

#### Clackamas County Planning and Zoning Division Department of Transportation and Development

Development Services Building 150 Beavercreek Road | Oregon City, OR 97045

503-742-4500 | zoninginfo@clackamas.us www.clackamas.us/planning

#### NOTICE OF LAND USE APPLICATION IN YOUR AREA

Date:	12/16/2021
Permit Number:	Z0281-21
Application:	Design Review
From:	Clackamas County Planning and Zoning
Notice Mailed To:	Property owners within 300 feet Community Planning Organizations (CPO) Interested Citizens and Agencies

#### **Application Proposal:**

DESIGN REVIEW - Proposal is for a Memory Care Facility with 56 beds. Site design includes new parking, circulation, landscape, etc.

The project will be presented to the Design Review Committee for review and feedback The public is welcome to attend this meeting and provide comment. Please see the DRC website at https://www.clackamas.us/planning/designreview.html

Property Owner:	HAJ DANUT		
Applicant:	RADULESCU, EDWARD		
Address:	7810 SE JOHNSON CREEK BLVD PORTLAND, OR 97206		
Location:	South Side of Johnson Creek Blvd,	east of 77th	
Legal Description:	12E29AD01800	Acres: .75	
	12E29AD01900		

Zone: MR1-MEDIUM DENSITY RESIDENTIAL

Staff: Anthony Riederer 503-742-4528 <u>E-mail:</u> ariederer@co.clackamas.or.us,

#### How to Comment on this Application:

1. To be sure your comments will be considered prior to the decision, we need to have them within 20 days of the date of this notice.

2. You may use the space provided below, mail a separate letter or e-mail the information. Please include the permit number, address the information to the staff member handling this matter, and focus your comments on the approval criteria for the application.

3. Return your mailed comments to: Clackamas County Planning and Zoning, 150 Beavercreek Rd, Oregon City, OR 97045; FAX to (503) 742-4550.

<u>Community Planning Organization</u>: The following recognized Community Planning Organization (CPO) has been notified of this application. This organization may develop a recommendation on this application. You are welcome to contact this organization and attend their meeting. If this Community Planning Organization is currently inactive, and you are interested in becoming involved in Land Use Planning in your area, please contact the Citizen Involvement Office at (503) 655-8552.

SOUTHGATE CPO REED, TONYA 503-816-0378 SOUTHGATECPO@GMAIL.COM

**Decision Process:** In order to be approved, this proposal must meet the approval criteria in the Zoning and Development Ordinance, Section(s)

202, 316, 1000 series, 1102, 1307

The Ordinance criteria for evaluating this application can be viewed at <u>www.clackamas.us/planning/zdo.html</u>. You may view the submitted application at the following link, <u>https://accela.clackamas.us/citizenaccess/</u>.

A decision on this proposal will be made and a copy will be mailed to you. If you disagree with the decision you may appeal to the Land Use Hearings Officer who will conduct a public hearing. There is a \$250 appeal fee.

Comments:

Your Name/Organization

Telephone Number

Clackamas County is committed to providing meaningful access and will make reasonable accommodations, modifications, or provide translation, interpretation or other services upon request. Please contact us at 503-742-4545 or email DRenhard@clackamas.us.

503-742-4545: ¿Traducción e interpretación? |Требуется ли вам устный или письменный перевод? | 翻译或口译 ? | Cấn Biên dịch hoặc Phiên dịch? | 번역 또는 통역?



Clackamas County Planning and Zoning Division Department of Transportation and Development

Development Services Building 150 Beavercreek Road | Oregon City, OR 97045

503-742-4500 | zoninginfo@clackamas.us www.clackamas.us/planning

# LAND USE APPLICATION

# **DEEMED COMPLETE**

ORIGINAL DATE SUBMITTED: 06/16/21					
FILE NUMBER: Z0281-21-D					
APPLICATION TYPE: DESIGN REVIEW					

The Planning and Zoning Division staff deemed this application complete for the purposes of Oregon Revised Statutes (ORS) 215.427 on: 12/8/2021

Anthony Riederer	Senior Planner
Staff Name	Title

#### **Comments:**

Check one:



The subject property is located inside an urban growth boundary. The 120-day deadline for final action on the application pursuant to ORS 215.427(1) is: 4/7/2022



The subject property is not located inside an urban growth boundary. The 150-day deadline for final action on the application pursuant to ORS 215.427(1) is:



#### **Planning and Zoning** Department of Transportation and Development **Development Services Building**

150 Beavercreek Road | Oregon City, OR 97045 503-742-4500 | zoninginfo@clackamas.us

www.clackamas.us/planning RECEIVED



Land use application for:

# **DESIGN REVIEW**

Clackamas County Planning & Zoning Division

Jun 16 2021

**Application Fee:** 0.384% of construction cost, with \$785 minimum and \$36,835 maximum (plus \$3,230 if Hydrogeologic Review is required)

APPLICANT INFORMATION					
Applicant name:	Applicant email:	Applicant	phone:		
Edward Radulescu	eddie@eprdesign.com	503-679-2493			
Applicant mailing address:	City:	State:	ZIP:		
919 NE 19th Ave. Suite 155	Portland	OR	97232		
Contact person name (if other than applicant):	Contact person email:	Contact p	erson phone:		
Contact person mailing address:	City:	State:	ZIP:		

PROPOSAL	
Brief description of proposal:	Pre-application conference file number:
Demo existing house and construct a new 2-story 56 bed residential care facility with a memory care endorsement with associated parking and landscaping.	ZPAC0090-20

SITE INFORMATION							
Site address:				Comprehensive Plan designation:	Zoning district:		
7810-7820 SE Johns	on Creek Boulevar	d			MR1		
Map and tax lot #:				•	Land area:		
	Township:	_ Range:	_ Section:	Tax Lot:	0.75 Acre		
	Township:	_ Range:	_ Section:	Tax Lot:			
	Township:	_ Range:	_ Section:	Tax Lot:			
Adjacent properties under same ownership:							
	Township:	_ Range:	_ Section:	Tax Lot:			
	Township:	_ Range:	_ Section:	Tax Lot:			

Printed names of all property owners:	Signatures of all property owners:	Date(s):					
Danut Haj	TRAD		6.7.21				
I hereby certify that the statements contained herein, along with the evidence submitted, are in all respects true and correct to the best of my knowledge.							
Applicant signature:	-	Date:	6.7.21				

# A. Complete a pre-application conference:

You must attend a pre-application conference with Planning and Zoning staff before filing this application. Information about the pre-application conference process and a request form are available from the Planning and Zoning website.

# B. Review applicable land use rules:

This application is subject to the provisions of <u>Section 1102</u>, <u>Design Review</u> of the <u>Clackamas County Zoning and</u> <u>Development Ordinance</u> (ZDO).

It is also subject to the ZDO's definitions, procedures, and other general provisions, as well as to the specific rules of the subject property's zoning district and applicable development standards, as outlined in the ZDO.

# C. Turn in all of the following:

- Complete application form: Respond to all the questions and requests in this application, and make sure all owners of the subject property sign the first page of this application. Applications without the signatures of *all* property owners are incomplete.
- Application fee: The cost of this application is 0.384% of construction cost, with a \$785 minimum and \$36,835 maximum. Payment can be made by cash, by check payable to "Clackamas County", or by credit/debit card with an additional card processing fee using the <u>Credit Card Authorization Form</u> available from the Planning and Zoning website. Payment is due when the application is submitted. Refer to the FAQs at the end of this form and to the adopted <u>Fee Schedule</u> for refund policies.
- Narrative describing the proposed use and demonstrating compliance with ZDO Section 1000, *Development Standards*, and the standards of the applicable zoning district(s)
- Engineering geologic study, if required pursuant to <u>ZDO Section 1002</u>, <u>Protection of Natural Features</u>, or <u>1003</u>, <u>Hazards to Safety</u>
- Preliminary statements of feasibility from service providers and a Site Evaluation or Authorization Notice from the <u>Septic & Onsite Wastewater Program</u>, as applicable and if required pursuant to <u>ZDO</u> <u>Section 1006, Utilities, Street Lights, Water Supply, Sewage Disposal, Surface Water Management, and</u> <u>Erosion Control</u> (forms for preliminary statements of feasibility are available at the Planning and Zoning <u>website</u>)
- Transportation impact study, if required pursuant to <u>ZDO Section 1007</u>, *Roads and Connectivity*
- Lot size and density calculations showing compliance with <u>ZDO Section 1012</u>, Lot Size and Density, if applicable to the proposal
- Vicinity map: The map must show the location of the subject property in relation to adjacent properties, roads, bikeways, pedestrian access, utility access, and manmade or natural site features that cross the boundaries of the subject property.
- Existing conditions map: The map must be drawn to a scale of not less than one inch = 50 feet, and must show all of the following, as listed in <u>ZDO Subsection 1102.02(G)</u>:
  - Contour lines at two-foot intervals for slopes of 20% or less within an urban growth boundary (UGB); contour lines at five-foot intervals for slopes exceeding 20% within a UGB; contour lines at 10-foot intervals outside a UGB; and the source of contour information;

- Slope analysis designating portions of the site according to the following slope ranges and identifying the total land area in each category: zero to 20%, greater than 20% to 35%, greater than 35% to 50%, and greater than 50%;
- Drainage;
- Potential hazards to safety, including areas identified as mass movement, flood, soil, or fire hazards pursuant to <u>ZDO Section 1003;</u>
- Natural features, such as rivers, streams, wetlands, underground springs, wildlife habitat, earth mounds, and large rock outcroppings;
- Wooded areas, significant clumps or groves of trees, and specimen conifers, oaks, and other large deciduous trees (where the site is heavily wooded, an aerial photograph, at a scale of nor more than 1 inch = 400 feet, may be submitted and only those trees that will be affected by the proposed development need be sited accurately);
- Overlay zoning districts regulated by <u>ZDO Section 700</u>, <u>Special Districts</u>;
- Noise sources;
- Sun and wind exposure;
- Significant views;
- Structures, impervious surfaces, utilities, onsite wastewater treatment systems, landscaping, driveways and easements (e.g. access, utility, storm drainage), with notes as to whether these will remain or be removed, and with dimensions of driveways and easements; and
- All of the following that are on or adjacent to the subject property, including dimensions and, if applicable, names: existing roads, platted unconstructed roads, railroad rights-of-way, bikeways, curbs, sidewalks, pedestrian pathways, accessways and trails.
- Proposed site plan: The map must be drawn to a scale of not less than one inch = 50 feet, and must show all of the following, as listed in <u>ZDO Subsection 1102.02(H)</u>:
  - The subject property, including contiguous property under the same ownership as the subject property, and adjacent properties;
  - Property lines and dimensions for the subject property (indicate any proposed changes to these)
  - Natural features to be retained;
  - Location, dimensions, and names of all existing or platted roads or other public ways, easements, and railroad rights-of-way on or adjacent to the subject property;
  - Location of at least one temporary benchmark and spot elevations;
  - Location and dimensions of structures, impervious surfaces, and utilities, whether proposed or existing and intended to be retained (for phased developments, include future buildings);
  - Approximate location and size of storm drainage facilities;
  - Relation to transit; parking and loading areas, including dimensions and number of individual parking and load spaces and drive aisles; bicycle racks; walkways; and pedestrian crossings;
  - Orientation of structures showing windows and doors;
  - Location and type of lighting;
  - Service areas for waste disposal, recycling, loading, and delivery;
  - Location of mail boxes;
  - Freestanding signs; and
  - Pedestrian amenities.

- Grading plan: The plan must be drawn to a scale of not less than one inch = 50 feet, and must show the location and extent of proposed grading, general contour lines, slope ratios, slope stabilization proposals, and natural resources protection consistent with ZDO Sections 1002 and 1003
- Architectural drawings: The drawings must show all of the following, as listed in <u>ZDO Subsection 1102.02(J)</u>:
  - Building elevations, including any building signs, with identifications of the dimensions, area, color, materials, and means of illumination of such signs and also identifying and showing dimensions of any electronic message center or other changeable copy sign areas;
  - Building sections;
  - Floor plans;
  - Color and type of building materials;
  - Elevation of freestanding sign(s) identifying the dimensions (including total height and height between the bottom of the sign and the ground), area, color, materials, and means of illumination, and also identifying and showing dimensions of any electronic message center or other changeable copy sign areas; and
  - Gross floor area, in square feet, of each structure; floor area ratio, if a minimum floor area ratio standard applies; and the number of dwellings.
- General landscaping plan: The plan must be drawn to a scale of not less than one inch = 50 feet, and must show the elements required on the proposed site plan and all of the following, as listed in <u>ZDO Subsection</u> <u>1102.02(K)</u>:
  - Existing plants and groups and plants proposed;
  - Description of soil conditions; plans for soil treatment such as stockpiling of topsoil or addition of soil amendments; and plant selection requirements relating to soil conditions;
  - Erosion controls, including plant materials and soil stabilization, if any;
  - Irrigation systems;
  - Landscape-related structures such as fences, terraces, decks, patios, shelters, and play areas; and
  - Open space and recreational areas and facilities, if applicable.
- **Transportation improvement plan:** The plan must include proposed cross-sections for roads to be constructed or improved, including widths of travel lanes, bikeways, sidewalks, curbs, pedestrian pathways, and landscape strips. Identify the proposed landscape plan for any landscape strips, including street tree types, size, and location, and identify any proposed dedication of right-of-way.
- RCO District and PMU1 site mater plan: If the proposed development is in the Regional Center Office (RCO) District or a Planned Mixed Use 1 (PMU1) site, include any master plan required by <u>ZDO Subsection</u> <u>1102.03(B)</u>.
- □ **OA District master plan:** If the proposed development is in the Office Apartment (OA) District, include any master plan required by <u>ZDO Subsection 1102.03(C)</u>.
- □ **Mobile vending unit narrative:** If the proposed development is for a mobile vending unit that exceeds the standards for both a level two and a level three mobile vending unit, include a narrative explaining how the proposal complies with the standards in <u>ZDO Subsection 837.05</u>.

**Note:** Pursuant to <u>ZDO Subsection 1307.07(C)(2)</u>, the Planning Director or designee may modify the preceding list of submittal requirements. Please consult the information provided in your pre-application conference.

# FAQs

### When is a Design Review permit required?

Approval of a Design Review permit is required by the Zoning and Development Ordinance ZDO) for any development, redevelopment, expansions, and improvements in commercial and industrial zoning districts, except for uses approved through a zone change to Neighborhood Commercial (NC) District, and in the following residential zoning districts:

- High Density Residential (HDR)
- Medium Density Residential (MR-1)
- Medium High Density Residential (MR-2)
- Mountain Recreational Resort (MRR), except for detached single-family dwellings, manufactured homes, and their accessory uses if they are not part of a condominium development
- Planned Medium Density Residential (PMD)
- Regional Center High Density Residential (RCHDR)
- Special High Density Residential (SHD)
- Village Apartment (VA)
- Village Townhouse (VTH)

A Design Review permit is also required for specific types of residential development in other residential zoning districts, and for any other use as required by the Planning Director, the County Hearings Officer, or the Board of County Commissioners.

#### What is the permit application process?

Design Review permits are subject to a "Type II" land use application process, as provided for in <u>Section</u> <u>1307</u> of the ZDO. Type II decisions include notice to owners of nearby land, the Community Planning Organization (if active), service providers (sewer, water, fire, etc.), and affected government agencies. If the application is approved, the applicant must comply with any conditions of approval identified in the decision. The application review procedure may be modified, pursuant to <u>Subsection 1102.04(A)</u> or (B), to include Design Review Committee review and recommendation to the Planning Director prior to issuance of the Planning Director's decision. The Planning Director's decision can be appealed to the County Land Use Hearings Officer.

#### What is needed for the County to approve a land use permit?

Applications for Design Review *may* be permitted after an evaluation by the County of applicable standards of the ZDO. The applicant is responsible for providing evidence that their proposal does or can meet those standards. In order to address the standards, the information requested in this application should be as thorough and complete as possible. A permit will only be approved or denied after a complete application is received and reviewed. The County approves an application only if it finds that the proposal meets the standards or can meet the standards with conditions.

#### Are all the submittal requirements listed in this application necessary?

County Staff, acting under the authority of the Planning Director per ZDO Subsection 1307.07(C)(2), has the ability to modify the submittal requirements for Design Review such that they are appropriate to the scope and context of the project. Any modifications to the submittal requirements should be discussed with Staff and identified through the required pre-application conference. Regardless of whether the submittal requirements are modified, it remains the applicant's obligation to demonstrate that all approval criteria are met

# **FAQs** continued

#### How long will it take the County to make a decision about an application?

The County makes every effort to issue a decision on a Type II land use application within 45 days of when we deem the application to be complete. State law generally requires a final County decision on a land use permit application in an urban area within 120 days of the application being deemed complete, and within 150 days for a land use permit in a rural area, although there are some exceptions.

#### If an application is submitted and then withdrawn, will a refund be given?

If a submitted Type II application is withdrawn before it is publicly noticed, 75% of the application fee paid will be refunded. If a submitted application is withdrawn after it is publicly noticed, but before a decision is issued, 50% of the application fee will be refunded. No refund will be given after a decision is issued.

#### Who can help answer additional questions?

For questions about the County's land use permit requirements and this application form, contact Planning and Zoning at **503-742-4500** or <u>zoninginfo@clackamas.us</u>. You can also find information online at the Planning and Zoning website: <u>www.clackamas.us/planning</u>.

Clackamas County is committed to providing meaningful access and will make reasonable accommodations, modifications, or provide translation, interpretation or other services upon request. Please contact us at 503-742-4545 or drenhard@clackamas.us.

**503-742-4545:** ¿Traducción e interpretación? | Требуется ли вам устный или письменный перевод? 翻译或口译 ? | Cấn Biên dịch hoặc Phiên dịch? | 번역 또는 통역?

# Design Review Narrative for Application: Z0281-21-D

# Site Address: 7810-7820 SE Johnson Creek Blvd. Portland, Oregon

### **Project Narrative:**

Proposal to demolish the existing house and construct a new 2-story Residential Care Facility licensed for 55 resident beds. The building will be a total of 26,107 square feet. A 15-space parking lot is proposed along with storm water measures and associated site Landscaping. This proposal requires a Design Review Application for approval of the new commercial building and site improvements.

### Site Details:

- Zoning: MR-1
- Site Area: 30,140 S.F. after 22' Right of Way Dedication
- Flood Zone: No
- Proposed Lot Coverage: 16,032 S.F. (53.2%)
- Proposed Landscaped Area: 9,376 S.F. (Min. 7,535 S.F. Required)
- Total Parking Spaces Provided: 15 (Min. 12 Required)
- Total Bike Parking Spaces Provided: 7 (Min. 7 Required)
- Setbacks Required:
  - o 15' Front
  - 7' Sides (2-story structure)
  - $\circ$  20' Rear

# **Relative Code Criteria Addressed in this Narrative:**

- Section 315: Urban Residential Zoning Districts
- Section 1000: Development Standards

# Section 315:

315-1: Permitted Uses: Nursing homes are outlined as a Permitted for MR-1 per Table 315-1.

315-4: Dimensional Standards:

Table 315-4: Dimensional Standards in the PMD, MR-1, MR-2, HDR, VA, SHD, and RCHDR Districts

Standard	PMD	MR-1	MR-2	HDR	VA	SHD	RCHDR
District Land Area for Calculating Density Pursuant to Section 1012	3,630 square feet	3,630 square feet	2,420 square feet	1,742 square feet	1,500 square feet	726 square feet	Not Applicable
Minimum Density	See Section 1012	See Section 1012	See Section 1012	See Section 1012	See Section 1012	See Section 1012	See Section 1012
Minimum Lot Size	None	None <sup>1</sup>	None <sup>2</sup>	None	None	None	None

	15 feet, except 20 feet	15 feet, except 20 feet	15 feet, except 20 feet				
Minimum Front Setback	to garage and carport motor vehicle entries	to garage and carport motor vehicle entries <sup>3,4</sup>	to garage and carport motor vehicle entries <sup>4</sup>	15 feet <sup>5</sup>	10 feet <sup>6,7</sup>	15 feet	5 feet <sup>8</sup>
Maximum Front Setback	See Subsections 1005.03(E) and (H).	See Subsections 1005.03(E) and (H).	See Subsections 1005.03(E) and (H).	See Subsections 1005.03(E) and (H).	18 feet <sup>6</sup>	See Subsections 1005.03(E) and (H).	20 feet <sup>8,9</sup>
Minimum Rear Setback	30 feet <sup>10</sup>	20 feet <sup>5,10,11,12</sup>	20 feet <sup>5,10</sup>	See Subsection 1005.03(L) <sup>5</sup>	None <sup>6,7</sup>	See Subsection 1005.03(L)	See Subsection 1005.03(L) <sup>13</sup>

Standard	PMD	MR-1	MR-2	HDR	VA	SHD	RCHDR
Minimum Side Setback	30 feet <sup>10</sup>	One story: five feet; two stories: seven feet; three stories: 15 feet. For each story higher than three, an additional five feet of yard depth shall be required. <sup>5,10,11,12,14,15</sup>	One story: five feet; two stories: seven feet; three stories: 15 feet. For each story higher than three, an additional five feet of yard depth shall be required. <sup>5,10,14,15</sup>	See Subsection 1005.03(L) <sup>5</sup>	None	See Subsection 1005.03(L)	See Subsection 1005.03(L) <sup>16</sup>
Maximum Building Height	None	None	None	None	45 feet	None	None
Minimum Building Separation	10 feet	None	None	See Subsection 1005.03(L)	20 feet between multifamily dwellings	See Subsection 1005.03(L)	See Subsection 1005.03(L)

### Section 1000:

1002: Protection of Natural Features:

This section does not apply as no natural features such as hills, trees, streams, or other natural feature exist on this site that are required to be protected or mitigated for.

#### 1003: Hazards to Safety:

This section does not apply as no hazards exist or generated with this proposal. The site is not in a flood hazard, soil hazard, or fire hazard area.

#### 1004: Historic Protection:

This section does not apply as the site is not designated as part of any historic landmark, site, or features.

1005: Site and Building Design:

1. 1005.01 PURPOSE

Section 1005 is adopted to ensure sites are developed and buildings designed to:

- A. Efficiently utilize the land used in development, particularly urban land in centers, corridors, station communities and employment areas;
- B. Create lively, safe, attractive and walkable centers, corridors, station communities, employment areas and neighborhoods;
- C. Support the use of non-auto modes of transportation, especially pedestrian trips to and between developments;
- D. Support community interaction by creating lively, safe and attractive public use spaces within developments and on the street;
- E. Reduce impacts of development on natural features and vegetation;
- F. Utilize opportunities arising from a site's configuration or natural features;
- G. Encourage use of green building technologies and green site development practices, energy conservation and use of renewable energy resources;
- H. Design illumination so that dark skies are maintained to the extent possible, balanced with the lighting needs of safe and functional developments; and
- I. Accommodate the needs of the users to be located in developments.
- 1005.02 APPLICABILITY

Section 1005 applies to institutional, commercial, and industrial development; multifamily dwellings; and developments of more than one two- or three-family dwelling. Subsections 1005.04 (F) and 1005.12 also apply to attached singlefamily dwellings. Subsection 1005.12 also applies to developments of a single two- or three- family dwelling. This section applies to the proposed development application because the proposed project is a commercial building. Sections pertaining to industrial developments, one, two, or three family dwellings; attached or detached, do not apply.

1005.03 GENERAL SITE DESIGN STANDARDS.

The following site design standards apply:

- A. Where feasible, cluster buildings within single and adjacent developments for efficient sharing of walkways, on-site vehicular circulation, connections to adjoining sites, parking, loading, transit-related facilities, plazas, recreation areas, and similar amenities. The proposal is being development between two underdeveloped sites. These sites are not pending any development or land use application and therefore this subsection is not feasible at this time.
- B. Where feasible, design the site so that so that the longest building elevations can be oriented within 20 degrees of true south in order to maximize the south-facing dimensions. The proposed structure has common areas as well as resident bedrooms oriented towards south. However, the site has its narrowest site dimension along the south side and therefore it is not feasible to create the longest building elevation facing south.
- C. Minimum setbacks may be reduced by up to 50 percent as needed to allow improved solar access when solar panels or other active or passive solar use is

incorporated into the building plan. No setback reduction is proposed with this application.

- D. A continuous, interconnected on-site walkway system meeting the following standards shall be provided.
  - Walkways shall directly connect each building public entrance accessible to the public to the nearest sidewalk or pedestrian pathway, and to all adjacent streets, including streets that dead-end at the development or to which the development is not oriented. The main entrance of the building is connected to the street and the parking area along SE Johnson Creek Blvd. with a 6' wide pedestrian paved walkway.
  - 2. Walkways shall connect each building to outdoor activity areas including parking lots, transit stops, children's play areas and plazas. Due to the nature of the residents that will reside at the proposed memory care facility, the activity area of the building is in an interior, secured, courtyard. However, the walkways around the site from the street to the main entrance and from the parking area to the main entrance are provided for pedestrian circulation.
  - 3. Walkways shall be illuminated. Separate lighting shall not be required if existing lighting adequately illuminates the walkway. All walkways, outdoor recreation areas, and parking areas will be illuminated. A lighting plan has been provided with this application for reference.
  - 4. Walkways shall be constructed with a well-drained, hard-surfaced material or porous pavement and shall be at least five feet in unobstructed width. The walkways are proposed to be constructed of concrete or pervious asphalt.
  - 5. Standards for walkways through vehicular areas:
    - a) Walkways crossing driveways, parking areas and loading areas shall be constructed to be clearly identifiable to motorists through the use of different paving material, raised elevation, warning signs or other similar methods. The walkway that crosses the parking area will be striped to novity motorists of the walkway.
    - b) Where walkways are adjacent to driveways, they shall be separated by a raised curb, bollards, landscaping or other physical barrier. Raised curbs are proposed around the parking area to create a barrier between walkways and landscaped areas adjacent to the parking area.
    - c) Inside the Portland Metropolitan Urban Growth Boundary (UGB), if the distance between the building public entrance and street is 75 feet or greater and located adjacent to a driveway or in a parking lot, the walkway shall be raised, with curbs, a minimum four-footwide landscape strip and shade trees planted a maximum of 30 feet on center. The distance from the Main Entrance to the street is less than 75'. See Site Plan provided with this application.
    - d) The exclusive use of a painted crossing zone to make walkways identifiable to motorists may be used only for portions of walkways which are shorter than 30 feet and located across driveways,

parking lots, or loading areas. The striped areas are located only in the parking area where the walkway crosses the driveway.

- e) Walkways bordering parking spaces shall be at least seven feet wide or a minimum of five feet wide when concrete bumpers, bollards, curbing, landscaping, or other similar improvements are provided which prevent parked vehicles or opening doors from obstructing the walkway. The walkways proposed on site that border the parking spaces and / or cross the vehicle driveway area is a minimum of 8' wide. See Site Plan provided with this application for reference.
- 6. The interconnected onsite walkway system shall connect to walkways in adjacent developments, or stub to the adjacent property line if the adjacent land is vacant or is developed without walkways.
  - a) Walkway stubs shall be located in consideration of topography and eventual redevelopment of the adjacent property.
  - b) Notwithstanding the remainder of Subsection 1005.03(D)(6), walkway linkages to adjacent development shall not be required within industrial developments, to industrial developments, or to vacant industrially zoned land.

The walkways can be stubbed out to nearby properties, but these properties have not yet been developed. There are currently no applications on file for the sites to the East, West, or South with proposed developments.

- E. Inside the UGB, except for industrial developments, a minimum of 50 percent of the street frontage of the development site shall have buildings located at the minimum front yard depth line. The minimum front yard setback of the site is 15'. 58'-6" of the 117' wide development (50%) is placed at this minimum setback line.
- 1. If the minimum front yard depth standard is less than 20 feet, the front yard depth may be increased to 20 feet provided pedestrian amenities are developed within the yard. The minimum front yard setback is 15'. No increase is proposed with this development.
- 2. Primary building entrances for buildings used to comply with Subsection 1005.03(E), shall:
  - a) Face the street;
  - b) Be located at an angle facing both the street and a parking lot; or
  - c) Be located to the side of the building, provided that the walkway connecting to the street is a minimum of eight feet wide and is developed with landscaping and pedestrian amenities.
     The primary building entrance faces SE Johnson Creek Blvd. and there is an 8' wide payed pedestrian walkway connecting Johnson Creek Blvd.

an 8' wide paved pedestrian walkway connecting Johnson Creek Blvd. with the main entrance.

- If a development has frontage on more than one street, Subsection 1005.03(E) must be met on only one frontage, as follows:
  - a) If one of the streets is a major transit street, the standard shall be met on that street.

- b) If neither or both are a major transit street, then the standard shall be met on the street with the higher functional classification.
- c) If neither 1005.03(E)(3)(a) or (b) applies, then the standard shall be met on the longest frontage.
   The site has frontage on only one street.
- F. Inside the UGB, parking lots larger than three acres in size shall be built with major on-site vehicular circulation ways that include raised walkways with curbs, a minimum four-foot-wide landscape strip and shade trees planted a maximum of 30 feet on center. The parking lot is smaller than 3 acres for this development.
- G. New retail, office, mixed use, and institutional buildings located on major transit streets shall have at least one public entrance facing a major transit street, or street intersecting a major transit street.
  - 1. A private street used to meet the standards in Subsection 1005.03(G) must have raised walking surfaces on both sides, street trees, curbs, and pedestrian- scale street lighting, and must connect at both ends to an existing or proposed street.
  - 2. If a development has frontage on more than one major transit street, this orientation requirement needs to be met on only one side.
  - 3. The public entrance orientation requirement does not apply to warehouses or industrial buildings with less than 5,000 square feet of attached offices. The primary building entrance faces SE Johnson Creek Blvd. and there is an 8' wide paved pedestrian walkway connecting Johnson Creek Blvd. with the main entrance.
- H. New retail, office, mixed use, multifamily, and institutional buildings located at a major transit stop shall be set back a maximum of 20 feet from at least one of the following: the major transit stop, the major transit street or an intersecting street, or a pedestrian plaza at the major transit stop or a street intersection.

1. For the purpose of Subsection 1005.03(H), a building is located at a major transit stop, if:

- a. The building is located on a lot that has frontage on the major transit street or an intersecting street; and
- b. Any portion of the building is within a 200-foot radius of the major transit stop.

The proposed development is not located at a major transit stop.

2. Lawfully established buildings that do not comply with the maximum setback standard may have additional height added as an expansion without being brought into conformance with the standard. This development is for a new budling that will comply with minimum and maximum setbacks.

3. The maximum setback standard does not apply to warehouses or industrial buildings with less than 5,000 square feet of attached offices. The proposed building in this development is not a warehouse or other industrial use.

- I. In the PMU District, there shall be no vehicular parking or circulation within the front yard setback. This site is not located in the PMU District.
- J. In the OC District the design and siting of structures shall control public access points into office buildings, utilizing a central lobby design, entrance courtyard, internal pedestrian walkway or mall, or similar designs that protect

business/professional uses from the disturbances of direct public access. This site is not located in the OC District.

- K. Where a minimum floor area ratio (FAR) is required by the standards of the applicable zoning district, it shall be calculated as follows:
  - 1. Calculate the building floor area by determining the square footage of all buildings in the proposed development, including:
    - a) Gross floor area of all commercial structures (except parking structures), including storage and mechanical equipment;
    - b) Square footage of commercial uses in a parking structure; and
    - c) Square footage of the footprint of a multifamily residential structure.

This site is located in the MR-1 zone and does not have an F.A.R. standard according to Table 315-4.

- 2. Calculate the net site area by subtracting from the gross site area the following:
  - a) Right-of-way dedications;
  - b) Off-road (except sidewalks) trails, bikeways, or multi-purpose trails;
  - c) Stormwater detention facilities;
  - d) Design elements (plazas, greenways, transit stations, etc.);
  - e) Parks;
  - f) Civic spaces;
  - g) Stream buffers;
  - h) Wetlands; and
  - i) 100-year floodplain (undeveloped portion) The net site area, after all R.O.W. dedications is 30,140 square feet. No other features exist on this site that require area to be subtracted as a result of such features.
- Divide the building floor area by the net site area. The result is the FAR. For example, if the building floor area is 20,000 square feet and the net site area is 40,000 square feet, the FAR is 0.5. The net site area is 30,140 square feet. The building floor area is 26,107 square feet. 26,107/30,140=0.89. In the MR-1 zone there is no maximum F.A.R. standard according to Table 315-4.
- L. The following standards apply in the HDR, RCHDR, and SHD Districts: This section has been omitted because the site is not located in either of the Districts listed in this subsection.

# 1005.04 BUILDING DESIGN

A. The following standards apply to building facades visible from a public or private street or accessway and to all building facades where the primary entrance is located.

1. Building facades shall be developed with architectural relief, variety and visual interest and shall avoid the effect of a single, long, or massive wall with no relation to human size. Examples of elements that subdivide the wall: change in plane, texture, masonry pattern or color, or windows. The building façade of the

proposed building includes all the listed features for articulation including: differences in wall plane with setbacks in the wall relief of at least 2', windows, textures and wall finish types and color.

- 2. Building facades shall have particular architectural emphasis at entrances and along sidewalks and walkways. The building entrance is highlighted with an awning roof area and brick column.
- Provide visual interest through use of articulation, placement and design of windows and entrances, building trim, detailing, ornamentation, planters or modulating building masses. The building façade has been designed with several articulations in the building massing, offset of wall planes, differences in material types, textures, and finishes including color. Windows have been framed with trim and accent siding features.
- 4. Utilize human scale, and proportion and rhythm in the design and placement of architectural features. The placement of roof elements, windows sizing and massing of the building have been taken into consideration in the design of the building façade.
- 5. Use architectural features which are consistent with the proposed use of the building, level and exposure to public view, exposure to natural elements, and ease of maintenance. Windows and entrances have been placed so that they provide exposure to the public view. The private spaces have been placed towards the back of the façade areas for privacy.
- 6. When uses between ground-level spaces and upper stories differ, provide differentiation through use of bays or balconies for upper stories, and awnings, canopies, trim and other similar treatments for lower levels. Windows, roof features, and siding design have been used to articulate the different building elements.
- B. Requirements for building entries:
  - Public entries shall be clearly defined, highly visible and sheltered with an overhang or other architectural feature, with a depth of at least four feet. The main entrance of the building facing SE Johnson Creek Blvd. has been designed with an awning roof overhang that is 5' deep and is highlighted but the roof edge and brick column. The entrance from the parking lot is also highlighted by a drive-under roof feature for pick-up and drop-off.
  - 2. Commercial, mixed-use and institutional buildings sited to comply with 1005.03(E) shall have public entries that face streets and are open to the public during all business hours. The primary entrance faces SE Johnson Creek Blvd. and is open to the public. However, the entrance does have a doorbell due to the nature of the residents residing in the building. The staff will have to allow entrance and exit in to the and out of the building at all times for the safety of the residents.

- C. The street-facing façade of commercial, mixed-use and institutional buildings sited to comply with 1005.03(E) shall meet the following requirements:
  - 1. Facades of buildings shall have transparent windows, display windows, entry areas, or arcades occupying a minimum of 60 percent of the first floor linear frontage. Windows and doors that are glazed occupy an excess of 60% of the frontage of the building first floor.
  - 2. Transparent windows shall occupy a minimum of 40 percent of the first floor linear frontage. Such windows shall be designed and placed for viewing access by pedestrians. Windows and doors that are glazed occupy an excess of 40% of the frontage of the building first floor.
  - 3. For large-format retail buildings greater than 50,000 square feet, features to enhance the pedestrian environment, other than transparent window, may be approved through design review. Such items may include, but are not limited to display cases, art, architectural features, wall articulation, landscaping, or seating, provided they are attractive to pedestrians, are built to human scale, and provide safety through informal surveillance. The proposed building is not a retail building or greater than 50,000 square feet in size.
- D. Requirements for roof design:
  - 1. For buildings with pitched roofs:

a. Eaves shall overhang at least 24 inches. The building eaves of the proposed building project out 24".

b. Roof vents shall be placed on the roof plane opposite the primary street. No roof vents will be placed on the street facing façade.

2. For buildings, other than industrial buildings, with flat roofs or without visible roof surfaces, a cornice or other architectural treatment shall be used to provide visual interest at the top of the building. The building has been designed with a pitched roof.

- E. Requirements for exterior building materials:
  - 1. Use architectural style, concepts, colors, materials and other features that are compatible with the neighborhood's intended visual identity. NW Style finishes, colors, and materials have been used in the design of the building in order to be compatible with existing and future development.
  - 2. Building materials shall be durable and consistent with the proposed use of the building, level and exposure to public view, exposure to natural elements, and ease of maintenance. The materials choses are long lasting quality materials such as brick, cedar wood and fiber-cement siding.
  - 3. Walls shall be surfaced with brick, tile, masonry, stucco, stone or synthetic equivalent, pre-cast masonry, gypsum reinforced fiber concrete, wood lap siding, architecturally treated concrete, glass, wood, metal, or a

combination of these materials. The materials choses are long lasting quality materials such as brick, cedar wood and fiber-cement siding.

- 4. The surfaces of metal exterior building materials that are subject to rust or corrosion shall be coated to inhibit such rust and corrosion, and the surfaces of metal exterior building materials with rust or corrosion shall be stabilized and coated to inhibit future rust and corrosion. All metal finishes will be coated or finished for a corrosion free install.
- F. Additional building design requirements for multifamily dwellings, two- and threefamily dwellings, and attached single-family dwellings:
  - 1. Façades of buildings that are two or more stories in height shall have a minimum of one balcony or bay per four dwelling units.
  - 2. Windows shall be frequent and coordinate with bays and balconies.
  - 3. Where feasible, place the buildings to minimize the potential of windows facing directly toward primary living areas of other dwelling units.
  - 4. For buildings that are one or two stories in height, roofs shall be hipped, gambrel or gabled to provide visual interest. Flat roofs shall be allowed in areas of these buildings where mechanical equipment is mounted or where they are used for roof gardens or other outdoor activities. In Urban Low Density Residential Districts, the roof of each attached single-family dwelling shall be distinct from the other through either separation of roof pitches or direction, or other variation in roof design.
  - 5. For multifamily developments, convenient areas shall be provided for storage of articles such as bicycles, barbecues, and outdoor furniture. These areas shall be completely enclosed and easily accessible to respective dwelling units.

The development is not a multi-family, two, three, or attached single family dwelling building. The standards listed in subsection 'F' do not apply.

- G. Requirements to increase safety and surveillance:
  - 1. Locate buildings and windows to maximize potential for surveillance of entryways, walkways, parking, recreation and laundry areas. The building has been designed with many ground floor windows to spaces that are constantly occupied by staff or other personnel such as, offices, conference rooms, activity rooms, main building entrance, etc.
  - 2. Provide adequate lighting for entryways, walkways, parking, recreation and laundry areas. All entryways, walkways, parking areas, and circulation areas will be lit according to County standards. See Lighting Plan provided with the submittal of the application for this development.
  - 3. Locate parking and automobile circulation areas to permit easy police patrol. The site parking and circulation area provides easy access for the police and other emergency vehicles.
  - 4. Design landscaping to allow for surveillance opportunities. Landscape has been designed per county requirements. See Landscape Plan provided with the submittal of the application for this development.

- 5. Locate mail boxes where they are easily visible and accessible. The mailboxes will located for easy access or on the interior of the building for which access will be give for the delivery driver.
- 6. Limit fences, walls and, except for trees, landscaping between a parking lot and a street to a maximum of 30 inches in height. No fences are proposed at the frontage of the site or parking area that will block visibility.
- 7. Locate play areas for clear parental monitoring. No play areas for children are proposed with this use.
- H. Solar access requirements:
  - 1. Except for uses with greater cooling needs than heating needs, such as many retail uses, concentrate window areas on the south side of buildings (within 20 degrees of due south) where there is good southern exposure.
  - 2. Provide overhangs, balconies, or other shading devices to prevent excessive summer heat gains.
  - 3. Use architectural features, shape of buildings, fences, natural landforms, berms, and vegetation to catch and direct summer breezes for natural cooling, and minimize effects of winter winds.

The development has the majority of windows facing East and West due to the narrowest dimensions of the site facing North and South. All efforts have been made to provide spaces oriented to provide the best exposure to light.

 Requirements for compatibility with the intent of the design type or with the surrounding area. For purposes of Subsection 1005.04(I), design types are Centers, Station Communities or Corridor Streets as identified on Comprehensive Plan Map IV-8, Urban Growth Concept; X-CRC-1, Clackamas Regional Center Area Design Plan, Regional Center, Corridors and Station Community; X-SC-1, Sunnyside Corridor Community Plan, Community Plan Area and Corridor Design Type Location; or X-MC-1, McLoughlin Corridor Design Plan, Design Plan Area. The intent of these design types is stated in Chapter 4 or 10 of the Comprehensive Plan.

The subsections of this section have been omitted because the subject site is not located in any of the listed design types.

- J. Requirements for screening mechanical equipment:
  - Rooftop mechanical equipment, except for solar energy systems, shall be screened from view by the use of parapet walls or a sight-obscuring enclosure around the equipment. The screen shall be constructed of one of the primary materials used on the primary facades, and shall be an integral part of the building's architectural design. No rooftop mechanical equipment are proposed with this development.

- Ground mounted mechanical equipment shall be located away from the intersection of two public streets, to the extent practicable, and shall be screened by ornamental fences, screening enclosures, or landscaping that blocks at least 80% of the view. The site does not have 2 intersecting public streets.
- 3. Wall mounted mechanical equipment shall not be placed on the front of a building or on a façade that faces a street. Wall mounted mechanical equipment that extends six inches or more from the outer building wall shall be screened from view from the streets; from residential, public, and institutional properties; and from public areas of the site or adjacent sites through one of the screening techniques used in 1005.04(J)(1) or (2). No wall mounted equipment will be placed along the street frontage of the site.
- K. Requirements for specialized structures in industrial zoning districts:
- In the BP and LI Districts, silos, towers, and other specialized storage or processing structures are prohibited unless they are enclosed in a building that complies with the other applicable standards of Subsection 1005.04, or unless they are approved as part of a conditional use. The site is not located in the BP or LI Districts.
- L. Facades in the OA District: In the OA District, facades are subject to the following standards: The items in this section have been omitted because the site is not located in the OA District.

# 1005.05 OUTDOOR LIGHTING

- A. Outdoor lighting devices:
  - 1. Shall be architecturally integrated with the character of the associated structures, site design and landscape. Outdoor lighting has been incorporated into the design of the Site. A lighting plan has been provided with this application.
  - 2. Shall not direct light skyward. All lighting is downward directed.
  - 3. Shall direct downward and shield light; or direct light specifically toward walls, landscape elements or other similar features, so that light is directed within the boundaries of the subject property; All lighting will have shields on them that direct lighting down or in the desired direction as to not spill over property lines.
  - 4. Shall be suitable for the use they serve, e.g. bollard lights along walkways, pole mounted lights for parking lots; The site lighting has been selected to provide the lighting needs for which the particular fixture is intended for.
  - 5. Shall be compatible with the scale and intensity of uses they are serving. Height of pole mounted fixtures shall not exceed 25 feet or the height of the tallest structure onsite, whichever is less; The site lighting has been designed specifically for the building, site, and its uses.
  - 6. At entrances, shall be glare-free. Entrance lighting may not exceed a height of 12 feet and must be directed downward. All building entrances have been equipped with proper lighting.

- B. The following are exempt from Subsection 1005.05(A):
  - 1. Temporary lights used for holiday decorations;
  - 2. Street lights regulated in Section 1006, *Utilities, Street Lights, Water Supply, Sewage Disposal, Surface Water Management, and Erosion Control*; and
  - 3. Lighting associated with outdoor recreation uses such as ball fields or tennis courts.

### 1005.06 ADDITIONAL REQUIREMENTS

Development shall comply with a minimum of one of the following techniques per 20,000 square feet of site area. Regardless of site size, a minimum of one and a maximum of five techniques are required. Partial site area numbers shall be rounded. The items highlighted with yellow are being used in this proposal.

- A. Install a solar energy system in the development.
- B. Use passive solar heating or cooling techniques to reduce energy consumption. Examples of techniques:
  - 1. Modulate building masses to maximize solar access.
  - 2. For developments with more than one structure, locate taller structures to minimize negative impacts on solar access for the development site and adjacent sites.
  - 3. Locate buildings to maximize windbreaks.
  - 4. Locate structures and landscaping to avoid winter shading on the south side and optimize summer shading on the west and southwest sides of buildings.
  - 5. Utilize deciduous trees to provide summer shade and allow winter sun.
  - 6. Utilize deciduous vines on fences, trellises, and arbors to provide summer shade.
  - 7. Locate and form berms to protect buildings and exterior use spaces against winter winds or utilize dense evergreens or conifers to screen winter wind and protect against hostile winter elements.
  - 8. Provide skylights or clerestory windows to provide natural lighting, and/or solar heating of interior spaces.
- C. Use highly reflective (high albedo) materials on roof surfaces.
- D. Place major outdoor use areas such as plazas, playgrounds, gardens, etc. on the south side of buildings.
- E. Construct a minimum of 75 percent of walkway area of porous pavement.
- F. Construct a minimum of 75 percent of all parking spaces with porous pavement.
- G. Provide additional landscaping area at least 10 percent above the requirements for the site pursuant to Table 1009-1. For example, if the minimum area requirement is 20 percent, then 22 percent shall be provided. Credit shall be given for green roofs or other areas of vegetation that exceed the minimum area requirements. A total of 7,535 S.F. of

landscaped area is required. 9,376 S.F. is proposed. The additional area is in excess of 10% of the required area.

- H. Include additional swales in development landscaping, pursuant to Section 1009. Credit shall be given for additional swale(s) that exceed the requirements of Subsection 1009.04(A)(2) by at least 10 percent of area. For example, if 1009.04(A)(2) requires 200 square feet of swale area, then an additional 20 square feet of swale area would be required.
- I. Collect rainwater from roofs and/or other impervious surfaces and use it for irrigation.
- J. Apply other techniques for onsite storm water treatment identified by the surface water management regulatory authority.
- K. Lay out sites and locate buildings and on-site vehicular circulation to create functional open areas such as plazas, courtyards, outdoor recreation areas, mini- parks, and accessways that are open to the general public.
- L. Enhance sidewalks and/or walkways by providing additional width, using higher quality materials; shielding from vehicular traffic with enhanced planting strips, street trees and on-street parking, and/or providing pedestrian amenities that are compatible with the design of the development as well as the neighborhood as a whole.
- M. Coordinate development between adjacent uses to provide for a more attractive and lively streetscape, enhance connections, minimize conflicts and provide common-use areas.
- N. Enhance the pedestrian connection between the development and neighborhood shopping areas, nearby transit, trails, bikeways or parks. Examples include additional width or pedestrian amenities.
- O. Provide functional and accessible rooftop gardens.
- P. For multifamily dwelling units that face the street, raise first floor units a minimum of two feet above street level.
- Q. Provide structured or under-structure parking to meet all or part of the parking need.
- R. Provide no more than the minimum number of surface parking spaces set out in Table 1015-2, all of which shall be no greater than the minimum dimensions allowed in Subsection 1015.04(B)(2).
- S. Lay out sites or orient structures, to maximize significant vistas.
- T. Locate and design structures to protect scenic views or vistas from adjacent properties and public thoroughfares. Setbacks, building height, and bulk should be considered.
- U. Utilize rail service opportunities abutting the site.
- V. Inside the UGB, a minimum of 75 percent of the street frontage of each lot shall have buildings located at the minimum front yard depth line. If the minimum front yard depth standard is zero, up to 20 feet of additional front yard depth may be provided where plazas, outdoor seating, or other pedestrian amenities are located.
- W. Outside the UGB, or for industrial developments, a minimum of 25 percent of the street frontage of each lot shall have buildings located at the

minimum front yard depth line. Up to 20 feet of additional front yard depth may be provided where plazas, outdoor seating, or other pedestrian amenities are located.

X. Locate buildings at the minimum side yard setback or within 10 feet of the side setback line, whichever is greater.

#### 1005.07 MODIFICATIONS

Modification of any standard identified in Subsections 1005.03 and 1005.04 may be approved as part of design review if the proposed modification will result in a development that achieves the purposes stated in Subsection 1005.01 as well or better than the requirement listed. No modifications are proposed with this development application for Design Review.

#### 1006.02 STREET LIGHTS

Street lights are required for all development inside the Portland Metropolitan Urban Growth Boundary. The following standards apply:

- A. Street lighting shall be installed pursuant to the requirements of Clackamas County Service District No. 5 and the electric company serving the development. A street light shall be installed where a new road intersects a County road right- of-way and, in the case of subdivisions, at every intersection within the subdivision.
- B. Areas outside Clackamas County Service District No. 5 shall annex to the district through petition to the district.

Street lights will be installed as required by Clackamas County, ODOT, and/or PGE.

#### 1006.03 WATER SUPPLY

- A. All development which has a need for, or will be provided with, public or community water service shall install water service facilities and grant necessary easements pursuant to the requirements of the district or company serving the development. There is public water to serve the proposed building located in SE Johnson Creek Blvd.
- B. Approval of a development that requires public or community water service shall be granted only if the applicant provides a preliminary statement of feasibility from the water system service provider.
  - The statement shall verify that water service, including fire flows, is available in levels appropriate for the development and that adequate water system capacity is available in source, supply, treatment, transmission, storage and distribution. Alternatively, the statement shall verify that such levels and capacity can be made available through improvements completed by the developer or the system owner.

- 2. If the statement indicates that water service is adequate with the exception of fire flows, the applicant shall provide a statement from the fire district serving the subject property that states that an alternate method of fire protection, such as an on-site water source or a sprinkler system, is acceptable.
- 3. The statement shall be dated no more than one year prior to the date a complete land use application is filed and need not reserve water system capacity for the development.

# There is public water to serve the proposed building located in SE Johnson Creek Blvd.

C. Prior to final approval of any partition or subdivision, the applicant shall provide evidence that any wells in the tract subject to temporary or permanent abandonment under Oregon Revised Statutes (ORS) 537.665 have been properly abandoned. No partition or subdivision is proposed with this development.

D. The following standards apply inside the Portland Metropolitan Urban Growth Boundary, Government Camp, Rhododendron, Wemme/Welches, Wildwood/Timberline, and Zigzag Village:

- Land divisions or other development requiring water service shall not be approved, except as provided in Subsection 1006.03(D)(4), unless they can be served by a public water system in compliance with drinking water standards as determined by the Oregon Health Authority.
- 2. New development requiring water service within the boundaries of a water service system, created pursuant to ORS Chapters 264, 450, or 451, shall receive service from this system.
- 3. New public water systems shall not be created unless formed pursuant to ORS Chapters 264, 450, or 451.
- 4. A lot of record not located within the approved boundaries of a public water system may be served by an alternative water source.

There is public water to serve the proposed building located in SE Johnson Creek Blvd. No partitions or subdivisions are proposed. The proper approvals will be obtained at time of building permit approval for connection to the public water system.

F. The following standards apply outside the Portland Metropolitan Urban Growth Boundary, Government Camp, Rhododendron, Wemme/Welches, Wildwood/Timberline, and Zigzag Village:

1. Applicants shall specify a lawful water source for the proposed development, such as a public or community water system, certificated water right, or exemptuse well. 2. All subdivisions proposing to use an exempt-use well or wells and all land divisions, and new industrial, commercial, or institutional development located within a sensitive groundwater area and proposing to use an exempt- use well or wells must affirmatively demonstrate that:

- a) The subject aquifer is capable of sustaining the proposed development with sufficient potable water.
- b) The proposed development is not likely to unreasonably interfere with existing wells. Unreasonably interfere means that a proposed development will result in one or more senior groundwater appropriators being unable to obtain either the permitted or the customary quantity of groundwater, whichever is less, from a reasonably efficient well that fully penetrates the aquifer where the aquifer is relatively uniformly permeable. However, in aquifers where flow is predominantly through fractures, full penetration may not be required as a condition of finding substantial or undue interference.
- c) The proposed development is not likely to contribute to the overdraft of the affected aquifer.
- 3. Unless waived by the Planning Director, an applicant for any proposed development subject to Subsection 1006.03(F)(2) shall submit a hydrogeologic review with the subject application. The purposes of a hydrogeologic review are to provide information and professional analysis regarding the geology and hydrogeology of the area in the immediate vicinity of the proposed development for the County to determine compliance with Subsection 1006.03(F)(2). Study findings, maps, and conclusions shall be presented in a clear and understandable report.

a. A hydrogeologic review report shall include sufficient evidence and analysis to demonstrate compliance with Subsection 1006.03(F)(2), and at a minimum, shall include the following information:

- i. A map showing all lots and parcels within at least one-quarter mile of the proposed development;
- ii. The location, as determined by publicly available information, of all known wells on all lots or parcels within at least one-quarter mile of the proposed development, and the quantity of water permitted to be used;
- iii. The estimated use of groundwater within at least one-quarter mile of the proposed development, including but not limited to, 400 gallons per day of household use for each lot and parcel, 2,000 gallons per day for lawn and landscape irrigation from June through September, and water use from permitted wells. The estimated use of groundwater shall include any development or tentative land division which has been approved by the county, and shall assume development of a singlefamily residence on each undeveloped lot or parcel;

- iv. The quantity of water the proposed land use will utilize. If the proposal is for residential use, water use shall be calculated as 400 gallons per day per household and 2000 gallons per day for lawn and landscape irrigation from June through September. If the proposal is for a land division for residential purposes, all proposed lots or parcels shall be included in the calculation, and the calculation shall assume that the remainder of the tract will be developed at its allowed density;
- v. Identification of aquifers in the area of the subject property;
- vi. Compilation and review of available geologic and hydrogeologic studies of the review area;
- vii. Compilation and evaluation of available well deepening and replacement well information in the review area;

viii. Compilation and analysis of existing geologic information, including representative well logs, physical location of representative wells, and an evaluation of the local stratigraphy and geologic structure in the review area;

- ix. Compilation and analysis of existing and available water level and pump test information including evaluation of long-term stability and sustainability of groundwater levels (heads); and
- Interpretation of the information gathered for Subsections 1006.03(F)(3)(a)(i) through (ix), including preparation of geologic and hydrogeologic maps and cross sections necessary to support and/or illustrate the interpretation.
- b. A hydrogeologic review shall conclude that there is sufficient information to demonstrate compliance with Subsection 1006.03(F)(2), and may need to be based on draw down tests or other physical measurements where necessary.
- c. The Planning Director may, at the Director's discretion, allow an applicant to modify the water use assumptions used in the hydrogeologic review where an applicant proposes enforceable water conservation and/or reuse measures, including but not limited to:
  - i. Gray water use;
  - ii. Water conserving appliances and fixtures;
  - iii. Landscaping with drought resistant plants; or
  - iv. Rainwater harvest and/or the use of cisterns.

To be deemed enforceable, any conservation or reuse measure must be approved by County Counsel.

- 4. All reviews and plans required by Subsection 1006.03(F) shall be reviewed by a qualified professional of the County's choice during the development review process. Such review shall include examination to ensure required elements have been completed, study procedures and assumptions are generally accepted, and all conclusions and recommendations are supported and reasonable.
- Outside of sensitive groundwater areas, the Planning Director may, at the Director's discretion, waive some or all of the requirements for a hydrogeologic review where an applicant demonstrates through well logs or other evidence that the specified information is not necessary to determine compliance with Subsection 1006.03(F)(2).
- 6. Water service for partitions and subdivisions shall be provided according to the provisions of ORS 92.090. When no water is to be provided by a public or community water system, there shall be a note on the final plat indicating that no public water service is being provided, in addition to the filing and disclosure requirements of ORS 92.090.
- 7. Approved land divisions at densities requiring public water service shall include a note on the final plat indicating public water service is required for development.
- 8. For a major subdivision, all lots shall be served by a single public or community water source.

# 1006.04 SANITARY SEWER SERVICE

- A. All development that has a need for sanitary sewers shall install the facilities pursuant to the requirements of the district or company serving the development. The proposed development will require a 6" sewer lateral connected to public sewer. There is adequate sewer existing in SE Johnson Creek Blvd.
- B. Approval of a development that requires sanitary sewer service shall be granted only if the applicant provides a preliminary statement of feasibility from the sanitary sewage treatment service provider and the collection system service provider.

1. The statement shall verify that sanitary sewer capacity in the wastewater treatment system and the sanitary sewage collection system is available to serve the development or can be made available through improvements completed by the developer or the system owner.

- 2. The service provider may require preliminary sanitary sewer system plans and calculations for the proposed development prior to signing a preliminary statement of feasibility.
- 3. The statement shall be dated no more than one year prior to the date a complete land use application is filed and need not reserve sanitary sewer system capacity for the development.

The proposed development will require a 6" sewer lateral connected to public sewer. There is adequate sewer existing in SE Johnson Creek Blvd.

C. Hotels and motels are permitted in unincorporated communities only if served by a community sewer system as defined by Oregon Administrative Rules 660-022- 0010(2). The proposed development is not a hotel or motel.

1006.05 SUBSURFACE SEWAGE DISPOSAL The items for this section have been omitted because there are no subsurface sewage disposal systems proposed for this site.

1006.06 SURFACE WATER MANAGEMENT AND EROSION CONTROL The following surface water management and erosion control standards apply:

A. Positive drainage and adequate conveyance of surface water shall be provided from roofs, footings, foundations, and other impervious or nearimpervious surfaces to an appropriate discharge point. All site rainwater from the roofs will be directed to a subsurface stormwater facility designed per WES standards. A plan for this system has been provided along with a Storm Report. The parking lot and other paved areas will be designed with pervious asphalt.

B. The requirements of the surface water management regulatory authority apply. If the County is the surface water management regulatory authority, the surface water management requirements of the *Clackamas County Roadway Standards* apply.

C. Approval of a development shall be granted only if the applicant provides a preliminary statement of feasibility from the surface water management regulatory authority. The statement shall verify that adequate surface water management, treatment and conveyance is available to serve the development or can be made available through improvements completed by the developer or the system owner.

- 1. The surface water management regulatory authority may require a preliminary surface water management plan and report, natural resource assessment, and buffer analysis prior to signing the preliminary statement of feasibility.
- 2. The statement shall be dated no more than one year prior to the date a complete land use application is filed and need not reserve surface water treatment and conveyance system capacity for the development.

All site rainwater from the roofs will be directed to a subsurface stormwater facility designed per WES standards. A plan for this system has been provided along with a Storm Report. The parking lot and other paved areas will be designed with pervious asphalt.

D. Development shall be planned, designed, constructed, and maintained to:

- 1. Protect and preserve existing natural drainage channels to the maximum practicable extent;
- 2. Protect development from flood hazards;
- 3. Provide a system by which water within the development will be controlled without causing damage or harm to the natural environment, or to property or persons within the drainage basin;
- 4. Ensure that waters drained from the development are substantially free of pollutants, including sedimentary materials, through such construction and drainage techniques as sedimentation ponds, reseeding, and phasing of grading; and
- Ensure that waters are drained from the development in such a manner that will not cause erosion to any greater extent than would occur in the absence of development.
   All site rain water from the roofs will be directed to a subsurface stormwater facility designed per County standards. A plan for this system has been provided along with a Storm Report. The parking lot and other paved areas will be designed with pervious asphalt.
- E. Where culverts cannot provide sufficient capacity without significant environmental degradation, the County may require the watercourse to be bridged or spanned. No culverts are proposed.
- F. If a development, or any part thereof, is traversed by any watercourse, channel, stream, creek, gulch, or other natural drainage channel, adequate easements for surface water management purposes shall be provided to the surface water management regulatory authority. There are not waterways, streams, creeks, gulches, or any other drainage channels located on the subject site.
- G. Channel obstructions are not allowed, except as approved for the creation of detention, retention, or hydropower facilities approved under this Ordinance. Fences with swing gates may be utilized. There are not waterways, streams, creeks, gulches, or any other drainage channels located on the subject site.
- H. The natural drainage pattern shall not be substantially altered at the periphery of the subject property. Greatly accelerated release of stored water is prohibited. Flow shall not be diverted to lands that have not previously encountered overland flow from the same upland source unless adjacent downstream owners agree. Natural drainage patterns will not be altered and no stormwater runoff will be directed to adjacent public or private properties.
- I. A surface water management and erosion control plan is required for significant residential, commercial, industrial, and institutional development. The plan shall include:
- 1. The methods to be used to minimize the amount of runoff siltation and pollution created from the development both during and after construction; and
- 2. Other elements required by the surface water management authority.

There are not waterways, streams, creeks, gulches, or any other drainage channels located on the subject site.

#### 1007 ROADS AND CONNECTIVITY

This section has been omitted because there are no new public or private roads proposed for this development.

### 1009 LANDSCAPING

- A. Landscaping materials shall be selected and sited to produce a hardy and lowmaintenance landscaped area with an emphasis on fast-growing plants. Selection shall include consideration of soil type and depth, spacing, exposure to sun and wind, slope and contours of the subject property, building walls and overhangs, and compatibility with existing vegetation to be preserved. Notwithstanding the requirement for hardiness, annuals are permitted as provided in Subsection 1009.01(B). A Landscape Plan has been provided with this development that complies with the standards of this section.
- B. A variety of plants, intermixed throughout landscaped areas, shall be provided, as follows:
  - 1. Evergreen and deciduous;
  - 2. Trees, shrubs, and groundcover;
  - 3. Plants of varying textures;
  - 4. Plants of varying widths and heights at maturity; and
  - 5. Plants with seasonal color interest (e.g., foliage, flowering perennials, annuals). A Landscape Plan has been provided with this development that complies with the standards of this section.
- C. The planting of invasive non-native or noxious vegetation shall be prohibited, and existing invasive non-native or noxious vegetation shall be removed. A Landscape Plan has been provided with this development that complies with the standards of this section.
- D. Landscaped areas shall not be used for other purposes, such as storage or display of automobiles, equipment, merchandise, or materials. Landcaped areas will not be used for other purposes.
- E. Landscaping of the unimproved area between a lot line and the improved portion of an adjacent road right-of-way shall be required when there are no immediate plans to develop or otherwise disturb the unimproved area, and one or more of the following apply:
  - 1. The subject property is located inside the Portland Metropolitan Urban Growth Boundary;
  - 2. Landscaping is necessary to present an appearance consistent with the proposed development as viewed from the road;
  - 3. Landscaping is necessary to reduce dust, noise, erosion, or fire hazard; or
  - 4. The road is designated as a scenic road on Comprehensive Plan Map 5-1, *Scenic Roads*.

A Landscape Plan has been provided with this development that complies with the standards of this section.

- F. Landscaping shall be used to highlight public entrances to buildings. If—due to the depth of a front setback, a required walkway, or both—there is insufficient area to permit a typical, in-ground landscaping bed between a public entrance and a front lot line, this requirement may be met with trellises, hanging baskets, or planters, any of which shall include plants. A Landscape Plan has been provided with this development that complies with the standards of this section.
- G. Where feasible, landscaping shall be required adjacent to walkways and other areas intended for pedestrian use. Landscaping is located adjacent to all walkways and parking areas.
- H. Existing significant plants, terrain, and other natural features shall be incorporated into the landscaping design and development if such features are required to be retained by other provisions of this Ordinance or if otherwise feasible. There are no significant existing plants or trees on the subject site.

# 1009.02 MINIMUM AREA STANDARDS

A. Table 1009-1, *Minimum Landscaped Area*, establishes the minimum percentage of the area of the subject property that shall be landscaped.

- 1. The minimum landscaped area shall be calculated after subtracting any public dedications from the area of the subject property.
- 2. Landscaping in adjacent rights-of-way shall not count toward compliance with the minimum landscaped area.
- 3. Requirements for surface parking and loading area landscaping, screening and buffering, scenic roads landscaping, landscaping strips, and recreational areas and facilities set forth in Section 1009 apply regardless of whether compliance with those requirements results in landscaping a greater percentage of the subject property than is required by Table 1009-1.

Zoning District	Minimum Landscaped Area
CC, PMU, RCC, RCO, RTL	10 percent
RTC	<ul> <li>15 percent outside Government Camp</li> <li>10 percent in Government Camp</li> </ul>
SCMU	<ul> <li>15 percent for developments of three- family or multifamily dwellings, including mixed-use developments that include these uses</li> <li>10 percent for all other developments</li> </ul>
BP, C-2, C-3, GI, LI, NC, RC, RI, VCS, VO	15 percent
OA, OC, RCHDR	20 percent

# Table 1009-1: Minimum Landscaped Area

HDR, <mark>MR-1</mark> , MR-2, MRR, PMD, VA, VTH	25 percent except 20 percent for attached single-family dwellings in the MR-1 and MR- 2 Districts
HR	<ul> <li>25 percent for conditional uses</li> <li>20 percent for attached single-family dwellings if three or more dwelling units are attached in succession</li> </ul>
FF-10, FU-10, R-2.5 through R-30, RA-1, RA-2, RR, RRFF- 5, VR-4/5, and VR-5/7	25 percent for conditional uses and for primary-use attached single-family dwellings in the VR-4/5 District if three or more dwelling units are attached in succession
SHD	40 percent

4. A minimum of 75 percent of the minimum landscaped area required by Table 1009-1—excluding any area occupied by pedestrian amenities, active recreational areas, or edible gardens—shall be landscaped with native or drought-tolerant plants.

- 5. Outdoor recreational areas required by Subsection 1009.08(A), as well as outdoor recreational areas in the MRR District, shall count toward the minimum landscaped area required by Table 1009-1, except that impervious surface area exceeding 25 percent of the outdoor recreational area shall be excluded.
- 6. Edible gardens may comprise a maximum of 10 percent of the minimum landscaped area required by Table 1009-1.
- 7. Green roofs may comprise a maximum of 25 percent of the minimum landscaped area required by Table 1009-1.
- 8. Turf lawn may comprise a maximum of 10 percent of the minimum landscaped area required by Table 1009-1. However, this limitation shall not apply to active recreational areas, provided that no other areas of the subject property are planted in turf lawn, and it shall not apply to cemeteries.
- 9. Pedestrian amenities may comprise a maximum of one-third of the minimum landscaped area required by Table 1009-1. However, no more than 15 percent of the minimum landscaped area required by Table 1009-1 and developed with pedestrian amenities shall have an impervious surface.
- 10. Area occupied by walls, fences, or trellises constructed to comply with Subsections 1009.03 and 1009.04 shall count toward the minimum landscaped area required by Table 1009-1.
- 11. In the PMD, MR-1, MR-2, and HDR Districts, the following may comprise a maximum of 20 percent of the minimum landscaped area required by Table 1009-1: interior courtyards, atriums, solar greenhouses, solariums, roof gardens, indoor recreational areas, and other comparable amenities.
- 12. In the RCHDR and SHD Districts, the minimum landscaped area required by Table 1009-1 shall be met with shared outdoor surface areas, including the following: landscaping, courtyards, pedestrian plazas, areas dedicated for parks, onsite walkways and bikeways, recreational areas and facilities, yards, decks, terraces, patios, and roof gardens. In addition, indoor recreational facilities identified in Subsection 1009.08(B), and over and above the minimum standard

set forth in Subsection 1009.08(B), may be counted toward the minimum landscaped area required by Table 1009-1.Also, private outdoor areas may be counted toward meeting the minimum landscaped area required by Table 1009-1, as follows:

a. A maximum of 25 percent of the minimum landscaped area required by Table 1009-1 may be comprised of usable private outdoor space, except that the 25-percent cap does not apply to usable private open space facing streets and accessory to residential development.

b. When living areas face the street, usable balcony space may be applied toward achieving the minimum landscaped area required by Table 1009-1 on a 1:2 ratio (one square foot of credit for every two square feet of balcony space facing the street). The balconies must have non-opaque sides and be designed to incorporate landscaping or other decorative features.

The site area is 30,140 square feet after all R.O.W. dedications. A total of 7,535 square feet of landscaped area is required (25%). 9,376 S.F. of landscaped area is provided (31%).

B. Exceptions: Notwithstanding Table 1009-1:3

Exceptions will not be utilized for this development.

1009.03 SURFACE PARKING AND LOADING AREA LANDSCAPING

Surface parking and loading areas shall be landscaped as follows:

A. Surface parking areas that include more than 15 parking spaces shall comply with the following landscaping requirements:

- 1. Twenty-five square feet of landscaping per parking space, excluding perimeter parking spaces, shall be provided, except that the standard shall be reduced to 20 square feet for each parking space developed entirely with porous pavement.
- 2. One landscape swale located between two rows of parking spaces, as shown in Figure 1009-1, is required for every six rows of parking spaces, unless all parking spaces are developed entirely with porous pavement. Additional swales beyond the minimum requirement are allowed.
  - a. For the purpose of Subsection 1009.03(A)(2), a "row" of parking spaces is one space deep, meaning that where two spaces abut at their ends, it is considered two "rows".
  - Parking spaces separated by pedestrian or vehicle crossings perpendicular to the row of parking spaces are considered to be part of a single row.
  - c. The first required swale shall be developed for the entire length of the longest row of parking spaces.
  - d. Gaps in a required swale are permitted only to provide for pedestrian and vehicle crossings.

- e. The parking lot shall be graded to allow surface water to flow into a swale. Curbs shall not separate parking spaces from the swale, and gaps between parking space tire stops are required to allow surface water to flow into a swale.
- f. Swales shall be a minimum of four feet wide.
- g. If the front portions of parking spaces are landscaped as allowed by Subsection 1015.02(A)(10), the landscaped portion of the parking space shall be adjacent and in addition to the swale, as shown in Figure 1009-1.
- h. Turf lawn is prohibited in swales.

# The proposed parking area does not exceed more than 15 parking spaces.

3. Interior landscaping not developed as swales pursuant to Subsection 1009.03(A)(2) shall comply with the following standards:

- a. It shall be arranged in areas at the ends of rows of parking or between parking spaces within rows of parking. See Figure 1009-2.
- b. It may join perimeter landscaping as long as the interior landscape area extends at least four feet into the parking area from the perimeter landscape line. See Figure 1009-2.
- c. Landscaping that abuts, but does not extend into, the parking area may be included as interior landscaping if all of the following are met:
  - I. The abutting landscaped area must be in addition to required perimeter landscaping;
  - II. Only the first 10 feet of the abutting landscaped area, measured from the edge of the parking area, may be included as interior landscaping; and
  - III. The landscaped area is not abutting and parallel to required perimeter landscaping. See Figure 1009-2.
- d. The interior length and width of landscaped areas shall be a minimum of four feet.

# The proposed parking area does not exceed more than 15 parking spaces.

4. Interior landscaped areas, including swales, shall include a minimum of one tree located every eight interior parking spaces, or fraction thereof, except in the OA, VA, VCS, and VO Districts, where a minimum of one tree shall be located every six interior parking spaces.

a. Where necessary to accommodate other design considerations, variable spacing of the trees required by Subsection 1009.03(A)(4) is allowed, but

in no case shall there be less than one tree planted in every 12 parking spaces.

b. The species of trees required shall be determined on the basis of the growth habit and the need to provide maximum shading of surface parking areas.

The proposed parking area does not exceed more than 15 parking spaces.

B. Perimeter landscaping requirements for surface parking and loading areas adjacent to abutting lots or rights-of-way are as follows:

- 1. A landscaping strip with a minimum width of five feet shall be provided adjacent to the perimeter of the surface parking or loading area, except:
  - a. In the OA, VA, VCS, and VO Districts, the minimum width shall be 10 feet;
  - b. In the BP and LI Districts, the minimum width shall be 15 feet abutting a front lot line; and
  - c. In the GI District, the minimum width shall be 10 feet abutting a front lot line.

A landscaped buffer that is at least 5' wide is provided around the parking area.

- 2. The required landscaping strips shall comply with the following standards:
  - a. Sufficient low shrubs shall be planted to form a continuous screen three feet high and 95 percent opaque, year-round; or a three-foot-high masonry wall or berm may be substituted for the shrubs. When applied along front lot lines, the screen or wall is to be placed along the interior side of the landscaping strip and shall be 30 inches high instead of three feet high.
  - b. In addition, one tree is required for every 30 linear feet of landscaping strip, or as otherwise required to provide a tree canopy over the landscaping strip.
  - c. Ground cover plants must fully cover the remainder of the landscaped area.

A Landscape Plan has been submitted with this proposal that complies with the landscape standards of this section. Please reference Landscape Plan.

3. A perimeter landscape strip is not required for a surface parking or loading area adjacent to an abutting lot if one or more interior driveways connect the two lots and if the abutting lot also is developed with a surface parking or loading area adjacent to the shared lot line.
4. Required walkways may cross perimeter landscaping strips.

#### 1009.04 SCREENING AND BUFFERING

- A. Screening shall be used to eliminate or reduce the visual impacts of the following:
  - 1. Service areas and facilities, such as loading areas and receptacles for solid waste or recyclable materials;
  - 2. Storage areas;
  - 3. Ground-mounted rainwater collection facilities with a storage capacity of more than 100 gallons;
  - 4. Parking lots within or adjacent to an Urban Low Density Residential, VR-5/7, VR-4/5, RA-1, RA-2, RR, RRFF-5, FF-10, FU-10, or HR District; and
  - 5. Any other area or use, as required by this Ordinance.

A Landscape Plan has been submitted with this proposal that complies with the landscape standards of this section. Please reference Landscape Plan.

B. Screening shall be accomplished by the use of sight-obscuring evergreen plantings, vegetated earth berms, masonry walls, sight-obscuring fences, proper siting of disruptive elements, building placement, or other design techniques.

A Landscape Plan has been submitted with this proposal that complies with the landscape standards of this section. Please reference Landscape Plan.

C. Screening shall be required to substantially block any view of material or equipment from any point located on a street or accessway adjacent to the subject property. Screening from walkways is required only for receptacles for solid waste or recyclable materials. A sight-obscuring fence at least six feet in height and up to a maximum of 10 feet in height shall be required around the material or equipment.

A Landscape Plan has been submitted with this proposal that complies with the landscape standards of this section. Please reference Landscape Plan.

D. Buffering shall be used to mitigate adverse visual impacts, dust, noise, or pollution, and to provide for compatibility between dissimilar adjoining uses. Special consideration shall be given to buffering between residential uses and commercial or industrial uses, and in visually sensitive areas.

A Landscape Plan has been submitted with this proposal that complies with the landscape standards of this section. Please reference Landscape Plan.

- E. Buffering shall be accomplished by one of the following (The yellow highlighted text is the selection made for this development):
  - 1. A landscaping strip with a minimum width of 15 feet and planted with:

- a. A minimum of one row of deciduous and evergreen trees staggered and spaced a maximum of 30 feet apart;
- b. A perennial, evergreen planting with sufficient foliage to obscure vision and which will grow to form a continuous hedge a minimum of six feet in height within two years of planting; and
- c. Low-growing evergreen shrubs and evergreen ground cover covering the balance of the area;

2. A berm with a minimum width of ten feet, a maximum slope of 40 percent on the side away from the area screened from view, and planted with:

- a. A perennial, evergreen planting with sufficient foliage to obscure vision and which will grow to form a continuous hedge within two years of planting. The minimum combined height of the berm and planting shall be six feet; and
- b. Low-growing evergreen shrubs and evergreen ground cover covering the balance of the area;

3. landscaping strip with a minimum width of five feet and including:

- A masonry wall or sight-obscuring fence a minimum of six feet in height. The wall or fence is to be placed along the interior side of the landscaping strip;
- Evergreen vines, evergreen trees, or evergreen shrubs, any of which shall be spaced not more than five feet apart; and
- Low-growing evergreen shrubs and evergreen ground cover covering the balance of the area; or

4. Another method that provides an adequate buffer considering the nature of the impacts to be mitigated.

F. Required walkways shall be accommodated, even if such accommodation necessitates a gap in required screening or buffering.

1009.07 FENCES AND WALLS

- A. Fences and walls shall be of a material, color, and design complementary to the development.
- B. In the BP and LI Districts, the minimum front setback for fences and walls is 15 feet.
- C. In the GI District, the minimum front setback for fences and walls is 10 feet.

A 6' tall fully site obscuring fence is proposed on the site. The fence will be constructed of wood (cedar boards with metal posts)

1009.09 EROSION CONTROL

A. Graded areas shall be re-vegetated with suitable plants to ensure erosion control.

B. Netting shall be provided, where necessary, on sloped areas while ground cover is being established.

Erosion control measures will be implemented per code during construction of the proposed building and site improvements.

#### 1009.10 PLANTING AND MAINTENANCE

A. Impervious weed barriers (e.g, plastic sheeting) are prohibited.

B. Plants shall not cause a hazard. Plants over walkways, sidewalks, pedestrian pathways, and seating areas shall be pruned to maintain a minimum of eight feet below the lowest hanging branches. Plants over streets, bikeways, accessways, and other vehicular use areas shall be pruned to maintain a minimum of 15 feet below the lowest hanging branches.

C. Plants shall be of a type that, at maturity, typically does not interfere with above- or below-ground utilities or paved surfaces.

D. Plants shall be installed to current nursery industry standards.

E. Plants shall be properly guyed and staked to current nursery industry standards as necessary. Stakes and guys shall not interfere with vehicular or pedestrian traffic, shall be loosened as needed to prevent girdling of trunks, and shall be removed as soon as sufficient trunk strength develops, typically one year after planting.

F. Landscaping materials shall be guaranteed for a period of one year from the date of installation. The developer shall either submit a signed maintenance contract for the one-year period or provide a performance surety pursuant to Section 1311, *Completion of Improvements, Sureties, and Maintenance*, covering the landscape maintenance costs for the one-year period.

G. Plants shall be suited to the conditions under which they will be growing. As an example, plants to be grown in exposed, windy areas that will not be irrigated shall be sufficiently hardy to thrive under these conditions. Plants shall have vigorous root systems, and be sound, healthy, and free from defects and diseases.

H. When planted, deciduous trees shall be fully branched, have a minimum caliper of two inches, and have a minimum height of eight feet.

I. When planted, evergreen trees shall be fully branched, have a minimum height of eight feet, and have only one leader.

J. Shrubs shall be supplied in minimum one-gallon containers or eight-inch burlap balls with a minimum spread of 12 inches.

K. Ground cover shall be planted a maximum of 30 inches on center with a maximum of 30 inches between rows. Rows of plants shall be staggered. Ground cover shall be supplied in minimum four-inch containers, except that the minimum shall be reduced to two and one-quarter inches or equivalent if the ground cover is planted a minimum of 18 inches on center.

L. Plants shall be spaced so that ground coverage three years after planting is expected to be 90 percent, except where pedestrian amenities, rainwater collection systems, or outdoor recreational areas count as landscaping pursuant to Subsection 1009.02. Areas under tree drip lines count as ground coverage.

M. Irrigation of plants shall be required, except in wooded areas, wetlands, and in river and stream buffers. The irrigation system shall be automatic, except that hose bibs and manually operated methods of irrigation may be permitted in small landscaped areas close to buildings. Automatic irrigation systems are subject to the following standards:

- 1. An automatic irrigation controller shall be required for irrigation scheduling.
- The system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.
- 3. In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.
- 4. Narrow or irregularly shaped areas, including turf lawn, less than eight feet in width in any direction shall be irrigated with subsurface or low volume irrigation.
- 5. Overhead sprinkler irrigation is prohibited within two feet of any impervious surface unless:
  - a. The landscaped area is adjacent to permeable surfacing and no runoff occurs; or
  - b. The adjacent impervious surfaces are designed and constructed to drain entirely to landscaping; or
  - c. The irrigation designer specifies an alternative design or technology that complies with Subsection 1009.10(M)(2).

N. Appropriate methods of plant care and landscaping maintenance shall be provided by the property owner. Pruning shall be done to current nursery industry standards.

O. Plants shall be protected from damage due to heavy foot traffic or vehicular traffic by protective tree grates, pavers, or other suitable methods.

Measures for the maintenance of plants shall be implemented including regular irrigation through automatic irrigation systems, pruning, weeding, visual inspections, and measures to prevent trampling or other hazard to plants, etc.

1010 SIGNS

A design for the sign for this site has been submitted with this application. Signs will comply with the design standards and permit requirements for this development. Reference design provided for the sign with the submittal materials.

### 1015.02 MOTOR VEHICLE PARKING AREA STANDARDS

A. Off-street parking areas shall be designed to meet the following requirements:

- Off-street motor vehicle parking areas shall be provided in defined areas of the subject property. No area shall be considered a parking space unless it can be shown that the area is accessible and usable for that purpose and has required maneuvering area for vehicles. Required backing and maneuvering areas shall be located entirely onsite. A parking area is provided on site with the required parking dimensions, maneuvering areas, etc.
- 2. Automobile parking spaces shall be a minimum of 8.5 feet wide and 16 feet long, except that parallel spaces shall be a minimum of 8.5 feet wide and 22 feet long. All parking spaces are a minimum of 8.5' x 16'. No parallel spaces are proposed.
- 3. A minimum of 25 percent of required parking spaces shall be no larger than 8.5 feet wide and 16 feet long. All parking spaces are a minimum of 8.5' x 16'.
- 4. Parking areas shall comply with minimum dimensions for curb length, stall depth, and aisle width established by the Clackamas County Roadway Standards; these dimensions are based on the orientation (e.g., 45-degree, 90-degree), length, and width of the spaces. All parking spaces comply with the 90-degree configuration.
- 5. Double-loaded, ninety-degree angle parking bays shall be utilized where possible. All parking spaces comply with the 90-degree configuration.
- 6. A minimum of one parking space or five percent of the required spaces, whichever is greater, shall be marked and signed for use as carpool/vanpool spaces. These spaces shall be the closest employee automobile parking spaces to the building entrances normally used by employees, but shall not take priority over any spaces required for individuals with disabilities. A handicap van accessible space with a clear loading area is provided in the proposed parking area.
- 7. In parking lots greater than one acre, major onsite circulation drive aisles and lanes crossing to adjacent developments shall not have parking spaces accessing directly onto them. The parking area is less than 1-acre in area.
- 8. Where feasible, shared driveway entrances, shared parking and maneuvering areas, and interior driveways between adjacent parking lots shall be required. Shared driveways are not proposed.
- 9. Except for parallel spaces, parking spaces heading into landscaped areas or along the perimeter of a parking lot shall be provided with a sturdy tire stop at least four inches high and located two feet within the space to prevent any portion of a car within the lot from extending over the property line. Curbs are provided at the front of vehicle spaces.
- 10. For parking spaces heading into a landscaped area, the area in front of the tire stop that is included in the parking space dimension may be landscaped instead of paved or graveled according to the following standards:

- a. Landscaping shall be ground cover plants only;
- b. The area in front of the tire stop that is included in the parking space dimension shall be in addition to the required minimum dimension for a landscape planter; and
- c. The landscaped area in front of the tire stop may count toward overall site landscaping requirements established in Table 1009-1, *Minimum Landscaped Area*. However, it may not count toward perimeter landscaping requirements established in Section 1009.03(B)(1).

A Landscape Plan is provided with this submittal that complies with the landscape standards set forth in this section.

B. Parking Minimums: The minimum number of parking spaces listed in Table 1015-1, *Automobile Parking Space Requirements*, applies unless modified in Subsection 1015.02(D).

1. In case of expansion of a building or use that, prior to the expansion, does not meet the minimum parking space requirements in Table 1015-1, the following provisions shall apply:

The development is for a brand new building that will meet the minimum parking requirements.

2. In the event more than one use occupies a single structure or parcel, the total minimum requirement for parking shall be the sum of the minimum requirements of the several uses computed separately.

The development is a single use occupancy.

- C. Parking Maximums:
  - 1. Within the UGB, the parking maximums listed in Table 1015-1, Urban Zone A, apply when an area has 20-minute peak hour transit service within one- quarter mile walking distance for bus transit or one-half mile walking distance for light rail transit.
  - Within the UGB, areas not meeting the requirements of Subsection 1015.02(C)(1), are subject to the parking maximums listed in Table 1015-1, Urban Zone B.
  - 3. In case of expansion of a building or use with more parking spaces than the maximum allowed by Table 1015-1:

The development is for a brand new building that will meet the maximum parking requirements.

The yellow highlighted area in Table 1015-1 applies to the proposed development use.

Land Use Category	Minimum Parking Spaces	Maximum Parking Spaces (Urban Zone A)	Maximum Parking Spaces (Urban Zone B)
Home Occupations to Host Events	1 space per 3 guests based on the maximum number of guests permitted for any single event. An additional space shall be provided for each employee.	None	None
Hospitals	0.5	None	None
Hotels and Motels (per unit)	1	None	None
Industrial, Manufacturing, and Processing Facilities			
Zero to 24,999 square feet	1.5	None	None
25,000 to 49,999 square feet	1.42	None	None
50,000 to 79,999 square feet	1.25	None	None
80,000 square feet and greater	1	None	None
Medical and Dental Clinics	3.5	4.9	5.9
Movie Theaters (per seat)	0.3	0.4	0.5
Nursing Homes, Welfare or Correctional Institutions, and Institutions for Children (per bed)	<mark>0.2</mark>	None	None

Table 1015-1: Automobile Parking Space Requirements

Office Uses (includes Office			
Park, "Flex- Space",	2.7	2 1	<i>A</i> 1
Government Office and	2.7	5.4	4.1
Miscellaneous Services)			

The total number of beds in this proposal = 55

55 X 0.2 (minimum parking spaces per bed) = 11

15 Parking Spaces are proposed with this development.

No maximum parking standards applies.

D. Exceptions to Parking Requirements:

There will be no exceptions used for the Parking Requirements with this development.

1021 SOLID WASTE AND RECYCLING MATERIAL COLLECTION

A garbage and recycling enclosure is provided. This enclosure will be constructed of fully site obscuring fence walls that are a minimum of 6' tall and it shall be equipped with fully site obscuring gates. The trash enclosure will be accessible with walkways from the building and through the parking area for vehicles servicing the Site. Please reference the Site Plan provided.

End of Applicable Code Sections.

- Subject: Project Name: Residential Care Facility Applicant: Edward Radulescu, EPR Design LLC Jurisdiction: Clackamas County Jurisdiction Case #: ZPAC0090-20 Site Address: 7810-7820 SE Johnson Creek Boulevard, Portland, Or
- Date: Thursday, September 16, 2021 at 11:11:41 PM Pacific Daylight Time
- From: Gary Spanovich
- To: Edward Radulescu, classichomesinc@comcast.net
- CC: Frank Charbonneau, Gary Spanovich

Attachments: Johnson Creek FINAL INVOICE.docx

Eddie,

Good news Clackamas County is not going to require the traffic study and ODOT will go along with that. See the correspondence below.

I have about ten hours into the project to advance it to this point, so I am attaching my invoice for \$1000 (\$100 an hour for 10 hours). Be great if the client can email me a check within two weeks, or by September 30th. Please mail check to:

Gary Spanovich PO Box 597 West Linn, Oregon 97068

#### Kent, Ken

to me

#### Hi Gary,

Sorry for the delay with an answer. I verified with our Traffic Section that based on low traffic generation of the proposed development, we will not require a traffic study or evaluation of a left turn lane.

Thanks,

Ken

#### **Kenneth Kent**

Senior Planner, Development Engineering

**Clackamas County Engineering Division** 

503-742-4673

kenken@clackamas.us

#### **Development Services Building**

#### 150 Beavercreek Road, Oregon City, OR 97045

**HAWKINS Kate** 

to me, Ken, Jonny, Anthony, Frank

Hi Gary,

I can confirm that ODOT will defer to the County's decision not to require a traffic study.

Thanks,

Kate (Wihtol) Hawkins, AICP

Associate Transportation Planner

**ODOT Region 1** 

kate.w.hawkins@odot.state.or.us

(503) 731 - 3049

**Gary Alan Spanovich** 

garyalanspanovich@gmail.com

Phone: 503-314-5955 Mailing Address: P.O. Box 597 West Linn, Oregon 97068

#### PRE-APPLICATION CONFERENCE – Design Review Overview Notes

#### ZPAC0090-20

# CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION & DEVELOPMENT LAND USE & ENVIRONMENTAL PLANNING DIVISION

Development Service Building, 150 Beavercreek Road, Oregon City OR 97045 Phone: (503) 742-4500 Fax: (503) 742-4550

LOCATION: Meeting held via Zoom Teleconference

DATE & TIME: September 16, 2020 @ 10:00 am

**<u>STAFF CONTACT</u>**: Anthony Riederer, AICP - Phone: (503) 742-4528 - E-mail: ariederer@clackamas.us

APPLICANT: Edward Radulescu

LEGAL DESCRIPTION: 12E29AD 01900 and 01800

SITE ADDRESS: 7810-7820 SE Johnson Creek Boulevard

TOTAL AREA INVOLVED: Approximately 0.75 Acre

PRESENT ZONING: MR1 (Medium Density Urban Residential)

**PROPOSAL:** Clearing a site of two existing single family homes and accessory buildings and redeveloping the site with memory care focused nursing home of approximately 30,220 square feet. Additional project elements include extension of site access for additional units, additional parking, landscaping, and other site features.

#### ZDO ORDINANCE STANDARDS:

**Note:** The information contained in this memo is introductory in nature and is designed to act as a guide to relevant ZDO sections. This is an initial review and is based on the information submitted by the applicant for the pre-application conference.

When the proposal is submitted for design review/land use approval, it will reviewed against all applicable ZDO sections and, through that process, additional considerations may come to light.

1. ZDO Section 315 (Medium Density Residential)

The existing use (Single Family Dwelling) is permitted in the MR1 district.

The proposed use (Nursing Home) is permitted in the MR1 District.

**Dimensional Standards:** 

- District Land Area for Density: 3,630 square feet
- Minimum Lot Size: None
- Maximum Front: See 1005.03(E) and (H)
- Minimum Front: 15 feet, except 20 feet to garage/carport entries
- Minimum Rear: 20 feet

- Minimum Side: One story: five feet; two stories: seven feet; three stories: 15 feet. For each story higher than three, an additional five feet of yard depth shall be required.
- Building Height: None

#### 2. ZDO Section 1005 - Site and Building Design

#### 1005.03: General Site Design Standards

If feasible, cluster buildings within single and adjacent developments for efficient sharing of site circulation elements and other amenities, per 1005.03(A).

If feasible, design the site so that so that the longest building elevations can be oriented within 20 degrees of true south in order to maximize the south-facing dimensions, per 1005.03(B)

Provide on-site walkways that meet the standards of 1005.03(D).

A minimum of 50% of the street frontage of the development site shall have buildings located at the minimum front yard depth line, per 1005.03(E). Please also be mindful of the location of the primary building entrances for buildings used to comply with 1005.03(E).

#### 1005.04: Building Design

Design all facades visible from a public or private street or accessway such that they comply with the design standards of 1005.04(A).

Design public building entrances such that they are defined, highly visible, and sheltered by an overhang of at least 4 feet, to comply with the standards of 1005.04(B)(1).

The design of the roofline shall include eaves which project no less than 24 inches from the façade or be defined by cornice or other architectural treatment to provide visual interest, as per 1005.04(D).

The facades shall be designed to meet the exterior building material standards of 1005.04(E).

Please specifically note 1005.04(E)(3): "Walls shall be surfaced with brick, tile, masonry, stucco, stone or synthetic equivalent, pre-cast masonry, gypsum reinforced fiber concrete, wood lap siding, architecturally treated concrete, glass, wood, or a combination of these or other high-image materials."

The design of the buildings shall meet the additional requirements for two- and three-family dwellings listed in ZDO 1005.04(F)

Address the requirements to increase safety and surveillance in 1005.04(G).

Design building addition to address the solar access requirements of 1005.04(H).

Fully address the applicable standards related to architectural design features, colors, materials, scale, and minimizing impacts on adjacent uses as provided in 1005.04(I)

Locate and design mechanical equipment so that it is screened as per the standards provided in 1005.04(J).

#### 1005.05: Outdoor Lighting

Design outdoor lighting to comply with the standards in 1005.05(A) and demonstrate compliance with these standards.

#### 1005.06: Additional Requirements

The site area for this project measures to approximately 33,000 square feet of site area. Section 1005.06 requires projects to meet one 'additional requirement' for every 20,000 square feet of site area, up to a maximum of 5.

The project will be required to meet at least one (1) of the additional requirements listed in 1005.06.

#### 1005.07: Modifications

Modification of any standard identified in **Subsections 1005.03 and 1005.04** may be approved as part of design review if the proposed modification will result in a development that achieves the purposes stated in Subsection 1005.01 as well or better than the requirement listed.

It is the responsibility of the applicant to 'make the case' as to how any proposed modification satisfies this requirement.

#### 4. ZDO Section 1006 - Utility Lines & Facilities

Location, design, installation, and maintenance of utility lines and facilities shall be carried out with minimum feasible disturbance of soil/site and consistent with rules/regulations of districts for surface water management, per 1006.01(A).

New electric, gas, communications services shall be installed pursuant to the requirements of the district/company serving the development and installed underground, unless prohibited by utility district or company, per 1006.01(B).

Easements shall be provided along property lines as deemed necessary by the Department of Transportation and Development, special districts, and utility companies, as per 1006.01(D).

Street lights shall be provided in accordance with 1006.02.

Development that has need for, or will be provided with, public or community water shall install water service facilities and grand necessary easements pursuant to the requirements of the district or company serving the development, per 1006.03(A).

Approval of a development that requires public or community water service shall be granted only if the applicant provides a preliminary statement of feasibility from the water system service provider, per 1006.03(B).

The development shall install facilities pursuant to the requirement of the district or company serving the site, per 1006.04(A).

Approval of a development that requires sanitary sewer service shall be granted only if the applicant provides a preliminary statement of feasibility from the sanitary sewage treatment service provider and the collection system service provider, per 1006.04(B).

Approval of a development shall be granted only if the applicant provides a preliminary statement of feasibility from the surface water management regulatory authority. Per 1006.06(C).

#### 5. ZDO Section 1007 & 1015 - Roads, Circulation & Parking

Circulation and site access to be reviewed by Clackamas County Engineering.

Vehicle access to the site is indicated as a single driveway off of SE Johnson Creek Boulevard

Street trees will be required, meeting the standards of 1007.06.

Please review the "General Standards" of 1015.01 to ensure that all parking facilities comply.

Motor vehicle parking shall meet the standards of Section 1015.02 as appropriate per the project design. Please note that parking is based on the use of the building, not the underlying zoning.

Bicycle parking will be required, per 1015.03. Please review these standards to ensure project compliance.

#### 6. ZDO Section 1009 - Landscaping

The landscape design shall fully address the general provisions as provided per 1009.01.

The application shall demonstrate that the site design meets or exceeds the 25% minimum landscaped area requirement as provided per Table 1009-1.

This area shall not include landscaping in adjacent rights-of-way.

The requirements of landscaping, screening and buffering, landscape strips, and outdoor recreation areas set in 1009 apply regardless of whether those areas exceed 25% of the site area.

Surface parking and loading area landscaping will be required per 1009.03.

Required screening and buffering shall be demonstrated to comply with the requirements of 1009.04.

The project design shall comply with the landscaping strip requirements of 1009.06(A).

Fences and walls shall comply with the standards of 1009.07.

Provide required outdoor recreational areas as required by 1009.08

Graded areas shall be revegetated to ensure erosion control, per 1009.09.

All landscaped areas and new plantings shall be selected, installed, and maintained per the standards of 1009.10.

#### 7. ZDO Section 1010 - Signs

All signs must meet standards of ZDO Subsection 1010.06 (Residential Signs in Urban and Rural Residential Districts and Future Urban Districts), where applicable.

#### Minimum Completeness Checklist for Design Review Applications

#### For additional detail on these requirements please see ZDO 1307.07(C) and 1102.02.

- 1. Pre-application conference held
- 2. Project narrative
  - a. Narrative should indicate how proposed design meets all applicable ordinance standards
- 3. Required Statement(s) of Feasibility
- 4. Site plan that illustrates the following:
  - a. Property and surrounding area (and uses) at reasonable scale.
  - b. Boundary lines and dimensions of property.
  - c. At least one temporary benchmark.
  - d. Natural features.
  - e. Location, dimensions of all streets, etc.
  - f. Location, dimensions of existing structures.
  - g. Approximate location and size of storm water facilities.
  - h. Relation to transit.
  - i. Parking areas, showing number and dimension of spaces and maneuverability.
  - j. New structures: footprints and building setbacks
  - k. Orientation of buildings (eg, entrances, etc.)
  - 1. Site lighting plan
  - m. Loading areas, maneuverability
  - n. Waste/recycling areas, containers
- 5. Grading plan, if earthwork is proposed.
- 6. Landscape Plan
- 7. Architectural Elevations
- 8. Building Material / Colors Samples
- 9. Signage plan, if any proposed
- 10. Transportation improvement plan

Please keep in mind that it is the applicant's responsibility to clearly demonstrate how a proposal meets all applicable ZDO criteria. Frequently, solely meeting the minimum submittal requirements may not provide enough information for staff to make a defensible finding that a project complies with all ordinance standards.

#### **Processing Time**

Upon receipt of a complete application, processing time will take approximately 6-8 weeks.





TO:Anthony Riederer / County PlanningFROM:Erik Carr Bertram / Water Environment Services (ecarr@clackamas.us, 503-936-3666)DATE:September 16, 2020SUBJECT:WES Pre-App Memo, ZPAC0090-20 "Residential Care Facility"LOCATION:7810 SE JOHNSON CREEK BLVDTAX LOT:12E29AD01800, 1900WES LOG#:500-20

Clackamas Water Environment Services (WES) is an intergovernmental entity formed pursuant to Oregon Revised Statutes Chapter 190 for the purpose of providing regional sewerage works, including all facilities necessary for collecting, pumping, treating, and disposing of sanitary or storm sewage within its boundaries. As the sanitary sewer and stormwater management service provider for the above-noted development, WES offers the following comments:

#### **General Comments**

- 1. The proposed development is within the Clackamas Water Environment Services (WES) service area and subject to WES Rules and Regulations, and Standards ("WES RR&S"). Prior to issuance of building permits, the applicant must procure WES plan approvals and permits, in accordance with these adopted ordinances:
  - a. Water Environment Services Rules and Regulations, July 2018, Ordinance No. 03-2018
  - b. Sanitary Sewer Standards, Clackamas County Service District No. 1, July 1, 2013.
  - c. Stormwater Standards, Clackamas County Service District No. 1, July 1, 2013.
- 2. WES anticipates an update to the RR&S, effective late 2020/21. The applicant must comply with the RR&S in effect on the submittal date of a complete land use application. If available, the applicant may choose to comply with the newly adopted RR&S.
- 3. Prior to land use application submittal, County Planning requires the applicant to obtain a Preliminary Statement of Feasibility from WES. The document verifies the availability of sanitary sewer and surface water service to serve this development, or can be made available by the developer. (*ZDO 1006.04 and 1006.06*)
- 4. WES will review any required plan submittals for compliance with WES RR&S and applicable land use conditions of approval. A civil engineer licensed by the State of Oregon must stamp and sign the sanitary sewer and stormwater management plans and reports.
- 5. Prior to Certificate of Occupancy approval by WES, the sanitary and storm systems must be complete in all respects, in accordance with the approved plans, or the developer must provide a performance bond to guarantee the construction of the infrastructure. WES will inspect and approve the construction of the sanitary and storm systems in accordance with the approved plans.
  - a. If the properties are to be re-platted, WES will review the plat in conjunction with any approved sanitary or stormwater plans prior to plat approval.
- 6. Requests to modify current WES Design Standards must be made in accordance with Sanitary Standards, Section 1.7 or Stormwater Standards, Section 1.6. The applicant must provide the necessary information to evaluate the request, as determined by WES.
- 7. The proposed development is subject to applicable fees and charges, in accordance with WES RR&S. Fees and charges must be paid prior to issuance of building permits, and are subject to change without notice to the applicant. The applicant is responsible for costs associated with the design, construction and testing of the sanitary sewer and storm systems.



#### Sanitary Sewer

- 8. WES has adequate capacity for sanitary sewer collection and treatment to serve this property.
  - a. Taxlots 1800 and 1900 both have existing 6" service laterals in Johnson Creek Blvd. See asbuilt drawing at end of this memo.
- 9. Taxlot 1901 is not currently connected to public sewer. It is unclear where their septic system and drain field is located, which may be on an adjacent property and should be clarified by the developer. Now would be an opportune time to discuss with property owner of taxlot 1901 options to provide a point of connection to public sewer, including private sanitary sewer easement.
- 10. The development must use one of the existing sanitary sewer connection laterals, or provide justification for an alternative connection. Tap-in fees will apply for any new connection to the public mainline. Unused laterals must be cut and capped at the property line.
- 11. With the first plan submittal, the applicant must submit a Non-Residential Questionnaire (NRQ) with an estimate of the development's discharge load and volume to the public sanitary sewer system. This form is available on the WES website. Additional NRQ's may be required with future tenant improvements.
- 12. The developer must implement procedures to prevent the discharge of any pollutant, substances, or wastewater that will interfere with the operation or performance of the public sewer system. The sanitary plans must show the location and model information for the grease interceptor. The property owner must maintain the interceptor at a frequency determined by the manufacturer and WES. (Rules 10.2)

#### Surface Water:

- 13. <u>WES shall review, approve and permit stormwater management plans for any development that creates or</u> modifies 5,000 square feet or more of impervious surface area.
- 14. The applicant shall submit a Surface Water Management Plan and Storm Report ("SWM Plan") to WES for review and approval. A licensed civil engineer must prepare the SWM Plan, in accordance with Section 5 of WES Stormwater Standards and all other regulations and conditions.
- 15. The SWM Plan must include the following elements and supporting documentation:
  - a. Civil site plans for the proposed stormwater management improvements.
  - b. A drainage analysis of predevelopment and post-development conditions for all onsite permeable and impervious surface areas, all water entering the property from off-site, and all road frontage improvements. <u>It is our understanding that road improvements will be required by DTD, and thus must be included in the SWM Plan.</u>
  - c. Storm drainage detention calculations using the King County methodology (SBUH hydrograph).
  - d. An infiltration testing report to verify the feasibility of proposed infiltration systems. Infiltration test results must correspond to the infiltration facility location and depth (see: Appendix E).
  - e. An acceptable downstream point of discharge to convey stormwater runoff from the entire development boundary.
  - f. A Downstream Conveyance Analysis that extends a minimum of 1500' downstream or to the point where the development contributes less than 15% of the upstream drainage area, whichever is greater. Analysis must include the entire drainage basin, assume no upstream detention, and must calculate the 25-year storm event for conveyance capacity requirements. <u>Field reconnaissance by the</u> <u>engineer, including contacting downstream property owners, is typically required with this analysis.</u>
  - g. Grading plans that identify an overflow pathway system to control storm/surface water in the event of a storm facility failure or bypass, without causing damage to property, persons, or the environment.
  - h. An Erosion Prevention and Sediment Control plan (see: WES SW Standards, Section 6).



- i. Water quality resource protection and vegetated buffers (see: WES SW Standards, Section 4).
- j. An operations and maintenance plan for the approved stormwater management system.
- 16. WES Stormwater Design Standards include:
  - a. **Conveyance systems**: Sized for a minimum 25-year design storm.
  - b. **Water Quality Standard**: Capture and treat the first 1-inch of storm runoff from a 24-hour storm event using either vegetation (Appendix H) or a Basic Treatment proprietary device (Appendix F).
  - c. **Infiltration Standard**: Capture and retain the first ½ inch of runoff in a 24-hour period through an approved infiltration system.
  - d. Detention/Flow Control Standard in Areas with Limited Downstream Capacity (Section 5.4.4.3) Additional flow control requirements are necessary in areas with limited downstream capacity that cannot be upgraded, and are in addition to other water quality and infiltration requirements. Within these designated basins (see maps in Appendix G), reduce the 25-year post-developed runoff rate to a 2-year pre-developed discharge rate, AND, from the 2-year post-developed runoff rate to ½ of the 2-year pre-developed discharge rate.
- 17. Existing Conditions:
  - a. It appears there are limited stormwater conveyance options in Johnson Creek Blvd. The project engineer must verify the location, size, and condition of any storm system in this area.
  - b. <u>An adequate point of discharge is not readily apparent. Prior to WES sign-off of feasibility, this</u> issue must be addressed in the applicant's preliminary SWM Plan and Report.
- 18. Infiltration Testing:
  - a. Soil types can vary significantly over relatively short distances, therefore the infiltration tests must correspond to the location and depth of the infiltration facilities (see: Appendix E).
  - b. Infiltration facilities must provide a 3-foot minimum vertical separation from the maximum seasonal groundwater elevation to the bottom elevation of the infiltration facility. (Appendix H)
  - c. WES will require an alternate downstream point of connection if the onsite soil is found unsuitable during plan review or construction to infiltrate the designed storm event. An alternate approved point of connection may require an off-site piping system to convey the stormwater runoff to an existing conveyance system. The applicant is responsible to obtain any offsite private or public easement(s).
  - d. If the infiltration standards cannot be met, the project engineer must submit a design modification request with an equivalent alternative design that can accomplish the same design intent as these standards. All request must be made in accordance with Stormwater Standards Section 1.6 and include a geotech report.
- 19. If the developer cannot provide an approvable point of connection to a downstream conveyance system, the SWM Plan must include a design to either:
  - a. Retain and infiltrate the 25-year, 24-hour storm event and provide an overland overflow pathway, or
  - b. Retain and infiltrate the 100-year, 24-hour storm event. The applicant must submit a geotechnical report, prepared by a licensed professional in the State of Oregon, to verify the feasibility of the engineer's design to infiltrate the stormwater runoff. The report must include site conditions analysis and infiltration test results in accordance with Appendix E.
- 20. A pervious pavement design detail is not available in the current WES Stormwater Standards, although a detail will likely be added in the new Standards. If using the current standards, the project engineer must provide an acceptable detail from another local jurisdiction. Pervious pavement considerations should include:
  - a. Minimum separation of 3 feet between underlying seasonal high groundwater and bottom of pavement facility.
  - b. No stormwater run-on allowed.



- c. Minimize potential for high sediment loads.
- d. Slope no greater than 6 percent.
- 21. If applicable, roadside planters shall be designed to meet current WES stormwater standards, including infiltration, water quality, and detention/flow control requirements. The following shall also apply:
  - a. A detail for green street planters is not currently available in the WES standards, therefore the project engineer shall reference the structural details of City of Portland detail SW-311A (Planter with 2.5' step-out) or provide an acceptable alternative detail from another local jurisdiction, as determined by WES.
  - b. The project engineer may be required to perform infiltration testing of the facilities, as requested by WES, to provide assurance that the system will perform as designed. If applicable, testing shall be documented in a report stamped and signed by the project engineer and submitted to WES.
  - c. Stormwater facilities should be designed for the limiting infiltration rate in the vegetated facilities, namely the facility engineered media that is generally assumed to be no greater than 2" per hour (assuming the onsite native infiltration rates are greater).
  - d. If there is no conveyance system to intercept 2-year design storm overflow, you need to completely infiltrate the 25-year storm with an acceptable unobstructed emergency overflow pathway.
  - e. Any storm facilities located within County ROW will be maintained by WES. These facilities shall be designed to only receive runoff from the ROW and shall provide adequate maintenance access and functionality, as determined by WES. A maintenance agreement with WES shall not be required for these facilities.
- 22. Property owners must inspect and maintain the stormwater management systems, in accordance with WES Rules, Section 12.10. Prior to plan approval, the developer must submit a 'Private Storm Drainage Facilities Maintenance Plan' (available on website) to WES.

#### Erosion Prevention and Sediment Control (EPSC):

- 23. <u>Any development activities that accelerate soil erosion, including grading and construction, must provide</u> <u>adequate erosion prevention and sediment control measures.</u> EPSC guidance for construction sites can be found in the *Erosion Prevention and Sediment Control Design Manual* on the WES website.
- 24. The developer must obtain an Erosion Prevention and Sediment Control Permit when development activity creates more than 800 sq ft of soil disturbance. Before the start of any grading or construction activities, the applicant must submit a Permit application and erosion control site plans to WES for review and approval, and pay applicable permit fees (\$460 + \$80/acre over 1 acre).
- 25. EPSC measures must be installed and inspected by a WES erosion control inspector prior to sign off on the building permit application. Please call 503-742-4567 to request an inspection. Monitoring inspections will occur periodically throughout the construction.

#### Water Quality Resource Areas (Title 3):

26. New development must protect water quality resource areas through preservation and maintenance of vegetated buffers (*Stormwater Standards, Section 4*). Clackamas County Planning Division serves as WES' agent to administer these requirements. The applicant will coordinate with the Planning Division for any buffer requirements, including Sensitive Area Certifications and Natural Resource Assessment Reports.

#### WES Fees and Charges

- 27. Due with first plan submittal to WES:
  - a. Sanitary Sewer Plan Review fees will apply. A \$400.00 minimum is due with the first plan submittal.



- b. Surface Water Plan Review fees will apply. The total fee is equal to 4% of the construction cost for all stormwater management related facilities. A \$400.00 minimum is due with the first plan submittal.
  c. An erosion control permit fee will apply. \$460.00 is due with the first plan submittal.
- 28. Our records indicate these properties did not participate in the construction costs for the public sanitary sewer mainline in SE Johnson Creek Blvd, therefore a Collection Sewer Charge (CSC) will apply for each property. A CSC in the amount of \$22,640.52 will apply. The developer must pay the CSC prior to issuance of the development permit.
- 29. System Development Charges (SDC's) will apply for sanitary sewer and surface water, in accordance with the prevailing rates in effect when building permit applications are submitted. Rate adjustments occur annually on July 1. WES will determine a final assignment of SDC's after review of the civil plans.
  - a. Surface Water SDC: The current rate is \$215 per 2,500 sf of new impervious surface area.
  - b. Sanitary Sewer SDC: The current rate is \$8,005.00 per EDU (Equivalent Dwelling Unit).
  - c. Congregate housing ("care facility") SDC's apply at a rate of 1 EDU per 2 beds, per Class 16 of Table VII. The multifamily residential rate is 0.8 EDU per dwelling unit, per Class 4 of Table VII. The definition of multifamily residential is a unit with a kitchen cooking stove. The applicant must provide architectural floor plans that identify kitchen cooking stoves in multifamily units and a bed count for any congregate housing units.
- 30. SDC Credit: The properties are located within the North Clackamas Revitalization Area (NCRA) and are eligible for SDC credit pre-paid by the Development Agency. A \$2,200.00 SDC credit will apply for each Lot.
- 31. Taxlot 1901:
  - a. If taxlot 1901 desires to connect to public sewer at the time of this development, the owner must pay a CSC and SDC.
  - b. The current SDC rate is \$8,005.00 per single family residence. A \$2,200.00 SDC credit will apply.
  - c. The property is eligible for a Restrictive Transfer Agreement (RTA), by which the remainder of the sanitary SDC will be waived if the property owner agrees to not sell the property for 5 years.
  - d. A new sewer tap of the public mainline will be required. A \$125.00 tap fee will apply.
  - e. A private sanitary sewer easement will be required if the service connection crosses an adjacent property.
  - f. A CSC in the amount of \$6,512.90 will apply.

Prior to issuance of a Preliminary Statement of Feasibility, the applicant must submit preliminary sanitary and storm system design plans and a preliminary storm report to WES for review. The plans must sufficiently demonstrate the proposed development can conform to WES Standards. Receipt of the signed Preliminary Statement of Feasibility does not automatically suggest all WES requirements can or have been met. Following Design Review approval, the applicant shall submit final civil engineered plans and a final storm report to WES for review and approval.





Figure 1 - Red = sanitary sewer lines, Green = storm lines





TAX L	OT	STATION	SIZE	LENGTH	* DEPTH @ P/W
1 ZE ZAAD	2700	0+66 LT	6	35'	9'
n	2600	1+28 LT	đ	35'	9'
IJ	1200	1+75 RT	1	25'	9'
u	2100	2+27 LT	ıl	35	9'
H	2000	2+77 LT	H	35	3'
11	1900	3+37 LT	H	35'	8'
11	1200	5+59 RT	IJ	25'	9'
11	1800	3+80 LT	11	35'	8'
11	1400	4+33 RT	15	25	8,
11	1600	5+00 17	11	40'	7.6'
1 2E 29 AD	1500	5+05RT	6"	25/	7.6



#### DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

**Development Services Building** 150 Beavercreek Road Oregon City, OR 97045

To: Anthony RiedererFrom: Emily MurklandSubj: ZPAC0090-20 Memory Care FacilityGarbage/Recycling Access and Storage

This review is based upon the current ZDO-1021 requirements adopted by Clackamas County. The purpose of this review is to provide applicants a better understanding of garbage and recycling enclosures, to ensure safe and adequate access and maneuverability. Sustainability and Solid Waste staff are available to assist in the development of garbage and recycling enclosures.

Plans with additional detail illustrating adherence to the requirements of ZDO 1021 are needed. The size of the containers used for the collection of materials, the pad on which the containers are to be located, illustration of access to the collection area by the refuse collection company, are all required to be outlined by the applicant.

Additionally, it is unclear whether the roadways near and around the proposed enclosure provides sufficient turning radius for a garbage collection vehicle. Provide plans that clearly outline minimum maneuverability standards (bus 40).

Please feel free to contact me to discuss proposed plans: <a href="mailto:emurkland@clackamas.us">emurkland@clackamas.us</a>, 503.742.4460. Further information can be found here: <a href="https://www.clackamas.us/recycling/enclosure.html">https://www.clackamas.us/recycling/enclosure.html</a> Further information about the status of your application can be found here: <a href="https://accela.clackamas.us/citizenaccess/">https://accela.clackamas.us/citizenaccess/</a>



Date:	September 16, 2020	SENT VIA EMAIL
То:	Edward Radulescu EPR Design LLC 919 NE 19 <sup>th</sup> Ave, Suite 155 Portland, OR 97232	
From:	Betty Johnson, Engineering Associate Clackamas River Water	
Subject:	Design Review Pre-Application Conference:	File #ZPAC0090-20
Site Address:	7810-7820 SE Johnson Creek Blvd, Portland, 97	206
Legal Description:	12E29AD01800 & 1900	

#### Comments:

- 1. CRW currently has available the following infrastructure available within the public right-of-way to serve the site:
  - a. 12-inch ductile iron waterline located within SE Johnson Creek Blvd.

#### 2. CRW currently is serving the site with the following service:

- a. 7810- SE Johnson Creek Blvd 3/4-inch domestic meter;
- b. 7820- SE Johnson Creek Blvd 3/4-inch domestic meter.

#### 3. Water Distribution Design & Infrastructure Requirements:

- a. Per Section 18 of the CRW's Rules and Regulations all water improvements designed and constructed by the Applicant to serve the proposed development must meet all standards and specifications of CRW; must be reviewed and approved by the Clackamas River Water (Engineering Department) prior to issuance of a Clackamas County Development Permit.
- b. Hydraulic modeling analysis may be required by Clackamas Fire District #1 to determine if the existing waterline within SE Johnson Creek Blvd will meet the required domestic and fireflow demands. The expense of the hydraulic modeling shall be borne by the Applicant.
- c. The average system pressure range the development may experience is approximately 67-75psi.
- d. At no time will CRW approve plans that include hardscape landscaping (except grass or shallow root plantings) or structures (such as walls, drainage systems, or permanent structures of any type) placed within easements.
- e. Any block walls or other fencing shall be designed and constructed around the outside of any easement(s), to allow the District direct access to vault(s) and inlet piping from the adjacent right-of-way.
- f. Water service solely for private fire protection purposes to a customer owned fire sprinkler system are classified as a fire service connection (restricted water use).

i. Fire services shall be installed where required and shall be provided by, owned, maintained, and tested by the customer. All fire services shall be metered and protected from backf1ow.

#### 4. Service Connection and System Development Charges:

- a. Service Connection:
  - i. Before a structure is demolished the owner or agent shall notify CRW within three business days to have the domestic meter temporarily pulled. If requested CRW will reestablish the meter for site use once the site has been cleared of debris.
  - i. Per Section 8 of the CRW's Rules and Regulations the following will be required when the Clackamas County Development Permit is issued for the parcel or per ZDO1006.05.F:
    - 1. Water service will be provided only from pipes or mains located within public streets, alleys or rights-of-way, or within easements furnished CRW, and to property or premises with frontage to such mains..."
    - 2. Domestic service will require review and approval of Clackamas River Water to ensure adequate sizing based on site demand in accordance with applicable rules and regulations.
    - 3. Public domestic/fire pipe sizing to serve the site will be determined during the construction plan review. Nominal pipe sizing of 2-, 3-, 4-, or 6-inch may be required.
    - 4. The domestic service for this development will require a backflow assembly directly downstream of the domestic water meter in accordance with Oregon Administrative Rules (OAR) 333-061-0070 thru 071 and all applicable plumbing codes. The owner will furnish and install the backflow assembly. Ownership and maintenance will be the property owner's responsibility.
  - ii. The Customer shall pay for the abandonment of the existing water service connection if it is deemed no longer necessary to serve the property.
- b. The System Development Charges (SDC):
  - i. The SDC is based on the domestic average, peak and irrigation demands for your facilities. SDC credit may be given for the existing meters if no longer in service. 2020-2021 Water Rate, Connection & System Development Charges are attached for reference.
  - ii. The current SDC will be collected when the site has been issued a Building Permit from Clackamas County and a CRW Water Service Application has been requested by the owner/builder.

#### 5. District Approvals:

- a. All water infrastructure shall meet the standards of the Clackamas River Water and be reviewed and approved by the Clackamas River Water (Engineering Department) prior to issuance of a Clackamas County Development Permit.
- b. Professionally engineered waterline plans reviewed and approved by Clackamas River Water.

- c. The Developer will be required to pay a time and materials deposit to the District for a Plan Check and Inspection fee prior to review any construction plans. Any unused portion will be reimbursed or if any monies are due the developer will be billed.
- d. Upon construction plan review there may be additional requirements as set forth by the Water District.

#### 6. Clackamas County Development Permit:

- a. It will be the developer's responsibility to acquire any necessary easements for water facilities that shall be provided and designated on the final plat, as deemed necessary by the Water District. These easements must have functional access to public right of way and be properly recorded.
- b. Fire and domestic water services as approved with this land use application, are intended specifically for the lot and are not intended to serve additional parcels or structures which may be created in the future. In the event that the parcels and/or lots are further divided to create additional parcels or lots, the owner is required to provide separate fire and domestic water services per CRW's "Rules and Regulations".
- c. Future fire related improvements will require review and approval of Clackamas County Fire District #1 to ensure proper fire coverage and fire service connection installation in accordance with applicable regulations along with the appropriate backflow prevention assembly and flow detector.

CRW has no objections to this application, however these comments are introductory and may change based on the preliminary/final design.

For further information regarding application please contact Betty Johnson, 503-723-2571.

cc: Clackamas Fire Applicant file

# Clackamas River Water - 7810-7820 SE Johnson Creek Blvd



Date: September 16, 2020 Drawing Name: GIS-Development Drawing Location: I:\Documentation\Facility Data Drawing By: B.Johnson

MAP FOR REFERENCE PURPOSES ONLY The information on this map is derived from Clackamas River Water's digital database. However, there may be map errors or omissions. Please contact Clackamas River Water directly to verify map information. Notification of any errors is appreciated.





62.5 125 Feet



CLACKAMAS RIVER WATER GEOGRAPHIC INFORMATION SYSTEM 16770 SE 82nd Drive - Clackamas, Oregon 5037229220 - www.creater.com



# **Clackamas River Water**

Water rate, Connection, and System Development Charges

Water Effective Date: 11/1/2020 SDC Effective Date: 7/1/2020

#### Bi-Monthly Service Charges for All Direct Service Customers Domestic Fire Meter Sizes Service Service Connection Fee SDC SDC Total SDC (Inches) Charges Charges Pre-Run/Install Reimbursement Improvement Charges full 3/4 \$ 55.51 \$ 58.10 \$ 500 тмо \$ 2,461 \$ 3,053 \$ 5,514 \$ \$ 76.70 600 1 58.10 TMO 4,101 5,089 \$ 9,190 \$ 8,199 \$ \$ 18,377 $1 \frac{1}{2}$ 109.13 69.51 10,178 2 146.61 82.80 \$ 13,119 \$ 16,285 \$ 29,404 3 235.52 117.72 4 362.00 187.60 b а 6 678.46 327.37 467.50 8 1,533.44 10 2,412.37 747.39 12 2,914.60 922.14

Res 18-2014 11/1/2020 (per Ordinance 02-2020 4/15/20)

a Calculated to cover time, materials and overhead. Pre-run refers to service lines installed by developer during subdivision construction.

b Calculated based upon anticipated water demand as compared to equivalent residential units (3/4"). The amounts shown for 1 1/2 & 2" are minimum charges.

Commodity Charge for Direct Service Customers per 100 Cubic Feet

Single Family Dwelling (3/4 or 1")

	Volume	Rate
Block 1	1 - 4	\$ 2.37
Block 2	5 - 8	2.63
Block 3	9 - 24	3.13
Block 4	25 & up	3.99
Leak Relief Rate		1.50

Multi-Family, Commercial & Industrial (all sizes)

Volume		F	Rate
Block 1	С	\$	2.91
Block 2	d		3.63

c Volume up to 1.5 times average winter consumption

d Volume above 1.5 times average winter consumption

Average Winter Consumption: Total consumption (volume) recorded on a customer's December and February bills, divided by two.



#### PRELIMINARY STATEMENT OF FEASIBILITY

#### To be completed by the applicant:

Applicant's Name: Edward Radulescu, EPR Design LLC

Property Legal Description: T 1 S, R 2E, Section 29AD, Tax Lot(s) 1800 & 1900 7810-7820 SE Johnson Creek Blvd, Portland, 97206 \_\_\_\_\_Project Engineer: \_\_\_\_\_

Site Address:

Project Title/Description of Proposed Development: Demo of existing homes and construct new 2-story,

53-residential 24-hour care facility with memory care endorsement.

#### To be completed by the service provider or surface water management authority:

Check all that apply:

- Sanitary sewer capacity in the wastewater treatment system and the sanitary sewage collection system is available to serve the development or can be made available through improvements completed by the developer or the system owner.
- Adequate surface water treatment and conveyance is available to serve the development or can be made available through improvements completed by the developer or the system owner.
- Water service is available in levels appropriate for the development, and adequate water system capacity is available in source, supply, treatment, transmission, storage and distribution or such levels and capacity can be made available through improvements completed by the developer or the system owner. This statement 
  applies 
  does not apply to fire flows.\*

\*If water service is adequate with the exception of fire flows, the applicant shall submit a statement from the fire district serving the subject property that states that an alternate method of fire protection, such as an on-site water source or a sprinkler system, is acceptable.

- This statement is issued subject to conditions of approval set forth in the attached.
- Adequate a sanitary sewer service, a surface water management, a water service cannot be provided.

Signature of Authorized Representative

**Engineering Associate** 

Title

September 16, 2020 Date

Clackamas River Water Name of Service Provider or Surface Water Management Authority

Completion of this statement does not reserve capacity for the development and does not alter an applicant's obligation to comply with the service provider's or surface water management authority's regulations. Completion of this statement does not obligate the service provider or surface water management authority to finance or construct improvements necessary to provide adequate service for the proposed development. Completion of this statement does not guarantee that land use approval for the proposed development will be granted.



# Attachment County Preliminary Statement of Feasibility

**To:** Edward Radulescu, EPR Design LLC

From: Betty Johnson

Date: September 16, 2020

**Re:** 7810-7820 SE Johnson Creek Blvd, Portland, 97206

#### • Comments:

- A. "Water service will be provided only from pipes or mains located within public street, alleys or rights-of-way, or within easements furnished to CRW, and to property or premises with frontage to such mains.... Each dwelling or building will be provided with its own water service connection and meter ...No person shall furnish water to other buildings or premises without the written approval of the Board, which may be granted in the sole discretion of the Board, and then only under the specific terms of an agreement approved by CRW"
- B. Fire hydrant number and distribution shall be in accordance with the Oregon Fire Code C105.1
- C. Placement of fire hydrant systems shall be in accordance with the Oregon Fire Code 507.5.1
- D. Unless Noted on plans or specified otherwise, all construction and backflow devices are to be in accordance with the most recent version of Clackamas River Water standards and the Oregon Administration Rules (OAR), Chapter 333.
- E. All water facilities design, construction, testing and maintenance, where applicable, shall conform to the latest adopted revision of the Oregon state Health Division administrative Rules chapter 333 on Public water System except where provisions outlined in the Clackamas River Water rules and regulations.
- F. For design of District's water system improvements, hydraulic system must be analyzed using the worst- case scenario envisioned in the district's current Water System Facilities Plan. The water system analysis shall be conducted using a simultaneous demand for the maximum (peak) day demand or peak hour non-fire demand, whichever is greater, and the fire demand.
- G. Any substantial deviation from the approved construction plans must have prior approval of the Water District.
- H. Easements for water facilities shall be provided along property lines and designated on the final plat, as deemed necessary by the Water District.
- I. Resale of water purchased from the Water District will not be permitted. No user shall resell or permit resale of water directly to any person, or for any use.

F:\1B County & City Design Review\Pre-App, Design Review & Land Use Applications\7810-7820 SE Johnson Creek Blvd\Preliminary Statement of Feasibility\7810-7820 SE Johnson Creek Blvd - Statement of Feasibility Conditions.docx

- J. An approved water system capable of supplying required fire flow for fire protection shall be provided to all premises upon which buildings are to be constructed.
- K. If water service is adequate with the exception of fire flows, the applicant shall submit a statement to Clackamas River Water from the fire district serving the subject property that states that if and /or what alternate method of fire protection is acceptable.
- L. Upon plan review there may be additional requirements as set forth by the Water District.

# **Clackamas Fire District #1** Fire Prevention Office



# **E-mail Memorandum**

To:	Anthony Riederer, Planning and Zoning
From:	Matt Amos, Fire Inspector, Clackamas Fire District #1
Date:	4/20/2020
Re:	New residential care facility 7810-7820 SE Johnson Creek Blvd. ZPAC0090-20

This review is based upon the current version of the Oregon Fire Code (OFC), as adopted by the Oregon State Fire Marshal's Office. The scope of review is typically limited to fire apparatus access and water supply, although the applicant must comply with all applicable OFC requirements. When buildings are completely protected with an approved automatic fire sprinkler system, the requirements for fire apparatus access and water supply may be modified as approved by the fire code official. The following items should be addressed by the applicant:

A Fire Access and Water Supply plan is required for subdivisions and commercial buildings over 1000 square feet in size <u>or when required by Clackamas Fire District #1</u>. The plan shall show fire apparatus access, fire lanes, fire hydrants, fire lines, available fire flow, FDC location (if applicable), building square footage, and type of construction. The applicant shall provide fire flow tests per NFPA 291, and shall be no older than 12 months. Work to be completed by experienced and responsible persons and coordinated with the local water authority.

Prior to the start of the project, a pre-construction meeting shall be held with Clackamas Fire District #1. The project manager/contractor is responsible for developing a written fire safety program. This program shall be made available for review by Clackamas Fire District #1. The plan should address the following:

- a. Good Housekeeping
- b. On-site security
- c. Fire protection systems
  - i. For construction operations, installation of new fire protection systems as construction progress
  - ii. For demolition operations, preservation of existing fire protection systems during demolition
- d. Development of a pre-fire plan with the local fire department
- e. Consideration of special hazards resulting from previous occupancies

Page 1 of 2 – 7810-7820 SE Johnson Creek Blvd. ZPAC0090-20

# f. Protection of existing structures and equipment from exposure fires resulting from construction, alteration and demolition operations.

# For additional information please refer to the Oregon Fire Code Chapter 33, and NFPA 241.

### Access:

- 1) No part of a building may be more than 150 feet from an approved fire department access road.
- 2) Access streets between 26 feet and less than 32 feet in width must have parking restricted to one side of the street. Access streets less than 26 feet in width must have parking restricted on both sides of the street. No parking restrictions for access roads 32 feet wide or more.

## Water Supply:

- All new buildings shall have a firefighting water supply that meets the fire flow requirements of the Fire Code. Maximum spacing between hydrants on street frontage shall not exceed 500 feet. Additional private on-site fire hydrants may be required for larger buildings. Fire sprinklers may reduce the water supply requirements.
- <u>Fire Hydrants, Commercial Buildings:</u> Where a portion of the building is more than 400 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the building, on-site fire hydrants and mains shall be provided. Note: This distance may be increased to 600 feet for buildings equipped throughout with an approved automatic sprinkler system.
- 3) The fire department connection (FDC) for any fire sprinkler system shall be placed as near as possible to the street, and within 100 feet of a fire hydrant.

4)
	WES Rules and Standards Update December 2019 Update						
Торіс	Issues	Potential Policy Changes					
Fiscal	<ul> <li>Limited opportunities for developer reimbursements</li> <li>Minimal participation in low income discount</li> <li>Current Equivalent Dwelling Unit (EDU) assignments inconsistent</li> </ul>	<ul> <li>Reimbursement Districts         <ul> <li>Seeking authority to establish sewer reimbursement districts that allow developers to recover costs</li> <li>Reimbursement districts available for private development projects and public infrastructure projects that extend sewer lines past undeveloped properties</li> <li>Change current sewer connection charge to flat rate</li> </ul> </li> <li>Low Income Discount Program         <ul> <li>Modify the low-income discount criteria based on federal poverty guidelines</li> <li>Increase family household criteria from 2 to 3 family members</li> </ul> </li> <li>Sanitary Equivalent Dwelling Unit (EDU) Assignments         <ul> <li>Non-residential EDU methodology</li> <li>Modify the methodology to better align with usage</li> <li>Increase square footage calculation for warehouses and storage</li> <li>Modify use categories such as restaurants and health clubs</li> <li>Residential EDU methodology – Modify assignments based on dwelling size</li> <li>5 categories of dwelling size ranging from 800 s.f. to 3,800 s.f.</li> <li>EDU assignments range from 70% to 120% of a standard residential unit</li> </ul> </li> </ul>					
Low Impact Development and Green Infrastructure	<ul> <li>NPDES permit requires stormwater approaches that prioritize Low Impact Development (LID) and green infrastructure</li> <li>Current infiltration requirement leads to high rate of design variances</li> </ul>	<ul> <li>Encourage LID and green infrastructure where it is smart and feasible</li> <li>Stormwater Design Standards Manual         <ul> <li>Include site planning strategies for LID</li> <li>Include design guidelines for green infrastructure facilities: rain gardens, stormwater planters, swales, pervious pavement, green roofs</li> <li>Allow infiltration as a flow control approach for facility design</li> <li>Allow pervious pavement and green roofs to meet water quality and flow control requirements</li> </ul> </li> </ul>					
Water Quality Standards and Pollutant Removal Goals	<ul> <li>Mandated pollutant removal goals for Stormwater facility design</li> <li>Current standards have limited design guidance on allowable BMPs</li> <li>Water quality and stream health need improvement</li> </ul>	<ul> <li>No changes to current pollutant removal goals, but more options to comply         <ul> <li>Water quality facilities designed to capture/treat 80% of average annual runoff volume to the max extent practicable (MEP) with goal of 70% total suspended solids removal</li> <li>Treatment volume equates to a water quality design storm of 1.0" over 24 hours</li> </ul> </li> <li>Water quality treatment achieved through green infrastructure, traditional ponds, or manufactured treatment</li> </ul>					



	WES Rules and Standards Update December 2019 Update						
Торіс	Issues	Potential Policy Changes					
		<ul> <li>Manufactured treatment specifications         <ul> <li>Hydrodynamic separators no longer allowed as a stand-alone system</li> <li>Will allow WA Department of Ecology TAPE approved systems for basic treatment</li> </ul> </li> <li>Provide more detailed design criteria for green infrastructure and update stormwater standard details</li> </ul>					
Stormwater Flow Control	<ul> <li>Current infiltration requirement (½" for all sites) leads to high rate of design variances on difficult sites</li> <li>Stream erosion still occurs if peak runoff is controlled - volume control needed</li> <li>Regulatory drivers are requiring more control</li> </ul>	<ul> <li>Infiltration encouraged where feasible – but no longer required</li> <li>Exemptions added for discharges to large water bodies</li> <li>New performance criteria for flow control, focused on controlling rate and <u>duration</u> of runoff         <ul> <li>Match post-development runoff between 42% of the 2-year peak flow rate up to the 10-year peak flow rate</li> <li>Use the WES BMP Sizing Tool or other analytical model capable of demonstrating compliance with the performance criteria</li> <li>Stormwater management facilities that infiltrate the 10-year, 24-hour design storm are assumed to meet the flow control performance standard, without further calculations/modeling required</li> </ul> </li> <li>Redevelopment projects required to assume a pre-developed condition of "grass" for new or replaced impervious areas in order to achieve incremental flow control</li> </ul>					
Sanitary Sewer	<ul> <li>Alignment with mandated industrial waste pretreatment requirements</li> <li>Outdated technical specifications and requirements</li> </ul>	<ul> <li>Updated to reflect maintenance and performance needs</li> <li>Updated technical specifications and requirements</li> <li>Updated list of materials, material specifications, and standard details</li> <li>Updated line and grade inspection standards         <ul> <li>Deviation in grade shall not exceed ½"</li> </ul> </li> <li>Minimum slopes based on pipe size and number of homes served</li> <li>TV Inspections required prior to WES acceptance</li> <li>Pretreatment program: Updated industrial user categories for consistency with EPA Streamlining Rule</li> <li>FOG: Rules added for grease trap maintenance and reporting</li> </ul>					





Department of Transportation Region 1 Headquarters 123 NW Flanders Street Portland, Oregon 97209 (503) 731.8200 FAX (503) 731.8259

September 24, 2020

ODOT #11815

## ODOT Response

Project Name: Residential Care Facility	Applicant: Edward Radulescu, EPR Design LLC
Jurisdiction: Clackamas County	Jurisdiction Case #: ZPAC0090-20
Site Address: 7810-7820 SE Johnson Creek	Legal Description: 01S 02E 29AD
Boulevard, Portland, OR	Tax Lot(s): 01900
State Highway: OR 213	Mileposts: 7.54

The site of this proposed land use action is in the vicinity of OR 213 (SE 82<sup>nd</sup> Avenue). ODOT has permitting authority for this facility and an interest in ensuring that this proposed land use is compatible with its safe and efficient operation.

### **COMMENTS/FINDINGS**

ODOT has reviewed the submitted application materials for a new 53-bed nursing home and memory care facility on Johnson Creek Boulevard. The proposal includes demolition of the existing house on site and construction of a new two-story facility with 13 off-street parking spaces.

ODOT recommends that the applicant submit a traffic impact analysis to evaluate impacts of the proposed development on the state highway system. If a traffic study is required by the County, please contact the ODOT traffic representative identified below to review the scope of work.

### ODOT RECOMMENDED LOCAL CONDITIONS OF APPROVAL

### Traffic Impacts

The applicant shall submit a traffic impact analysis to assess the impacts of the proposed use on the State highway system. The analysis must be conducted by a Professional Engineer registered in Oregon. Contact the ODOT Traffic representative identified below and the local jurisdiction to scope the study.

#### Please send a copy of the Land Use Notice to:

ODOT Region 1 Planning Development Review 123 NW Flanders St Portland, OR 97209

ODOT\_R1\_DevRev@odot.state.or.us

Development Review Planner: Kate Hawkins	503.731.3049
	kate.w.hawkins@odot.state.or.us
Traffic Contact: Avi Tayar, P.E.	503.731.8221
	abraham.tayar@odot.state.or.us



Wendi Coryell, Service District Specialist Clackamas County - Department of Transportation & Development (DTD) Administration 503.742.4657 (P) | wendicor@co.clackamas.or.us | 503.742.4272 (F) Development Services Building | 150 Beavercreek Road | Oregon City, OR | 97045

CLACKAMAS	COUNTY - DTD	UPDATED:	9/16/2020	ESTIMATED DEVELOPMENT FEES		
FILE #: ZPAC	0090-20	PROPOSAL:	Care Facility			
<b>PARCEL:</b> 12E29	AD01900 \$	STREET ADDRESS:	: 7820 SE Johnson Creek Blvd.			
TRANSPORTA	TION SYSTEM DEVELOPMENT CHARG	E (TSDC) AREA:	Countywide TSDC Distric	ot		
F	PARK SYSTEM DEVELOPMENT CHARG	E (PSDC) AREA:	North Clackamas Parks	& Recreation District (NCPRD), District 2		
SCHOOL	CONSTRUCTION EXCISE TAX (SCET),	DISTRICT AREA:	North Clackamas School	District		

REDIT	EXISTING USE, TO BE DISCONTINUED: Building Area,	1,000 Square Feet
ū	Building Area, Total, Credit:	(1,000) Square Feet
Ш	PROPOSED USE:	
(1)	Building Area, Care Facility	30,220 Square Feet
Ř	Danang/ aba, barb r abinty	· · ·
HARG		Square Feet

#### **Countywide TSDC District**

INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) CLASSIFICATION: CODE & DESCRIPTION		COST PER UNIT	UNIT OF MEASUREMENT	NOTES	# UNITS	E: ((	STIMATED CREDIT)   CHARGE
Single Family/Mobile Home	\$	4,590	/dwelling unit	(1), (2), (3)	(1.00)	\$	(4,590)
Senior	\$	1,473	/unit	(1), (2), (3)	53.00	\$	78,069
					70 470		

http://www.clackamas.us/engineering/documents/tsdccompleterates.pdf

ESTIMATED ISDC ASSESSMENT: \$ /3,4/9

#### North Clackamas Parks & Recreation District (NCPRD), District 2

OSHA STANDARD INDUSTRY CLASSIFICATION (SIC): CODE & DESCRIPTION	# SQUARE FEET PER 'EMPLOYEE' (USING OSHA SIC STANDARDS)		# SQUARE FEET PER 'EMPLOYEE' NOTES # UNITS (USING OSHA SIC STANDARDS)		# UNITS	ESTIMATED (CREDIT)   CHARGE	
Single Family Residential / Mobile Home	\$ 1	/dwelling unit	(1), (2), (3)	6,760	\$ (6,760)		
80: Health Services	\$ 350	/square feet	(1), (2), (3)	31	\$ 1,860		

https://www.osha.gov/pls/imis/sic\_manual.html

ESTIMATED PSDC ASSESSMENT: \$

#### **North Clackamas School District**

CONSTRUCTION TYPE (COMMERCIAL/RESIDENTIAL)	COST PER UNIT	UNIT OF MEASUREMENT	NOTES	# UNITS	ES (0 0	STIMATED CREDIT)   CHARGE
Residential	\$ (1.35)	/ Square Foot	(1), (2), (3)	(1,000)	\$	(1,350)
Commercial	\$ 0.67	/ Square Foot	(1), (2), (3)	30,220	\$	20,247
http://www.clackamas.us/building/school.html		ESTIN	ATED SCET ASS	ESSMENT:	\$	18,897

#### NOTES:

(1) This estimate is provided by Clackamas County staff as an aid for budget purposes only.

(2) This estimate has been calculated using Clackamas County adopted fees as of July 2013.

(3) There are other fees, charged by other agencies and departments that have not been included here.



![](_page_77_Figure_0.jpeg)

AND SUBJECT TO CHANGE AND SUBJECT TO THE BEGIN TO THE HIGH DEGREE OF UNCERTAINTY ASSOCIATED WITH A CONCEPTUAL DESIGN, THESE INSTRUMENTS OF SERVICE SHALL BE CONSIDERED A WORK SHALL BE CONSIDERED TO THE HIGH DEGREE OF UNCERTAINTY ASSOCIATED WITH RESPECT TO THIS PROJECT, ALL WORK SHALL BE CONSIDERED A WORK IN PROGRESS WHERE UNKNOWN FACTORS EXIST AND JURISDICTIONAL REQUIREMENTS OF SERVICE SHALL NOT BE USED AS THE BASIS FOR A FINANCIAL EVALUATION OR CONSTRUCTION COST BUT AND SUBJECT TO CHANGE, THESE INSTRUMENTS OF SERVICE SHALL BE CONSIDERED A WORK SHALL BE CONSIDERED A WORK SHALL BE CONSIDERED A WORK SHALL BE CONSIDERED TO THE HIGH DEGREE OF UNCERTAINTY ASSOCIATED WITH A CONCEPTUAL DESIGN, THESE INSTRUMENTS OF SERVICE SHALL NOT BE USED AS THE BASIS FOR A FINANCIAL EVALUATION OR CONSTRUCTION COST BUT AND SUBJECT TO CHANGE, THESE INSTRUMENTS OF SERVICE SHALL BE CONSIDERED A WORK SHALL BE CONSIDERED A WORK SHALL BE CONSIDERED A WORK SHALL BE CONSIDERED TO THE HIGH DEGREE OF UNCERTAINTY ASSOCIATED WITH A CONCEPTUAL DESIGN, THESE INSTRUMENTS OF SERVICE SHALL BE CONSIDERED A WORK SHALL BE CONSI ESTIMATING. NO ASSURANCES ARE OFFERED OR IMPLIED AS TO THE OVERALL FEASIBILITY OF THE PROJECT. ALL WORK SHALL BE SUBJECT TO REVIEW AND FINAL APPROVAL BY ALL A

#### EXISTING EDGE OF PAVEMENT, TYP

#### EXISTING OVERHEAD POWER LINES, TYP.

#### PROPOSED 6' SITE OBSCURING PERIMETER FENCE, TYP.

NOTES:

 $\bigcirc$ 

ALL GROUND COVER SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING AS SPECIFIED IN PLANTING LEGEND.

GROUND COVER TO BE LOCATED ONE HALF OF SPECIFIED SPACING DISTANCE FROM ANY HARD SURFACE, UNLESS OTHERWISE SPECIFIED.

D Ground Cover Planting Detail Not To Scale

![](_page_77_Figure_15.jpeg)

![](_page_77_Figure_16.jpeg)

# PLANTING NOTES

- ALL BOUNDARIES, EASEMENTS, UTILITIES AND LEGAL ENCUMBRANCES TO BE CONFIRMED WITH OWNER PRIOR TO 16. THE CONTRACTOR SHALL ENSURE THAT ALL EXCAVATED PLANTING PITS HAVE POSITIVE DRAINAGE. PLANT PITS BEGINNING WORK. PROPERTY LINES AND SURVEY INFORMATION PROVIDED BY EPR DESIGN. IN NO WAY IS THIS PLAN TO BE INTERPRETED TO EXCEED THE LEGAL BOUNDARIES OF THE OWNER'S REAL
- PROPERTY. THE LANDSCAPE DESIGNER ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF BOUNDARIES, UTILITIES AND WETLANDS.
- THIS PLAN SHALL BE INSTALLED TO MEET ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL CODES. THIS PLAN SHALL BE CONSIDERED PRELIMINARY UNTIL APPROVED BY ALL GOVERNING AGENCIES. IMPLEMENTATION OF THIS PLAN SHALL NOT PROCEED UNTIL ISSUANCE OF ALL RELATED PERMITS.
- PLANT QUANTITIES ARE FOR INFORMATION ONLY. IN CASE OF ANY DISCREPANCY, THE PLAN SHALL GOVERN. ALL WORK IS TO BE PERFORMED BY LICENSED CONTRACTORS AND EXPERIENCED WORKERS.

PLAN VIEW

- THE CONTRACTOR IS TO VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO PERFORMING ANY EXCAVATION. CONTRACTOR SHALL REPAIR ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S WORK, AT NO ADDITIONAL COST TO THE OWNER. CONTACT ALL UTILITY PROVIDERS SERVING THE 25. AMEND SOIL IN LAWN AREAS WITH 80 LBS. OF DOLOMITE LIME AND 40 LBS. OF 10-20-20 SLOW RELEASE SITE AREA 48 HOURS PRIOR TO ANY EXCAVATION.
- ALL PLANT MATERIALS SHALL MATCH SPECIFICATIONS PER SPECIES AND SHALL COMPLY WITH ANSI Z60. 'STANDARD FOR NURSERY STOCK'.
- THE CONTRACTOR SHALL ADHERE TO THE OREGON ASSOCIATION OF NURSERIES GUIDELINES FOR PLANTING PRACTICES.
- THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING ELEMENTS ON AND OFF SITE, RESULTING FROM THE CONTRACTOR'S WORK. THE CONTRACTOR IS RESPONSIBLE FOR THE VIABILITY OF ALL PLANT MATERIAL FOR 2 YEARS AFTER
- COMPLETION OF PLANTING. DISEASED, DYING, OR DEAD PLANT MATERIAL SHALL BE REPLACED BY THE CONTRACTOR DURING THE TWO YEAR PERIOD AND MAINTAINED FOR AN ADDITIONAL 2 YEAR PERIOD. IMMEDIATELY UPON BID AWARD, CONTRACTOR SHALL SECURE THE PLANT MATERIALS AS SPECIFIED FROM
- AVAILABLE SOURCES. IN THE EVENT THAT PLANT MATERIALS ARE NOT AVAILABLE, CONTACT LANDSCAPE ARCHITECT FOR APPROVED SUBSTITUTIONS. NO SUBSTITUTION FOR PLANT MATERIAL WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
- TOP DRESS ALL SHRUB AND GROUND COVER AREAS (NOT LAWN) WITH 3" OF FIR BARK MULCH. SUBMIT SAMPLE TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO CONSTRUCTION. TREE LOCATIONS MAY BE ADJUSTED IN THE FIELD TO SUIT SITE REQUIREMENTS AS DIRECTED BY THE LANDSCAPE ARCHITECT.

SECTION

	PLANT LEGEND		
SYMBOL	BOTANICAL / COMMON NAME	SIZE	QUANTITY
TREES			
	ACER BEURGERIANUM TRIDENT MAPLE	2" cal. min.	Т
	ACER CAMESTRE HEDGE MAPLE	2" cal. min.	2
	CERCIS CANADENSIS EASTERN REDBUD	2" cal. min.	14
ANNAL ANNA	PINUS FLEXILIS 'VANDERWOLF PYRAMID' BLUE PYRAMIDAL PINE	8' ht min.	З
	THUJA PLICATA 'HOGAN' HOGAN CEDAR	8' ht min.	З
SHRUBS			
$\odot$	ABELIA X GRANDIFLORA 'KALEIDOSCOPE' KALEIDOSCOPE ABELIA	I GAL.	17
Å	CAMELLIA X 'WINTER SNOWMAN' WINTER'S SNOWMAN ICE ANGELS CAMELLIA	I GAL.	З
*	ILEX BLABRA 'COMPACTA' COMPACT INKBERRY HOLLY	I GAL.	20
O	NANDINA DOMESTICA 'HARBOUR DWARF' H. D. HEAVENLY BAMBOO	I GAL.	22
$\odot$	PENNISETUM ALOPECUROIDES 'HAMELN' HAMELN FOUNTAIN GRASS	I GAL.	13
	PRUNUS LAUROCERASUS 'OTTO LUYKEN' OTTO LUYKEN ENGLISH LAUREL	I GAL.	22
$\otimes$	VIBURNUM DAVIDII DAVID VIBURNUM	I GAL.	4
GROUNDCOVE	R		
	ARCTOSTAPHYLOS UVA-URSI KINNIKINNICK	I GAL.	30" O.C.
	TURF (SEED OR SOD), PER OWNER		

![](_page_77_Picture_31.jpeg)

Creating Solutions to Complex Issues

4400 NE 77th Avenue Suite 275 VANCOUVER, WA 98662 VOICE: 360-750-9000 FAX: 360-713-6102

![](_page_77_Picture_34.jpeg)

Ц

SU

ш

ENIOR В GON 7 SON S SE JOHN RTLAND, Ŵ 20 20 Ο  $\mathbf{\omega}$ 

FULLY FLOODED WITH WATER SHALL DRAIN WITHIN (12) HOURS OF FILLING.

17. FINISH GRADE SHALL BE SET TO ALLOW POSITIVE DRAINAGE 18. ROTOTILL 2" OF COMPOST INTO ALL PLANTED AREAS.

19. INCORPORATE PEAT INTO THE ROOT ZONE OF RHODODENDRONS, AZALEAS AND OTHER ACID LOVING PLANTS. 20. INCORPORATE 10-20-20 FERTILIZER INTO THE ROOT ZONE OF ALL NEW PLANTINGS. 21. RONSTAR, OR APPROVED EQUAL, PREEMERGENT HERBICIDE TO BE APPLIED TO ALL PLANTED AREAS PER

MANUFACTURERS INSTRUCTIONS. 22. EXISTING VEGETATION TO BE SPRAYED WITH ROUNDUP, OR APPROVED EQUAL, PER MANUFACTURERS INSTRUCTIONS. SUFFICIENT TIME SHALL BE GIVEN TO ALLOW EXISTING MATERIAL TO DIE. REMOVE EXISTING 27. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING TURF PLANTED WITHIN THE RIGHT OF WAY.

23. CROWN LAWN AREAS AND GRADE TO PROVIDE POSITIVE DRAINAGE. 24. ROLL LAWN AREA TO INSURE PROPER COMPACTION TO MINIMIZE SETTLING.

FERTILIZER OR EQUIVALENT. PROVIDE A 3" LAYER OF SANDY LOAM TOPSOIL FOR LAWN AND BED AREA. 26. SEED LAWN AREAS WITH GRASS SEED MANUFACTURER'S RECOMMENDATIONS. COVER SEED WITH FINE MULCH APPLIED WITH ROLLER OR HYDROSEED.

27. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING TURF PLANTED WITHIN THE RIGHT OF WAY. 28. PLANT MATERIAL SHALL BE PLANTED W/ ROOT CROWN I" ABOVE FINISHED GRADE TO ALLOW POSITIVE DRAINAGE AWAY FROM CROWN.

29. STAKE ALL TREES OVER 6 FT. IN HEIGHT PER DETAILS ON THIS SHEET.

30. REFER TO DETAILS FOR ADDITIONAL INFORMATION. 31. ALL PLANTING SHALL BE IRRIGATED BY AN AUTOMATIC UNDERGROUND SPRINKLER SYSTEM.

32. ALL PLANT MATERIALS FURNISHED ARE TO BE HEALTHY, UNIFORMLY BRANCHED AND WITH WELL DEVELOPED FIBROUS ROOT SYSTEMS.

33. ALL PLANT MATERIALS FURNISHED ARE TO BE FREE FROM DEAD OR BROKEN BRANCHES, LICHENS, SCARS, BROKEN BARK OR WOUNDS. ALL PLANT MATERIALS WILL BE INSECT, WEED, AND DISEASE FREE ACCORDING TO THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF AGRICULTURE FOR NURSERY PLANT MATERIALS SOLD FOR WHOLESALE OR RETAIL. ALL PRUNING WOUNDS MUST BE WELL HEALED WITH NO EVIDENCE OF DECAY

34. FIELD CONFIRM ALL SITE CONDITIONS, AREAS AND SIZES PRIOR TO BIDDING & CONSTRUCTION. DO NOT SCALE FROM PLANS.

CHECKED: DRAWN BOP SCALE: DATE: |" = 20'-0" | 05-16-21 JOB #: 21-1656 ISSUED FOR: PLR **REVISIONS:** SHEET NAME: PRELIMINARY LANDSCAPE

![](_page_77_Figure_50.jpeg)

PLAN

![](_page_78_Figure_0.jpeg)

![](_page_78_Figure_2.jpeg)

![](_page_79_Figure_0.jpeg)

![](_page_80_Figure_0.jpeg)

![](_page_81_Figure_0.jpeg)

![](_page_82_Figure_0.jpeg)

CHAMBERMAXX DESIGN DETAILS							
FEATURE	START CHAMBER	MIDDLE CHAMBER	END CHAMBER				
ERALL CHAMBER HEIGHT - IN (mm)	30.3 (770)	30.3 (770)	30.3 (770)				
ERALL CHAMBER WIDTH - IN (mm)	51.4 (1306)	51.4 (1306)	51.4 (1306)				
UAL LENGTH - IN (mm)	98.4 (2500)	91.0 (2311)	92.0 (2337)				
TALLED LAY LENGTHS - IN (mm)	96.2 (2443)	85.4 (2169)	88.5 (2248)				
AMBER STORAGE VOLUME - CF (m <sup>3</sup> )	50.2 (1.421)	47.2 (1.336)	46.2 (1.307)				
AMBER STORAGE PER LINEAR FOOT - CF/LF (m³/m)	6.3 (0.582)	6.6 (0.616)	6.3 (0.582)				
STALLED CHAMBER VOLUME - CF (m <sup>3</sup> )	78.1 (2.211)	75.1 (2.127)	74.1 (2.098)				
TALLED CHAMBER VOLUME PER LINEAR FOOT - CF/LF (m³/m)	9.7 (0.905)	10.6 (0.981)	10.0 (0.934)				
MBER WEIGHT - LB (kg)	83 (37.65)	73 (33.11)	76 (34.47)				
(152 mm) OF STONE ABOVE AND BELOW CHAMBER 5.6" (142 mm) CHAMBER SPA	CING AND 40% POR						

- 7. IT IS ALWAYS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES. 8. GENERAL INSTALLATION METHODS AND MATERIALS TO BE IN ACCORDANCE WITH ASTM D2321.

![](_page_82_Picture_20.jpeg)

CHAMBERMAXX STORMWATER DETENTION WITH LINER SYSTEM STANDARD DETAIL CONTAINMENT ROW OPTION

00 9

7

# 7810 AND 7820 SE JOHNSON CREEK BLVD. STORMWATER NARRATIVE

For roof, I'm proposing CHAMBERMAXX. Best on percolation and calculations, for 100 yr storm event (needs 100 yr because we don't have overflow), we need to store 1,512 C.Ft.

Will be 3 rows. Per row 78.1 c.ft start + 5 x 75.1 c.ft middle + 74.1 c.ft end = 527.7 c.ft

3 rows x 527.7 = 1,583.1 c.ft > 1,512 c.ft need it

For parking, I did calcs for 100 yr storm event, even if we have a potential overflow into the ROW. At this point, I don't know if will be an actual half street improvement or cash-in-liew.

Will be porous asphalt. 7,021 sq. ft. x 0.5ft rock x 0.3 vol. of voids = 1,051 c.ft for storage > 521 c.ft need it

![](_page_83_Picture_6.jpeg)

-	 -		2 C		A States		
-	 	1 1444 (Back 1		the state of the state of the		A	
- <b>1</b>	- <b>-</b>						2
- <b>2</b>							
· • ×	 						

Location 78/0-	7820 SEZ	ACSON CR	Date: 8/5/21	Test F	10te Number:	
Depth to bottom of hole: 4			Dimension of hole: 6	" Test A	Test Method: OFEN AT	
Tester's Tester's Tester's	Name: <b>R\$C</b> <i>H</i> Company: <b>R</b> \$ C Contact Number:	ARDS. ENCIO SOJ-3	COORCESCU P.1 NBERING CO 180- GI 79			
*****	Depth (feet):			Soil Texture:		
0-0.51			TOP SOIL			
0.5' - 4			BROWH SILF WITH ROCKS			
Presature	tion Start Time: /	10010		<b>, , , , , , , , , , , , , , , , , , , </b>		
Time:	Time Interval (minutes):	Measure ment, (feet):	Drop in water level, (feet):	Inflitration rate, (inches per hour):	Remarks:	
414	or and the second s	0.5			FILL W/WATER	
4:10	10	0.43	0.07	5.04	anna reiste a francús a sua a su	
4:20	20	0.36	0.01	5.04		
4:35	10	0.3	0.06	4.32		
4:40	0	a.25	0.05	3.6		
4:50	(\$	0.20	0.05	3.6		
5PM	10	0.15	0.05	3.6		
5.05	Ð	0.5	<b>—</b>		Fill W/WATE	
5.25	20	0.4	0.1	3.6		
5.45	20	0. Z	0.1	3.6		
6.05	20	0.2	6.1	3.6	Ein w/ WAT	
6.10	0	0.5				
6.30	- 20	0.4	0.1	2.0		
5.50	20	0.3	0,1	5.6		
1.10	20	0.2	0.1	3. 🥙		
TAS'	Lized (	2 3.6	/ Ench /HR		, Min/	
		MCG	-2 = 1.8 / 44		<u>1 /iuch</u>	
RUS	GS: Dop	TH OF	GROVND WATE	=e =27	.151	
			GROWN AND A MAR	EL= 18	0 851	

City of Portland Stormwater Management Manual— August 2016 Chapter 2: Stormwater Facility and Conveyance Design, Submittal Requirements Table 2-4. Infiltration Test Data Table

Location	LI SGJACSON	, CR. 8240	Date: 8/5/21	Test H	lole Number: /3
Depth to	bottom of hole:	4'	Dimension of hole:	6" Test N	Tethod: OPEN PT
Tester's Tester's Tester's	Name: Ricas Company: RSC Contact Number	20 5. 60 GNGIN : 503 - 31	ORCUSCU P.E BERING CO 80-G179		
	Deptu (feet):			Soil Texture:	
	0-0.51		TOPS	3016	
0	.5'- 4'		BROWN SILT W/ ROCKS		
Presatur Presatur Time:	ation Start Time: A ation End Time: A Time Interval	AAL SON NooN Measure	Drop in water level,	y detec i Infiltration	Rei N Remarks:
	(minaics).	(feet):	(1820)-	per hour):	
NOON	0 %	0.5			F'U WWWATOR
(2.20	20	0.38	0.62	4.32	
12.40	20	0.26	0.12	4.32	
<u>ICm</u>	20	0.14	0,12	4.32	
1:05	0	0.5			Fill w/wA
<u>1:25  </u>	20	0.38	0.12	4.32	
1:45	<u> </u>	0.26	0.12	6.32	
2:05		0.14	0,12	4.32	

5FABILIZED @ 4.32 in/HR

City of Portland Stormwater Management Manual— August 2016 Chapter 2: Stormwater Facility and Conveyance Design, Submittal Requirements e

The OLD COMPANY AND A SHORE THE STREET AND A	C. S	A REAL PROPERTY AND A REAL
Second Contractor Contractor States and Addition	and the second	A second s Second second se Second second s Second second se
the second se		

Location: 182058 JACSON CR BHD			Date: 8/5/21	Test E	lole Number: 1/3	
Depth to bottom of hole: 41			Dimension of hole: 6	// Test N	Tethod: OPEN PIT	
Tester's Tester's Tester's	Name: RNCHJ Company: RSL Contact Number	140 S.C 2 GNAI 2 503-3	NEGRIMA CO. 80-6179			
Depth (feet): 0 = 0.5' 0.5' = 4'			Soil Texture:			
			ROWH SILT W/ROCKS			
Presatur Presatur	ation Start Time: {	BAM NOON A	LETER HAVY R	AIN		
Time:	Time Interval (minutes):	Measure ment, (feet):	Drop in water level, (feet):	Infiitration rate, (inches per hour):	Remarks:	
A.	0	056			Eill w/warve	
NOON						
12:10	10	0.5	0.06	4.32		
NOON 12:10 12:20	10 10	0.5	0.0F 0.05	9.32 3.6		
Noon 12:10 12:20 12:30	10 10 10	0.5 0.45 0.40	0.04 0.05 0.05	4.32 3.6 3.6		
Noon 12:10 12:20 12:30 12:30	10 10 10 10	0.5 0.45 0.40 0.35	0.04 0.05 0.05 0.05	4.32 3.6 3.6 3.6		
Noon 12:10 12:20 12:30 12:30 12:50	10 10 13 10 10	0.5 0.45 0.40 0.35 0.30	0.04 0.05 0.05 0.05 0.05	9:32 3.6 3.6 3.6 3.6		
12:10 12:20 12:30 12:30 12:40 12:50 12:50	10 10 10 10 10 10	0.5 0.45 0.40 0.35 0.30 0.25	0.06 0.05 0.05 0.05 0.05 0.05 0.05	4.32 3.6 3.6 3.6 3.6 3.6 3.6		
Noon 12:10 12:20 12:30 12:30 12:40 12:50 12:50 1:05	10 10 10 10 10 10 10 10	0.5 0.45 0.40 0.35 0.25 0.25	0.04 0.05 0.05 0.05 0.05 0.05	4.32 3.6 3.6 3.6 3.6 3.6 3.6	Rill w/warek	
Noon 12:10 12:20 12:30 12:30 12:40 12:50 12:50 1.05 1:05 1:25	10 10 10 10 10 10 10 10 10 20	0.5 0.45 0.40 0.35 0.35 0.25 0.25 0.5 0.4	0.04 0.05 0.05 0.05 0.05 0.05 0.05	4.32 3.6 3.6 3.6 3.6 3.6 3.6 3.6	E:ILW/WATCH	
Noon 12:10 12:20 12:30 12:30 12:50 12:50 12:50 1:05 1:05 1:25	10 10 10 10 10 10 10 10 10 10 10 20 20 20	0.5 0.45 0.40 0.35 0.35 0.25 0.25 0.5 0.4 0.3	0.04 0.05 0.05 0.05 0.05 0.05 0.05 0.1	4.32 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	E:/Lw/wareA	
Noon 12:10 12:20 12:30 12:30 12:50 12:50 12:50 1:05 1:05 1:25 1:25 1:25 1:25	10 10 10 10 10 10 10 10 10 20 20 20 20 20	0.5 0.45 0.40 0.35 0.35 0.25 0.5 0.4 0.3 0.2	0.06 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1	9.32 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	E'll w/water	
Noon 12:10 12:20 12:32 12:32 12:50 12:50 12:50 1:05 1:45 2:05 2:05 2:10	10 10 10 10 10 10 10 10 10 20 20 20 20 20 20 20 20	0.5 0.45 0.40 0.35 0.35 0.25 0.5 0.4 0.3 0.2 0.3 0.2 0.5	0.06 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1	4.32 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	E:/Lw/wares F:n w/wares	
Noon 12:10 12:20 12:30 12:30 12:50 12:	10 10 10 10 10 10 10 20 20 20 20 20 20 20 20 20 20 20 20 20	0.5 0.45 0.40 0.35 0.25 0.5 0.4 0.3 0.2 0.5 0.5 0.5 0.5	0.06 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.15	<u>4.32</u> <u>3.6</u> <u>3.6</u> <u>3.6</u> <u>3.6</u> <u>3.6</u> <u>3.6</u> <u>3.6</u> <u>3.6</u> <u>3.6</u> <u>3.6</u> <u>3.6</u>	Ellwiwarek Fin w/ware	

STABILIZED @ 3.6 inch/ AR

ŝ

City of Portland Stormwater Management Manual— August 2016 Chapter 2: Stormwater Facility and Conveyance Design, Submittal Requirements

![](_page_87_Figure_0.jpeg)

ROOF

TEST HYD 1:

.48

\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \*\*\*\*\*\*\*\*\* 100-YEAR 24-HOUR STORM \*\*\*\* 4.80" TOTAL PRECIP. \*\*\*\*\*\*\*\* DATA PRINT-OUT: AREA(ACRES) PERVIOUS IMPERVIOUS TC(MINUTES) Α CN Α CN .4 .0 86.0 .4 98.0 5.0 PEAK-Q(CFS) T-PEAK(HRS) VOL(CU-FT) .48 7.67 6294 SUMMARY OF INPUT ITEMS 1) TYPE OF FACILITY: GRAVEL TRENCH/BED 2) STORAGE DEPTH(ft): 3.00 3) VERTICAL PERMEABILITY(min/in): 33.40 4) PRIMARY DESIGN HYDROGRAPH FILENAME: hish 5) PRIMARY RELEASE RATE(cfs): .00 6) NUMBER OF TEST HYDROGRAPHS: 1 TEST HYD 1 FILENAME: hish TARGET RELEASE(cfs): .00 7) NUMBER-OF-ORIFICES, RISER-HEAD(ft), RISER-DIAM(in): 0, 3.00, 36 8) ITERATION DISPLAY: NO PERFORMANCE: INFLOW TARGET-OUTFLOW ACTUAL-OUTFLOW PK-STAGE STORAGE (1512) **DESIGN HYD:** .48 .00 .00 3.00

.00

.00

2.70

1510

\*\*\*\*\*\*\*\* 100-YEAR 24-HOUR STORM \*\*\*\* 4.80" TOTAL PRECIP. \*\*\*\*\*\*\*\* ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1 0,86,0.16,98,5 DATA PRINT-OUT: AREA(ACRES) TC(MINUTES) PERVIOUS IMPERVIOUS CN Α CN Δ .2 .0 86.0 .2 98.0 5.0 PEAK-Q(CFS) T-PEAK(HRS) VOL(CU-FT) .20 7.67 2650 ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH: HIJP SUMMARY OF INPUT ITEMS 1) TYPE OF FACILITY: **GRAVEL TRENCH/BED** 2) STORAGE DEPTH(ft): 2.00 3) VERTICAL PERMEABILITY(min/in): 33.40 4) PRIMARY DESIGN HYDROGRAPH FILENAME: HIJP 5) PRIMARY RELEASE RATE(cfs): .00 6) NUMBER OF TEST HYDROGRAPHS: 1 TEST HYD 1 FILENAME: HIJP TARGET RELEASE(cfs): .00 7) NUMBER-OF-ORIFICES, RISER-HEAD(ft), RISER-DIAM(in): 0, 2.00, 24 8) ITERATION DISPLAY: NO ENTER ITEM NUMBER TO BE REVISED (ENTER ZERO IF NO REVISIONS ARE REQUIRED): 0 INITIAL STORAGE VALUE FOR ITERATION PURPOSES: 2652 CU-FT **PERFORMANCE:** INFLOW TARGET-OUTFLOW ACTUAL-OUTFLOW PK-STAGE STORAGE **DESIGN HYD:** .20 2.00 521 .00 .00 TEST HYD 1: .20 .00 .00 1.80 520