

GLADSTONE PLANNING COMMISSION REGULAR AGENDA GLADSTONE CIVIC CENTER, 18505 PORTLAND AVENUE <u>Tuesday, December 19, 2023 – 6:30 p.m.</u>

The City of Gladstone is abiding by guidelines set forth in House Bill 2560, which requires the governing body of the public body, to extent reasonably possible, to make all meetings accessible remotely through technological means and provide opportunity for members of general public to remotely submit oral and written testimony during meetings to extent in-person oral and written testimony is allowed. Therefore, this meeting will be open to the public both in person and virtually using the Zoom platform.

Please click the link below to join the webinar: https://us06web.zoom.us/j/82316339036?pwd=1FFZIhM82e_xk1Fvpf8wsMVBUWPqnw.btwan0JHdtjwCO3J

Passcode: 621875

Or One tap mobile : +17193594580,,82316339036#,,,,*621875# US; +17207072699,,82316339036#,,,,*621875# US (Denver)

Or Telephone: Dial(for higher quality, dial a number based on your current location): +1 719 359 4580 US; +1 720 707 2699 US (Denver)

Webinar ID: 823 1633 9036 Passcode: 621875

If members of the public would like to comment on an agenda item (either virtually or in person) please email your comments to <u>bannick@ci.gladstone.or.us</u> prior to 12:00 p.m. (noon) on December 19, 2023. Individuals attending in person may submit a speaker card to the City Recorder prior to the beginning of the meeting. Comments are limited to three (3) minutes.

The Planning Commission will also have *Business from the Audience* at the end of the meeting. To speak during this time, (either virtually or in person) please email <u>bannick@ci.gladstone.or.us</u> prior to 12:00 p.m. (noon) on December 19, 2023 with your name, topic of discussion, and city of residence. Individuals attending in person may submit a speaker card to the City Recorder prior to the beginning of the meeting. Comments are limited to three (3) minutes.

6:30 P.M. CALL TO ORDER ROLL CALL FLAG SALUTE

CONSENT AGENDA

All items listed below are considered to be routine and will be enacted by one motion. There will be no separate discussion of these items unless a commission member or person in the audience requests specific items be removed from the Consent Agenda for discussion prior to the time the commission votes on the motion to adopt the Consent Agenda.

1. Approval of October 17, 2023 Meeting Minutes (no meeting in November)

REGULAR AGENDA

- 2. Monthly Planning Report November 2023
- 3. **CONTINUED PUBLIC HEARING**: DR-23-06. Construction of a new 7,458 sq. ft. warehouse storage building. No proposed off-street parking or exterior storage. 6075 Duniway Avenue, Greg Philo.
- 4. **PUBLIC HEARING:** TXT-23-03. Gladstone Municipal Code Amendments for Chapter 17.78 Home Occupation.
- 5. 2024 Long-Range Planning Work Program

BUSINESS FROM THE PUBLIC - Visitors: This is an opportunity for members of the audience to bring to the Commission's attention any item not otherwise listed on the Agenda. Comments will be limited to three (3) minutes per person. Speakers may not yield their time to others and must fill out a speaker card available in the back of the room prior to making a comment.

BUSINESS FROM THE PLANNING COMMISSION

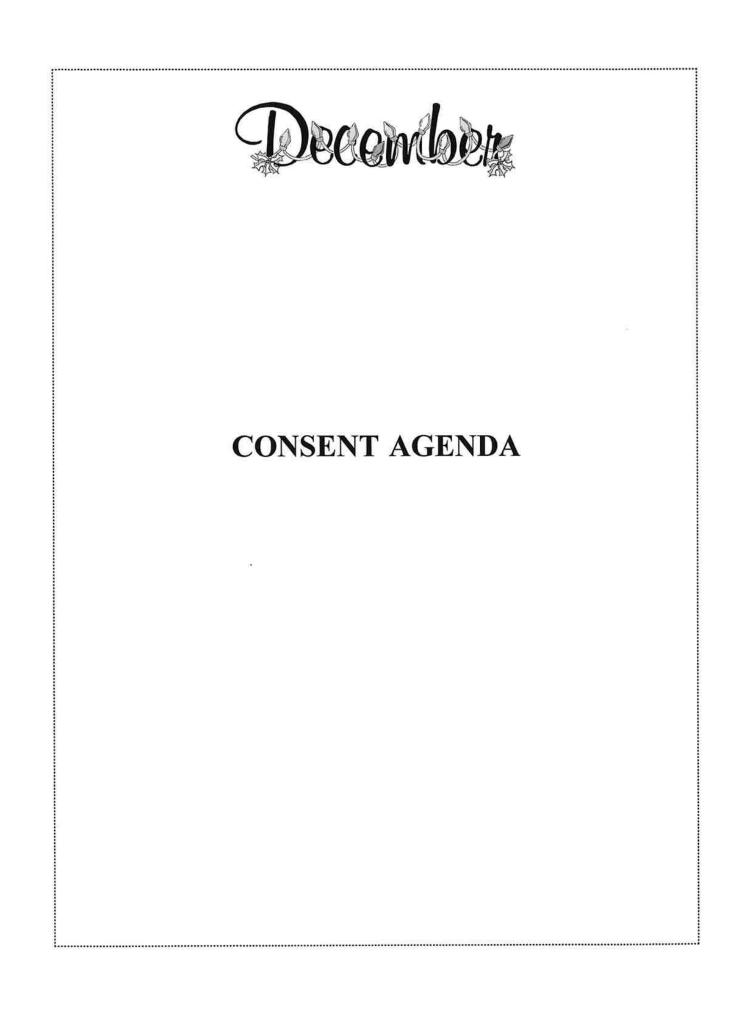
ADJOURN

Upcoming Meeting Dates:

• January 16, 2024 – Planning Commission Meeting

MEETING ACCESSIBILITY SERVICES AND AMERICANS WITH DISABILITIES ACT (ADA) NOTICE

The Civic Center is ADA accessible. Hearing devices may be requested from the City Recorder at least 48 hours prior to the meeting. Individuals requiring other assistance must make their request known 48 hours preceding the meeting by contacting the City Recorder at <u>bannick@ci.gladstone.or.us</u>. Staff will do their best to respond in a timely manner and to accommodate requests.



GLADSTONE PLANNING COMMISSION MEETING MINUTES OF OCTOBER 17, 2023

Meeting was called to order at 6:31 P.M. (In Person and via Zoom)

ROLL CALL:

Chair Natalie Smith, Commissioner Jennifer Volbeda, Commissioner Andriel Langston, Commissioner Andrew Labonte, Commissioner Pat Smith, Commissioner Thomas Mersereau

ABSENT:

Commissioner Jacob Wease

STAFF:

Heather Austin, Senior Planner; Tami Bannick, City Recorder

CONSENT AGENDA:

1. <u>APPROVAL OF AUGUST 15, 2023 MEETING MINUTES:</u>

Commissioner Pat Smith made a motion to approve the Consent Agenda. Motion was seconded by Commissioner Langston. Ms. Bannick took a roll call vote: Commissioner Volbeda – yes. Commissioner Langston – yes. Commissioner Labonte – yes. Commissioner Pat Smith – yes. Commissioner Mersereau – yes. Chair Smith – yes. Motion passed with a unanimous vote.

REGULAR AGENDA:

2. <u>MONTHLY PLANNING REPORTS – SEPTEMBER & OCTOBER 2023:</u> Ms. Austin said the reports are included in the packet.

She said business was steady as far as customer service contacts. They looked at a sign permit for the Subway located on Princeton.

3. <u>PUBLIC HEARING: DR-23-06 – CONSTRUCTION OF A NEW 7,458 SQ. FT.</u> <u>WAREHOUSE STORAGE BUILDING – 6075 DUNIWAY AVENUE:</u> Chair Smith opened the public hearing at 6:35 P.M.

She asked if there were any abstentions from the Commissioners – there were none. She asked if there were any significant ex parte/pre-hearing contacts or conflicts of interest – there were none. All the Commissioners had viewed the site. She asked if any member of the audience wished to challenge the right of any Commissioner to hear this matter – none did. She asked if any member of the audience wished to question the jurisdiction of this body to act on behalf of the City Council on this matter – none did.

Chair Smith went over the order/procedures they will be following. She said this is an item in which they will be receiving public testimony. Any interested person may present testimony concerning the proposed amendments. The public hearing is your opportunity to comment before the City makes a decision. She went over the procedures for testifying.

Ms. Austin went over the staff report/Power Point presentation. This project is for the Fire Restoration Company. There is no proposed off-street parking or exterior storage and there is no longer a requirement to provide off-street parking. The project is zoned light industrial. This use

is permitted outright in this zoning district. It is approximately .5 acres in size. It doesn't fall within the flood plain or any environmental overlays in the City. They sent notice to applicant/owner of the site, as well as property owners/residents within 250 feet, as well as the appropriate agencies. They only received comments from City of Gladstone Public Works/Engineering. They need to have conversations with the applicant regarding the width of the proposed driveways, public improvements, right-of-way dedication, and 8-foot public utility easements along all street frontages.

She went over the design/schematic/maps of the project. Staff recommends that this design review be approved. The conditions could be applied to make this proposal meet the development code, with the exception of building materials.

APPLICANT TESTIMONY:

Greg Philo, applicant, gave some background information about himself. He said this is a very narrow lot, so it creates design challenges. He said the issues with power poles and landscaping could make this project non feasible. He is asking for a continuation. He would like to a have conversation about the issues now so that they are better repaired next time. He shared information/photos/colors of the building material. He has already purchased the steel. There was discussion regarding building materials.

Commissioner Pat Smith asked what was going to be stored – Mr. Philo said it would mainly be furniture/clothing/etc. that has been cleaned and will be stored there until the structure is rebuilt after a fire. The residence/manufactured home adjacent to the site belongs to him.

Rapheal Goodblatt, Architect, said they are trying to get a handle on the driveway, a utility easement, and a 10-foot planter strip all the way around the site. He asked for input from the Planning Commission. Mark Bello, Planning Consultant, said they are interested in how the screening would be expected to work, signage, parking, and loading and if there are examples of these in the City that they could look at. Ms. Austin said the landscaping strip referenced in the staff report could overlap with an 8-foot public utility easement, so it's not 18 feet; it's 10 feet. The L portion of the building issue would be a question for Public Works/Engineering, as well as the utility easement issue. She found that the asphalt area serves as a loading area. She wants to be sure they are meeting the code requirements, and she believes they can. She hasn't seen a signage proposal of any kind, so she couldn't comment on that - a sign is a separate permit. Mr. Philo said their trucks would be parked in the paved area while they are being loaded/unloaded. They use box trucks. There was further discussion regarding the landscape strip/driveway/sidewalk/power poles/ADA ramp.

PUBLIC TESTIMONY:

None. There has been no correspondence received pertaining to this matter.

Commissioner Langston made a motion to grant a 60-day continuance for application DR-23-06. Motion was seconded by Commissioner Volbeda. Ms. Bannick took a roll call vote: Commissioner Volbeda – yes. Commissioner Langston – yes. Commissioner Labonte – yes. Commissioner Pat Smith – yes. Commissioner Mersereau – yes. Chair Smith – yes. Motion passed with a unanimous vote.

BUSINESS FROM THE PUBLIC:

None.

BUSINESS FROM THE PLANNING COMMISSION:

They had discussed bringing their personal financial information to the next meeting.

Commissioner Pat Smith said he has lived in Gladstone for 42 years. He is retired. They own their home outright. He lives off the proceeds of investments, he has three small pensions, and he is a partner in a small business that provides a small amount of income. He has no business interests, although he is a partner in a business that's registered in Gladstone, but they do no business here – it's basically an office where they receive mail and write checks.

Chair Smith said she has lived here for 22 years. She owns a home in Gladstone. She has a full-time job and a part time job. She has no other business interests.

Commissioner Langston has lived here for approximately 10 years. He works for a construction management firm that works in Oregon and Washington. His wife has her own house cleaning company and works in the Metro area, but has no customers in Gladstone. They own their home. Commissioner Volbeda has lived here for three years. She owns her home. She has a full-time job working for a large retail company who doesn't currently do business in Gladstone.

Commissioner Labonte has lived here since 2015. He and his wife own their home. His wife does hospice care with Providence. He has two part-time jobs, one of which is with Gladstone Mercantile (property management).

Commissioner Mersereau has lived in Gladstone for over 55 years. He owns his home outright. He has a property management business. He has one rental in Gladstone. He owns two other rentals. He is a treasurer for a car club.

There was further discussion regarding the format used for the previous project. Everyone liked the open dialog; that it was more like a work session and was very helpful and informative.

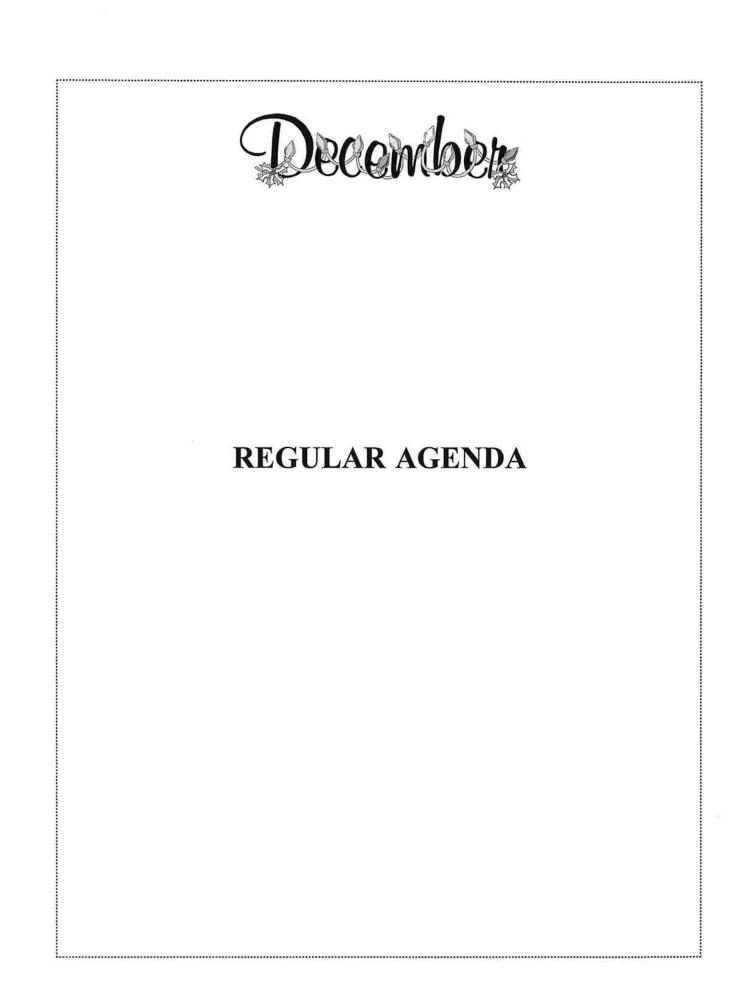
ADJOURN:

Commissioner Langston made a motion to adjourn the meeting. Motion was seconded by Commissioner Mersereau. Ms. Bannick took a roll call vote: Commissioner Mersereau – yes. Commissioner Pat Smith – yes. Commissioner Labonte – yes. Commissioner Langston – yes. Commissioner Volbeda – yes. Chair Smith – yes. Motion passed with a unanimous vote.

Meeting was adjourned at approximately 7:34 P.M.

Minutes approved by the Planning Commission this ______ day of ______, 2023.

Natalie Smith, Chair





City of Gladstone Monthly Planning Report November 2023

PUBLIC CONTACTS/PLANNING ACTIONS

CUSTOMER CONTACT/ Planning Actions	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	YEAR- TO-DATE TOTALS
Customer Service Counter Contacts	1	1	1	1	0	1	0	0	0	0	1		6
Customer phone/email Contacts	48	37	31	43	34	27	20	32	42	44	32		390
Building Permits with Land Use Review	4	6	2	4	8	4	2	6	9	8	5		58
Code Compliance Review	1	1	1	0	0	0	1	0	0	0	0		4
Pre-application Conferences	1	0	1	0	0	0	1	1	1	0	2		7
Administrative Decisions	2	2	0	0	0	0	2	0	1	0	0		7

PLANNING COMMISSION ACTIONS/DECISIONS

• No Planning Commission in November 2023

CITY COUNCIL LAND USE ACTIONS/DECISIONS

• No City Council Land Use Actions/Decisions in November 2023

PRE-APPLICATION CONFERENCES

- Roadrunner Pizza Storage Building Addition Design Review
- Gladstone School District Transportation Facility Design Review

ADMINISTRATIVE PERMITS

No Administrative Permits in November

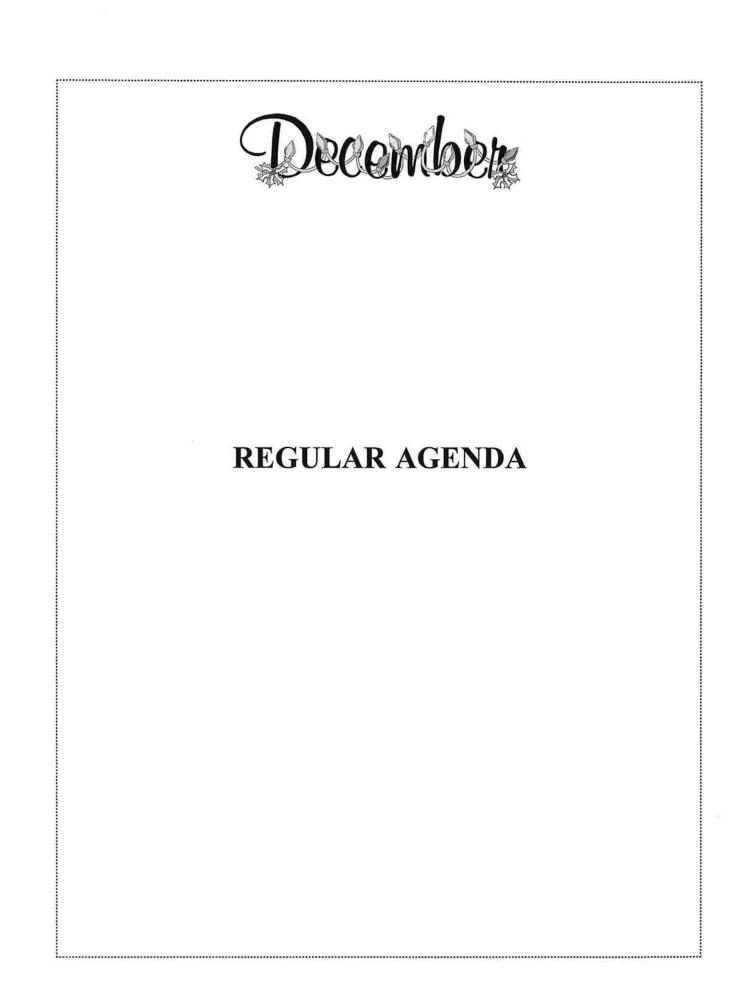
BUILDING PERMITS WITH LAND USE REVIEW

Date	Address	Permit #	Description
11/16/23	275 Ipswich Street	B0210923 Resubmittal	Triplex addition to site with 1 dwelling unit (total of 4 dwelling units/quadplex) Middle Housing- no design review required. Setbacks and maximum height met. No trees to be removed. Parking not required because site is within ½ mile of McLoughlin (high frequency transit) per CFEC rules. However, if parking is provided, it must meet city standards. Review Cycle #9. Gladstone Zoning Standards continue to be met.
11/16/23	1085 Portland Ave	B0515823	Exterior ADA upgrades and interior improvements to existing Commercial Structure for new Happy Rock Coffee Roasting Co. coffee shop and roastery. Review Cycle #2. Gladstone Zoning Standards continue to be met.
11/16/23	525 Portland Ave	B0569623	Gladstone Library combined trash and generator enclosure. Shown matching plans approved by Planning Commission in February 2022.
11/30/23	19605 River Rd	MH0008323	Replacement of Manufactured Home Dwelling in location of existing home
11/30/23	19605 River Rd	MH0008423	Replacement of Manufactured Home Dwelling in location of existing home

FUTURE ITEMS/PROPERTY UPDATES

Date	Торіс
12/19/23	Planning Commission Public Hearing- Continued- DR-23-06 FIRE Restoration Warehouse Building (Pending re-submittal of applicant's materials)
	Planning Commission Public Hearing- Updating Home Occupation Code Language (GMC Chapter 17.78)

Page 2



Agenda Item No. 3



••

PC Meeting Date: 10/17/2023 (Original) 12/19/23 (Continued)

STAFF REPORT: DESIGN REVIEW

Application No.:	DR-23-06
Applicant/Owner:	Greg Philo, FIRE Restoration (greg@firexperts.net) Raphael Goodblatt, AHHA Architect Inc. (rag@ahhapdx.com)
Project Location:	6075 Duniway Ave, Gladstone OR, 97027; 22E19AA00401
Project Description:	Construction of a new approximately 7,500 square foot warehouse storage building. No proposed off-street parking or exterior storage.

_ _ _ _ _ _

SUMMARY OF STAFF RECOMMENDATION

12.12.23 Update: The Planning Commission opened the public hearing for DR-23-6 on October 17, 2023. The Commission accepted the Staff Report and the Applicant's Testimony. There were no members of the public present to testify. The Commission discussed the proposal with the Applicant and city staff. The Applicant requested an extension of the public hearing to December 19, 2023 and granted a 60-day extension to the state-mandated 120-day review period, from January 30, 2024 to March 30, 2024. Portions of this staff report that are new are identified in <u>highlighted underlined text</u> and portions to be removed are identified in strikethrough text.

The planning staff <u>recommend approval</u> of the Design Review application DR-23-06 and recommend the following findings and standard conditions in support of approval, as well as 4 special conditions: (1) Revised Building Elevations, and Site Plan-and Narrative; (2) Construction Plans for Public Improvements; (3) Right-of-Way Dedication and (4) Easements.

The site is located at 6075 Duniway Ave, Tax Lot ID 22E19AA00401, a 0.51-acre site zoned LI- Light Industrial. The purpose of the Design Review is to add a warehouse building to the site. There is an existing single-household residential structure on the site which is proposed to remain.

As proposed and conditioned, Planning Staff found the application consistent with all applicable standards from Title 17 of the Gladstone Municipal Code (GMC). Therefore, staff recommend that the Planning Commission approve this Design Review application <u>as shown on the submitted plans</u> with the standard conditions and 4 special conditions of approval. The standard of review for the proposed project is the City of Gladstone's Municipal Code Zoning and Development Title 17.

Table of Contents

SUMMARY OF STAFF RECOMMENDATION1
REQUEST FOR COMMENTS
STANDARD CONDITIONS
FINDINGS
Chapter 17.24 LI – LIGHT INDUSTRIAL DISTRICT6
Chapter 17.80 DESIGN REVIEW7
DIVISION IV. DEVELOPMENT STANDARDS
Chapter 17.42 GENERAL PROVISIONS9
Chapter 17.44 BUILDING SITING AND DESIGN9
Chapter 17.46 LANDSCAPING13
Chapter 17.48 OFF-STREET PARKING AND LOADING15
Chapter 17.52 SIGNS26
Chapter 17.54 CLEAR VISION26
Chapter 17.56 DRAINAGE27
Chapter 17.58 GRADING AND FILL29
Chapter 17.60 UTILITIES29

REQUEST FOR COMMENTS

Sent to: Property owners and residents within two hundred fifty (250) feet of the subject property, City of Gladstone Public Works, Police and Engineering as well as ODOT, Clackamas Fire, Water Environment Services (WES), Oak Lodge, and Gladstone Disposal.

Responses Received: The proposal was reviewed by Gladstone Public Works and Engineering who provided comments dated October 10, 2023 <u>and December 7, 2023</u> regarding public utilities and streets, which have been incorporated into this report. No comments were received from the public, Oak Lodge, Clackamas Fire District on behalf of Gladstone fire, ODOT or WES.

STANDARD CONDITIONS

- 1. Expiration. This approval shall remain valid for two years following the date of approval per 17.80.100. If the approved use has not commenced by that date, this approval shall expire unless a time extension is granted pursuant to GMC 17.66.015(4).
- 2. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Planning Director for the City of Gladstone.
- 3. Assignment. The permit may be assigned to any qualified person, provided assignee files with the City Planning Department an affidavit accepting all terms and conditions of the permit.

- 4. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.
- 5. The Oak Lodge Rules and Regulations and Design and Construction Standards in effect on the date of complete application to OLWSD, not land use application date, shall apply to all utilities within the Oak Lodge Water Services Service Area.
- 6. Construction Plans. Plans detailing the installation of public and private utilities, site grading and other public and private improvements shall be submitted to the City of Gladstone Public Works Department for review and approval per GMC 17.60.010 and 17.42.030. The design, location and planned installation of all street and sidewalks, natural gas, power, street lighting, telephone, cable television, storm water, water and sanitary sewer provisions are subject to approval by the appropriate agency/utility service provider. Construction plans shall be designed and stamped by a Professional Engineer registered in the State of Oregon. Plan submittal shall include three (3) paper sets of plans, a pdf copy, an Engineer's Estimate for the public improvements, and a drainage report. The Gladstone Public Works Department provided detailed comments regarding the Construction Plans submittal in their memo dated October 10, 2023, included with this report.
- 7. Pre-Construction Conference. Once grading/construction plans are ready to be approved by the City of Gladstone, a Pre-Construction Conference with final sign-off on the Construction Plans is required per GMC 17.40.030. Review fees, SDC's and performance bonding may be required of the applicant prior to scheduling the pre-construction conference.
- 8. Building Permits. The applicant shall obtain required building permits from Clackamas County. The applicant shall comply with requirements of the permits.
- 9. Signage. All signs shall meet the provisions of Subsection 17.52 of the GMC. Sign designs were not included with the submittal package. If existing signage is to be replaced with signage in the future, a sign permit shall be filed separately at the time it is needed.
- 10. ADA Access. This approval is subject to the development complying with the provisions of the Americans with Disabilities Act (ADA) per GMC 17.50.020 (6)(f), including provisions for curb ramps, circulation within the site, and appropriate grades to the public entrances of the buildings.
- **11.** As-Built Submittals. Prior to the approval of the Certificate of Occupancy, the applicant shall provide the City Public Works Department with copies of the as-built submittals per GMC 17.60.020(7).
- 12. Stormwater Certification. Prior to approval of the Certificate of Occupancy, the applicant shall provide the City Public Works Department with a recorded copy of the Storm Drainage Facilities Maintenance Agreement prepared using an approved City of Gladstone form, a signed certification from the design engineer indicating that the surface water systems have been inspected and installed per the approved plans and that the systems are functioning as designed, and a maintenance bond in the amount of ten (10) percent of the cost of the public improvements.

City of Gladstone Planning Staff Report File No. DR-23-06

3

SPECIAL CONDITIONS OF APPROVAL

- 1. Revised Building and Site Plans-and Narrative. Prior to building permit approval, submit revised building plans, building elevations, and site plan and narrative to the Gladstone Planning Department that demonstrates:
 - a. all exterior materials and finishes are high-image such as masonry, architecturally treated tilt-up concrete, glass, wood or stucco and no metal siding is utilized unless specifically approved by the Planning Commission, acting as the design review committee, in accordance with GMC 17.44.020(4) (applicant noted they would provide examples at the Planning Commission hearing)
 - b. site photometrics, in accordance with GMC 17.44.020(5)-(6) (applicant noted this is in production)
 - c. compliance with the trash disposal and recycling collection provisions of GMC 17.44.020(8) (plans note trash and recycling collection in the building but need to provide details of compliance with GMC 17.44.020(8))

12.12.23 Update: The items below identified with strikethrough text were previously conditioned in the October 10, 2023 staff report. However, the applicant's resubmittal addresses many of the items identified. Next to each former condition, an explanation of compliance is provided in <u>highlighted underlined text</u>. These provisions are no longer specifically recommended as conditions of approval.

- d. skylights or clerestory windows to provide natural lighting and/or solar heating of interior spaces per GMC 17.44.020(2)(c); and <u>Sheet A-201 Exterior Elevations</u> identifies clerestory windows above all of the doors to provide natural lighting and/or solar heating of the interior space
- e. all mechanical equipment screened in accordance with GMC 17.44.020(3)(e) Sheet AS-001 Architectural Site Plan identifies appropriate screening for all facilities
- f. roof-mounted or other above ground equipment or facilities screened in accordance with GMC 17.44.020(7) Sheet AS-001 Architectural Site Plan identifies appropriate screening for all facilities
- g. a minimum of 3,333 square feet of landscaping on this 22,215 square foot site, in accordance with GMC 17.46.020(1) Sheet C2.00 SITE PLAN and Sheet AS-001 Architectural Site Plan identify landscaping in excess of the minimum requirement
- h. a minimum 10-foot-wide landscaped strip containing the materials listed in GMC 17.46.020(2)(c) in accordance with GMC 17.48.020(2)(b). Any fences or walls along this landscaped strip shall be located behind the required landscaped strip in accordance with GMC 17.46.020(2)(d) Sheet C2.00 SITE PLAN and Sheet AS-001 Architectural Site Plan identify the required landscaped strip
- i. landscaping irrigation and maintenance, overall plant species and street tree details, all of which shall comply with GMC 17.46.020(3)-(5) and (8) <u>Sheet AS-001</u> <u>Architectural Site Plan identifies that landscaping irrigation and maintenance will be</u> provided and that plant species will meet city specifications
- j. the loading area is constructed of asphalt or concrete and meets the provisions of GMC 17.48.040(1) Sheet C2.00 SITE PLAN identifies the loading area constructed with asphalt
- k. the two short-term bicycle parking spaces meet the design standards of GMC

17.48.050(2) Sheet AS-001 Architectural Site Plan identifies appropriate bicycle parking

I. a pedestrian pathway a minimum 6-feet in width meeting the standards of the Americans with Disabilities Act (ADA) connecting the public sidewalk along Duniway Avenue with the main entry on the west end of the building. Such pedestrian pathway shall meet the provisions of GMC 17.50.020(6)(a)-(f) Sheet AS-001 Architectural Site Plan identifies a 6-foot-wide pedestrian pathway connecting the front building door with the adjacent public sidewalk

- Construction Plans for Public Improvements. Prior to building permit approval, the applicant shall submit plans detailing the installation of public and private utilities and infrastructure, as detailed in the Public Works Comments dated 10.10.23 12.07.23 sections 1 through 7 in compliance with the Provisions of GMC 17.50.030, 17.50.040, 17.56.020 and 17.60.020.
- 3. Right-of-Way Dedication. Prior to issuance of a certificate of occupancy, adequate right-of-way shall be dedicated at the intersection of Portland Avenue and Duniway Avenue so that the new sidewalk improvements will be located within the public right-of-way per GMC 17.50.040.
- 4. Easements. Any backflow prevention vault shall be completely contained in a public water easement. Prior to issuance of a certificate of occupancy, 8-foot-wide public utility easements shall be recorded along both street frontages adjacent to this site unless a reduced width is approved due to existing structures, as noted in the Public Works Comments dated 10.10.23 12.07.23 and in accordance with Gladstone Public Works Standards.

NOTES

- 1. System Development Charges (SDCs). SDCs may be required due to the increased use of the property. The project shall provide all relevant information needed to calculate the SDCs to the Public Works Director.
- 2. Building Permits. Clackamas County Building Department will provide structural, mechanical, grading, and review of Fire & Life Safety, Plumbing, and Electrical Permits for this project.
- 3. Right of Way Permits. Prior to initiating work within the right of way, a permit from the Gladstone Public Works Department and ODOT are required as applicable.
- 4. Erosion Control permits are issued through Clackamas County Water Environment Services and are required for 800 sq. ft. or more of ground disturbance.

FINDINGS

Zoning Code Review & Findings

Below are applicable citations/review criteria from GMC Chapter 17 and findings in response to the criteria. Unless discussed below, the applicant has met the requirements of the applicable review criteria fully, and/or the Code's criteria are not applicable to this proposal and therefore do not

warrant discussion. Where conditions are necessary for the proposal to meet the provisions of GMC Chapter 17, the provisions are included beneath the findings for the applicable section. Subsections of specific criteria not applicable to the proposal are omitted from this report and indicated with a triple asterisk (***).

Chapter 17.24 LI – LIGHT INDUSTRIAL DISTRICT

17.24.020 Uses allowed outright.

In an LI zoning district, the following uses and their accessory uses are allowed outright. Outside or open storage shall be an allowed accessory use.

(13) Uses permitted outright in C-3 district.

Finding: The LI zone permits outright "Wholesale distribution outlet, including warehousing and storage". As these uses are permitted outright in LI per 17.24.020(15), this criterion is met.

17.24.045 Screening.

The following screening standards shall apply:

(1) Off-street parking and loading areas and business activities, such as service, repair, processing, storage and merchandise display, that are conducted outside of a wholly enclosed building, shall be screened from abutting properties where such properties are in a residential zoning district and from abutting unimproved public street rights-of-way where property on the opposite side of the unimproved right-of-way is in a residential zoning district.

(2) Business activities, such as service, repair, processing, storage and merchandise display, that are conducted outside of a wholly enclosed building, shall be screened from abutting properties where such properties are in a C-1 or C-2 zoning district and from abutting unimproved public street rights-of-way where property on the opposite side of the unimproved right-of-way is in a C-1 or C-2 zoning district.

(3) Storage, with the exception of merchandise display, outside of a wholly enclosed building shall be screened from abutting improved public street rights-of-way. Off-street parking and loading areas for customer vehicles, employee vehicles and vehicles for sale are not required to be screened from improved public street rights-of-way. However, off-street parking and loading areas for other types of vehicle storage (e.g., towed vehicles, recreational vehicles being stored as a service) shall be screened from abutting improved public street rights-of-way.

(4) Required screening shall be accomplished by building placement, a landscaped earth berm or a sight-obscuring fence or hedge.

(5) Required screening shall be reviewed pursuant to GMC Chapter <u>17.80</u> (Design Review). When design review is not required, screening shall be reviewed by the City Administrator or designee.
(6) Required screening shall be a minimum of six feet high. With the exception of equipment and vehicles, stored merchandise and materials shall not exceed the height of required screening. Stored equipment and vehicles may exceed the height of the required screening provided such equipment and vehicles are not stacked on top of one another.

(7) Required screening shall be sited so that it does not conflict with GMC Chapter <u>17.54</u> (Clear Vision). In locations where perimeter landscaping adjacent to a street is required as a condition of land use approval, required screening shall be located behind such landscaping.

<u>Finding</u>: The proposed use does not include outdoor storage, business activities or parking. The south side of the site will include loading areas which will not abut residentially zoned properties. The eastern boundary of the site abuts Portland Ave with residential zoning across the street. No changes are

proposed to this portion of the site. The screening requirements of 17.24.045 are not required of the proposed submittal. This standard is met.

17.24.060 Dimensional standards.

Except as provided in GMC Chapter <u>17.38</u> (Planned Unit Development), Chapter <u>17.72</u> (Variances) and Chapter <u>17.76</u> (Exceptions), the following dimensional standards shall apply in an LI zoning district: (1) <u>Building Height</u>. The maximum building height shall be 35 feet. This restriction may be varied as follows:

(a) Maximum building height may be increased by one story if the building is provided with an approved automatic sprinkler system throughout as provided in Section 506 of the Oregon Structural Specialty Code or its successor;

(b) Vertical projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials, flagpoles and similar objects not used for human occupancy are exempt from the maximum building height standard;

(c) Maximum building height may be increased if the city fire department reports that it possesses sufficient fire-fighting capability to provide emergency response to a structure of the height proposed.
(2) <u>Side Setbacks</u>. There shall be no minimum side setback requirement except when a side lot line abuts a residential zoning district, in which case the minimum side setback shall be 20 feet.

(3) <u>Rear Setbacks</u>. There shall be no minimum rear setback requirement except when a rear lot line abuts a residential zoning district, in which case the minimum rear setback shall be 20 feet.
 (4) <u>Front and Street Side Setbacks</u>. There shall be no minimum front or street side setback

requirements.

(5) <u>Architectural Features</u>. Architectural features such as cornices, eaves, gutters, chimneys and flues may project a maximum of two feet into a required setback area.

(6) <u>Off-Street Parking</u>. The boundary of any area developed or intended for off-street parking shall be located a minimum of five feet from all property lines.

(7) <u>Equipment Setbacks</u>. There shall be no minimum setback requirements for central air conditioners, heat pumps and similar equipment except when a lot line abuts a residential zoning district, in which case the minimum setback requirement from the lot line abutting the residential zoning district shall be 10 feet.

(8) <u>Portable Storage Container Setbacks</u>. When a lot line abuts a residential district, a setback does not apply to portable storage containers as defined in Chapter <u>5.22</u>.

Finding: The proposed building height of 24' will not exceed the 35' maximum. Vertical projections are not proposed. There are no minimum setbacks for this proposal as the portion of the site abutting Portland Ave and across from residential zoning will not be developed. There is no off-street parking proposed with this development. The submitted narrative states that an HVAC unit will be on the ground as shown on the plans; however, the plans do not show the HVAC unit. Because the site is separated from the residential zoning by the width of Portland Avenue, which is greater than 10' in width, any on-site placement of the HVAC unit will meet subsection (7), above. The site improvements meet the dimensional standards of the LI zoning district.

Chapter 17.80 DESIGN REVIEW

17.80.021 Applicability.

(1) This chapter shall apply to new structures; additions to existing structures; site development, such as grading, parking lot construction or commercial/industrial use of an undeveloped property; change of use; and major remodeling, with the following exceptions:***

<u>Finding</u>: The proposal is to add an approximately 7,500 SF warehouse building to the site that contains one residential structure. It is not clear the exact size of the building as some plan sheets indicate 7,450 sf, some plan sheets indicate 7,458 sf and the application form states 7,485 sf. The application requires design review. This criterion is met.

17.80.061 Submittal requirements.

(1) An application for design review shall include a minimum of twelve (12) copies of the following plans drawn to scale. A project summary shall accompany the application when necessary to describe special circumstances such as a request for a minor exception pursuant to GMC Section 17.80.090 (minor exceptions).

Finding: The applicant provided the application materials, including the narrative, site plan, landscaping plan and Architectural Plan. Copies needed to thoroughly assess the criteria used for evaluation were also provided. This standard is met.

17.80.090 Minor Exceptions.

(1) Authority. In conjunction with the design review plan approval, the Planning Commission may grant minor exceptions from the following requirements:

(a) Dimensional standards for yards required in the primary district;

(b) Dimensional standards for off-street parking as required in GMC Chapter 17.48 (Off-Street Parking and Loading);

(c) Minimum and maximum number of off-street parking spaces required in GMC Chapter 17.48 (Off-Street Parking and Loading).

(2) Limitations. No minor exceptions shall be greater than twenty-five percent (25%) of the requirement from which the exception is requested. Requests greater than twenty-five percent (25%) shall be subject to variance procedures. ***

<u>Finding</u>: The applicant is not requesting an exception. This is informational only. This criterion is not applicable as proposed.

17.80.100 Compliance.

(1) Approval of design review shall expire if construction has not begun within two years of the date of the final decision. Upon request and in accordance with GMC Section 17.66.015(4)(a), the two-year period may be renewed once by the City Administrator or designee for not more than one year.
(2) Prior to issuance of a final certificate of occupancy, the development site shall be checked by the City Administrator or designee to insure compliance with the approved design review plans. Approval of a final certificate of occupancy shall not be granted until all conditions of design review approval are met.

(3) Any departure from the approved design review plans may be cause for revocation of the building permit or denial of a final certificate of occupancy. Any changes in the approved design review plans shall be submitted to the City Administrator or designee for review and approval prior to execution. Changes to the substance of an approval or the substance of conditions of approval shall require the submittal of a new design review application.

<u>Finding</u>: This is informational only. The applicant has two years to begin construction from the date of the city's approval.

DIVISION IV. DEVELOPMENT STANDARDS

Chapter 17.42 GENERAL PROVISIONS

17.42.020 Use of public right-of-way. Use of public right-of-way for the sale, display or storage of goods and off-street parking is prohibited on interior side of curbs, however, this requirement may be waived upon City Council approval.

<u>Finding</u>: The proposal does not include sale, display or storage of goods or off-street parking in the public right-of-way. This standard is met.

17.42.030 Improvements. Improvements installed by a developer, either as a requirement or at his or her option, shall conform to the standards of this title, GMC Chapter 12.02 (street excavation requirements) and to any supplemental design and construction specifications adopted by the city for such improvements. Improvements shall be installed in accordance with the following procedure:

(1) Improvement work shall not begin until plans have been checked for adequacy and approved by the city.

(a) To the extent necessary for evaluation of the proposal, the plans may be required before land use approval is issued.

(b) Plans shall be prepared in accordance with the requirements of the city.

(2) Improvement work shall not begin until the city has been notified, and if work has been discontinued for any reason, it shall not be resumed until the city has been notified.

(3) Improvements shall be constructed under the inspection and to the satisfaction of the city.

(a) The city may require changes in typical sections and details in the public interest if unusual conditions arise during construction to warrant the change.

Finding: Improvements to the site will conform to the standards of this title. Compliance of street and utility improvements is discussed and conditioned, if necessary, in Chapters 17.50, 17.56, 17.58 and 17.60. This standard is met.

Chapter 17.44 BUILDING SITING AND DESIGN

17.44.020 General standards. Building siting and design standards are as follows:

(1) Siting. Where there are no conflicts with other design standards or requirements in this Title, site buildings to maximize solar access where practical, using such techniques as:

(a) Maximizing east-west street length so that principal building façades will face south;

(b) Orienting buildings within twenty degrees of true south as well as maximizing their south-facing dimension;

(c) Placing higher buildings on the north portion of the site, while protecting solar access for adjacent sites;

(d) Placing major yard spaces on south side of buildings.

<u>Finding</u>: The proposed warehouse building is longer in the east-west dimension so that the building openings are oriented south. This standard is met.

(2) Energy Efficient Design. Where there are no conflicts with other design standards or requirements

in this Title, design buildings that are conducive to energy efficiency and conservation, using techniques including, but not limited to, those listed below which are most appropriate to the development:

(a) Concentrate window areas on the south side (within twenty degrees of true south) of buildings where there is good southern exposure, and provide overhangs, balconies, or other shading devices to prevent excessive summer heat gains;

(b) Use architectural features, shapes or buildings, fences, natural landforms, berms and vegetation to catch and direct summer breezes for natural cooling and minimize effects of winter winds; (c) Provide skylights or clerestory windows to provide natural lighting and/or solar heating of interior spaces.

Finding: The windows on the building are primarily on the southern frontage. The large roll-up doors on the southern frontage may be used for summer breezes for natural cooling. The structure is built to be closed to winter winds. The applicant has not demonstrated conflict with other design standards or requirements in this Title and has not provided skylights or clerestory windows to provide natural lighting and/or solar heating of interior spaces, as shown on Sheet A-201 Exterior Elevations. This standard can be met as conditioned below is met.

Condition: Prior to building permit approval, submit revised building plans to the Gladstone Planning Department that include skylights or clerestory windows to provide natural lighting and/or solar heating of interior spaces.

(3) Compatibility. Arrange structures and use areas to be compatible with adjacent developments and surrounding land uses, considering the following design and siting techniques:

(a) Locate and design structures to protect scenic views or vistas from adjacent properties and public thoroughfares. Setbacks, building height and bulk should be considered;

(b) Design structures to provide visual order and avoid monotony in layout and design;

(c) Orient major service activity areas (e.g., loading and delivery areas) of the proposed project away from existing residences;

(d) Provide opaque enclosures and gates for all refuse storage areas;

(e) Screen mechanical equipment, except solar collection apparatus, from view or place such equipment in locations where it will not be viewed by the public. Screening shall be accomplished by the use of a sight-obscuring fence or hedge, a landscaped earth berm, building placement or other design techniques;

(f) Buffering and/or screening shall be used to mitigate adverse visual impacts, dust, noise and pollution, and to provide for compatibility between dissimilar adjoining uses. Special consideration will be given to the buffering, screening and siting of commercial and industrial uses to ensure that noise and odors are not detectable to normal sensory perception on adjacent residential properties. All development shall comply with GMC Chapter 8.12 (noise control).

Finding: The existing building placement, orientation and height will not change. The proposed warehouse structure will be placed on the site so that the large, blank wall (north side) will be adjacent to an existing large, blank wall on the adjacent property. The proposed loading access is across Duniway Avenue from Gladstone City Hall, a non-residential use. The narrative states that all refuse storage areas will be within the structure. The narrative points to the plans for HVAC placement; however, the plans do not indicate HVAC placement. Sheet AS-001 Architectural Site Plan identifies the HVAC placement and screening. Additional buffering and screening of the use is not

necessary as it will be entirely within an enclosed building. This standard-can be met as conditioned below is met.

Condition: Prior to building permit approval, submit a revised site plan to the Gladstone Planning Department that demonstrates all mechanical equipment screened in accordance with GMC 17.44.020(3)(e).

(4) Building Materials. Buildings shall be constructed using high-image exterior materials and finishes such as masonry, architecturally treated tilt-up concrete, glass, wood or stucco. Buildings shall not be constructed with metal siding material, except as approved by the design review committee for specific high-image materials, except for:

(a) Canopies, awnings, screening for roof-mounted fixtures, or other architectural features: (b) Utility equipment cabinets:

(c) Structures no greater than two hundred (200) square feet in floor area and ten (10) feet in height: and,

(d) Buildings, the portions of buildings, that are not visible from a road or adjacent property.

<u>Finding</u>: The submitted narrative states, "The use of metal materials has to be explicitly approved by the Planning Commission". It is unclear from the narrative or the submitted plans if metal is proposed. Given the lack of information on the exterior materials proposed, this standard can be met as conditioned below.

Condition: Prior to building permit approval, submit revised building elevations to the Gladstone Planning Department that demonstrates all exterior materials and finishes are high-image such as masonry, architecturally treated tilt-up concrete, glass, wood or stucco and no metal siding is utilized unless specifically approved by the Planning Commission, acting as the design review committee, in accordance with GMC 17.44.020(4).

(5) Lighting. Adequate exterior lighting shall be provided to protect public safety and shall be deflected so as not to shine on a lot in a residential district.

(6) On-site Lighting. All on-site lighting shall be designed, located, shielded, or deflected so as not to shine into off-site structures or impair the vision of the driver of any vehicle. When required, engineered site lighting plans shall be developed consistent with Illuminating Engineering Standards (IES) including, but not limited to, average maintained illumination and maximum to minimum ratios. A master plan for on-site lighting shall include the design, height, and location of all proposed exterior lights, including:

(a) Parking and loading area lighting;

(b) Pedestrian walkway lighting;

(c) Internal access road lighting;

(d) Lighting of public entrances into buildings;

(e) Flood lights illuminating buildings or significant natural features.

<u>Finding</u>: The submitted narrative and site plan fail to demonstrate compliance with this criterion. A photometric plan or other site lighting plan was not included with this submittal. Staff cannot determine if the proposal complies with these standards. These standards can be met as conditioned below.

Condition: Prior to building permit approval, submit a revised site plan to the Gladstone Planning Department that demonstrates site photometrics in accordance with GMC 17.44.020(5)-(6).

(7) Equipment and Facilities. All utility lines shall be placed underground. All roof-mounted fixtures and utility cabinets or similar equipment which must be installed above ground shall be visually screened from public view.

<u>Finding</u>: The submitted site plan shows all new utility lines placed underground. The narrative and site plan do not indicate roof-mounted fixtures and utility cabinets or similar equipment. Sheet AS-001 Architectural Site Plan identifies appropriate screening for all facilities. This standard-can be met as conditioned below is met.

Condition: Prior to building permit approval, submit a revised site plan and building elevations to the Gladstone Planning Department that demonstrate roof-mounted or other above ground equipment or facilities screened in accordance with GMC 17.44.020(7).

(8) Trash Disposal and Recycling Collection. In addition to the preceding standards, new construction requiring full site plan review shall incorporate functional and adequate space for on-site storage and efficient collection of mixed solid waste and source separated recyclables prior to pick-up and removal by haulers.

(a) Minimum storage area for trash and recyclables shall be established by one of the following methods: minimum standards method or franchise hauler review method.

- (A) Franchise Hauler Review Method. The applicant shall submit plans for storage and collection of solid waste and recyclables that are acceptable to the city's franchise solid waste hauler; acceptance may be indicated on the site plan and/or by separate attachment; or
- (B) (B) Minimum Standards Method. The applicant shall submit plans for storage of solid waste and recyclables in accordance with the following:

(i) Multi-family complexes containing ten (10) or fewer dwelling units shall provide a minimum fifty (50) square feet; developments containing more than ten (10) residential units shall provide an additional five (5) square feet per dwelling unit above ten (10).

(ii) Nonresidential developments shall provide a minimum storage area of ten (10) square feet plus:

(aa) office – 4 square feet /1,000 square feet gross floor area (GFA)

(bb) retail – 10 square feet /1,000 square feet GFA

(cc) wholesale/warehouse/manufacturing - 6 square feet /1,000 square feet GFA

(dd) educational & institutional – 4 square feet / 1,000 square feet GFA

(ee) Other – 4 square feet /1,000 square feet GFA

Finding: The submitted narrative states that "trash will be stored inside the building". No further information is provided. This standard can be met as conditioned below.

Condition: Prior to building permit approval, submit a revised site plan to the Gladstone Planning Department that demonstrates compliance with the trash disposal and recycling collection provisions of GMC 17.44.020(8).

17.44.024 Nonresidential design standards.

New nonresidential buildings, with the exception of buildings housing institutional, warehouse or manufacturing uses, shall be subject to the following design standards:

(1) <u>Ground Floor Windows</u>. Ground floor windows shall be required on walls fronting a public street and shall comply with the following standards:

(a) The windows shall cover at least fifty percent (50%) of the length and twenty-five percent of the ground level wall area. Ground level wall areas include all exterior wall areas up to nine feet (9') above the finished grade. The bottom of required windows shall be no more than four feet (4') above the adjacent exterior finished grade.

(b) Required windows shall be windows that allow views into work areas or lobbies, pedestrian entrances or display windows set into the wall. Display cases attached to the outside wall shall not qualify.

(2) <u>Distinct Ground Floor</u>. The ground level of primary buildings shall be visually distinct from upper floors. This separation shall be provided by one of the following mechanisms:

- (a) A cornice above ground level;
- (b) An arcade;

(c) Change in material or texture or architectural design; or

(d) A row of clerestory windows on the building's street-facing elevation.

Finding: GMC 17.44.024 specifically exempts buildings housing warehouse uses, such as the building proposed with this design review. Therefore, the provisions of GMC 17.44.024 are not applicable to this proposal.

Chapter 17.46 LANDSCAPING

Chapter 17.46 of the GMC regulates landscaping standards applicable to all development that is subject to design review.

17.46.020 Standards. Landscaping requirements shall be as follows:

(1) Minimum Requirement. A minimum of 15 percent of the lot area shall be landscaped, except when a greater percentage is required elsewhere in this title.

Finding: The proposed improvement area "project area" is approximately 22,215 square feet (0.51 ac). Sheet AS-001 identifies 3,935 square feet of landscape area which is 17.7%, exceeding the minimum 15% required. However, Sheet C2.00 identifies 2,420 square feet of landscape area in different locations on the site from AS-001, not meeting the requirements of this section. It is unclear exactly where the landscaping will be provided to meet this requirement. This standard can be met as conditioned below. Sheet C2.00 SITE PLAN and Sheet AS-001 Architectural Site Plan identify landscaping in excess of the minimum requirement. This standard is met.

Condition: Prior to building permit approval, submit a revised site plan to the Gladstone Planning Department that demonstrates a minimum of 3,333 square feet of landscaping on this 22,215 square foot site, in accordance with GMC 17.46.020(1).

(2) Parking and Loading Areas. The following landscape requirements shall apply to off-street parking and loading areas:

(a) An off-street parking and loading area providing 10 or more parking spaces shall be improved with defined landscaped areas totaling no less than ten square feet per parking space;

(b) A parking or loading area shall be separated from any lot line adjacent to a street by a landscaped strip at least 10 feet in width, and any other lot line by a landscaped strip at least five feet in width; (c) A landscaped strip separating a parking or loading area from a street shall contain:

(A) Street trees spaced as appropriate to the species, not to exceed 25 feet apart, on the average,

(B) Low shrubs not to reach a height greater than three feet spaced no more than five feet apart, on the average, and

(C) Vegetative ground cover;

(d) If a fence or wall is required or proposed, it shall be located behind required landscaped strips where such strips are adjacent to a street;

(e) In parking areas three acres and larger intended for use by the general public, pedestrian walkways shall be raised or separated from parking, parking aisles, and travel lanes by a raised curb, concrete bumpers, bollards, landscaping, or other physical barrier. If a raised pathway is used, curb ramps shall be provided in accordance with the Americans with Disabilities Act Accessibility Guidelines.

<u>Finding</u>: The site proposes an off-street loading area; however, the off-street loading area does not provide 10 or more parking spaces and is therefore not required to include a minimum of 10 square feet of landscaping per parking space, per subsection (a), above. The loading area is not shown on the submitted plans to be separated from the lot line adjacent to Duniway Avenue by a landscaped strip at least 10 feet in width. The submitted narrative and plans do not indicate a fence or wall separating the loading area from Duniway Avenue. This standard can be met as conditioned below. Sheet C2.00 SITE PLAN and Sheet AS-001 Architectural Site Plan identify the required landscaped strip. This standard is met.

Condition: Prior to building permit approval, submit a revised site plan to the Gladstone Planning Department that demonstrates a minimum 10-foot-wide landscaped strip containing the materials listed in GMC 17.48.020(2)(c) in accordance with GMC 17.46.020(2)(b). Any fences or walls along this landscaped strip shall be located behind the required landscaped strip in accordance with GMC 17.46.020(2)(d).

(3) Irrigation. Provision shall be made for watering planting areas where such care is required.

(4) Maintenance Required. Landscaping shall be continuously maintained.

(5) Plant Species. The general characteristics of tree species shall be considered when planting under overhead utility lines or near sidewalks or curbs to assure that damage will not result when maturity is reached.

(6) Grading. The natural form of the site shall be preserved insofar as practicable unless berming or contouring of land is required.

(7) Public Rights-of-Way. Land within the public road right-of-way, not developed as sidewalks or driveways, shall be landscaped and maintained by the abutting property owners. Landscaping will be of the variety that would not create a road hazard or impair sight distance.

(8) Street Trees. Street tree planting may be required of any development and, if planted, shall be according to city requirements and of a species compatible with the width of the planting strip, and

nearby street tree species.

(9) <u>Exceptions</u>. The following exceptions apply to properties with frontage on McLoughlin Blvd.: (a) The use of sod along McLoughlin Blvd. shall be encouraged in landscape plans for development of McLoughlin Blvd.;

(b) The use of sod along McLoughlin Blvd. may be allowed in lieu of required street trees; (c) The 10-foot-wide landscape strip along McLoughlin Blvd. may be allowed in the right-of-way if applicant agrees to relocate the 10-foot strip whenever the right-of-way is improved. This strip may be included in total landscape area calculations.

(10) <u>Nonconforming Uses and Nonconforming Development</u>. Additions or alterations to nonconforming uses and nonconforming development on a commercial or industrial site which does not comply with the landscaping requirements of this title must provide landscaping in a scale with the modification, as follows:

(a) Major remodeling, or structural additions of less than 1,000 square feet, require at least an additional three percent landscaping, up to the minimum landscaping requirements for new development in the district.

(b) Structural additions of 1,000 to 1,999 square feet are required to landscape at least an additional five percent of the developed site area, up to the minimum landscaping requirements for new development in the district.

(c) Structural additions of 2,000 to 4,999 square feet are required to landscape at least an additional 10 percent of the developed site area, up to the minimum landscaping requirements for new development in the district.

(d) Structural additions of 5,000 square feet or more are required to meet the current minimum landscape requirements for new development.

(e) Where successive structural additions occur the landscape requirement shall accumulate until total conformance is reached.

Finding: No details provided regarding landscaping irrigation or maintenance, overall plant species or street trees is provided. Sheet C3.00 identifies grading preserving the natural form of the site without berming or contouring of the land. There is no land within the public right-of-way that will not be developed. This site is not along McLoughlin Blvd. The proposed addition to the site exceeds 5,000 square feet and must therefore meet the current minimum landscaping standards, regardless of existing development on the site. These standards can be met as conditioned below. Sheet AS-001 Architectural Site Plan identifies that landscaping irrigation and maintenance will be provided and that plant species will meet city specifications. This standard is met.

Condition: Prior to building permit approval, submit a revised site plan to the Gladstone Planning Department that demonstrates landscaping irrigation and maintenance, overall plant species and street tree details, all of which shall comply with GMC 17.46.020(3)-(5) and (8).

Chapter 17.48 OFF-STREET PARKING AND LOADING

Chapter 17.48 of the GMC regulates off-street parking and loading for all development permits.

17.48.030 Standards for developments subject to design review.

At the time of construction, enlargement, or change of use of any structure or development subject to GMC Chapter 17.80 (Design Review), except as provided in the C-2 district, off-street parking spaces

shall be provided as follows unless greater requirements are otherwise established under this title***

Finding: Oregon Administrative Rule 660-012-0440(3) states,

"(3) Cities and counties may not enforce parking mandates for developments on a lot or parcel that includes lands within one-half mile of frequent transit corridors, including:

(a) Priority transit corridors designated under OAR 660-012-0710;

(b) Corridors with bus service arriving with a scheduled frequency of at least four times an hour during peak service; and

(c) Corridors with the most frequent transit route or routes in the community if the scheduled frequency is at least once per hour during peak service.

This site is within one-half mile of McLoughlin Blvd., a corridor with bus service arriving with a scheduled frequency of at least four times an hour during peak service. For this reason, the city may not mandate parking on this site. The developer has elected not to provide vehicle parking on this site and, as such, the provisions of 17.48.030 are not applicable to this development.

17.48.040 Design requirements for permanent off-street parking and loading.

1) Parking and Loading:

(a) Parking and loading areas shall be paved with asphalt and/or concrete meeting city standards, maintained adequately for all weather use and so drained as to avoid flow of water across public sidewalks;

(b) Off-street parking and loading areas shall be screened from abutting properties located in a residential zoning district unless such abutting properties are developed with nonresidential uses. Required screening shall be accomplished by building placement, a landscaped earth berm or a sight-obscuring fence or hedge. Required screening shall be a minimum of six feet high and shall not conflict with GMC Chapter 17.54 (clear vision).

(c) Areas for standing and maneuvering vehicles, other than for the off-street parking and storage of truck tractors and/or semitrailers, shall be paved with an asphalt and/or concrete surface meeting city standards. The parking of truck tractors and/or semitrailers in off-street parking areas used exclusively for the parking and/or storage of said vehicles may be allowed utilizing a durable and dustless surface other than an asphalt and/or concrete surface. Such surface must be graded, compacted and surfaced in such a manner that it will adequately support these vehicles, including trailer standing gear, will not produce dust, will not produce tracking of mud or other materials onto adjoining streets or properties, and otherwise complies with other applicable provisions of this code.

Finding: It is unclear from the submitted plans if the loading area will be paved with concrete or asphalt. Gravel is noted for the loading bays; however, there is no indication that this meets the provisions of this section Sheet C2.00 SITE PLAN identifies the loading area constructed with asphalt. Drainage is indicated on Sheet C3.00 and does not flow across the public sidewalk. There are no residential properties abutting the proposed loading area. This standard is met.

Condition: Prior to building permit approval, submit a revised site plan to the Gladstone Planning Department that demonstrates that the loading area is constructed of asphalt or concrete and meets the provisions of GMC 17.48.040(1).

(2) Parking***

<u>Finding</u>: No off-street parking is proposed or required with this development and, as such, the provisions of 17.48.040(2) are not applicable.

(3) Loading:

(a) A driveway designed for continuous forward flow of passenger vehicles for the purpose of loading and unloading passengers shall be located on the site of any school having a capacity greater than 25 students;

(b) Buildings or structures to be built or substantially altered which receive and distribute material or merchandise by truck shall provide and maintain off-street loading berths in sufficient numbers and size to adequately handle the needs of the particular use. If loading space has been provided in connection with an existing use or is added to an existing use, the loading space shall not be eliminated if elimination would result in less space than is required to adequately handle the needs of the particular use;

(c) Off-street parking areas used to fulfill the requirements of this section shall not be used for loading and unloading operations except during periods of the day when not required to take care of parking needs;

(d) Loading facilities shall be located at least 20 feet from residential property. Loading spaces shall be located on the site and directly accessible to the main structure.

(e) Exceptions and Adjustments. Loading areas within a street right-of-way in areas zoned mixed-use commercial in the C-2 zoning district may be approved when all of the following conditions are met: N/A –LI Zoning District

<u>Finding</u>: The amount of loading on this site appears sufficient to support the particular needs of the use. This site is not a school, is not in C-2 zoning, is not within 20 feet of residential property and does not propose shared vehicle parking and loading areas. This standard is met.

17.48.050 Bicycle parking standards.

(1) General Provisions.

(a) Applicability. Standards for bicycle parking apply to full-site design review of new construction for multi-family residential (four units and larger) and new commercial/industrial developments. The Planning Commission may grant exemptions to bicycle parking requirements in connection with temporary uses or uses that are not likely to generate the need for bicycle parking.
(b) Types of Spaces. Bicycle parking facilities shall be provided in terms of short-term bicycle parking and long-term bicycle parking. Short-term bicycle parking is intended to encourage customers and other visitors to use bicycles by providing a convenient and readily accessible place to park bicycles. Long-term bicycle parking provides a weather-protected place to park bicycles for employees, students, residents, commuters, and others who generally stay at a site for at least several hours.

(c) Minimum Number of Spaces. All developments required to comply with this section shall provide a minimum five percent bicycle parking spaces based on the city's required minimum number of automobile parking spaces. In addition, the following applies:

(A) All development shall have a minimum two short-term bicycle parking spaces; and

(B) If more than seven bicycle parking spaces are required, at least 50 percent of the spaces shall be provided as long-term bicycle parking.

(C) Notwithstanding subsection (1)(a)(A) of this section, 100 percent of all bicycle parking spaces for multi-family development of four units and more shall be provided as long-term bicycle

parking.

(2) Location and Design.

(a) Short-Term Bicycle Parking. Short-term bicycle parking facilities are lockers or racks that meet the standards of this section and that are located inside a building, or located outside within 30 feet of the main entrance to the building or at least as close as the nearest vehicle parking space, whichever is closer;

(b) Long-Term Bicycle Parking. Long-term bicycle parking includes:

(A) Racks, storage rooms, or lockers in areas that are secure or monitored (e.g., visible to employees or customers or monitored by security).

(B) Covered outside bicycle parking spaces that meet the requirements of subsection (2)(g) of this section and are located within 100 feet of an entrance to the building;

(c) Signs. If the bicycle parking is not visible from the street or main building entrance, then a sign conforming to the city's standards for on-site traffic control, GMC Section 17.52.060(1), shall be posted indicating the location of the parking facilities;

(d) Rack Type and Dimensions.

(A) Bicycle racks must hold bicycles securely by the frame and be securely anchored;

(B) Bicycle racks must accommodate:

(i) Locking the frame and one wheel to the rack with a high-security U-shaped shackle lock, or approved substitute; or

(ii) Locking the frame and both wheels to the rack with a chain or cable not longer than six feet; (C) The Planning Commission may approve alternate bicycle racks provided they are convenient and secure;

(e) Bicycle parking spaces must be at least six feet long and two feet wide. An aisle five feet wide for bicycle maneuvering must be provided;

(f) Areas set aside for required bicycle parking must be clearly marked and reserved for bicycle parking only;

(g) Covered Parking (Weather Protection).

(A) When required, covered bicycle parking shall be provided in one of the following ways: inside buildings, under roof overhangs or awnings, in bicycle lockers, or within or under other structures.

(B) Where required covered bicycle parking is not proposed to be located within a building or locker, the cover must be permanent and designed to protect the bicycle from rainfall and provide seven- foot minimum overhead clearance.

(C) Where required bicycle parking is provided in lockers, the lockers shall be securely anchored.

Finding: A short-term bicycle parking rack for 2 spaces is provided on the site plan to the west of the new warehouse, within 30 feet of the main entrance to the building. The details of the bicycle parking rack are not provided and therefore this standard can be met as conditioned below. Sheet AS-001 Architectural Site Plan identifies appropriate bicycle parking design and location. This standard is met.

Condition: Prior to building permit approval, submit a revised site plan to the Gladstone Planning Department that demonstrates that the two short-term bicycle parking spaces meet the design standards of GMC 17.48.050(2).

Chapter 17.50 VEHICULAR AND PEDESTRIAN CIRCULATION

17.50.010 Applicability. Vehicular and pedestrian circulation standards shall apply to all land divisions and to all development that is subject to design review.

Finding: The provisions of Chapter 17.50 apply to this design review application.

17.50.020 Vehicular and pedestrian circulation generally.

Vehicular and pedestrian circulation facilities, including walkways, provisions for the handicapped, interior drives and parking as provided under GMC Chapter 17.48 (off-street parking and loading), shall be designated as follows:

(1) Impervious Surface. Provide for least amount of impervious surface necessary to adequately serve the type and intensity of proposed land uses within developments as well as providing adequate access for service vehicles.

(2) Traffic Separation. Provide when feasible, a separation of motor vehicular, bicycle and pedestrian traffic.

(3) Curbs and Sidewalks. Provide curbs, associated drainage, and sidewalks within the right-of-way or easement for public roads and streets.

(4) Traffic Volume Expansion. Provision shall be made to accommodate any increased volume of traffic resulting from the development consistent with GMC Section 17.50.050. If streets adjacent to or serving the site are inadequate, widening, dedication of property for future widening, or other street improvements may be required. The development shall be designed to minimize traffic volume increases on minor streets and underdeveloped streets.

(5) Handicapped Needs. Provide for the special needs of the handicapped such as wheelchair ramps and Braille signs.

(6) Pedestrian Circulation Standards. An on-site pedestrian circulation system shall be provided for new nonresidential and multi-family developments and for new buildings added to existing nonresidential and multi-family developments. The system may include sidewalks as part of the public rights-of-way, walkways, and multi-use paths. (Walkways only provide for pedestrian circulation; multi-use pathways accommodate pedestrians and bicycles.) The system shall comply with the following standards:

(a) The system shall connect all adjacent streets to the main entrances of nonresidential buildings and to unit and/or building entrances of multi-family developments;

(b) The system shall connect all buildings and other areas of the site, such as parking areas, bicycle parking, recreational areas, common outdoor areas and any pedestrian amenities; (c) The system shall be hard-surfaced and constructed in accordance with the public works

standards. For nonresidential development, the walkways shall be a minimum of six feet wide. For multi-family residential development, walkways shall be a minimum of five feet wide;

(d) The system and off-street parking and loading areas shall be designed to avoid, to the maximum extent possible, the system's crossing off-street parking and loading areas. Where the system crosses driveways or off-street parking and loading areas, the system shall be clearly identifiable through the use of elevation changes, speed bumps, a different paving material or other similar method. Striping shall not fulfill this requirement;

(e) Where the system is parallel and adjacent to an auto travel lane, the system shall be a raised path or be separated from the auto travel lane by a raised curb, bollards, landscaping or other physical barrier. If a raised path is used, the ends of the raised portions shall be equipped with curb ramps;

(f) The system shall comply with the Americans with Disabilities Act (ADA);

(g) Walkways or multi-use paths shall be provided at or near midblock where the block length

exceeds the length required by GMC Section <u>17.64.020</u>. Multi-use paths shall also be provided where cul-de- sacs or dead-end streets are planned, to connect the ends of the streets together, to other streets, and/or to other developments, as applicable. Multi-use paths used to comply with these standards shall conform to all of the following criteria:

(A) Multi-use paths are required to be no less than 10 feet wide and located within a 20-footwide right-of-way or easement that allows access for emergency vehicles.

(B) The city may require landscaping within the pathway easement/right-of-way for screening and the privacy of adjoining properties.

(C) The Planning Commission may determine, based upon facts in the record, that a walkway or multi- use pathway is impracticable due to: physical or topographic conditions (e.g., freeways, railroads, extremely steep slopes, sensitive lands, and similar physical constraints); buildings or other existing development on adjacent properties that physically prevent a connection now or in the future, considering the potential for redevelopment; and sites where the provisions of recorded leases, easements, covenants, restrictions, or other agreements recorded as of the effective date of this code prohibit the pathway connection.

<u>Finding:</u> The submitted narrative and site plan do not demonstrate pedestrian connectivity. While the proposed use is unlikely to generate a great number of pedestrian customer trips, the site will have employees, customers or other visitors who, if arriving by vehicle will park on the street or if arriving on foot will arrive on the public sidewalk, and who will need safe entry to the building. This standard can be met as conditioned. Sheet AS-001 Architectural Site Plan identifies a 6-foot-wide pedestrian pathway connecting the front building door with the adjacent public sidewalk. This standard is met.

Condition: Prior to building permit approval, submit a revised site plan to the Gladstone Planning Department that demonstrates a pedestrian pathway a minimum 6-feet in width meeting the standards of the Americans with Disabilities Act (ADA) connecting the public sidewalk along Duniway Avenue with the main entry on the west end of the building. Such pedestrian pathway shall meet the provisions of GMC 17.50.020(6)(a) (f).

(7) Proposed new industrial, institutional, multi-family retail and office developments requiring full site design review that are adjacent to or incorporate transit streets shall provide transit improvements at any existing or planned transit stop located along the site's frontage consistent with the transit operator's adopted long-range plan.

(a) Transit facilities include bus stops, shelters, and related facilities. Required transit facility improvements may include the dedication of land or the provision of a public easement.

(b) Development shall provide reasonably direct pedestrian connections between building entrances and adjacent transit facilities and between buildings on the site and streets with adjoining transit stops.

(c) Improvements at Major Bus Stops. A proposed development that is adjacent to or includes an existing or planned major bus stop will be required to plan for access to the transit stop and provide for transit improvements, in consultation with TriMet and consistent with an agency adopted or approved plan at the time of development.

(A) Major bus stops are identified as part of the regional transit system and depicted in the Gladstone transportation system plan transit plan as "major bus stops."

(B) Requirements apply where the subject parcel(s) or portions thereof are within 200 feet of a transit stop. Development requirements and improvements may include the following:

(i) Intersection or mid-block traffic management improvements to allow for pedestrian crossings at major transit stops.

(ii) Building placement within 20 feet of the transit stop, a transit street or an intersection street, or a pedestrian plaza at the stop or at street intersections.

(iii) Transit passenger landing pads accessible to disabled persons to transit agency standards. (iv) An easement or dedication for a passenger shelter and an underground utility connection to a major transit stop if requested by TriMet.

(v) Lighting to TriMet standards.

(d) Any land divisions where further divisions are possible and multiple-family developments, community services uses, and commercial or industrial uses located on an existing or future planned frequent bus route shall meet the TriMet transit facility requirements. Applicants shall consult with TriMet to determine necessary transit facility improvements in conjunction with the proposed development. Proposals shall be consistent with the road crossing improvements that are identified in the transportation system plan on streets with existing or planned transit service.

<u>Finding</u>: There is no existing or planned transit stop along the site's frontage. Therefore, this standard is not applicable.

17.50.030 Streets and roads generally.

(1) The location, width and grade of streets shall be considered in their relation to existing and planned streets, to the topographical conditions, to public convenience and safety, and to the proposed use of land to be served by the streets. The street system shall assure an adequate traffic or circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. Where location is now shown in a development plan, the arrangement of streets shall either:

(a) Provide for the continuation or appropriate projection of existing principal streets in surrounding areas; or

(b) Conform to a plan for the neighborhood approved or adopted by the Planning Commission to meet

a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical.

(2) For new residential and mixed-use development on vacant land of five acres or more in the R-5, R- 7.2, MR and C-2 zoning districts, street connections and access ways shall be provided as follows:

(a) Full street connections shall be provided at intervals that are consistent with the adopted transportation system plan for the identified street classification, except where prevented by topography, barriers such as railroads or freeways, or environmental constraints such as major streams and rivers;

(b) Access ways for pedestrians, bicycles or emergency vehicles shall be provided on public easements or right-of-way where full street connections are not possible, with spacing between full streets or access way connections of not more than 330 feet, except where prevented by topography, barriers such as railroads or freeways, or environmental constraints such as major streams and rivers;

(c) A variance to street spacing standards may be granted pursuant to GMC Chapter 17.72 if resources are present that are mapped on the Natural Resources Map, where street spacing can be achieved at a minimum of 800 feet and no greater than 1,200 feet. Where habitat quality or the length of the crossing required prevents a full street connection, an exception to the street spacing

standards may be granted, pursuant to GMC Chapter 17.72.

17.50.040 Street and road standards.

The design and improvement of streets within a development and streets adjacent but only partially within the development shall comply with improvement specifications adopted pursuant to GMC Section 17.42.030 and with the following standards:

(1) Right-of-Way and Roadway Widths.

(a) Minimum right-of-way and roadway widths shall conform to the standards found in Table 16 of the Gladstone transportation system plan, consistent with a street's functional classification.

(b) The street cross-sections found in the Gladstone transportation system plan may be modified to accommodate alternative stormwater management methods subject to the approval of the Public Works Supervisor. The Public Works Supervisor may require modification of the typical cross section to accommodate alternative stormwater management methods when associated with development proposals. Such modifications may be applied as conditions of development approval.

(2) Alignment. All streets other than minor streets or cul-de-sacs, as far as practical, shall be in alignment with existing streets by continuations of the center lines thereof. The staggering of street alignments resulting in T intersections shall, wherever practical, leave a minimum distance of two hundred feet between the center lines of streets having approximately the same direction and otherwise shall not be less than 100 feet.

(3) Future Extension of Streets. Where necessary to give access to or permit a satisfactory future subdivision of adjoining land, streets shall be extended to the boundary of the subdivision. The point where the streets temporarily end shall conform to the standards below:

(a) Extended streets or street stubs to adjoining properties are not considered to be cul-de-sacs since they are intended to continue as through streets when the adjoining property is developed.

(b) A barricade (e.g., fence, bollards, boulders, or similar vehicle barrier) shall be constructed at the end of the street by the subdivider and shall not be removed until authorized by the city or other applicable agency with jurisdiction over the street.

(c) Temporary turnarounds (e.g., hammerhead or bulb-shaped configuration) shall be constructed for stub streets over 150 feet in length.

(d) Temporary turnarounds shall be formed as an easement and will not affect building setback lines. The removal of a temporary turnaround shall occur when the street is extended and shall be paid for

by the person extending the street. Reserve strips (street plugs) may be required to preserve the objectives of street extensions.

(e) In the case of dead-end stub streets that will connect to streets on adjacent sites in the future, notification that the street is planned for future extension shall be posted on the stub street until the street is extended and shall inform the public that the dead-end street may be extended in the future.

(4) Reserve Strips. Reserve strips or street plugs controlling the access to streets will not be approved unless necessary for the protection of the public welfare or of substantial property rights and in these cases they may be required. The control and disposal of the land composing such strips shall be placed within the jurisdiction of the city under conditions approved by the Planning Commission.

(5) Intersection Angles. Streets shall be laid out to intersect at angles as near to right angles as practical, except where topography requires lesser angles, but in no case less than 60° unless a special intersection design is approved. Streets shall have at least 50 feet of tangent adjacent to intersections unless topography requires lesser distances. Intersections which are not at right angles

shall have minimum corner radii of 15 feet along right-of-way lines which form acute angles. Rightof-way lines at intersections with arterial streets shall have minimum curb radii of not less than 35 feet. Other street intersections shall have curb radii of not less than 20 feet. All radii shall maintain a uniform width between the roadway and the right-of-way lines. Ordinarily, the intersection of more than two streets at any one time will not be allowed.

(6) Existing Streets. Whenever existing streets adjacent to or within a tract are of inadequate widths, additional right-of-way shall be provided at the time of development.

(7) Cul-de-sacs and Hammerheads. The use of cul-de-sac designs and closed-end street systems shall be limited to situations where topography, existing development, barriers such as railroads or freeways, or environmental constraints such as major streams and rivers prevent full street extensions. If cul-de-sacs are used, they shall be as short as possible and shall have maximum lengths of 200 feet except where topography, existing development, barriers such as railroads or freeways, or environmental constraints such as major streams and rivers prevent full street extensions. Closed-end street systems shall serve no more than 25 single-family dwellings and terminate with adequate vehicle turnaround.

(8) Street Names. No street names shall be used which will duplicate or be confused with the names of existing streets. Street names and numbers shall conform to the established pattern in or near the city and shall be subject to the approval of the Planning Commission.

(9) Grades and Curves. Grades shall not exceed 10 percent on major or minor arterials, 15 percent on connector streets, or twenty percent on any other street unless specifically approved. In fault areas, finished street grades shall have a minimum slope of 0.5 percent. Center line radii of curves shall not be less than 300 feet on major arterials, 200 feet on minor arterials, or 100 feet on other streets. On arterials there shall be a tangent of not less than 100 feet between reversed curves.
(10) Marginal Access Streets. Where a land division abuts or contains an existing or proposed arterial street, the Planning Commission may require marginal access streets, reverse frontage lots with suitable depth, screen planting contained in a nonaccess reservation along the rear or side property line, or such other treatment as may be necessary for adequate protection of residential properties and for separation of through and local traffic.

(11) Alleys. Alleys may be provided in commercial and industrial districts unless other permanent provisions for access to off-street parking and loading facilities are made as approved by the Planning Commission. While alley intersections and sharp changes in alignment shall be avoided, the corners of necessary alley intersections shall have radii of not less than 10 feet.

(12) Private Streets. Private streets may serve development where a finding can be made that such streets are of adequate width, alignment, grade and restricted length to afford the same degree of public safety as public streets and that extension of the public street system is impractical due to lot size or shape, topography, the location of existing structures to be retained or other similar circumstances and where no more than six dwelling units will take access from the private streets. In no case shall a private street be less than 20 feet in width. Greater width may be required where necessary to provide for public safety, accommodate traffic volume, or provide for underground utilities. A street maintenance agreement, acceptable to the city and duly recorded, shall be required.

(13) Painting of Curbs and Sidewalks. Except where required for safety purposes or for the identification of house numbers, painting of curbs and sidewalks is prohibited. All such painting must be approved by the city.

(14) Curbs and Driveways. Curb cuts and driveway installations shall be installed, according to city standards.

(15) Sidewalks. Sidewalks shall be installed on both sides of a public street and at any special pedestrian way within a development. The Planning Commission may approve a development with

sidewalks on one side only of a local street if special site conditions exist or if alternative pedestrian routes are available, or if the proposed sidewalk is not likely to become part of a complete pedestrian route in the foreseeable future.

(16) Bicycle and Pedestrian Routes. Bicycle/pedestrian routes shall be required when consistent with Map 5 of the comprehensive plan and when necessary to provide a system of interconnecting walkways and safe, convenient access to a transit stop for a school, park, church, day care center, library, commercial center, community center or similar facility. Separate bicycle/pedestrian ways not located in a street right-of-way shall include a 10-foot wide paved surface within a 12-foot wide right-of-way, unless conditions warrant otherwise and shall be illuminated as required in GMC Section 17.44.020(6).

(17) Street Signs. Street name signs shall be installed at all street intersections. Specifications for signs shall be submitted and approved prior to their erection.

(18) Street Lights. Street lights shall be installed and shall be served from an underground source of supply.

(19) Storm Sewers. Catch basins shall be installed and connected to drainage tile leading to storm sewers or drainage ways.

(20) Monuments. Upon completion of street improvements, monuments shall be reestablished and protected in monument boxes at every street intersection and all points of curvature and points of tangency of street center lines. Elevation bench marks shall be established at each street intersection monument with elevations to U.S. Geological Survey datum. All lot corners will be marked by a metal rod.

Finding: The Public Works Comments dated 10.10.23 <u>12.07.23</u> identify the following regarding public streets and right-of-way:

1. Lighting. Street lighting along the Portland Avenue and Duniway Avenue frontage is adequate for the development of the site. No further lighting analysis is required.

2. Sidewalks and ADA. Sidewalks along Portland Avenue and Duniway Avenue shall be installed to conform to current City of Gladstone and ADA PROWAG standards. New sidewalks shall be constructed as follows:

- The project shall install curb ramps at the curb return from Portland Avenue to Duniway Avenue that comply with ADA PROWAG standards. The existing utility pole at the intersection may have to be moved to accommodate the new improvements. If the existing utility pole can not be
- moved, or the applicant chooses not to move the pole, the existing curb ramp on the Civic Center side of the street may have to be reconstructed for the intersection to conform to PROWAG standards.
- The sidewalk on Portland Avenue shall match the width of the sidewalk to the north, with a 5- foot minimum width. The sidewalk shall be placed curb tight, like the sidewalk to the north.
- The sidewalk on Duniway Avenue shall be 6-feet in width and curb-tight, matching the width and the location of the sidewalk to the west. Where the sidewalk swings around objects, the width of the sidewalk shall not be reduced.
- New sidewalks shall have a scoring pattern conforming to City of Gladstone Public Works Standards.
- 3. Streets. The proposed development shall address all street improvement requirements of the

Gladstone Public Works Design Standards. New street improvements shall be constructed as follows:

- Curbing along Portland Avenue and Duniway Avenue shall conform to existing improvements at the ends of the project.
- On Portland Avenue, the street shall be widened with a concrete curb installed to match the curb alignment of the curb in front of the Civic Center.
- On Duniway Avenue, half street improvements will be required. The new concrete curb line in
 front of this site shall be installed 34-feet from the existing curb in front of the Civic Center, except
 as shown a[t] the curb bump out near Portland Avenue. The curb profile shall match the southern
 curb line in front of the Civic Center. New driveway curb cuts shall be constructed to commercial
 approach standards.
- On Duniway Avenue, the applicant is requesting two driveway curb cuts. <u>Generally, curb cuts shall</u> [be] kept to a minimum, however, the Public Works Director is supportive of allowing two curb cuts on Duniway Avenue in lieu of a curb cut on Portland Avenue. The two curb cuts shown meet the criteria of Public Works Design Standards 5.0070.D.3.c requiring a minimum 30-foot distance between any two curb cuts on the same lot on a local street. having throat widths of 68 feet and 22 feet. Typically, one driveway curb cut is permitted per lot, with a maximum width of 36 feet (measured from top of wing to top of wing). There are multiple Public Works Department Design Standards not being met with the two driveways proposed by the applicant:
 - i. 5.070.D.2 The maximum curb cut width shall be 36 feet.
 - ii. 5.0070.D.3.c The minimum distance between any two curb cuts on the same lot on local street is 30 feet.
 - 5.0070.D.4 Curb cuts shall be kept to a minimum; consolidation of driveways is preferred.
 Requested deviations from the Public Works Design Standards (a Design Modification) shall be submitted to the Public Works Director in writing. For each standard not being met, the applicant shall note the standard, the reason why a Design Modification is necessary, and how the deviation from the design standard has been minimized to the extent possible. The Public Works Director may approve or deny requests for Design Modifications or may agree to relax certain applicable standards on a case-by-case basis. It is recommended that requests for Design Modifications be submitted to the Public Works Director as soon as possible, & prior to submittal of construction plans.

• In no case will any portion of a vehicle backed into the loading docks be allowed to overhang the Duniway Avenue sidewalk.

• The construction plans for the project shall include a plan demonstrating the necessary turning movements for the size of truck to be used by the applicant. The turning movements shall demonstrate how the design vehicle will be able to back into the project when the parallel parking stalls on the southern side of Duniway Avenue are <u>all</u>occupied.

• Street trees are required to be installed along the Portland Avenue and Duniway Avenue frontages. The trees may be behind the sidewalk but shall be in front of the loading area. Tree spacing shall be as required by the Municipal Code.

• It is the applicant's responsibility to relocate mailboxes, signage, and utilities that may interfere with new right-of-way improvements.

• The applicant may be required to install new signage and/or pavement markings. Signage and

• pavement markings shall conform to the requirements of the MUTCD and the Gladstone Public Works Design Standards.

• Prior to any work in the right-of-way, a City Right-of-Way Permit will be required from Public Works.

- 4. Easements.
- Any backflow prevention vault shall be completely contained in a public water easement.
- Public utility easements 8 feet in width shall be granted along the street frontages. Where existing or approved structures reduce the width available, a reduced width is acceptable.
- Easements shall be prepared using an approved City of Gladstone easement form. A copy of the recorded easement shall be provided to City of Gladstone Public Works prior to the pre-construction meeting.

5. Right-of-way Dedication. Adequate right-of-way shall be dedicated at the intersection of Portland Avenue and Duniway Avenue so that the new sidewalk improvements will be located within the public right-of-way.

Condition: Prior to building permit approval, the applicant shall submit plans detailing the installation of public and private utilities and infrastructure, as detailed in the Public Works Comments dated 10.10.23 12.07.23 in compliance with the Provisions of GMC 17.50.030 and 17.50.040.

17.50.050 Traffic impact analysis (TIA).

<u>Finding</u>: The proposal does not meet the city's threshold for requirement of a Traffic Impact Analysis and, as such, this standard is not appliable to the proposal.

Chapter 17.52 SIGNS

Finding: Sign designs for the replacement of the current signs, or any additional signage, was not included in the application. This standard is not applicable to the proposal and all future signs will be required to obtain a sign permit meeting the provisions of GMC 17.52.

Chapter 17.54 CLEAR VISION

17.54.020 Clear vision area.

(1) <u>Obstruction Prohibited</u>. On property at any corner formed by the intersection of two streets, or a street and a railroad, it is unlawful to install, set out or maintain, or to allow the installation, setting out or maintenance of any sign, fence, hedge, shrubbery, natural growth or other obstructions to the view higher than three feet above the level of the center of the adjacent intersection with that triangular area between the property line and a diagonal line joining points on the property lines at the distance from the intersection specified in this regulation. In the case of rounded corners, the triangular areas shall be between the lot lines extended in a straight line to a point of intersection and so measured, and a third side which is a line across the center of the lot joining the nonintersecting ends of the other two sides. The following measurements shall establish clear-vision areas:

Right-of-Way (in feet)	Measurement Each Lot Line (in feet)
80'	20'
60'	30'
50' or less	40'

(2) <u>Exceptions.</u> Provisions set out in Subsection (1) of this section shall not apply to:

(a) Public utility poles; trees trimmed (to the trunk) to a line at least eight feet (8') above the level of the intersection; provided, that the remaining limbs and foliage of the trees must be trimmed as to leave, at all seasons, a clear and unobstructed cross-view of the intersection; saplings, or plant species of open growth habits and not planted in the form of a hedge, which are so planted and trimmed as to leave at all seasons a clear and unobstructed cross-view of the intersection, supporting members of appurtenances to permanent buildings existing on the date when this ordinance in this Chapter becomes effective; official warning signs or signals; places where the contour of the ground is such that there can be no cross-visibility at the intersection; or to signs mounted ten or more feet above the ground and whose supports do not constitute an obstruction as described in Subsection (1) of the section.

(b) At a driveway serving a parking lot with capacity of more than eight automobiles and at corners of an intersection of a street controlled by stop signs or a traffic signal if the street intersection or driveway has an unobstructed sight distance specified in a 2001 publication titled "A Policy on Geometric Design of Highways and Streets" prepared by the American Association of State Highway and Transportation Officials (AASHTO), summarized in the table below; however, the Planning Commission may approve a driveway location with less than minimum intersection sight distance if no other suitable location is available:

Posted Speed Limit	Minimum Intersection Sight Distance
20	225 ft.
25	280 ft.
30	335 ft.
35	390 ft.
40	445 ft.
45	500 ft.

Finding: The applicant does not propose structures or sight-interfering vegetation within the clear vision areas. The proposed building (warehouse) does not impact this minimum sight distance. The applicant has indicated that the permitted residence is partially located within the clear vision triangle; however, the fencing at the corner of Portland Ave and Duniway Ave will be replaced with fencing at a maximum of 3' in height meeting this standard. This standard is met.

Chapter 17.56 DRAINAGE

17.56.020 Standards.

Adequate provisions shall be made to ensure proper drainage of surface waters, to preserve natural flow of watercourses and springs and to prevent soil erosion and flooding of neighboring properties or streets. Such provisions shall include but not be limited to the following:

(1) Generally. All development shall be planned, designed, constructed and maintained to:

(a) Protect and preserve existing drainage channels to the maximum practicable extent;

(b) Protect development from flood hazards;

(c) Provide a system by which water within the development will be controlled and managed without causing damage or harm to the natural environment, or to property or persons within the drainage basin;

(d) Assure that waters drained from new or redevelopment sites are substantially free of pollutants, including sedimentary materials, through the use of stormwater treatment facilities as referenced herein and appropriate erosion and sediment control practices;

(e) Assure that runoff drained from new and redevelopment sites is managed in accordance with criteria outlined in the City of Gladstone Stormwater Treatment and Detention Standards as to not cause erosion to any greater extent than would occur in the absence of development;

(f) Avoid placement of surface detention or retention facilities in road rights of way.

(2) Watercourses. Where culverts cannot provide sufficient capacity without significant environmental degradation, the city may require the watercourse to be bridged or spanned.

(3) Easements. In the event that a development or any part thereof is traversed by any watercourse, channel, stream or creek, gulch or other natural drainage channel, adequate easements for storm drainage purposes shall be provided to the city. This does not imply maintenance by the city.
(4) Obstructions. Channel obstructions are not allowed, except as approved for the creation of a detention or retention facility. Fences with swing gates may be utilized.

(5) Surface Drainage and the Storm Sewer System.

(a) Stormwater treatment and detention facilities shall be designed and installed in accordance with criteria outlined in the Gladstone Public Works Design Standards and the Gladstone Public Works Standard Construction Specifications.

(b) The street cross-sections found in the Gladstone transportation system plan may be modified to accommodate alternative stormwater management methods subject to the approval of the Public Works Supervisor. The Public Works Supervisor may require modification of the typical cross section to accommodate alternative stormwater management methods when associated with development proposals. Such modifications may be applied as conditions of development approval.

Finding: The subject property does not contain any known drainage ways, floodplains, or watercourses. The Public Works comments dated 10.10.23 12.07.23 identify the following regarding storm drainage:

Storm Drainage. The proposed development shall meet all storm drainage design requirements pursuant to the Gladstone Public Works Design Standards. Private storm drainage improvements onsite shall be permitted through Clackamas County Building Department. New storm drainage improvements shall be constructed as follows:

- A public catch basin shall be installed on Portland Ave. uphill of the curb-return ramp.
- On Duniway Avenue, the catch basin at the sag curve in the street shall be removed and a new inlet shall be installed to match the new curb line.
- On Duniway Avenue, existing catch basins that will not be located within the pavement area of the street shall be removed. If a catch basin structure acts as a junction and needs to remain, a manhole or junction box having a solid lid shall be installed in place of the existing catch basin.
- <u>Following land use approval, a-A</u> storm drainage analysis and report shall be submitted to City of Gladstone Public Works for review and approval demonstrating how the proposed storm water quality, quantity, infiltration, and conveyance systems are meeting the requirements of the Gladstone Public Works Design Standards.
- Due to a downstream deficiency noted in the Storm Drainage Master Plan, the water quantity detention requirements for this site will be as follows:
 i. Reduce the 2-year, 24-hour post development peak runoff rate to 50% or less of the 2-year, 24-hour pre-development peak runoff rate.
 ii. Reduce the 25-year, 24-hour post development peak runoff rate to equal or less than that of

the 2-year, 24-hour pre-developed peak runoff rate.

• The applicant will be responsible for maintaining the water quality and quantity systems for this project and shall complete & record a Storm Water Facilities Maintenance Agreement. The document shall be submitted to Gladstone Public Works for review, adjusted if necessary, and then recorded with Clackamas County. A copy of the recorded document shall be submitted to Gladstone Public Works prior to the Certificate of Occupancy being issued.

Condition. Prior to building permit approval, the applicant shall submit plans detailing the installation of public and private utilities and infrastructure, as detailed in the Public Works Comments dated 10.10.23 12.07.23 in compliance with the Provisions of GMC 17.56.020.

Chapter 17.58 GRADING AND FILL

17.58.020 General provisions.

(1) Grading of Building Sites. Grading and fill of building sites shall conform to Chapter 70 of the Uniform Building Code. The character of soil for fill and the characteristics of lots and parcels made usable by fill shall be suitable for the purpose intended. When deemed necessary, the building official may require geological studies to determine the suitability of the site.

(2) U.B.C. Requirements. The building official shall enforce Chapter 70 of the U.B.C. and shall require soils reports and/or engineering studies before issuing a building permit for fill, excavation, construction or related activities involving soils with restrictive features such as instability, wetness, flooding or other limitations.

Finding: Any applicable Building permits and grading permits are required to ensure the requirements in the Uniform Building Code, or current predecessor, will be met through the building permit review process. This criterion is met with the standard building permit condition identified previously.

Chapter 17.60 UTILITIES

17.60.020 Standards.

Utility services and facilities shall be appropriate to the scale and type of development and consideration shall include, but not be limited to the following standards:

(1) Site Disturbance. The location, design, installation and maintenance of all utility lines and facilities shall be carried out with minimum feasible disturbances of soil and site.

(2) Electricity. Gas. Communications. All development which has a need for electricity, gas and communications services shall install them pursuant to the requirements of the district or company servicing the development. Except where otherwise prohibited by the utility district or company, all such facilities shall be underground.

(3) Underground Facilities. The developer shall make necessary arrangements with utility companies or other persons or corporations affected for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting and cable television, shall be placed underground.

(4) Sanitary Sewers. All development which has a need for sanitary sewers shall install the facilities.
(5) Water Services. All development which has a need for water service shall install water facilities and grant necessary easements pursuant to the requirements of the utility district serving the development. In addition, requirements for development shall include the following:

(a) Water lines to serve residential developments shall be a minimum six inch (6") nominal diameter and water lines to service commercial and industrial developments shall be a minimum eight inch

nominal diameter with valves and fire hydrants serving each building site in the development and connecting the development to city mains shall be installed. Prior to starting building construction, the design shall take into account provisions for extension beyond the development and to adequately grid the city system. Hydrant spacing to be based on accessible area served according to A.I.A. recommendations and as approved by the Fire Chief;

(b) If the city determines that a water line size greater man the required minimum in diameter is required to provide for future extension of the water system, the city will reimburse the developer the difference in cost of pipe and valves between that of the minimum diameter and the size stipulated by the city.

(6) Coordination with Street Surfacing. All underground utilities, sanitary sewers and storm drains installed in streets by the developer or by any utility company shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities and sanitary sewers shall be placed to a length minimizing the necessity for disturbing the street improvements when service connections are made.

(7) As-Built Submittals. A map showing all public improvements, as built, shall be filed with the city engineer upon completion of the improvements.

(8) Conditions for Refund to Developer.

(a) If required water mains or sewer facilities will without further construction other than individual laterals, directly serve properties outside the development, the city may enter into an agreement with the developer to require owners of the other benefiting properties to refund to the developer, a pro rata portion of the cost of the extension prior to allowing the benefiting property to connect thereto;

(b) Any such agreement shall contain a provision that the developer agrees to completely indemnify and hold harmless the city for any claim or injury or action arising from the city's administration of such agreement;

(c) The right to require such a refund shall not continue for more than 10 years after the date of installation of the extension;

(d) The amount to be refunded and the individual proration of the same shall be determined by the city and such determination shall be final.

<u>Finding</u>: The Public Works Comments dated 10.10.23 <u>12.07.23</u> identify the following regarding water and sanitary sewer:

1. Water. The proposed development shall meet all water system requirements pursuant to the requirements of the Gladstone Public Works Design Standards. With the widening of Duniway Avenue, the existing water meter boxes shall be moved to the proper location behind the curb per Std. Dwgs. 402 or 403. Water meter sizing calculations will be required to verify that the water meter(s) are adequately sized to serve the proposed development. These calculations are typically based on a fixture count and shall be submitted to the City at the time of plan review. Backflow prevention devices in underground vaults will be required for fire mains and oversized water services. Public water easements will be required around fire main vaults on private property.

2. Sanitary Sewer. The proposed development shall meet all sanitary sewer requirements pursuant to the Gladstone Public Works Design Standards. The existing sanitary sewer lateral shall have a cleanout installed in the sidewalk, or at the back of sidewalk, to designate the dividing point between public and private maintenance responsibility. The existing sanitary sewer lateral condition shall be verified by television inspection. A copy of the inspection shall be submitted to the Public Works

Department for review. Following review, if the existing sewer lateral is determined to be in poor condition by City of Gladstone Public Works, the sewer lateral shall be repaired or replaced to the current standards of the City of Gladstone. The new sanitary sewer lateral shall be installed consistent with City of Gladstone standards and shall have a cleanout installed in or at the back of the new sidewalk.

Condition. Prior to building permit approval, the applicant shall submit plans detailing the installation of public and private utilities and infrastructure, as detailed in the Public Works Comments dated 10.10.23 12.07.23 in compliance with the Provisions of GMC 17.60.020.

As such, the Planning Staff are recommending the Planning Commission APPROVE the Design Review Application DR-23-06 as conditioned.

Pursuant to Section 17.92.020 of the Gladstone Municipal Code, the decision of the Planning Commission may be appealed to the City Council within 15 days of the mailing of the Planning Commission's written decision. In order to appeal a decision of the Planning Commission, a party must have appeared orally or in writing before the Planning Commission. The filing fee for the appeal is \$250.00. If no appeal is filed within 15 days, the decision of the Planning Commission shall be final.

Please see Applicant's Submittal Materials for Proposed Building and Site Plans



Public Works Comments for DR-23-06 Fire Experts, 6075 Duniway Avenue

REVISED 12.07.2023

- 1. **Lighting.** Street lighting along the Portland Avenue and Duniway Avenue frontage is adequate for the development of the site. No further lighting analysis is required.
- 2. **Sidewalks and ADA.** Sidewalks along Portland Avenue and Duniway Avenue shall be installed to conform to current City of Gladstone and ADA PROWAG standards. New sidewalks shall be constructed as follows:
 - The project shall install curb ramps at the curb return from Portland Avenue to Duniway Avenue that comply with ADA PROWAG standards.
 - The sidewalk on Portland Avenue shall match the width of the sidewalk to the north, with a 5-foot minimum width. The sidewalk shall be placed curb tight, like the sidewalk to the north.
 - The sidewalk on Duniway Avenue shall be 6-feet in width and curb-tight, matching the width and the location of the sidewalk to the west. Where the sidewalk swings around objects, the width of the sidewalk shall not be reduced.
 - New sidewalks shall have a scoring pattern conforming to City of Gladstone Public Works Standards.
- 3. Water. The proposed development shall meet all water system requirements pursuant to the requirements of the Gladstone Public Works Design Standards. With the widening of Duniway Avenue, the existing water meter boxes shall be moved to the proper location behind the curb per Std. Dwgs. 402 or 403. Water meter sizing calculations will be required to verify that the water meter(s) are adequately sized to serve the proposed development. These calculations are typically based on a fixture count and shall be submitted to the City at the time of plan review. Backflow prevention devices in underground vaults will be required for fire mains and oversized water services. Public water easements will be required around fire main vaults on private property.
- 4. Sanitary Sewer. The proposed development shall meet all sanitary sewer requirements pursuant to the Gladstone Public Works Design Standards. The existing sanitary sewer lateral shall have a cleanout installed in the sidewalk, or at the back of sidewalk, to designate the dividing point between public and private maintenance responsibility. The existing sanitary sewer lateral condition shall be verified by television inspection. A copy of the inspection shall be submitted to the Public Works Department for review. Following review, if the existing sewer lateral is determined to be in poor condition by City of Gladstone Public Works, the sewer lateral shall be repaired or replaced to the current standards of the City of Gladstone. The new sanitary sewer lateral shall be installed consistent with City of Gladstone standards and shall have a cleanout installed in or at the back of the new sidewalk.
- 5. Storm Drainage. The proposed development shall meet all storm drainage design requirements pursuant to the Gladstone Public Works Design Standards. Private storm drainage improvements onsite shall be permitted through Clackamas County Building Department. New storm drainage improvements shall be constructed as follows:
 - A public catch basin shall be installed on Portland Ave. uphill of the curb ramp.
 - On Duniway Avenue, the catch basin at the sag curve in the street shall be removed and a new inlet shall be installed to match the new curb line.

- On Duniway Avenue, existing catch basins that will not be located within the pavement area of the street shall be removed. If a catch basin structure acts as a junction and needs to remain, a manhole or junction box having a solid lid shall be installed in place of the existing catch basin.
- Following land use approval, a storm drainage analysis and report shall be submitted to City of Gladstone Public Works for review and approval demonstrating how the proposed storm water quality, quantity, infiltration, and conveyance systems are meeting the requirements of the Gladstone Public Works Design Standards.
- Due to a downstream deficiency noted in the Storm Drainage Master Plan, the water quantity detention requirements for this site will be as follows:
 - i. Reduce the 2-year, 24-hour post development peak runoff rate to 50% or less of the 2-year, 24-hour pre-development peak runoff rate.
 - ii. Reduce the 25-year, 24-hour post development peak runoff rate to equal or less than that of the 2-year, 24-hour pre-developed peak runoff rate.
- The applicant will be responsible for maintaining the water quality and quantity systems for this
 project, including the cartridge inlet in Duniway Avenue, and shall complete & record a Storm
 Water Facilities Maintenance Agreement. The document shall be submitted to Gladstone Public
 Works for review, adjusted if necessary, and then recorded with Clackamas County. A copy of the
 recorded document shall be submitted to Gladstone Public Works prior to the Certificate of
 Occupancy being issued.
- 6. **Streets.** The proposed development shall address all street improvement requirements of the Gladstone Public Works Design Standards. New street improvements shall be constructed as follows:
 - Curbing along Portland Avenue and Duniway Avenue shall conform to existing improvements at the ends of the project.
 - On Portland Avenue, the street shall be widened with a concrete curb installed to match the curb alignment of the curb in front of the Civic Center.
 - On Duniway Avenue, half street improvements will be required. The new concrete curb line in front
 of this site shall be installed 34-feet from the existing curb in front of the Civic Center, except as
 shown a the curb bump out near Portland Avenue. The curb profile shall match the southern curb
 line in front of the Civic Center. New driveway curb cuts shall be constructed to commercial
 approach standards.
 - On Duniway Avenue, the applicant is requesting two driveway curb cuts. Generally, curb cuts shall kept to a minimum, however, the Public Works Director is supportive of allowing two curb cuts on Duniway Avenue in lieu of a curb cut on Portland Avenue. The two curb cuts shown meet the criteria of Public Works Design Standard 5.0070.D.3.c requiring a minimum 30-foot distance between any two curb cuts on the same lot on a local street.
 - In no case will any portion of a vehicle backed into the loading docks be allowed to overhang the Duniway Avenue sidewalk.
 - The construction plans for the project shall include a plan demonstrating the necessary turning movements for the size of truck to be used by the applicant. The turning movements shall demonstrate how the design vehicle will be able to back into the project when the parallel parking stalls on the northern and southern side of Duniway Avenue are all occupied.
 - Street trees are required to be installed along the Portland Avenue and Duniway Avenue frontages. The trees may be behind the sidewalk but shall be in front of the loading area. Tree spacing shall be as required by the Municipal Code.
 - It is the applicants responsibility to relocate mailboxes, signage, and utilities that may interfere with new right-of-way improvements.

- The applicant may be required to install new signage and/or pavement markings. Signage and pavement markings shall conform to the requirements of the MUTCD and the Gladstone Public Works Design Standards.
- Prior to any work in the right-of-way, a City Right-of-Way Permit will be required from Public Works.
- 7. Easements.
 - Any backflow prevention vault shall be completely contained in a public water easement.
 - Public utility easements 8 feet in width shall be granted along the street frontages. Where existing or approved structures reduce the width available, a reduced width is acceptable.
 - Easements shall be prepared using an approved City of Gladstone easement form. A copy of the
 recorded easement shall be provided to City of Gladstone Public Works prior to the preconstruction meeting.
- 8. **Right-of-way Dedication.** Adequate right-of-way shall be dedicated at the intersection of Portland Avenue and Duniway Avenue so that the new sidewalk improvements will be located within the public right-of-way.
- 9. Construction Plans Submittal. Plans detailing the installation of public and private utilities, site grading, and other public and private improvements shall be submitted to the City of Gladstone Public Works Department for review and approval. The design, location, and planned installation of all street and sidewalks, natural gas, power, street lighting, telephone, cable television, storm water, water, and sanitary sewer provisions are subject to approval by the appropriate agency/utility service provider. Construction plans shall be designed and stamped by a Professional Engineer registered in the State of Oregon. The Construction Plan submittal shall include (3) paper sets of plans, a pdf copy, an Engineer's Estimate for the public improvements, and a drainage report.
- Pre-Construction Conference. Once grading/construction plans are ready to be approved by the City of Gladstone, a Pre-Construction Conference with final sign-off on the Construction Plans is required. Review fees, SDC's and performance bonding may be required of the applicant prior to scheduling the preconstruction conference.
- 11. As-Built Submittals and Stormwater Certification. Prior to approval of the Certificate of Occupancy, the applicant shall provide the City with the following:
 - As-built plans.
 - A recorded copy of the Storm Drainage Facilities Maintenance Agreement. The Maintenance Agreement shall be prepared using an approved City of Gladstone form.
 - A signed certification from the design engineer indicating that the surface water systems have been inspected and installed per the approved plans and that the systems are functioning as designed.
 - A maintenance bond in the amount of ten (10) percent of the cost of the public improvements.

AHHA

Architect Inc

Date December 7, 2023

Note: Updated notes in this Narrative in bold, italized underlined font (12.7.23)

Jurisdiction:

City of Gladstone Heather Austin, 3J Consulting 18505 Portland Ave Gladstone, Or 97027 503 946 9365 x206 heather.austin@3j-consulting.com

Project Name/Owner:

Duniway Project Greg Philo 503 305 7285 greg@firexperts.net GTP Properties LLC PO Box 2133 Oregon City, Or 97405 Project Location: 6075 Duniway Ave Gladstone Oregon 97027

Applicant:

AHHA Architect Inc Raphael A. Goodblatt 6663 SW Beaverton Hilldale Hwy #222 Portland Oregon 97225 503 734 8210 rag@ahhapdx.com Property ID 22E19AA00401 Use: Storage Zone: LI - Light Industrial District Pre - Application - ZPAC0147-22

17.24.020(1) Use allowed - Warehouse & Storage

17.24.045 Screening -

(4) Duniway - Site obscuring fence not required. All storage occurs in the building and parking is not required.

(6) Portland - New proposed fence will be 3' tall within the vision triangle.

(7) No signs will be located in the chain link fence without design approval.

17.24.060 Dimensional Standards

(1) Height -This is met, the building is 24' tall to the middle of the gable, allowed 35'

- (2) Setbacks No rear or side yard setbacks are required, 6' setbacks provided
- (3) Setbacks No rear or side yard setbacks are required, 6' setbacks provided
- (4) Setbacks Front or street setbacks Not applicable
- (5) Architectural Features Not applicable
- (6) Off Street parking Not required site is located 500' from Mass transit.
- (7) Equipment set back HVAC units are located on the ground. See site plan for location

Division IV Development Standards

17.42 General Provisions Pre-construction conference w/ City public works and

Engineering departments - relates to 17.42.020

17.44 Building Site and design

17.46 Landscaping

17.48 Off-street parking and loading - No parking required. Mass transit is within half a mile.

- 17.50 Vehicular & Pedestrian Circulation
- 17.52 Signs
- 17.53 Billboards not applicable
- 17.54 Clear Vision Sheet C2.00
- 17.56 Drainage Sheet C3.00

- 17.58 Grading Sheet C3.00
- 17.60 Utilities Sheet C4.00
- 17.61 Wireless not applicable
- 17.62 Special uses not applicable

17.44.020

(1) Siting

- (2) Energy Efficient Design.
- (3) Compatibility.
- (a) Locate and design structures to protect scenic views: Not applicable
- (b) Design structures to provide visual order See building plans and Elevations
- (c) Orient major service activity areas See site plan AS -001
- (d) Provide opaque enclosures All storage and all trash are located inside the building.
- (e) Screen mechanical equipment. See site plan for location of HVAC units

(7) Equipment and Facilities. All utility lines on-site shall be placed underground. All roof-mounted fixtures and utility. All roof-mounted fixtures and utility cabinets or similar equipment which must be installed above ground shall be visually screened from public view.

See Sheet AS-001 showing location of HVAC units and required screening.

(4) Building Materials. The use of metal materials has to be explicitly approved by the Planning Commission.

(5) & (6) On-site Lighting. - Off site lighting not required.

On site lighting locations & description shown on Sheet AS-001 & Sheet A-201

(8) Trash enclosure - Trash will be stored inside the building.

17.44.024

<u>See Sheet A-201.for windows and glazing shown on South Elevation. See note</u> <u>regarding glazing located in garage doors.</u>

17.46.020

Landscaping standards. 15% of *site is required landscaping, see Sheets C2.00 & AS-001*

(2) Parking and Loading Areas. - Parking not required, site located 500 ft from mass transit.

(c) 10' wide landscape strip shown on Civil drawing C2.0 & AS-001

(d) Fence or wall not proposed and not required. No parking required.

17.48.040

Design requirements for permanent off-street parking and loading. Parking not required,

17.48.050

Bicycle parking standards. - See Sheet AS-001 for bike rack location and specification.

17.50.020 Vehicular and pedestrian circulation

- (1) Impervious surface see Civil Plan sheet
- (2) Traffic Separation not required there is no on-site parking
- (3) Curbs and Sidewalks See Civil C2.00 For new sidewalk design.
- (4) N/A
- (5) ADA sidewalk improvement on the corner of Duniway & Portland
- (6) Pedestrian Circular Standards (6) wide pedestrian walkway see sheet AS-001

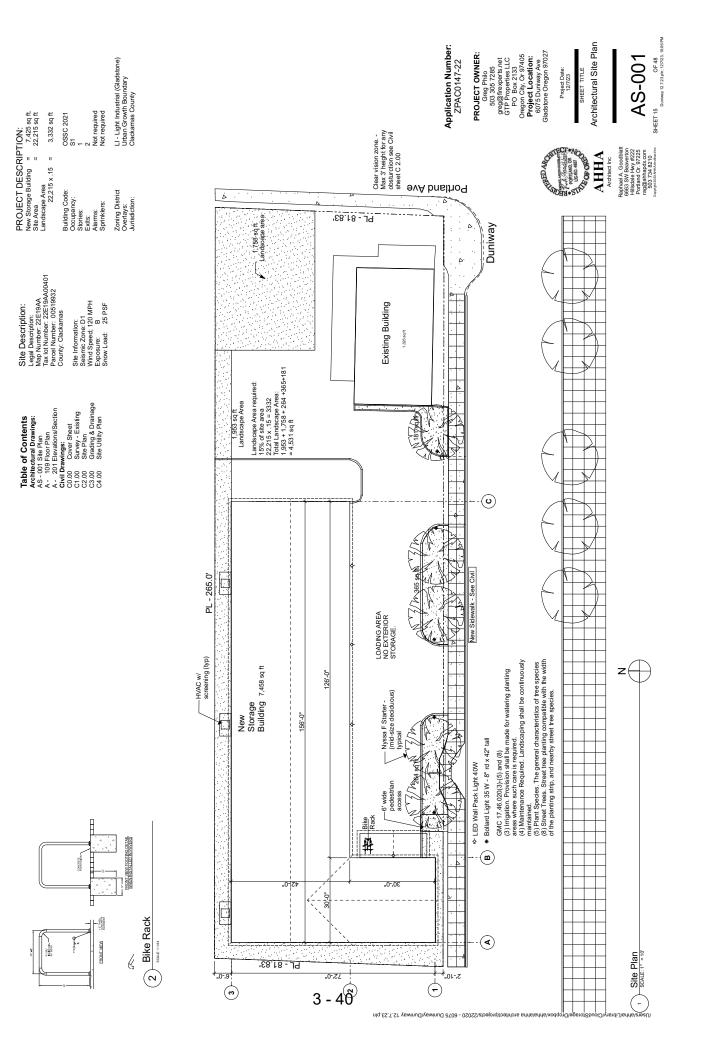
17.50.040 Street and road standards.

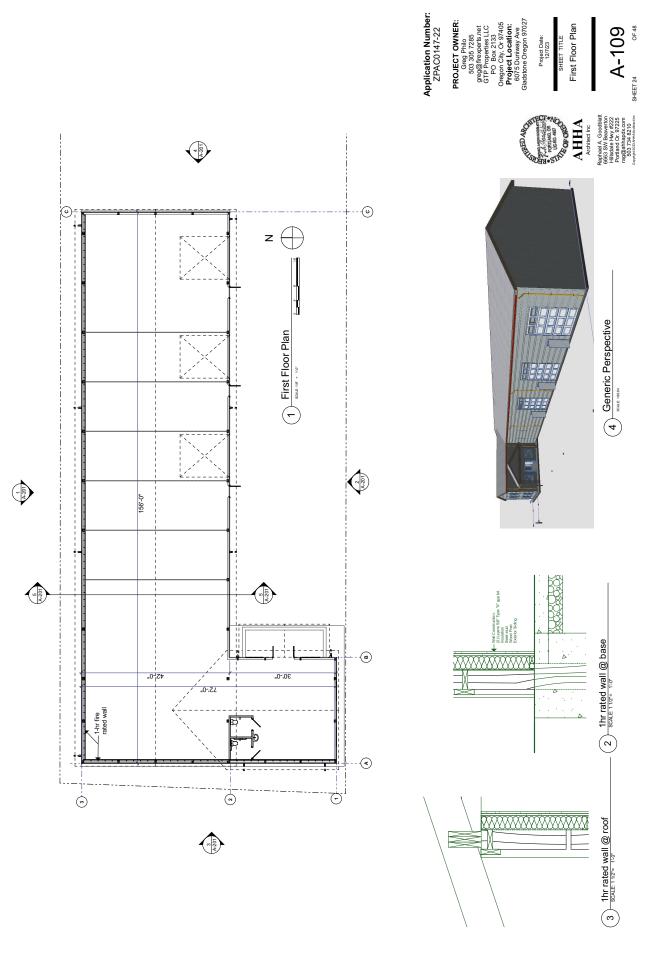
(1) Right-of-Way and Roadway Widths. See Civil C2.00 For right-of-way improvements

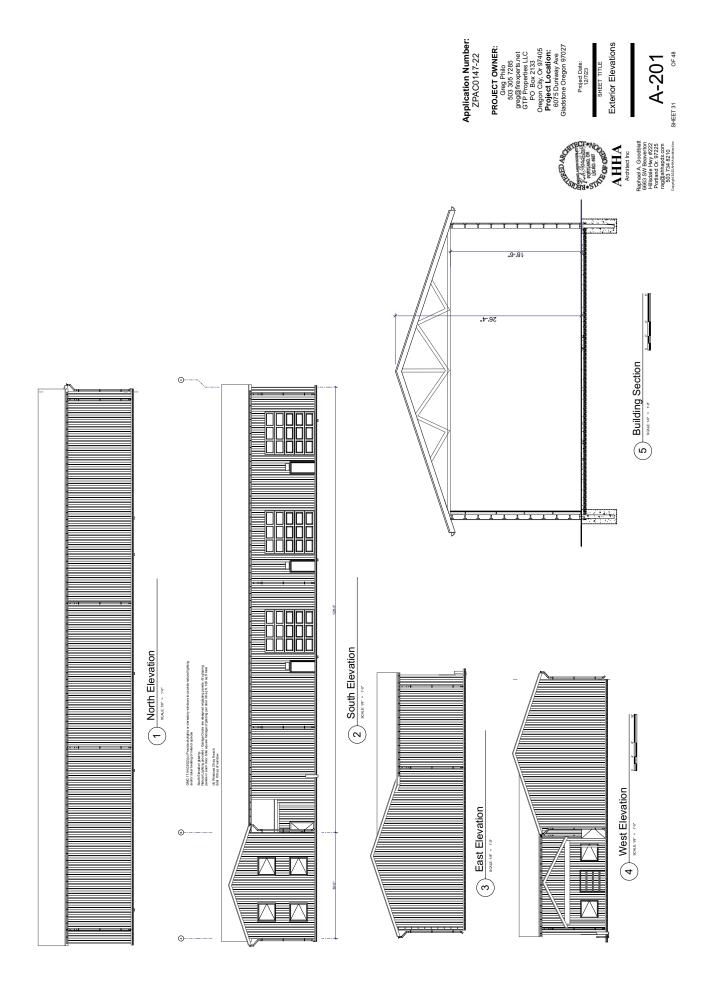
17.50.050 Traffic impact analysis (TIA). The City Public Works Department did not indicate that this would be needed.

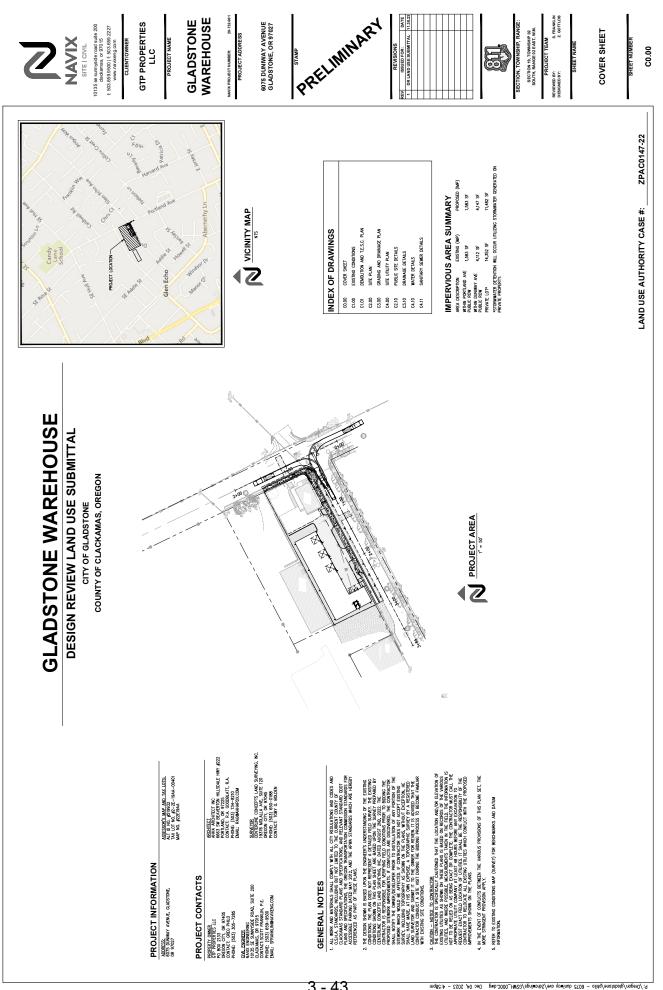
7.54.020 Clear vision area.

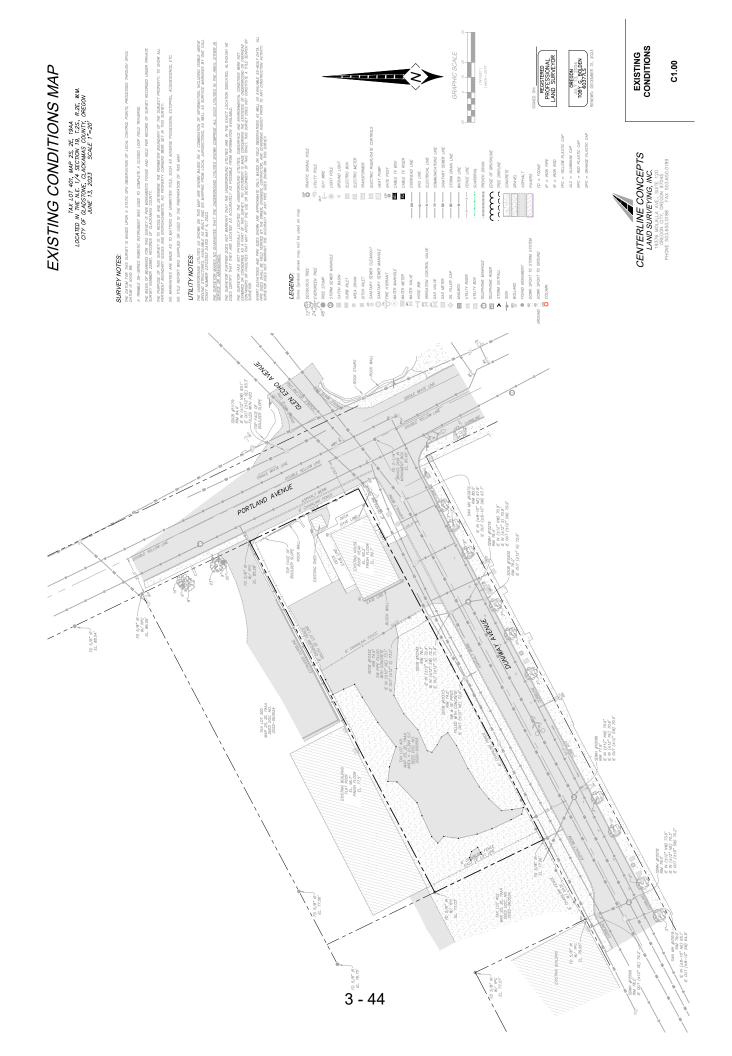
(1) Obstruction Prohibited See site plan sheet C2.00 for clear vision area.
The existing permitted residence is located partially within the clear vision triangle. This development does not change this previously permitted location.
Additionally, the newly constructed City Hall building resides within the clear vision triangle and encroaches even further than our existing building.
Please see the Site Plan, Sheet C2.10.

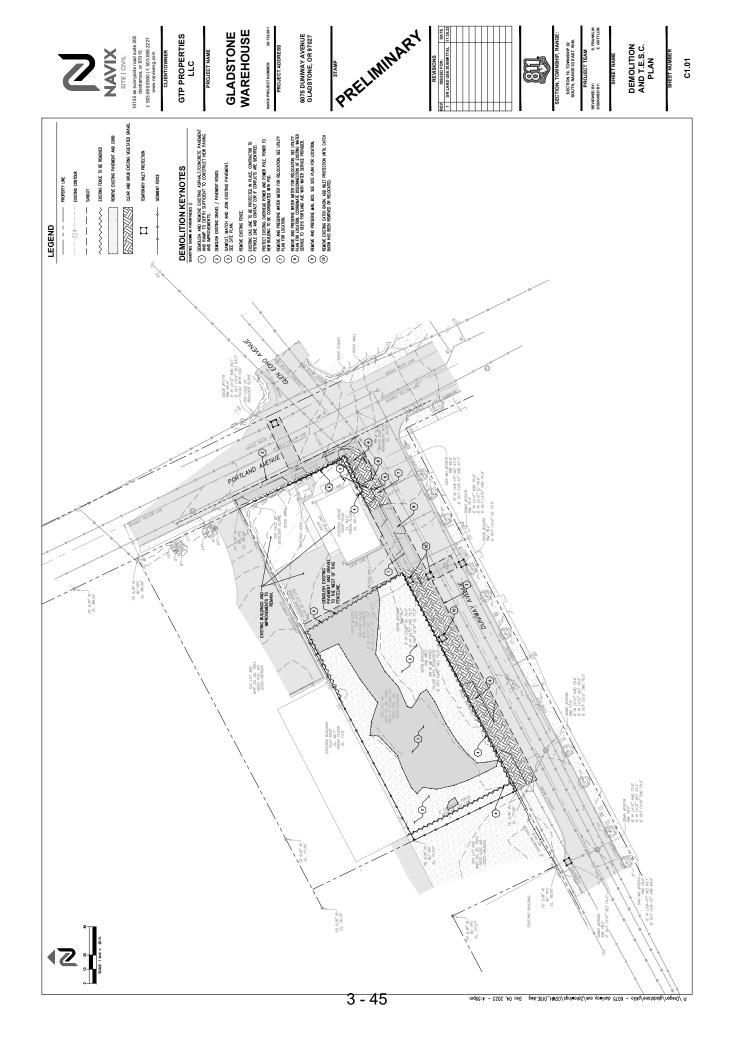


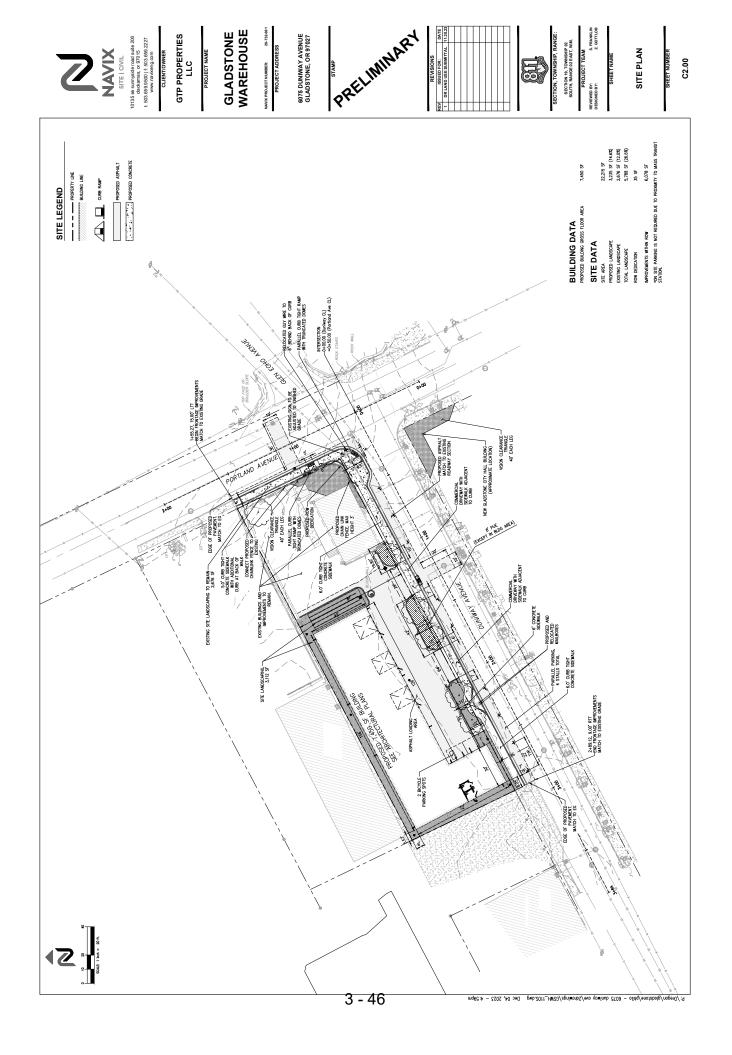


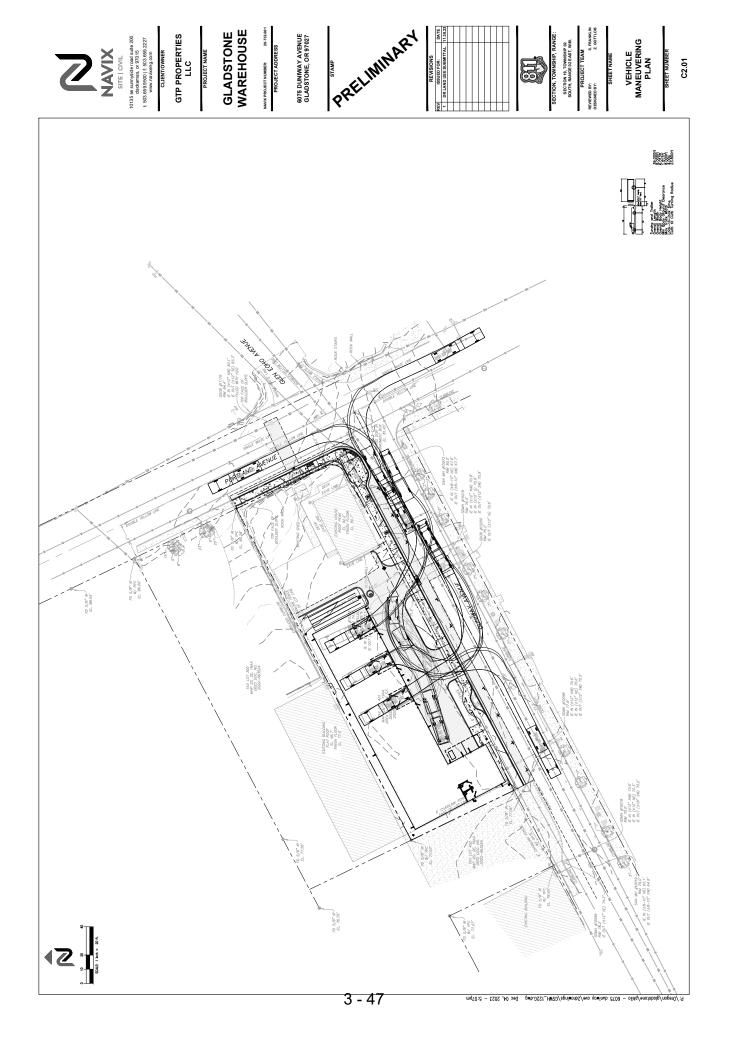


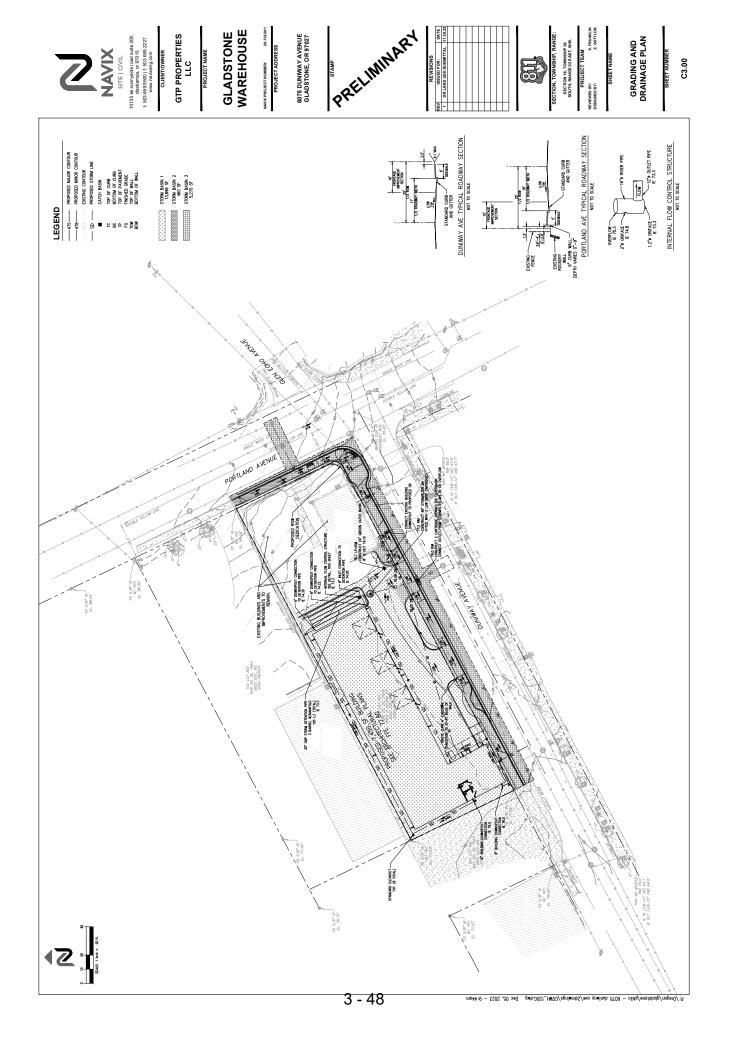


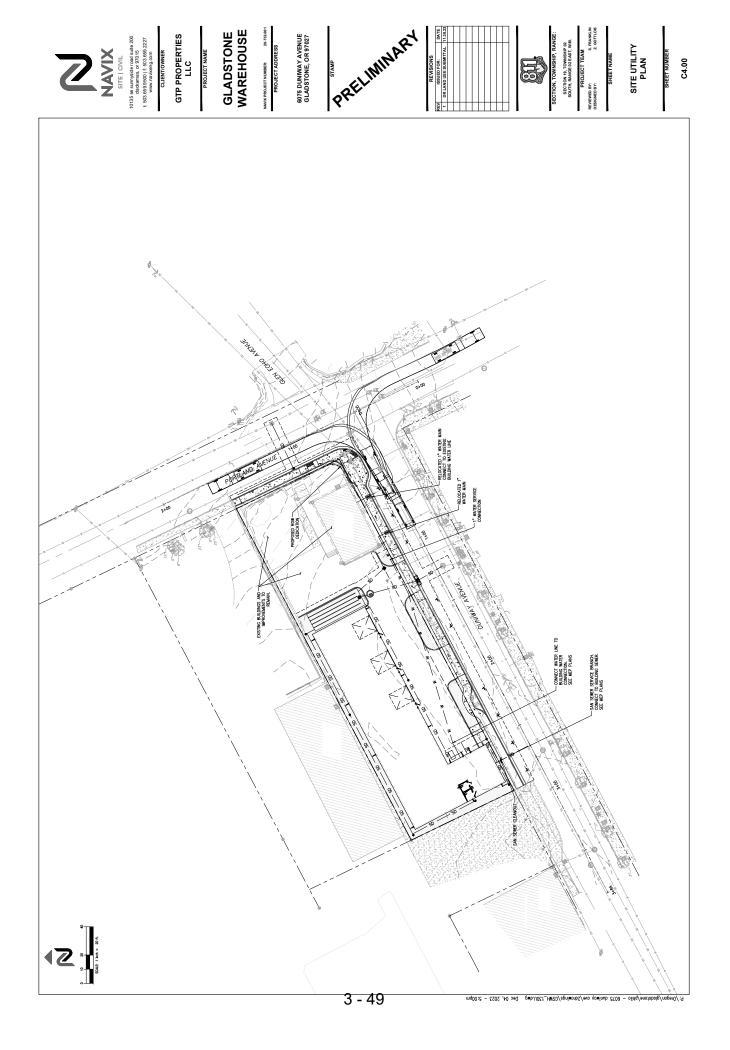


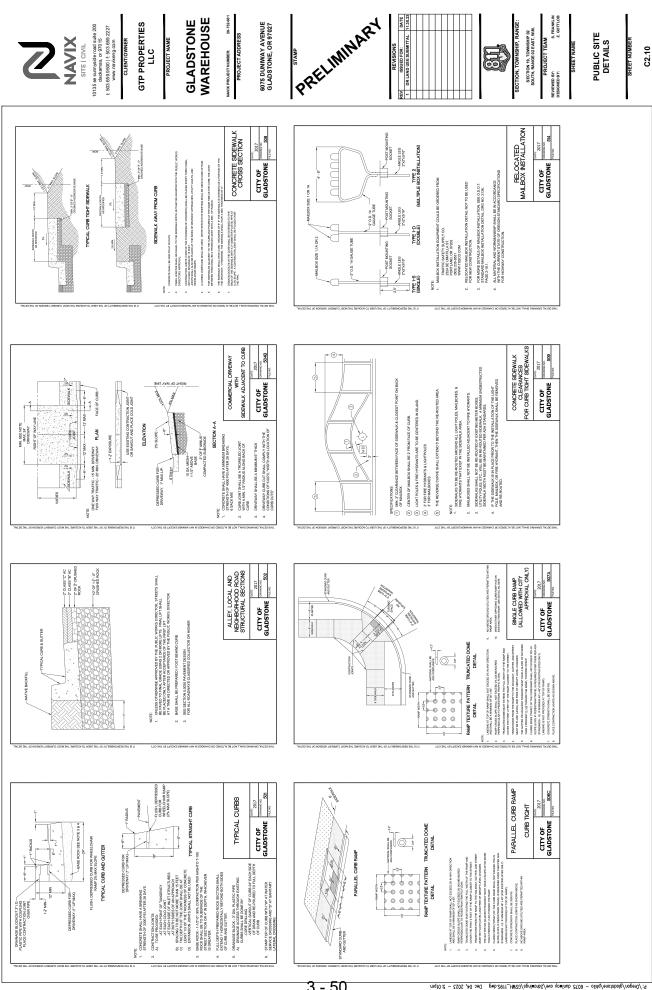


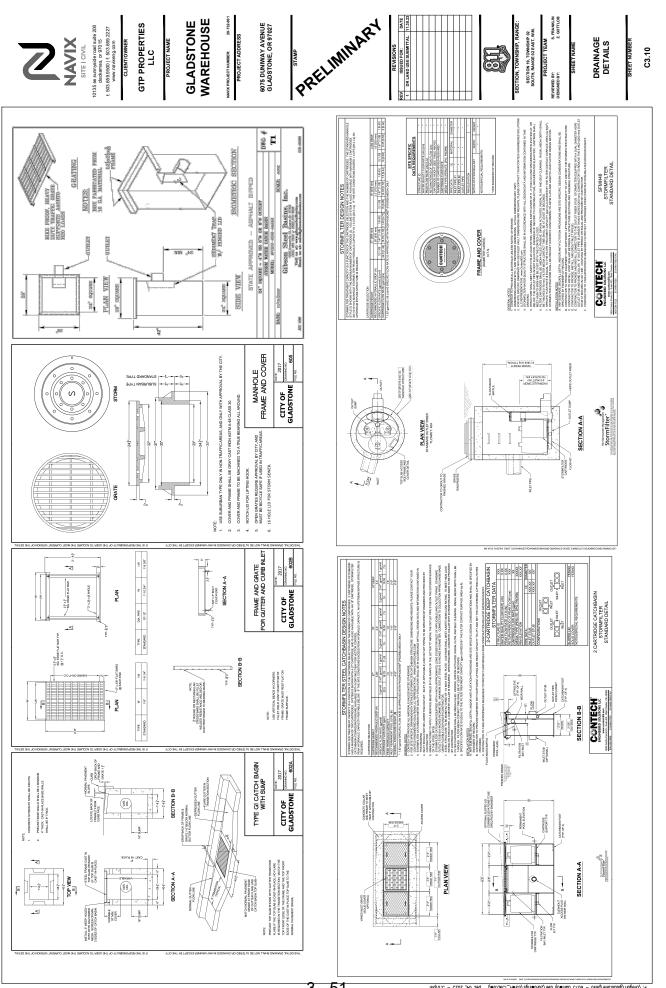




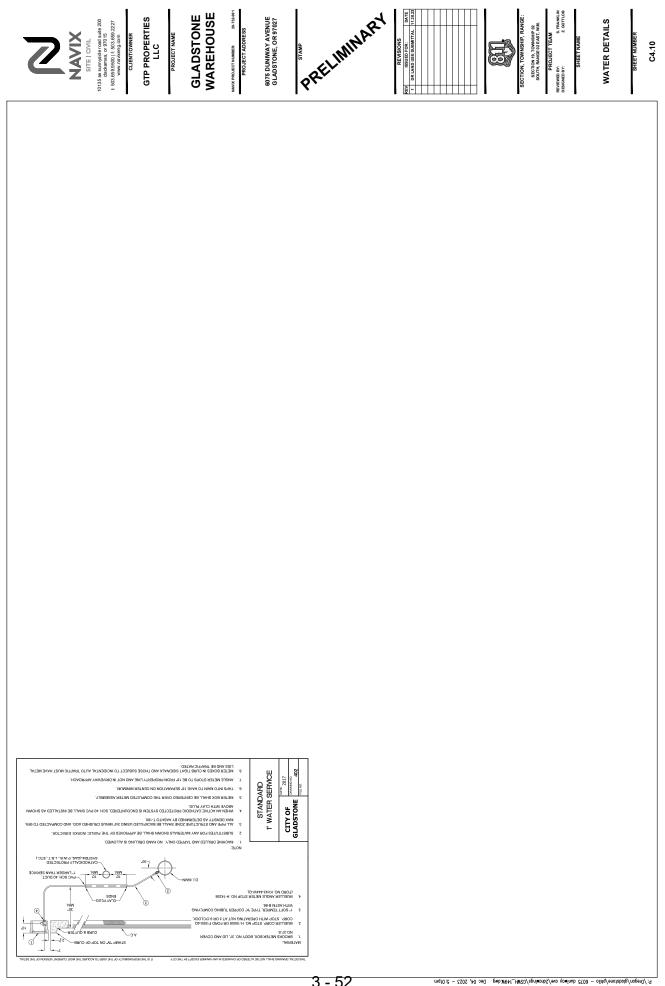


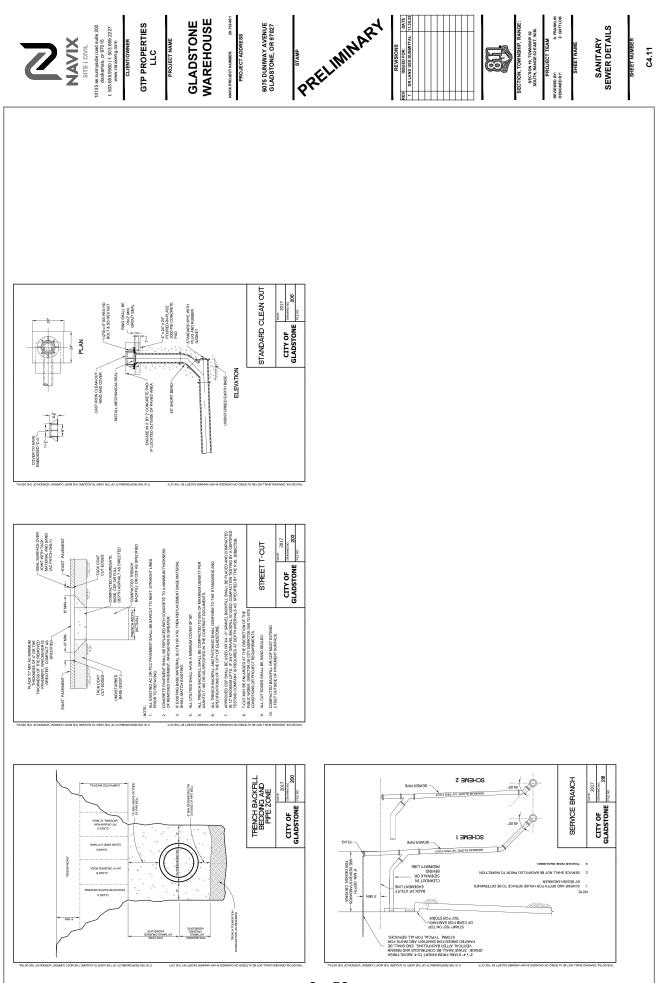






P: \Oregon\gladstone\philo - 5.03 - 5.01pm





P:/Oregon/gladstone/philo - 6075 duniway ave/2drawings/CSWL_1595.dwg Dec 04, 2023 - 5:01pm

Gladstone Warehouse

6075 Duniway Avenue Gladstone, 97027

Storm Drainage Analysis

PRELIMINARY

Prepared By:



10135 SE Sunnyside Rd Suite 200 Clackamas, OR 97015 t 503.659.9500 f 503.659.2227 navixeng.com

December 1st, 2023

Zack Gottlob, P.E. Scott G. Franklin, P.E., P.L.S.

Table of Contents

Section			Page
Stormwater D	rainage Report	t	
	-		2
	. Project Descri		
	. Design Criteri		
	Proposed Dra	ainage System	
-	. Conclusion		
-			
3. Project (Overview		5
a	. Existing Cond	litions	
b	. Proposed Dev	velopment	
C.	Soils		
d	. Hydrology		
4. Site Dra	inage Analysis		6
a	. Modeling		
b	. Drainage Basi	in Areas	
C.	Water Quality	/	
5. Conclus	ion		10
Appendi	ix A Site	e Plan	
Appendi	ix B NRC	CS Soil Survey	

HydroCAD Stormwater Analysis

Appendix C

Project Description

The proposed project is located at 6075 Duniway Avenue in Gladstone, Oregon. The site is in the City of Gladstone within Clackamas County and is subject to the City of Gladstone Stormwater Standards.

The existing private site is approximately 0.52 acres with an existing residence and parking area. The project will add an additional building and maneuvering area. Of the 0.52 acres site, approximately 0.34 acres will be disturbed as a part of this project. The entire site has historically been gravel. However, over time portions of the public frontage and private site have seen vegetative growth through the gravel, enough to affect the amount of runoff expected from the existing condition. We've estimated this area to be 0.09 ac and assumed a reduced CN of 91 to reflect the underlying impervious gravels but also the surface vegetation we now see. The project proposes to remove and/or demolish approximately 0.34 acres of the existing impervious and vegetated gravel area, and construct approximately 0.27 acres of new impervious area, for a net decrease of 0.07 acres. The proposed improvements will involve the building construction, asphalt maneuvering area lot, associated landscaping, and driveways.

The project will also require frontage improvements along both Duniway and Portland Avenues, with the relocation of 3 storm structures, existing mailbox, and 2 water meters. Approximately 0.13 acres of public impervious and vegetated gravel area will be replaced, with no net gain of impervious area.

Design Criteria

The purpose of this report is to describe the project's stormwater management strategy and to show that the design meets the agency requirements for mitigating stormwater impacts. The City of Gladstone has identified a downstream deficiency which will require additional detention above what is normally required per the City of Gladstone Stormwater Standards. Required infiltration will not be feasible due to the underlying soil's lack of infiltration capacity. Other design criteria include providing safe passage of the 100-year storm event. Volume-based storm facilities are designed to treat the first 1.0 inch of the 24-hr storm event. The City has identified a downstream deficiency which restricts the permissible post-developed flow rates for 24-hr events. Flow rates for 2-year, 24-hour events are limited to ½ the predevelopment rate, while the 25-year, 24-hr events are limited to the 2-year, 24-hr event.

Proposed Drainage System

This project proposes to introduce a private catch basin, and a pipe storage system with flow control orifice to detain and control release of stormwater. Water Quality Treatment will be provided by a private Stormfilter manhole which will be constructed between the detention system and discharge point. An overflow bypass for larger rainfall events will also be provided. Building downspouts and the asphalt area will be routed into the detention system. Stormwater generated within the ROW will be collected via public storm pipes and a standard catch basin within Portland Ave and Stormfilter catch basin within Duniway Ave and routed directly into the storm system. Please see a more detailed description of Basins 2 and 3 water quality treatment on Page 8.

The detention system has been sized using the design criteria described above, and as outlined further in this report.

As the existing untouched portion of the site currently drains into the ROW, both overland, and using a piped downspout. The existing flow path crosses the proposed sidewalk. To avoid this, an additional private catch basin will be installed to collect and deposit stormwater without treatment or detention into the public system through the private stormwater conveyance system.

Project Location



https://cmap.clackamas.us/maps/cmap?address=6075%20Duniway%20Ave,%20Gladstone,%2097027#

Location:	6075 Duniway Ave, Gladstone, OR 97027
Section/Township/Range:	NE ¼ of Section 19 T2S, R2E, W.M.
Parcel/Tax Lot:	#2-2E-19AA-00401
Property Size:	0.52 Acres
City, County, State:	Gladstone, Clackamas County, Oregon
Governing Agency:	City of Gladstone
Design Criteria:	City of Gladstone Stormwater Standards
Zone:	LI - Light Industrial District

Gladstone Warehouse – Stormwater Report 6075, Duniway Avenue

Project Overview

Existing Conditions

The proposed project is located at 6075 Duniway Ave, in Gladstone, Oregon. The existing site is approximately 0.52 acres with an existing residence along with an associated parking lot. The site generally slopes from northeast to southwest with approximately 0.65' of grade difference from the northern most area to be disturbed to the southern property corner. Of the 0.52 acres, approximately 0.34 acres will be disturbed as a part of this project on the southwestern half of the property. Existing improvements to the northeast of the proposed development area will remain untouched as part of this project, The untouched areas of the property currently drain to the ROW, as well as site landscape areas.

Proposed Development

The proposed project involves demolishing the existing parking area, fences, and gates. The demolition will remove approximately 0.34 acres of existing impervious area (vegetated gravel and asphalt surfacing) on the southwestern half of the property, and construct approximately 0.27 acres of new impervious area, for a net decrease of 0.07 acres of site impervious area. Public impervious area will be largely unchanged in area at 0.13 acres, however the nature of the impervious will be altered, in that it is currently vegetated gravel, and will be replaced by concrete sidewalk and asphalt roadway.

The maneuvering area will consist of approximately 4,103 sf of asphalt driveway and maneuvering area, and will drain into a private catch basin, before entering the 30" detention pipe system. The proposed building is approximately 7,450sf, and will be routed via downspouts into the detention system. The detention system has been sized to overdetain the stormwater generated from the building roof and asphalt maneuvering area, to meet peak flow limits. It is also sized to treat the stormwater generated within the basin to meet stormwater quality standards.

Overall, the improved area will consist of 17,195 sf (0.39 ac) of public and private impervious area (roof and concrete/asphalt), and 3,111 sf (0.07 acres) of pervious area (landscaping). Of the 0.39 acres of impervious surface runoff, approximately 0.27 acres (11,482 sf) will drain to the private stormwater system, while the rest will be collected within the public system. The detention pipe and Stormfilter manhole have overflows built into their flow control orifices, which will allow larger events to bypass the treatment and prevent the detention pipe from surcharging. In the event of a greater than 100-year storm event that surcharges the detention pipe, the private catch basin grate will overtop and drain into the right-of way.

The remaining 5,713 sf (0.13 acres) of public sidewalk, roadway and landscaping will collect in two proposed public catch basins. Catch Basin 1 (CB1), within Portland Avenue ROW will

collect 460 sf of runoff from the proposed improvements. Catch Basin 2 (CB2), a Stormfilter catch basin will collect the remainder of the proposed impervious area, and minor landscaping generated within Portland Ave and Duniway Avenue (5,253 sf) to be treated before discharge into the public storm system. In order to meet the detention requirements, the private system will detain enough stormwater, that the sum total of the basins discharge meets the required reduction in discharge, as allowed by the City of Gladstone stormwater standards.

Soils

Per the NRCS Web Soil Survey Report generated on June 20, 2023 (see Appendix A), the onsite soils are Cove Silty Clay Loam, hydrologic soil group D, with an estimated very low to moderately low Ksat of 0.00 to 0.06 in/hr. Due to the negligible infiltration, storm infiltration is not proposed.

Hydrology

Curve Number

When using the SBUH methodology, a curve number (CN) of 98 is used for proposed gravel, asphalt, concrete and rooftops. For the existing vegetated gravel, a CN of 91 was used. For all other landscaping/pervious areas a CN of 80 is used.

Runoff from the site was calculated using the SBUH methodology and the appropriate areas were routed through the detention system, utilizing HydroCAD, which utilizes a stage-storage methodology.

Time of Concentration

The time of concentration (Tc) is the time for runoff to travel from the furthest point in the drainage basin of interest to the discharge point of interest. Runoff on the site typically sheet flows to catch basins or downspouts where it is conveyed by underground pipes to the storm system. The longest Tc onsite is less than 5 minutes therefore the 5-minute minimum Tc has been applied to the model.

Site Drainage Analysis

Modeling

HydroCAD v10.10-6a was utilized to assist with stormwater modeling and calculations for the storm system. NRCS Type 1A rainfall distribution and the SBUH methodology were utilized for the analysis of the water quality event. Given a specified design storm (precipitation values) and its associated distribution, the HydroCAD model calculates runoff hydrographs in terms of peak rates and total volume based on the approximated characteristics of the basin (i.e., basin area, curve number (CN), time of concentration (TC), etc.). The water quality treatment volume for the site impervious area is calculated using a 1.0 inch 24-hr NRCS Type 1A rainfall distribution rain event, utilizing the SBUH method. Peak inflows were compared to the provided outflow ratings provided by Contech to verify the water quality event can be treated with the Stormfilter manhole and catch basin, without bypassing the cartridges as described further below.

Drainage Basin Areas

Impervious, pervious areas and curve numbers used in the analysis for pre-developed and post-developed conditions are shown in Table 1 below. For purposes of sizing the stormwater facilities, the site is split into 3 separate drainage basins, Basin 1, Basin 2, and Basin 3. Basin 1 comprises of the on-site area proposed for this development and will be treated and detained on-site, before discharging into the public system, via a connection to the overflow of the public Stormfilter CB. Basin 2 comprises the impervious area draining to CB1, which consists entirely of the public sidewalk and roadway expansion. Basin 3 consists entirely of a public sidewalk and roadway within Duniway and Portland which bypasses CB1. See sheet C3.00 on the Design Plans, for basin delineations.

The combined peak discharge rates for the 2-year and 25-year events of all three basins were combined and verified to meet the rates of pre-development, 1/2 2-year and 2-year, peak flow rates, due to the downstream deficiency.

PRE-DEVELOPED					
Basin	Area (sf)	Condition	CN	TC (min)	
	16,577	Redevelopment Impervious Area	98	5	
	3,853	Redevelopment Vegetated Gravel	91	5	
Total	20,430	Weighted Avg	97		
		POST-DEVELOPED			
Basin 1	Area (sf)	Condition	CN	TC (min)	
	11,482	Proposed Impervious Area	98	5	
		(roof, asphalt/concrete)			
	2,870	Pervious Area (landscaping)	80	5	
Subtotal	14,352	Weighted Avg	94	5	
Basin 2	Area (sf)	Condition	С	TC (min)	
	460	Newly-created Impervious Street	98	5	
		Area (Portland Ave)			
Subtotal	460				
Basin 3	Area (sf)	Condition	с	TC (min)	
	5,377	Newly-created Impervious Street	98	5	
		Area (Duniway Ave & Portland Ave)			
	241	Pervious Area (Landscaping)	80	5	
Subtotal	5,618	Weighted Avg		5	
Total	20,430				

Table 1 – Summary of Drainage Basin Information

Water Quality

This project proposes to treat runoff generated on site by flowing through Stormfilter cartridges within the Stormfilter manhole. For publicly generated stormwater, the project proposes to treat runoff generated by flowing through Stormfilter cartridges in a public Stormfilter catch basin. See Table 3 for additional information.

The private storm facility complies with the water quality requirements identified above to treat the first 1.0 inch of the 24-hr event. This corresponds to a peak discharge rate of 8.97gpm (0.02cfs) through the 1.2" WQ orifice within the detention facility. The StormFilter manhole, fitted with 3, low drop cartridges, can treat the water quality peak flow rate of the available peak flow rate of 10gpm (0.022cfs).

The public Stormfilter CB is designed to treat the first 1.0 inch of the 24-hr event which corresponds to a peak flow rate of 8.97gpm (0.02 cfs) with the available 12.53gpm provided by the 2-cartridge system.

Basin 1 – Detention System

As noted above, Basin 1 will be treated and detained through the detention system, a volume-based storm facility. See Appendix B for calculations, summarized in Table 2 and 3 below.

-					
Basin	Proposed Impervious Area gravel and Roof Runoff (sf)	Proposed Pervious Area Landscaping (sf)	Proposed Facility Size (sf)	Proposed Facility Storage (cf)	
1	11,482	2,870	487.5	957	

Table 2 – Detention System Sizing Requirements

A 16" barrel flow control structure within the detention facility controls the release rates for storm events. The structure has a 1.2" WQ orifice at elevation 73.3, another 1" orifice, with invert at 74.8 and is open at the elevation of 75.3 The release rates and storage elevations are identified in Table 3.

	Peak Flow Rate	Peak Basin 1	Basin 2+3	Target Release	Peak
Storm	into Basin 1	Release Rate	Release	Rate	Storage
Event	Detention Facility	(cfs)	Rate	(predevelopment)	Elevation
	(cfs)	(CIS)	(cfs)	(cfs)	(ft)
WQ	0.05	0.02	0.03	-	73.67
2-yr	0.17	0.04	0.09	0.13 (1/2-2-yr)	74.66
25-yr	0.28	0.14	0.13	0.27 (2-yr)	75.32
100-yr	0.34	0.34	0.15	0.52	75.40

Table 3 – Detention System Storage

The peak flow is below the maximum peak flow provided by the 3-cartridge water quality manhole, so the entire WQ event will be detained and treated. Flows exceeding the 25-year event will overtop the flow control overflow outlet, which is at an elevation of 75.30, to freely release at high flow rates. Once stormwater reaches this elevation it will bypass the flow control orifice within the flow control structure in the detention pipe and the overflow orifice within the water quality manhole and discharge into the public system. Discharge to the public system will be through the bypass system within the Stormfilter CB. The soffit of the detention pipe is at 75.80 providing 6" of freeboard above the overflow structure.

Basin 2 – Public CB1

There is insufficient area within the ROW to provide surface level vegetated treatment or detention facilities and insufficient cover to provide mechanical treatment such as a Stormfilter Catch basin, therefore this area will remain untreated. However due to the excess treatment capacity within the private system and CB2, overall stormwater quality will meet the standard.

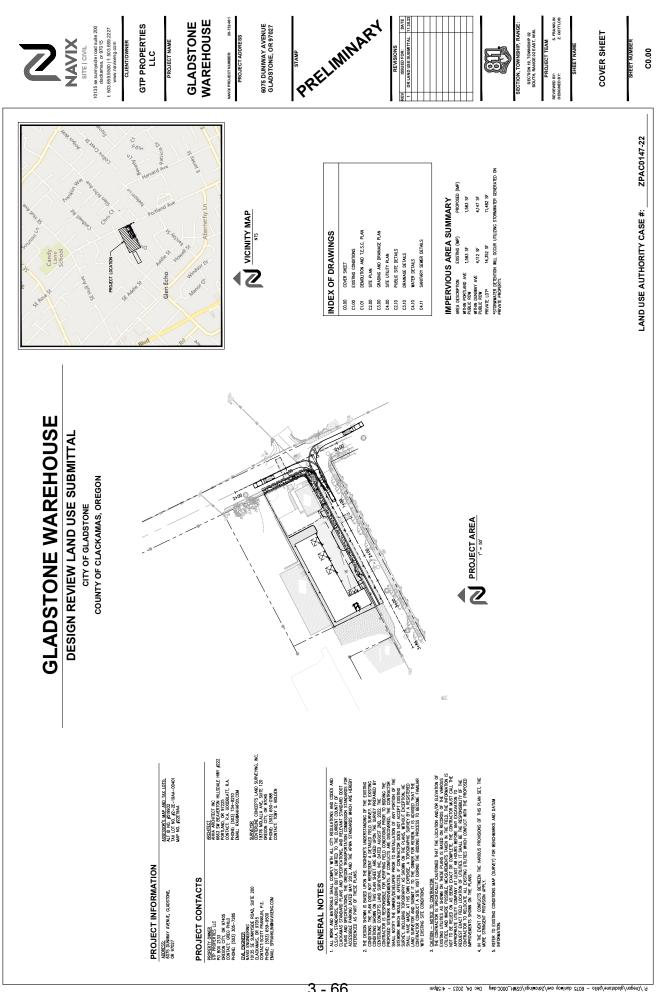
Basin 3 – Public CB2

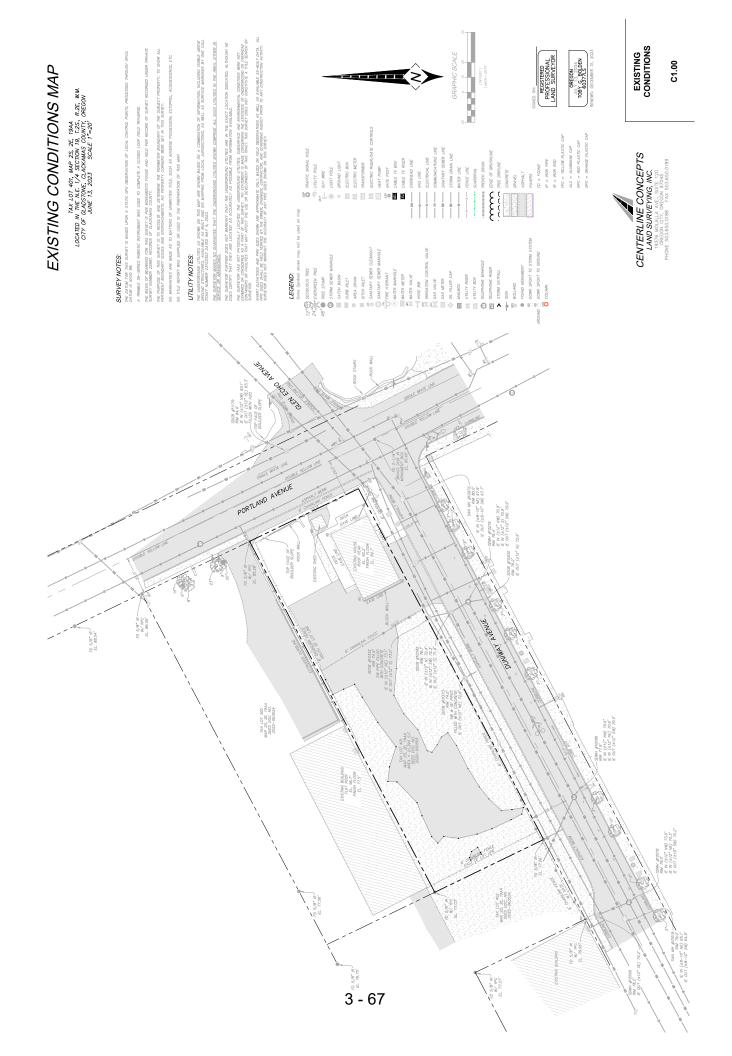
Stormfilter Catch basin 2 will collect and treat stormwater generated within Duniway Avenue and Portland Avenue, where it is not collected up stream. Treatment will be provided by a Contech 2 Cartridge Filter System, with a capacity of 12.53gpm.

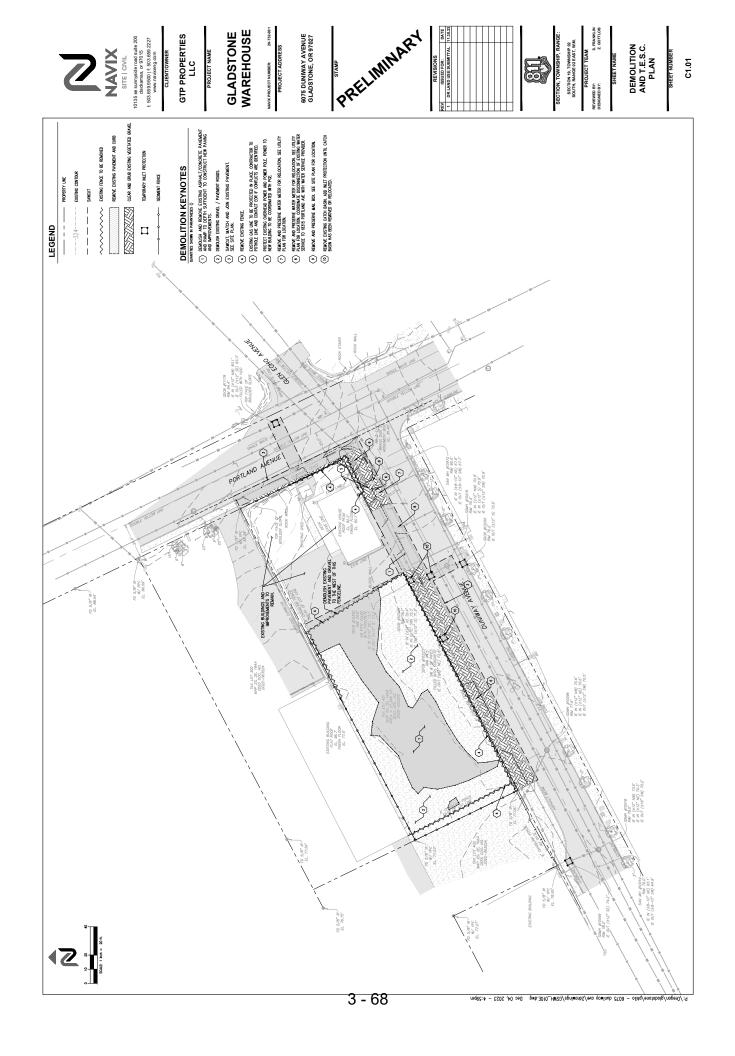
Conclusion

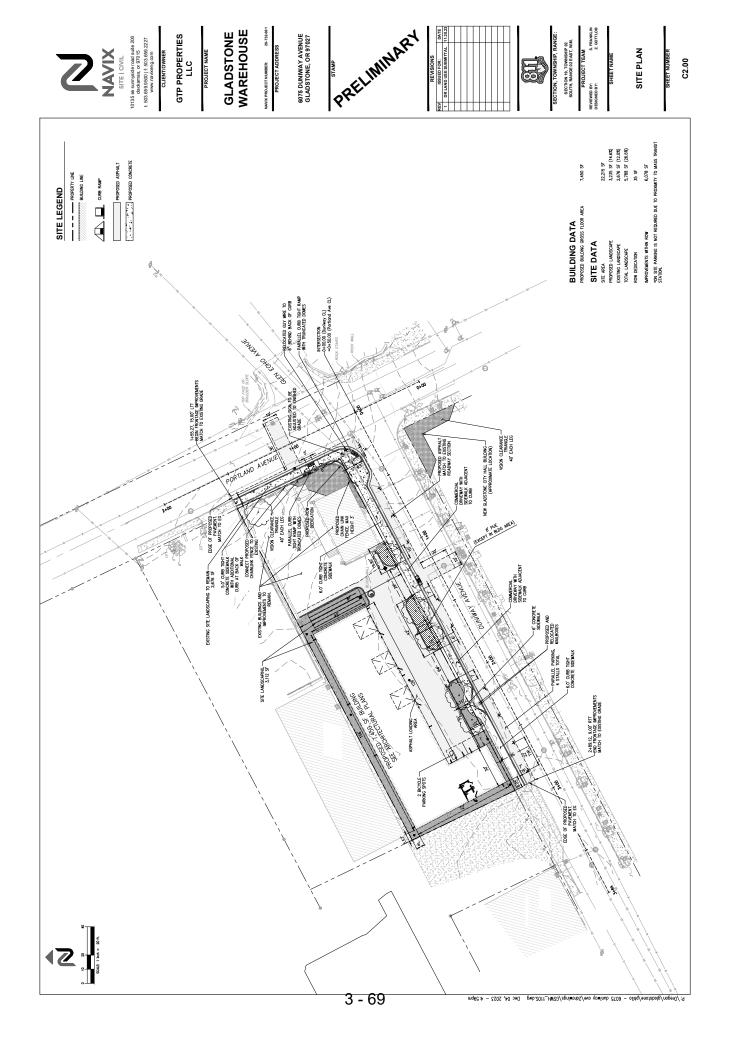
The proposed stormwater management system for this project has been designed in accordance with regulatory criteria described above and is consistent with sound engineering practice. This design has incorporated stormwater quality treatment and flow detention to the maximum extent practicable. Therefore, no significant adverse impacts to surrounding surface water are expected because of the proposed improvements.

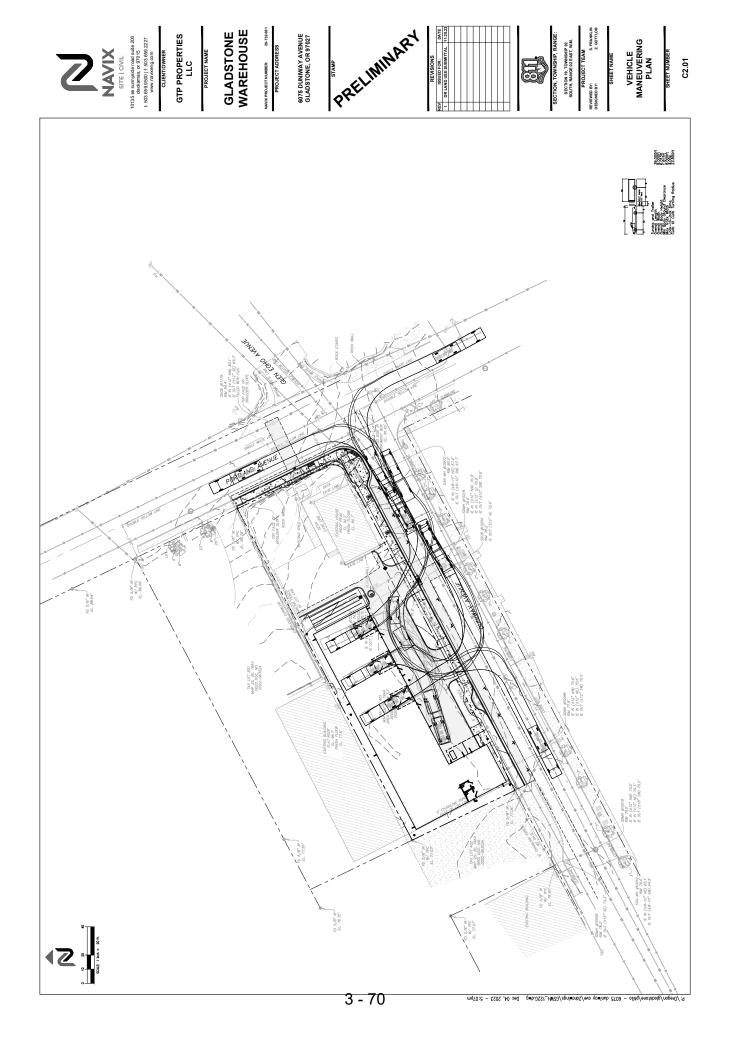
Appendix A

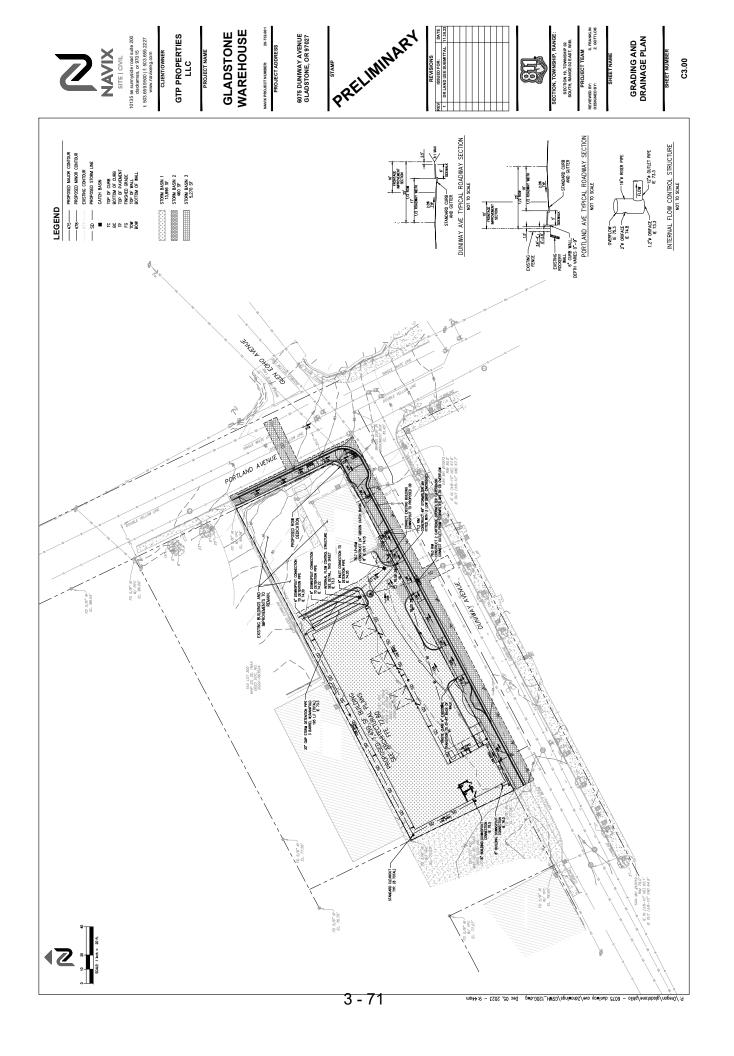


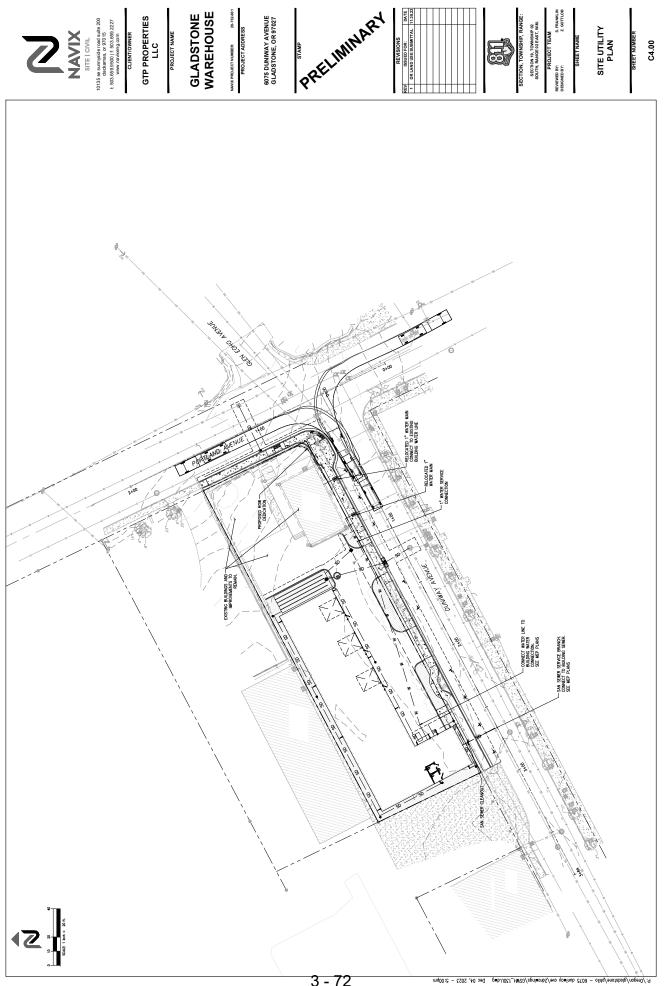


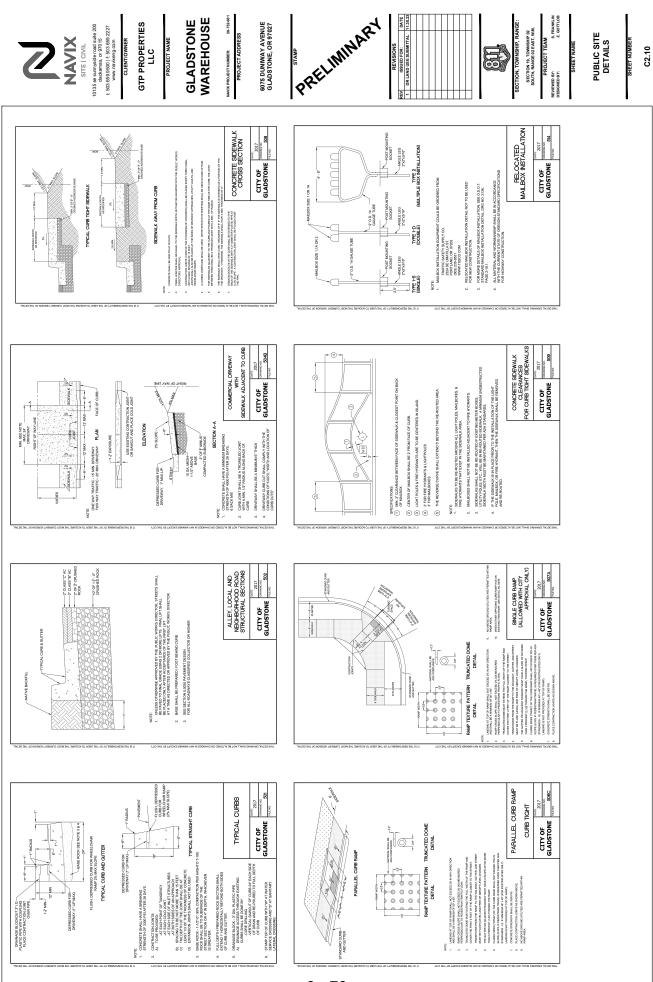








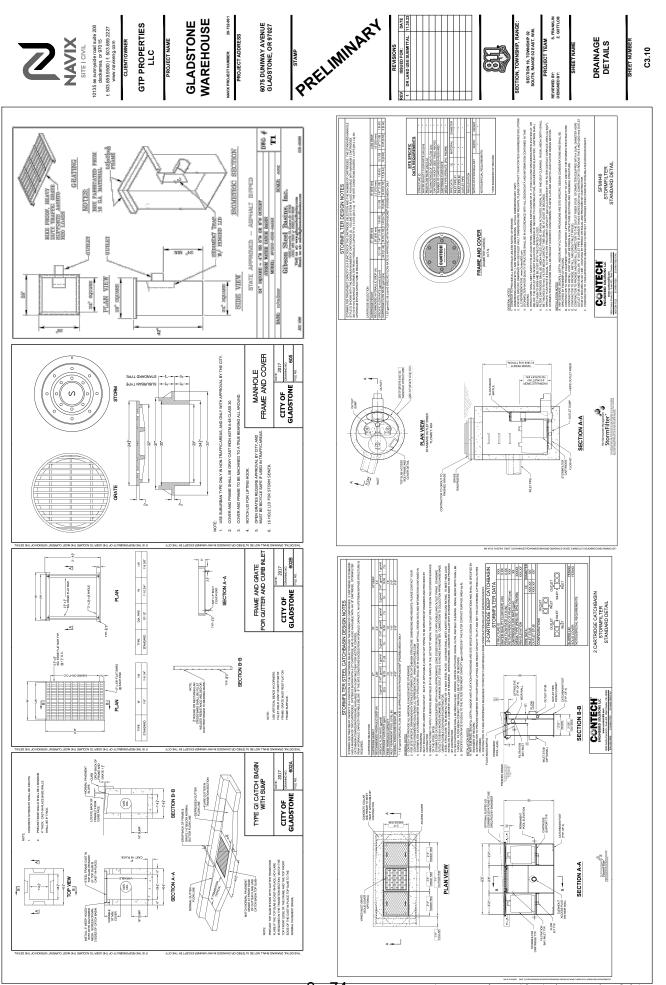




3 - 73

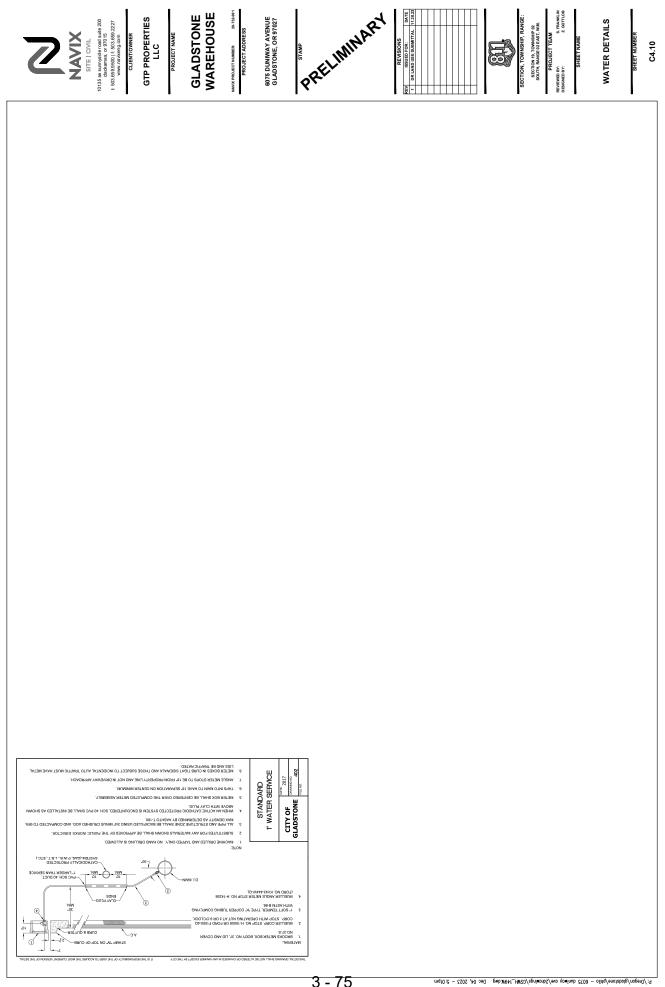
P:/Oregon/gladstone/philo - 6075 dunimary ave/2dramings/SSUH_1195.dwg Dec 04, 2023

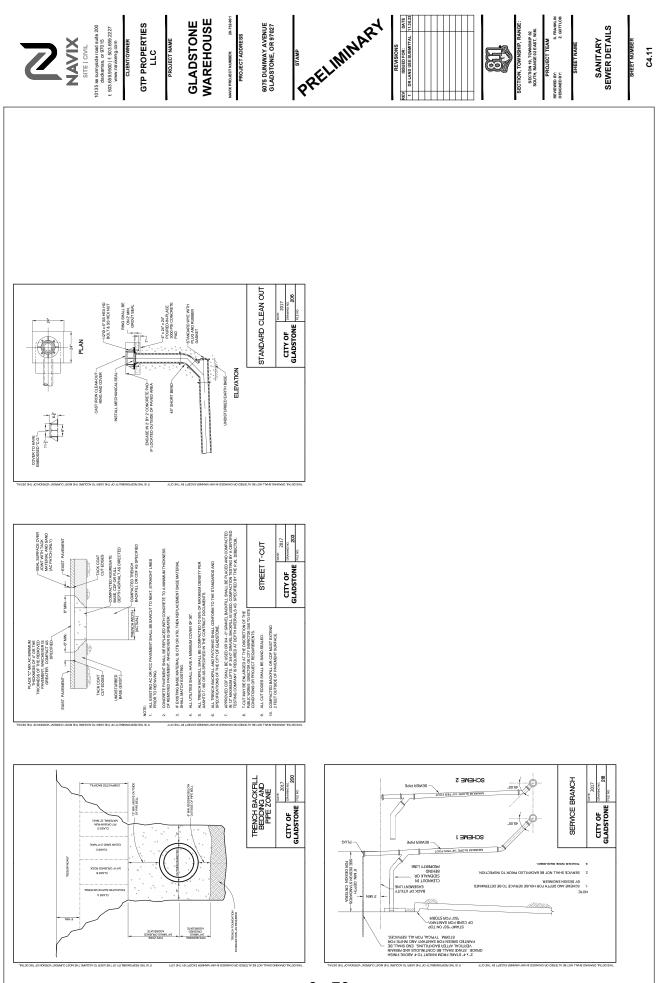
mqf0:č



3 - 74

P:/Oregon/gladstone/philo - 6075 dunimay ave/2dramings/CSMH_1590.dwg Dec 04. 2025 - 5:01pm





3 - 76

P:/Oregon/gladstone/philo - 6075 Junimay ave/Sdramings/Sdva _ Dec 04, 2023 - 5:01pm

Appendix B



United States Department of Agriculture



Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants Custom Soil Resource Report for Clackamas County Area, Oregon



Preface

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

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

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

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

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

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

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	
Soil Map	9
Legend	
Map Unit Legend	
Map Unit Descriptions	
Clackamas County Area, Oregon	
25—Cove silty clay loam	
91B—Woodburn silt loam, 3 to 8 percent slopes	14
References	

How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

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

Soil Map

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



Γ

MAP L	EGEND	MAP INFORMATION	
Area of Interest (AOI) Area of Interest (AOI) Soils	Spoil Area	The soil surveys that comprise your AOI were mapped at 1:20,000.	
Soil Map Unit Polygons Soil Map Unit Lines Soil Map Unit Points	 Wery Stony Spot [™] Wet Spot Other Special Line Features 	Warning: Soil Map may not be valid at this scale. Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of	
Special Point Features Blowout Borrow Pit	Water Features	contrasting soils that could have been shown at a more detailed scale.	
Clay Spot	Transportation +++ Rails Interstate Highways	Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service	
Gravel Pit Gravelly Spot	US Routes Major Roads Local Roads	Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857) Maps from the Web Soil Survey are based on the Web Mercator	
 ▲ Lava Flow ▲ Marsh or swamp Mine or Quarry 	Background Aerial Photography	projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.	
 Miscellaneous Water Perennial Water 		This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.	
Rock Outcrop Saline Spot Sandy Spot		Soil Survey Area: Clackamas County Area, Oregon Survey Area Data: Version 19, Sep 14, 2022 Soil map units are labeled (as space allows) for map scales	
 Severely Eroded Spot Sinkhole 		1:50,000 or larger. Date(s) aerial images were photographed: Jun 13, 2019—Jul	
Slide or Slip Sodic Spot		25, 2019 The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.	

10

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
25	Cove silty clay loam	0.4	49.6%
91B	Woodburn silt loam, 3 to 8 percent slopes	0.4	50.4%
Totals for Area of Interest		0.8	100.0%

Map Unit Descriptions

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

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

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Clackamas County Area, Oregon

25—Cove silty clay loam

Map Unit Setting

National map unit symbol: 223y Elevation: 100 to 1,500 feet Mean annual precipitation: 40 to 60 inches Mean annual air temperature: 52 to 54 degrees F Frost-free period: 165 to 210 days Farmland classification: Farmland of statewide importance

Map Unit Composition

Cove and similar soils: 85 percent Minor components: 12 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cove

Setting

Landform: Flood plains Landform position (three-dimensional): Dip Down-slope shape: Linear Across-slope shape: Linear Parent material: Clayey alluvium

Typical profile

H1 - 0 to 7 inches: silty clay loam H2 - 7 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 24 inches
Frequency of flooding: OccasionalNone
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): 4w Land capability classification (nonirrigated): 4w Hydrologic Soil Group: D Ecological site: R002XC005OR - High Flood Plain Group Hydric soil rating: Yes

Minor Components

Wapato

Percent of map unit: 5 percent Landform: Flood plains Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear

Other vegetative classification: Poorly Drained (G002XY006OR) Hydric soil rating: Yes

Conser

Percent of map unit: 4 percent Landform: Terraces Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Other vegetative classification: Poorly Drained (G002XY006OR) Hydric soil rating: Yes

Concord

Percent of map unit: 2 percent Landform: Terraces Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Other vegetative classification: Poorly Drained (G002XY006OR) Hydric soil rating: Yes

Dayton

Percent of map unit: 1 percent Landform: Terraces Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Other vegetative classification: Poorly Drained (G002XY006OR) Hydric soil rating: Yes

91B—Woodburn silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 227z Elevation: 150 to 400 feet Mean annual precipitation: 40 to 50 inches Mean annual air temperature: 52 to 54 degrees F Frost-free period: 165 to 210 days Farmland classification: All areas are prime farmland

Map Unit Composition

Woodburn and similar soils: 90 percent Minor components: 4 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Woodburn

Setting

Landform: Terraces Landform position (three-dimensional): Tread Down-slope shape: Linear

> 14 3 - 91

Across-slope shape: Linear Parent material: Stratified glaciolacustrine deposits

Typical profile

H1 - 0 to 16 inches: silt loam

H2 - 16 to 38 inches: silty clay loam

H3 - 38 to 60 inches: silt loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 25 to 32 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 2e Hydrologic Soil Group: C Ecological site: R002XC008OR - Valley Terrace Group Forage suitability group: Moderately Well Drained < 15% Slopes (G002XY004OR) Other vegetative classification: Moderately Well Drained < 15% Slopes (G002XY004OR) Hydric soil rating: No

Minor Components

Huberly

Percent of map unit: 2 percent Landform: Swales on terraces Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Other vegetative classification: Poorly Drained (G002XY006OR) Hydric soil rating: Yes

Aquolls

Percent of map unit: 1 percent Landform: Flood plains Hydric soil rating: Yes

Dayton

Percent of map unit: 1 percent Landform: Terraces Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Other vegetative classification: Poorly Drained (G002XY006OR) Hydric soil rating: Yes

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http:// www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

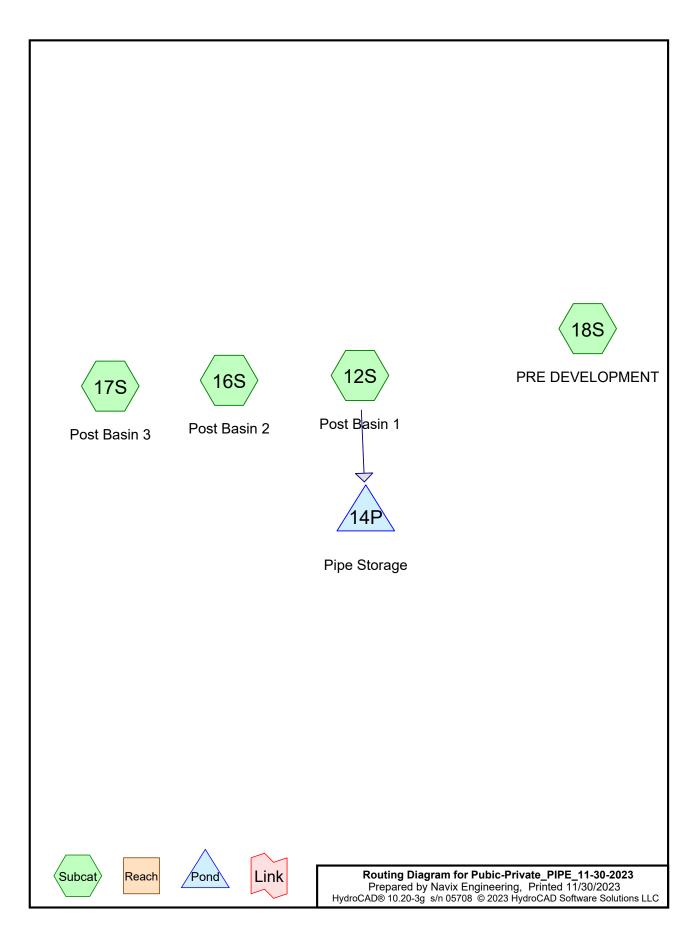
United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/ detail/national/landuse/rangepasture/?cid=stelprdb1043084 United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/? cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix C



Prepared by Navix Engineer	ing
HydroCAD® 10.20-3g s/n 05708	© 2023 HydroCAD Software Solutions LLC

Event	#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
	1	2-YR	Type IA 24-hr		Default	24.00	1	2.60	2
	2	25-YR	Type IA 24-hr		Default	24.00	1	4.00	2
	3	100-YR	Type IA 24-hr		Default	24.00	1	4.80	2
	4	WQ	Type IA 24-hr		Default	24.00	1	1.00	2

Rainfall Events Listing

Prepared by Navix Engineering	
HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC	

Area Listing (all nodes)

Area	CN	Description
 (acres)		(subcatchment-numbers)
0.071	80	>75% Grass cover, Good, HSG D (12S, 17S)
0.088	91	Gravel roads, HSG D (18S)
0.778	98	Paved parking, HSG C (12S, 16S, 17S, 18S)
0.938	96	TOTAL AREA

Pubic-Private_PIPE_11-30-2023 Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.778	HSG C	12S, 16S, 17S, 18S
0.160	HSG D	12S, 17S, 18S
0.000	Other	
0.938		TOTAL AREA

Pubic-Private_PIPE_11-30-2023TypPrepared by Navix EngineeringHydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

 Type IA 24-hr
 2-YR Rainfall=2.60"

 Printed
 11/30/2023

 _C
 Page 5

Time span=0.00-64.00 hrs, dt=0.05 hrs, 1281 points Runoff by SBUH method, Split Pervious/Imperv. Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment12S: Post Basin 1	Runoff Area=14,352 sf 80.00% Impervious Runoff Depth=2.09" Tc=5.0 min CN=80/98 Runoff=0.17 cfs 0.057 af				
Subcatchment16S: Post Basin 2	Runoff Area=460 sf 100.00% Impervious Runoff Depth=2.37" Tc=5.0 min CN=0/98 Runoff=0.01 cfs 0.002 af				
Subcatchment17S: Post Basin 3	Runoff Area=5,618 sf 95.71% Impervious Runoff Depth=2.31" Tc=5.0 min CN=80/98 Runoff=0.08 cfs 0.025 af				
Subcatchment18S: PRE DEVELOPMENT	Runoff Area=20,430 sf 81.14% Impervious Runoff Depth=2.24" Tc=5.0 min CN=91/98 Runoff=0.27 cfs 0.088 af				
Pond 14P: Pipe Storage	Peak Elev=74.66' Storage=0.012 af Inflow=0.17 cfs 0.057 af Outflow=0.04 cfs 0.057 af				
Total Runoff Area = 0.938 ac Runoff Volume = 0.172 af Average Runoff Depth = 2.20"					

17.04% Pervious = 0.160 ac 82.96% Impervious = 0.778 ac

Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 12S: Post Basin 1

[49] Hint: Tc<2dt may require smaller dt

Runoff	=	0.17 cfs @	7.91 hrs,	Volume=
Routed	l to F	ond 14P : Pipe S	torage	

0.057 af, Depth= 2.09"

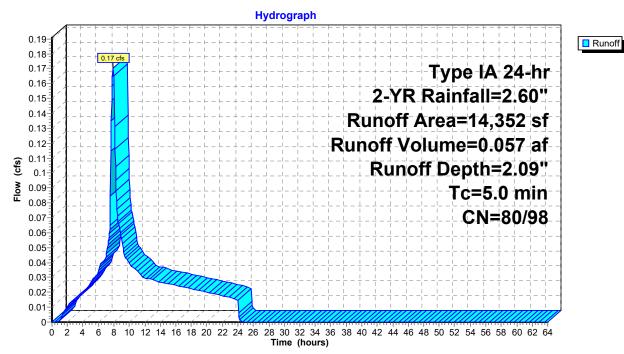
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr 2-YR Rainfall=2.60"

	Area (sf)	CN	Description	
	11,482	98	Paved parking, HSG C	
*	2,870	80	>75% Grass cover, Good, HSG D	
	14,352 2,870 11,482	94	Weighted Average 20.00% Pervious Area 80.00% Impervious Area	
	Tc Length (min) (feet)	Slop (ft/		

5.0

Direct Entry,

Subcatchment 12S: Post Basin 1



Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 16S: Post Basin 2

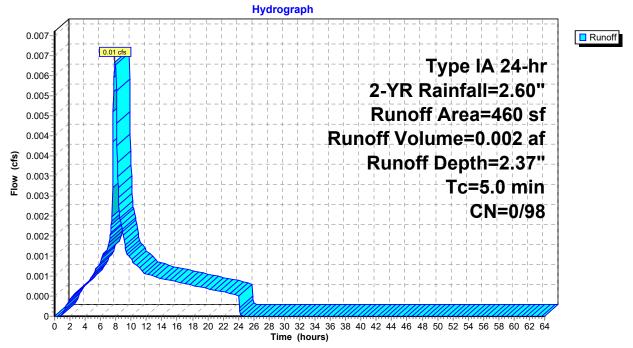
[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.01 cfs @ 7.90 hrs, Volume= 0.002 af, Depth= 2.37"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr 2-YR Rainfall=2.60"

A	rea (sf)	CN I	Description		
	460	98 I	Paved park	ing, HSG C	C
	460		100.00% In	npervious A	Area
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,





 Type IA 24-hr
 2-YR Rainfall=2.60"

 Printed
 11/30/2023

 LC
 Page 8

Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 17S: Post Basin 3

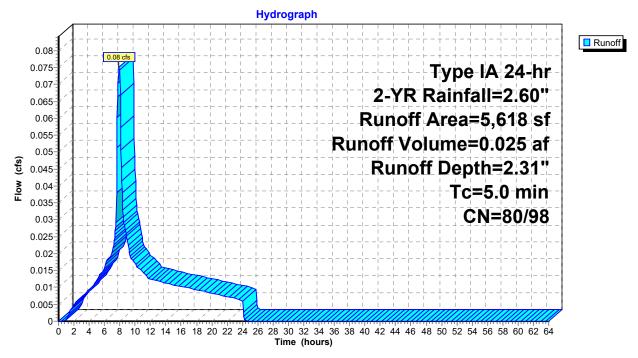
[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.08 cfs @ 7.90 hrs, Volume= 0.025 af, Depth= 2.31"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr 2-YR Rainfall=2.60"

A	rea (sf)	CN	Description		
	5,377	98	Paved park	ing, HSG C	C
	241	80	>75% Gras	s cover, Go	bood, HSG D
	5,618	97	Weighted A	verage	
	241		4.29% Per	vious Area	
	5,377		95.71% lm	pervious Ar	rea
Tc	Length	Slope		Capacity	Description
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)	
5.0					Direct Entry,

Subcatchment 17S: Post Basin 3



Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 18S: PRE DEVELOPMENT

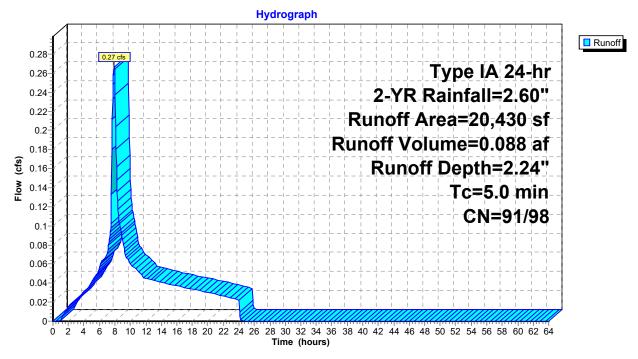
[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.27 cfs @ 7.91 hrs, Volume= 0.088 af, Depth= 2.24"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr 2-YR Rainfall=2.60"

A	rea (sf)	CN	Description		
	16,577	98	Paved park	ing, HSG C	
	3,853	91	Gravel road	ls, HSG D	
	20,430	97	Weighted A	verage	
	3,853		18.86% Pe	rvious Area	1
	16,577		81.14% lm	pervious Ar	ea
Tc (min)	Length (feet)	Slope (ft/ft		Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 18S: PRE DEVELOPMENT



Pubic-Private_PIPE_11-30-2023 Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Pond 14P: Pipe Storage

Inflow Area =	0.329 ac, 80.00% Impervious, Inflow D	epth = 2.09" for 2-YR event
Inflow =	0.17 cfs @ 7.91 hrs, Volume=	0.057 af
Outflow =	0.04 cfs @ 9.42 hrs, Volume=	0.057 af, Atten= 74%, Lag= 90.6 min
Primary =	0.04 cfs @ 9.42 hrs, Volume=	0.057 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Peak Elev= 74.66' @ 9.42 hrs Surf.Area= 0.011 ac Storage= 0.012 af

Plug-Flow detention time= 128.6 min calculated for 0.057 af (100% of inflow) Center-of-Mass det. time= 128.6 min (817.2 - 688.5)

Volume	Invert	Avail.Storag	e Storage Description
#1	73.30'	0.022 a	af 30.0" Round Pipe Storage
			L= 195.0'
Device	Routing	Invert	Outlet Devices
#1	Primary	73.30'	24.0" Round Culvert
	-		L= 1.0' RCP, groove end projecting, Ke= 0.200
			Inlet / Outlet Invert= 73.30' / 73.30' S= 0.0000 '/' Cc= 0.900
		I	n= 0.010 PVC, smooth interior, Flow Area= 3.14 sf
#2	Device 1	75.30' 2	2.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#3	Device 1	73.30'	1.2" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Device 1	74.80'	2.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
Primary	OutFlow Ma	x=0.04 cfs @	9.42 hrs HW=74.66' (Free Discharge)

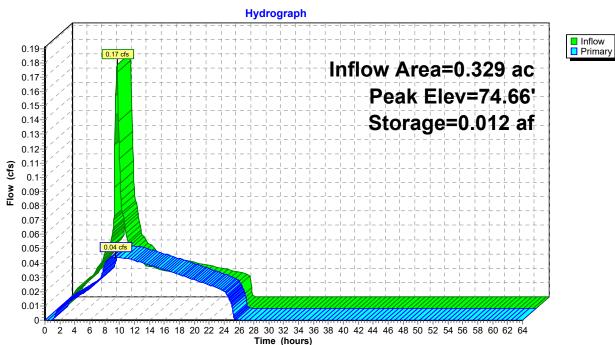
1=Culvert (Passes 0.04 cfs of 6.85 cfs potential flow)

-2=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

-3=Orifice/Grate (Orifice Controls 0.04 cfs @ 5.61 fps)

-4=Orifice/Grate (Controls 0.00 cfs)

Pubic-Private_PIPE_11-30-2023TyPrepared by Navix EngineeringHydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC



Pond 14P: Pipe Storage

Pubic-Private_PIPE_11-30-2023 Prepared by Navix Engineering	<i>Type IA 24-hr 25-YR Rainfall=4.00"</i> Printed 11/30/2023					
HydroCAD® 10.20-3g s/n 05708 © 2023 Hydro	CAD Software Solutions LLC Page 12					
Time span=0.00-64.00 hrs, dt=0.05 hrs, 1281 points Runoff by SBUH method, Split Pervious/Imperv. Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method						
Subcatchment12S: Post Basin 1	Runoff Area=14,352 sf 80.00% Impervious Runoff Depth=3.42"					

	Tc=5.0 min CN=80/98 Runoff=0.28 cfs 0.094 af
Subcatchment16S: Post Basin 2	Runoff Area=460 sf 100.00% Impervious Runoff Depth=3.77" Tc=5.0 min CN=0/98 Runoff=0.01 cfs 0.003 af
Subcatchment17S: Post Basin 3	Runoff Area=5,618 sf 95.71% Impervious Runoff Depth=3.69" Tc=5.0 min CN=80/98 Runoff=0.12 cfs 0.040 af
Subcatchment18S: PRE DEVELOPMENT	Runoff Area=20,430 sf 81.14% Impervious Runoff Depth=3.62" Tc=5.0 min CN=91/98 Runoff=0.43 cfs 0.142 af
Pond 14P: Pipe Storage	Peak Elev=75.32' Storage=0.019 af Inflow=0.28 cfs 0.094 af Outflow=0.14 cfs 0.094 af
Total Dunoff Area = 0.029	as Duroff Volume = 0.270 of Average Duroff Dorth = 2.56

Total Runoff Area = 0.938 ac Runoff Volume = 0.279 af Average Runoff Depth = 3.56" 17.04% Pervious = 0.160 ac 82.96% Impervious = 0.778 ac

Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 12S: Post Basin 1

[49] Hint: Tc<2dt may require smaller dt

Runoff	=	0.28 cfs @	7.91 hrs,	Volume=
Routed	to	Pond 14P : Pipe S	torage	

0.094 af, Depth= 3.42"

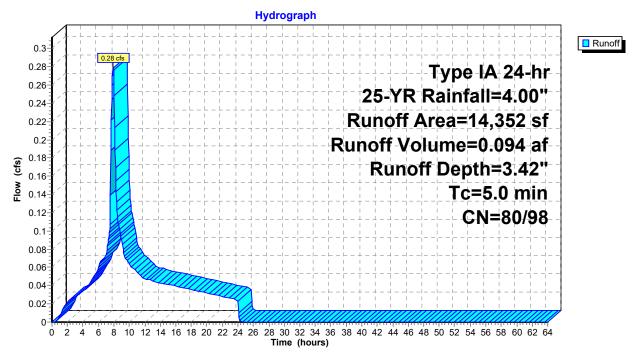
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr 25-YR Rainfall=4.00"

	Area (sf)	CN	Description				
	11,482	98	Paved parking, HSG C				
*	2,870	80	>75% Grass cover, Good, HSG D				
	14,352	94	Weighted Average				
	2,870		20.00% Pervious Area				
	11,482		80.00% Impervious Area				
_							
T	c Length	Slop					
(min) (feet)	(ft/	ft) (ft/sec) (cfs)				



Direct Entry,

Subcatchment 12S: Post Basin 1



Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 16S: Post Basin 2

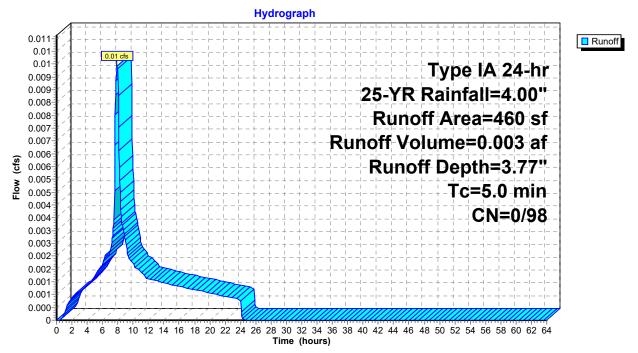
[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.01 cfs @ 7.90 hrs, Volume= 0.003 af, Depth= 3.77"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr 25-YR Rainfall=4.00"

Α	rea (sf)	CN E	Description		
	460	98 F	Paved park	ing, HSG C	
	460	1	00.00% In	npervious A	rea
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 16S: Post Basin 2



Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 17S: Post Basin 3

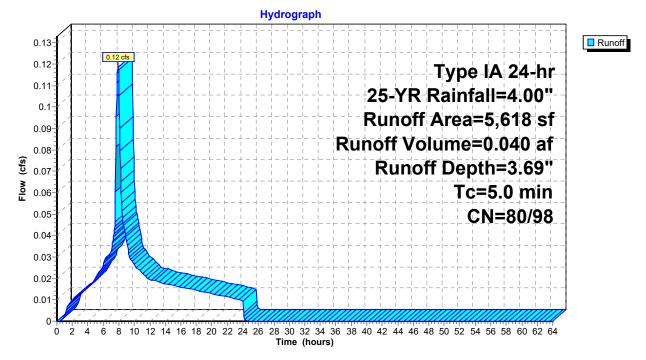
[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.12 cfs @ 7.90 hrs, Volume= 0.040 af, Depth= 3.69"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr 25-YR Rainfall=4.00"

A	rea (sf)	CN	Description				
	5,377	98	Paved park	ing, HSG C	;		
	241	80	>75% Ġras	s cover, Go	ood, HSG D		
	5,618	97	Weighted A	verage			
	241		4.29% Pervious Area				
	5,377		95.71% lm	pervious Ar	ea		
Tc (min)	Length (feet)	Slope (ft/ft		Capacity (cfs)	Description		
5.0	· · · /		<u> </u>		Direct Entry,		

Subcatchment 17S: Post Basin 3



Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 18S: PRE DEVELOPMENT

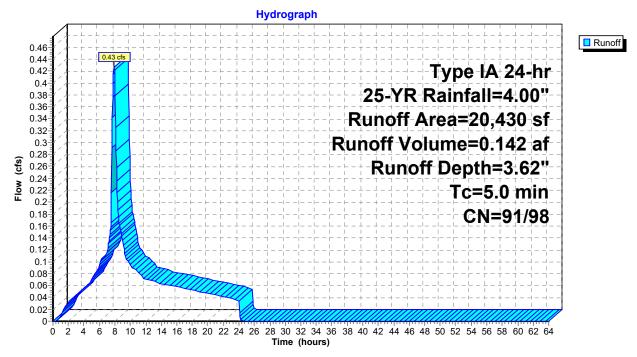
[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.43 cfs @ 7.90 hrs, Volume= 0.142 af, Depth= 3.62"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr 25-YR Rainfall=4.00"

A	rea (sf)	CN	Description		
	16,577	98	Paved park	ing, HSG C	
	3,853	91	Gravel road	ls, HSG D	
	20,430	97	Weighted A	verage	
	3,853		18.86% Pe	rvious Area	a de la constante de
	16,577		81.14% lm	pervious Are	ea
Тс	Longth	Slope	Volocity	Capacity	Description
(min)	Length (feet)	Slope (ft/ft	,	Capacity (cfs)	Description
	(ieet)	ווויו		(015)	
5.0					Direct Entry,

Subcatchment 18S: PRE DEVELOPMENT



Pubic-Private_PIPE_11-30-2023 Type IA 24-hr 25-YR Rainfall=4.00" Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Pond 14P: Pipe Storage

Printed 11/30/2023

Page 17

Inflow Area =	0.329 ac, 80.00% Impervious, Inflow D	Depth = 3.42" for 25-YR event
Inflow =	0.28 cfs @ 7.91 hrs, Volume=	0.094 af
Outflow =	0.14 cfs @ 8.32 hrs, Volume=	0.094 af, Atten= 50%, Lag= 25.0 min
Primary =	0.14 cfs @ 8.32 hrs, Volume=	0.094 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Peak Elev= 75.32' @ 8.32 hrs Surf.Area= 0.009 ac Storage= 0.019 af

Plug-Flow detention time= 152.8 min calculated for 0.094 af (100% of inflow) Center-of-Mass det. time= 152.8 min (830.0 - 677.2)

Volume	Invert	Avail.Storag	e Storage Description
#1	73.30'	0.022 a	af 30.0" Round Pipe Storage L= 195.0'
Device	Routing	Invert	Outlet Devices
#1	Primary		24.0" Round Culvert L= 1.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 73.30' / 73.30' S= 0.0000 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 3.14 sf
#2	Device 1	75.30'	2.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#3	Device 1	73.30'	1.2" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Device 1	74.80'	2.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
			8.32 hrs HW=75.32' (Free Discharge)

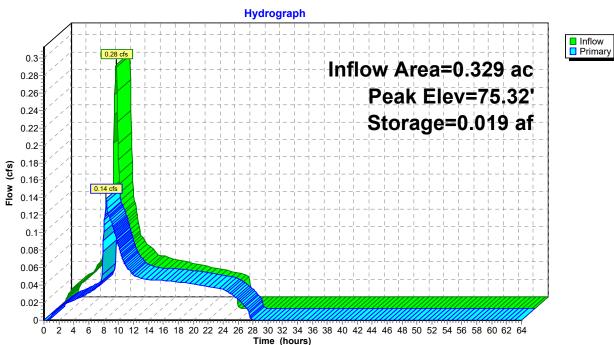
-1=Culvert (Passes 0.14 cfs of 13.23 cfs potential flow)

-2=Sharp-Crested Rectangular Weir (Weir Controls 0.01 cfs @ 0.43 fps)

-3=Orifice/Grate (Orifice Controls 0.05 cfs @ 6.84 fps)

-4=Orifice/Grate (Orifice Controls 0.07 cfs @ 3.17 fps)

Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC



Pond 14P: Pipe Storage

Type IA 24-hr 25-YR Rainfall=4.00"

Printed 11/30/2023

Page 18

Pubic-Private_PIPE_11-30-2023 Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 Hydro	Type IA 24-hr 100-YR Rainfall=4.80" Printed 11/30/2023 oCAD Software Solutions LLC Page 19
Runoff by SBL	-64.00 hrs, dt=0.05 hrs, 1281 points JH method, Split Pervious/Imperv. d method - Pond routing by Dyn-Stor-Ind method
Subcatchment12S: Post Basin 1	Runoff Area=14,352 sf 80.00% Impervious Runoff Depth=4.19" Tc=5.0 min CN=80/98 Runoff=0.34 cfs 0.115 af
Subcatchment16S: Post Basin 2	Runoff Area=460 sf 100.00% Impervious Runoff Depth=4.56" Tc=5.0 min CN=0/98 Runoff=0.01 cfs 0.004 af
Subcatchment17S: Post Basin 3	Runoff Area=5,618 sf 95.71% Impervious Runoff Depth=4.48" Tc=5.0 min CN=80/98 Runoff=0.14 cfs 0.048 af
Subcatchment18S: PRE DEVELOPMENT	Runoff Area=20,430 sf 81.14% Impervious Runoff Depth=4.42" Tc=5.0 min CN=91/98 Runoff=0.52 cfs 0.173 af

Pond 14P: Pipe StoragePeak Elev=75.40' Storage=0.020 af Inflow=0.34 cfs 0.115 af
Outflow=0.34 cfs 0.115 af

Total Runoff Area = 0.938 ac Runoff Volume = 0.340 af Average Runoff Depth = 4.35" 17.04% Pervious = 0.160 ac 82.96% Impervious = 0.778 ac

Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 12S: Post Basin 1

[49] Hint: Tc<2dt may require smaller dt

Runoff	=	0.34	cfs @	7.91 hrs,	Volume=
Routed	l to	Pond 14P	: Pipe S	Storage	

0.115 af, Depth= 4.19"

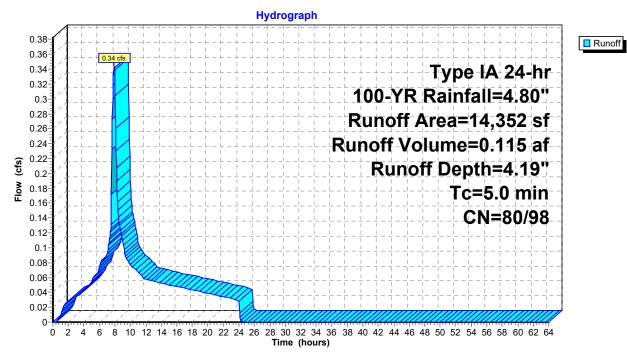
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr 100-YR Rainfall=4.80"

	Area (sf)	CN	Description					
	11,482	98	Paved parking, HSG C					
*	2,870	80	>75% Grass cover, Good, HSG D					
	14,352	94	Weighted Average					
	2,870		20.00% Pervious Area					
	11,482		80.00% Impervious Area					
	Tc Length	Slop						
(n	nin) (feet)	(ft/1	ft) (ft/sec) (cfs)					

5.0

Direct Entry,

Subcatchment 12S: Post Basin 1



Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

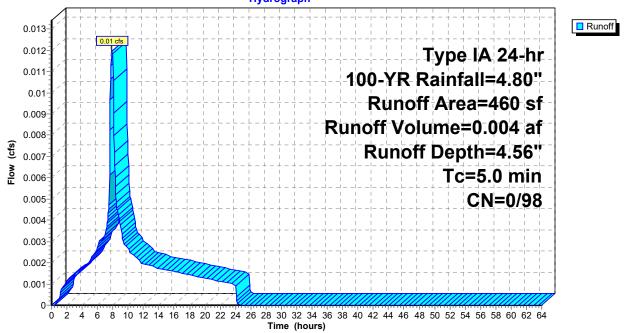
Summary for Subcatchment 16S: Post Basin 2

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.01 cfs @ 7.90 hrs, Volume= 0.004 af, Depth= 4.56"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr 100-YR Rainfall=4.80"

A	Area (sf) CN Description							
	460 98 Paved parking, HSG C							
	460	460 100.00% Impervious Area						
Tc _(min)								
5.0	Direct Entry,							
Subcatchment 16S: Post Basin 2								
	Hydrograph							



Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 17S: Post Basin 3

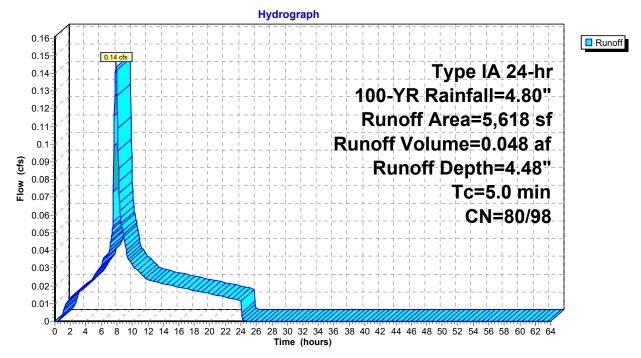
[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.14 cfs @ 7.90 hrs, Volume= 0.048 af, Depth= 4.48"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr 100-YR Rainfall=4.80"

A	rea (sf)	CN	Description						
	5,377	98	Paved parking, HSG C						
	241	80	>75% Grass cover, Good, HSG D						
	5,618	97	Weighted Average						
	241		4.29% Pervious Area						
	5,377		95.71% Impervious Area						
Tc (min)	Length (feet)	Slope (ft/ft		Capacity (cfs)	•				
5.0					Direct Entry,				

Subcatchment 17S: Post Basin 3



Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 18S: PRE DEVELOPMENT

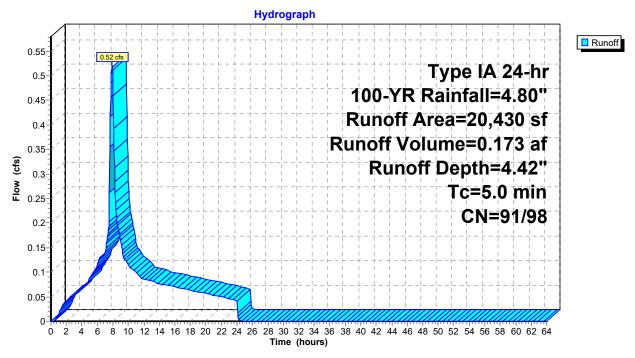
[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.52 cfs @ 7.90 hrs, Volume= 0.173 af, Depth= 4.42"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr 100-YR Rainfall=4.80"

A	rea (sf)	CN	Description				
	16,577	98	Paved parking, HSG C				
	3,853	91	Gravel roads, HSG D				
	20,430	97	Weighted Average				
	3,853 18.86% Pervious Area						
	16,577 81.14% Impervious Area				rea		
Тс	Length	Slop	e Velocity	Capacity	Description		
(min)	(feet)	(ft/ft		(cfs)	Description		
5.0	. /		<u> </u>	X /	Direct Entry,		

Subcatchment 18S: PRE DEVELOPMENT



Pubic-Private_PIPE_11-30-2023 Type IA 24-hr 100-YR Rainfall=4.80" Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Pond 14P: Pipe Storage

Printed 11/30/2023

Page 24

Inflow Area =	0.329 ac, 80.00% Impervious, Inflo	w Depth = 4.19" for 100-YR event
Inflow =	0.34 cfs @ 7.91 hrs, Volume=	0.115 af
Outflow =	0.34 cfs @ 8.00 hrs, Volume=	0.115 af, Atten= 2%, Lag= 5.6 min
Primary =	0.34 cfs $\overline{@}$ 8.00 hrs, Volume=	0.115 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Peak Elev= 75.40' @ 8.00 hrs Surf.Area= 0.008 ac Storage= 0.020 af

Plug-Flow detention time= 147.5 min calculated for 0.115 af (100% of inflow) Center-of-Mass det. time= 147.6 min (820.5 - 672.9)

Volume	Invert	Avail.Stora	ge Storage Description				
#1	73.30'	0.022	af 30.0" Round Pipe Storage L= 195.0'				
Device	Routing	Invert	Outlet Devices				
#1	Primary	73.30'	24.0" Round Culvert L= 1.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 73.30' / 73.30' S= 0.0000 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 3.14 sf				
#2	Device 1	75.30'	2.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)				
#3	Device 1	73.30'	1.2" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads				
#4	Device 1	74.80'	2.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads				
Primary OutFlow Max=0.33 cfs @ 8.00 hrs HW=75.40' (Free Discharge)							

-1=Culvert (Passes 0.33 cfs of 14.05 cfs potential flow)

-2=Sharp-Crested Rectangular Weir (Weir Controls 0.20 cfs @ 1.03 fps)

-3=Orifice/Grate (Orifice Controls 0.05 cfs @ 6.98 fps)

-4=Orifice/Grate (Orifice Controls 0.08 cfs @ 3.46 fps)

Pubic-Private_PIPE_11-30-2023 Prepared by Navix Engineering

HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Hydrograph Inflow
Primary 0.38 0.34 cfs 0.36 Inflow Area=0.329 ac 0.34 0.32 Peak Elev=75.40' 0.3 Storage=0.020 af 0.28-0.26-0.24 0.22 Flow (cfs) 0.2 0.18 0.16 0.14 0.12 0.1 0.08 0.06 0.04 0.02 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 Ó Time (hours)

Pond 14P: Pipe Storage

Type IA 24-hr 100-YR Rainfall=4.80"

Printed 11/30/2023

Page 25

Pubic-Private_PIPE_11-30-2023TPrepared by Navix EngineeringHydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

 Type IA 24-hr
 WQ Rainfall=1.00"

 Printed
 11/30/2023

 C
 Page 26

Time span=0.00-64.00 hrs, dt=0.05 hrs, 1281 points Runoff by SBUH method, Split Pervious/Imperv. Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment12S: Post Basin 1	Runoff Area=14,352 sf 80.00% Impervious Runoff Depth=0.65" Tc=5.0 min CN=80/98 Runoff=0.05 cfs 0.018 af				
Subcatchment16S: Post Basin 2	Runoff Area=460 sf 100.00% Impervious Runoff Depth=0.79" Tc=5.0 min CN=0/98 Runoff=0.00 cfs 0.001 af				
Subcatchment17S: Post Basin 3	Runoff Area=5,618 sf 95.71% Impervious Runoff Depth=0.76" Tc=5.0 min CN=80/98 Runoff=0.03 cfs 0.008 af				
Subcatchment18S: PRE DEVELOPMENT	Runoff Area=20,430 sf 81.14% Impervious Runoff Depth=0.71" Tc=5.0 min CN=91/98 Runoff=0.08 cfs 0.028 af				
Pond 14P: Pipe Storage	Peak Elev=73.67' Storage=0.002 af Inflow=0.05 cfs 0.018 af Outflow=0.02 cfs 0.018 af				
Total Runoff Area = 0.938 ac Runoff Volume = 0.054 af Average Runoff Depth = 0.70"					

17.04% Pervious = 0.160 ac 82.96% Impervious = 0.778 ac

Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 12S: Post Basin 1

[49] Hint: Tc<2dt may require smaller dt

Runoff	=	0.05	cfs @	7.92 hrs,	Volume=
Routed	to	Pond 14P	: Pipe S	Storage	

0.018 af, Depth= 0.65"

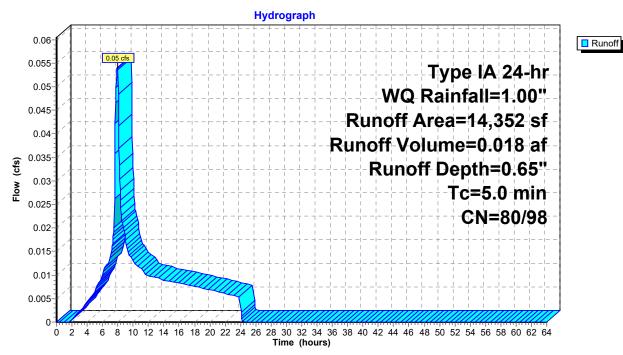
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr WQ Rainfall=1.00"

	Area (sf)	CN	Description						
	11,482	98	Paved parking, HSG C						
*	2,870	80	>75% Grass cover, Good, HSG D						
	14,352 2,870 11,482	94	Weighted Average 20.00% Pervious Area 80.00% Impervious Area						
	Tc Length (min) (feet)	Slop (ft/							

5.0

Direct Entry,

Subcatchment 12S: Post Basin 1



Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 16S: Post Basin 2

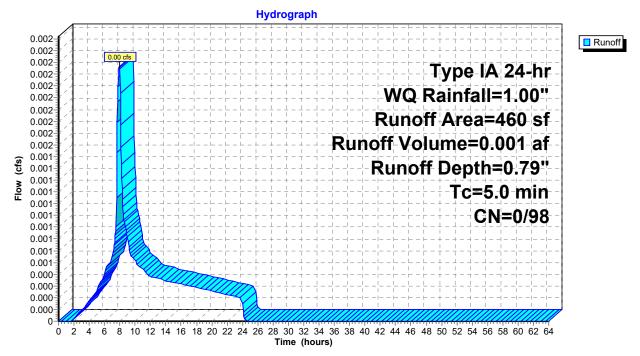
[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.00 cfs @ 7.92 hrs, Volume= 0.001 af, Depth= 0.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr WQ Rainfall=1.00"

A	rea (sf)	CN Description						
	460	98 Paved parking, HSG C						
	460	100.00% Impervious Area						
Tc _(min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description			
5.0					Direct Entry,			

Subcatchment 16S: Post Basin 2



Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 17S: Post Basin 3

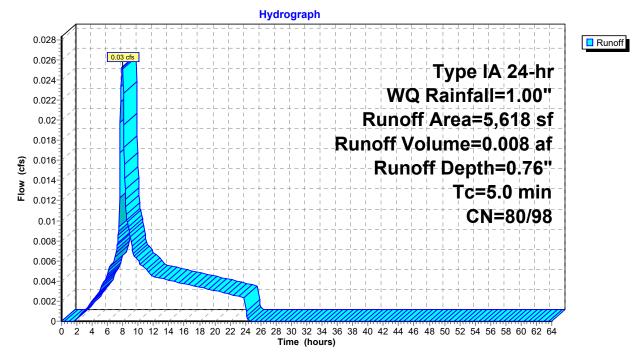
[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.03 cfs @ 7.92 hrs, Volume= 0.008 af, Depth= 0.76"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr WQ Rainfall=1.00"

A	rea (sf)	CN	Description					
	5,377	98	Paved park	ing, HSG C	C			
	241	80	>75% Grass cover, Good, HSG D					
	5,618	97	Weighted Average					
	241		4.29% Pervious Area					
	5,377		95.71% Impervious Area					
Tc (min)	Length (feet)	Slop (ft/ft	,	Capacity (cfs)	Description			
5.0					Direct Entry,			

Subcatchment 17S: Post Basin 3



Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 18S: PRE DEVELOPMENT

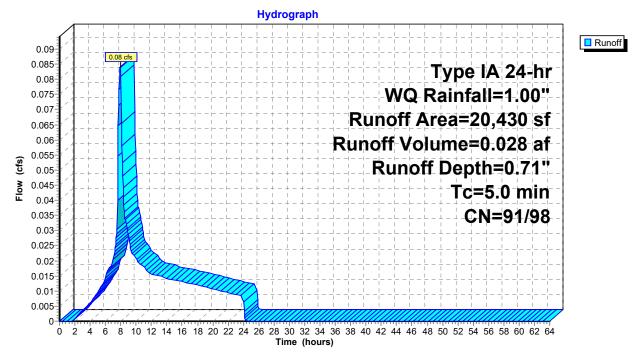
[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.08 cfs @ 7.93 hrs, Volume= 0.028 af, Depth= 0.71"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Type IA 24-hr WQ Rainfall=1.00"

A	rea (sf)	CN	Description					
	16,577	98	Paved parking, HSG C					
	3,853	91	Gravel roads, HSG D					
	20,430	97	Weighted Average					
3,853 18.86% Pervious Area					3			
	16,577 81.14% Impervious Area				rea			
Tc (min)	Length (feet)	Slope (ft/ft		Capacity (cfs)	Description			
5.0					Direct Entry,			

Subcatchment 18S: PRE DEVELOPMENT



Prepared by Navix Engineering HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC

Summary for Pond 14P: Pipe Storage

Inflow Area =	0.329 ac, 80.00% Impervious, Inflow De	epth = 0.65" for WQ event
Inflow =	0.05 cfs @ 7.92 hrs, Volume=	0.018 af
Outflow =	0.02 cfs @ 8.45 hrs, Volume=	0.018 af, Atten= 58%, Lag= 31.5 min
Primary =	0.02 cfs @ 8.45 hrs, Volume=	0.018 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-64.00 hrs, dt= 0.05 hrs Peak Elev= 73.67' @ 8.45 hrs Surf.Area= 0.008 ac Storage= 0.002 af

Plug-Flow detention time= 25.7 min calculated for 0.018 af (100% of inflow) Center-of-Mass det. time= 25.8 min (748.1 - 722.3)

Volume	Invert	Avail.Stora	ge Storage Description	
#1	73.30'	0.022	af 30.0" Round Pipe Storage L= 195.0'	
			L= 193.0	
Device	Routing	Invert	Outlet Devices	
#1	Primary	73.30'	24.0" Round Culvert	
	,		L= 1.0' RCP, groove end projecting, Ke= 0.200	
			Inlet / Outlet Invert= 73.30' / 73.30' S= 0.0000 '/' Cc= 0.900	
			n= 0.010 PVC, smooth interior, Flow Area= 3.14 sf	
#2	Device 1	75.30'	2.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)	
#3	Device 1	73.30'	1.2" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads	
#4	Device 1	74.80'	2.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads	
Primary OutFlow Max=0.02 cfs @ 8.45 hrs HW=73.67' (Free Discharge)				

1=Culvert (Passes 0.02 cfs of 0.57 cfs potential flow)

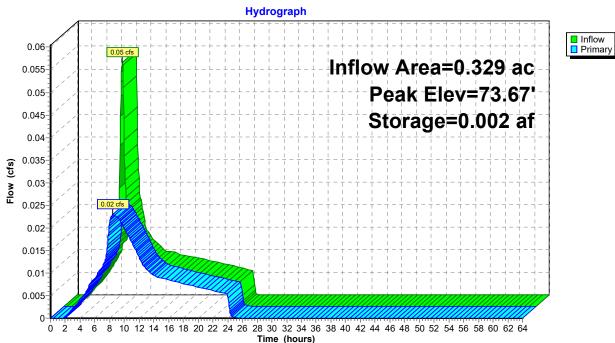
2=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)

-3=Orifice/Grate (Orifice Controls 0.02 cfs @ 2.92 fps)

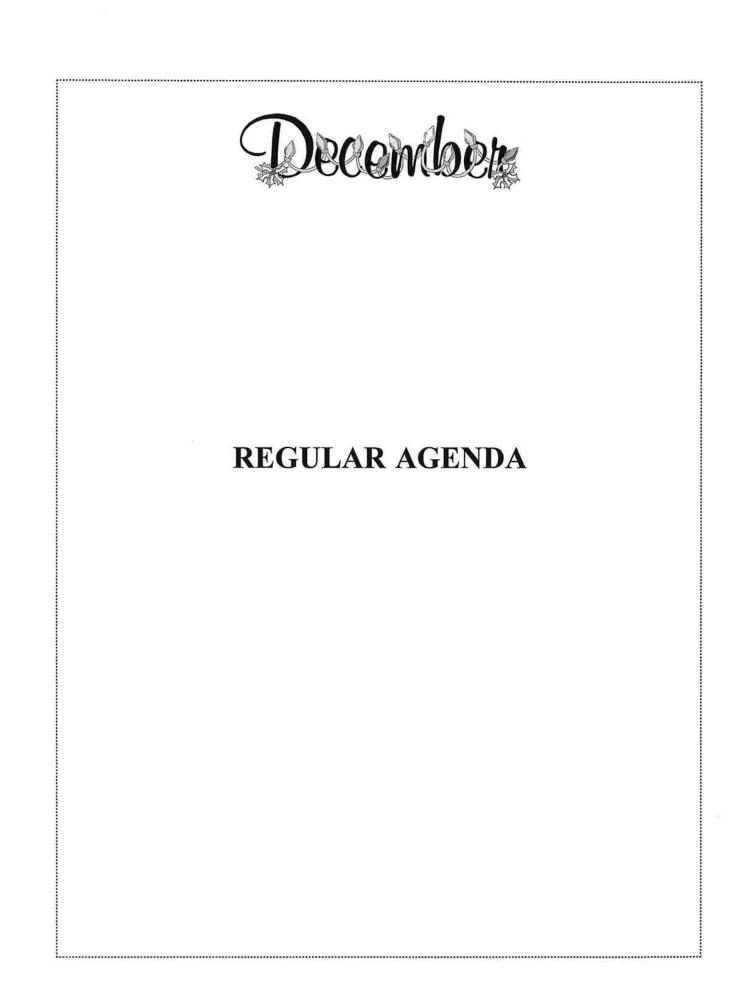
-4=Orifice/Grate (Controls 0.00 cfs)

Pubic-Private_PIPE_11-30-2023 Prepared by Navix Engineering

Type IA 24-hr WQ Rainfall=1.00" Printed 11/30/2023 HydroCAD® 10.20-3g s/n 05708 © 2023 HydroCAD Software Solutions LLC Page 32



Pond 14P: Pipe Storage





Agenda Item No. 4

PC Meeting Date: 12/19/2023

Staff Report: GMC 17.78 Home Occupation Code Amendments

File No.:	TXT-23-03
Applicant or Presenter:	City of Gladstone
Project Location:	Properties Eligible for Home Occupations
Project Description:	City staff propose updates to Gladstone Municipal Code (GMC) Chapter 17.78- Home Occupations. The criteria of GMC Chapter 17.78 will apply to any new home occupation submittal in the city of Gladstone.

SUMMARY

Gladstone currently requires residents who wish to operate a business within their residential property to obtain a Home Occupation Permit. The current Home Occupation Code language has been difficult to interpret and has resulted in confusion on behalf of both those applying for a permit and those reviewing and approving the permit. The current language also does not account for the changes in remote work that have become prevalent worldwide over the past several years.

Gladstone city staff from the Administration, Economic Development, Planning and Police Departments worked together to craft proposed changes to GMC Chapter 17.78. The City Council reviewed and discussed the staff-proposed code update at a Work Session on October 24, 2023. The proposed updates to GMC Chapter 17.78 provided with this staff report reflect the work prepared by staff and refined by Council.

TABLE OF CONTENTS

I.	PUBLIC NOTICE	2
II.	CONSISTENCY WITH STATEWIDE PLANNING GOALS	2
III.	FINDINGS RELATED TO GLADSTONE MUNICIPAL CODE	10
IV.	CONSISTENCY WITH METRO'S FUNCTIONAL PLAN (METRO CODE 3.07)	13
۷.	CONSISTENCY WITH TRANSPORTATION PLANNING RULE	13

INCLUDED WITH STAFF REPORT

A. Draft Amendments

B. Public Notice

I. PUBLIC NOTICE

Published In: The Oregonian, DLCD's post-acknowledgment plan amendment website (PAPA), and on the Gladstone Website. Notice was also emailed to Gladstone's agency partners for review.

Responses Received: None at date of staff report publication.

II. CONSISTENCY WITH STATEWIDE PLANNING GOALS

1. Goal 1 – Citizen Involvement: To develop a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process.

Finding: Goal 1 requires the City to incorporate six key components in its public involvement program:

- Citizen Involvement: An officially recognized committee for public involvement broadly representative of geographic areas and interests related to land use and land use decisions to provide for widespread public involvement;
- Communication: Mechanisms for effective two-way communication between the public and elected/appointed officials;
- Influence: Opportunities for the public to be involved in all phases of the planning and decision-making process including developing, evaluating, and amending plans;
- Technical Information: Access to technical information used in the decision-making process, provided in an accessible and understandable format;
- Feedback Mechanisms: Programs to ensure that members of the public receive responses from policymakers and that a written record for land-use decisions is created and made accessible; and,
- Financial Support: Adequate resources allocated for the public involvement program as an integral component of the planning budget.

The Planning Commission is conducting a public hearing with opportunities for the public to review draft code amendments and discuss key aspects related to the proposed amendments. The City publicized these public meetings on their website, social media, and newspaper print. The amendments were further publicized through the DLCD PAPA website and noticed to the interested agencies.

Based on the findings above, the code amendments are consistent with Statewide Planning Goal 1.

Goal 2 – Land Use Planning: To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.

Finding: Statewide Planning Goal 2 requires each local government in Oregon to have and follow a comprehensive land use plan and implementing regulations. Cities and counties must build their comprehensive plans on a factual base and follow their plan when making decisions on appropriate zoning. An "adequate factual base" means facts and evidence that reasonable people would rely on when conducting their day-to-day affairs. City and county plans must be consistent with one another. Special district and state agency plans and programs must be coordinated with comprehensive plans.

The proposed amendments to update the home occupation chapter of the GMC represents the land use planning process and policy framework for operation of homebased businesses in the city of Gladstone. The proposed update to the home occupation chapter is consistent with the current Comprehensive Plan, particularly the Procedural Goal of the Land Use Planning Chapter: "To ensure a factual base for land use decisions and actions and to establish a planning process and policy framework for this purpose."

The proposal also supports the following Objective in the Economy Chapter: "To promote the provision of local jobs to reduce reliance on commuting in order to conserve both time and energy and to aid in the battle against air and noise pollution".

Notice of the proposed amendment package for consideration was provided to Metro and DLCD through the Post-Acknowledgement Plan Amendment website and distribution system.

Therefore, the amendments, as proposed, are consistent with Statewide Planning Goal 2.

Goals 3 -4 – Agricultural and Forest Lands:

Finding: These goals are not applicable because the proposed amendments do not change the City of Gladstone policies required to meet these goals that are directed at rural areas and counties.

Goal 5 – Open Spaces, Scenic and Historic Areas, and Natural Resources: To protect natural resources and conserve scenic and historic areas and open spaces.

Finding: Particularly in urban areas, the emphasis of Goal 5 is on the inventory and conservation of wetlands, riparian zones, and wildlife habitats. In addition to Goal 5, the City is required to comply with Metro Title 13 for all mapped resources located within the UGB. By meeting the requirements of Title 13, the City also complies with Goal 5 for riparian areas and wildlife habitat. Metro Title 13 is addressed in the findings for the Urban Growth Management Functional Plan.

The Gladstone Municipal code contains the following zoning overlays that serve to protect Significant Natural Resources:

- 17.25 HCAD—Habitat Conservation Area District;
- 17.26 OS—Open Space District;
- 17.27 WQ—Water Quality Resource Area District;
- 17.28 GW—Greenway Conditional Use District; and
- 17.29 FM—Flood Management Area District.

The proposed updates to the home occupation code chapter do not modify these natural resource zoning overlay districts, adopted inventories, mapping or inventory of resources or historic preservation efforts. Goal 5 does not directly apply to the amendments because no new Goal 5 program is advanced by this amendment and no existing Goal 5 program is changed by this amendment.

Based on the findings above, the Zoning Code Update to adopt the proposed amendments to the Gladstone Municipal Code is consistent with Statewide Planning Goal 5.

Goal 6 – Air, Water and Land Resources Quality: To maintain and improve the quality of the air, water and land resources of the state.

Finding: Goal 6 instructs local governments to consider protection of air, water and land resources from pollution and pollutants when developing comprehensive plans. The pollutants addressed in Goal 6 include solid waste, water waste, noise and thermal pollution, air pollution, and industry-related contaminants. Comprehensive Plans must demonstrate consistency with the administrative rules related to air, water, and land quality established by the Environmental Quality Commission (EQC).

Under the oversight of the EQC, the Oregon Department of Environmental Quality (DEQ) regulates air, water, and land through its permitting actions under the federal Clean Water Act and Clean Air Act. The Department of State Lands and the Army Corps of Engineers regulate jurisdictional wetlands and waters of the state and the country, respectively. The City of Gladstone Public Works department regulates impervious surface and stormwater runoff throughout the City through design standards applied to development. The Clackamas County Water Environmental Services and Oak Lodge also provide sewer and stormwater services for City residents. The Gladstone Municipal Code (GMC) has the following overlay districts that are related to water quality, wetlands, and surface water:

- 17.25 HCAD—Habitat Conservation Area District;
- 17.27 WQ—Water Quality Resource Area District; and
- 17.29 FM—Flood Management Area District.

While air quality is largely regulated by DEQ, the City can impose conditions of approval on land use approvals that require minimizing air pollution and carbon emission impacts through actions such as vegetative plantings and conservation.

The Federal Transit Administration and Federal Highway Administration enforce noise standards for federally-funded rail and highway projects. The Oregon Noise Control Act authorizes cities and counties to adopt and enforce noise ordinances and standards of their own. Gladstone regulates noise through the GMC Chapter 8.12 Noise Control, which designates prohibited noises and maximum permissible environmental noise and sound levels. Gladstone's Zoning Code (Chapter 17) also includes noise-related provisions in several sections of the code, often referring to the City's Noise Ordinance in Chapter 8.12 or standards of the DEQ.

The proposed amendment package does not modify the existing habitat conservation, water

quality or floodplain overlay districts or the noise ordinance. The adoption of the TXT-23-03 amendments does not include any changes to the adopted inventories, the Comprehensive Plan Map, or the habitat or water resource zoning districts in the Gladstone Municipal Code. Goal 6 does not directly apply to the proposed amendments, or comprehensive plan amendment because no new Goal 6 program is advanced by this amendment and no existing Goal 6 program is changed by this amendment.

Therefore, Goal 6 is not applicable to the amendments proposed through TXT-23-03 as the amendments do not propose to change comprehensive land use plan policies or implementing regulations for compliance with Statewide Planning Goal 6.

Based on the findings above, the Zoning Code amendment to adopt the TXT-23-03 amendments is consistent with Statewide Planning Goal 6.

Goal 7 – Areas Subject to Natural Disasters and Hazards: To protect people and property from natural hazards.

Finding: Goal 7 requires local comprehensive plans to address Oregon's natural hazards. Protecting people and property from natural hazards requires knowledge, planning, coordination, and education. Natural hazards applicable to Gladstone include floods, landslides, weak foundation soils, earthquakes, and wildfires. Goal 7 calls for local governments to respond to new hazard inventory information provided by federal and state agencies by adopting or amending plan policies and implementing measures as needed. For riverine flood hazards, local governments must adopt and implement local floodplain regulations that meet the minimum National Flood Insurance Program (NFIP) requirements. In implementing natural hazard plans and policies, the State goal urges local governments to do the following: coordinate plans with emergency preparedness and recovery programs; consider stormwater management as a means to address flood and landslide hazards; consider nonregulatory approaches to implementing hazard plans; and to require technical reports when reviewing development requests in hazard areas.

The City of Gladstone complies with Goal 7 by regulating development in hazard-prone areas through the Municipal Code, the Public Works Design Guidelines and MOU's with Clackamas County on fire response and other emergency preparedness efforts. The following Gladstone Municipal Code Chapters address flooding and landslides:

- 17.27 WQ—Water Quality Resource Area District.
- 17.29 FM—Flood Management Area District.

Additionally, the Design Review and Conditional Use land use processes address applicable natural hazards on a site specific basis.

The TXT-23-03 amendments do not modify existing zoning overlay districts or design standards related to protecting development from hazards. The adoption of the amendments does not include any changes to the adopted inventories, the Comprehensive Plan Map, or the overlay zoning districts in the Gladstone Municipal Code. Goal 7 does not directly apply to the TXT-23-03 amendments because no new Goal 7 program is advanced by these amendments

and no existing Goal 7 program is changed by this amendment package. Therefore, Goal 7 is not applicable to the TXT-23-03 zoning code amendments because the amendments do not propose to change comprehensive land use plan policies or implementing regulations for compliance with Statewide Planning Goal 7.

Based on the findings above, adoption of the TXT-23-03 amendments is consistent with Statewide Planning Goal 7.

Goal 8 – Recreational Needs: To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

Finding: Goal 8 requires local governments to plan for the recreational needs of their residents and visitors. The goal places priority on non-motorized forms of recreation, and recreation areas that serve high-density populations with limited transportation options and limited financial resources. It also places priority on recreation areas that are free or available at a low cost to the public.

The City of Gladstone has a robust system of parks, recreation facilities and trails, including 14 neighborhood parks, community gardens, and natural areas. All of Gladstone's parks are owned and managed by the City. The City completed a Parks Master Plan in 2017. Many of the current parks are included in the Open Space District that is regulated by Chapter 17.26 of the Gladstone Municipal Code.

The proposed amendments do not modify existing open space overlay districts or the Parks Master Plan. The adoption of the TXT-23-03 amendments does not propose any changes to the Parks Master Plan, adopted inventories, the Comprehensive Plan Map, or the overlay zoning districts in the Gladstone Municipal Code. Goal 8 does not directly apply to the TXT-23-03 amendments because no new Goal 8 program is advanced by this amendment and no existing Goal 8 program is changed by this amendment.

Therefore, Goal 8 is not applicable to the proposed amendments because the amendments do not propose to change comprehensive land use plan policies or implementing regulations for compliance with Statewide Planning Goal 8.

Based on the findings above, adopting the TXT-23-03 amendments is consistent with Statewide Planning Goal 8.

Goal 9 – Economy of the State: To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.

Finding: Goal 9 ensures cities and counties have enough land available to realize economic growth and development opportunities. Commercial and industrial development takes a variety of shapes and leads to economic activities that are vital to the health, welfare and prosperity of Oregon's citizens. To be ready for these opportunities, local governments perform Economic Opportunity Analyses based on a 20-year forecast of population and job growth. Home-based businesses play a small role in the economy of the city, providing local jobs that do not require the resident to commute to work or spend revenue on additional overhead. Home occupations

are limited in size and scope due to their location in residential areas and are therefore not large employers. However, providing reasonable provisions for home occupations does allow the city to support economic development opportunities.

Based on the findings above, adopting TXT-23-03 supports the city's compliance with Goal 9 in allowing the city to support economic development and growth at all levels.

Goal 10 – Housing: To provide for the housing needs of citizens of the state.

Finding: Goal 10 concerns urban lands designated for residential use. Goal 10 requires the City to maintain and plan for an adequate land supply to accommodate at least 20 years of future growth, providing flexibility in housing location, type, and density (specifically at an overall density of 10 or more units/acre with the opportunity for 50 percent of new units to be attached single family or multifamily) to ensure the availability and prices of housing units are commensurate with the needs and financial capabilities of Oregon households.

Comprehensive plans are required to include an analysis of community housing needs by type and affordability, the recent housing needs assessment of housing development potential, and an inventory of residential land; contain policies for residential development and supportive services based on that analysis that increase the likelihood that needed housing types will be developed; and provide for an adequate supply of a variety of housing types consistent with identified policies and meeting minimum density and housing mix requirements (established by OAR 660, Division 007).

The findings for Goal 10 Housing, based on the City's Housing Needs Analysis (HNA), include findings that demonstrate that Gladstone currently has a range of housing types, including single-family detached and attached homes, duplexes, multi-family, and mixed-use developments, and has a need for additional capacity to provide for needed housing during the next 20 years. The HNA provides information about the factors that could affect housing development, including demographics, affordability trends, workforce housing availability, and development patterns.

The Housing Needs Analysis was adopted in 2021 and includes the City's buildable lands inventory (BLI) for housing within the UGB. The BLI is required by Goal 10 and ORS 197.296 to ensure that current use designations provide an adequate short- and long-term land supply for housing development for meeting existing needs and those of projected growth. It analyzes existing development patterns and intensity, land and development values, existing land use designations and zoning, and building constraints to determine where there is vacant land and/or land that is likely to be redeveloped and compares the existing supply of land to emerging trends and indicators for future estimates of demand. The proposed amendments do not propose to change the buildable lands inventory, or housing needs analysis.

While the proposed changes to the home occupation chapter to the Municipal Code do affect how a home-based business is permitted, the proposed changes do not affect the availability of housing options in the city as the home must be used as a residence with a home-based business as a subordinate use to the residential use. The proposed amendments provide a clear and reasonable process by which a residential property may be utilized primarily as a dwelling and secondarily as a home-based business. Based on the findings above, the TXT-23-03 amendments are consistent with Statewide Planning Goal 10.

Goal 11 – Public Facilities and Services: To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

Finding: The City conducted a Water System Master Plan and a Sanitary Sewer Master Plan in 2014. In 2017, a Sanitary Sewer Master Plan, Parks Master Plan and Transportation System Plan were completed. The proposed amendments do not propose any changes to the adopted master plans, the Comprehensive Plan Map, or the Gladstone Municipal Code. The amendments do not propose to change the comprehensive land use plan policies or implementing regulations regarding public facilities and services for compliance with Statewide Planning Goal 11.

Based on the findings above, the adoption of the TXT-23-03 amendments is consistent with Statewide Planning Goal 11.

Goal 12 – Transportation: To provide and encourage a safe, convenient and economic transportation system.

Finding: Goal 12 is implemented by Oregon Administrative Rules (OAR) Chapter 660, Division 12. Local governments are required to adopt a transportation system plan (TSP) and land use regulations to implement the TSP. OAR 660-012-0060 requires any comprehensive plan amendment to be evaluated according to the terms outlined in that OAR to demonstrate whether they will have a significant impact on the transportation system. The City of Gladstone completed a Transportation System Plan in 2017. The proposed amendments do not propose any changes to the adopted Transportation System Plan, the Comprehensive Plan Map, or the Gladstone Zoning Map with regard to transportation. The TXT-23-03 amendments propose no new Goal 12 program and no existing Goal 12 program, or standard, is changed by this amendment package. The amendments do not propose to change the comprehensive land use plan policies or implementing regulations regarding transportation and compliance with Statewide Planning Goal 12.

Based on the findings above, the proposed amendments are consistent with Statewide Planning Goal 12.

Goal 13 – Energy Conservation: To conserve energy.

Finding: Goal 13 requires that land and uses developed on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles. The TXT-23-03 amendments package does not modify existing design standards or land use regulations related to energy conservation. The adoption of the proposed amendments does not propose any changes to the adopted inventories, the Comprehensive Plan Map, or the Gladstone Municipal Code. Goal 13 does not directly apply

to the proposed amendments because no new Goal 13 program is advanced by this amendment and no existing Goal 13 program is changed by this amendment. Therefore, Goal 13 is not applicable to the TXT-23-03 amendments because the amendment package does not propose to change comprehensive land use plan policies or implementing regulations for compliance with Statewide Planning Goal 13.

Based on the findings above, to adopt the TXT-23-03 amendments, is consistent with Statewide Planning Goal 13.

Goal 14 – Urbanization: To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.

Finding: The entirety of the city and its Urban Growth Management Area is located within the Regional Urban Growth Boundary (UGB). As such, this text amendment will not result in the transition of any land from rural to urban uses, or result in population or employment growth outside of the UGB. The proposed amendments do not modify the Gladstone Urban Growth Management Area, the UGB, or existing zoning requirements related to urbanization. The adoption of the TXT 23-03 amendments does not propose any changes to the adopted inventories, the Comprehensive Plan Map, or the Gladstone Zoning Map. Goal 14 does not directly apply to the amendments because no new Goal 14 program is advanced by this amendment and no existing Goal 14 program is changed by this amendment. Therefore, Goal 14 is not applicable to the TXT-23-03 amendments because the amendment package does not propose to change comprehensive land use plan policies or implementing regulations for compliance with Statewide Planning Goal 14.

Based on the findings above, adopting the TXT-23-03 amendments is consistent with Statewide Planning Goal 14.

Goal 15 – Willamette River Greenway: To protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River as the Willamette River Greenway.

Finding: Gladstone is bordered on one side by the Willamette River and the Greenway. Therefore, the Gladstone Municipal Code includes Chapter 17.28 that establishes the land use regulations related to the Greenway Conditional Use District. The proposed amendments do not modify the Greenway Conditional Use District, or existing zoning requirements related to the Willamette River Greenway. The adoption of the TXT-23-03 amendments do not propose any changes to the adopted inventories, the Comprehensive Plan Map, or the Gladstone Municipal Code Chapter 17.28. Goal 15 does not directly apply to the amendments because no new Goal 15 program is advanced by this amendment and no existing Goal 15 program is changed by this amendment. Therefore, Goal 15 is not applicable to the TXT-23-03 amendments because it does not propose to change comprehensive land use plan policies or implementing regulations for compliance with Statewide Planning Goal 15.

Based on the findings above, to adopt the TXT-23-03 is consistent with Statewide Planning Goal 15.

Goals 16-19 – Estuarine Resources, Coastal Shore lands, Beaches and Dunes, and Ocean Resources:

<u>Finding</u>: The City of Gladstone is not subject to these four Statewide Planning Goals. Therefore, they are not applicable to the proposed amendments found in the TXT-23-03 amendment package.

III. FINDINGS RELATED TO GLADSTONE MUNICIPAL CODE

Once the proposed amendments are adopted by City Council, the TXT-23-03 amendments package will be consistent with all of the Statewide Planning Goals.

The City of Gladstone planning staff finds:

17.68.010 AUTHORIZATION TO INITIATE AMENDMENTS.

(1) An amendment to the text of this title or the Comprehensive Plan may be initiated by the City Council, the City Planning Commission or the City Administrator or his designee.

(2) An amendment to the Zoning Map or to the Comprehensive Plan Map may be initiated by:

(a) The City Council;

(b) The City Planning Commission;

(c) The City Administrator or his designee; or

(d) By application of a property owner, contract purchaser or authorized agent of the subject property.

(3) The request by a property owner for a map amendment shall be accomplished by filing an application with the city using forms prescribed by the city and submitting the information required from the applicant under Section 17.68.050.

Finding: The request came from the City Administrator after a discussion with the Gladstone City Council about the limitations of the existing home occupation code language. This criterion is met.

17.68.020 Review process. Applications under this chapter shall be reviewed pursuant to GMC Division VII (administrative procedures).

Finding: The proposed amendments are being reviewed by the Planning Commission at a public hearing on December 19, 2023, at which time the Planning Commission will make a recommendation regarding the amendments to the City Council. The Council will conduct a public hearing and make a decision on the amendments at their meeting on January 9, 2024. Notice of these public hearings was publicized as required. The TXT-23-03 amendments package is being reviewed according to GMC Division VII. This criterion is met.

17.68.040 Conditions.

(1) City Council may require conditions. When necessary to properly relate new developments to existing or anticipated conditions in the vicinity or to make possible a higher quality of development than would otherwise be possible, the City Council may determine that a zone

change will be accompanied by the acceptance or accomplishment of certain specified conditions. Conditions and requirements invoked pursuant to a zoning map amendment shall thereafter apply to the property so zoned.

(2) Acceptance of conditions. Such conditions shall be designed to further the objectives of the comprehensive plan and the zoning ordinance codified in this title and shall clearly set forth, in written form or upon drawings, all restrictions and requirements which will be applicable to the property rezoned. Where a zone change is made subject to such conditions, it shall become effective upon written acceptance and filing of the applicable terms and conditions by the property owner and by any other person intending to have an ownership interest in or to develop the property. The signed acceptance of conditions shall be filed with the City Recorder and a certified copy shall also be filed in the county deed records at the expense of the petitioner.

(3) Type of conditions. Conditions may include special measures designed to limit use or density, screen or separate buildings or portions of the site from adjoining property; limit access from important thoroughfares or through residential areas; provide additional right-of-way for an abutting street, preserve or provide public access to greenspace, floodplains, or river frontage; improve bicycle or pedestrian safety and connectivity; or improve transit capacity and efficiency.

(4) No variance of ordinance standards. In connection with the adoption of a zoning amendment, ordinance standards may be varied only when the Planning Commission finds that the development proposed and covered by specific limiting conditions will provide benefits and safeguards equal to or better than those possible under a strict interpretation of the zoning ordinance. In no case shall a use not specifically permitted within the zoning district be allowed under this section and Section 17.68.050. When circumstances as described in GMC Section 17.72.020 (circumstances for granting) exist, the regular variance procedures shall be followed.

(5) Building permit conditions. In addition to conditions as described above in this section, the Council may also provide that a zoning amendment will become effective upon satisfactory performance by the applicant of certain conditions or actions, such as a bona fide application for a building permit within a specified period of time.

Finding: Staff are not recommending any special conditions. This criterion does not apply.

17.68.050 Evidence supplied by applicant. The applicant seeking a zoning map change pursuant to the provisions of GMC Section 17.68.010 must show by a preponderance of the evidence all of the following, unless otherwise provided for in this title:

(1) Granting the request fulfills a public need; the greater departure from present development policies or land use patterns, the greater the burden of the applicant.

(2) The public need is best carried out by granting the petition for the proposed action, and that need is best served by granting the petition at this time.

(3) The proposed action is consistent with the comprehensive plan and Metro's Functional Plan (Metro Code 3.07), and the Transportation Planning Rule (OAR 660-012-0060).

(4) Proof of significant change in a neighborhood or community or a mistake in the planning or zoning for the property under consideration, when relevant.

(5) The property and affected area is presently provided with, or concurrent with development can be provided with, adequate public facilities, including, but not limited to, the planned function, capacity, and performance standards of the transportation system as adopted in the transportation system plan.

(6) The transportation system is capable of safely supporting the uses allowed by the proposed designation in addition to the existing and planned uses in the area, consistent with the Transportation Planning Rule (OAR 660-012-0060). Requirements of the State Transportation Planning Rule shall apply to those land use actions that significantly affect the transportation system, as defined by OAR 660-012-0060.

<u>Finding</u>: This project is proposing an update to the Home Occupation chapter of the Gladstone Municipal Code. No zoning map change is proposed. No changes are proposed that would affect the service of public utilities or transportation patterns. This standard is met.

17.70.10 Authorization to grant or deny.

2) Conditions of Approval. In addition to the specific requirements of this title, including those set forth in GMC Chapter 17.62 (special uses), and the comprehensive plan, approval of a conditional use may be granted subject to additional conditions that are found necessary to protect the best interests of the surrounding area or the city as a whole. These conditions may include, but are not limited to, the following:

(a) Limiting the hours, days, place and manner of operation;

(b) Requiring design features that minimize environmental impacts such as noise, vibration, smoke, dust, fumes and glare;

(c) Requiring increased setbacks, lot area, lot depth and lot width;

(d) Limiting building height, size, lot coverage and location on the site;

(e) Designating the size, number, location and design of vehicle access points;

(f) Requiring street right-of-way to be dedicated and streets to be improved;

(g) Requiring landscaping, screening, drainage and surfacing of parking and loading areas;

(h) Limiting the number, size, location, height and lighting of signs;

(i) Regulating the location and intensity of outdoor lighting;

(j) Requiring a sight-obscuring fence or hedge to screen the conditional use from adjacent to or nearby property;

(*k*) Construction of off-site transportation improvements to mitigate impacts resulting from development that relate to capacity deficiencies and public safety; and (*I*) Upgrade or construct public facilities to city standards.

Finding: Currently there are no conditions recommended. This criterion is met.

IV. CONSISTENCY WITH METRO'S FUNCTIONAL PLAN (METRO CODE 3.07)

Title 1: Housing Capacity Title 3: Water Quality And Flood Management Title 4: Industrial and Other Employment Areas Title 6 Centers, Corridors, Station Communities and Main Streets

Finding: The proposed amendments do not significantly alter residential capacity within the city. Water quality and flood management are addressed in the Gladstone Municipal Code and no changes are proposed to these chapters. The proposed home occupation code language update does not include revisions to industrial and other employment areas or centers, corridors, station communities and main streets. The proposed amendments are consistent with Metro's Functional Plan. These criteria are met.

V. CONSISTENCY WITH TRANSPORTATION PLANNING RULE

OAR 660-012-0060 requires: (1) If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:

(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);

(b) Change standards implementing a functional classification system; or

(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection.

Finding: The proposed zoning code amendments do not change the functional class of any existing or planned transportation facility or change the standards implementing a functional classification system. This criterion is met.

CONCLUSION

Based on the findings identified above, the city finds that the proposed code amendments meet the required Gladstone, Metro and State of Oregon requirements for approval.

Staff recommends the Planning Commission recommend approval of TXT-23-03 (updating Gladstone Municipal Code Chapter 17.78-Home Occupations) to the City Council for a public hearing at their meeting on January 9, 2024.

Chapter 17.78 HOME OCCUPATIONS

Sections:

17.78.010 Uses allowed as home occupations. Purpose

17.78.020 Applicability and Exemptions

17.78.03016 Type I and Type II home occupations. Prohibited Home Occupations

17.78.040 Approval criteria and standards.

17.78.020 Limitations on home occupations.

17.78.0<u>5</u>30 Procedure to establish and maintain a home occupation.

17.78.060 Action regarding complaints and violation of standards.

17.78.070 Violations

17.78.010 Uses allowed as home occupations.Purpose

The purpose of this chapter is to:

(1) Permit residents an opportunity to use their homes to engage in small-scale business ventures which could not be sustained if it were necessary to lease commercial quarters, or because the nature of the activity would make it impractical to expand to a full-scale enterprise; and

(2) Establish approval criteria and standards to ensure that a home occupation is conducted as a lawful use that is subordinate to the residential use of the property and is conducted in a manner that is not detrimental or disruptive in terms of appearance or operation to neighboring properties and residents.

17.78.020 Applicability and Exemptions

(1) A person shall not carry on a home occupation, or permit such use to occur, on property that the person owns or is in lawful control of, contrary to the provisions of this chapter.

(2) Exemptions from the provisions of this chapter are:

(a) Garage sales, yard sales, estate sales, and similar activities;

(b) Hobbies that do not result in payment to those engaged in the activity;

(3) A home occupation permit and associated fee are required for each property on which a home occupation is undertaken.

In all zones, home occupations in the same lot accessory to the principal residential uses shall be permitted only in the following categories:

(1) Office for professional, personal or business services.

(2) Studio for arts, handicrafts or tutoring.

(3) Shop for limited or customer production or minor repair service.

(4) Headquarters for a craftsman or salesman.

Statutory Reference: ORS Ch. 197 and 227 History: Ord. 1131 §2, 1990.

17.78.016 Type I and type II home occupations.

(1) Except for a sign pursuant to 17.78.020 (9), a Type I home occupation may generate only incidental traffic, subject to the requirements of this chapter, and otherwise shall exhibit no evidence that a business is being conducted from the premises.

(2) Type II home occupations may generate limited traffic from customers, clients and students, subject to the requirements of this chapter.

Statutory Reference: ORS Ch. 197 and 227 History: Ord. 1356 §1, 2004

17.78.030 Prohibited Home Occupations

The following uses are not allowed as a home occupation or business venture in or associated with a dwelling unit:

(1) Any and all commercial services to automobiles, RV, Boat or the like. This may include washing and lubrication services, automobile and truck maintenance and repair, painting, body and fender work, and storage.

(2) Animal breeding and kennels as defined in 17.06.240

17.78.040 Approval criteria and standards.

All home occupations shall comply with the following:

(1) A home occupation may be conducted only at the primary residence of the permittee. Persons, including employees, other than members of the permittee's family who also reside in the dwelling shall not engage in the home occupation.

(2) Deliveries to the home occupation shall be similar to deliveries to other residences in the vicinity. Vehicles used for delivery and pick up may not include heavy trucks (i.e. two or more axles).

(3) Offensive noise, vibration, smoke, dust, odors, heat or glare noticeable at or beyond the property line resulting from the home occupation are prohibited. A home occupation is subject to the provisions of Chapter 8.04 Nuisances.

(4) The home occupation shall be operated entirely within the dwelling unit and any conforming accessory structure. All activities must be in completely enclosed, hard-sided structures. Exterior activities, storage or display of goods, equipment or materials is prohibited. The total area that may be used in an accessory building for the home occupation, including materials and product storage, shall not exceed 800 square feet or 25 percent of the combined residence and accessory structure gross floor area, whichever is smaller. Indoor storage of materials or products shall comply with the building, fire, health, and housing codes.

(5) A home occupation shall not require a change in the applicable building code use classification of the dwelling unit, as determined by the building official. Any accessory building that is used in the home occupation must meet the applicable building code requirements.;

(6) More than one business activity constituting two or more home occupations is allowed on one property only if the combined floor space of the business activities does not exceed 800 square feet or 25 percent of the combined gross floor area of the residence and accessory structure, whichever is smaller. Each home occupation shall apply for a separate home occupation permit, if required by this chapter, and each shall also have a separate business license.

(7) Storage and/or distribution of toxic or flammable materials, and spray-painting or sprayfinishing operations that involve toxic or flammable materials which in the judgment of the fire marshal pose a dangerous risk to the residence, its occupants, and/or surrounding properties are prohibited. The person conducting the home occupation shall make available to the fire marshal for review the Material Safety Data Sheets which pertain to all potentially toxic and/or flammable materials associated with the use.

(8) A home occupation shall not require any on-street parking other than that normally required for the residence. Any parking generated by patrons shall be able to be accommodated on site.

(9) Customers and clients of the home occupation shall not visit the business between the hours of 8:00 p.m. and 8:00 a.m. and shall not generate excessive traffic or monopolize on-street parking.

17.78.020 Limitations on home occupations.

Any such home occupation shall comply with the following limitations:

(1) No servant, employee or any person other than a member or members of the family residing within the dwelling shall engage in a home occupation therein or within an accessory building.

(210) No-A_dwelling shall not be used as a headquarters for the assembly of employees for instructions or other purposes or to be dispatched for work at other locations.

(3) The scale of operations shall be distinctly limited in nature and conducted primarily as a supplementary, and not principal, source of family income; or as an accommodation for handicapped or retired person; or as a starter operation for a limited period only until its size or other characteristics compel relocation to the appropriate nonresidential district.

(4) All aspects of the conduct of a home occupation shall be confined, contained and conducted within the dwelling or within a completely enclosed accessory building.

(5) Any home occupation which causes abnormal automobile or pedestrian traffic or which is objectionable due to unsightliness or emission of odor, dust, smoke, noise, glare, heat, vibration or similar causes discernible on the outside of any building containing such home occupation shall be prohibited. Type I home occupations may generate no more than six (6) one-way trips per day, which shall be incidental to operation of the home occupation. Type II home occupations may generate no more than ten (10) one-way client and commercial trips per day, except home occupations relating to instructional services, where no more than twenty (20) one-way student trips may be permitted. As used in this chapter, "instructional services" are characterized by one or more persons leading another person or group of persons in a given course or subject of study. No more than four (4) student vehicles may be parked on the property and/or in the street right of

way at any one time. No commercial motor vehicle that is subject to the state vehicle mile tax, such as long-haul trailers, as defined in ORS 801.208, may be allowed as part of a home occupation. In conformance with GMC 10.04.230 (1)(f), this standard does not preclude the parking of a truck (tractor) portion of such a commercial vehicle on private property.

(<u>11</u>6) No significant enlargements or alterations to <u>thea</u> dwelling or <u>an</u> accessory building for the sole purpose of conducting a home occupation shall be <u>are</u> permitted.

 $(\underline{127})$ The premises shall at all times be maintained as residential in appearance, cleanliness and quietness.

(8) Dimensions, power rating or weight of such equipment and tools used in the conduct of a home occupation shall not exceed that of normal household equipment and tools.

(<u>139</u>) Signs advertising <u>the</u> home occupations or any aspect thereof shall <u>be affixed directly to</u> <u>the dwelling</u>. The total size of all combined signage not exceed a total of one square foot in area and shall be affixed directly to the dwelling.

(10) Any materials used or any item produced or repaired on the premises shall not be displayed or stored so as to be visible from the exterior of the building.

(11) Tutoring, instructional, counseling or personal services which cannot be conducted except by personal contact may be permitted as a Type II home occupation and shall be by appointment only between the hours of 7:00 a.m. and 10:00 p.m. and shall not be oriented toward or attract passers by.

(12) An office for a physician or dentist may be permitted as a Type II home occupation primarily for emergency cases and as an accommodation for retired or part-time practitioners and not as a principal office for the practice of the profession.

(13) Retail activity shall be limited to the mail order type of business.

(14) Except as set forth in subsection (11) and (12) of this section, customer and client contact shall be primarily by telephone or mail and not on the premises.

(15) No more than twenty-five percent of the floor area as defined in GMC Section 17.06.195 (floor area) may be used for the operation of a home occupation including storage of equipment, materials, and completed products.

Statutory Reference: ORS Ch. 197 and 227 History: Ord. 1131 §2, 1990; Ord. 1356, 2004

17.78.0530 Procedure to establish and maintain a home occupation.

(1) <u>A person engaging in a home occupation must use the dwelling as the person's primary</u> residence, pay the one-time home occupation fee, comply with the provisions of this chapter, and acquire an annual business license.

(a) A home occupation permit will become invalid if the permittee applicant fails to renew the annual business license fee before the expiration period or moves from the residence.

(2) Property owners/residents located within 100 feet of the home occupation will receive notice of the home occupation application 15 days before the city issues a decision on the application.

(a) A person may submit any comments or concerns regarding the application to the City in writing, including identifying the relevant requirement(s) of this chapter

(b) If the city determines that the application does not comply with the requirement(s) of this chapter, the business will be required to come into compliance with the standards before the home occupation will be approved. The establishment and maintenance of a Type I or Type II home occupation is subject GMC Division VII (administrative procedures) and the requirements below.

(2) Applicants for a Type II home occupation are subject to the following requirement. Notwithstanding subsection (a) of this section, no permit for a Type II home occupation shall be issued by the City Administrator or his designee until or unless the applicant has received favorable approval, as indicated by signatures on the authorized application form of owners or contract purchasers of not less than seventy-five (75%) of all property in the area bound by lines one hundred fifty feet (150') from and parallel to the boundary of lines of the lot proposed to contain each home occupation. The area of any property owned or occupied by the applicant shall be excluded in computing required percentage of approval.

(a) An applicant for a Type II home occupation who resides in an apartment complex, mobile home park or other similar multi-family housing complex, may obtain the signed approval

of a resident manager in lieu of seventy-five percent (75%) of the property owners within one hundred fifty feet (150') of the proposed home occupation.

(<u>3</u>3) <u>A p</u>Permits for <u>a</u> home occ<u>upation</u> may be revoked at any time if the requirements of this code are not being met.

(4) If, in the opinion of the applicant, the City Administrator or his designee has acted arbitrarily and capriciously in withholding or revoking a permit for home occupation, he may request an interpretation of the code by the Planning Commission. In such cases, the dwelling or accessory building to be devoted to a home occupation shall be open for inspection to the staff of the Planning Commission on any day between eight a.m. to ten p.m.

(5) A home occupation permit shall remain valid indefinitely, subject to payment of annual business license fee, unless a substantial increase in intensity of the permitted use occurs, which shall require application for a new permit.

<u>(6)</u> The city shall not issue a business license until a home occupation permit is issued by the City Administrator or designee.

(7) A violation of any standard of this chapter or any condition of approval for a home occupation is a Class "A" infraction. A separate violation occurs for each day that the violation continues.

Statutory Reference: ORS Ch. 197 and 227 **History:** Ord. 1131, 1990; Ord. 1356, 2004.

17.78.060 Action regarding complaints and violation of standards.

(1) A complaint may be filed by the City of Gladstone or the public. A complaint shall be filed with the City Administrator or designee. Planning Department. A complaint shall clearly state the objection to the home occupation, based on the criteria in this chapter.

(2) A complaint shall be reviewed by the Code Compliance Officer or designee. The City may approve the continuation of the home occupation use as it exists, revoke the home occupation permit, or compel measures to be taken to bring the home occupation into compliance with this chapter. The operator of the home occupation may appeal the decision in accordance with GMC 17.92.010.

(3) If it is determined, in exercise of reasonable discretion, the home occupation that is the subject of the complaint will negatively affect public health and/or safety, the City may order-the

home occupation activities to cease pending exhaustion of all appeals. Violation of such an order shall be deemed a violation of this code.

17.78.070 Violations.

A violation of any standard of this chapter or any condition of approval for a home occupation is a Class "A" infraction. A separate violation occurs for each day that the violation continues.

NOTICE OF PUBLIC HEARING

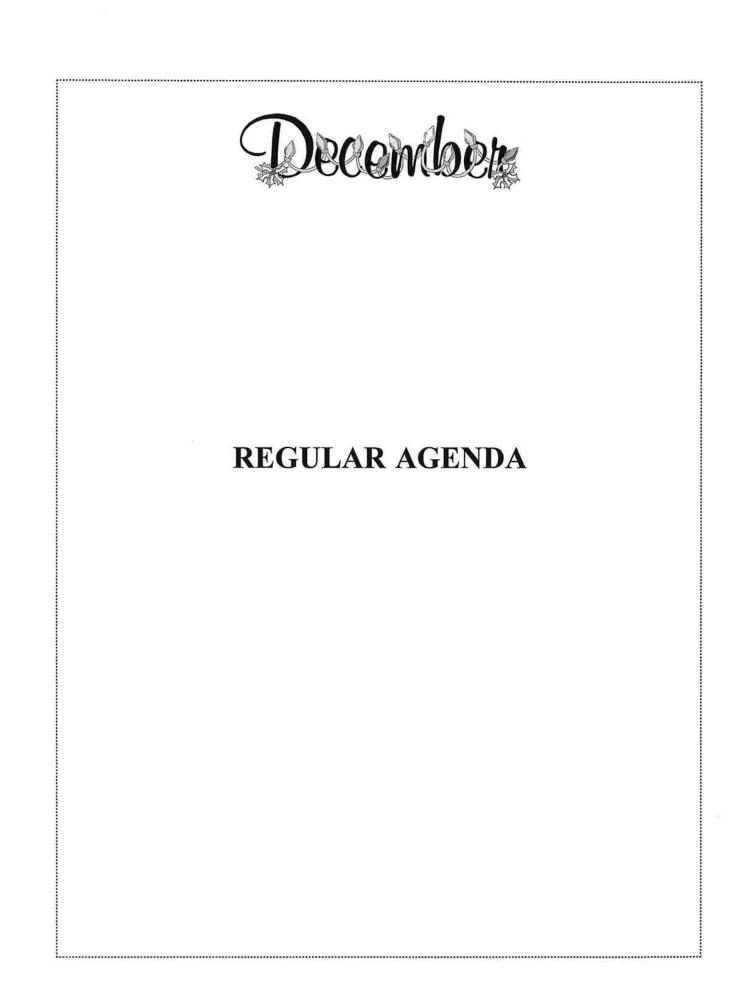
<u>Gladstone Home Occupation Code Language Update, file TXT 23-03.</u> On Tuesday, December 19, 2023, beginning no earlier than 6:30 p.m. the Gladstone Planning Commission will hold a public hearing in the Gladstone City Hall Council Chambers, 18505 Portland Avenue, Gladstone, OR 97027 to consider revisions to Gladstone Municipal Code 17.78- Home Occupations. The proposed changes update the regulations for the limited operation of a business from a residence.

The City of Gladstone is abiding by guidelines set forth in House Bill 2560, which requires the governing body of the public body, to extent reasonably possible, to make all meetings accessible remotely through technological means and provide opportunity for members of general public to remotely submit oral and written testimony during meetings to extent in-person oral and written testimony is allowed. Therefore, this meeting will be open to the public both in person and virtually using the Zoom platform. The Zoom link to the public hearing and details on how to observe and testify online or by telephone will be available after August 8, 2023 on our website: <u>https://www.ci.gladstone.or.us/bc-pc/page/planning-commission-meeting-86</u> City Council will hold a separate public hearing on January 9, 2024, to consider the amendments recommended by the Planning Commission.

The proposal is subject to Chapter 17.68, Amendments and Zone Changes of Title 17 of the Gladstone Municipal Code and is available for inspection at Gladstone City Hall Monday through Friday, from 8:00 a.m. to 5:00 p.m. A copy of the proposal is available for a reasonable cost. For additional information, or an electronic version of the proposed amendments, contact Heather Austin at permit.review@3j-consulting.com or 503-946-9365 ext. 206.

Failure to raise an issue in a hearing, in person or by letter, or failure to provide statements or evidence sufficient to afford the decision maker an opportunity to respond to the issue precludes appeal to the Land Use Board of Appeals based on that issue.

Publish on or before: November 29, 2023





2024 Long-Range Planning Work Program

The City of Gladstone will undertake several long-range planning projects in 2024. The Planning Commission will be an integral part of this planning work. We anticipate several work sessions to draft and refine the projects listed below.

- <u>Gladstone Town Center Project</u>
 - The city received a \$60,000 grant from the Department of Land Conservation and Development (DLCD) to establish a Town Center. The Gladstone Town Center will double as the City's Climate Friendly Area, defined as "a walkable, connected area that provides a mix of businesses, housing and amenities such as parks and schools". This project will include a Stakeholder Advisory Committee that has yet to be established and will take about 18 months to complete (anticipated completion June 2025)
- <u>Climate Friendly and Equitable Communities (CFEC) Parking Reform</u>
 - This project is also funded under the Town Center Project grant. The city will need to update parking requirements as part of the CFEC initiative. Parking reform will apply to the areas of the city beyond ½-mile from McLoughlin Blvd., where parking mandates are removed due to proximity to high-frequency transit service (see attached map).
- <u>Re-zoning of Meldrum Bar Park and Gladstone Nature Park</u>
 - \circ The properties that comprise these two parks will be re-zoned to OS- Open Space.
- <u>State-Mandated Code Updates, including:</u>
 - Add "conversation of all or a portion of a commercial building to a residential use" as a permitted use in the C-1, C-2, C-3 and OP zones", and review language in the Design Review criteria to see if the addition of similar language is needed
 - Permit affordable housing in all commercial zones
 - Permit child care centers outright in the C-1, C-2, C-3, OP and LI Zones (review for updates needed in definitions chapter)

