0.1	2.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	0.0	15.1	16.1	0.0	12.5	7.8	9.6	9.6	7.8	12.5	12.4
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	B	B
Approach Vol, veh/h		304			120			840			786	
Approach Delay, s/veh		14.8			14.0			9.3			12.2	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	19.0		12.3	8.2	16.9		12.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	2.5	8.2		6.2	3.8	9.4		7.6				
Green Ext Time (p_c), s	0.0	3.0		1.2	0.0	2.9		0.3				

Intersection Summary

HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

HCM 6th TWSC
4: Redwood St/Site Driveway & 35th St

Projected 2024 without Project
PM Peak Hour

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	65	35	10	55	1	30	5	10	1	5	15
Future Vol, veh/h	15	65	35	10	55	1	30	5	10	1	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	3	0	0	0	25	0	0	0
Mvmt Flow	16	71	38	11	60	1	33	5	11	1	5	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	61	0	0	109	0	0	215	205	90	213	224	61
Stage 1	-	-	-	-	-	-	122	122	-	83	83	-
Stage 2	-	-	-	-	-	-	93	83	-	130	141	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.45	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.525	3.5	4	3.3
Pot Cap-1 Maneuver	1555	-	-	1494	-	-	746	695	908	748	678	1010
Stage 1	-	-	-	-	-	-	887	799	-	930	830	-
Stage 2	-	-	-	-	-	-	919	830	-	878	784	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1555	-	-	1494	-	-	719	682	908	724	665	1010
Mov Cap-2 Maneuver	-	-	-	-	-	-	719	682	-	724	665	-
Stage 1	-	-	-	-	-	-	877	790	-	920	823	-
Stage 2	-	-	-	-	-	-	891	823	-	852	775	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.1			10.1			9.2		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	749	1555	-	-	1494	-	-	884
HCM Lane V/C Ratio	0.065	0.01	-	-	0.007	-	-	0.026
HCM Control Delay (s)	10.1	7.3	0	-	7.4	0	-	9.2
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

HCM 6th TWSC
1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Projected 2024 with Project
AM Peak Hour

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	5	1	10	10	1	5	5	420	5	5	520	1
Future Vol, veh/h	5	1	10	10	1	5	5	420	5	5	520	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	33	9	0	0	0	0	33	5	2
Mvmt Flow	6	1	12	12	1	6	6	512	6	6	634	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	916	1177	318	857	1174	259	635	0	0	518	0	0
Stage 1	647	647	-	527	527	-	-	-	-	-	-	-
Stage 2	269	530	-	330	647	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	8.16	6.68	6.9	4.1	-	-	4.76	-	-
Critical Hdwy Stg 1	6.5	5.5	-	7.16	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	7.16	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.83	4.09	3.3	2.2	-	-	2.53	-	-
Pot Cap-1 Maneuver	230	193	684	205	180	746	958	-	-	856	-	-
Stage 1	431	470	-	431	509	-	-	-	-	-	-	-
Stage 2	719	530	-	578	448	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	225	190	684	198	178	746	958	-	-	856	-	-
Mov Cap-2 Maneuver	225	190	-	198	178	-	-	-	-	-	-	-
Stage 1	428	467	-	428	506	-	-	-	-	-	-	-
Stage 2	707	527	-	562	445	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15	20.3	0.1	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	958	-	-	380	255	856	-	-
HCM Lane V/C Ratio	0.006	-	-	0.051	0.077	0.007	-	-
HCM Control Delay (s)	8.8	-	-	15	20.3	9.2	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	35	420	20	0	545
Future Vol, veh/h	0	35	420	20	0	545
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	8	2	5	2
Mvmt Flow	0	38	457	22	0	592

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	240	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	761	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	761	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	761
HCM Lane V/C Ratio	-	-	0.05
HCM Control Delay (s)	-	-	10
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.2

Lanes, Volumes, Timings
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Projected 2024 with Project
 AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	25	130	45	35	25	65	335	15	25	465	45
Future Volume (vph)	75	25	130	45	35	25	65	335	15	25	465	45
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	125		0	150		0	150		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		675			318			615			184	
Travel Time (s)		18.4			8.7			10.5			3.1	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.6	23.0		9.5	22.9	
Total Split (%)	40.9%	40.9%		40.9%	40.9%		17.5%	41.8%		17.3%	41.6%	
Maximum Green (s)	18.0	18.0		18.0	18.0		5.1	18.5		5.0	18.4	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	

Intersection Summary

Area Type: Other
 Cycle Length: 55
 Actuated Cycle Length: 36.9
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St



HCM 6th Signalized Intersection Summary
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Projected 2024 with Project
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	25	130	45	35	25	65	335	15	25	465	45
Future Volume (veh/h)	75	25	130	45	35	25	65	335	15	25	465	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1668	1600	1723	1695	1654	1614	1750	1641	1668	1750	1682	1545
Adj Flow Rate, veh/h	86	29	149	52	40	29	75	385	17	29	534	52
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	6	11	2	4	7	10	0	8	6	0	5	15
Cap, veh/h	455	50	256	344	196	142	460	1018	45	515	867	84
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.08	0.33	0.33	0.04	0.29	0.29
Sat Flow, veh/h	1290	227	1164	1187	892	646	1667	3041	134	1667	2942	286
Grp Volume(v), veh/h	86	0	178	52	0	69	75	197	205	29	289	297
Grp Sat Flow(s),veh/h/ln	1290	0	1390	1187	0	1538	1667	1559	1617	1667	1598	1630
Q Serve(g_s), s	1.9	0.0	3.8	1.3	0.0	1.2	1.0	3.2	3.2	0.4	5.1	5.2
Cycle Q Clear(g_c), s	3.1	0.0	3.8	5.1	0.0	1.2	1.0	3.2	3.2	0.4	5.1	5.2
Prop In Lane	1.00		0.84	1.00		0.42	1.00		0.08	1.00		0.18
Lane Grp Cap(c), veh/h	455	0	306	344	0	338	460	522	541	515	471	480
V/C Ratio(X)	0.19	0.00	0.58	0.15	0.00	0.20	0.16	0.38	0.38	0.06	0.61	0.62
Avail Cap(c_a), veh/h	876	0	760	732	0	841	593	876	908	709	893	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.8	0.0	11.5	13.8	0.0	10.5	7.3	8.3	8.3	7.6	10.0	10.0
Incr Delay (d2), s/veh	0.2	0.0	1.8	0.2	0.0	0.3	0.2	0.5	0.4	0.0	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.1	0.3	0.0	0.3	0.2	0.7	0.7	0.1	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	13.2	14.0	0.0	10.8	7.5	8.8	8.8	7.6	11.3	11.3
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	B	B
Approach Vol, veh/h		264			121			477			615	
Approach Delay, s/veh		12.8			12.2			8.6			11.1	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	15.5		11.7	7.0	14.2		11.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	2.4	5.2		5.8	3.0	7.2		7.1				
Green Ext Time (p_c), s	0.0	1.8		1.1	0.0	2.5		0.3				

Intersection Summary

HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

HCM 6th TWSC
4: Redwood St/Site Driveway & 35th St

Projected 2024 with Project
AM Peak Hour

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	25	15	10	60	5	25	5	5	5	5	20
Future Vol, veh/h	20	25	15	10	60	5	25	5	5	5	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	5	8	0	2	0	11	2	33	0	0	0
Mvmt Flow	22	28	17	11	67	6	28	6	6	6	6	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	73	0	0	45	0	0	187	176	37	179	181	70
Stage 1	-	-	-	-	-	-	81	81	-	92	92	-
Stage 2	-	-	-	-	-	-	106	95	-	87	89	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.21	6.52	6.53	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.599	4.018	3.597	3.5	4	3.3
Pot Cap-1 Maneuver	1540	-	-	1576	-	-	754	717	953	787	717	998
Stage 1	-	-	-	-	-	-	906	828	-	920	823	-
Stage 2	-	-	-	-	-	-	878	816	-	926	825	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1540	-	-	1576	-	-	720	701	953	765	701	998
Mov Cap-2 Maneuver	-	-	-	-	-	-	720	701	-	765	701	-
Stage 1	-	-	-	-	-	-	892	816	-	906	817	-
Stage 2	-	-	-	-	-	-	846	810	-	900	813	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.5	1	10.1	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	743	1540	-	-	1576	-	-	890
HCM Lane V/C Ratio	0.053	0.015	-	-	0.007	-	-	0.038
HCM Control Delay (s)	10.1	7.4	0	-	7.3	0	-	9.2
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

HCM 6th TWSC
1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Projected 2024 with Project
PM Peak Hour

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	1	5	15	10	1	5	10	650	15	5	635	5
Future Vol, veh/h	1	5	15	10	1	5	10	650	15	5	635	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	13	2	0	0	4	0
Mvmt Flow	1	6	18	12	1	6	12	774	18	6	756	6

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1183	1587	381	1200	1581	396	762	0	0	792	0	0
Stage 1	771	771	-	807	807	-	-	-	-	-	-	-
Stage 2	412	816	-	393	774	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.36	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.33	-	-	2.2	-	-
Pot Cap-1 Maneuver	147	109	623	143	110	609	778	-	-	838	-	-
Stage 1	363	413	-	346	397	-	-	-	-	-	-	-
Stage 2	593	393	-	609	411	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	142	107	623	131	108	609	778	-	-	838	-	-
Mov Cap-2 Maneuver	142	107	-	131	108	-	-	-	-	-	-	-
Stage 1	358	410	-	341	391	-	-	-	-	-	-	-
Stage 2	576	387	-	579	408	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	19.7		28.7		0.1		0.1	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	778	-	-	270	171	838	-	-
HCM Lane V/C Ratio	0.015	-	-	0.093	0.111	0.007	-	-
HCM Control Delay (s)	9.7	-	-	19.7	28.7	9.3	-	-
HCM Lane LOS	A	-	-	C	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.4	0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	40	680	30	0	670
Future Vol, veh/h	0	40	680	30	0	670
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	43	739	33	0	728

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	386	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	612	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	612	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	612
HCM Lane V/C Ratio	-	-	0.071
HCM Control Delay (s)	-	-	11.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.2

Lanes, Volumes, Timings
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

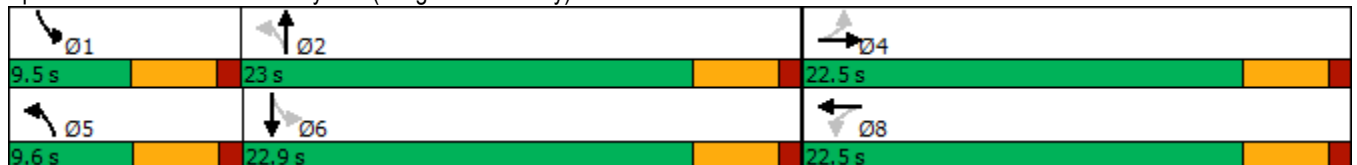
Projected 2024 with Project
 PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	40	120	55	40	25	110	565	40	45	570	55
Future Volume (vph)	95	40	120	55	40	25	110	565	40	45	570	55
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	125		0	150		0	150		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		675			318			615			184	
Travel Time (s)		18.4			8.7			10.5			3.1	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.6	23.0		9.5	22.9	
Total Split (%)	40.9%	40.9%		40.9%	40.9%		17.5%	41.8%		17.3%	41.6%	
Maximum Green (s)	18.0	18.0		18.0	18.0		5.1	18.5		5.0	18.4	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	

Intersection Summary

Area Type: Other
 Cycle Length: 55
 Actuated Cycle Length: 42.2
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St



HCM 6th Signalized Intersection Summary

3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Projected 2024 with Project
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↘		↗	↘		↗	↕	↘	↗	↘	
Traffic Volume (veh/h)	95	40	120	55	40	25	110	565	40	45	570	55
Future Volume (veh/h)	95	40	120	55	40	25	110	565	40	45	570	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1750	1736	1750	1750	1750	1736	1736	1750	1750	1709	1668
Adj Flow Rate, veh/h	113	48	143	65	48	30	131	673	48	54	679	65
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	0	1	0	0	0	1	1	0	0	3	6
Cap, veh/h	430	86	255	324	223	139	444	1147	82	428	976	93
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.10	0.37	0.37	0.06	0.33	0.33
Sat Flow, veh/h	1321	388	1155	1211	1007	629	1654	3123	223	1667	2995	286
Grp Volume(v), veh/h	113	0	191	65	0	78	131	355	366	54	368	376
Grp Sat Flow(s),veh/h/ln	1321	0	1542	1211	0	1637	1654	1650	1696	1667	1624	1657
Q Serve(g_s), s	2.9	0.0	4.2	1.9	0.0	1.5	1.9	6.6	6.6	0.8	7.5	7.5
Cycle Q Clear(g_c), s	4.4	0.0	4.2	6.1	0.0	1.5	1.9	6.6	6.6	0.8	7.5	7.5
Prop In Lane	1.00		0.75	1.00		0.38	1.00		0.13	1.00		0.17
Lane Grp Cap(c), veh/h	430	0	341	324	0	362	444	606	623	428	529	540
V/C Ratio(X)	0.26	0.00	0.56	0.20	0.00	0.22	0.29	0.59	0.59	0.13	0.69	0.70
Avail Cap(c_a), veh/h	761	0	728	628	0	773	503	801	824	551	784	800
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	13.2	15.9	0.0	12.1	7.8	9.7	9.7	7.9	11.2	11.2
Incr Delay (d2), s/veh	0.3	0.0	1.4	0.3	0.0	0.3	0.4	0.9	0.9	0.1	1.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.4	0.5	0.0	0.5	0.4	1.7	1.7	0.2	2.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	0.0	14.6	16.2	0.0	12.4	8.1	10.6	10.6	8.0	12.8	12.8
LnGrp LOS	B	A	B	B	A	B	A	B	B	A	B	B
Approach Vol, veh/h		304			143			852			798	
Approach Delay, s/veh		14.5			14.1			10.2			12.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	18.5		12.9	8.3	16.9		12.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	2.8	8.6		6.4	3.9	9.5		8.1				
Green Ext Time (p_c), s	0.0	3.0		1.2	0.0	2.9		0.4				

Intersection Summary

HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

HCM 6th TWSC
4: Redwood St/Site Driveway & 35th St

Projected 2024 with Project
PM Peak Hour

Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	65	35	10	55	1	30	5	10	1	5	35
Future Vol, veh/h	30	65	35	10	55	1	30	5	10	1	5	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	3	0	0	0	25	0	0	0
Mvmt Flow	33	71	38	11	60	1	33	5	11	1	5	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	61	0	0	109	0	0	260	239	90	247	258	61
Stage 1	-	-	-	-	-	-	156	156	-	83	83	-
Stage 2	-	-	-	-	-	-	104	83	-	164	175	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.45	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.525	3.5	4	3.3
Pot Cap-1 Maneuver	1555	-	-	1494	-	-	697	666	908	711	650	1010
Stage 1	-	-	-	-	-	-	851	772	-	930	830	-
Stage 2	-	-	-	-	-	-	907	830	-	843	758	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1555	-	-	1494	-	-	651	645	908	682	630	1010
Mov Cap-2 Maneuver	-	-	-	-	-	-	651	645	-	682	630	-
Stage 1	-	-	-	-	-	-	831	754	-	909	823	-
Stage 2	-	-	-	-	-	-	860	823	-	808	741	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.7			1.1			10.6			9.1		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	694	1555	-	-	1494	-	-	931
HCM Lane V/C Ratio	0.07	0.021	-	-	0.007	-	-	0.048
HCM Control Delay (s)	10.6	7.4	0	-	7.4	0	-	9.1
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.2

Queuing and Blocking Report
Existing 2023

AM Peak Hour

Intersection: 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	35	64	30	38
Average Queue (ft)	11	14	2	2
95th Queue (ft)	35	46	12	18
Link Distance (ft)	617	622		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	100
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: US Hwy 101 (Oregon Coast Hwy) & Site Driveway

Movement	WB	NB	SB
Directions Served	R	T	T
Maximum Queue (ft)	48	11	6
Average Queue (ft)	20	0	0
95th Queue (ft)	47	8	6
Link Distance (ft)	179	121	393
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	70	111	60	78	52	94	66	49	116	106
Average Queue (ft)	32	46	21	28	24	43	22	9	62	43
95th Queue (ft)	64	84	53	61	49	78	54	34	104	89
Link Distance (ft)		629		241		581	581		121	121
Upstream Blk Time (%)									0	0
Queuing Penalty (veh)									0	0
Storage Bay Dist (ft)	125		150		150			75		
Storage Blk Time (%)		0				0			3	
Queuing Penalty (veh)		0				0			0	

Queuing and Blocking Report
Existing 2023

AM Peak Hour

Intersection: 4: Redwood St/Site Driveway & 35th St

Movement	EB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	23	62	39
Average Queue (ft)	1	25	16
95th Queue (ft)	11	55	41
Link Distance (ft)	241	628	85
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1

Queuing and Blocking Report
Existing 2023

PM Peak Hour

Intersection: 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	31	47	34	12
Average Queue (ft)	15	11	5	1
95th Queue (ft)	39	36	25	11
Link Distance (ft)	617	622		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	100
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: US Hwy 101 (Oregon Coast Hwy) & Site Driveway

Movement	WB	SB	SB
Directions Served	R	T	T
Maximum Queue (ft)	65	38	12
Average Queue (ft)	21	3	1
95th Queue (ft)	52	21	8
Link Distance (ft)	179	393	393
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	105	100	64	66	77	105	82	76	135	124
Average Queue (ft)	43	44	24	26	36	57	38	19	75	59
95th Queue (ft)	83	79	54	57	64	99	69	51	125	111
Link Distance (ft)		629		241		581	581		121	121
Upstream Blk Time (%)									1	0
Queuing Penalty (veh)									3	1
Storage Bay Dist (ft)	125		150		150			75		
Storage Blk Time (%)	0	0							6	
Queuing Penalty (veh)	0	0							2	

Queuing and Blocking Report
Existing 2023

PM Peak Hour

Intersection: 4: Redwood St/Site Driveway & 35th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	10	17	54	39
Average Queue (ft)	1	1	25	15
95th Queue (ft)	7	7	51	40
Link Distance (ft)	241	364	628	85
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 6

Queuing and Blocking Report
Existing 2023

AM Peak Hour

Intersection: 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	35	64	30	38
Average Queue (ft)	11	14	2	2
95th Queue (ft)	35	46	12	18
Link Distance (ft)	617	622		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	100
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: US Hwy 101 (Oregon Coast Hwy) & Site Driveway

Movement	WB	NB	SB
Directions Served	R	T	T
Maximum Queue (ft)	48	11	6
Average Queue (ft)	20	0	0
95th Queue (ft)	47	8	6
Link Distance (ft)	179	121	393
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	70	111	60	78	52	94	66	49	116	106
Average Queue (ft)	32	46	21	28	24	43	22	9	62	43
95th Queue (ft)	64	84	53	61	49	78	54	34	104	89
Link Distance (ft)		629		241		581	581		121	121
Upstream Blk Time (%)									0	0
Queuing Penalty (veh)									0	0
Storage Bay Dist (ft)	125		150		150			75		
Storage Blk Time (%)		0				0			3	
Queuing Penalty (veh)		0				0			0	

Queuing and Blocking Report
Existing 2023

AM Peak Hour

Intersection: 4: Redwood St/Site Driveway & 35th St

Movement	EB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	23	62	39
Average Queue (ft)	1	25	16
95th Queue (ft)	11	55	41
Link Distance (ft)	241	628	85
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1

Queuing and Blocking Report
 Projected 2024 without Project

PM Peak Hour

Intersection: 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	31	40	49	30
Average Queue (ft)	15	12	5	2
95th Queue (ft)	39	36	26	14
Link Distance (ft)	617	622		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	100
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: US Hwy 101 (Oregon Coast Hwy) & Site Driveway

Movement	WB	SB	SB
Directions Served	R	T	T
Maximum Queue (ft)	62	36	19
Average Queue (ft)	20	3	1
95th Queue (ft)	49	22	13
Link Distance (ft)	179	393	393
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	91	109	64	60	91	116	82	92	131	122
Average Queue (ft)	41	50	22	26	38	55	38	20	75	58
95th Queue (ft)	71	87	53	53	69	93	70	58	120	106
Link Distance (ft)		629		241		581	581		121	121
Upstream Blk Time (%)									1	0
Queuing Penalty (veh)									2	1
Storage Bay Dist (ft)	125		150		150			75		
Storage Blk Time (%)		0				0		0	6	
Queuing Penalty (veh)		0				0		0	2	

Queuing and Blocking Report
Projected 2024 without Project

PM Peak Hour

Intersection: 4: Redwood St/Site Driveway & 35th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	12	18	58	39
Average Queue (ft)	1	1	26	15
95th Queue (ft)	7	8	52	40
Link Distance (ft)	241	364	628	85
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 5

Queuing and Blocking Report
 Projected 2024 with Project

AM Peak Hour

Intersection: 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	T	L
Maximum Queue (ft)	40	69	24	4	39
Average Queue (ft)	13	18	2	0	2
95th Queue (ft)	38	55	14	3	16
Link Distance (ft)	617	622		393	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		100
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: US Hwy 101 (Oregon Coast Hwy) & Site Driveway

Movement	WB	SB
Directions Served	R	T
Maximum Queue (ft)	54	16
Average Queue (ft)	21	1
95th Queue (ft)	49	8
Link Distance (ft)	179	393
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	88	100	69	83	57	96	65	61	125	106
Average Queue (ft)	39	43	25	25	26	44	25	13	63	45
95th Queue (ft)	76	80	57	59	51	81	56	41	106	94
Link Distance (ft)		629		241		581	581		121	121
Upstream Blk Time (%)									0	0
Queuing Penalty (veh)									1	0
Storage Bay Dist (ft)	125		150		150			75		
Storage Blk Time (%)	0	0				0			4	
Queuing Penalty (veh)	0	0				0			1	

Queuing and Blocking Report
Projected 2024 with Project

AM Peak Hour

Intersection: 4: Redwood St/Site Driveway & 35th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	23	12	61	39
Average Queue (ft)	2	0	25	19
95th Queue (ft)	12	6	56	44
Link Distance (ft)	241	364	628	85
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 2

Queuing and Blocking Report
 Projected 2024 with Project

PM Peak Hour

Intersection: 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	L
Maximum Queue (ft)	31	39	34	4	31
Average Queue (ft)	16	13	6	0	3
95th Queue (ft)	40	38	25	3	19
Link Distance (ft)	617	622		393	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		100
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: US Hwy 101 (Oregon Coast Hwy) & Site Driveway

Movement	WB	SB	SB
Directions Served	R	T	T
Maximum Queue (ft)	57	27	6
Average Queue (ft)	26	3	0
95th Queue (ft)	50	20	4
Link Distance (ft)	179	393	393
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	101	116	82	72	92	109	90	72	134	138
Average Queue (ft)	43	47	31	29	39	60	44	28	75	61
95th Queue (ft)	82	84	64	60	69	98	80	62	123	110
Link Distance (ft)		629		241		581	581		121	121
Upstream Blk Time (%)									1	0
Queuing Penalty (veh)									2	1
Storage Bay Dist (ft)	125		150		150			75		
Storage Blk Time (%)	0	0						0	6	
Queuing Penalty (veh)	0	0						0	3	

Queuing and Blocking Report
Projected 2024 with Project

PM Peak Hour

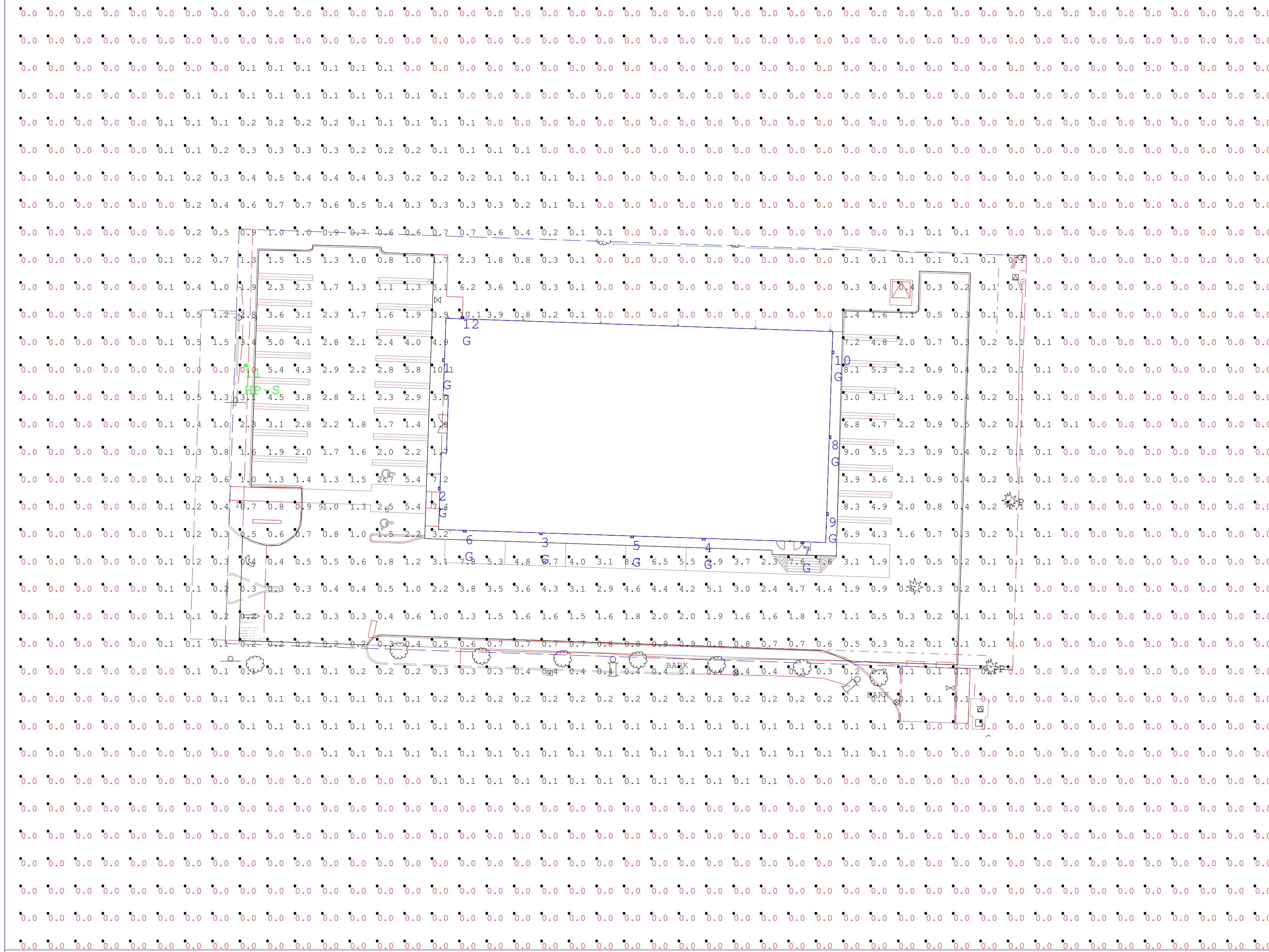
Intersection: 4: Redwood St/Site Driveway & 35th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	33	23	63	51
Average Queue (ft)	2	1	27	24
95th Queue (ft)	15	11	53	48
Link Distance (ft)	241	364	628	85
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 6

Exhibit J



LumNo	Label	Z
1	G	12
2	G	12
3	G	12
4	G	12
5	G	12
6	G	12
7	G	12
8	G	12
9	G	12
10	G	12
11	HP-S	27
12	G	12

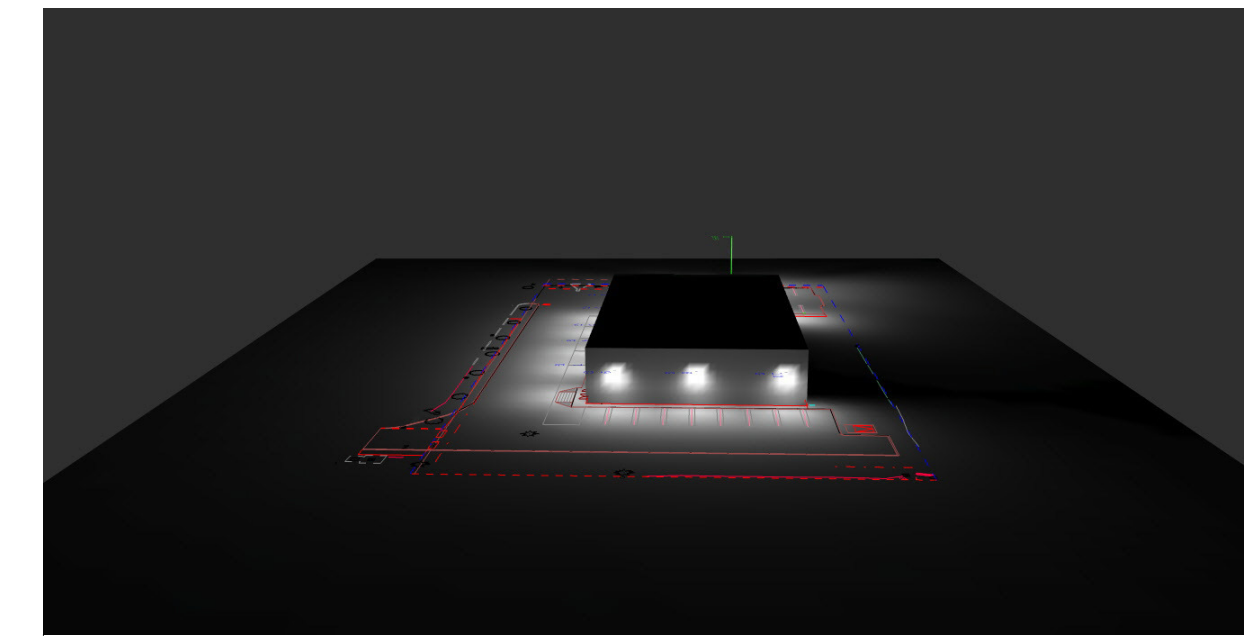
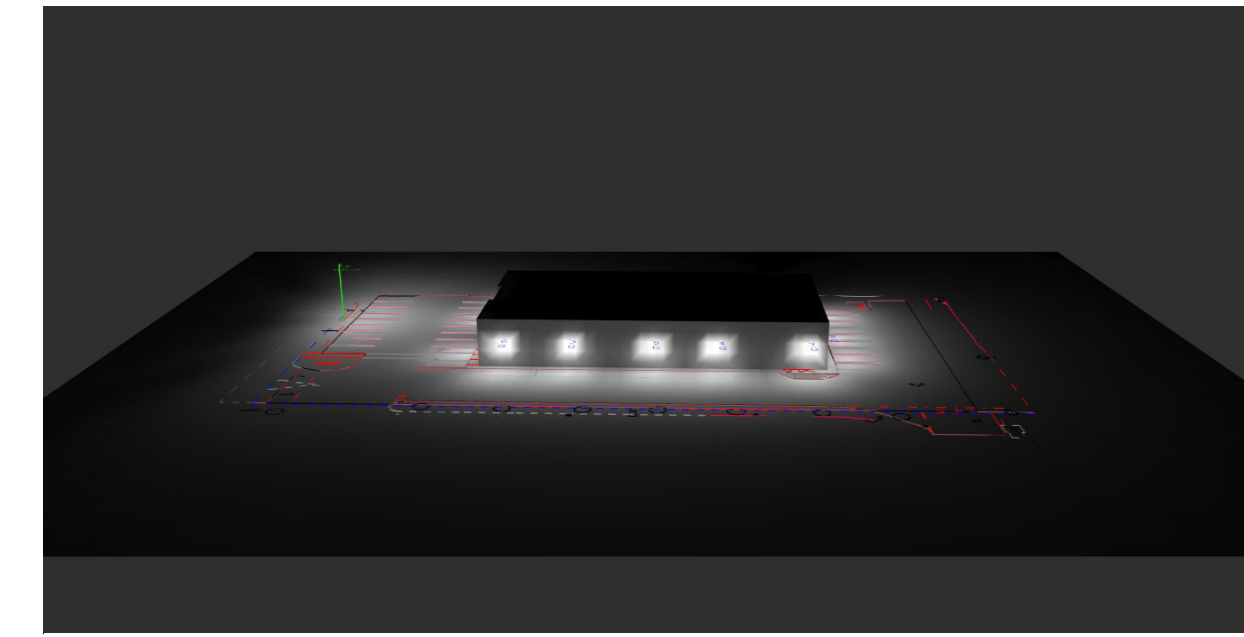
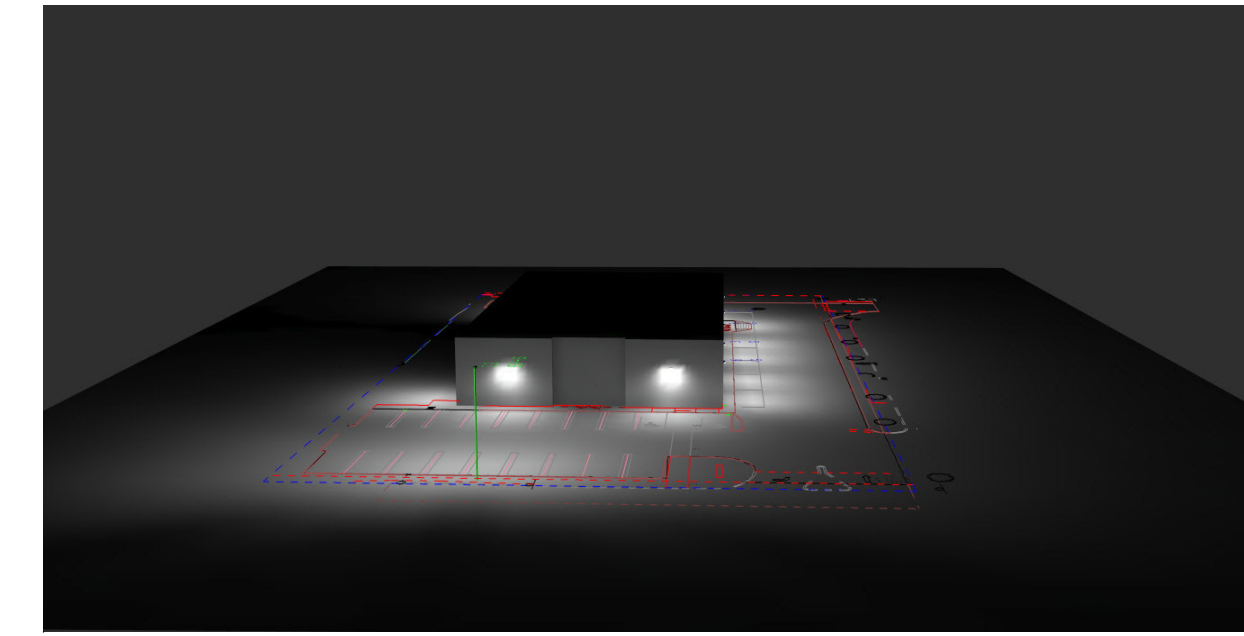
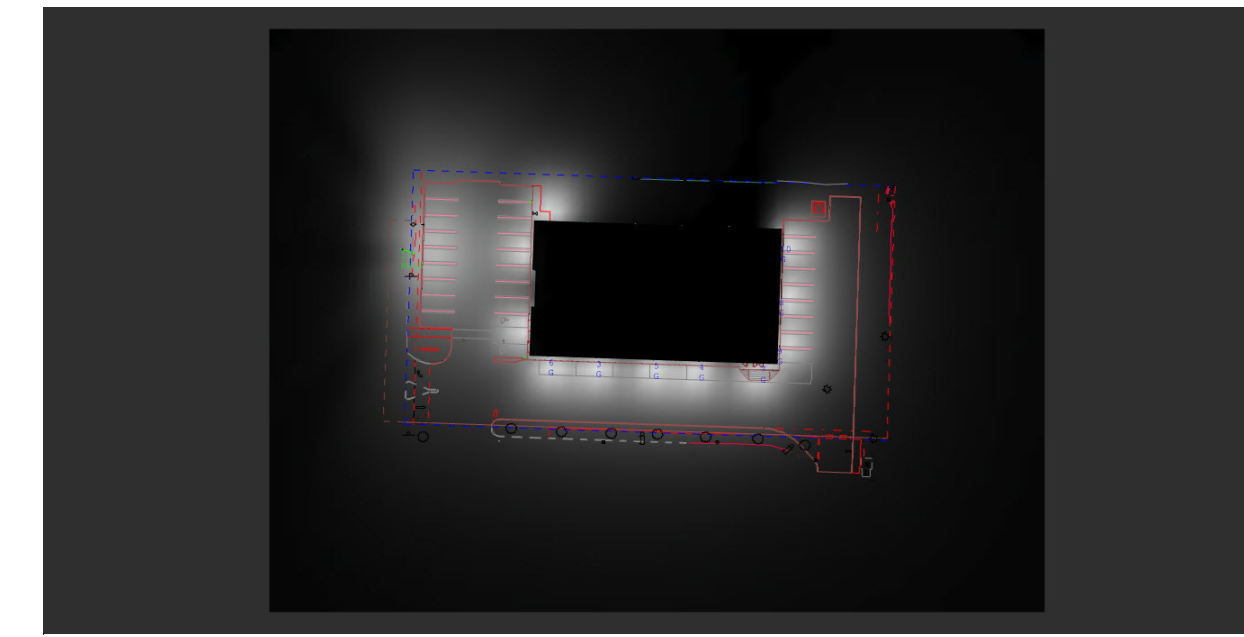
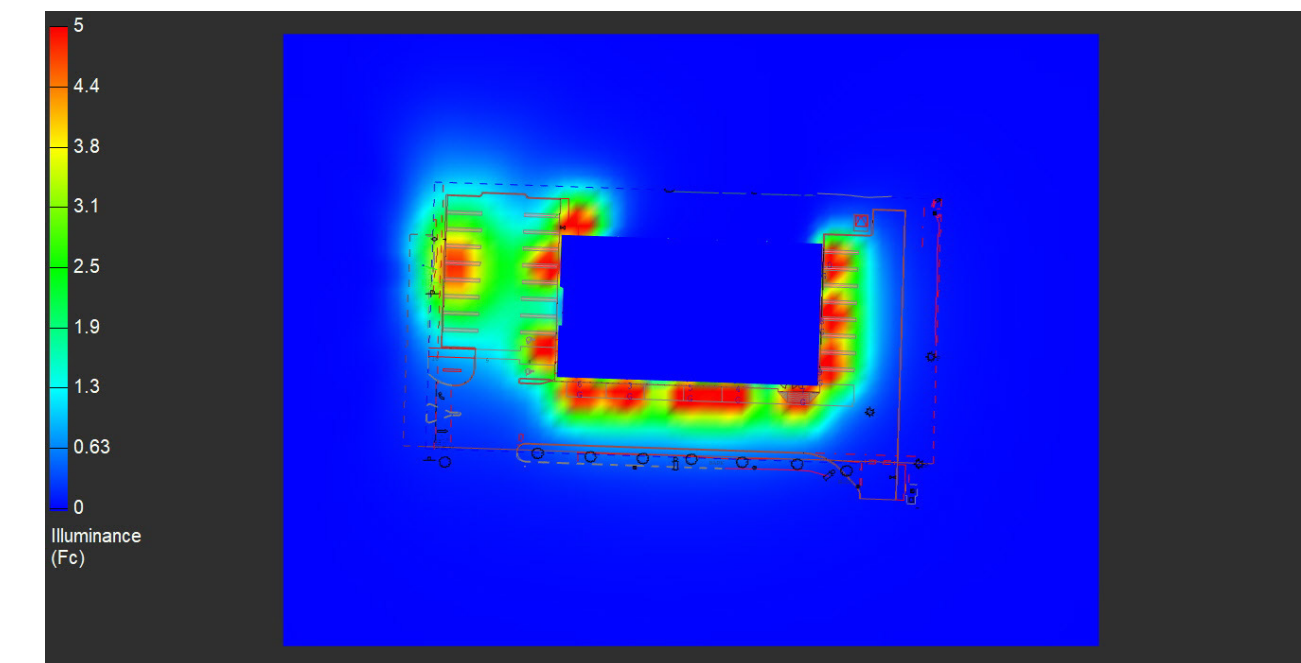
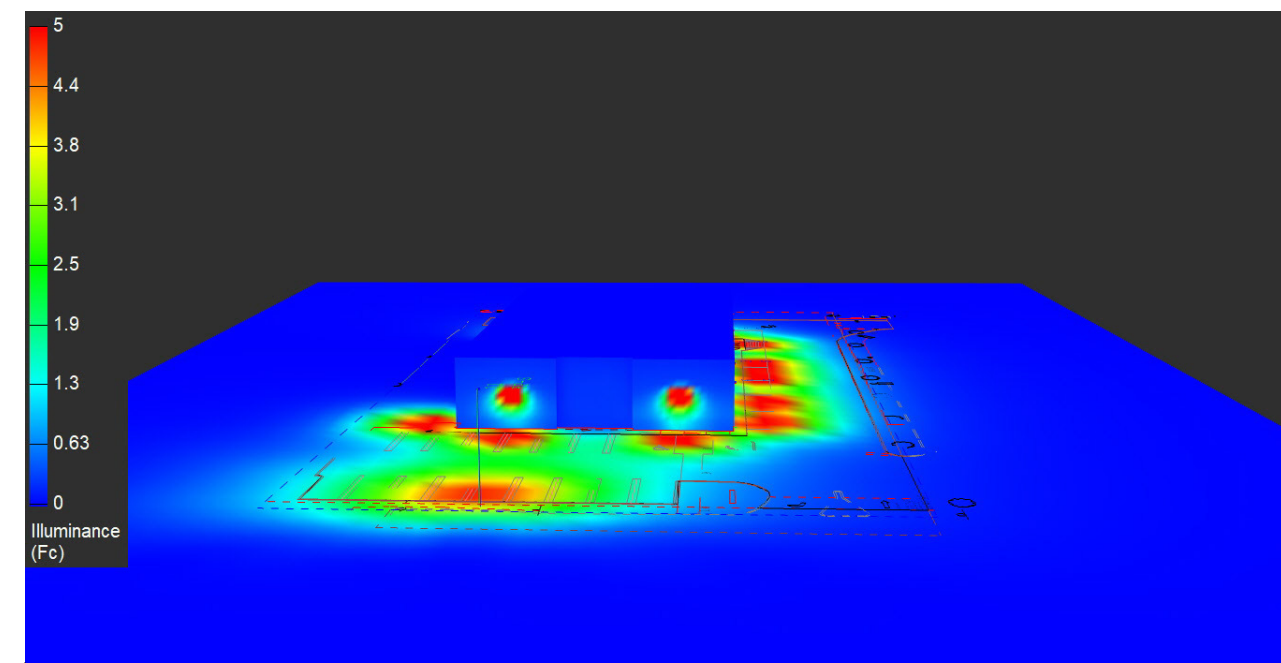
Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	11	G	Single	LEDs - WP4053 Wall Pack	0.950	5359	39.8284	438.112
	1	HP-S	Single	LEDs - AL1211SH - TS - SL075-150W-H3-40K-Shielded	0.950	17436	147.901	147.901

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
Site	Illuminance	Fc	0.43	10.1	0.0	N.A.	N.A.	
Parking Lot	Illuminance	Fc	2.27	9.9	0.1	22.70	99.00	

Notes:

Plan Notes:
 Calculations at Ground Level (10' x 10' Grid Spacing). Refer to luminaire location summary for mounting heights of each fixture. Pole mounted fixtures include a 2ft concrete base. Mounting heights indicated on luminaire location summary is a total A.F.G. height.

General Notes:
 Due to changing lighting ordinances it is the contractors responsibility to submit the site photometrics & luminaire specs to the local inspector before ordering to ensure this plan complies with local lighting ordinances. This lighting design is based on information supplied by others. Changes in electrical supply, area geometry & objects within the lighted area may produce illumination values different from the predicted results shown on this layout. This layout is based on .IES files that were lab tested or computer generated, actual results may vary.



#	Date	Comments
Revisions		

Drawn By: Brent M. Finley, LC
 Checked By:
 Date: 6/12/2023
 Scale:

Dollar General -
 Florence OR 25719

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Lumens/Lamp	LLF	Lum. Watts	Description
	11	G	Single	5346.7	0.950	39.8284	LEDS - WP4053 Wall Pack
	1	HP-S	Single	17478	0.950	147.901	LEDS - AL1211SH - TS - SL075-150W-H3-40K- Shielded

Numeric Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Site	Illuminance	Fc	0.43	10.2	0.0	N.A.	N.A.
Parking Lot	Illuminance	Fc	2.32	9.5	0.1	23.20	95.00

Luminaire Location Summary		
LumNo	Label	Z
1	G	16.5
2	G	16.5
3	G	12
4	G	12
5	G	12
6	G	12
7	G	12
8	G	12
9	G	12
10	G	12
11	HP-S	20
12	G	12

Notes:

Plan Notes:

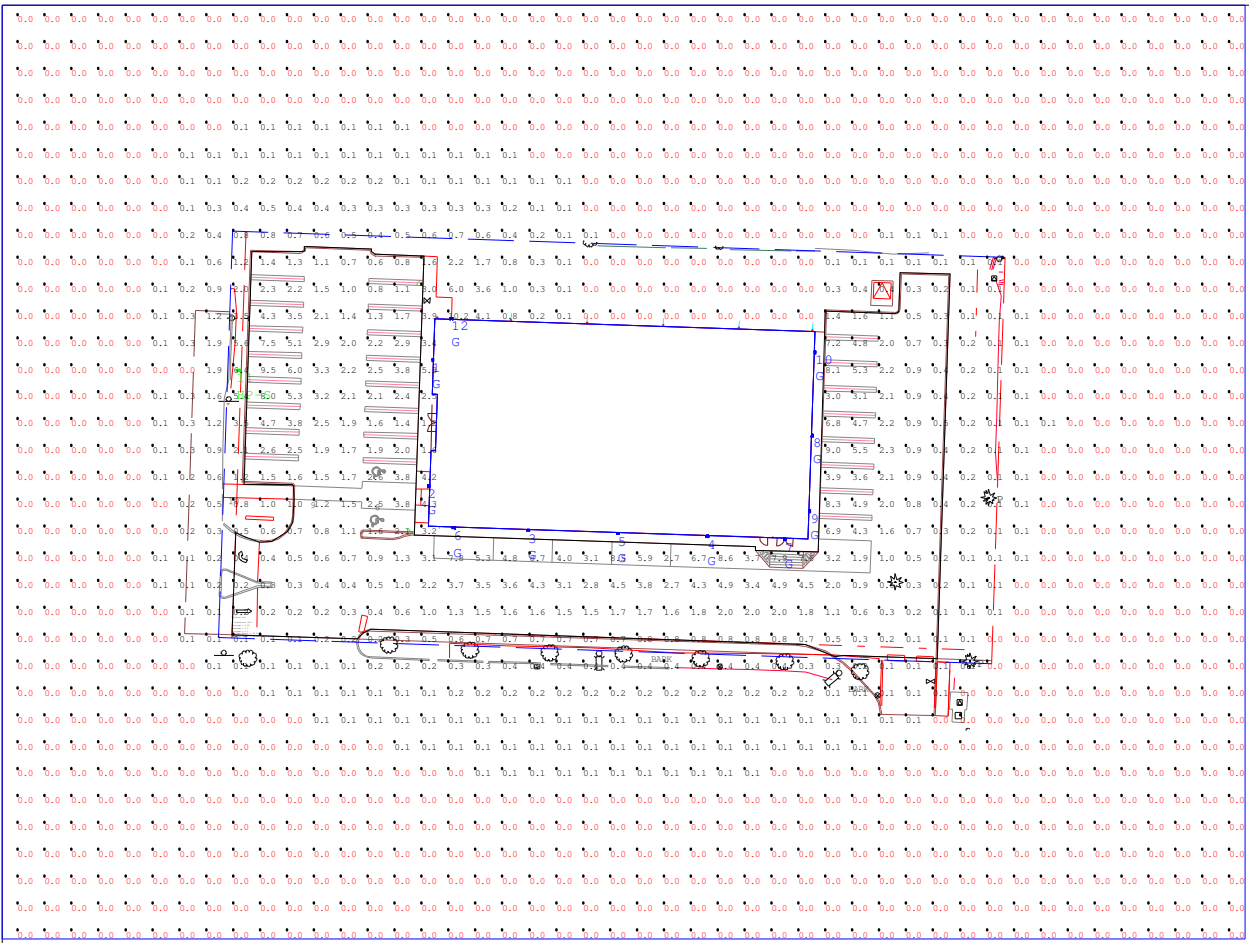
Calculations at Ground Level (10' x 10' Grid Spacing). Refer to luminaire location summary for mounting heights of each fixture. Pole mounted fixtures include a 2ft concrete base. Mounting heights indicated on luminaire location summary is a total A.F.G. height.

General Notes:

Due to changing lighting ordinances it is the contractors responsibility to submit the site photometrics & luminaire specs to the local inspector before ordering to ensure this plan complies with local lighting ordinances. This lighting design is based on information supplied by others. Changes in electrical supply, area geometry & objects within the lighted area may produce illumination values different from the predicted results shown on this layout. This layout is based on .IES files that were lab tested or computer generated, actual results may vary.

Project name: Dollar General Florence OR 25719 Lighting Layout Prepared for: Capital Growth Buchalter Prepared by: Brent M. Finley, LC	NLES - INC. N8874 Fire Lane 1 Menasha, WI 54952 PH 920-840-6054 / FAX 920-840-6424 www.nlesinc.com
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Luminaire Location Summary		
LumNo	Label	Z
1	G	16.5
2	G	16.5
3	G	12
4	G	12
5	G	12
6	G	12
7	G	12
8	G	12
9	G	12
10	G	12
11	HP-S	20
12	G	12

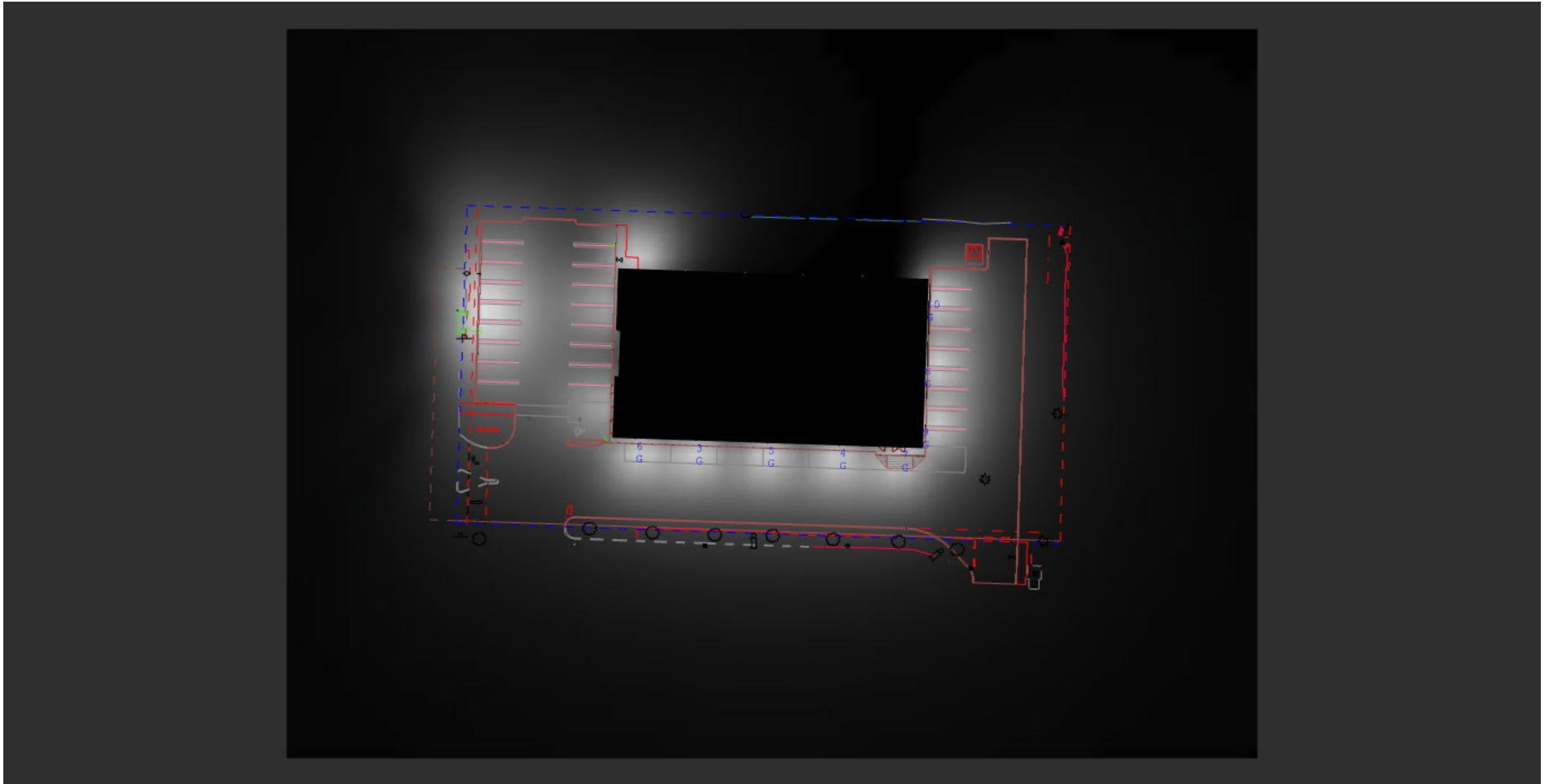
Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts	
	11	G	Single	LEDs - WP4053 Wall Pack	0.950	5359	39.8284	438.112	
	1	HP-S	Single	LEDs - AL1211SH - TS - SL075-150W-H3-40K-Shielded	0.950	17436	147.901	147.901	

Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min
Site	Illuminance	Fc	0.43	10.2	0.0	N.A.
Parking Lot	Illuminance	Fc	2.32	9.5	0.1	23.20

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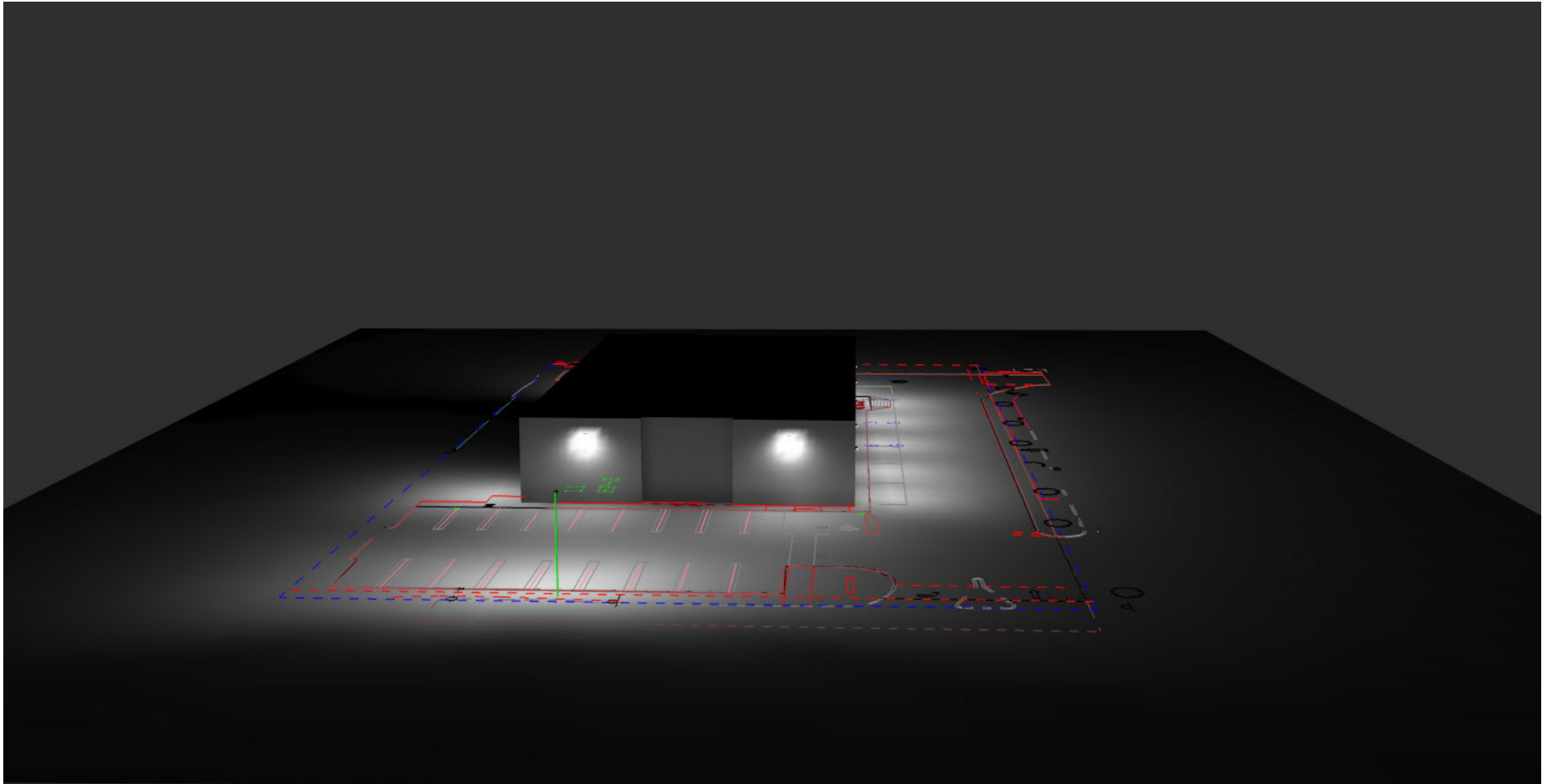


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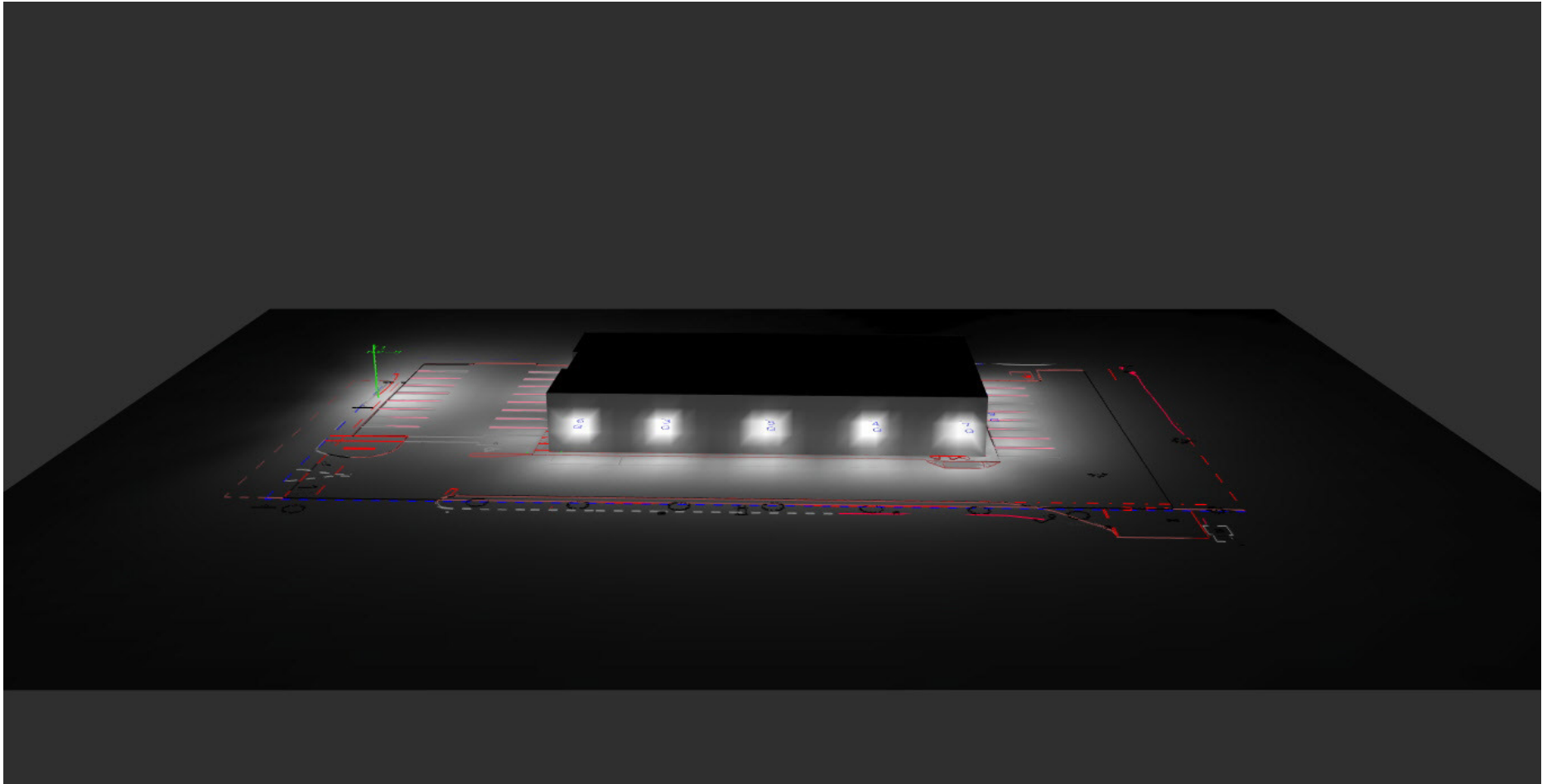


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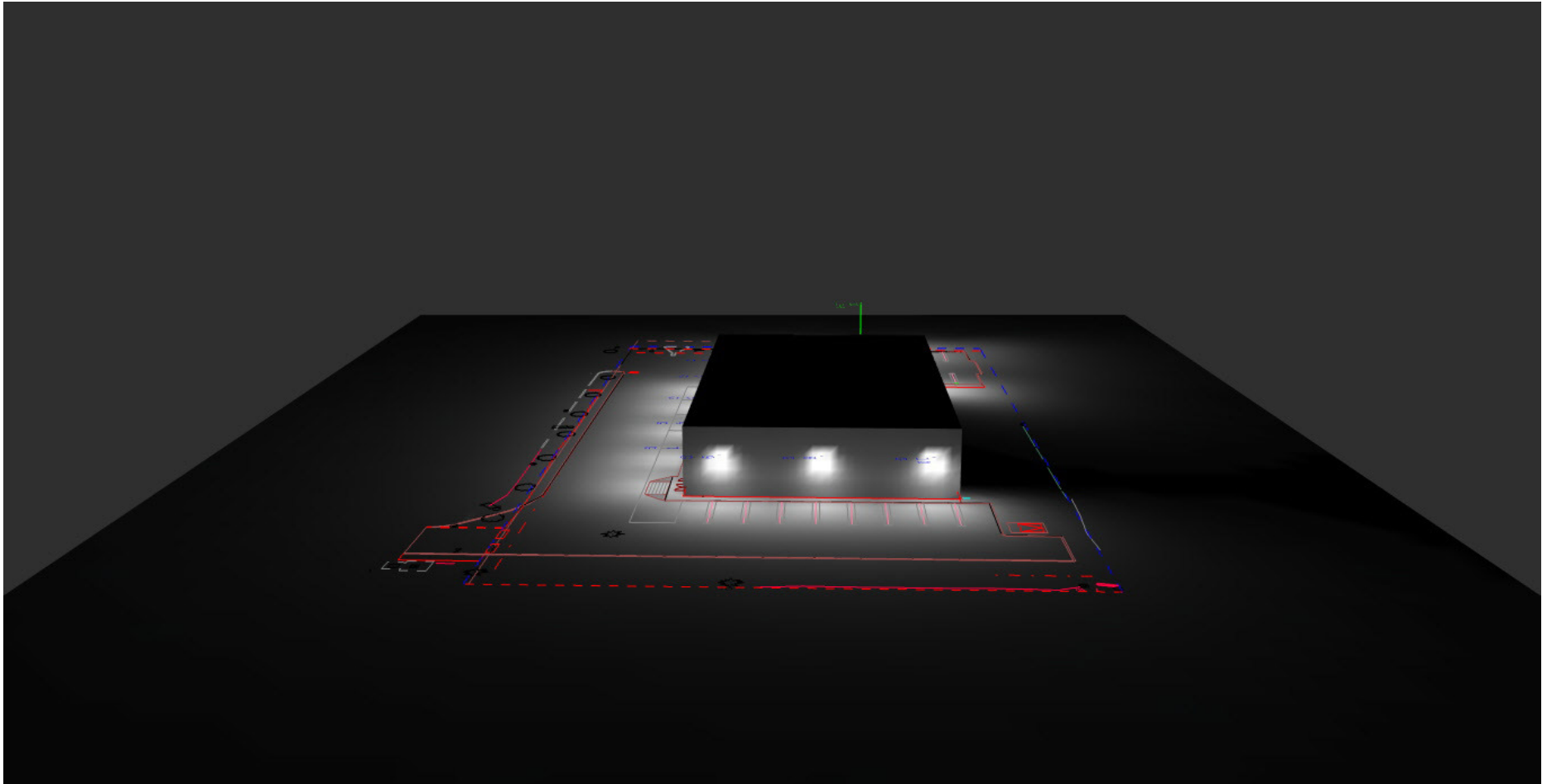


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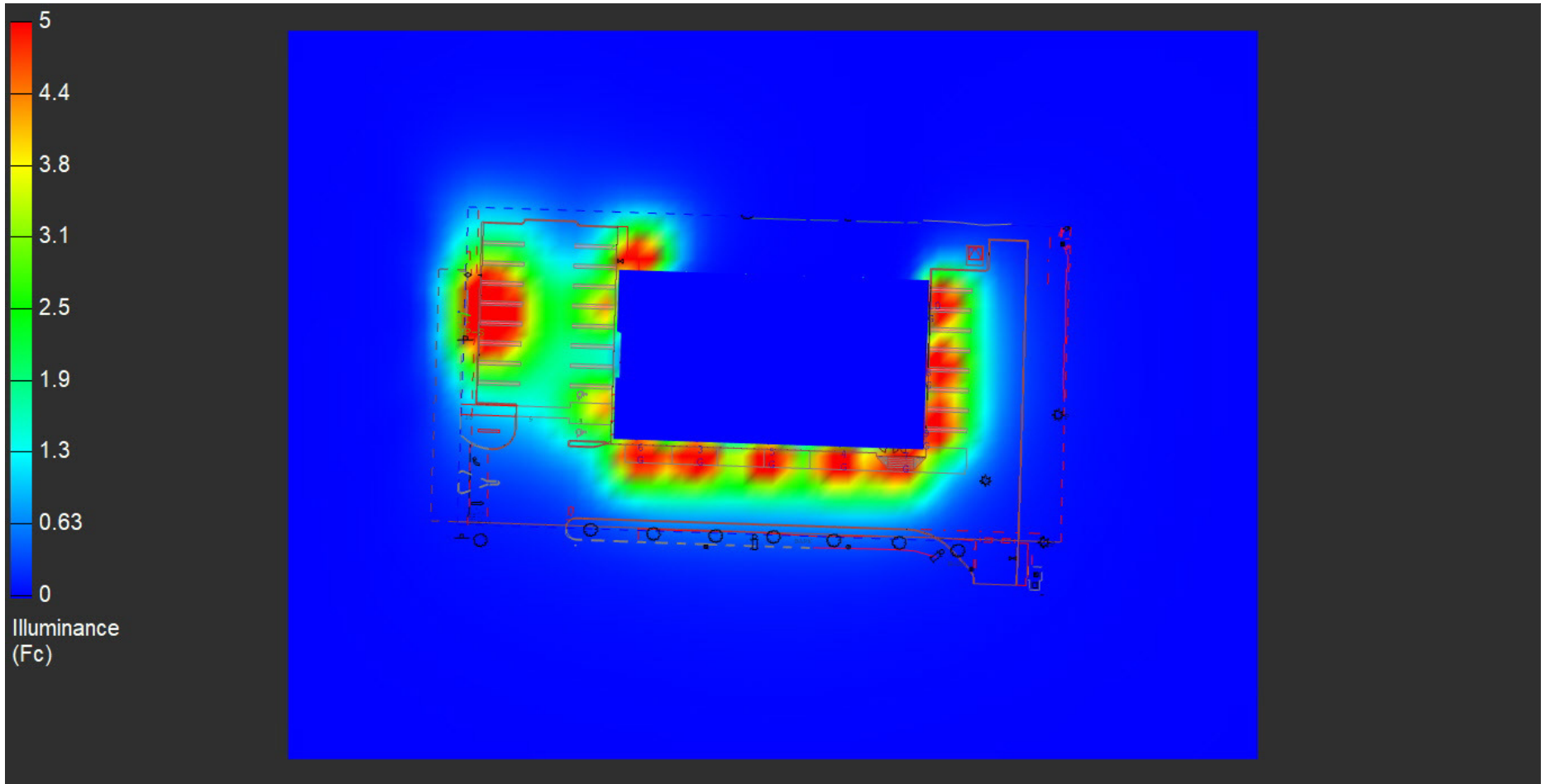


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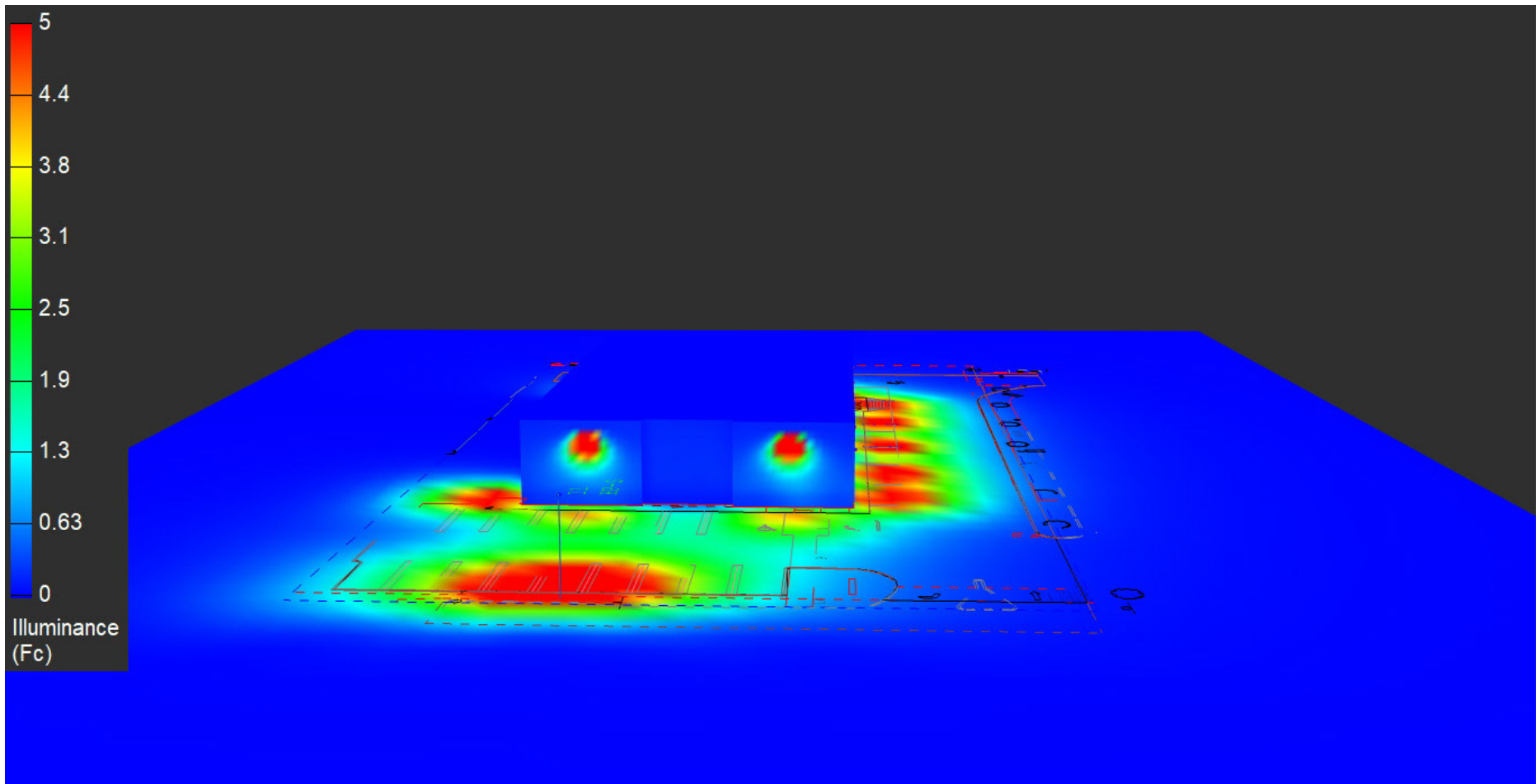


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TYPE G



LED Full Cut Wall Pack



WALL PACK

Wall pack light is one of the most dependable lights for security lighting luminaire. Applications include perimeter, security, stripmalls, entrance ways, and any general outdoor surface. The high performance optics are specifically designed to produce a Type III distribution.

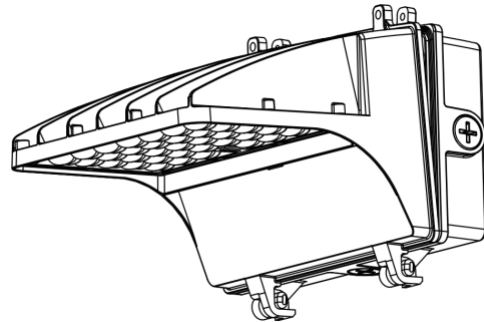
DESCRIPTION

- Energy Saving 40 Watt Integrated LED
- Lasts 45 years* or 50,000 Hours Continuous Use
- Maintenance Free — No Bulb Replacements
- 5 Year Limited Warranty



WP4053

Input Voltage	120-277V
Wattage	40W
Dimmability	Dimmable
Lumens	5200Lm
CCT ₃	5000K
Avg Rated Life ¹	50,000 hours
Power Factor	0.9
IP Rating	Wet Location
CRI ₄	>80Ra
Working Temp.	Min -4°F (-20° C), Max 104°F (40° C)
Product Dimensions	9.3 x 7.1 x 8.9 in
Product Weight	1.8lbs
Mastor Carton Weight	19.8lbs
Case Pack	4 pc



1 Hours lifetime with 70% lumen maintenance
2 Thermally stable typical lumens (±10%)
3 Thermally stable CCT (±10%)
4 Color rendering index/Ra



AREA LIGHT SERIES

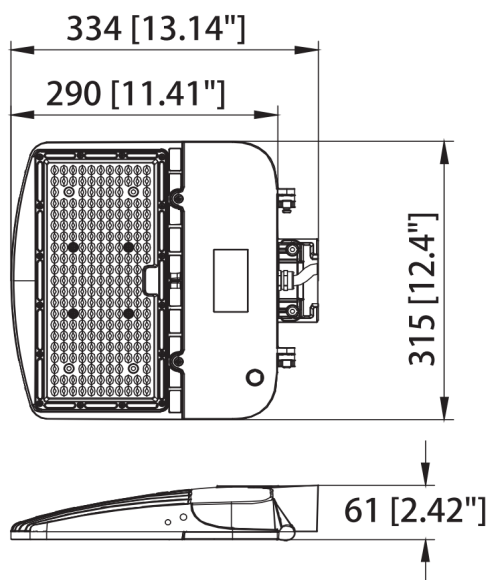
The LEDS Area Lights are perfect for new construction, retrofit and lighting upgrade solutions. High output and top of the line specifications. Available in multiple wattage and lumen output configurations to meet any lighting application. Type 4 & 5 available.



FEATURES

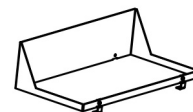
- Energy Saving 150 Watt Integrated LED
- Lasts 45 Years* or 50,000 Hours Continuous Use
- Maintenance Free - No Bulb Replacements
- 5-Year Limited Warranty

Model Number	Part Number	Watts	IP Rating	CCT	CRI	Input Voltage	Product Dimensions(in)
AL1211	AL-15050-MV	150W	IP65	5000k	>80Ra	120-277	11.68x12.40x2.69



ACCESSORIES

Accessories	Model Number	Part Number
Slip-fitter mount	AL7770	AL-SF-003
Round pole mount	AL7771	AL-RP-003
Glare Shield	AL1211SH	N/A



TYPE J



Steel Poles

POLE

The pole shaft is fabricated from hot rolled carbon steel having a minimum yield of 55,000 PSI and conforms to ASTM A500 grade C requirements. The shaft construction is a single piece of formed steel welded longitudinally. The hand hold is located 1' above the pole base. A ground lug is provided standard.

BASE COVER

A full base cover is provided which encapsulates the base plate and anchor bolts to provide a clean transition from pier to pole.

ANCHOR BASE

The anchor base is fabricated from a structural quality hot rolled carbon steel plate that has a minimum yield strength of 36,000 PSI. The anchor base telescopes the pole shaft and has a circumferential weld on the top and bottom.

FINISH

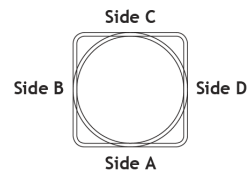
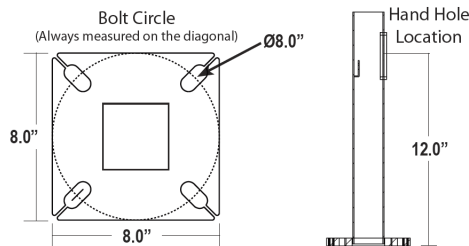
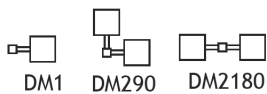
A Super Durable Polyester powder coat finish is electrostatically applied in our state of the art paint facility. Standard colors available: Black, Bronze, US Green, White. Custom colors available upon request. Galvanizing and T-Guard treatments available upon request. Additional warranty extensions available with these treatments.



Part Number	Description
LEDS-POLE-DM1	25' Pole, Drilled for Single Fixture, Bronze Finish
LEDS-POLE-DM290	25' Pole, Drilled for 2 Fixtures at 90°, Bronze Finish
LEDS-POLE-DM2180	25' Pole, Drilled for 2 Fixtures at 180°, Bronze Finish
LEDS-POLE-BOLTS	4 Anchor Bolt with Rigid Template

Technical Data		Max EPA (1.3 Gust)	
Nominal Pole Height	25' - 0"	90 mph	5.0
Shaft Dimension	25' x 4"	100 mph	3.0
Wall Gauge	11 Gauge	110 mph	1.5
Bolt Circle	8.0"	120 mph	0.4
Bolt Size	3/4" x 18" x 3"	130 mph	N / A
Base Plate Dimensions	8.0" sq. x .75" thk.	140 mph	N / A
Est. Shipping Weight	180 lbs		

Mounting Options



Drilling Locations

Sides	A	B	C	D
Hand Hole	X			
DM1	X			
DM290	X	X		
DM2180		X		X



LEDS LLC
N8774 Firelane 1
Menasha, WI 54952

P: 920-840-6054
F: 920-840-6424
www.leds-llc.com



Oregon

Tina Kotek, Governor

Department of Transportation
Region 2 Tech Center
455 Airport Road SE, Building B
Salem, Oregon 97301-5397
Telephone (503) 986-2990
Fax (503) 986-2839

DATE: October 30, 2023

TO: Douglas Baumgartner, PE
Development Review Coordinator

FROM: Arielle Ferber, PE
Traffic Analysis Engineer

SUBJECT: Florence Dollar General Development (Florence, OR) – Outright Use
TIA Review Comments

ODOT Region 2 Traffic has completed our review of the submitted traffic impact analysis (dated October 23, 2023) to address traffic impacts due to development on the southeast quadrant of US 101 at 36th Street in the city of Florence, with respect to consistency and compliance with ODOT's Analysis Procedures Manual, Version 2 (APM). The APM was most recently updated in September 2023. The current version is published online at: <http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx>. As a result, we submit the following comments for the City's consideration:

Analysis items to note:

- The following was noted relating to the crash analysis:
 - Total number of reported crashes at the US 101 at 37th Street and Redwood Street at 35th Street should be one and zero, respectively.
 - Using the "rule of thumb" crash rate threshold of 1.0 to be indicative of design deficiencies has been replaced as a result of more comprehensive data and research in recent years. Rather, it is more appropriate to compare an intersection's crash rate to that of the corresponding 90th percentile crash rate per Section 4.1.1 and Exhibit 4-1 of ODOT's APM. It should be noted that none of the intersections exceed their corresponding 90th percentile crash rate.
- ODOT mobility targets can be found in the *Oregon Highway Plan (OHP)*. The v/c mobility target for US 101 (statewide highway, within UGB, non-MPO, 40 MPH) at all highway study intersections is 0.85. The study area intersections are projected to operate below this target in the 2024 Build conditions therefore the conclusions of the study remain the same.

Proposed mitigation comments:

1. ODOT maintains jurisdiction of the Oregon Coast Highway No. 09 (US 101) and ODOT approval shall be required for all proposed mitigation measures to this facility.

2. No mitigation measures have been proposed. This conclusion appears reasonable for this proposed development.

Thank you for the opportunity to review this traffic impact analysis. As the analysis software files were not provided, Region 2 Traffic has only reviewed the submitted report.

This traffic impact study has been, for the most part, prepared in accordance with ODOT analysis procedures and methodologies. If the City determines any of the above comments will merit the need for reanalysis, we would be willing and able to assist with a second round of review.

If there are any questions regarding these comments, please contact me at (971) 208-1290 or Arielle.Ferber@ODOT.state.or.us

Exhibit L

From: Mike Miller <mike.miller@ci.florence.or.us>
Sent: Friday, November 3, 2023 5:11 PM
To: Wendy Farley-Campbell <wendy.farleycampbell@ci.florence.or.us>; Planning Department <PlanningDepartment@ci.florence.or.us>
Cc: Jake Krieger <jake.krieger@ci.florence.or.us>; August Murphy <august@ci.florence.or.us>
Subject: Dollar General

Hi Wendy and Clare,

Public Works offers the following comments regarding the proposed Dollar General development:

Public Works and Civil West Engineering performed a review of the Dollar General Traffic Impact Analysis (TIA) by SCJ Alliance, dated October 2023. Our review was performed in accordance with City Code and the 2012 Transportation System Plan (TSP). Note that Dollar General's application was made prior to the adoption of the 2023 Transportation System Plan.

The study was well performed and no other comments or questions have come up. The requirements set forth by City Code and the 2012 TSP appear to be met and no further action is required. Public Works has also reviewed the comments from ODOT regarding the Dollar General TIA and concur with their findings.

Regarding the civil engineering plans from Dollar General, Public Works has provided comments back to the engineer for Dollar General and have requested the following items be addressed prior to the issuance of public improvement permits:

- Stormwater plans need to be in compliance with the City's stormwater design manual and stormwater management plans
- Include City of Florence standard detail drawings in the plan set, including the use of 'Blue Bolts' for water system fittings. Blue bolts are constructed from corrosion-resistant, high-strength low-alloy steel that conforms to ANSI/AWWA C111/A21.11 and feature a blue fluoropolymer coating.
- Relocation of the existing 8-inch water main away from the proposed building and a minimum 10-foot separation from stormwater, sewer and underground electric lines.

Thank you,

Mike

Mike Miller
Public Works Director
mike.miller@ci.florence.or.us
(541) 997-4106



CONFEDERATED TRIBES OF
COOS, LOWER UMPQUA & SIUSLAW INDIANS

1245 Fulton Ave. Coos Bay, OR 97420
Phone (541) 888-9577 or 1-888-280-0726
Fax (541) 888-2853

Exhibit M

SENT VIA EMAIL

11/1/23

City of Florence Planning Dept.
250 Hwy 101
Florence, OR 97439

Re: PC 23 08 DR 02

Site Address: Intersection of Hwy 101 and 36th St.

The Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians have no objections to the proposed project. Please be aware that the property is in proximity to known cultural resource sites and so may contain as yet unlocated cultural resources. **We request that we be contacted immediately if any known or suspected cultural resources are encountered during any phase of the work.**

Please also be aware that federal and state laws prohibit intentional excavation of known or suspected cultural resources without an archaeological permit and require that we be notified immediately if resources are discovered, uncovered, or disturbed. 43 CFR 10 applies on tribal and federal lands, federal projects, federal agencies, as well as to federal actions and federally funded (directly or indirectly) projects. ORS 97.745 prohibits the willful removal, mutilation, defacing, injury, or destruction of any cairn, burial, human remains, funerary objects, or objects of cultural patrimony of any native Indian. ORS 358.920 prohibits excavation injury, destruction, or alteration of an archaeological site or object or removal of an archaeological object from public or **private lands**.

Please feel free to contact me if I may be of any further assistance.

Sincerely,

Jillian Hendrix
Cultural Resources Protection Specialist

Exhibit N

From: Kienlen, Jordan G <Jordan.Kienlen@lumen.com>

Sent: Thursday, November 02, 2023 12:10 PM

To: Sharon Barker <sharon.barker@ci.florence.or.us>

Subject: Referral Request for new Dollar General retail store Hwy 101, North of Burger King 18-12-23-22-06800

Hello Sharon,

Upon review, there will be no objection/conflict with Lumen facilities with this project. If the new Dollar General wishes to have service connected to the new building, have them reach out to us directly so we can begin the planning process.

If you have any questions, please feel free to reach out at any time.

Thanks,



Jordan Kienlen

Local Network Implementation Engineer II

112 E 10th Ave Eugene, OR 97401

tel: 541-639-8358 | cell: 541-613-8507

jordan.kienlen@lumen.com

Exhibit O

From: Michael Schick <chief@wlfea.org>

Sent: Thursday, October 26, 2023 12:04 PM

To: Sharon Barker <sharon.barker@ci.florence.or.us>

Subject: RE: Referral Request for new Dollar General retail store Hwy 101, North of Burger King 18-12-23-22-06800

Sharon,

The Fire Department has no issues with emergency access or water supply for the planned development. We are highly encouraging the installation of an automatic sprinkler system but are not requiring it at this time. We are requiring a key box be placed on the exterior.