CITY OF OREGON CITY
PLANNING COMMISSION
AGENDA

Commission Chambers, Libke Public Safety Facility, 1234 Linn Ave, Oregon City
Monday, April 14, 2025 at 7:00 PM

Ways to participate in this public meeting:

- *Attend in person, location listed above. Please see the public comment guidelines below.*
- *Attend the livestream of the meeting on the City's YouTube Channel: https://www.youtube.com/user/CityofOregonCity*
- *Register to provide electronic testimony (email ocplanning@orcity.org or call 503-722-3789 by 3:00 PM on the day of the meeting to register)*
- *Email ocplanning@orcity.org (deadline to submit written testimony via email is 3:00 PM on the day of the meeting)*
- *Mail to City of Oregon City, Attn: City Recorder, P.O. Box 3040, Oregon City, OR 97045*

1. **CONVENE MEETING AND ROLL CALL**
2. **APPROVAL OF MINUTES**
   a. Approval for Meeting Minutes from 3/10/2025
3. **PUBLIC COMMENTS**
   Please see the public comment guidelines below.
4. **PUBLIC HEARINGS**
   a. Initial Public Hearing on Climate Friendly and Equitable Communities Code Amendments File No. LEG25-02
   b. GLUA-24-00020/MAS-24-00001: Clackamas Community College Master Plan 2024-44
5. **COMMUNICATIONS**
6. **ADJOURNMENT**

PUBLIC COMMENT GUIDELINES

Complete a Comment Card prior to the meeting and submit it to the clerk. When the Chair calls your name, proceed to the speaker table, and state your name and city of residence. Each speaker is given 3 minutes to speak. As a general practice, the committee does not engage in discussion with those making comments. Complaints shall be addressed at the department level prior to addressing the committee.

ADA NOTICE

The location is ADA accessible. Hearing devices may be requested from the City Recorder prior to the meeting. Individuals requiring other assistance must make their request known 48 hours preceding the meeting by contacting the City Recorder's Office at 503-657-0891.

Agenda Posted at City Hall, Pioneer Community Center, Library, City Website.

Video Streaming & Broadcasts: The meeting is streamed live on the Oregon City's website and available on demand following the meeting. The meeting can be viewed on Willamette Falls Television channel 28 for Oregon City area residents as a rebroadcast. Please contact WFMC at 503-650-0275 for a programming

schedule.

CITY OF OREGON CITY
PLANNING COMMISSION
MINUTES - DRAFT

Commission Chambers, Libke Public Safety Building, 1234 Linn Ave, Oregon City
Monday, March 10, 2025, at 7:00 PM

1. CALL TO ORDER AND ROLL CALL

Chair Espe called the meeting to order at 7:00 PM.

Present:7 – Chair Paul Espe, Vice Chair Brandon Dole, Commissioner Greg Stoll, Commissioner Bob LaSalle, Commissioner Karla Laws, Commissioner Dirk Schlagenhaufer, Commissioner Victoria Meinig

Staffers: 3 - Community Development Director Aquilla Hurd-Ravich, Planning Manager Pete Walter, Administrative Assistant Kay Neumann

2. MEETING MINUTES

A. Meeting Minutes for Approval: February 24, 2025.

A motion was made by Commissioner LaSalle, seconded by Commissioner Laws to approve the meeting minutes for February 24, 2025.

The motion carried by the following vote:

Yea: 7 - Commissioner LaSalle, Commissioner Laws, Commissioner Schlagenhaufer, Commissioner Stoll, Commissioner Meinig, Vice Chair Dole, Chair Espe

3. PUBLIC COMMENTS

None

4. DISCUSSION ITEMS

A. Community Director Hurd-Ravich introduced the Climate Friendly Equitable Communities consultant, Brian Davis. Brian went over the process and adoption timeline. The public outreach process will be complete after the City Commission Work Session on March 11.

1. Brian responded to questions that were raised during the Planning Commission Work Session on January 13.
    a. DLCD confirmed that Oregon City cannot require a parking study for redevelopment of parking spaces required per OAR 660-012-0050(1)(b).

    b. He also said that if the frequency of Line 33 was reduced, the corridor would still qualify for the parking requirements under OAR 660-012-0440.

c. And it was confirmed that Oregon City cannot require EV charging stations adjacent to asphalt area with new development because an asphalt area would qualify as a parking space per 660-012-0005(32).

   There was discussion about the definition of a parking space. Question was raised if land could be set aside for parking spaces and require the EV stations at time of development. It was answered that by doing so, we would be going against existing rules. We cannot designate land as parking spaces and comply with the CFEC regulations. Where we cannot require a minimum number of parking spaces, we cannot require EV charging stations. Maybe the City could come up with some type of incentive to get developers to reserve space for charging stations.

2. Brian then provided public feedback and recommendations on the code requirements.
   a. For the Underused on and off-street parking spaces being redeveloped for other purposes was generally supported by the public. Recommendation is to define "underused" as "Parking lots or facilities that are below 50% of capacity most or all of the time."

   b. Regarding the requirement of at least one of three climate mitigation actions from new parking lots over one-half acre in size. Public supported prioritizing tree canopy with some support for the solar option. The public was not in support of having a fee-in-lieu, and the commissioners agreed with the recommendation not to have a fee-in-lieu option. Recommendation is to add code language requiring tree canopy and allowing solar panels if site constraints render tree canopy infeasible.

      Commissioner asked if we can require using the NRC tree lists for development? There are approved street tree lists that are already in effect. The City Commission has not been in support of further regulating trees in the city. Commissioner expressed interest in requiring more diversity in tree plantings and using more native trees. It was also stated that it is important to have the right tree in the right place.

      c. For the EV charging requirement for 40% of parking spaces at new multi-unit (>5) residential developments. The public did not support more than 40% and want to be sure that the sidewalks are kept clear of equipment. Recommendation is to add code language to require the 40% and to ensure design requirements specify that charges are installed such that sidewalks are kept clear.

      Question was asked if there is a definition for "EV ready". Brian said there is some wording about Level 2 Charging in the conceptual report. And the OAR does state it is required to have conduit in the ground. Further clarifying questions were asked about required amps being listed. Director Hurd-Ravich would like to check with the Building Department and if the amps would be part of the code required for the building permit and not put this in the land use file. She will find out what Level 2 is defined as in the Specialty Code.

      d. For providing bicycle and small-scale mobility device parking in climate-friendly areas and at "key" destination. The public was generally supportive of providing and/or requiring secure parking but again wants to be sure to maintain clear sidewalks. The recommendation was to do some minor updates to the requirements since Oregon City is already largely in compliance. On-Street requirements would be addressed in the next TSP update.

e. Regarding the adoption of parking maximums in climate friendly areas and within the ½ mile transit line, Oregon City's existing maximums are in compliance except for some multi-family housing. The public seemed to support one consistent requirement citywide. Recommendation is to amend the multi-family maximum and scale back to 1.2 off-street parking spaces per studio unit and 2 off-street parking spaces per non-studio residential unit.

Commissioner asked about retroactivity plays into this for parking lots that already exist but need to be updated or are redeveloped. Brian said there are sections in the requirements that address what can be required or not required for certain redevelopments. Planning Manager Walter said that we will need to look at our pre-existing non-conforming structures code and make some provision in there and define what the thresholds are. This might need to be more prescriptive, and we need to get some clarification from DLCD. Director Hurd-Ravich was to get clarification on the maximum parking element specifically. Concern was raised that the cost to re-do a parking lot could be extensive and if the requirements change so that a business owner can't fix their deteriorating parking lot for fear of losing parking spaces as that seems counter-productive.

A commissioner asked about mega churches and how this would apply to them. Director Hurd-Ravich indicated that the maximum parking spaces applies to multi-family residences with a parking lot over ½ acre, so it would just be the tree canopy that would apply.

A question was raised about ADUs and being more creative long term to make them more affordable with SDCs and using empty lots. Director Hurd-Ravich said there is no discussion about SDCs having the methodology changed in how they are determined. The purpose of the CFEC is to reduce the cost because parking is a cost. So, if there is less parking required, then costs will go down. There is not any discussion in this about ADUs, so that would be a different discussion.

The point was made that when dealing with non-conforming uses and structures, repairs and alterations are generally permitted as long as they comply with current building codes and don't expand the non-conformity. So, it needs to have been legal when it was originally built. If you repair or rebuild it when it was not legal, then you have to redesign it to bring it into compliance.

5. COMMUNICATIONS

A. There is no meeting on March 24th.

B. On April 14th there will be a Work Session at 6 p.m. for a Thimble Creek Update. The meeting at 7 p.m. will include a public hearing for the Clackamas Community College Master Plan and there will be a 1st reading of the CFEC amendments.

6. ADJOURNMENT

Chair Espe adjourned the meeting at 8:07 p.m.

625 Center Street
Oregon City, OR 97045
503-657-0891

CITY OF OREGON CITY

Staff Report

To:	Planning Commission	**Agenda Date:**	April 14, 2025
From:	Aquilla Hurd-Ravich, Community Development Director Pete Walter, Planning Manager		

SUBJECT:
Initial Public Hearing on Climate Friendly and Equitable Communities Code Amendments File No. LEG25-02

STAFF RECOMMENDATION:
Staff recommends the Planning Commission review the findings, code amendments, and exhibits and recommend approval to the City Commission.

EXECUTIVE SUMMARY:
New state rules, known as Climate Friendly and Equitable Communities, require Oregon Cities and Counties to implement a number of reforms related to parking requirements and management in an effort to reduce the climate impacts of excessive parking. Many of the changes are prescriptive, and several of them are already in effect, but there are some options available to communities who do not wish to entirely remove minimum parking requirements while conforming substantially to the new State rules.

The parking-related rules (OAR 660-12-0400 through -0450) generally aim to reduce the amount of unnecessary parking built due to minimum requirements, and to reduce impacts of new parking to the extent possible. There are three broad paths to compliance allowed within the rules ("options," per DLCD's terminology).

- Option 1 is to repeal mandates entirely.
- Options 2 and 3 are to enact either a smaller subset of more significant reforms (Option 2) or a larger subset of less significant reforms (Option 3).

At their meeting in January 2024, the Oregon City Commission directed Staff to proceed with Option 3.

Additionally, there are several requirements regarding newly developed or redeveloped parking specified by OARs 660-012-0405 (Parking Regulation Improvements) and 660-012-0410 (Electric Vehicle Charging) that necessitate updates to Oregon City's code, and additional rules addressing the maximum amount of parking that can be developed specified by OAR 660-012-0415.

The memo titled "Oregon City Conceptual Approach to CFEC Compliance" dated March 1, 2025, by the City's consultant Studio Davis discusses the preferred avenue to compliance

for Oregon City. This avenue was developed beginning with an initial code audit conducted in 2023 by Jet Planning and refined through ongoing analysis and outreach conducted by Studio Davis and the City in tandem. The recommendations herein discuss and consider feedback received through an extensive outreach process that included presentations to the various boards and commissions serving Oregon City as well as a public workshop that included in-person and online elements.

BACKGROUND:

The approach to compliance detailed below was developed through a robust and inclusive outreach process that sought to obtain feedback from Oregon City residents, employees, and community leaders.

The initial round of engagement prior to October 2024 was conducted directly by City staff. In late 2024, an ad-hoc CFEC Committee was formed to advise the project team on implementing the necessary changes. From the City's initial engagement, Option 3 emerged as the preferred compliance alternative. The CFEC Committee supported this alternative and established the general framework for compliance.

While many elements of Option 3 are prescriptive, there are several areas where Oregon City has some discretion regarding how to meet requirements. The project team sought feedback on these areas through subsequent engagement efforts with the CFEC Committee and other standing committees during January and February 2025, including with a public open house held on February 10, 2025. For the Open House, the project team created a number of materials to solicit feedback, including creation of a poster that summarized the feedback received to date.

The following code chapters are proposed to be amended:

17.04 Definitions
17.08.025 Low Density Residential- Conditional Uses
17.10.025 Medium Density Residential- Conditional Uses
17.12.020 High Density Residential- Permitted Uses
17.29.020 MUC1&MUC2- Permitted Uses
17.34.030 MUD-Permitted Uses
17.35.030 Willamette Falls Downtown District-Conditional Uses
17.52 Off Street Parking and Loading
17.54.115 Supplemental Zoning Regulations and Exceptions- Mobile Food Units
17.56.040 Conditional Uses-Criterial and Standards for conditional uses
17.62 Site Plan and Design Review

Planning Commission Direction Needed

Requiring parking within one-half mile of Tri-Met Bus Line 33 is disallowed per OAR 660-012-0440. However, the rule allows the City to distinguish between a straight-line distance and a walking distance.

> OAR 660-012-0440(*4) Cities and counties may use either walking distance or straight-line distance in measuring distances in this rule.*

The original maps and corridors the City has used to implement this section were based on the straight-line measurements which creates a rather wide transit corridor throughout the City. Since receiving feedback from the City Commission, City staff worked to analyze a half (1/2) mile walking distance buffer based on bus stops along Line 33. This approach reduces the width of the buffer which means there are more areas of the City subject to

parking minimums.
Staff is requesting direction on which method to use when measuring the half (½) mile transit corridor. Based on this direction staff will create a map that can be referenced upon implementation.

PROCESS
Adoption of the code amendments is a legislative action that requires review and recommendation from the Planning Commission prior to adoption by the City Commission following public hearings.

NEXT STEPS:
Following this initial public hearing, the City Commission will consider these proposed amendments through a first and second reading of the ordinance.

- First reading is scheduled for May 7th, 2025
- Second reading is scheduled for May 21, 2025

OPTIONS:
1. Recommend approval of the proposed CFEC code amendments to the City Commission with a recommendation to use the walking distance measurement for the half-mile transit corridor.
2. Recommend approval with modifications to the proposed CFEC code amendments to the City Commission and a recommendation to use the walking distance measurement for the half-mile transit corridor.
3. Request revisions and modifications and continue the public hearing to a date certain.

LEGISLATIVE STAFF REPORT AND RECOMMENDATION

A preliminary analysis of the applicable approval criteria for a legislative proposal is enclosed within the following report.

April 7, 2025

HEARING DATE: **April 14, 2025 -** Planning Commission
7:00 pm, Commission Chambers, Robert Libke Public Safety Building
1234 Linn Ave, Oregon City, OR 97045

FILE NUMBER: LEG-25-02

APPLICATION TYPE: Legislative (OCMC 17.50.170)

APPLICANT: City of Oregon City - Planning Division,
PO Box 3040, Oregon City, OR 97045

Aquilla Hurd-Ravich, AICP, Community Development Director
Pete Walter, Planning Manager

REQUEST: Amendments to the Oregon City Municipal Code to implement Parking Reforms for compliance with Climate Friendly and Equitable Communities rules

LOCATION(S): City Wide

I. BACKGROUND:

File No. LEG-25-02 amends various Chapters of the Oregon City Municipal Code to implement Oregon's new administrative rules (OAR) pertaining to parking that were recently enacted as part of the Climate Friendly and Equitable Communities (CFEC) program and provides recommended findings for legislative adoption of code updates that Oregon City will need to implement to comply with the new rules.

The parking-related rules (OAR 660-12-0400 through -0450) generally aim to reduce the amount of unnecessary parking built due to minimum requirements, and to reduce impacts of new parking to the extent possible. There are three broad paths to compliance allowed within the rules ("options," per DLCD's terminology).

- Option 1 is to repeal mandates entirely.

- Options 2 and 3 are to enact either a smaller subset of more significant reforms (Option 2) or a larger subset of less significant reforms (Option 3).

The Oregon City Commission directed Staff to proceed with Option 3.

Additionally, there are several requirements regarding newly developed or redeveloped parking specified by OARs 660-012-0405 (Parking Regulation Improvements) and 660-012-0410 (Electric Vehicle Charging) that necessitate updates to Oregon City's code, and additional rules addressing the maximum amount of parking that can be developed specified by OAR 660-012-0415.

The memo titled "Oregon City Conceptual Approach to CFEC Compliance" dated March 1, 2025, by the City's consultant Studio Davis discusses the preferred avenue to compliance for Oregon City. This avenue was developed beginning with an initial code audit conducted in 2023 by Jet Planning and refined through ongoing analysis and outreach conducted by Studio Davis and the City in tandem. The recommendations herein discuss and consider feedback received through an extensive outreach process that included presentations to the various boards and commissions serving Oregon City as well as a public workshop that included in-person and online elements.

PROCESS

Adoption of the code amendments is a legislative action that requires review and recommendation from the Planning Commission prior to adoption by the City Commission following public hearings.

Engagement & Outreach

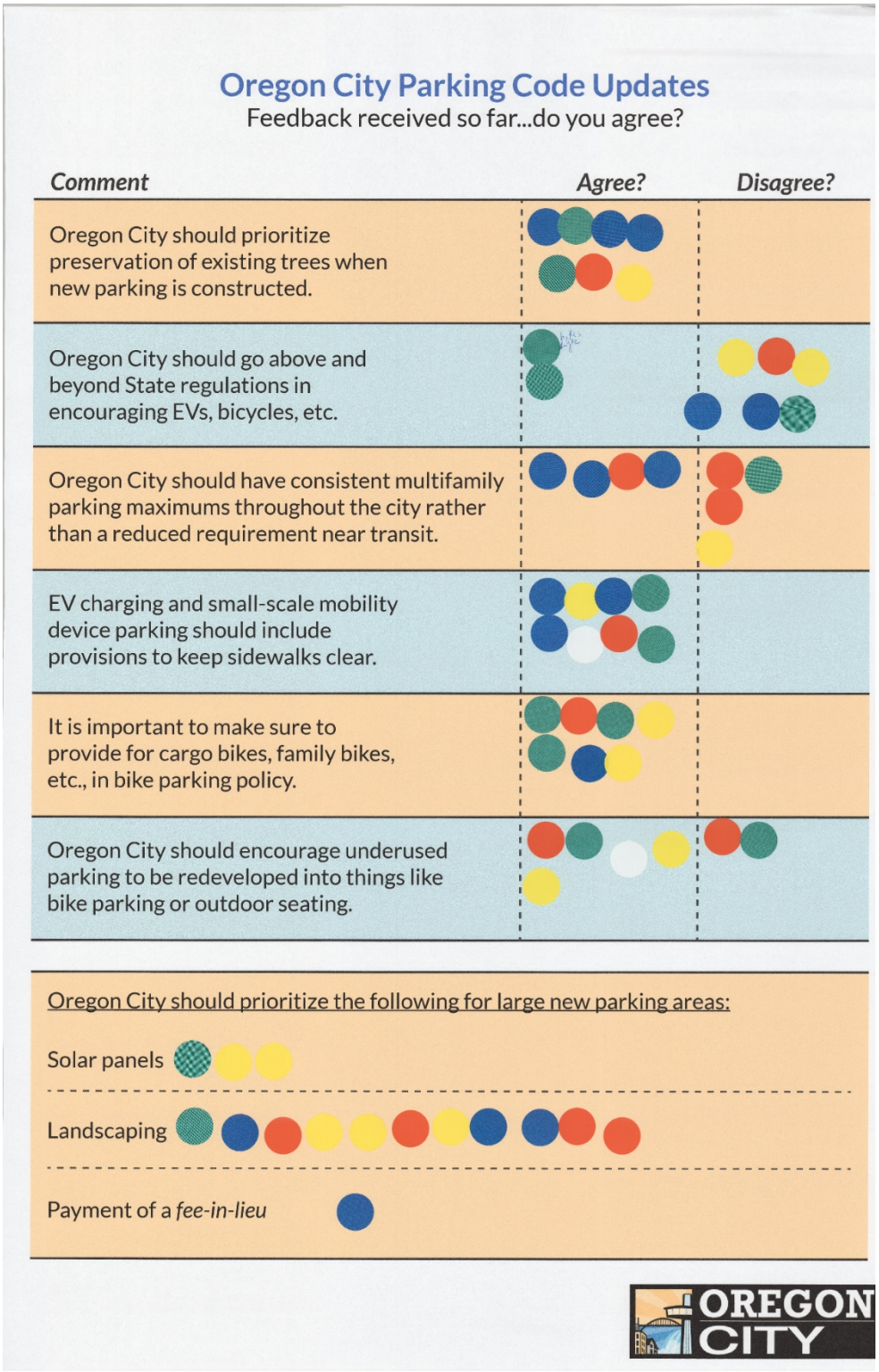
The approach to compliance detailed below was developed through a robust and inclusive outreach process that sought to obtain feedback from Oregon City residents, employees, and community leaders.

The initial round of engagement prior to October 2024 was conducted directly by City staff. In late 2024, an ad-hoc CFEC Committee was formed to advise the project team on implementing the necessary changes. From the City's initial engagement, Option 3 emerged as the preferred compliance alternative. The CFEC Committee supported this alternative and established the general framework for compliance.

While many elements of Option 3 are prescriptive, there are several areas where Oregon City has some discretion regarding how to meet requirements. The project team sought feedback on these areas through subsequent engagement efforts with the CFEC Committee and other standing committees during January and February 2025, including with a public open house held on February 10, 2025. For the Open House, the project team created a number of materials to solicit feedback, including creation of a poster that summarized the feedback received to date. That poster is shown below in Figure 1, and represents a good synopsis of feedback received, showing both the key points from the various commissions as well as the workshop's participants' dots indicating agreement or disagreement.

Figure 1

Again, many of the requirements Oregon City needs to update are strictly prescribed by the CFEC



rules. However, the engagement process generated detailed and thoughtful feedback on a number of areas where the City does have latitude. To the extent possible, that feedback has been incorporated into the recommended updates.

CFEC Advisory Committee

City Staff

Aquilla Hurd-Ravich, Community Development Director
Pete Walter, Planning Manager
Dayna Webb, Public Works Director
Ryan Kersey, Manager, Code and Parking Enforcement
Vance Walker, Manager, OCPW Operations
James Graham, Economic Development Manager
Ann Griffin, Economic Development Coordinator

Community Members

Juliana Allen, Downtown Oregon City Association (DOCA)
Andrew Crampton, Housing Authority of Clackamas County (HACC)
Dorothy Dahlsrud, Oregon City Citizen Involvement Committee (CIC)
Karla Laws, Community Member
Devin Ellen, Housing Authority of Clackamas County (HACC)
Dan Fowler, Downtown business owner
Gloria LaFleur, Housing Authority of Clackamas County (HACC)
Raymond Rendlemann, Transportation Advisory Committee (TAC)
Kristen Svicarovich, Confederated Tribes of the Grand Ronde
Tim Wuest, Oregon City Business Alliance, Parks and Recreation Advisory Committee (PRAC)
Vicki Yates, Resident / Mid-Town Business Owner
Ryan Webb, Confederated Tribes of the Grand Ronde
Samantha Wolf, Chair, Oregon City Natural Resources Committee (NRC)

Meetings / Outreach Dates

2024

January 9	City Commission work session
January 17	City Commission presentation
October 30	CFEC Advisory Committee Meeting #1
November 14	CFEC Advisory Committee Meeting #2

2025

January 9	Development Stakeholders Group
January 13	Planning Commission
February 3	Citizen Involvement Committee
February 10	Public Open House
February 10-17	On-Line Virtual Public Open House
February 12	Natural Resources Committee
February 26	Library Board
March 10	Planning Commission
March 11	City Commission

March 13	CFEC Advisory Committee meeting #3
March 18	Gaffney Lane Neighborhood Association
April 14	Planning Commission Public Hearing #1
May 7	City Commission Public Hearing #1
May 21	City Commission Public Hearing #2 (if needed)
June 4	City Commission 2nd Reading of Ordinance No. 25-1006

Public Notice and Comments
This is a legislative action that requires public notice pursuant to OCMC 17.50.090.C. - *Notice of Public Hearing on a Legislative Proposal*. The Community Development Director provided the required Post Acknowledgement Plan Amendment (PAPA) notice of the proposed changes to Land Use Regulations to the Oregon Department of Land Conservation and Development on March 7, 2025. Notice of the April 14, 2025 Planning Commission public hearing was also provided to the Citizen Involvement Committee, Natural Resources Committee, Neighborhood Associations, and affected service districts, agencies and parties by email on March 26, 2025.

Following the public notice, as of the date of this report, no public comments have been received.

Project Webpages
Prior to the legislative adoption process, staff created a webpage to inform the public about the CFEC regulations at **https://orcity.org/1553/Climate-Friendly-Equitable-Communities-C**.

At the start of the legislative adoption process, staff created a project webpage for the legislative file at **https://orcity.org/3367/LEG-25-02-Climate-Friendly-Equitable-Com**.

II. DECISION-MAKING CRITERIA
The remainder of this staff report provides additional findings to demonstrate that the proposed parking code amendments are consistent with applicable approval criteria.

Chapter 17.68 - Zoning Changes and Comprehensive Plan Amendments

17.68.010 - Initiation of the amendment.
A text amendment to the comprehensive plan, or an amendment to the zoning code or map or the Comprehensive Plan map, may be initiated by:
A. A resolution request by the City Commission;
B. An official proposal by the Planning Commission;
C. An application to the Planning Division; or.
D. A Legislative request by the Planning Division.
All requests for amendment or change in this title shall be referred to the Planning Commission.
Finding: The proposal qualifies as initiated as a legislative request by the Planning Division at the direction of the City Commission.

17.68.015 –Procedures.
Applications shall be reviewed pursuant to the procedures set forth in Chapter 17.50.

17.50.170 - Legislative hearing process.
A. Purpose. Legislative actions involve the adoption or amendment of the city's land use regulations, comprehensive plan, maps, inventories and other policy documents that affect the entire city or large portions of it. Legislative actions which affect land use shall begin with a public hearing before the planning commission.

B. Planning Commission Review.
1. Hearing Required. The planning commission shall hold at least one public hearing before recommending action on a legislative proposal. Any interested person may appear and provide written or oral testimony on the proposal at or prior to the hearing. The community development director shall notify the Oregon Department of Land Conservation and Development (DLCD) as required by the post-acknowledgment procedures of ORS 197.610 to 197.625, as applicable.

C. City Commission Review.
1. City Commission Action. Upon a recommendation from the planning commission on a legislative action, the city commission shall hold at least one public hearing on the proposal. Any interested person may provide written or oral testimony on the proposal at or prior to the hearing. At the conclusion of the hearing, the city commission may adopt, modify or reject the legislative proposal, or it may remand the matter to the planning commission for further consideration. If the decision is to adopt at least some form of the proposal, and thereby amend the city's land use regulations, comprehensive plan, official zoning maps or some component of any of these documents, the city commission decision shall be enacted as an ordinance.

2. Notice of Final Decision. Not later than five days following the city commission final decision, the community development director shall mail notice of the decision to DLCD in accordance with ORS 197.615(2).

Finding: This legislative action followed the procedures found in OCMC 17.50.170 including meetings with the Citizen Involvement Committee, Natural Resource Committee, Planning Commission, and City Commission where applicable. A complete timeline of the meeting is provided on Page 3 of this report. Ordinance No. 25-1006 has been drafted for enactment by the City Commission.

17.68.020 - Criteria.
The criteria for comprehensive plan amendment or text or map amendment in the zoning code are set forth as follows:
A. The proposal shall be consistent with the applicable goals and policies of the comprehensive plan;

Finding: This legislative action is consistent with the applicable goals and policies of the comprehensive plan as detailed in the responses below. Therefore, the proposed amendments are consistent with Criterion (A).

OC2040 Comprehensive Plan
CHAPTER 1 - HEALTHY AND WELCOMING COMMUNITIES

GOAL 1 Implement and maintain a community engagement program that provides broad and inclusive opportunities for all Oregon City community members to learn about and understand city government processes, including land use planning, and participate meaningfully in decisions that impact their communities.

POLICY 1.3 Seek opportunities to develop and enhance relationships with community-based organizations (CBOs) who are working in Oregon City and the larger region.

POLICY 1.4 Utilize innovative forms of communication technology to enhance the City's public engagement efforts.

POLICY 1.5 Provide on-going education to the community regarding land use projects and processes and ensure clear communication about when and how to be involved at key points in the process.

Finding: the proposal is consistent with these applicable goals and policies of the OC2040 Comprehensive Plan. Additionally, as required under OAR 660-12 Development of the CFEC implementation included a robust public outreach and engagement process, summarized on pages 2-4 of this report. The public process that led to the legislative file included a presentation to the Citizen Involvement Committee and numerous other boards and committees. A virtual open house was held online to allow the public to participate remotely. All the meetings allowed for both in-person and virtual participation.

OC2040 Comprehensive Plan
CHAPTER 2: DIVERSE ECONOMY

GOAL 3 Guide growth and development in a manner that implements the City's 2040 Vision and maintains an urban growth boundary that supports and accommodates projected population and employment during the 20-year planning period.

POLICY 3.1 Promote efficient use of land and public infrastructure and plan for appropriate infill development, redevelopment, and new development.

STRATEGY 3.1.A Create incentives for new development to use land more efficiently, such as by having minimum floor area ratios and maximums for parking and setbacks.

STRATEGY 3.1.B Encourage the vertical and horizontal mixing of different land-use types in selected areas of the city where compatible uses can be designed to reduce the overall need for parking, create vibrant urban areas, reduce reliance on private automobiles, create more business opportunities and achieve better places to live.

GOAL 4 Encourage and support new development that incorporates supportive community features and sustainability principles in site design and building construction.

STRATEGY 4.2.A Encourage designs that achieve a minimum "Certified" level of LEED (Leadership in Energy and Environmental Design) certification.

STRATEGY 4.2.B Encourage commercial and industrial development that enhances livability of neighborhoods through the design of attractive LEED certified buildings and environmentally responsible landscaping that uses native vegetation wherever possible, and by ensuring that development is screened and buffered from adjoining residential neighborhoods and access is provided by a variety of transportation modes.

STRATEGY 4.2.C Encourage siting and construction of new development to take advantage of solar energy, minimize energy usage, and maximize opportunities for public transit.

POLICY 4.3 Utilize urban design principles that create comfortable and attractive public spaces that are reflective of Oregon City's community vision.

Finding: the proposal is consistent with these applicable goals and policies of the OC2040 Comprehensive Plan. Implementing parking reforms where land uses are supported by frequent transit and encouraging the reuse of underutilized parking areas will support community features and sustainability principles in site design and building construction and reduce barriers to redevelopment.

OC2040 Comprehensive Plan
CHAPTER 3 – CONNECTED INFRASTRUCTURE

GOAL 1 Provide a safe, comfortable, and accessible transportation network that serves all modes of travel, including non-motorized modes.

POLICY 1.2 Reduce Oregon City's carbon footprint by supporting and emphasizing non-motorized modes.

GOAL 4 Promote and support energy conservation, sustainability, and resiliency through best practices in infrastructure planning, operations, and management.

POLICY 2.4 Increase resiliency to climate change, natural hazard events, and cyber intrusions in public utility infrastructure.

POLICY 4.2 Continue to implement green, sustainable, and low-impact approaches to stormwater management.

STRATEGY 4.2.A Ensure parking lot designs that mitigate stormwater impacts. Take measures to reduce waterflow and increase water absorption using bioswales, vegetated landscaped islands with curb cuts to allow water inflow, and increase tree planting.

Finding: the proposal is consistent with these applicable goals and policies of the OC2040 Comprehensive Plan. The code amendments are intended to increase resiliency to climate change and will augment regulations already implemented by Oregon State Building Codes and used by City staff in the Building, Planning, and Engineering Divisions to promote more sustainable development. The zoning code already supports significant reductions in parking minimums to support land uses like restaurants and housing. CFEC rules include encouraging reuse of underutilized parking areas for purposes like outdoor seating areas, a policy the city already supports, and for electric vehicle charging, solar panels, and pedestrian and bicycle parking spaces.

OC2040 Comprehensive Plan
CHAPTER 4 – PROTECTED ENVIRONMENT

GOAL 2 Conserve, protect, and enhance the function, health, and diversity of the City's natural resources and ecosystems.

POLICY 2.1 Develop and adopt a Climate Action Plan for Oregon City.

POLICY 2.2 Implement site development and design practices that incorporate natural ecosystem enhancement, minimize impacts on natural resources, and avoid degradation or loss of wetlands, watershed, and habitat.

STRATEGY 2.2.A Adopt and/or establish standards for all new development that promote the use of pervious surfaces and prevent negative ecological effects of urban stormwater runoff on streams, creeks and rivers.

STRATEGY 2.2.B Encourage use of native and hardy plants such as trees, shrubs and groundcovers to maintain ecological function and reduce maintenance costs and chemical use.

POLICY 2.4 Protect and enhance the urban forest tree canopy.

STRATEGY 2.4.A Encourage the maintenance and improvement of the city's tree canopy to improve air quality.

POLICY 2.7 Support programs and methods that will improve air quality in Oregon City.

STRATEGY 2.7.A Promote land-use patterns that reduce the need for distance travel by single-occupancy vehicles and increase opportunities for

walking, biking and/or transit to destinations such as places of employment, shopping and education.

Finding: the proposal is consistent with these applicable goals and policies of the OC2040 Comprehensive Plan. Adoption of these code amendments will augment the protection of natural resources already protected by the Oregon City Comprehensive Plan and its implementing ordinances.

Requiring parking within one-half mile of Tri-Met Bus Line 33 is disallowed per OAR 660-012-0440. However, the rule allows the City to distinguish between a straight-line distance and a walking distance.

> OAR 660-012-0440(*4) Cities and counties may use either walking distance or straight-line distance in measuring distances in this rule.*

The original maps and corridors the City has used to implement this section were based on the straight-line measurements which creates a rather wide transit corridor throughout the City. Since receiving feedback from the City Commission, City staff worked to analyze a half (1/2) mile walking distance buffer based on bus stops along Line 33. This approach reduces the width of the buffer which means there are more areas of the City subject to parking minimums. Staff is requesting direction on which method to use when measuring the half (½) mile transit corridor. Based on this direction staff will create a map that can be referenced upon implementation.

Chapter 17.50 Administration and Procedures

17.50.050 – Pre-application conference.
A. Pre-application Conference. Prior to a Type II – IV or Legislative application, excluding Historic Review, being deemed complete, the applicant shall schedule and attend a pre-application conference with City staff to discuss the proposal, unless waived by the Community Development Director. The purpose of the pre-application conference is to provide an opportunity for staff to provide the applicant with information on the likely impacts, limitations, requirements, approval standards, fees and other information that may affect the proposal.

1. *To schedule a pre-application conference, the applicant shall contact the Planning Division, submit the required materials, and pay the appropriate conference fee.*
2. *At a minimum, an applicant should submit a short narrative describing the proposal and a proposed site plan, drawn to a scale acceptable to the City, which identifies the proposed land uses, traffic circulation, and public rights-of-way and all other required plans.*
3. *The Planning Division shall provide the applicant(s) with the identity and contact persons for all affected neighborhood associations as well as a written summary of the pre-application conference.*
4. *A pre-application conference shall be valid for a period of six months from the date it is held. If no application is filed within six months of the conference or meeting, the applicant shall schedule and attend another conference before the City will accept a permit application. The Community Development Director may waive the pre-application requirement if, in the Director's opinion, the development has not changed significantly and the applicable municipal code or standards have not been significantly amended. In no case shall a pre-application conference be valid for more than one year.*

5. C. Notwithstanding any representations by City staff at a pre-application conference, staff is not authorized to waive any requirements of this code, and any omission or failure by staff to recite to an applicant all relevant applicable land use requirements shall not constitute a waiver by the City of any standard or requirement.

Finding: this application is filed by the Planning Division who is responsible for administering the legislative review process. The pre-application was waived by the Community Development Director.

17.50.055 - Neighborhood association meeting.

Neighborhood Association Meeting. The purpose of the meeting with the recognized neighborhood association is to inform the affected neighborhood association about the proposed development and to receive the preliminary responses and suggestions from the neighborhood association and the member residents.

A. Applicants applying for annexations, zone change, comprehensive plan amendments, conditional use, Planning Commission variances, subdivision, or site plan and design review (excluding minor site plan and design review), general development master plans or detailed development plans applications shall schedule and attend a meeting with the City-recognized neighborhood association in whose territory the application is proposed no earlier than one year prior to the date of application. Although not required for other projects than those identified above, a meeting with the neighborhood association is highly recommended.

B. The applicant shall request via email or regular mail a request to meet with the neighborhood association chair where the proposed development is located. The notice shall describe the proposed project. A copy of this notice shall also be provided to the chair of the Citizen Involvement Committee.

C. A meeting shall be scheduled within thirty days of the date that the notice is sent. A meeting may be scheduled later than thirty days if by mutual agreement of the applicant and the neighborhood association. If the neighborhood association does not want to, or cannot meet within thirty days, the applicant shall host a meeting inviting the neighborhood association, Citizen Involvement Committee, and all property owners within three hundred feet to attend. This meeting shall not begin before six p.m. on a weekday or may be held on a weekend and shall occur within the neighborhood association boundaries or at a City facility.

D. If the neighborhood association is not currently recognized by the City, is inactive, or does not exist, the applicant shall request a meeting with the Citizen Involvement Committee.

E. To show compliance with this section, the applicant shall submit a copy of the email or mail notice to the neighborhood association and CIC chair, a sign-in sheet of meeting attendees, and a summary of issues discussed at the meeting. If the applicant held a separately noticed meeting, the applicant shall submit a copy of the meeting flyer, postcard or other correspondence used, and a summary of issues discussed at the meeting and submittal of these materials shall be required for a complete application.

Finding: legislative applications are not a listed land use review type that requires a neighborhood association meeting. Staff presented the proposal to the Citizen Involvement Committee on

February 3, 2025. A copy of the PowerPoint presentation is attached to the application by reference.

17.50.070 - Completeness review and one hundred twenty-day rule.

C. Once the Community Development Director determines the application is complete enough to process, or the applicant refuses to submit any more information, the City shall declare the application complete. Pursuant to ORS 227.178, the City will reach a final decision on an application within one hundred twenty calendar days from the date that the application is determined to be or deemed complete unless the applicant agrees to suspend the one hundred twenty calendar day time line or unless State law provides otherwise. The one hundred twenty-day period, however, does not apply in the following situations:

1. Any hearing continuance or other process delay requested by the applicant shall be deemed an extension or waiver, as appropriate, of the one hundred twenty-day period.

2. Any delay in the decision-making process necessitated because the applicant provided an incomplete set of mailing labels for the record property owners within three hundred feet of the subject property shall extend the one hundred twenty-day period for the amount of time required to correct the notice defect.

3. The one hundred twenty-day period does not apply to any application for a permit that is not wholly within the City's authority and control.

4. The one hundred twenty-day period does not apply to any application for an amendment to the City's comprehensive plan or land use regulations nor to any application for a permit, the approval of which depends upon a plan amendment.

D. A one-hundred day period applies in place of the one-hundred-twenty day period for affordable housing projects where:

1. The project includes five or more residential units, including assisted living facilities or group homes;

2. At least 50% of the residential units will be sold or rented to households with incomes equal to or less than 60% of the median family income for Clackamas County or for the state, whichever is greater; and

3. Development is subject to a covenant restricting the owner and successive owner from selling or renting any of the affordable units as housing that is not affordable for a period of 60 years from the date of the certificate of occupancy.

E. The one hundred twenty-day period specified in OCMC 17.50.070.C or D may be extended for a specified period of time at the written request of the applicant. The total of all extensions may not exceed two hundred forty-five calendar days.

F. The approval standards that control the City's review and decision on a complete application are those which were in effect on the date the application was first submitted.

Finding: Legislative actions are not subject to the 120-day deadline.

III. RECOMMENDATION

Based on the findings in this report, staff recommends approval of file LEG-25-02. If the Planning Commission recommends approval to the City Commission, staff will prepare an Ordinance for consideration by the City Commission to adopt the proposed code amendments.

IV. EXHIBITS

1) Proposed Amendments to the Oregon City Municipal Code
   a) Redline version
   b) Clean version
2) Meeting materials and PowerPoint presentations for all meetings attended for the public engagement process are part of the record by reference. All the meeting dates are listed on pages 3-4 of this report. Minutes for these meetings may be available from the respective body.
3) Memorandum "RE: Oregon City Conceptual Approach to CFEC Compliance", Brian Davis, AICP, March 1, 2025.
4) Oregon City Frequent Transit Corridor Map – ½ Mile Buffer
   a) Buffer based on straight line measurement from corridor
   b) Walkshed based on ½ mile walkshed from Bus Stops w/ zoning
   c) Walkshed/Buffer comparison
   d) Walkshed/Buffer comparison – w/ zoning in between the two areas
5) DLCD Summary of Parking Reforms for Oregon City
6) ORS 197.646 DLCD Notice to Metro Area Local Governments, Sept. 19, 2022

Chapter 17.04 DEFINITIONS

[Note: the following is a list of new or amended definitions intended to implement CFEC code requirements) – these definitions will be numbered in the Municipal Code when codified.]

Change of Use

"Change of Use" means a type of development in which the principal use for an existing site or building is changed to a new different use, but not including a change of ownership, tenancy, or management where the previous nature of the use, line of business, or other function is substantially unchanged. A change of use may or may not require land use approval depending on the scale and type of use proposed. For example, if an existing warehouse in an industrial zone were to be converted to a manufacturing facility, and both the existing and the proposed use are permitted in the zone, a change of use is occurring, however, land use review would be limited to only the aspects of the use that are changing. See also definition for "Development".

Electrical Service Capacity

"Electrical service capacity" means:

(a) Building electrical service, sized for the anticipated load of electric vehicle charging stations, that has overcurrent devices necessary for electric vehicle charging stations or has adequate space to add the overcurrent devices;

(b) Designated space within a building to add electrical service with capacity for electric vehicle charging stations; or

(c) A designated location on building property, in or adjacent to a landscaped area, for installing remote service for electric vehicle charging stations; and

(d) A conduit system installed from building electrical service, or from the dedicated spaces or locations described in subparagraph (A) of this paragraph, to parking spaces that can support, at a minimum, electrical wiring for installation of level 2 electric vehicle charging stations and, if the conduit is for future installation of electric vehicle charging stations, that labels both ends of the conduit to mark the conduit as provided for future electric vehicle charging stations.

Electric vehicle charging station

"Electric vehicle charging station" means a device or facility for delivering electricity for motor vehicles that use electricity for propulsion.

Frequent Transit Corridor

"Frequent Transit Corridor" means:

(a) Priority transit corridors designated under OAR 660-012-0710; or
(b) Corridors with transit service arriving with a scheduled frequency of at least four times an hour during peak service; or
(c) If no corridor qualifying under subsection (b), corridors with the most frequent transit service in the community if the scheduled frequency is at least once per hour during peak service.

Level 2 electric vehicle charging station

"Level 2 electric vehicle charging station" means an electric vehicle charging station that uses 240V AC electricity for charging an EV.

Mixed Use Development

"Mixed Use Development" means

Existing language in code: "more than one type of land use occupies a single structure or parcel of land."

or:

The development of a single property, or contiguous properties under single ownership, with a building or buildings which comprise two or more different land uses including residential, office, retail, recreational, light industrial, institutional, and other listed uses where permitted.

New Parking Lot

"New parking lot" or space means any of the following:

(a) New parking lot area or space where no parking previously existed.

(b) Removal and replacement of pavement and subgrade of existing parking areas greater than six inches deep (6").

(c) The term new parking lot does not apply to crack and chip sealing, patching, repaving over existing subgrade or selective repair of damaged areas less than six inches (6").

New Parking lot area.

"New parking lot area" means all surface area on which a vehicle can drive, including all parking stalls, all drives and drive-through lanes within the property regardless of length, and all maneuvering areas regardless of depth. New parking lot area does not include areas not used by passenger vehicles such as loading areas or outdoor storage.

Oregon City Regional Center

Oregon City Regional Center means the area indicated on the adopted Regional Center Map for downtown and North End Areas of the City that implements the Metro Region 2040 Center Concept for Oregon City. The Regional Center spans the area from the former paper mill to Clackamette Cove and the intersection of OR-213 / I-205 / OR 99E, from the banks of the Willamette and Clackamas Rivers to the bluff, and areas on both sides of McLoughlin Boulevard. The majority of the Oregon City Regional Center is zoned Mixed Use Downtown, although other zone districts are present within the boundary of the Regional Center.

Oregon Residential Reach Code

"Oregon Residential Reach Code" means a statewide optional energy construction standard approved by the Building Codes Division. It is separate from the state building code and applicable at the designer's and contractor's discretion.

Small scale mobility device

"Small scale mobility device" means electric bicycles, electric scooters, and other personal electric assistive mobility devices such as electric wheelchairs.

Surface Parking

"Surface Parking" means the area measured around the perimeter of all new parking spaces, maneuvering areas, and interior landscaping.

Underused parking

"Underused parking" means parking lots or facilities that are below 50% of capacity most or all of the time.

17.04.595 Institutional development.

"Institutional development" includes all public, semi-public and private community facilities and uses, including government office and maintenance facilities, educational facilities, research institutions, correctional institutions, museums, libraries, stadiums, hospitals, residential ~~care~~ facilities, auditoriums and convention or meeting halls, churches, parks and public recreational facilities, automobile parking structures, and other similar facilities and uses.

"Residential Care Facilities" is revised to "Residential Facilities" to be consistent with ORS 443.400, and the existing definition in OCMC 17.04.1025.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019)

17.08.025 Conditional uses.

The following uses are permitted in the R-10, R-8 and R-6 districts when authorized by and in accordance with the standards contained in OCMC 17.56:

A. Golf courses, except miniature golf courses, driving ranges or similar commercial enterprises;

B. Bed and breakfast inns/boarding houses;

C. Cemeteries, crematories, mausoleums and columbariums;

D. Child care centers and nursery schools;

E. Emergency service facilities (police and fire), excluding correctional facilities;

F. Residential ~~care~~ facilities;

G. Private and/or public educational or training facilities;

H. Public utilities, including sub-stations (such as buildings, plants and other structures);

I. Religious institutions;

J. Assisted living facilities; nursing homes and group homes for over fifteen patients.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019)

"Residential Care Facilities" is revised to "Residential Facilities" to be consistent with ORS 443.400, and the existing definition in OCMC 17.04.1025.

17.10.025 Conditional uses.

The following uses are permitted in the R-5 and R-3.5 districts when authorized by and in accordance with the standards contained in OCMC 17.56:

A. Golf courses, except miniature golf courses, driving ranges or similar commercial enterprises;

B. Bed and breakfast inns/boarding houses;

C. Cemeteries, crematories, mausoleums and columbariums;

D. Child care centers and nursery schools;

E. Emergency service facilities (police and fire), excluding correctional facilities;

F. Residential ~~care~~ facilities;

"Residential Care Facilities" is revised to "Residential Facilities" to be consistent with ORS 443.400, and the existing definition in OCMC 17.04.1025.

G. Private and/or public educational or training facilities;

H. Public utilities, including sub-stations (such as buildings, plants and other structures);

I. Religious institutions;

J. Assisted living facilities; nursing homes and group homes for over fifteen patients;

K. Live/work dwellings.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019)

17.12.020 Permitted uses.

Permitted uses in the R-2 district are:

A. Accessory dwelling units for existing single-family detached residential units constructed prior to the effective date of the ordinance codified in this chapter;

B. Duplexes;

C. Triplexes;

D. Quadplexes;

E. Townhouses;

F. Multi-family residential;

G. Cottage clusters;

H. Residential ~~care~~ facilities;

"Residential Care Facilities" is revised to "Residential Facilities" to be consistent with ORS 443.400, and the existing definition in OCMC 17.04.1025.

I. Accessory buildings;

J. Parks, playgrounds, playfields and community or neighborhood centers;

K. Home occupations;

L. Family day care providers;

M. Temporary real estate offices in model homes located on and limited to sales of real estate on a single piece of platted property upon which new residential buildings are being constructed;

N. Management and associated offices and buildings necessary for the operations of a multi-family residential development;

O. Transportation facilities.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.29.020 Permitted uses—MUC-1 and MUC-2.

A. Banquet, conference facilities and meeting rooms.

B. Bed and breakfast/boarding houses, hotels, motels, and other lodging facilities.

C. Child care centers and/or nursery schools.

D. Indoor entertainment centers and arcades.

E. Health and fitness clubs.

F. Medical and dental clinics, outpatient; infirmary services.

G. Museums, libraries and cultural facilities.

H. Offices, including finance, insurance, real estate and government.

I. Outdoor markets, such as produce stands, craft markets and farmers markets that are operated on the weekends and after six p.m. during the weekday.

J. Postal services.

K. Parks, playgrounds, playfields and community or neighborhood centers.

L. Repair shops, for radio and television, office equipment, bicycles, electronic equipment, shoes and small appliances and equipment.

M. Multi-family residential, triplexes and quadplexes.

N. One or two dwelling units in conjunction with a nonresidential use, provided that the residential use occupies no more than fifty percent of the total square footage of the development.

O. Restaurants, eating and drinking establishments without a drive-through.

P. Services, including personal, professional, educational and financial services; laundry and dry-cleaning.

Q. Retail trade, including grocery, hardware and gift shops, bakeries, delicatessens, florists, pharmacies, specialty stores, marijuana, and similar, provided the maximum footprint for a stand-alone building with a single store or multiple buildings with the same business does not exceed sixty thousand square feet.

R. Seasonal sales.

S. Residential ~~care~~ facilities, assisted living facilities; nursing homes and group homes for over fifteen patients licensed by the state.

"Residential Care Facilities" is revised to "Residential Facilities" to be consistent with ORS 443.400, and the existing definition in OCMC 17.04.1025.

T. Studios and galleries, including dance, art, photography, music and other arts.

U. Utilities: Basic and linear facilities, such as water, sewer, power, telephone, cable, electrical and natural gas lines, not including major facilities such as sewage and water treatment plants, pump stations, water tanks, telephone exchanges and cell towers.

V. Veterinary clinics or pet hospitals, pet day care.

W. Home occupations.

X. Research and development activities.

Y. Temporary real estate offices in model dwellings located on and limited to sales of real estate on a single piece of platted property upon which new residential buildings are being constructed.

Z. Transportation facilities.

AA. Live/work dwellings.

BB. Accessory dwelling unit in conjunction with a legally established non-conforming single-family dwelling.

CC. Duplex.

DD. After-hours public parking.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 13-1003, § 1(Exh. 1), 7-17-2013; Ord. No. 13-1017, § 1(Exh. 1), 4-16-2014; Ord. No. 16-1008, § 1(Exh. A), 10-19-2016, ballot 11-8-2016; Ord. No. 18-1005, § 1(Exh. A), 5-2-2018; Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.34.020 Permitted uses.

Permitted uses in the MUD district are defined as:

A. Banquet, conference facilities and meeting rooms;

B. Bed and breakfast/boarding houses, hotels, motels, and other lodging facilities;

C. Child care centers and/or nursery schools;

D. Indoor entertainment centers and arcades;

E. Health and fitness clubs;

F. Medical and dental clinics, outpatient; infirmary services;

G. Museums, libraries and cultural facilities;

H. Offices, including finance, insurance, real estate and government;

I. Outdoor markets, such as produce stands, craft markets and farmers markets that are operated on the weekends and after six p.m. during the weekday;

J. Postal services;

K. Repair shops, for radio and television, office equipment, bicycles, electronic equipment, shoes and small appliances and equipment;

L. Multi-family residential, triplexes and quadplexes;

M. One or two units in conjunction with a nonresidential use provided that the residential use occupies no more than fifty percent of the total square footage of the development;

N. Restaurants, eating and drinking establishments without a drive-through;

O. Services, including personal, professional, educational and financial services; laundry and dry-cleaning;

P. Retail trade, including grocery, hardware and gift shops, bakeries, delicatessens, florists, pharmacies, specialty stores provided the maximum footprint of a freestanding building with a single store does not exceed sixty thousand square feet (a freestanding building over sixty thousand square feet is allowed as long as the building contains multiple stores);

Q. Seasonal sales;

R. Residential ~~care~~ facilities, assisted living facilities; nursing homes and group homes for over fifteen patients licensed by the state;

"Residential Care Facilities" is revised to "Residential Facilities" to be consistent with ORS 443.400, and the existing definition in OCMC 17.04.1025.

S. Studios and galleries, including dance, art, photography, music and other arts;

T. Utilities: Basic and linear facilities, such as water, sewer, power, telephone, cable, electrical and natural gas lines, not including major facilities such as sewage and water treatment plants, pump stations, water tanks, telephone exchanges and cell towers;

U. Veterinary clinics or pet hospitals, pet day care;

V. Home occupations;

W. Research and development activities;

X. Temporary real estate offices in model dwellings located on and limited to sales of real estate on a single piece of platted property upon which new residential buildings are being constructed;

Y. Transportation facilities;

Z. Live/work dwellings;

AA. After-hours public parking;

BB. Marinas;

CC. Religious institutions;

DD. Mobile food units outside of the downtown design district.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.35.030 Conditional uses.

The following uses are permitted in this district when authorized and in accordance with the process and standards contained in OCMC 17.56:

A. Emergency services;

B. Hospitals;

C. Assisted living facilities; nursing homes, residential ~~care~~ facilities and group homes for over fifteen patients;

"Residential Care Facilities" is revised to "Residential Facilities" to be consistent with ORS 443.400, and the existing definition in OCMC 17.04.1025.

D. Parking not in conjunction with a primary use on private property, excluding after-hours public parking;

E. Retail trade, including grocery, hardware and gift shops, bakeries, delicatessens, florists, pharmacies and specialty stores in a freestanding building with a single store exceeding forty thousand square feet;

F. Public facilities such as sewage and water treatment plants, water towers and recycling and resource recovery centers;

G. Industrial uses including food and beverage production, design, light manufacturing, processing, assembly, packaging, fabrication and treatment of products made from previously prepared or semi-finished materials that exceed sixty thousand square feet;

H. Public utilities and services such as pump stations and sub-stations;

I. Stadiums and arenas.

(Ord. No. 14-1016, § 1(Att. B), 11-5-2014; Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

Chapter 17.52 OFF-STREET PARKING AND LOADING[1]

17.52.005 Purpose

The purpose of this chapter is…

A. To ensure that off-street parking is well-designed, efficiently used and compatible with adjacent land uses and the transportation system, and provides safe internal circulation for temporary parking of vehicles, pedestrians, bicycles, small scale mobility devices and transit needs;

C. To regulate the number of spaces, access, dimensions, tree canopy, landscaping, surfacing and drainage of parking areas;

D. To provide incentives for repurposing, reusing and reducing underused and unneeded parking areas and impervious areas used for parking.

CFEC Requirement

N/A

Explanation

Although not required for CFEC compliance, this adds a purpose statement to clarify the chapter's intent. The "Applicability" section below should remain a distinct section from the "Purpose" section.

17.52.010 Applicability.

The construction of a new structure or parking lot, or alterations to the size or use of an existing structure, parking lot or property use shall require site plan review approval and compliance with this chapter. This chapter does not apply to residential developments including single-family detached residential dwellings, duplexes, townhouses, tri- or 3-plexes, quad- or 4-plexes, and cottage clusters.

CFEC Requirement

Reducing the Burden of Parking Mandates (OAR 660-012-0425)

Explanation

Oregon City complies per OCMC 17.52.010 – Applicability, but this addition now expressly mentions triplex and 4-plexes for clarity.

[1]Editor's note(s)—Ord. No. 18-1009, § 1(Exh. A), adopted July 3, 2019, amended Chapter 17.52 in its entirety to read as herein set out. Former Chapter 17.52, §§ 17.52.010—17.52.090, pertained to similar subject matter, and derived from Ord. No. 10-1003, adopted July 7, 2010; Ord. No. 13-1003, adopted July 17, 2013; Ord. No. 14-1016, adopted November 5, 2014 and Ord. No. 18-1005, adopted May 2, 2018.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.52.015 Planning commission adjustment of parking standards.

A. Purpose. The purpose of permitting a planning commission adjustment to parking standards is to provide for flexibility in modifying parking standards in all zoning districts, without permitting an adjustment that would adversely impact the surrounding or planned neighborhood. Adjustments provide flexibility to those uses which may be extraordinary, unique, or provide greater flexibility for areas that can accommodate a denser development pattern based on existing infrastructure and ability to access the site by means of walking, biking or transit. An adjustment to a minimum parking standard may be approved based on a determination by the planning commission that the adjustment is consistent with the purpose of this code, and the approval criteria can be met.

B. Procedure. A request for a planning commission parking adjustment shall be initiated by a property owner or authorized agent by filing a land use application. The application shall be accompanied by a site plan, drawn to scale, showing the dimensions and arrangement of the proposed development and parking plan, the extent of the adjustment requested along with findings for each applicable approval criteria. A request for a parking adjustment shall be processed as a Type III application as set forth in Chapter 17.50.

C. Approval criteria for the adjustment are as follows:

1. Documentation. The applicant shall document that the individual project will require an amount of parking that is different from that required after all applicable reductions have been taken.

2. Parking Analysis for Surrounding Uses and On-Street Parking Availability. The applicant shall show that there is a continued fifteen percent parking vacancy in the area adjacent to the use during peak parking periods and that the applicant has permission to occupy this area to serve the use pursuant to the procedures set forth by the community development director.

a. For the purposes of demonstrating the availability of on street parking as defined in OCMC 17.52.020.B.3, the applicant shall undertake a parking study during time periods specified by the community development director. The time periods shall include those during which the highest parking demand is anticipated by the proposed use. Multiple observations during multiple days shall be required. Distances are to be calculated as traversed by a pedestrian that utilizes sidewalks and legal crosswalks or an alternative manner as accepted by the community development director.

b. The on-site parking requirements may be reduced based on the parking vacancy identified in the parking study. The amount of the reduction in on-site parking shall be calculated as follows:

i. Vacant on-street parking spaces within three hundred feet of the site will reduce on-site parking requirements by 0.5 parking spaces; and

ii. Vacant on-street parking spaces between three hundred and six hundred feet of the site will reduce on-site parking requirements by 0.2 parking spaces.

3. Function and Use of Site. The applicant shall demonstrate that modifying the amount of required parking spaces will not significantly impact the use or function of the site and/or adjacent sites.

4. Compatibility. The proposal is compatible with the character, scale and existing or planned uses of the surrounding neighborhood.

5. Safety. The proposal does not significantly impact the safety of adjacent properties and rights-of-way.

6. Services. The proposal will not create a significant impact to public services, including fire and emergency services.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.52.020 Number of automobile spaces ~~required~~.

A. Exemptions. The City shall not require a minimum number of parking spaces in the following situations.

1. Residential developments with more than one unit on a single Lot of Record as defined by 17.04.695.
2. Developments on a lot or parcel that includes lands within one-half (1/2) mile of a frequent transit corridor.
3. Per OAR 660-012-0435, no off-street parking is required within the Oregon City Regional Center, and within one-quarter mile of the Oregon City Regional Center.
4. Facilities and homes designed to serve people with psychosocial, physical, intellectual or developmental disabilities, including but not limited to a: residential care facility, residential training facility, residential treatment facility, residential training home, residential treatment home, and conversion facility as defined in ORS 443.400;
5. Child care facility as defined in ORS 329A.250;

~~Single-room occupancy housing;~~

6. Residential units smaller than 750 square feet;
7. Affordable housing as defined in OAR 660-039-0010;
8. Publicly supported housing as defined in ORS 456.250;
9. Emergency and transitional shelters for people experiencing homelessness; and
10. Domestic violence shelters.
11. Change of use of, or redevelopment of, buildings vacant for more than two years, provided the applicant provides evidence that the building was vacant prior to the effective date of this ordinance.
12. Change of use or redevelopment where at least 50 percent of the building floor area is retained.
13. Expansion of existing businesses provided that the cumulative expansion within one calendar year does not exceed 30 percent of the existing building footprint.
14. Designated historic buildings and landmarks pursuant to OCMC 17.40.030 – Historic Overlay District.
15. Commercial properties with fewer than ten (10) on-site employees or 3,000 square feet of floor space.
16. Developments built under the Oregon Residential Reach Code.
17. Developments seeking certification under any Leadership in Energy and Environmental Design (LEED) rating system.
18. Schools as defined in OCMC 17.04
19. Bars and taverns
20. Mixed-use development.

A change in use within an existing habitable building located in the MUD design district or the Willamette Falls Downtown District is exempt from additional parking requirements.

21. Additions to an existing building and new construction that do not constitute cumulative expansion more than 30% within one calendar year are required to meet the minimum parking requirements for the areas as specified in Table 17.52.020 for the increased square footage.

CFEC Requirement

Reducing the Burden of Parking Mandates (OAR 660-012-0425)

Reduction of Parking Mandates for Development Types (OAR 660-012-0430)

Explanation

The new exemption section implements the majority of CFEC requirements in OAR 660-012-0425 and 660-012 0430 into one part of the code, although there is some redundancy with Table 17.52.020 which displays minimum and maximum parking by specific use in a tabular format. References to "minimum" and "required" parking have been removed in accordance with CFEC guidance, where needed.

B. Where new parking is proposed ~~T~~the number of parking spaces shall comply with the minimum and ~~minimum and~~ maximum ~~standards~~ ratio listed in Table 17.52.020. The maximum parking requirements are based on spaces per one thousand square feet net leasable area unless otherwise stated.

Table 17.52.020

Land Use	Minimum and Maximum Parking ~~Requirements~~	
	Minimum	Maximum
Bars and taverns	Not required	
Cottage cluster	Not required	
Multi-family residential ~~(~~no studio units)	1.00 per unit	2~~.5~~ per unit
Multi-family residential, studio unit or one-bedroom	Not required	1.2 per unit
Triplex and quadplex	~~2.00~~Not required	4
Hotel, motel	1.0 per guest room	1.25 per guest room
Correctional Institution	1 per 7 beds	1 per 5 beds
Senior housing, including congregate care, residential care and assisted living facilities; nursing homes and other types of group homes	~~1 per 7 beds~~Not required	1 per 5 beds
Hospital	2.00	4.00
Preschool nursery/kindergarten	~~2.00~~Not required	3.00
Elementary/middle school	~~1 per classroom~~Not required	1 per classroom + 1 per administrative employee + 0.25 per seat in auditorium/assembly room/stadium
High school, college, commercial school for adults	~~0.20 per # staff and students~~ Not required	0.30 per # staff and students
Auditorium, meeting room, stadium, religious assembly building, movie theater	.25 per seat	0.5 per seat
Retail store, shopping center, restaurants	4.10	5.00
Office	2.70	3.33
Medical or dental clinic	2.70	3.33
Sports club, recreation facilities	Case specific	5.40

Storage warehouse, freight terminal	0.30	0.40
Manufacturing, wholesale establishment	1.60	1.67
Light industrial, industrial park	1.3	1.60

1. Mixed ~~ultiple~~ Uses. Unless exempt under (A), ~~I~~in the event several land uses occupy a single structure or parcel of land, the total requirements for off-street parking shall be the sum of the requirements of the several uses computed separately.
2. Requirements for types of buildings and uses not specifically listed herein shall be determined by the community development director, based upon the requirements of comparable uses listed.
3. Where calculation in accordance with the above list results in a fractional space, any fraction less than one-half shall be disregarded and any fraction of one-half or more shall require one space.
4. Fleet vehicle parking shall be accommodated within the maximum parking ratio, except that in GI, CI, and MUE zones, fleet vehicle parking may be included in a parking lot in addition to the maximum number of permitted parking spaces.
5. For land uses with more than 65,000 square feet of floor area, surface parking may not consist of more area than the floor area of the building.
5. ~~A change in use within an existing habitable building located in the MUD design district or the Willamette Falls Downtown District is exempt from additional parking requirements. Additions to an existing building and new construction are required to meet the minimum parking requirements for the areas as specified in Table 17.52.020 for the increased square footage.~~

CFEC Requirement

Reducing the Burden of Parking Mandates (OAR 660-012-0425)

Reduction of Parking Mandates for Development Types (OAR 660-012-0430)

Explanation

Table 17.52.020 displays minimum and maximum parking by specific use in a tabular format. References to "minimum" and "required" parking have been removed in accordance with CFEC guidance, where needed.

~~B~~C. Unless exempt under Section (A), ~~P~~parking requirements can be met either on-site, or off-site by meeting one or multiple of the following conditions:

1. Parking may be located on the same site as the associated use which it is supporting.
2. Mixed Uses. If more than one type of land use occupies a single structure or parcel of land, the total requirements for off-street automobile parking shall be the sum of the requirements for all uses, unless it can be shown that the peak parking demands are actually less (e.g. the uses operate on different days or at different times of the day). In that case, the total requirements shall be reduced accordingly, up to a maximum reduction of fifty percent, as determined by the community development director.
3. Shared Parking. ~~Required p~~Parking facilities for two or more uses, structures, or parcels of land may be ~~satisfied by the same parking facilities used jointly, to the extent that the owners or operators show that the need for parking facilities does not materially overlay (e.g., uses primarily of a daytime versus nighttime nature), that the shared parking facility is within one thousand feet of the potential uses, and~~shared provided that the right of joint use is evidenced by a recorded deed, lease, contract, or similar written instrument authorizing the joint use.

CFEC Requirement

Reducing the Burden of Parking Mandates (OAR 660-012-0425)

Explanation

Shared parking is currently addressed within OCMC 17.52.20(B)(3) as a permissible path to meet parking requirements. This can be kept as-is for the area where parking requirements will be retained. However, more general language will be needed establishing the permissibility of shared parking. Potential language follows.

"Parking facilities for two or more uses, structures, or parcels of land may be shared, provided that the right of joint use is evidenced by a recorded deed, lease, contract, or similar written instrument authorizing the joint use."

4. On-Street Parking. On-street parking may be counted toward ~~the minimum standards~~on-site parking when it is on the street face abutting the subject land use. An on-street parking space shall not obstruct a required clear vision area and it shall not violate any law or street standard. On-street parking for commercial uses requesting this shall conform to the following standards:

   a. Dimensions. The following constitutes one on-street parking space:

      ~~1~~i. Parallel parking: Twenty-two feet of uninterrupted and available curb;

      ~~2~~ii.Forty-five and/or sixty-degree diagonal parking: Fifteen feet of curb;

      ~~3~~iii. Ninety-degree (perpendicular) parking: Twelve feet of curb.

      ~~4~~iv. Public Use Required for Credit. On-street parking spaces counted toward meeting the parking requirements of a specific use ~~may~~ shall not be used exclusively by that use, but shall be available for general public use at all times. Signs or other actions that limit general public use of on-street spaces are prohibited.

~~-~~5. Garage parking spaces and driveways at least 20 feet deep shall count towards off-street parking.

6. Off-site parking. Required parking spaces may be provided offsite, within 2,000 feet pedestrian travel of a site. If any non-loading parking is provided on site, all required parking for people with disabilities shall be on site. If all parking is offsite, parking for people with disabilities must be located within the shortest possible distance of an accessible entrance via an accessible path and no greater than 200 feet from that entrance.

CFEC Requirement

Reducing the Burden of Parking Mandates (OAR 660-012-0425)

Explanation

Adds two new prescriptive requirements to comply with CFEC addressing explicitly counting driveway spaces and garages towards parking.

C. Reduction of the Number of the Minimum Automobile Spaces Required. Any combination of the reductions below is permitted unless otherwise noted. The reductions may be cumulative and not capped.

~~1. Downtown Parking Overlay. The minimum required number of parking stalls is reduced within the downtown parking overlay by fifty percent.~~

~~2. Transit Oriented Development. For projects not located within the downtown parking overlay district, the minimum required number of parking stalls is reduced up to twenty-five percent when:~~

~~a. In a commercial center (sixty thousand square feet or greater of retail or office use measured cumulatively within a five hundred foot radius);~~

~~b. When adjacent to multi-family development with over eighty units; or~~

~~c. Within one thousand three hundred twenty feet of an existing or planned public transit street and within one thousand three hundred twenty feet of the opposite use (commercial center or multi-family development with over eighty units).~~

~~3~~1.. Tree Preservation. The community development director may grant an adjustment to any standard of this requirement provided that the adjustment preserves any tree greater than 20 inches in diameter ~~designated heritage tree or grove~~ so that the reduction in the amount of required pavement can help preserve existing healthy trees in an undisturbed, natural condition.

~~4~~2.. Transportation Demand Management. The community development director shall reduce the required number of parking stalls up to twenty-five percent when a parking-traffic study prepared by a traffic engineer demonstrates alternative modes of transportation, including transit, bicycles, and walking, and/or special characteristics of the customer, client, employee or resident population will reduce expected vehicle use and parking space demand for this development, as compared to standard Institute of Transportation Engineers vehicle trip generation rates and further that the transportation demand management program promotes or achieves parking utilization lower than minimum city parking requirements.

A transportation demand management (TDM) program shall be developed to include strategies for reducing vehicle use and parking demand generated by the development and will be measured annually. If, at the annual assessment, the city determines the plan is not successful, the plan may be revised. If the city determines that no good-faith effort has been made to implement the plan, the city may take enforcement actions.

~~5~~3.. ~~The minimum required number of~~Parking stalls may be reduced by up to ten percent when the subject property is adjacent to an existing or planned fixed public transit route or within one thousand feet of an existing or planned transit stop.

~~6~~4. Parking shall be reduced by one off-street parking space for each three kilowatts of capacity in solar panels or wind power that will be provided in a development.

~~7~~5. Parking shall be reduced by one off-street parking space for each dedicated car sharing parking space in a development. These spaces shall be clearly signed or marked appropriately.

~~8~~6. Parking mandates shall be reduced by two off-street parking spaces for every electric vehicle charging station provided in a development.

~~9~~7. Parking mandates shall be reduced by one off-street parking space for every two residential units in a development that are fully accessible to people with mobility disabilities.

CFEC Requirement

Reduction of Parking Mandates for Development Types (OAR 660-012-0430)

Explanation

This is largely self-explanatory, and the additions are prescriptive. One could use the term “receive credit for” as an alternative to “shall be reduced by” in the context of this section.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.52.025 Reuse and redevelopment of underused parking allowed

A. Purpose. The purpose of this section is to encourage other beneficial uses within parking areas, especially in situations where parking is underused as defined in OCMC 17.04.

B. Property owners may redevelop, remove, reuse and repurpose parking spaces for bicycle-oriented, pedestrian-oriented or transit supportive facilities including but not limited to bicycle parking, bus stops and pull-outs, transit shelters, and park and ride stations. These requests may be approved through the Type I Site Plan and Design Review application process in OCMC 17.62.030.

CFEC Requirement

Allow redevelopment of a portion of a parking lot for bike or transit uses (660-012-0405(1)(b))

Allow and encourage redevelopment of underused parking (660-012-0405(2))

Explanation

This is largely self-explanatory, and the additions are prescriptive. The current code does not clearly articulate redevelopment of parking for bike or transit uses. New language will need to be added to the code to explicitly allow for this to address potential redevelopment of underused parking. The City can still require review for new or expanded uses or structures.

A definition of "underused parking" will be added to 17.04 to provide clarity; "parking lots or facilities that are below 50% of capacity most or all of the time."

17.52.030 Standards for automobile parking.

A. Access. Ingress and egress locations on public thoroughfares shall be located in the interests of public traffic safety and meet requirements of OCMC 16.12.035. Groups of more than four parking spaces shall be so located and served by driveways so that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.

B. Surfacing. Required off-street parking spaces and access aisles shall have paved surfaces adequately maintained. The use of pervious asphalt/concrete and alternative designs that reduce stormwater runoff and improve water quality pursuant to the city's stormwater and low impact development design standards are encouraged.

C. Drainage. Drainage shall be designed in accordance with the requirements of OCMC 13.12 and the city public works stormwater and grading design standards.

D. Dimensional Standards.

1. Requirements for parking developed at varying angles are according to the table included in this section. A parking space shall not be less than seven feet in height when within a building or structure, and shall have access by an all-weather surface to a street or alley. Parking stalls in compliance with the American with Disabilities Act may vary in size in order to comply with the building division requirements. Up to thirty-five percent of the ~~minimum required~~ parking ~~may~~ shall be compact, while the remaining required parking stalls ~~are~~ may be designed to standard dimensions. The community

development director may approve alternative dimensions for parking stalls ~~in excess of the minimum requirement~~ which comply with the intent of this chapter.

2. Alternative Parking/Plan. Any applicant may propose an alternative parking plan. Such plans are often proposed to address physically constrained or smaller sites, however innovative designs for larger sites may also be considered. In such situations, the community development director may approve an alternative parking lot plan with variations to parking dimensions of this section. The alternative shall be consistent with the intent of this chapter and shall create a safe space for automobiles and pedestrians while providing landscaping ~~to~~ of the quantity and quality found within standard parking lot landscaping requirements.

CFEC Requirement

N/A.

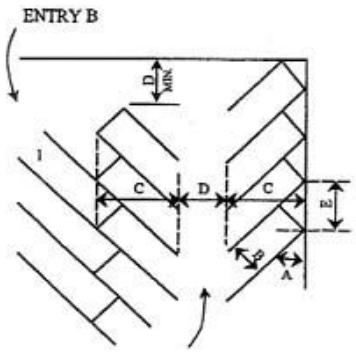
Explanation

Revisions for clarification. Staff will continue to review any parking, if required, for compliance with applicable dimensional standards.

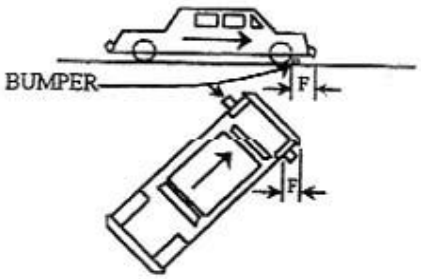
Parking Standard
Parking Angle Space Dimensions

A Parking Angle		B Stall Width	C Stall to Curb	D Aisle Width	E Curb Length	F Overhang
0 degrees		8.5	9.0	12	20	0
30 degrees	Standard Compact	9' 8'	17.3' 14.9'	11' 11'	18' 16'	
45 degrees	Standard Compact	8.5 8.5	19.8' 17.0'	13' 13'	12.7' 11.3'	1.4
60 degrees	Standard Compact	9' 8'	21' 17.9'	18' 16'	10.4' 9.2'	1.7
90 degrees	Standard Compact	9' 8'	19.0' 16.0'	24' 22'	9' 8'	1.5

All dimensions are to the nearest tenth of a foot.



TYPICAL PARKING LAYOUT
ENTRY A



NOTE: SPACE 1 CONTINGENT UPON ENTRY B
OVERHANG

NOTE: Overhang dimensions are intended to indicate possible location from parking area edge for location of bumpers.

E. Carpool and Vanpool Parking.

1. New non-residential developments with ~~seventy-five~~fifty (50) or more parking spaces~~, excluding projects where seventy-five percent or more of the total floor area is residential, and new hospitals, government offices, group homes, nursing and retirement homes, schools and transit park-and-ride facilities with fifty or more parking spaces,~~ shall ~~identify the spaces available for employee, student and commuter parking and~~ designate at least five percent, but not fewer than two, of those spaces for exclusive carpool and vanpool parking. Carpool and vanpool parking spaces shall be located closer to the main employee, student or commuter entrance than all other employee, student or commuter parking spaces with the exception of ADA accessible parking spaces. The carpool/vanpool spaces shall be clearly marked "Reserved — Carpool/Vanpool Only." This section shall apply to the following listed uses:

   (a) Hospitals.

   (b) Government offices.

   (c) Group homes.

   (d) Nursing and retirement homes.

   (e) Schools.

   (f) Designated employee parking areas.

   (g) Transit park-and-ride facilities.

2. The standards in E(1) shall not apply to projects where seventy-five percent or more of the floor area is residential.

CFEC Requirement

Preferential placement of carpool/vanpool parking (660-012-0405(1)(a)).

Explanation

OCMC 17.52.030(E) currently requires preferential parking for carpools/vanpools for many developments. Oregon City's requirements meet or exceed those from the new OAR, which is limited in applicability to only "designated employee areas." However, the threshold for applicability for these new parking areas is 50 spaces, so the OCMC will need to be slightly updated to meet this.

For clarity, the applicable uses that must conform to this requirement are provided as a numbered list.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.52.040 Bicycle parking standards.

A. Purpose—Applicability. To encourage bicycle transportation to help reduce principal reliance on the automobile, and to ensure bicycle safety and security, bicycle parking shall be provided in conjunction with all uses other than exclusively residential use with less than five dwellings on-site (excluding cottage clusters).

B. Number of Bicycle Spaces Required. For any use not specifically mentioned in Table A, the bicycle parking requirements shall be the same as the use which, as determined by the community development director, is most similar to the use not specifically mentioned. Calculation of the number of bicycle parking spaces required shall be determined in the manner established in OCMC 17.52.020 for determining automobile parking space requirements. Modifications to bicycle parking requirements may be made through the site plan and design, conditional use, or master plan review process.

Table A Required Bicycle Parking Spaces*

Where two options for a requirement are provided, the option resulting in more bicycle parking applies. Where a calculation results in a fraction, the result is rounded up to the nearest whole number.

Use	Minimum Bicycle Parking	Minimum Bicycle Parking — Covered — ~~The following percentage of bicycle parking is required to be covered~~
Multi-family (five or more units)	1 per ~~10~~ 2 units (minimum of 2)	~~50%~~ 0.5 spaces per unit (minimum of 1)
Mixed-use with five or more residential units	1 per 2 units (minimum of 2)	0.5 spaces per unit (minimum of 1)
Correctional institution	1 per 15 auto spaces (minimum of 2)	30% (minimum of 1)
Nursing home or care facility	1 per 30 auto spaces (minimum of 2)	30% (minimum of 1)
Hospital	1 per 20 auto spaces (minimum of 2)	30% (minimum of 1)
Park-and-ride lot	1 per 5 auto spaces (minimum of 2)	50% (minimum of 1)
Transit center	1 per 5 auto spaces (minimum of 2)	50% (minimum of 1)

Parks and open space	1 per 10 auto spaces (minimum of 2)	0%
Public parking lots	1 per 10 auto spaces (minimum of 2)	50% (minimum of 1)
Automobile parking structures	1 per 10 auto spaces (minimum of 4)	80% (minimum of 2)
Religious institutions, movie theater, auditorium or meeting room	1 per 10 auto spaces (minimum of 2)	30% (minimum of 1)
Libraries, museums	1 per 5 auto spaces (minimum of 2)	30% (minimum of 1)
Preschool, nursery, kindergarten	2 per classroom (minimum of 2)	50% (minimum of 1)
Elementary	4 per classroom (minimum of 2)	50% (minimum of 1)
Junior high and High school	2 per classroom (minimum of 2)	50% (minimum of 2)
College, business/commercial schools	2 per classroom (minimum of 2)	50% (minimum of 1)
Swimming pools, gymnasiums, ball courts	1 per 10 auto spaces (minimum of 2)	30% (minimum of 1)
Retail stores and shopping centers	1 per 20 auto spaces (minimum of 2)	50% (minimum of 2)
Retail stores handling exclusively bulky merchandise such as automobile, boat or trailer sales or rental	1 per 40 auto spaces (minimum of 2)	0%
Bank, office	1 per 20 auto spaces (minimum of 2)	50% (minimum of 1)
Medical and dental clinic	1 per 20 auto spaces (minimum of 2)	50% (minimum of 1)
Eating and drinking establishment	1 per 20 auto spaces (minimum of 2)	0%
Gasoline service station	1 per 10 auto spaces (minimum of 2)	0%

* Covered bicycle parking is not required for developments with two or fewer parking stalls.

CFEC Requirement

Bicycle Parking Requirements (OAR 660-012-0630)

Minimum bicycle parking requirements for certain uses (660-012-630(2))

Covered bicycle parking required for multifamily and mixed-use residential (660-012-630(3))

Explanation

OCMC 17.52.040 Table A specifies bicycle parking requirements, and includes a minimum requirement for all uses specified by this rule. Cities must require at least 0.5 stalls per unit in covered bicycle parking for multi-family and mixed use residential uses. While Oregon City requires 50% of bike parking stalls to be covered, because it only requires one stall per 10 units it does not meet the letter of this rule. The easiest way to meet the requirement would be to change the covered parking requirement in the first row of Table A to the numerical requirement rather than a percentage, updating the header as needed.

C. Design Standards.

1. Bicycle parking facilities shall be in the form of a lockable enclosure on-site, secure room in a building on-site, a covered or uncovered rack on-site, or within the adjacent right-of-way.

2. Bicycle parking areas shall be clearly marked or visible from on-site buildings or the street. If a bicycle parking area is not plainly visible from the street or main building entrance, a sign shall be posted indicating the location of the bicycle parking area. Indoor bicycle parking areas shall not require stairs to access the space. If sites have more than one building, bicycle parking shall be distributed as appropriate to serve all buildings.

3. Bicycle parking areas shall be illuminated pursuant to OCMC 17.62.065 – Outdoor Lighting.

~~3~~4. All bicycle racks shall be designed so that:

a. The bicycle frame is supported horizontally at two or more places.

b. The frame and at least one wheel of the bicycle can be locked to the rack with a standard U-type lock.

c. The user is not required to lift the bicycle onto the bicycle rack.

d. Each bicycle parking space is accessible without moving another bicycle.

e. It is a minimum of thirty inches tall and eighteen inches wide between the two points of contact.

f. Provides an area of at least six feet by two feet per standard bicycle.

g. Provides an area of at least six feet by three feet for cargo bicycles and large bicycles. Where only one bicycle space is required per Table A, it shall meet the larger space requirement of is standard.

g. All bicycle racks and lockers shall be securely anchored to the ground or to a structure.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

CFEC Requirement

Bike parking must meet certain standards regarding security and accessibility (660-012-630(3))

Provide parking for bikes and other "small-scale mobility devices" at key destinations (660-012-630(4))

Explanation

The design standards specified by OCMC 17.52.040(C) are fairly robust and adequately address most of the requirements regarding the size of spaces, accessibility, and location. It is recommended that the City add language to OCMC 17.52.040(C)(2) to indicate the spaces should also be "well lit." This rule also includes a stipulation that spaces must be included to "accommodate large bicycles, including family and cargo bicycles.", however, it does not stipulate how many of those spaces should be sized this way, so staff has specified a minimum of one space Oregon City's design standards are likely adequate to ensure that these bicycles are accommodated at most or all bike spaces.

17.52.060 Parking lot landscaping.

Purpose. The purpose of this code section includes the following:

1. To enhance and soften the appearance of parking lots;
2. To limit the visual impact of parking lots from sidewalks, streets and particularly from residential areas;
3. To shade and cool parking areas;
4. To reduce air and water pollution;
5. To reduce stormwater impacts and improve water quality; and
6. To establish parking lots that are more inviting to pedestrians and bicyclists.

A. Applicability. Unless otherwise specified, construction of new parking lots and alterations of existing parking lots shall comply with parking lot landscaping standards. Parking lot landscaping requirements within this section do not apply to parking structures or parking garages, except landscaping as required in OCMC 17.62.

B. Development Standards.

1. The landscaping shall be located in defined landscaped areas that are uniformly distributed throughout the parking or loading area.
2. All areas in a parking lot not used for parking, maneuvering, or circulation shall be landscaped.
3. Developments adding off-street parking areas of one-half acre (21,780 square feet) or more shall comply with (a)~~,~~or (b) ~~or (c)~~ below:

   (a) Provide tree canopy that will cover at least 40 percent of the new parking lot at maturity but no later than 15 years after planting.

   (b) ~~w~~Where an applicant can demonstrate that it is infeasible to meet the 40% canopy requirement in (a) the Community Development Director may approve installation of solar panels with a generation capacity of at least 0.5 kilowatts per parking space. Panels may be located anywhere on the property subject to applicable standards of the OCMC.

4. ~~3.~~ Parking lot trees shall be a mix of deciduous shade trees and coniferous trees. The trees shall be evenly distributed throughout the parking lot as both interior and perimeter landscaping.
5. ~~4~~5. Required landscaping trees shall be of a minimum two-inch minimum caliper size for deciduous species or a minimum 8 foot height for evergreen species ~~(though it may not be standard for some tree types to be distinguished by caliper),~~at the time of planting ~~planted according to American Nurseryman Standards,~~ and selected from the Oregon City Street Tree List, Parking Lot Tree list or other ~~-~~approved species recommended by a certified ~~n~~ arborist or registered landscape architect.
6. ~~5~~6. At maturity, all of the landscaped area shall be planted in ground cover plants, which includes grasses. Mulch (as a ground cover) shall only be allowed underneath plants at full growth and within two feet of the base of a tree and is not a substitute for ground cover.
7. ~~6~~7. Landscaped areas shall include irrigation systems unless an alternate plan is submitted, and approved by the community development director, that can demonstrate adequate maintenance.
8. ~~7~~8. All landscaping shall be installed according to accepted planting procedures, according to American ~~Nurseryman~~ Standards for Nursery Stock (ANSI Z60.1)~~s~~.

CFEC Requirement

Tree canopy, solar, or fee-in-lieu, for parking more than ½ acre (660-012-0405(4)(a))

Explanation

The rule indicates that Oregon City must require at least one, or any combination, of the following:

A) Require installation of solar panels capable of generating 0.5 kilowatts per new parking space;

B) Require a fee-in-lieu payment of $1,500 per new parking space to be invested in a city, county, or state fund dedicated to renewable energy development; or

C) Require a tree canopy covering 40% of the parking lot.

During the outreach process participants generally indicated support for landscaping, and a plurality felt that there should also be a solar option for parking lot landscaping, which Oregon City does not currently allow for.

Note that a fee-in-lieu program was not widely supported during the outreach process and it is unclear how such a program would be administered, so this is not recommended here.

C. Perimeter Parking Lot Landscaping and Parking Lot Entryway/Right-of-Way Screening for New Parking Lots and new parking lots over ½ acre. Shall ~~New P~~parking lots and include associated drive aisles ~~shall include a~~ with five-foot wide landscaped buffer where the parking lot abuts the right-of-way and/or adjoining properties. In order to provide connectivity between non-single-family sites, the community development director may approve an interruption in the perimeter parking lot landscaping for a single driveway where the parking lot abuts property designated as multi-family, commercial or industrial. Shared driveways and parking aisles that straddle a lot line do not need to meet perimeter landscaping requirements.

1. The perimeter parking lot are[a] shall include:

   a. Trees spaced a maximum of thirty feet apart (minimum of one tree on either side of the entryway is required). When the parking lot is adjacent to a public right-of-way, the parking lot trees shall be offset from the street trees;

   b. An evergreen hedge screen of thirty to forty-two inches high or shrubs spaced no more than four feet apart on average. The hedge/shrubs shall be parallel to and not nearer than two feet from the right-of-way line. The required screening shall be designed to allow for free access to the site and sidewalk by pedestrians. Visual breaks, no more than five feet in width, shall be provided every thirty feet within evergreen hedges abutting public right-of-ways.

   c. A minimum of 30% tree canopy at maturity is required along the parking lot perimeter adjacent to drive aisles.

CFEC Requirement

Tree canopy, solar, or fee-in-lieu, for parking more than ½ acre (660-012-0405(4)(a))

Explanation

The 30% perimeter coverage requirement is met prima facie if the overall 40% tree canopy requirement from the previous section is met. Otherwise, 30% tree coverage is required along the perimeter while meeting the previous requirement via the solar option.

D. Parking Area/Building Buffer. Except for parking lots with fewer than five parking stalls, parking areas (excluding drive aisles with no adjacent parking) shall be separated from the exterior wall of a structure, exclusive of pedestrian entranceways or loading areas, by one of the following:

1. Minimum five-foot wide landscaped planter strip (excluding areas for pedestrian connection) meeting the standards for perimeter parking lot area landscaping; or:

2. Minimum seven-foot sidewalks with shade trees spaced a maximum of thirty feet apart in three-foot by five-foot tree wells.

E. Interior Parking Lot Landscaping. Surface parking lots with more than five parking stalls shall include at least forty-five square feet of interior parking lot landscaping per parking stall to improve the water quality, reduce stormwater runoff, and provide pavement shade. Pedestrian walkways or any impervious surface in the landscaped areas are not to be counted in the percentage. Fractions shall be rounded up when calculating the required number of plantings. Interior parking lot landscaping shall include:

a. A minimum of one tree per four parking spaces.

b. A minimum of 1.5 shrubs per parking space.

c. No more than eight contiguous parking spaces shall be created without providing an interior landscape strip between them. Landscape strips shall be provided between rows of parking shall be a minimum of six feet in width and a minimum of ten feet in length.

F. Alternative landscaping plan.

Any applicant may propose an alternative landscaping plan. Such plans are often proposed to address physically constrained or smaller sites, however innovative designs for larger sites may also be considered. Alternative plans may include the use of low impact development techniques and minimized landscaping requirements. In such situations, the community development director may approve variations to the landscaping standards of OCMC 17.52.060 in accordance with subsection 1 and/or 2 below.

1. General Review Standard. The alternative shall meet the standards in OCMC 17.62.015, Modifications that will better meet design review requirements.

2. Credit for Pervious/Low Impact Development. The community development director may count up to fifty percent of the square footage of any pervious hardscaped landscape material within a parking lot that is designed and approved pursuant to the city's adopted stormwater and low impact development design standards toward minimum landscaping requirements for the site. (This includes porous pavement detention, open celled block pavers, porous asphalt, porous concrete pavement, porous turf, porous gravel, etc.).

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.52.070 Electrical ~~Service Capacity~~Vehicle Charging

A. New private multi-family residential or mixed-use developments with five or more residential units shall install electrical service capacity, as defined in OCMC 17.04, to new off-street parking spaces subject to the following standards. ~~Variance requests to these standards are prohibited.~~

1. Non-residential development and residential or mixed-use developments with less than five dwelling units shall provide electrical service capacity to a minimum of 20 percent of all off-street vehicle parking spaces on the site.

2. Residential or mixed-use development with five or more dwelling units shall provide electrical service capacity to a minimum of 40 percent of all off-street vehicle parking spaces on site.

3. The placement of electrical service equipment shall not conflict with, or block access required under the Americans with Disabilities Act. Electrical service equipment shall not displace required pedestrian paths, sidewalks, landscaping, bicycle paths and parking spaces.

4. Parking mandates shall be reduced by two off street parking spaces for every electric vehicle charging station provided in a development.

CFEC Requirement

Electric Vehicle Charging (OAR 660-012-0410)

Explanation

Rule -0410 calls for new private multi-family residential or mixed-use developments with five or more residential dwelling units to install conduits to serve 40% of vehicle parking spaces. Currently, Oregon City's code doesn't address EV charging, so language to meet this requirement will be needed. A potential way to do this would be to add the following language (or similar) to code.

The definition of Electrical Service Capacity will be added as OCMC 17.04.345 -350. Per implementation guidance, potential language is:

"Electrical service capacity" means:

(a) Building electrical service, sized for the anticipated load of electric vehicle charging stations, that has overcurrent devices necessary for electric vehicle charging stations or has adequate space to add the overcurrent devices;

(b) Designated space within a building to add electrical service with capacity for electric vehicle charging stations; or

(c) A designated location on building property, in or adjacent to a landscaped area, for installing remote service for electric vehicle charging stations; and

(d) A conduit system installed from building electrical service, or from the dedicated spaces or locations described in subparagraph (A) of this paragraph, to spaces that can support, at a minimum, electrical wiring for installation of level 2 electric vehicle charging stations and, if the conduit is for future installation of electric vehicle charging stations, that labels both ends of the conduit to mark the conduit as provided for future electric vehicle charging stations.

"Electric vehicle charging station" means a device or facility for delivering electricity for motor vehicles that use electricity for propulsion.

"Level 2 electric vehicle charging station" means an electric vehicle charging station that uses 240V AC electricity for charging an EV.

17.52.080 Maintenance.

The owner, tenant and their agent, if any, shall be jointly and severally responsible for the maintenance of the site including but not limited to the off-street parking and loading spaces, bicycle parking and all landscaping which shall be maintained in good condition so as to present a healthy, neat and orderly appearance and shall be kept free from refuse and debris.

All plant growth in interior landscaped areas shall be controlled by pruning, trimming, or otherwise so that:

A. It will not interfere with the maintenance or repair of any public utility;

B. It will not restrict pedestrian or vehicular access; and

C. It will not constitute a traffic hazard due to reduced visibility.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.52.090 Loading areas.

A. Purpose. The purpose of this section is to provide adequate loading areas for commercial, office, retail and industrial uses that do not interfere with the operation of adjacent streets.

B. Applicability. OCMC 17.52.090 applies to uses that are expected to have service or delivery truck visits with a forty-foot or longer wheelbase, at a frequency of one or more vehicles per week. The city engineer and decision maker shall determine through site plan and design review the number, size, and location of required loading areas, if any.

C. Standards.

1. The off-street loading space shall be large enough to accommodate the largest vehicle that is expected to serve the use without obstructing vehicles or pedestrian traffic on adjacent streets and driveways. Applicants are advised to provide complete and accurate information about the potential need for loading spaces because the city engineer or decision maker may restrict the use of other public right-of-way to ensure efficient loading areas and reduce interference with other uses.

2. Where parking areas are prohibited between a building and the street, loading areas or drive isles are also prohibited.

3. The city engineer and decision maker, through site plan and design review, may approve a loading area adjacent to or within a street right-of-way when all of the following loading and unloading operations conditions are met:

a. Short in duration (i.e., less than one hour);

b. Infrequent (less than three operations daily between five a.m. and twelve a.m. or all operations between twelve a.m. and five a.m. at a location that is not adjacent to a residential zone);

c. Does not obstruct traffic during peak traffic hours;

d. Does not interfere with emergency response services; and

e. Is acceptable to the applicable roadway authority.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.54.115 Mobile food units.

A. Applicability. The following provisions apply to mobile food units not located within a building. The provisions do not apply to indoor mobile food units or mobile food units allowed pursuant to a special event permit issued by the city.

B. General Requirements.

1. Mobile food units shall primarily sell food items.
2. Mobile food units shall not sell cannabis, in any form.
3. Mobile food units shall have a valid Oregon City business license.
4. Mobile food units shall not be located within the right-of-way, except as approved by the city engineer.
5. Mobile food units shall maintain continuous compliance with applicable federal, state, and city standards.
6. Discharge or leakage draining into the stormwater system is prohibited. Wastewater shall not be dumped onto the ground, onto the streets, or into a storm a drain. All liquid waste from the waste tank or from cleaning activities such as cleaning the mobile food cart shall be captured and properly disposed of in the sanitary sewer.
7. All permanent utility lines shall be placed underground. Temporary utilities, lines and tanks shall be placed underground or otherwise screened, covered, or hidden from view from the right-of-way as to minimize visual impacts and prevent tripping hazards or other unsafe conditions.
8. Power connections may not be connected by overhead wires to the individual mobile food units.
9. Comply with the stormwater and grading design standards for additional impervious surfaces.
10. Mobile food units, equipment, customer service areas, or any associated item may not be located within the right-of-way.
11. Sites with more than ten mobile food units at any time shall have a designated loading area.
12. Parking lots, refuse and recycling areas, outdoor lighting, fencing, and structures (other than the mobile food units) are subject to compliance with site plan and design review standards in OCMC 17.62. Mobile food units are exempt from OCMC 17.52 unless otherwise identified below.
13. Mobile food unit owners are responsible for maintaining the mobile unit and the adjacent site area in a neat and clean condition. This includes but is not limited to regular maintenance and cleaning of the exterior of the mobile food unit to avoid rust and peeling paint, repair of broken or sagging awnings, canopies, platforms, counters, benches, tables, umbrellas, and other structures used by customers adjacent to the mobile food unit.

C. Design Standards.

1. Transitory Mobile Food Units. Mobile food units that remain on a property for five hours or less in a twenty-four-hour period shall comply with the following:
    a. Standards related to the site.
        i. Be limited to three food units on a property at any one time;
        ii. Maintain ~~the minimum number of parking stalls and~~ minimum drive aisle widths and landscaping ~~parking lot~~ requirements for parking lots; and
        iii. Not result in the reduction of landscaping less than the minimum site.

b. Standards related to the mobile food unit.

i. Comply with nuisances regulations in OCMC 8.08.040;

ii. Comply with OCMC 17.62.050.I for all temporary structures associated with the mobile food cart units (except for the unit itself);

iii. Connect to individual wastewater holding tanks at all times; and

iv. Connect to a potable water tank at all times.

2. Non-Transitory Mobile Food Units. All other mobile food units that remain on a property for more than five hours at a time shall comply with the following:

a. Standards related to the site.

i. Maintain ~~the minimum number of parking stalls and~~ minimum drive aisle widths and ~~parking lot~~ landscaping requirements for parking lots;

ii. Not result in the reduction of landscaping less than the minimum site;

b. Standards related to the unit.

i. Fully screen from view any mechanical or power generating equipment that is separated from and external to the mobile food unit with vegetation or screening at a height equal to or greater than the height of the generating unit;

ii. Connect to a permanent water source, unless exempted by the city engineer if utilities are not available;

iii. Connect to public sewer. This may be achieved through a communal system;

iv. Connect to a permanent power source; and

v. Comply with the minimum setbacks and maximum height of the zoning designation.

D. Process.

1. A Type I minor site plan and design review shall be submitted for each property in compliance with the transitory standards in OCMC 17.54.115.C.1 with a wastewater/water operations and maintenance plan.

2. A Type II minor site plan and design review shall be submitted for each property in compliance with the non-transitory standards in OCMC 17.54.115.C with a wastewater/water operations and maintenance plan.

3. Mobile food cart units shall each submit a business license and mobile food cart unit form.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.56.040 Criteria and standards for conditional uses.

In addition to the standards listed herein in OCMC 17.56.010, which are to be considered in the approval of all conditional uses and the standards of the zone in which the conditional use is located, the following additional standards shall be applicable:

A. Building Openings. The city may limit or prohibit building openings within fifty feet of residential property in a residential zone if the openings will cause glare, excessive noise or excessive traffic which would adversely affect adjacent residential property as set forth in the findings of the planning commission.

B. Additional Street Right-of-Way. The dedication of additional right-of-way may be required where the city plan indicates need for increased width and where the street is inadequate for its use; or where the nature of the proposed development warrants increased street width.

C. Public Utility or Communication Facility. Such facilities as a utility substation, water storage tank, radio or television transmitter, tower, tank, power transformer, pumping station and similar structures shall be located, designed and installed with suitable regard for aesthetic values. The base of these facilities shall not be located closer to the property line than a distance equal to the height of the structure. Hydroelectric generation facilities shall not exceed ninety megawatts of generation capacity.

D. Schools. The site shall be located to best serve the intended area, shall be in conformance with the city plan, shall have adequate access, and shall be in accordance with appropriate state standards.

E. Helipad Landing Facility.

1. Size of runways and landing areas;
2. Approaches and obstructions within the runways and landing areas;
3. Fencing and/or screening to provide visual and noise buffering and to deflect winds or blast due to aircraft operation;
4. Fire protection measures and equipment;
5. Night illumination adequate for operations, and its effects upon surrounding property;
6. Landing markers;
7. Structural adequacy of runways, pads and other structures;
8. Paving and ground cover materials in relation to noise and down wash.

F. Residential ~~Care~~ Facilities.

1. In addition to the general provisions of OCMC 17.56.020, any application shall include a description of the proposed use, including the number of residents and the nature of the condition or circumstances for which care, or a planned treatment or training program will be provided, the number of staff and the estimated length of stay per resident and the name of the agency responsible for regulating or sponsoring the use.
2. Approval of a conditional use application for a residential care facility shall include the following minimum standards where applicable:
    a. The proposed facility shall maintain all applicable licenses required by the appropriate agencies for the use described in the application.
    b. All residential ~~care~~ facilities shall be subject to design review. Special considerations for this use are:

i. Compatibility in appearance with the surrounding area;

ii. Provisions of usable on-site open space appropriate to the needs of the residents and the nature of the care, treatment or training provided;

iii. Clearly defined property boundaries.

"Residential Care Facilities" is revised to "Residential Facilities" to be consistent with ORS 443.400, and the existing definition in OCMC 17.04.1025.

G. Bed and Breakfast Inns.

1. The bed and breakfast inn shall maintain all applicable licenses required by governmental agencies for the use described in the application.

2. All bed and breakfast inns shall be subject to design review. Special considerations for this use are:

a. Compatibility of the structure in appearance with the surrounding area;

b. Compatibility of ~~the~~ any parking facilities in appearance and circulation of traffic with the surrounding area. Parking facilities, if proposed, shall also comply with Chapter 17.52;

Clarifies that if parking is proposed for the development, the applicable standards in the Chapter 17.52 apply, such as landscaping, dimensions, pedestrian circulation, etc.

c. Compatibility of the signage in appearance with the surrounding area. Signage shall also comply with Chapter 15.28;

d. The number of rooms to be used as overnight public accommodations shall not exceed four rooms in an underlying residential zone, or seven rooms in an underlying nonresidential zone;

e. The owner/operators shall reside in the bed and breakfast inn, or in a residence adjacent to the bed and breakfast inn; and

f. The planning commission may allow up to an additional six non-guests to be served along with the guests at a meal.

H. Shelters.

1. Shelters shall be processed as a Type IV review.

2. The shelter shall maintain a written community engagement plan include the following information:

a. Description of purpose and scope of services of the shelter;

b. Population to be housed at the shelter and the process and criteria for the selection of guests;

c. Bed capacity for nightly guests;

d. Hours of operations and curfew, if applicable;

e. Twenty-four-hour contact information; and

f. Explanation of how the shelter will address concerns/complaints.

3. Shelters shall hold a meeting with the community prior to commencing operation, and a minimum of once a year each year thereafter. The purpose of the meeting is to discuss the community engagement plan and provide an opportunity for greater communication. Mailed notice of the meeting shall be provided to property owners within three hundred feet, the neighborhood association, and the city. The meeting shall be open to the public.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008(Exh. A), 12-18-2019)

Chapter 17.62 SITE PLAN AND DESIGN REVIEW[1]

17.62.010 Purpose.

The purposes of site plan and design review are to: Encourage site planning in advance of construction; protect lives and property from potential adverse impacts of development; consider natural or man-made hazards which may impose limitations on development; conserve the city's natural beauty and visual character and minimize adverse impacts of development on the natural environment as much as is reasonably practicable; assure that development is supported with necessary public facilities and services; ensure that structures and other improvements are properly related to their sites and to surrounding sites and structure; and implement the city's comprehensive plan and land use regulations with respect to development standards and policies.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.62.015 Modifications that will better meet design review requirements.

The review body shall consider modification of certain site related development standards of this chapter specified below. These modifications may be approved as part of a Type II design review process.

A. Applicability.

1. This process shall apply to modifications to:
    a. Landscaping in OCMC 17.62.050.A;
    b. Vehicular connections to adjoining properties in OCMC 17.62.050.B.2;
    c. On-site pedestrian circulation in OCMC 17.62.050.C;
    d. Onsite utility location OCMC 17.62.050.G;
    e. Building location in OCMC 17.62.055.D;
    f. Building details in OCMC 17.62.055.I;
    g. Windows in OCMC 17.62.055.J;
    h. Parking lot landscaping in OCMC 17.52.060.
2. Modifications that are denied through Type II design review may be requested as a variance through the variance process pursuant to OCMC 17.60.020 or master plan adjustment pursuant to OCMC 17.65.070 as applicable.

[1]Editor's note(s)—Ord. No. 18-1009, § 1(Exh. A), adopted July 3, 2019, amended Chapter 17.62 in its entirety to read as herein set out. Former Chapter 17.62, §§ 17.62.010—17.62.100, pertained to similar subject matter, and derived from Ord. No. 08-1014, adopted July 1, 2009; Ord. No. 10-1003, adopted July 7, 2010; Ord. No. 16-1007, adopted August 17, 2016; Ord. No. 13-1003, adopted July 17, 2013; Ord. No. 17-1007, adopted June 21, 2017 and Ord. No. 18-1005, adopted May 2, 2018.

3. Rather than a modification, applicants may choose to apply for a variance through the variance process pursuant to OCMC 17.60.020 or master plan adjustment pursuant to OCMC 17.65.070 as applicable.

B. The review body may approve requested modifications if it finds that the applicant has shown that the following approval criteria are met:

1. The modification will result in a development that better meets the applicable design guidelines; and

2. The modification meets the intent of the standard. On balance, the proposal will be consistent with the purpose of the standard for which a modification is requested.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 21-1007, § 1(Exh. A), 4-21-2021)

17.62.030 When required.

Site plan and design review shall be required for all development of real property in all zones except the low and medium density residential districts, unless otherwise provided for by this title or as a condition of approval of a permit. Site plan and design review shall also apply to all conditional uses, cluster housing developments, multi-family uses, manufactured home parks, and nonresidential uses in all zones. Site plan and design review does not apply to activities occurring within the right-of-way except for communication facilities pursuant to OCMC 17.80.

Site plan and design review is required for a change in use between the uses in Table 17.62.030:

Table 17.62.030

Existing Use	Proposed Use
Residential	Nonresidential use, including but not limited to: commercial, office, industrial, retail, or institutional
Single-family or duplex	3 or more dwellings

Site plan and design review shall not alter the type and category of uses permitted in the underlying zoning districts.

Only the standards of OCMC 17.62.035 apply to duplex, triplex, quadplex, cottage cluster, townhouse, single-family detached residential unit, live/work dwelling and accessory dwelling unit Type I applications.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.62.035 Minor site plan and design review.

This section provides for a minor site plan and design review process. Minor site plan review is a Type I or Type II decision, as described in OCMC 17.62.035.A, subject to administrative proceedings described in OCMC 17.50 and may be utilized as the appropriate review process only when authorized by the community development director. The purpose of this type of review is to expedite design review standards for uses and activities that require only a minimal amount of review, typical of minor modifications and/or changes to existing uses or buildings.

A. Type I Minor Site Plan and Design Review.

1. Applicability. Type I applications involve no discretion and are typically processed concurrently with a building permit application. The Type I process is not applicable for:

   a. Any activity which is included with or initiates actions that require Type II—IV review.

   b. Any increase in square footage of a conditional or nonconforming use (excluding nonconforming structures).

   c. Any proposal in which nonconforming upgrades are required under OCMC 17.58.

   d. Any proposal in which modifications are proposed under OCMC 17.62.015.

2. The following projects may be processed as a Type I application:

   a. Addition of up to two hundred square feet to a commercial, institutional, or multi-family structure in which no increases are required to off-street parking. This includes a new ancillary structure, addition to an existing structure, or new interior space (excluding new drive thru). Increases of more than two hundred square feet in a twelve-month period shall be processed as Type II.

   b. Addition of up to one thousand square feet to an industrial use in which no increases are required to off-street parking. This includes a new ancillary structure, addition to an existing structure, or new interior space (excluding ancillary retail and office). Increases of more than one thousand square feet in a twelve-month period shall be processed as Type II.

   c. Temporary structures, excluding mobile vendors.

   d. Removal, replacement or addition of awnings, or architectural projections to existing structures.

   e. Addition, modification, or relocation of refuse enclosure.

   f. Changes to amount, location, or design of bicycle parking.

   g. Installation of mechanical equipment.

   h. Repaving of previously approved parking lots with no change to striping.

   i. Replacement of exterior building materials.

   j. Addition of windows and doors, relocation of windows and doors in which transparency levels remain unchanged, or removal of windows and doors provided minimum transparency requirements are still met.

   k. Addition or alteration of parapets or rooflines.

   l. Modification of building entrances.

   m. Addition to or alteration of a legal nonconforming single- or two-family dwelling.

   n. Change to parking lot circulation or layout, excluding driveway modifications.

   o. Removal or relocation of existing vehicle parking stalls ~~provided total parking remains between approved minimum and maximum with no new reductions other than through the downtown parking district~~ to ~~accomodate~~accommodate tree planting, landscaping, stormwater facilities, solar and wind power equipment, outdoor seating, parking for bicycles, scooters and other small scale mobility devices, pedestrian improvements and similar purposes.~~.~~

CFEC Requirement

Allow redevelopment of a portion of a parking lot for bike or transit uses (660-012-0405(1)(b))

Allow and encourage redevelopment of underused parking (660-012-0405(2))

Explanation

This addition specifies the review process will be a Type I administrative review process for redevelopment and repurposing of parking lots. Oregon City already has a Type I review of this type for reductions in parking, however, this explicitly states some of the uses that would be permitted in these areas instead of parking for vehicles.

p. Adoption of shared parking agreements.

q. Changes to landscaping ~~that do not require~~ to improve stormwater quality and quantity treatment under OCMC 13.12.

r. New or changes to existing pedestrian accessways, walkways or plazas.

s. Installation of or alterations to ADA accessibility site elements.

t. Modification or installation of a fence, hedge, or wall, or addition of a fence, hedge or wall.

u. Addition of or alterations to outdoor lighting.

v. Demolition of any structure or portion of a structure.

w. Tree removal.

x. Type I master plan amendments under OCMC 17.65.080.

y. Mobile food units in one location for five hours or less as identified in OCMC 17.54.115.

z. Duplex, triplex, quadplex, cottage cluster, townhouse, single-family detached residential unit, live/work dwelling, and accessory dwelling unit.

aa. Placement of a single manufactured home within an existing space or lot in a manufactured home park.

3. Submittal Requirements. A Type I application shall include:

a. A narrative describing the project.

b. Site plan drawings showing existing conditions/uses and proposed conditions/uses.

c. Architectural drawings, including building elevations and envelopes, if architectural work is proposed.

d. A completed application form.

e. Any other information determined necessary by the community development director.

B. Type II Minor Site Plan and Design Review.

1. Type II minor site plan and design review applies to the following uses and activities unless those uses and activities qualify for Type I review per OCMC 17.62.035.A:

a. Modification of an office, commercial, industrial, institutional, public or multi-family structure that does not increase the interior usable space (for example covered walkways or entryways, addition of unoccupied features such as clock tower, etc.).

b. Modification to parking lot layout and landscaping, or the addition of up to five parking spaces.

c. A maximum addition of up to one thousand square feet to a commercial, office, institutional, public, multi-family, or industrial building provided that the addition is not more than thirty-five percent of the original building square footage.

d. Mobile food units in OCMC 17.54.115.

e. Other land uses and activities may be added if the community development director makes written findings that the activity/use will not increase off-site impacts and is consistent with the type and/or scale of activities/uses listed above.

2. Application. The application for the Type II minor site plan and design review shall contain the following elements:

a. The submittal requirements of OCMC 17.50.

b. A narrative explaining all aspects of the proposal in detail and addressing each of the applicable criteria listed in OCMC 17.62.

c. Site plan drawings showing existing conditions/uses and proposed conditions/uses.

d. Architectural drawings, including building elevations and envelopes, if architectural work is proposed.

e. Additional submittal material may be required by the community development director on a case-by-case basis.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.62.040 Items required.

A complete application for site plan and design review shall be submitted. Except as otherwise in subsection I of this section, the application shall include the following:

A. A site plan or plans, to scale, containing the following:

1. Vicinity information showing streets and access points, pedestrian and bicycle pathways, transit stops and utility locations;

2. The site size, dimensions, and zoning, including dimensions and gross area of each lot or parcel and tax lot and assessor map designations for the proposed site and immediately adjoining properties;

3. Contour lines at two-foot contour intervals for grades zero to ten percent, and five-foot intervals for grades over ten percent;

4. The location of natural hazard areas on and within one hundred feet of the boundaries of the site, including:

a. Areas indicated on floodplain maps as being within the one hundred-year floodplain,

b. Unstable slopes, as defined in OCMC 17.44.020,

c. Areas identified on the seismic conditions map in the comprehensive plan as subject to earthquake and seismic conditions;

5. The location of natural resource areas on and within one hundred feet of the boundaries of the site, including fish and wildlife habitat, existing trees (six inches or greater in caliper measured four feet above ground level), wetlands, streams, natural areas, wooded areas, areas of significant trees or vegetation, and areas designated as being within the natural resources overlay district;

6. The location of inventoried historic or cultural resources on and within one hundred feet of the boundaries of the site;

7. The location, dimensions, and setback distances of all existing permanent structures, improvements and utilities on or within twenty five feet of the site, and the current or proposed uses of the structures;

8. The location, dimensions, square footage, building orientation and setback distances of proposed structures, improvements and utilities, and the proposed uses of the structures by square footage;

9. The location, dimension and names, as appropriate, of all existing and platted streets, other public ways, sidewalks, bike routes and bikeways, pedestrian/bicycle accessways and other pedestrian and bicycle ways, transit street and facilities, neighborhood activity centers, and easements on and within two hundred fifty feet of the boundaries of the site;

10. The location, dimension and names, as appropriate, of all proposed streets, other public ways, sidewalks, bike routes and bikeways, pedestrian/bicycle accessways and other pedestrian and bicycle ways, transit streets and facilities, neighborhood activity centers, and easements on and within two hundred feet of the boundaries of the site;

11. All parking, circulation, loading and servicing areas, including the locations of all carpool, vanpool and bicycle parking spaces as required in OCMC 17.52;

12. Site access points for automobiles, pedestrians, bicycles and transit;

13. On-site pedestrian and bicycle circulation;

14. Outdoor common areas proposed as open space;

15. Total impervious surface created (including buildings and hard ground surfaces);

16. The proposed location, dimensions and materials of fences and walls.

B. A landscaping plan, drawn to scale, showing the location and types of existing trees (six inches or greater in caliper measured four feet above ground level) and vegetation proposed to be removed and to be retained on the site, the location and design of landscaped areas, the varieties, sizes and spacings of trees and plant materials to be planted on the site, other pertinent landscape features, and irrigation systems required to maintain plant materials.

C. Architectural drawings or sketches, drawn to scale and showing floor plans, elevations accurately reflected to grade, and exterior materials of all proposed structures and other improvements as they will appear on completion of construction. The name of the adjacent street shall be identified on each applicable building elevation.

D. An electronic materials board clearly depicting all building materials with specifications as to type, color and texture of exterior materials of proposed structures.

E. An erosion/sedimentation control plan, in accordance with the requirements of OCMC 17.47 and the public works erosion and sediment control standards, and a drainage plan developed in accordance with city drainage master plan requirements, OCMC 13.12 and the public works stormwater and grading design standards. The drainage plan shall identify the location of drainage patterns and

drainage courses on and within one hundred feet of the boundaries of the site. Where development is proposed within an identified hazard area, these plans shall reflect concerns identified in the hydrological/geological/geotechnical development impact statement.

F. An exterior lighting plan, drawn to scale, showing type, height, and area of illumination.

G. Archeological Monitoring Recommendation. For all projects that will involve ground disturbance, the applicant shall provide:

1. A letter or email from the Oregon State Historic Preservation Office Archaeological Division indicating the level of recommended archeological monitoring on-site, or demonstrate that the applicant had notified the Oregon State Historic Preservation Office and that the Oregon State Historic Preservation Office had not commented within forty-five days of notification by the applicant; and

2. A letter or email from the applicable tribal cultural resource representative of the Confederated Tribes of the Grand Ronde, Confederated Tribes of the Siletz, Confederated Tribes of the Umatilla, Confederated Tribes of the Warm Springs and the Confederated Tribes of the Yakama Nation indicating the level of recommended archeological monitoring on-site, or demonstrate that the applicant had notified the applicable tribal cultural resource representative and that the applicable tribal cultural resource representative had not commented within forty-five days of notification by the applicant.

If, after forty-five days' notice from the applicant, the Oregon State Historic Preservation Office or the applicable tribal cultural resource representative fails to provide comment, the city will not require the letter or email as part of the completeness review. For the purpose of this section, ground disturbance is defined as the movement of native soils.

H. Such special studies or reports as the community development director may require to obtain information to ensure that the proposed development does not adversely affect the surrounding community or identified natural resource areas or create hazardous conditions for persons or improvements on the site. The community development director shall require an applicant to submit one or more development impact evaluations as may be necessary to establish that the city's traffic safety or capacity standards, natural resource, including geologic hazard and flood plain overlay districts, will be satisfied.

I. The community development director may waive the submission of information for specific requirements of this section or may require information in addition to that required by a specific provision of this section, as follows:

1. The community development director may waive the submission of information for a specific requirement upon determination either that specific information is not necessary to evaluate the application properly, or that a specific approval standard is not applicable to the application. If submission of information is waived, the community development director shall, in the decision, identify the waived requirements, explain the reasons for the waiver, and state that the waiver may be challenged on appeal and may be denied by a subsequent review authority. If the matter is forwarded to the planning commission for initial review, the information required by this paragraph shall be included in the staff report;

2. The community development director may require information in addition to that required by a specific provision of this section upon determination that the information is needed to evaluate the application properly and that the need can be justified on the basis of a special or unforeseen circumstance as necessary to comply with the applicable standards. If additional information is required, the community development director shall, in the decision, explain the reasons for requiring the additional information.

J. All new utilities shall be placed underground.

1. Service poles may be allowed on private property when undergrounding service is technically or physically infeasible.

K. One full-sized copy of all architectural and site plans.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 21-1007, § 1(Exh. A), 4-21-2021)

17.62.050 General standards.

All development shall comply with the following standards:

A. Landscaping.

1. Existing native vegetation is encouraged to be retained to the maximum extent practicable. All plants listed on the Oregon City Nuisance Plant List shall be removed from the site prior to issuance of a final occupancy permit for the building.

2. The amount of landscaping required is found in the standards for each underlying zone. Where the underlying zone does not contain and minimum landscaping standard, the minimum site landscaping shall be fifteen percent of the total site area. Except as allowed elsewhere in Title 16 or 17 of this code, all areas to be credited towards landscaping shall be installed with growing plant materials.

3. Pursuant to OCMC 17.49, landscaping requirements within the natural resource overlay district, other than landscaping required for parking lots, may be met by preserving, restoring and permanently protecting native vegetation and habitat on development sites.

4. A landscaping plan shall be prepared by a registered landscape architect for new or revised landscaped areas and parking lots. Landscape architect approval is not required for tree removal and/or installation if the species are chosen from an approved street tree list. A certified landscape designer, arborist, or nurseryman shall be acceptable in lieu of a landscape architect for projects with less than five hundred square feet of landscaping. All landscape plans shall include a mix of vertical (trees and shrubs) and horizontal elements (grass, groundcover, etc.) that within three years will cover one hundred percent of the landscape area. Plant species listed on the Oregon City Nuisance Plant list are prohibited and native species are encouraged. No mulch, bark chips, or similar materials shall be allowed at the time of landscape installation except under the canopy of shrubs and within two feet of the base of trees.

5. Landscaping shall be visible from public thoroughfares to the extent practicable.

6. The landscaping in parking areas shall not obstruct lines of sight for safe traffic operation and shall comply with all requirements of OCMC 10.32, Traffic Sight Obstructions.

B. Vehicular Access and Connectivity.

1. Parking areas shall be located behind the building façade that is closest to the street, below buildings, or on one or both sides of buildings.

2. Existing or future connections to adjacent sites through the use of vehicular and pedestrian access easements which provide connection from the right-of-way to the adjoining property shall be provided.

3. Parcels larger than three acres shall provide streets as required in OCMC 16.12.

4. Parking garage entries shall not be more than half of the streetscape.

C. A well-marked, continuous and protected on-site pedestrian circulation system meeting the following standards shall be provided:

1. Pathways between all building entrances and the street are required. Pathways between the street and buildings fronting on the street shall be as direct as possible and shall not cross a drive aisle. Exceptions may be allowed by the director where steep slopes, a physically constrained site, or protected natural resources prevent a direct connection or where an indirect route would enhance the design and/or use of a common open space.

2. The pedestrian circulation system shall connect all main entrances, transit stops, ADA spaces, parking areas, bicycle parking, recreational areas, common outdoor areas, and any pedestrian amenities on the site. For buildings fronting on the street, the sidewalk may be used to meet this standard.

3. The pedestrian circulation system shall connect the principal building entrance to those of buildings on adjacent sites, except within industrial zoning designations.

4. Elevated external stairways or walkways shall not extend beyond the building facade except for external stairways or walkways located in, or facing interior courtyard areas that are not visible from the street or a public access easement. This standard does not apply to sky-bridges or sky-ways.

5. On-site pedestrian walkways shall be hard surfaced, well drained and at least five feet wide. Surface material shall contrast visually to adjoining surfaces. When bordering parking spaces other than spaces for parallel parking, pedestrian walkways shall be a minimum of seven feet in width unless curb stops are provided. When the pedestrian circulation system is parallel and adjacent to an auto travel lane, the walkway shall be raised or separated from the auto travel lane by a raised curb, bollards, landscaping or other physical barrier.

If a raised walkway is used, the ends of the raised portions shall be equipped with curb ramps for each direction of travel.

6. Pedestrian ~~walkways that cross~~crossings at intersections with drive aisles or other vehicular circulation areas shall be demarcated ~~with striping and, in addition preferably~~ by a raised surface that slows vehicular travel, or ~~utilize a~~other change in textural material or height to alert the driver of the pedestrian crossing area. ~~Crossings demarcated only by striping are discouraged as they are less effective.~~

7. Pedestrian facilities within parking lots shall be illuminated to at least the same level as the on-site driveways pursuant to section 17.62.065.

CFEC Requirement *Implements the requirement for certain designs for Pedestrian connections through large parking lots (660-012-0405(4)(c))* Explanation This addition amendment specifies the type of design to be used for pedestrian crossings in large parking lots. Including the levels of illumination.

D. All development shall maintain continuous compliance with applicable federal, state, and city standards.

E. Adequate public water and sanitary sewer facilities sufficient to serve the proposed or permitted level of development shall be provided pursuant to OCMC 16.12. The applicant shall demonstrate that

adequate facilities and services are presently available or can be made available concurrent with development. Service providers shall be presumed correct in the evidence, which they submit. All facilities shall be designated to city standards as set out in the city's facility master plans and public works design standards. A development may be required to modify or replace existing off-site systems if necessary to provide adequate public facilities. The city may require over sizing of facilities where necessary to meet standards in the city's facility master plan or to allow for the orderly and efficient provision of public facilities and services. Where over sizing is required, the developer may request reimbursement from the city for over sizing based on the city's reimbursement policy and fund availability, or provide for recovery of costs from intervening properties as they develop.

F. If a transit agency, upon review of an application for an industrial, institutional, retail or office development, recommends that a bus stop, bus turnout lane, bus shelter, accessible bus landing pad, lighting, or transit stop connection be constructed, or that an easement or dedication be provided for one of these uses, consistent with an agency adopted or approved plan at the time of development, the review authority shall require such improvement, using designs supportive of transit use. Improvements at a major transit stop may include intersection or mid-block traffic management improvements to allow for crossings at major transit stops, as identified in the city's transportation system plan.

G. Screening of Mechanical Equipment. Commercial, mixed-use, institutional, and multi-family buildings shall include the following measures to screen or block views of mechanical equipment from adjacent streets according to the following requirements:

1. Rooftop mechanical equipment, including HVAC equipment and utility equipment that serves the structure, shall be screened from view from the adjacent street on all new buildings or building additions. Screening shall be accomplished through the use of parapet walls or a sight-obscuring enclosure around the equipment constructed of one of the primary materials used on the primary facades of the structure, and that is an integral part of the building's architectural design. The parapet or screen shall completely surround the rooftop mechanical equipment to an elevation equal to or greater than the highest portion of the rooftop mechanical equipment being screened from adjacent streets, as viewed from the sidewalk or future sidewalk location on the adjacent street at pedestrian level. In the event such parapet wall does not fully screen all rooftop equipment, then the rooftop equipment shall be enclosed by a screen constructed of one of the primary materials used on the primary facade of the building so as to achieve complete screening. Screening requirements do not apply to new or replacement equipment on existing buildings. New or replacement rooftop mechanical equipment on existing buildings shall be painted or powder-coated.

2. Wall-mounted mechanical HVAC and air conditioning equipment, and groups of multiple utility meters shall not be placed on the front facade of a building or on a facade that faces a right-of-way. Wall-mounted mechanical equipment, including-air conditioning and groups of multiple utility meters, that extend six inches or more from the outer building wall shall be screened from view from adjacent streets; from residential, public, and institutional properties; and from public areas of the site or adjacent sites through the use of (a) sight-obscuring enclosures constructed of one of the primary materials used on the primary facade of the structure, (b) sight-obscuring fences, or (c) trees or shrubs that block at least eighty percent of the equipment from view or (d) painting the units to match the building. Wall-mounted mechanical equipment that extends six inches or less from the outer building wall shall be designed to blend in with the color and architectural design of the subject building. Vents which extend six inches or less from the outer building wall shall [be] exempt from this standard if painted.

3. Ground-mounted above-grade mechanical equipment shall be screened by ornamental fences, screening enclosures, trees, or shrubs that block at least eighty percent of the view from the public right-of-way.

4. This section shall not apply to the installation of solar energy panels, photovoltaic equipment, wind power generating equipment, dishes/antennas, pipes, vents, and chimneys.

H. Building Materials.

1. Prohibited Materials. The following materials shall be prohibited in visible locations from the right-of-way or a public access easement unless an exception is granted by the community development director based on the integration of the material into the overall design of the structure:

   a. Vinyl or plywood siding (including T-111 or similar plywood).

   b. Glass block or highly tinted, reflected, translucent or mirrored glass (except stained glass) as more than ten percent of the building facade.

   c. Corrugated fiberglass.

   d. Chain link fencing (except for temporary purposes such as a construction site, gates for a refuse enclosure, stormwater facilities, when excepted by 17.62.050.H.2.g, or when located on properties within the general industrial district).

   e. Crushed colored rock/crushed tumbled glass.

   f. Non-corrugated and highly reflective sheet metal.

   g. Tarps, except for the protection of outside storage.

2. Special Material Standards. The following materials are allowed if they comply with the requirements found below:

   a. Concrete Block. When used for the front façade of any building, concrete blocks shall be split, rock- or ground-faced and shall not be the prominent material of the elevation. Plain concrete block or plain concrete may be used as foundation material if the foundation material is not revealed more than three feet above the finished grade level adjacent to the foundation wall.

   b. Metal Siding. Metal siding shall have visible corner moldings and trim and incorporate masonry or other similar durable/permanent material near the ground level (first two feet above ground level) except when used for a temporary structure.

   c. Exterior insulation and finish system (EIFS) and similar troweled finishes shall be trimmed in wood, masonry, or other approved materials and shall be sheltered from extreme weather by roof overhangs or other methods.

   d. Building surfaces shall be maintained in a clean condition and painted surfaces shall be maintained to prevent or repair peeling, blistered or cracking paint.

   e. Membrane or fabric covered storage areas are permitted as temporary structures, excluding the use of tarps.

   f. Vinyl or powder coated chain link fencing is permitted for city-owned stormwater management facilities, reservoirs, and other public works facilities such as pump stations, maintenance yards, and storage yards not located within the general industrial district.

   g. Chain link fencing is permitted in the following circumstances:

1. Within city-owned parks and recreational facilities.

2. On any property when used for a baseball or softball backstop or dugout, track and field facility, or sports court.

I. Temporary Structures. Temporary structures are permitted pursuant to the following standards:

1. Structures up to two hundred square feet:

a. Shall not be on a property for more than three consecutive days;

b. Shall not be on a property more than six times per year;

c. Shall comply with the minimum dimensional standards of the zoning designation;

d. Shall be sited so as to leave ~~the minimum number of~~adequate parking ~~spaces~~ for the primary uses ~~as~~ if required by OCMC 17.52 or as otherwise specified in a land use approval;

e. Shall not disturb ingress or egress to the site; and

f. Shall be exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.I and J.

2. Temporary structures larger than two hundred square feet may be permitted up to two times per year; and:

a. Structures larger than two hundred square feet up to eight hundred square feet:

i. Shall not be on a property for more than thirty consecutive days;

ii. Shall comply with the minimum dimensional standards of the zoning designation;

iii. Shall be sited so as to leave ~~the minimum number of~~adequate parking ~~spaces~~ for the primary uses ~~as~~ if required by OCMC 17.52 or as otherwise specified in a land use approval;

iv. Shall not disturb ingress or egress to the site; and

v. Shall be exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.I and J.

b. Structures larger than eight hundred square feet:

i. Shall not be on a property for more than seven consecutive days;

ii. Shall comply with the minimum dimensional standards of the zoning designation;

iii. Shall be sited so as to leave ~~the minimum number of~~ adequate parking ~~spaces~~ for the primary uses ~~as~~ if required by OCMC 17.52 or as otherwise specified in a land use approval;

iv. Shall not disturb ingress or egress to the site; and

v. Shall be exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.I and J.

3. Government owned properties are exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.H and I and the dimensional standards of the zoning designation.

J. All new utilities shall be placed underground.

1. Service poles may be allowed on private property when undergrounding service is technically or physically infeasible.

K. Development shall comply with requirements of the following Oregon City Municipal Code chapters, as applicable, including but not limited to:

1. Chapter 12.04, Streets, Sidewalks and Public Places.
2. Chapter 12.08, Public and Street Trees.
3. Chapter 13.04, Water Service System.
4. Chapter 13.08, Sewer Regulations.
5. Chapter 13.12, Stormwater Management.
6. Chapter 16.12, Minimum Improvements and Design Standards for Development.
7. Chapter 17.20, Residential Design Standards for ADU's, Cluster Housing, Internal Conversions, Live/Work Units, and Manufactured Home Parks.
8. Chapter 17.40, Historic Overlay District.
9. Chapter 17.41, Tree Protection Standards.
10. Chapter 17.42, Flood Management Overlay District.
11. Chapter 17.44, Geologic Hazards.
12. Chapter 17.47, Erosion and Sediment Control.
13. Chapter 17.48, Willamette River Greenway.
14. Chapter 17.49, Natural Resource Overlay District.
15. Chapter 17.50, Administration and Procedures.
16. Chapter 17.52, Off-Street Parking and Loading.
17. Chapter 17.54, Supplemental Zoning Regulations and Exceptions.
18. Chapter 17.58, Lawful Nonconforming Uses, Structures, and Lots.
19. Chapter 17.65, Master Plans and Planned Unit Development.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 21-1007, § 1(Exh. A), 4-21-2021)

17.62.055 Institutional, office, multi-family, retail, and commercial building standards.

A. Purpose. The primary objective of the regulations contained in this section is to provide a range of design choices that promote creative, functional, and cohesive development that is compatible with surrounding areas. Buildings approved in compliance with these standards are intended to serve multiple tenants over the life of the building, and are not intended for a one-time occupant. The standards encourage people to spend time in the area, which also provides safety though informal surveillance. Finally, this section is intended to promote the design of an urban environment that is built to human scale by creating buildings and streets that are attractive to pedestrians, create a sense of enclosure, provide activity and interest at the intersection of the public and private spaces, while also accommodating vehicular movement.

B. Applicability. This section applies to institutional, office, multi-family, retail and commercial buildings except accessory structures less than one thousand square feet and temporary structures.

C. Conflicts. With the exception of standards for building orientation and building front setbacks, in the event of a conflict between a design standard in this section and a standard or requirement contained in the underlying zoning district, the standard in the zoning district shall prevail.

D. Siting of Structures. On sites with one hundred feet or more of frontage at least sixty percent of the site frontage width shall be occupied by buildings placed within five feet of the property line. For sites with less than one hundred feet of street frontage, at least fifty percent of the site frontage width shall be occupied by buildings placed within five feet of the property. Multi-family developments shall be placed no farther than twenty feet from the front property line. This section does not apply to properties with less than forty feet of frontage.

A larger front yard setback may be approved through site plan and design review if the setback area incorporates at least one element from the following list for every five feet of increased setback requested:

1. Tables, benches or other approved seating area.
2. Cobbled, patterned or paved stone or enhanced concrete.
3. Pedestrian scale lighting.
4. Sculpture/public art.
5. Fountains/water feature.
6. At least twenty square feet of landscaping or planter boxes for each tenant facade fronting on the activity area.
7. Outdoor café.
8. Enhanced landscaping or additional landscaping.
9. Other elements, as approved by the community development director, that can meet the intent of this section.

E. Building Orientation. All buildings along the street frontage shall face the front most architecturally significant facade toward the street and have a functional primary entrance facing the street. Primary building entrances shall be clearly defined and recessed or framed by a sheltering element such as an awning, arcade or portico in order to provide shelter from the summer sun and winter weather.

F. Entryways. Entrances shall include a doorway and a minimum of four of the following elements:

1. Display windows; recesses or projections; peaked roof or raised parapet over the door; canopy of at least five feet in depth; porch; distinct materials; architectural details such as tile work and moldings; pedestrian amenities such as benches, planters or planter boxes; landscape treatments integrating arbors, low walls, trellis work; or similar elements. Trellises, canopies and fabric awnings may project up to five feet into front setbacks and public rights-of-way, provided that the base is not less than eight feet at the lowest point and no higher than ten feet above the sidewalk.

G. Corner Lots. For buildings located at the corner of intersections, the primary entrance of the building shall be located at the corner of the building or within twenty-five feet of the corner of the building. Additionally, one of the following treatments shall be required:

1. Incorporate prominent architectural elements, such as increased building height or massing, cupola, turrets, or pitched roof, at the corner of the building or within twenty-five feet of the corner of the building.
2. Chamfer the corner of the building (i.e. cut the corner at a forty-five degree angle and a minimum of ten feet from the corner) and incorporate extended weather protection (arcade or awning), special paving materials, street furnishings, or plantings in the chamfered area.

3. Standards 1 and 2 above do not apply to vertically attached 3—4 plexes, multi-family buildings or multi-family portions of residential mixed-use buildings.

H. Variation in Massing. For street facing facades greater than one hundred twenty feet in length a modulation is required which extends through all floors. Decks and roof overhangs may encroach up to three feet per side into the modulation. The modulation shall meet one of the following dimensional requirements:

1. A minimum depth of two percent of the length of the façade and a minimum width of thirty percent of the length of the façade; or

2. A minimum depth of four percent of the length of the façade and a minimum width of twenty percent of the length of the façade.

I. Building Design Elements.

1. All front and side facades shall provide a design element or architectural feature that add interest and detail such that there are no blank walls of thirty feet in length or more, measured horizontally. Features that can meet this requirement include:

   a. Change in building material or texture;

   b. Window or door;

   c. Balcony; or

   d. Pillar or post.

2. Street facing facades shall include additional design features. For every thirty feet of façade length, three of the following elements are required:

   a. Decorative materials on more than ten percent of the total wall area (e.g., brick or stonework, shingles, wainscoting, ornamentation, and similar features);

   b. Decorative cornice and/or roof line (e.g., for flat roofs);

   c. Roof gable;

   d. Recessed entry;

   e. Covered canopy entry;

   f. Cupola or tower;

   g. Dormer;

   h. Balcony;

   i. Pillars or posts;

   j. Repeating pattern of building materials;

   k. A change in plane of at least two feet in width and six inches in depth;

   l. Bay or oriel window; or

   m. An alternative feature providing visual relief and detail as approved by the community development director.

3. Building Detail Variation. Architectural features shall be varied on different buildings within the same development. At least two of the required features on each street-facing elevation shall be distinct from the street-facing elevations of other buildings within the same development.

J. Windows.

1. The minimum windows requirements are set forth in Table 17.62.055.J. Windows are measured in lineal fashion between 3.5 feet and six feet from the ground. For example, a one hundred-foot long building elevation would be required to have at least sixty feet (sixty percent of one hundred feet) of windows in length between the height of 3.5 feet and six feet from the ground.

Table 17.62.055.J
Minimum Windows

Use	Ground Floor: Front and Street Facing Facades	Upper Floor(s): Front and Street Facing Facades	Ground Floor: Side(s) Facades	Upper Floor(s): Side(s) Facades
Non-Multi-Family (or Portions of Buildings Thereof)	60%	10%	30%	10%
Multi-Family (or Portions of Buildings Thereof)	15%	15%	10%	10%

2. Reflective, glazed, mirrored or tinted glass is limited to ten percent of the lineal footage of windows on the street facing facade. Highly reflective or glare-producing glass with a reflective factor of one-quarter or greater is prohibited on all building facades. Any glazing materials shall have a maximum fifteen percent outside visual light reflectivity value. No exception shall be made for reflective glass styles that appear transparent when internally illuminated.

3. Side walls that face walkways may include false windows and door openings only when actual doors and windows are not feasible because of the nature of the use of the interior use of the building. False windows located within twenty feet of a right-of-way shall be utilized as display windows with a minimum display depth of thirty-six inches.

4. Multi-family windows shall incorporate window trim at least four inches in width when surrounded by horizontal or vertical lap siding.

K. Roof Treatments. The maximum length of any continuous roofline on a street-facing façade shall be seventy-five feet without a cross gable or change in height of at least two feet.

L. Drive-through facilities shall:

1. Be located at the side or rear of the building.

2. Be designed to maximize queue storage on-site.

M. Special development standards along transit streets.

1. Purpose. This section is intended to provide direct and convenient pedestrian access to retail, office and institutional buildings from public sidewalks and transit facilities and to promote pedestrian and transit travel to commercial and institutional facilities.

2. Applicability. Except as otherwise provide in this section, the requirements of this section shall apply to the construction of new retail, office and institutional buildings which front on a transit street.

3. Development Standards.

    a. All buildings shall have at least one main building entrance oriented towards the transit street. A main building entrance is oriented toward a transit street if it is directly located on the transit street, or if it is linked to the transit street by an on-site pedestrian walkway that does not cross off-street parking or maneuvering areas.

    i. If the site has frontage on more than one transit street, or on a transit street and a street intersecting a transit street, the building shall provide one main building entrance oriented to the transit street or to the corner where the two streets intersect.

        ii. For building facades over three hundred feet in length on a transit street, two or more main building entrances shall be provided as appropriate and oriented towards the transit street.

    b. In the event a requirement of this section conflicts with other requirements in Title 17, the requirements of this section shall control.

4. Exemptions. The following permitted uses are exempted from meeting the requirements of subsection 3 of this section:

    a. Heavy equipment sales;

    b. Motor vehicle service stations, including convenience stores associated therewith; or

    c. Solid waste transfer stations.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.62.056 Additional standards for large retail establishments.

Retail building(s) occupying more than ten thousand gross square feet of floor area shall contribute to the establishment or enhancement of community and public spaces by providing at least two of the following:

A. Patio/seating area;

B. Pedestrian plaza with benches;

C. Transportation center;

D. Window shopping walkway;

E. Outdoor playground area;

F. Kiosk area, water feature;

G. Clock tower; or

H. Other such deliberately shaped area and/or a focal feature or amenity that, in the judgment of the appropriate decision maker, adequately enhances such community and public spaces. Any such areas shall have direct access to the public sidewalk network and such features shall not be constructed of materials that are inferior to the principle materials of the building and landscape.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.62.057 Multi-family usable open space requirements.

A. Intent. Creating areas of usable open space that are easily accessed by residents provides focal points for community recreation and interaction and adds to the overall quality of life for residents. Given the environmental and recreational benefits of common open space, it should be integrated purposefully into the overall design of a development and not merely be residual areas left over after buildings and parking lots are sited.

B. Open Space Required. All new multi-family developments in all zones shall provide usable open space.

1. In residential zones, each development shall provide a minimum of one hundred square feet of open space per dwelling unit.

2. In nonresidential, commercial and mixed-use zones, each development shall provide a minimum of fifty square feet of open space per dwelling unit.

3. Required setback areas shall not count toward the open space requirement unless setback areas are incorporated into spaces that meet all other requirements of this section.

4. Required open space areas may be counted towards both the open space requirements and the minimum landscaping requirements in OCMC 17.62.050.A, if the spaces meet the requirements of both sections.

C. Usable Open Space Types.

1. Common open spaces shall be accessible to all residents of the development and include landscaped courtyards, decks, gardens with pathways, children's play areas, common rooftop decks and terraces, and other multipurpose recreational or green spaces. Common open spaces may be used to meet one hundred percent of the usable open space requirement. Design standards:

a. Minimum dimensions for common open space shall be twelve feet with a minimum size of two hundred square feet for developments with twenty units or less, and twenty feet with a minimum size of four hundred square feet for developments with twenty-one or more units.

b. Common open space shall feature a mix of natural and recreational amenities to make the area more functional and enjoyable for a range of users. Sites with twenty units or less shall provide a minimum of two of the following amenities, and sites with twenty-one units or more shall provide a minimum of three of the following amenities and an additional amenity for every twenty units over forty, rounded up.

1. Landscaping areas.

2. Community gardening areas.

3. Large trees expected to reach over eighteen inches dbh at maturity.

4. Seating.

5. Pedestrian-scaled lighting.

6. Hard-surfaced pedestrian paths in addition to those required for internal pedestrian circulation.

7. Paved courtyard or plaza.

8. Gazebos or other decorative shelters.

9. Play structures for children.

10. Sports courts.

11. An alternative amenity as approved by the community development director.

c. Common open space shall be separated from ground level windows, streets, service areas and parking lots with landscaping, low-level fencing, and/or other treatments as approved by the city that enhance safety and privacy for both the common open space and dwelling units.

d. Common open space shall be accessible from the dwelling units and, as appropriate, from public streets and sidewalks. The space shall be oriented to encourage activity from local residents.

2. Private open space that is not open to all residents includes balconies, patios, and other outdoor multi-purpose recreational or green spaces. It may be used to meet up to fifty percent of the usable open space requirement.

a. Minimum dimensions for private open space shall be five feet with a minimum size of forty square feet.

3. Indoor recreational space may be used to meet up to twenty-five percent of the usable open space requirement provided the space is:

a. Accessible to all dwelling units.

b. Designed for and includes equipment for a recreational use (e.g., exercise, group functions, etc.).

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.62.058 Additional public park and open space requirements in Thimble Creek Concept Plan Area—Nonresidential development.

A. New non-residential development creating new commercial or industrial space will contribute to the creation of the parks and open space within the Thimble Creek Concept Plan by contributing a fee in lieu to the city to support the acquisition and interim use of needed park and open space land within the concept plan boundary as follows:

1. The fee in lieu will be set by the city commission and adopted yearly in the city's fee schedule. The fee shall only be used by the city for park, trail and open space acquisition and interim site development.

2. The fee-in-lieu or other equivalent monetary contribution, approved by the community development director, must be paid prior to approval of the certificate of occupancy.

(Ord. No. 21-1006, § 1(Exh. A), 7-1-2020)

17.62.059 Additional public park and open space requirements in Thimble Creek Concept Plan Area—Residential development.

A. Each development within the Thimble Creek Concept Plan area that includes residential development must dedicate land for neighborhood parks and open space subject to the location requirement set forth in subsection D as follows:

1. The minimum acreage of land dedicated for the South-Central Open Space-Neighborhood Park as provided in the following calculation: (2.6 persons per dwelling units) × (total number of dwelling units proposed) × (four acres)/(one thousand persons);

2. The minimum amount of land in acres dedicated for the East Ridge-Thimble Creek Conservation Area shall be 7.5 acres; and

3. The entire acreage must be dedicated as part of the final plat or site plan development approval for the first phase of development.

B. If a larger area for a neighborhood park or open space is proposed than is required based on the per-unit calculation described in subsection A, for the south Central Open Space Neighborhood Park, the city must reimburse the applicant for the value of the amount of land that exceeds the required dedication based on the fee-in-lieu formula expressed in subsection C.

C. The city may accept a fee-in-lieu as an alternative to this dedication at its discretion or may require a fee-in-lieu if a suitable site meeting the criteria described in subsection D of these provisions is not available within the development site. The calculation of the fee-in-lieu or other monetary contributions must meet the following standards:

1. The amount of the fee in lieu of other monetary contributions shall be determined by a licensed, city selected appraiser retained by the applicant, who will value the excessive dedication assuming that zoning and other land use entitlement necessary for park and open space development are in place.

2. The fee-in-lieu or other monetary contribution shall be paid current with public dedication.

D. Neighborhood park and open space sites proposed for dedication must be located within the South-Central Open Space Network and East Ridge Thimble Creek Conservation Area Park locations as shown in Figure 17.62.059-1 and meet the following locational and development standards:

1. South Central Open Space-Neighborhood Park.

a. Thirty-foot ped/bikeway string along the east side of Center Parkway to be located in a shared-use path and will not be considered part of a pearl.

b. Up to four pearls of various sizes spread along the open space network.

c. Minimum sizes pearl: Two acres minimum.

d. Maximum size pearl: None.

e. Minimum combined size of all pearls: Ten acres.

f. Minimum average pearl width: Two hundred feet.

g. Minimum average pearl depth: Two hundred feet.

h. At least five acres to be developed with active recreation components.

i. The first pearl dedicated must be at least three acres in size.

2. East Ridge-Thimble Creek Conservation Area shall include:

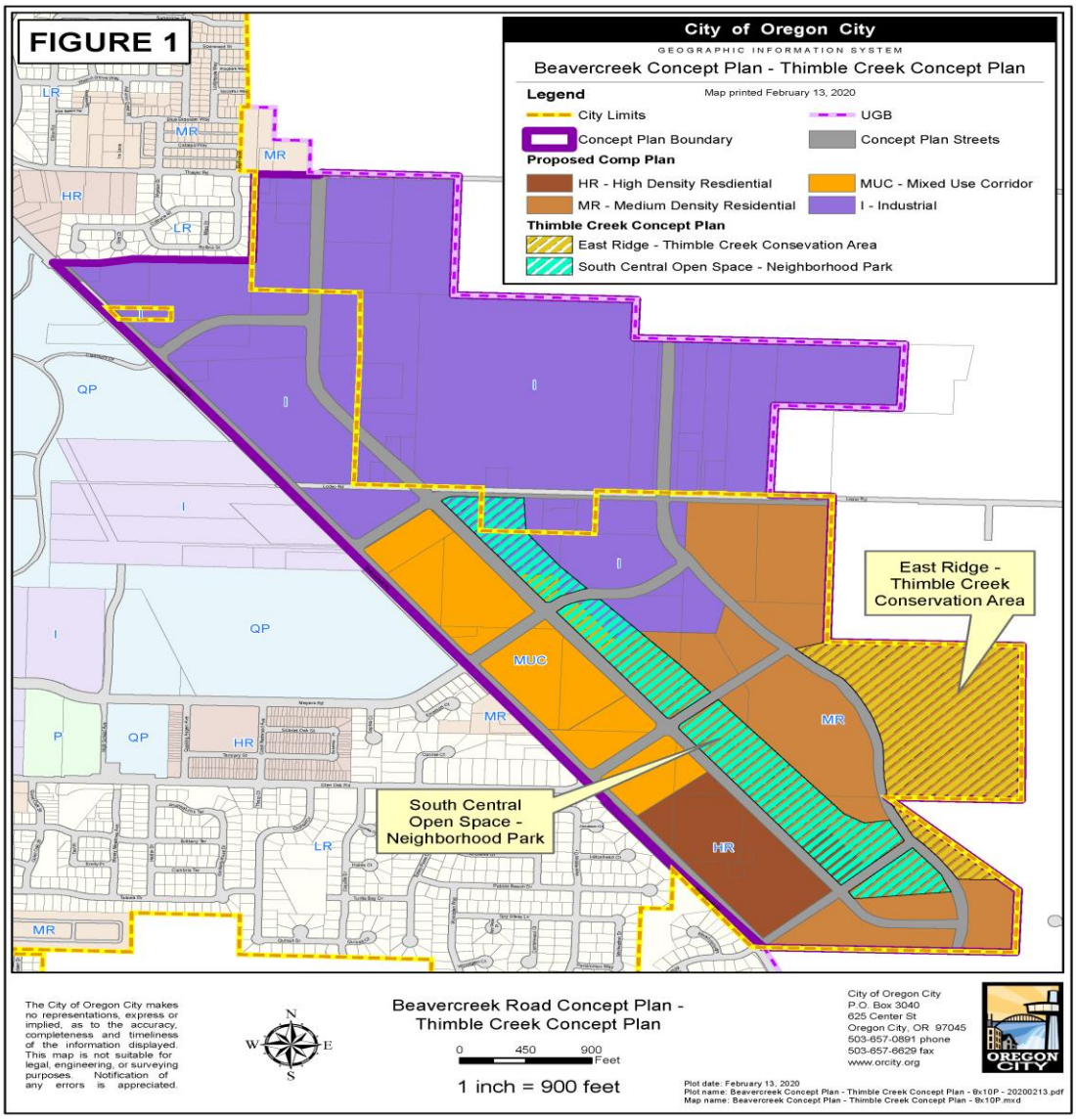
a. One-half of area between the Thimble Creek stream buffer and the four hundred ninety-foot elevation ridgeline to be open space;

b. Two public viewpoints separated by at least four hundred feet with a minimum size of .35 acre at less than ten percent slope for each viewpoint. One of the viewpoints must be visible from a passing vehicle on the Ridge Parkway;

c. Seven hundred-foot non-interrupted view corridor along the open space from the east edge of the Ridge Parkway; and

d. Provide a pedestrian-oriented forest trail from one view-point to another along the Ridge Parkway.

Figure 17.62.059-1



(Ord. No. 21-1006, § 1(Exh. A), 7-1-2020)

17.62.060 Reserved.

Editor's note(s)—Ord. No. 22-1001, § 1(Exh. A), adopted June 1, 2022, repealed § 17.62.060, which pertained to cluster housing and derived from Ord. No. 18-1009, adopted July 3, 2019; Ord. No. 19-1008, adopted December 18, 2019 and Ord. No. 21-1006, adopted July 1, 2020.

17.62.065 Outdoor lighting.

A. Purpose. The general purpose of this section is to require outdoor lighting that is adequate for safety and convenience; in scale with the activity to be illuminated and its surroundings; directed to the surface or activity to be illuminated; and designed to clearly render people and objects and contribute to a pleasant nighttime environment. Additional specific purposes are to:

1. Provide safety and personal security as well as convenience and utility in areas of public use or traverse, for uses where there is outdoor public activity during hours of darkness;

2. Control glare and excessive brightness to improve visual performance, allow better visibility with relatively less light, and protect residents from nuisance and discomfort;

3. Control trespass light onto neighboring properties to protect inhabitants from the consequences of stray light shining in inhabitants' eyes or onto neighboring properties;

4. Result in cost and energy savings to establishments by carefully directing light at the surface area or activity to be illuminated, using only the amount of light necessary; and

5. Control light pollution to minimize the negative effects of misdirected light and recapture views to the night sky.

6. Encourage energy efficient lighting with new technologies such as light emitting diodes (LED) or similar to reduce ongoing electrical demand and operating costs.

B. Applicability.

1. General.

a. All exterior lighting for any type of commercial, mixed-use, industrial, institutional, or multi-family development shall comply with the standards of this section, unless excepted in subsection B.3.

b. The city engineer or public works director shall have the authority to enforce these regulations on private property if any outdoor illumination is determined to present an immediate threat to the public health, safety and welfare.

2. Lighting Plan Requirement. All commercial, industrial, mixed-use, cottage housing and multi-family developments shall submit a proposed exterior lighting plan. The plan shall be submitted concurrently with the site plan. The exterior lighting plan shall include plans and specifications for streetlights, parking lot lights, and exterior building lights. The specifications shall include details of the pole, fixture height and design, lamp type, wattage, and spacing of lights.

3. Excepted Lighting. The following types of lighting are excepted from the requirements of this section:

a. Residential lighting for single-family attached and detached homes, and duplexes.

b. Public street and right-of-way lighting.

c. Temporary decorative seasonal lighting provided that individual lamps have a light output of sixty watts or less.

d. Temporary lighting for emergency or nighttime work and construction.

e. Temporary lighting for theatrical, television, and performance areas, or for special public events.

f. Lighting for a special district, street, or building that, according to an adopted municipal plan or ordinance, is determined to require special lighting aesthetics as part of its physical character.

g. Lighting required and regulated by the Federal Aviation Administration.

C. Design and Illumination Standards.

1. Outdoor lighting, if provided, shall be provided in a manner that enhances security, is appropriate for the use, avoids adverse impacts on surrounding properties, and the night sky through appropriate shielding as defined in this section. Glare shall not cause illumination on other properties in excess of a measurement of 0.5 footcandles of light as measured at the property line.
2. Lighting shall be provided in parking lots, bicycle parking areas, and vehicular circulation areas.
3. Lighting shall be provided in pedestrian walkways, pedestrian plazas, and pedestrian circulation areas.
4. Lighting shall be provided at all building entrances.
5. With the exception of pedestrian scale lighting, all light sources shall be concealed or shielded with a full cut-off style fixture in order to minimize the potential for glare and unnecessary diffusion on adjacent property.
6. The maximum height of any lighting pole serving a multi-family residential use shall be twenty feet. The maximum height serving any other type of use shall be twenty-five feet, except in parking lots larger than five acres, the maximum height shall be thirty-five feet if the pole is located at least one hundred feet from any residential use.
7. Floodlights shall not be utilized to light all or any portion of a building facade between ten p.m. and six a.m.
8. Lighting on outdoor canopies shall be fully recessed into the canopy and shall not protrude downward beyond the ceiling of the canopy.
9. All outdoor light not necessary for security purposes shall be reduced, activated by motion sensor detectors, or turned off during non-operating hours.
10. Light fixtures used to illuminate flags, statues, or any other objects mounted on a pole, pedestal, or platform shall use a narrow cone beam of light that will not extend beyond the illuminated object.
11. For upward-directed architectural, landscape, and decorative lighting, direct light emissions shall not be visible above the building roofline.
12. No flickering or flashing lights shall be permitted, except for temporary decorative seasonal lighting.
13. Lighting for outdoor recreational uses such as ball fields, playing fields, tennis courts, and similar uses, are allowed a light post height up to eighty feet in height.
14. Main building entrances shall be well lighted and visible from any transit street. The minimum lighting level for building entries fronting on a transit street shall be three foot-candles.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.62.085 Refuse and recycling standards for commercial, industrial, office, institutional, and multi-family developments.

The purpose and intent of these provisions is to provide an efficient, safe and convenient refuse and recycling enclosure for the public as well as the local collection firm. All new development, change in property use, expansions, or exterior alterations to uses, other than single-family detached residential units, duplexes, triplexes, quadplexes, townhouses, cottage clusters or accessory dwelling units (ADUs), shall include a refuse and recycling enclosure. The area(s) shall be:

A. Fully enclosed and visually screened;

B. Located in a manner easily and safely accessible by collection vehicles;

C. Located in a manner so as not to hinder travel lanes, walkways, streets or adjacent properties;

D. On a level, hard surface designed to discharge surface water runoff and avoid ponding;

E. Maintained by the property owner;

F. Used only for purposes of storing solid waste and recyclable materials;

G. Designed in accordance with applicable sections of the Oregon City Municipal Code (including OCMC 8.20, Solid Waste Collection and Disposal) and city adopted policies.

Enclosures are encouraged to be sized appropriately to meet the needs of current and future tenants and designed with sturdy materials which are compatible to the primary structure(s).

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.62.090 Implementation.

A. Applications for site plan and design review shall be reviewed in the manner provided in OCMC 16.12 and 17.50. The building official may issue a certificate of occupancy only after the improvements required by site plan and design review approval have been completed, or a schedule for completion and a bond or other financial guarantee have been accepted by the city.

B. In performing site plan and design review, the review authority shall consider the effect of additional financial burdens imposed by such review on the cost and availability of needed housing types. Consideration of such factors shall not prevent the imposition of conditions of approval found necessary to meet the requirements of this section. The cost of such conditions of approval shall not unduly increase the cost of housing beyond the minimum necessary to achieve the provisions of this title, nor shall such cost prevent the construction of needed housing types.

C. The site plan and design review provisions of this chapter shall not be applied to reduce the density or height of an application for a development project that reserves at least seventy-five percent of the gross floor area for housing where the proposed density or height is at or below what is allowed in the base zone, except in the following situations:

1. Where the reduction in density is required for development subject to historic overlay provision in OCMC 17.40; or

2. Where the reduction in density is necessary to resolve a health, safety or habitability issue, or to comply with the natural resource overlay district regulations of OCMC 17.49, the geologic hazard overlay district regulations of OCMC 17.44, or the floodplain management overlay district regulations of OCMC 17.42 or steep slope regulations.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

Chapter 17.04 DEFINITIONS

[Note: the following is a list of new or amended definitions intended to implement CFEC code requirements) – these definitions will be numbered in the Municipal Code when codified.]

Change of Use

"Change of Use" means a type of development in which the principal use for an existing site or building is changed to a new different use, but not including a change of ownership, tenancy, or management where the previous nature of the use, line of business, or other function is substantially unchanged. A change of use may or may not require land use approval depending on the scale and type of use proposed. For example, if an existing warehouse in an industrial zone were to be converted to a manufacturing facility, and both the existing and the proposed use are permitted in the zone, a change of use is occurring, however, land use review would be limited to only the aspects of the use that are changing. See also definition for "Development".

Electrical Service Capacity

"Electrical service capacity" means:

(a) Building electrical service, sized for the anticipated load of electric vehicle charging stations, that has overcurrent devices necessary for electric vehicle charging stations or has adequate space to add the overcurrent devices;

(b) Designated space within a building to add electrical service with capacity for electric vehicle charging stations; or

(c) A designated location on building property, in or adjacent to a landscaped area, for installing remote service for electric vehicle charging stations; and

(d) A conduit system installed from building electrical service, or from the dedicated spaces or locations described in subparagraph (A) of this paragraph, to parking spaces that can support, at a minimum, electrical wiring for installation of level 2 electric vehicle charging stations and, if the conduit is for future installation of electric vehicle charging stations, that labels both ends of the conduit to mark the conduit as provided for future electric vehicle charging stations.

Electric vehicle charging station

"Electric vehicle charging station" means a device or facility for delivering electricity for motor vehicles that use electricity for propulsion.

Frequent Transit Corridor

"Frequent Transit Corridor" means:

(a) Priority transit corridors designated under OAR 660-012-0710; or
(b) Corridors with transit service arriving with a scheduled frequency of at least four times an hour during peak service; or
(c) If no corridor qualifying under subsection (b), corridors with the most frequent transit service in the community if the scheduled frequency is at least once per hour during peak service.

Level 2 electric vehicle charging station

"Level 2 electric vehicle charging station" means an electric vehicle charging station that uses 240V AC electricity for charging an EV.

Mixed Use Development

"Mixed Use Development" means

Existing language in code: "more than one type of land use occupies a single structure or parcel of land."

or:

The development of a single property, or contiguous properties under single ownership, with a building or buildings which comprise two or more different land uses including residential, office, retail, recreational, light industrial, institutional, and other listed uses where permitted.

New Parking Lot

"New parking lot" or space means any of the following:

(a) New parking lot area or space where no parking previously existed.

(b) Removal and replacement of pavement and subgrade of existing parking areas greater than six inches deep (6").

(c) The term new parking lot does not apply to crack and chip sealing, patching, repaving over existing subgrade or selective repair of damaged areas less than six inches (6").

New Parking lot area.

"New parking lot area" means all surface area on which a vehicle can drive, including all parking stalls, all drives and drive-through lanes within the property regardless of length, and all maneuvering areas regardless of depth. New parking lot area does not include areas not used by passenger vehicles such as loading areas or outdoor storage.

Oregon City Regional Center

Oregon City Regional Center means the area indicated on the adopted Regional Center Map for downtown and North End Areas of the City that implements the Metro Region 2040 Center Concept for Oregon City. The Regional Center spans the area from the former paper mill to Clackamette Cove and the intersection of OR-213 / I-205 / OR 99E, from the banks of the Willamette and Clackamas Rivers to the bluff, and areas on both sides of McLoughlin Boulevard. The majority of the Oregon City Regional Center is zoned Mixed Use Downtown, although other zone districts are present within the boundary of the Regional Center.

Oregon Residential Reach Code

"Oregon Residential Reach Code" means a statewide optional energy construction standard approved by the Building Codes Division. It is separate from the state building code and applicable at the designer's and contractor's discretion.

Small scale mobility device

"Small scale mobility device" means electric bicycles, electric scooters, and other personal electric assistive mobility devices such as electric wheelchairs.

Surface Parking

"Surface Parking" means the area measured around the perimeter of all new parking spaces, maneuvering areas, and interior landscaping.

Underused parking

"Underused parking" means parking lots or facilities that are below 50% of capacity most or all of the time.

17.04.595 Institutional development.

"Institutional development" includes all public, semi-public and private community facilities and uses, including government office and maintenance facilities, educational facilities, research institutions, correctional institutions, museums, libraries, stadiums, hospitals, residential facilities, auditoriums and convention or meeting halls, churches, parks and public recreational facilities, automobile parking structures, and other similar facilities and uses.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019)

17.08.025 Conditional uses.

The following uses are permitted in the R-10, R-8 and R-6 districts when authorized by and in accordance with the standards contained in OCMC 17.56:

A. Golf courses, except miniature golf courses, driving ranges or similar commercial enterprises;

B. Bed and breakfast inns/boarding houses;

C. Cemeteries, crematories, mausoleums and columbariums;

D. Child care centers and nursery schools;

E. Emergency service facilities (police and fire), excluding correctional facilities;

F. Residential facilities;

G. Private and/or public educational or training facilities;

H. Public utilities, including sub-stations (such as buildings, plants and other structures);

I. Religious institutions;

J. Assisted living facilities; nursing homes and group homes for over fifteen patients.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019)

17.10.025 Conditional uses.

The following uses are permitted in the R-5 and R-3.5 districts when authorized by and in accordance with the standards contained in OCMC 17.56:

A. Golf courses, except miniature golf courses, driving ranges or similar commercial enterprises;

B. Bed and breakfast inns/boarding houses;

C. Cemeteries, crematories, mausoleums and columbariums;

D. Child care centers and nursery schools;

E. Emergency service facilities (police and fire), excluding correctional facilities;

F. Residential facilities;

G. Private and/or public educational or training facilities;

H. Public utilities, including sub-stations (such as buildings, plants and other structures);

I. Religious institutions;

J. Assisted living facilities; nursing homes and group homes for over fifteen patients;

K. Live/work dwellings.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019)

17.12.020 Permitted uses.

Permitted uses in the R-2 district are:

A. Accessory dwelling units for existing single-family detached residential units constructed prior to the effective date of the ordinance codified in this chapter;

B. Duplexes;

C. Triplexes;

D. Quadplexes;

E. Townhouses;

F. Multi-family residential;

G. Cottage clusters;

H. Residential facilities;

I. Accessory buildings;

J. Parks, playgrounds, playfields and community or neighborhood centers;

K. Home occupations;

L. Family day care providers;

M. Temporary real estate offices in model homes located on and limited to sales of real estate on a single piece of platted property upon which new residential buildings are being constructed;

N. Management and associated offices and buildings necessary for the operations of a multi-family residential development;

O. Transportation facilities.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.29.020 Permitted uses—MUC-1 and MUC-2.

A. Banquet, conference facilities and meeting rooms.

B. Bed and breakfast/boarding houses, hotels, motels, and other lodging facilities.

C. Child care centers and/or nursery schools.

D. Indoor entertainment centers and arcades.

E. Health and fitness clubs.

F. Medical and dental clinics, outpatient; infirmary services.

G. Museums, libraries and cultural facilities.

H. Offices, including finance, insurance, real estate and government.

I. Outdoor markets, such as produce stands, craft markets and farmers markets that are operated on the weekends and after six p.m. during the weekday.

J. Postal services.

K. Parks, playgrounds, playfields and community or neighborhood centers.

L. Repair shops, for radio and television, office equipment, bicycles, electronic equipment, shoes and small appliances and equipment.

M. Multi-family residential, triplexes and quadplexes.

N. One or two dwelling units in conjunction with a nonresidential use, provided that the residential use occupies no more than fifty percent of the total square footage of the development.

O. Restaurants, eating and drinking establishments without a drive-through.

P. Services, including personal, professional, educational and financial services; laundry and dry-cleaning.

Q. Retail trade, including grocery, hardware and gift shops, bakeries, delicatessens, florists, pharmacies, specialty stores, marijuana, and similar, provided the maximum footprint for a stand-alone building with a single store or multiple buildings with the same business does not exceed sixty thousand square feet.

R. Seasonal sales.

S. Residential facilities, assisted living facilities; nursing homes and group homes for over fifteen patients licensed by the state.

T. Studios and galleries, including dance, art, photography, music and other arts.

U. Utilities: Basic and linear facilities, such as water, sewer, power, telephone, cable, electrical and natural gas lines, not including major facilities such as sewage and water treatment plants, pump stations, water tanks, telephone exchanges and cell towers.

V. Veterinary clinics or pet hospitals, pet day care.

W. Home occupations.

X. Research and development activities.

Y. Temporary real estate offices in model dwellings located on and limited to sales of real estate on a single piece of platted property upon which new residential buildings are being constructed.

Z. Transportation facilities.

AA. Live/work dwellings.

BB. Accessory dwelling unit in conjunction with a legally established non-conforming single-family dwelling.

CC. Duplex.

DD. After-hours public parking.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 13-1003, § 1(Exh. 1), 7-17-2013; Ord. No. 13-1017, § 1(Exh. 1), 4-16-2014; Ord. No. 16-1008, § 1(Exh. A), 10-19-2016, ballot 11-8-2016; Ord. No. 18-1005, § 1(Exh. A), 5-2-2018; Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.34.020 Permitted uses.

Permitted uses in the MUD district are defined as:

A. Banquet, conference facilities and meeting rooms;

B. Bed and breakfast/boarding houses, hotels, motels, and other lodging facilities;

C. Child care centers and/or nursery schools;

D. Indoor entertainment centers and arcades;

E. Health and fitness clubs;

F. Medical and dental clinics, outpatient; infirmary services;

G. Museums, libraries and cultural facilities;

H. Offices, including finance, insurance, real estate and government;

I. Outdoor markets, such as produce stands, craft markets and farmers markets that are operated on the weekends and after six p.m. during the weekday;

J. Postal services;

K. Repair shops, for radio and television, office equipment, bicycles, electronic equipment, shoes and small appliances and equipment;

L. Multi-family residential, triplexes and quadplexes;

M. One or two units in conjunction with a nonresidential use provided that the residential use occupies no more than fifty percent of the total square footage of the development;

N. Restaurants, eating and drinking establishments without a drive-through;

O. Services, including personal, professional, educational and financial services; laundry and dry-cleaning;

P. Retail trade, including grocery, hardware and gift shops, bakeries, delicatessens, florists, pharmacies, specialty stores provided the maximum footprint of a freestanding building with a single store does not exceed sixty thousand square feet (a freestanding building over sixty thousand square feet is allowed as long as the building contains multiple stores);

Q. Seasonal sales;

R. Residential facilities, assisted living facilities; nursing homes and group homes for over fifteen patients licensed by the state;

S. Studios and galleries, including dance, art, photography, music and other arts;

T. Utilities: Basic and linear facilities, such as water, sewer, power, telephone, cable, electrical and natural gas lines, not including major facilities such as sewage and water treatment plants, pump stations, water tanks, telephone exchanges and cell towers;

U. Veterinary clinics or pet hospitals, pet day care;

V. Home occupations;

W. Research and development activities;

X. Temporary real estate offices in model dwellings located on and limited to sales of real estate on a single piece of platted property upon which new residential buildings are being constructed;

Y. Transportation facilities;

Z. Live/work dwellings;

AA. After-hours public parking;

BB. Marinas;

CC. Religious institutions;

DD. Mobile food units outside of the downtown design district.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.35.030 Conditional uses.

The following uses are permitted in this district when authorized and in accordance with the process and standards contained in OCMC 17.56:

A. Emergency services;

B. Hospitals;

C. Assisted living facilities; nursing homes, residential facilities and group homes for over fifteen patients;

D. Parking not in conjunction with a primary use on private property, excluding after-hours public parking;

E. Retail trade, including grocery, hardware and gift shops, bakeries, delicatessens, florists, pharmacies and specialty stores in a freestanding building with a single store exceeding forty thousand square feet;

F. Public facilities such as sewage and water treatment plants, water towers and recycling and resource recovery centers;

G. Industrial uses including food and beverage production, design, light manufacturing, processing, assembly, packaging, fabrication and treatment of products made from previously prepared or semi-finished materials that exceed sixty thousand square feet;

H. Public utilities and services such as pump stations and sub-stations;

I. Stadiums and arenas.

(Ord. No. 14-1016, § 1(Att. B), 11-5-2014; Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

Chapter 17.52 OFF-STREET PARKING AND LOADING[1]

17.52.005 Purpose

The purpose of this chapter is…

A. To ensure that off-street parking is well-designed, efficiently used and compatible with adjacent land uses and the transportation system, and provides safe internal circulation for temporary parking of vehicles, pedestrians, bicycles, small scale mobility devices and transit needs;

C. To regulate the number of spaces, access, dimensions, tree canopy, landscaping, surfacing and drainage of parking areas;

D. To provide incentives for repurposing, reusing and reducing underused and unneeded parking areas and impervious areas used for parking.

17.52.010 Applicability.

The construction of a new structure or parking lot, or alterations to the size or use of an existing structure, parking lot or property use shall require site plan review approval and compliance with this chapter. This chapter does not apply to residential developments including single-family detached residential dwellings, duplexes, townhouses, tri- or 3-plexes, quad- or 4-plexes, and cottage clusters.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.52.015 Planning commission adjustment of parking standards.

A. Purpose. The purpose of permitting a planning commission adjustment to parking standards is to provide for flexibility in modifying parking standards in all zoning districts, without permitting an adjustment that would adversely impact the surrounding or planned neighborhood. Adjustments provide flexibility to those uses which may be extraordinary, unique, or provide greater flexibility for areas that can accommodate a denser development pattern based on existing infrastructure and ability to access the site by means of walking, biking or transit. An adjustment to a minimum parking standard may be approved based on a determination by the planning commission that the adjustment is consistent with the purpose of this code, and the approval criteria can be met.

B. Procedure. A request for a planning commission parking adjustment shall be initiated by a property owner or authorized agent by filing a land use application. The application shall be accompanied by a site plan, drawn to scale, showing the dimensions and arrangement of the proposed development and parking plan, the

[1]Editor's note(s)—Ord. No. 18-1009, § 1(Exh. A), adopted July 3, 2019, amended Chapter 17.52 in its entirety to read as herein set out. Former Chapter 17.52, §§ 17.52.010—17.52.090, pertained to similar subject matter, and derived from Ord. No. 10-1003, adopted July 7, 2010; Ord. No. 13-1003, adopted July 17, 2013; Ord. No. 14-1016, adopted November 5, 2014 and Ord. No. 18-1005, adopted May 2, 2018.

extent of the adjustment requested along with findings for each applicable approval criteria. A request for a parking adjustment shall be processed as a Type III application as set forth in Chapter 17.50.

C. Approval criteria for the adjustment are as follows:

1. Documentation. The applicant shall document that the individual project will require an amount of parking that is different from that required after all applicable reductions have been taken.

2. Parking Analysis for Surrounding Uses and On-Street Parking Availability. The applicant shall show that there is a continued fifteen percent parking vacancy in the area adjacent to the use during peak parking periods and that the applicant has permission to occupy this area to serve the use pursuant to the procedures set forth by the community development director.

a. For the purposes of demonstrating the availability of on street parking as defined in OCMC 17.52.020.B.3, the applicant shall undertake a parking study during time periods specified by the community development director. The time periods shall include those during which the highest parking demand is anticipated by the proposed use. Multiple observations during multiple days shall be required. Distances are to be calculated as traversed by a pedestrian that utilizes sidewalks and legal crosswalks or an alternative manner as accepted by the community development director.

b. The on-site parking requirements may be reduced based on the parking vacancy identified in the parking study. The amount of the reduction in on-site parking shall be calculated as follows:

i. Vacant on-street parking spaces within three hundred feet of the site will reduce on-site parking requirements by 0.5 parking spaces; and

ii. Vacant on-street parking spaces between three hundred and six hundred feet of the site will reduce on-site parking requirements by 0.2 parking spaces.

3. Function and Use of Site. The applicant shall demonstrate that modifying the amount of required parking spaces will not significantly impact the use or function of the site and/or adjacent sites.

4. Compatibility. The proposal is compatible with the character, scale and existing or planned uses of the surrounding neighborhood.

5. Safety. The proposal does not significantly impact the safety of adjacent properties and rights-of-way.

6. Services. The proposal will not create a significant impact to public services, including fire and emergency services.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.52.020 Number of automobile spaces.

A. Exemptions. The City shall not require a minimum number of parking spaces in the following situations.

1. Residential developments with more than one unit on a single Lot of Record as defined by 17.04.695.

2. Developments on a lot or parcel that includes lands within one-half (1/2) mile of a frequent transit corridor.

3. Per OAR 660-012-0435, no off-street parking is required within the Oregon City Regional Center, and within one-quarter mile of the Oregon City Regional Center.

4. Facilities and homes designed to serve people with psychosocial, physical, intellectual or developmental disabilities, including but not limited to a: residential care facility, residential training facility, residential treatment facility, residential training home, residential treatment home, and conversion facility as defined in ORS 443.400;

5. Child care facility as defined in ORS 329A.250;

6. Residential units smaller than 750 square feet;
7. Affordable housing as defined in OAR 660-039-0010;
8. Publicly supported housing as defined in ORS 456.250;
9. Emergency and transitional shelters for people experiencing homelessness; and
10. Domestic violence shelters.
11. Change of use of, or redevelopment of, buildings vacant for more than two years, provided the applicant provides evidence that the building was vacant prior to the effective date of this ordinance.
12. Change of use or redevelopment where at least 50 percent of the building floor area is retained.
13. Expansion of existing businesses provided that the cumulative expansion within one calendar year does not exceed 30 percent of the existing building footprint.
14. Designated historic buildings and landmarks pursuant to OCMC 17.40.030 – Historic Overlay District.
15. Commercial properties with fewer than ten (10) on-site employees or 3,000 square feet of floor space.
16. Developments built under the Oregon Residential Reach Code.
17. Developments seeking certification under any Leadership in Energy and Environmental Design (LEED) rating system.
18. Schools as defined in OCMC 17.04
19. Bars and taverns
20. Mixed-use development.
21. A change in use within an existing habitable building located in the MUD design district or the Willamette Falls Downtown District is exempt from additional parking requirements. Additions to an existing building and new construction that do not constitute cumulative expansion more than 30% within one calendar year are required to meet the minimum parking requirements for the areas as specified in Table 17.52.020 for the increased square footage.

B. Where new parking is proposed the number of parking spaces shall comply with the minimum and maximum ratio listed in Table 17.52.020. The maximum parking requirements are based on spaces per one thousand square feet net leasable area unless otherwise stated.

Table 17.52.020

Land Use	Minimum and Maximum Parking	
	Minimum	Maximum
Bars and taverns	Not required	
Cottage cluster	Not required	
Multi-family residential(no studio units)	1.00 per unit	2 per unit
Multi-family residential, studio unit or one-bedroom	Not required	1.2 per unit
Triplex and quadplex	Not required	4
Hotel, motel	1.0 per guest room	1.25 per guest room
Correctional Institution	1 per 7 beds	1 per 5 beds
Senior housing, including congregate care, residential care and assisted living facilities; nursing homes and other types of group homes	Not required	1 per 5 beds
Hospital	2.00	4.00

Preschool nursery/kindergarten	Not required	3.00
Elementary/middle school	Not required	1 per classroom + 1 per administrative employee + 0.25 per seat in auditorium/assembly room/stadium
High school, college, commercial school for adults	Not required	0.30 per # staff and students
Auditorium, meeting room, stadium, religious assembly building, movie theater	.25 per seat	0.5 per seat
Retail store, shopping center, restaurants	4.10	5.00
Office	2.70	3.33
Medical or dental clinic	2.70	3.33
Sports club, recreation facilities	Case specific	5.40
Storage warehouse, freight terminal	0.30	0.40
Manufacturing, wholesale establishment	1.60	1.67
Light industrial, industrial park	1.3	1.60

1. Mixed Uses. Unless exempt under (A), in the event several land uses occupy a single structure or parcel of land, the total requirements for off-street parking shall be the sum of the requirements of the several uses computed separately.
2. Requirements for types of buildings and uses not specifically listed herein shall be determined by the community development director, based upon the requirements of comparable uses listed.
3. Where calculation in accordance with the above list results in a fractional space, any fraction less than one-half shall be disregarded and any fraction of one-half or more shall require one space.
4. Fleet vehicle parking shall be accommodated within the maximum parking ratio, except that in GI, CI, and MUE zones, fleet vehicle parking may be included in a parking lot in addition to the maximum number of permitted parking spaces.
5. For land uses with more than 65,000 square feet of floor area, surface parking may not consist of more area than the floor area of the building.

C. Unless exempt under Section (A), parking requirements can be met either on-site, or off-site by meeting one or multiple of the following conditions:

1. Parking may be located on the same site as the associated use which it is supporting.
2. Mixed Uses. If more than one type of land use occupies a single structure or parcel of land, the total requirements for off-street automobile parking shall be the sum of the requirements for all uses, unless it can be shown that the peak parking demands are actually less (e.g. the uses operate on different days or at different times of the day). In that case, the total requirements shall be reduced accordingly, up to a maximum reduction of fifty percent, as determined by the community development director.
3. Shared Parking. Parking facilities for two or more uses, structures, or parcels of land may be shared provided that the right of joint use is evidenced by a recorded deed, lease, contract, or similar written instrument authorizing the joint use.
4. On-Street Parking. On-street parking may be counted toward on-site parking when it is on the street face abutting the subject land use. An on-street parking space shall not obstruct a required clear vision

area and it shall not violate any law or street standard. On-street parking for commercial uses requesting this shall conform to the following standards:

a. Dimensions. The following constitutes one on-street parking space:

i. Parallel parking: Twenty-two feet of uninterrupted and available curb;

ii. Forty-five and/or sixty-degree diagonal parking: Fifteen feet of curb;

iii. Ninety-degree (perpendicular) parking: Twelve feet of curb.

iv. Public Use Required for Credit. On-street parking spaces counted toward meeting the parking requirements of a specific use shall not be used exclusively by that use, but shall be available for general public use at all times. Signs or other actions that limit general public use of on-street spaces are prohibited.

5. Garage parking spaces and driveways at least 20 feet deep shall count towards off-street parking.

6. Off-site parking. Required parking spaces may be provided offsite, within 2,000 feet pedestrian travel of a site. If any non-loading parking is provided on site, all required parking for people with disabilities shall be on site. If all parking is offsite, parking for people with disabilities must be located within the shortest possible distance of an accessible entrance via an accessible path and no greater than 200 feet from that entrance.

C. Reduction of the Number of the Minimum Automobile Spaces Required. Any combination of the reductions below is permitted unless otherwise noted. The reductions may be cumulative and not capped.

1.. Tree Preservation. The community development director may grant an adjustment to any standard of this requirement provided that the adjustment preserves any tree greater than 20 inches in diameter so that the reduction in the amount of required pavement can help preserve existing healthy trees in an undisturbed, natural condition.

2.. Transportation Demand Management. The community development director shall reduce the required number of parking stalls up to twenty-five percent when a parking-traffic study prepared by a traffic engineer demonstrates alternative modes of transportation, including transit, bicycles, and walking, and/or special characteristics of the customer, client, employee or resident population will reduce expected vehicle use and parking space demand for this development, as compared to standard Institute of Transportation Engineers vehicle trip generation rates and further that the transportation demand management program promotes or achieves parking utilization lower than minimum city parking requirements.

A transportation demand management (TDM) program shall be developed to include strategies for reducing vehicle use and parking demand generated by the development and will be measured annually. If, at the annual assessment, the city determines the plan is not successful, the plan may be revised. If the city determines that no good-faith effort has been made to implement the plan, the city may take enforcement actions.

3.. Parking stalls may be reduced by up to ten percent when the subject property is adjacent to an existing or planned fixed public transit route or within one thousand feet of an existing or planned transit stop.

4. Parking shall be reduced by one off-street parking space for each three kilowatts of capacity in solar panels or wind power that will be provided in a development.

5. Parking shall be reduced by one off-street parking space for each dedicated car sharing parking space in a development. These spaces shall be clearly signed or marked appropriately.

6. Parking mandates shall be reduced by two off-street parking spaces for every electric vehicle charging station provided in a development.

7. Parking mandates shall be reduced by one off-street parking space for every two residential units in a development that are fully accessible to people with mobility disabilities.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.52.025 Reuse and redevelopment of underused parking allowed

A. Purpose. The purpose of this section is to encourage other beneficial uses within parking areas, especially in situations where parking is underused as defined in OCMC 17.04.

B. Property owners may redevelop, remove, reuse and repurpose parking spaces for bicycle-oriented, pedestrian-oriented or transit supportive facilities including but not limited to bicycle parking, bus stops and pull-outs, transit shelters, and park and ride stations. These requests may be approved through the Type I Site Plan and Design Review application process in OCMC 17.62.030.

17.52.030 Standards for automobile parking.

A. Access. Ingress and egress locations on public thoroughfares shall be located in the interests of public traffic safety and meet requirements of OCMC 16.12.035. Groups of more than four parking spaces shall be so located and served by driveways so that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.

B. Surfacing. Required off-street parking spaces and access aisles shall have paved surfaces adequately maintained. The use of pervious asphalt/concrete and alternative designs that reduce stormwater runoff and improve water quality pursuant to the city's stormwater and low impact development design standards are encouraged.

C. Drainage. Drainage shall be designed in accordance with the requirements of OCMC 13.12 and the city public works stormwater and grading design standards.

D. Dimensional Standards.

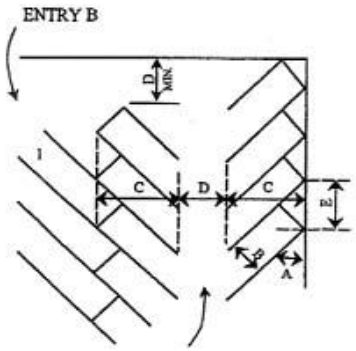
1. Requirements for parking developed at varying angles are according to the table included in this section. A parking space shall not be less than seven feet in height when within a building or structure, and shall have access by an all-weather surface to a street or alley. Parking stalls in compliance with the American with Disabilities Act may vary in size in order to comply with the building division requirements. Up to thirty-five percent of the parking shall be compact, while the remaining required parking stalls may be designed to standard dimensions. The community development director may approve alternative dimensions for parking stalls which comply with the intent of this chapter.

2. Alternative Parking/Plan. Any applicant may propose an alternative parking plan. Such plans are often proposed to address physically constrained or smaller sites, however innovative designs for larger sites may also be considered. In such situations, the community development director may approve an alternative parking lot plan with variations to parking dimensions of this section. The alternative shall be consistent with the intent of this chapter and shall create a safe space for automobiles and pedestrians while providing landscaping of the quantity and quality found within standard parking lot landscaping requirements.

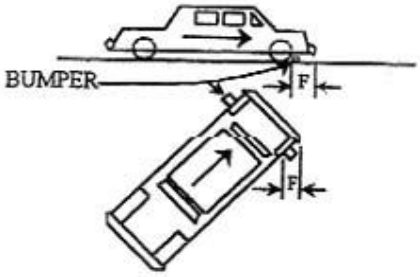
Parking Standard
Parking Angle Space Dimensions

A Parking Angle		B Stall Width	C Stall to Curb	D Aisle Width	E Curb Length	F Overhang
0 degrees		8.5	9.0	12	20	0
30 degrees	Standard Compact	9' 8'	17.3' 14.9'	11' 11'	18' 16'	
45 degrees	Standard Compact	8.5 8.5	19.8' 17.0'	13' 13'	12.7' 11.3'	1.4
60 degrees	Standard Compact	9' 8'	21' 17.9'	18' 16'	10.4' 9.2'	1.7
90 degrees	Standard Compact	9' 8'	19.0' 16.0'	24' 22'	9' 8'	1.5

All dimensions are to the nearest tenth of a foot.



TYPICAL PARKING LAYOUT
ENTRY A



NOTE: SPACE 1 CONTINGENT UPON ENTRY B
OVERHANG

NOTE: Overhang dimensions are intended to indicate possible location from parking area edge for location of bumpers.

E. Carpool and Vanpool Parking.

1. New non-residential developments with fifty (50) or more parking spaces shall designate at least five percent, but not fewer than two, of those spaces for exclusive carpool and vanpool parking. Carpool and vanpool parking spaces shall be located closer to the main employee, student or commuter entrance than all other employee, student or commuter parking spaces with the exception of ADA

accessible parking spaces. The carpool/vanpool spaces shall be clearly marked "Reserved — Carpool/Vanpool Only." This section shall apply to the following listed uses:

(a) Hospitals.

(b) Government offices.

(c) Group homes.

(d) Nursing and retirement homes.

(e) Schools.

(f) Designated employee parking areas.

(g) Transit park-and-ride facilities.

2. The standards in E(1) shall not apply to projects where seventy-five percent or more of the floor area is residential.

Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.52.040 Bicycle parking standards.

A. Purpose—Applicability. To encourage bicycle transportation to help reduce principal reliance on the automobile, and to ensure bicycle safety and security, bicycle parking shall be provided in conjunction with all uses other than exclusively residential use with less than five dwellings on-site (excluding cottage clusters).

B. Number of Bicycle Spaces Required. For any use not specifically mentioned in Table A, the bicycle parking requirements shall be the same as the use which, as determined by the community development director, is most similar to the use not specifically mentioned. Calculation of the number of bicycle parking spaces required shall be determined in the manner established in OCMC 17.52.020 for determining automobile parking space requirements. Modifications to bicycle parking requirements may be made through the site plan and design, conditional use, or master plan review process.

Table A Required Bicycle Parking Spaces*

Where two options for a requirement are provided, the option resulting in more bicycle parking applies. Where a calculation results in a fraction, the result is rounded up to the nearest whole number.

Use	Minimum Bicycle Parking	Minimum Bicycle Parking — Covered —
Multi-family (five or more units)	1 per 2 units (minimum of 2)	0.5 spaces per unit (minimum of 1)
Mixed-use with five or more residential units	1 per 2 units (minimum of 2)	0.5 spaces per unit (minimum of 1)
Correctional institution	1 per 15 auto spaces (minimum of 2)	30% (minimum of 1)
Nursing home or care facility	1 per 30 auto spaces (minimum of 2)	30% (minimum of 1)
Hospital	1 per 20 auto spaces (minimum of 2)	30% (minimum of 1)
Park-and-ride lot	1 per 5 auto spaces (minimum of 2)	50% (minimum of 1)
Transit center	1 per 5 auto spaces (minimum of 2)	50% (minimum of 1)
Parks and open space	1 per 10 auto spaces (minimum of 2)	0%

Public parking lots	1 per 10 auto spaces (minimum of 2)	50% (minimum of 1)
Automobile parking structures	1 per 10 auto spaces (minimum of 4)	80% (minimum of 2)
Religious institutions, movie theater, auditorium or meeting room	1 per 10 auto spaces (minimum of 2)	30% (minimum of 1)
Libraries, museums	1 per 5 auto spaces (minimum of 2)	30% (minimum of 1)
Preschool, nursery, kindergarten	2 per classroom (minimum of 2)	50% (minimum of 1)
Elementary	4 per classroom (minimum of 2)	50% (minimum of 1)
Junior high and High school	2 per classroom (minimum of 2)	50% (minimum of 2)
College, business/commercial schools	2 per classroom (minimum of 2)	50% (minimum of 1)
Swimming pools, gymnasiums, ball courts	1 per 10 auto spaces (minimum of 2)	30% (minimum of 1)
Retail stores and shopping centers	1 per 20 auto spaces (minimum of 2)	50% (minimum of 2)
Retail stores handling exclusively bulky merchandise such as automobile, boat or trailer sales or rental	1 per 40 auto spaces (minimum of 2)	0%
Bank, office	1 per 20 auto spaces (minimum of 2)	50% (minimum of 1)
Medical and dental clinic	1 per 20 auto spaces (minimum of 2)	50% (minimum of 1)
Eating and drinking establishment	1 per 20 auto spaces (minimum of 2)	0%
Gasoline service station	1 per 10 auto spaces (minimum of 2)	0%

[*] Covered bicycle parking is not required for developments with two or fewer parking stalls.

C. Design Standards.

1. Bicycle parking facilities shall be in the form of a lockable enclosure on-site, secure room in a building on-site, a covered or uncovered rack on-site, or within the adjacent right-of-way.

2. Bicycle parking areas shall be clearly marked or visible from on-site buildings or the street. If a bicycle parking area is not plainly visible from the street or main building entrance, a sign shall be posted indicating the location of the bicycle parking area. Indoor bicycle parking areas shall not require stairs to access the space. If sites have more than one building, bicycle parking shall be distributed as appropriate to serve all buildings.

3. Bicycle parking areas shall be illuminated pursuant to OCMC 17.62.065 – Outdoor Lighting.

4. All bicycle racks shall be designed so that:

   a. The bicycle frame is supported horizontally at two or more places.

   b. The frame and at least one wheel of the bicycle can be locked to the rack with a standard U-type lock.

   c. The user is not required to lift the bicycle onto the bicycle rack.

d. Each bicycle parking space is accessible without moving another bicycle.

e. It is a minimum of thirty inches tall and eighteen inches wide between the two points of contact.

f. Provides an area of at least six feet by two feet per standard bicycle.

g. Provides an area of at least six feet by three feet for cargo bicycles and large bicycles. Where only one bicycle space is required per Table A, it shall meet the larger space requirement of is standard.

g. All bicycle racks and lockers shall be securely anchored to the ground or to a structure.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.52.060 Parking lot landscaping.

Purpose. The purpose of this code section includes the following:

1. To enhance and soften the appearance of parking lots;
2. To limit the visual impact of parking lots from sidewalks, streets and particularly from residential areas;
3. To shade and cool parking areas;
4. To reduce air and water pollution;
5. To reduce stormwater impacts and improve water quality; and
6. To establish parking lots that are more inviting to pedestrians and bicyclists.

A. Applicability. Unless otherwise specified, construction of new parking lots and alterations of existing parking lots shall comply with parking lot landscaping standards. Parking lot landscaping requirements within this section do not apply to parking structures or parking garages, except landscaping as required in OCMC 17.62.

B. Development Standards.

1. The landscaping shall be located in defined landscaped areas that are uniformly distributed throughout the parking or loading area.
2. All areas in a parking lot not used for parking, maneuvering, or circulation shall be landscaped.
3. Developments adding off-street parking areas of one-half acre (21,780 square feet) or more shall comply with (a)or (b) below:

   (a) Provide tree canopy that will cover at least 40 percent of the new parking lot at maturity but no later than 15 years after planting.

   (b) Where an applicant can demonstrate that it is infeasible to meet the 40% canopy requirement in (a) the Community Development Director may approve installation of solar panels with a generation capacity of at least 0.5 kilowatts per parking space. Panels may be located anywhere on the property subject to applicable standards of the OCMC.
4. Parking lot trees shall be a mix of deciduous shade trees and coniferous trees. The trees shall be evenly distributed throughout the parking lot as both interior and perimeter landscaping.
5. Required landscaping trees shall be of a minimum two-inch minimum caliper size for deciduous species or a minimum 8 foot height for evergreen species at the time of planting and selected from the Oregon City Street Tree List, Parking Lot Tree list or other approved species recommended by a certified arborist or registered landscape architect.

6. At maturity, all of the landscaped area shall be planted in ground cover plants, which includes grasses. Mulch (as a ground cover) shall only be allowed underneath plants at full growth and within two feet of the base of a tree and is not a substitute for ground cover.

7. Landscaped areas shall include irrigation systems unless an alternate plan is submitted, and approved by the community development director, that can demonstrate adequate maintenance.

8. All landscaping shall be installed according to accepted planting procedures, according to American Standards for Nursery Stock (ANSI Z60.1).

C. Perimeter Parking Lot Landscaping and Parking Lot Entryway/Right-of-Way Screening for New Parking Lots and new parking lots over ½ acre. Shall include associated drive aisles with five-foot wide landscaped buffer where the parking lot abuts the right-of-way and/or adjoining properties. In order to provide connectivity between non-single-family sites, the community development director may approve an interruption in the perimeter parking lot landscaping for a single driveway where the parking lot abuts property designated as multi-family, commercial or industrial. Shared driveways and parking aisles that straddle a lot line do not need to meet perimeter landscaping requirements.

1. The perimeter parking lot are[a] shall include:

a. Trees spaced a maximum of thirty feet apart (minimum of one tree on either side of the entryway is required). When the parking lot is adjacent to a public right-of-way, the parking lot trees shall be offset from the street trees;

b. An evergreen hedge screen of thirty to forty-two inches high or shrubs spaced no more than four feet apart on average. The hedge/shrubs shall be parallel to and not nearer than two feet from the right-of-way line. The required screening shall be designed to allow for free access to the site and sidewalk by pedestrians. Visual breaks, no more than five feet in width, shall be provided every thirty feet within evergreen hedges abutting public right-of-ways.

c. A minimum of 30% tree canopy at maturity is required along the parking lot perimeter adjacent to drive aisles.

D. Parking Area/Building Buffer. Except for parking lots with fewer than five parking stalls, parking areas (excluding drive aisles with no adjacent parking) shall be separated from the exterior wall of a structure, exclusive of pedestrian entranceways or loading areas, by one of the following:

1. Minimum five-foot wide landscaped planter strip (excluding areas for pedestrian connection) meeting the standards for perimeter parking lot area landscaping; or:

2. Minimum seven-foot sidewalks with shade trees spaced a maximum of thirty feet apart in three-foot by five-foot tree wells.

E. Interior Parking Lot Landscaping. Surface parking lots with more than five parking stalls shall include at least forty-five square feet of interior parking lot landscaping per parking stall to improve the water quality, reduce stormwater runoff, and provide pavement shade. Pedestrian walkways or any impervious surface in the landscaped areas are not to be counted in the percentage. Fractions shall be rounded up when calculating the required number of plantings. Interior parking lot landscaping shall include:

a. A minimum of one tree per four parking spaces.

b. A minimum of 1.5 shrubs per parking space.

c. No more than eight contiguous parking spaces shall be created without providing an interior landscape strip between them. Landscape strips shall be provided between rows of parking shall be a minimum of six feet in width and a minimum of ten feet in length.

F. Alternative landscaping plan.

Any applicant may propose an alternative landscaping plan. Such plans are often proposed to address physically constrained or smaller sites, however innovative designs for larger sites may also be considered. Alternative plans may include the use of low impact development techniques and minimized landscaping requirements. In such situations, the community development director may approve variations to the landscaping standards of OCMC 17.52.060 in accordance with subsection 1 and/or 2 below.

1. General Review Standard. The alternative shall meet the standards in OCMC 17.62.015, Modifications that will better meet design review requirements.
2. Credit for Pervious/Low Impact Development. The community development director may count up to fifty percent of the square footage of any pervious hardscaped landscape material within a parking lot that is designed and approved pursuant to the city's adopted stormwater and low impact development design standards toward minimum landscaping requirements for the site. (This includes porous pavement detention, open celled block pavers, porous asphalt, porous concrete pavement, porous turf, porous gravel, etc.).

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.52.070 ElectricalVehicle Charging

A. New private multi-family residential or mixed-use developments with five or more residential units shall install electrical service capacity, as defined in OCMC 17.04, to new off-street parking spaces subject to the following standards.

1. Non-residential development and residential or mixed-use developments with less than five dwelling units shall provide electrical service capacity to a minimum of 20 percent of all off-street vehicle parking spaces on the site.
2. Residential or mixed-use development with five or more dwelling units shall provide electrical service capacity to a minimum of 40 percent of all off-street vehicle parking spaces on site.
3. The placement of electrical service equipment shall not conflict with, or block access required under the Americans with Disabilities Act. Electrical service equipment shall not displace required pedestrian paths, sidewalks, landscaping, bicycle paths and parking spaces.
4. Parking mandates shall be reduced by two off street parking spaces for every electric vehicle charging station provided in a development.

17.52.080 Maintenance.

The owner, tenant and their agent, if any, shall be jointly and severally responsible for the maintenance of the site including but not limited to the off-street parking and loading spaces, bicycle parking and all landscaping which shall be maintained in good condition so as to present a healthy, neat and orderly appearance and shall be kept free from refuse and debris.

All plant growth in interior landscaped areas shall be controlled by pruning, trimming, or otherwise so that:

A. It will not interfere with the maintenance or repair of any public utility;

B. It will not restrict pedestrian or vehicular access; and

C. It will not constitute a traffic hazard due to reduced visibility.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.52.090 Loading areas.

A. Purpose. The purpose of this section is to provide adequate loading areas for commercial, office, retail and industrial uses that do not interfere with the operation of adjacent streets.

B. Applicability. OCMC 17.52.090 applies to uses that are expected to have service or delivery truck visits with a forty-foot or longer wheelbase, at a frequency of one or more vehicles per week. The city engineer and decision maker shall determine through site plan and design review the number, size, and location of required loading areas, if any.

C. Standards.

1. The off-street loading space shall be large enough to accommodate the largest vehicle that is expected to serve the use without obstructing vehicles or pedestrian traffic on adjacent streets and driveways. Applicants are advised to provide complete and accurate information about the potential need for loading spaces because the city engineer or decision maker may restrict the use of other public right-of-way to ensure efficient loading areas and reduce interference with other uses.

2. Where parking areas are prohibited between a building and the street, loading areas or drive isles are also prohibited.

3. The city engineer and decision maker, through site plan and design review, may approve a loading area adjacent to or within a street right-of-way when all of the following loading and unloading operations conditions are met:

a. Short in duration (i.e., less than one hour);

b. Infrequent (less than three operations daily between five a.m. and twelve a.m. or all operations between twelve a.m. and five a.m. at a location that is not adjacent to a residential zone);

c. Does not obstruct traffic during peak traffic hours;

d. Does not interfere with emergency response services; and

e. Is acceptable to the applicable roadway authority.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.54.115 Mobile food units.

A. Applicability. The following provisions apply to mobile food units not located within a building. The provisions do not apply to indoor mobile food units or mobile food units allowed pursuant to a special event permit issued by the city.

B. General Requirements.

1. Mobile food units shall primarily sell food items.
2. Mobile food units shall not sell cannabis, in any form.
3. Mobile food units shall have a valid Oregon City business license.
4. Mobile food units shall not be located within the right-of-way, except as approved by the city engineer.
5. Mobile food units shall maintain continuous compliance with applicable federal, state, and city standards.
6. Discharge or leakage draining into the stormwater system is prohibited. Wastewater shall not be dumped onto the ground, onto the streets, or into a storm a drain. All liquid waste from the waste tank or from cleaning activities such as cleaning the mobile food cart shall be captured and properly disposed of in the sanitary sewer.
7. All permanent utility lines shall be placed underground. Temporary utilities, lines and tanks shall be placed underground or otherwise screened, covered, or hidden from view from the right-of-way as to minimize visual impacts and prevent tripping hazards or other unsafe conditions.
8. Power connections may not be connected by overhead wires to the individual mobile food units.
9. Comply with the stormwater and grading design standards for additional impervious surfaces.
10. Mobile food units, equipment, customer service areas, or any associated item may not be located within the right-of-way.
11. Sites with more than ten mobile food units at any time shall have a designated loading area.
12. Parking lots, refuse and recycling areas, outdoor lighting, fencing, and structures (other than the mobile food units) are subject to compliance with site plan and design review standards in OCMC 17.62. Mobile food units are exempt from OCMC 17.52 unless otherwise identified below.
13. Mobile food unit owners are responsible for maintaining the mobile unit and the adjacent site area in a neat and clean condition. This includes but is not limited to regular maintenance and cleaning of the exterior of the mobile food unit to avoid rust and peeling paint, repair of broken or sagging awnings, canopies, platforms, counters, benches, tables, umbrellas, and other structures used by customers adjacent to the mobile food unit.

C. Design Standards.

1. Transitory Mobile Food Units. Mobile food units that remain on a property for five hours or less in a twenty-four-hour period shall comply with the following:
    a. Standards related to the site.
        i. Be limited to three food units on a property at any one time;
        ii. Maintain minimum drive aisle widths and landscaping requirements for parking lots; and
        iii. Not result in the reduction of landscaping less than the minimum site.
    b. Standards related to the mobile food unit.

i. Comply with nuisances regulations in OCMC 8.08.040;

ii. Comply with OCMC 17.62.050.I for all temporary structures associated with the mobile food cart units (except for the unit itself);

iii. Connect to individual wastewater holding tanks at all times; and

iv. Connect to a potable water tank at all times.

2. Non-Transitory Mobile Food Units. All other mobile food units that remain on a property for more than five hours at a time shall comply with the following:

a. Standards related to the site.

i. Maintain minimum drive aisle widths and landscaping requirements for parking lots;

ii. Not result in the reduction of landscaping less than the minimum site;

b. Standards related to the unit.

i. Fully screen from view any mechanical or power generating equipment that is separated from and external to the mobile food unit with vegetation or screening at a height equal to or greater than the height of the generating unit;

ii. Connect to a permanent water source, unless exempted by the city engineer if utilities are not available;

iii. Connect to public sewer. This may be achieved through a communal system;

iv. Connect to a permanent power source; and

v. Comply with the minimum setbacks and maximum height of the zoning designation.

D. Process.

1. A Type I minor site plan and design review shall be submitted for each property in compliance with the transitory standards in OCMC 17.54.115.C.1 with a wastewater/water operations and maintenance plan.

2. A Type II minor site plan and design review shall be submitted for each property in compliance with the non-transitory standards in OCMC 17.54.115.C with a wastewater/water operations and maintenance plan.

3. Mobile food cart units shall each submit a business license and mobile food cart unit form.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.56.040 Criteria and standards for conditional uses.

In addition to the standards listed herein in OCMC 17.56.010, which are to be considered in the approval of all conditional uses and the standards of the zone in which the conditional use is located, the following additional standards shall be applicable:

A. Building Openings. The city may limit or prohibit building openings within fifty feet of residential property in a residential zone if the openings will cause glare, excessive noise or excessive traffic which would adversely affect adjacent residential property as set forth in the findings of the planning commission.

B. Additional Street Right-of-Way. The dedication of additional right-of-way may be required where the city plan indicates need for increased width and where the street is inadequate for its use; or where the nature of the proposed development warrants increased street width.

C. Public Utility or Communication Facility. Such facilities as a utility substation, water storage tank, radio or television transmitter, tower, tank, power transformer, pumping station and similar structures shall be located, designed and installed with suitable regard for aesthetic values. The base of these facilities shall not be located closer to the property line than a distance equal to the height of the structure. Hydroelectric generation facilities shall not exceed ninety megawatts of generation capacity.

D. Schools. The site shall be located to best serve the intended area, shall be in conformance with the city plan, shall have adequate access, and shall be in accordance with appropriate state standards.

E. Helipad Landing Facility.

1. Size of runways and landing areas;
2. Approaches and obstructions within the runways and landing areas;
3. Fencing and/or screening to provide visual and noise buffering and to deflect winds or blast due to aircraft operation;
4. Fire protection measures and equipment;
5. Night illumination adequate for operations, and its effects upon surrounding property;
6. Landing markers;
7. Structural adequacy of runways, pads and other structures;
8. Paving and ground cover materials in relation to noise and down wash.

F. Residential Facilities.

1. In addition to the general provisions of OCMC 17.56.020, any application shall include a description of the proposed use, including the number of residents and the nature of the condition or circumstances for which care, or a planned treatment or training program will be provided, the number of staff and the estimated length of stay per resident and the name of the agency responsible for regulating or sponsoring the use.
2. Approval of a conditional use application for a residential care facility shall include the following minimum standards where applicable:
    a. The proposed facility shall maintain all applicable licenses required by the appropriate agencies for the use described in the application.
    b. All residential facilities shall be subject to design review. Special considerations for this use are:

i. Compatibility in appearance with the surrounding area;

ii. Provisions of usable on-site open space appropriate to the needs of the residents and the nature of the care, treatment or training provided;

iii. Clearly defined property boundaries.

G. Bed and Breakfast Inns.

1. The bed and breakfast inn shall maintain all applicable licenses required by governmental agencies for the use described in the application.

2. All bed and breakfast inns shall be subject to design review. Special considerations for this use are:

a. Compatibility of the structure in appearance with the surrounding area;

b. Compatibility of any parking facilities in appearance and circulation of traffic with the surrounding area. Parking facilities, if proposed, shall also comply with Chapter 17.52;

c. Compatibility of the signage in appearance with the surrounding area. Signage shall also comply with Chapter 15.28;

d. The number of rooms to be used as overnight public accommodations shall not exceed four rooms in an underlying residential zone, or seven rooms in an underlying nonresidential zone;

e. The owner/operators shall reside in the bed and breakfast inn, or in a residence adjacent to the bed and breakfast inn; and

f. The planning commission may allow up to an additional six non-guests to be served along with the guests at a meal.

H. Shelters.

1. Shelters shall be processed as a Type IV review.

2. The shelter shall maintain a written community engagement plan include the following information:

a. Description of purpose and scope of services of the shelter;

b. Population to be housed at the shelter and the process and criteria for the selection of guests;

c. Bed capacity for nightly guests;

d. Hours of operations and curfew, if applicable;

e. Twenty-four-hour contact information; and

f. Explanation of how the shelter will address concerns/complaints.

3. Shelters shall hold a meeting with the community prior to commencing operation, and a minimum of once a year each year thereafter. The purpose of the meeting is to discuss the community engagement plan and provide an opportunity for greater communication. Mailed notice of the meeting shall be provided to property owners within three hundred feet, the neighborhood association, and the city. The meeting shall be open to the public.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008(Exh. A), 12-18-2019)

Chapter 17.62 SITE PLAN AND DESIGN REVIEW[1]

17.62.010 Purpose.

The purposes of site plan and design review are to: Encourage site planning in advance of construction; protect lives and property from potential adverse impacts of development; consider natural or man-made hazards which may impose limitations on development; conserve the city's natural beauty and visual character and minimize adverse impacts of development on the natural environment as much as is reasonably practicable; assure that development is supported with necessary public facilities and services; ensure that structures and other improvements are properly related to their sites and to surrounding sites and structure; and implement the city's comprehensive plan and land use regulations with respect to development standards and policies.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.62.015 Modifications that will better meet design review requirements.

The review body shall consider modification of certain site related development standards of this chapter specified below. These modifications may be approved as part of a Type II design review process.

A. Applicability.

1. This process shall apply to modifications to:
    a. Landscaping in OCMC 17.62.050.A;
    b. Vehicular connections to adjoining properties in OCMC 17.62.050.B.2;
    c. On-site pedestrian circulation in OCMC 17.62.050.C;
    d. Onsite utility location OCMC 17.62.050.G;
    e. Building location in OCMC 17.62.055.D;
    f. Building details in OCMC 17.62.055.I;
    g. Windows in OCMC 17.62.055.J;
    h. Parking lot landscaping in OCMC 17.52.060.
2. Modifications that are denied through Type II design review may be requested as a variance through the variance process pursuant to OCMC 17.60.020 or master plan adjustment pursuant to OCMC 17.65.070 as applicable.

[1]Editor's note(s)—Ord. No. 18-1009, § 1(Exh. A), adopted July 3, 2019, amended Chapter 17.62 in its entirety to read as herein set out. Former Chapter 17.62, §§ 17.62.010—17.62.100, pertained to similar subject matter, and derived from Ord. No. 08-1014, adopted July 1, 2009; Ord. No. 10-1003, adopted July 7, 2010; Ord. No. 16-1007, adopted August 17, 2016; Ord. No. 13-1003, adopted July 17, 2013; Ord. No. 17-1007, adopted June 21, 2017 and Ord. No. 18-1005, adopted May 2, 2018.

3. Rather than a modification, applicants may choose to apply for a variance through the variance process pursuant to OCMC 17.60.020 or master plan adjustment pursuant to OCMC 17.65.070 as applicable.

B. The review body may approve requested modifications if it finds that the applicant has shown that the following approval criteria are met:

1. The modification will result in a development that better meets the applicable design guidelines; and

2. The modification meets the intent of the standard. On balance, the proposal will be consistent with the purpose of the standard for which a modification is requested.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 21-1007, § 1(Exh. A), 4-21-2021)

17.62.030 When required.

Site plan and design review shall be required for all development of real property in all zones except the low and medium density residential districts, unless otherwise provided for by this title or as a condition of approval of a permit. Site plan and design review shall also apply to all conditional uses, cluster housing developments, multi-family uses, manufactured home parks, and nonresidential uses in all zones. Site plan and design review does not apply to activities occurring within the right-of-way except for communication facilities pursuant to OCMC 17.80.

Site plan and design review is required for a change in use between the uses in Table 17.62.030:

Table 17.62.030

Existing Use	Proposed Use
Residential	Nonresidential use, including but not limited to: commercial, office, industrial, retail, or institutional
Single-family or duplex	3 or more dwellings

Site plan and design review shall not alter the type and category of uses permitted in the underlying zoning districts.

Only the standards of OCMC 17.62.035 apply to duplex, triplex, quadplex, cottage cluster, townhouse, single-family detached residential unit, live/work dwelling and accessory dwelling unit Type I applications.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.62.035 Minor site plan and design review.

This section provides for a minor site plan and design review process. Minor site plan review is a Type I or Type II decision, as described in OCMC 17.62.035.A, subject to administrative proceedings described in OCMC 17.50 and may be utilized as the appropriate review process only when authorized by the community development director. The purpose of this type of review is to expedite design review standards for uses and activities that require only a minimal amount of review, typical of minor modifications and/or changes to existing uses or buildings.

A. Type I Minor Site Plan and Design Review.

1. Applicability. Type I applications involve no discretion and are typically processed concurrently with a building permit application. The Type I process is not applicable for:

    a. Any activity which is included with or initiates actions that require Type II—IV review.

    b. Any increase in square footage of a conditional or nonconforming use (excluding nonconforming structures).

    c. Any proposal in which nonconforming upgrades are required under OCMC 17.58.

    d. Any proposal in which modifications are proposed under OCMC 17.62.015.

2. The following projects may be processed as a Type I application:

    a. Addition of up to two hundred square feet to a commercial, institutional, or multi-family structure in which no increases are required to off-street parking. This includes a new ancillary structure, addition to an existing structure, or new interior space (excluding new drive thru). Increases of more than two hundred square feet in a twelve-month period shall be processed as Type II.

    b. Addition of up to one thousand square feet to an industrial use in which no increases are required to off-street parking. This includes a new ancillary structure, addition to an existing structure, or new interior space (excluding ancillary retail and office). Increases of more than one thousand square feet in a twelve-month period shall be processed as Type II.

    c. Temporary structures, excluding mobile vendors.

    d. Removal, replacement or addition of awnings, or architectural projections to existing structures.

    e. Addition, modification, or relocation of refuse enclosure.

    f. Changes to amount, location, or design of bicycle parking.

    g. Installation of mechanical equipment.

    h. Repaving of previously approved parking lots with no change to striping.

    i. Replacement of exterior building materials.

    j. Addition of windows and doors, relocation of windows and doors in which transparency levels remain unchanged, or removal of windows and doors provided minimum transparency requirements are still met.

    k. Addition or alteration of parapets or rooflines.

    l. Modification of building entrances.

    m. Addition to or alteration of a legal nonconforming single- or two-family dwelling.

    n. Change to parking lot circulation or layout, excluding driveway modifications.

    o. Removal or relocation of existing vehicle parking stalls to accommodate tree planting, landscaping, stormwater facilities, solar and wind power equipment, outdoor seating, parking for bicycles, scooters and other small scale mobility devices, pedestrian improvements and similar purposes.

    p. Adoption of shared parking agreements.

q. Changes to landscaping to improve stormwater quality and quantity treatment under OCMC 13.12.

r. New or changes to existing pedestrian accessways, walkways or plazas.

s. Installation of or alterations to ADA accessibility site elements.

t. Modification or installation of a fence, hedge, or wall, or addition of a fence, hedge or wall.

u. Addition of or alterations to outdoor lighting.

v. Demolition of any structure or portion of a structure.

w. Tree removal.

x. Type I master plan amendments under OCMC 17.65.080.

y. Mobile food units in one location for five hours or less as identified in OCMC 17.54.115.

z. Duplex, triplex, quadplex, cottage cluster, townhouse, single-family detached residential unit, live/work dwelling, and accessory dwelling unit.

aa. Placement of a single manufactured home within an existing space or lot in a manufactured home park.

3. Submittal Requirements. A Type I application shall include:

a. A narrative describing the project.

b. Site plan drawings showing existing conditions/uses and proposed conditions/uses.

c. Architectural drawings, including building elevations and envelopes, if architectural work is proposed.

d. A completed application form.

e. Any other information determined necessary by the community development director.

B. Type II Minor Site Plan and Design Review.

1. Type II minor site plan and design review applies to the following uses and activities unless those uses and activities qualify for Type I review per OCMC 17.62.035.A:

a. Modification of an office, commercial, industrial, institutional, public or multi-family structure that does not increase the interior usable space (for example covered walkways or entryways, addition of unoccupied features such as clock tower, etc.).

b. Modification to parking lot layout and landscaping, or the addition of up to five parking spaces.

c. A maximum addition of up to one thousand square feet to a commercial, office, institutional, public, multi-family, or industrial building provided that the addition is not more than thirty-five percent of the original building square footage.

d. Mobile food units in OCMC 17.54.115.

e. Other land uses and activities may be added if the community development director makes written findings that the activity/use will not increase off-site impacts and is consistent with the type and/or scale of activities/uses listed above.

2. Application. The application for the Type II minor site plan and design review shall contain the following elements:

a. The submittal requirements of OCMC 17.50.

b. A narrative explaining all aspects of the proposal in detail and addressing each of the applicable criteria listed in OCMC 17.62.

c. Site plan drawings showing existing conditions/uses and proposed conditions/uses.

d. Architectural drawings, including building elevations and envelopes, if architectural work is proposed.

e. Additional submittal material may be required by the community development director on a case-by-case basis.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.62.040 Items required.

A complete application for site plan and design review shall be submitted. Except as otherwise in subsection I of this section, the application shall include the following:

A. A site plan or plans, to scale, containing the following:

1. Vicinity information showing streets and access points, pedestrian and bicycle pathways, transit stops and utility locations;

2. The site size, dimensions, and zoning, including dimensions and gross area of each lot or parcel and tax lot and assessor map designations for the proposed site and immediately adjoining properties;

3. Contour lines at two-foot contour intervals for grades zero to ten percent, and five-foot intervals for grades over ten percent;

4. The location of natural hazard areas on and within one hundred feet of the boundaries of the site, including:

a. Areas indicated on floodplain maps as being within the one hundred-year floodplain,

b. Unstable slopes, as defined in OCMC 17.44.020,

c. Areas identified on the seismic conditions map in the comprehensive plan as subject to earthquake and seismic conditions;

5. The location of natural resource areas on and within one hundred feet of the boundaries of the site, including fish and wildlife habitat, existing trees (six inches or greater in caliper measured four feet above ground level), wetlands, streams, natural areas, wooded areas, areas of significant trees or vegetation, and areas designated as being within the natural resources overlay district;

6. The location of inventoried historic or cultural resources on and within one hundred feet of the boundaries of the site;

7. The location, dimensions, and setback distances of all existing permanent structures, improvements and utilities on or within twenty five feet of the site, and the current or proposed uses of the structures;

8. The location, dimensions, square footage, building orientation and setback distances of proposed structures, improvements and utilities, and the proposed uses of the structures by square footage;

9. The location, dimension and names, as appropriate, of all existing and platted streets, other public ways, sidewalks, bike routes and bikeways, pedestrian/bicycle accessways and other pedestrian and bicycle ways, transit street and facilities, neighborhood activity centers, and easements on and within two hundred fifty feet of the boundaries of the site;

10. The location, dimension and names, as appropriate, of all proposed streets, other public ways, sidewalks, bike routes and bikeways, pedestrian/bicycle accessways and other pedestrian and bicycle ways, transit streets and facilities, neighborhood activity centers, and easements on and within two hundred feet of the boundaries of the site;

11. All parking, circulation, loading and servicing areas, including the locations of all carpool, vanpool and bicycle parking spaces as required in OCMC 17.52;

12. Site access points for automobiles, pedestrians, bicycles and transit;

13. On-site pedestrian and bicycle circulation;

14. Outdoor common areas proposed as open space;

15. Total impervious surface created (including buildings and hard ground surfaces);

16. The proposed location, dimensions and materials of fences and walls.

B. A landscaping plan, drawn to scale, showing the location and types of existing trees (six inches or greater in caliper measured four feet above ground level) and vegetation proposed to be removed and to be retained on the site, the location and design of landscaped areas, the varieties, sizes and spacings of trees and plant materials to be planted on the site, other pertinent landscape features, and irrigation systems required to maintain plant materials.

C. Architectural drawings or sketches, drawn to scale and showing floor plans, elevations accurately reflected to grade, and exterior materials of all proposed structures and other improvements as they will appear on completion of construction. The name of the adjacent street shall be identified on each applicable building elevation.

D. An electronic materials board clearly depicting all building materials with specifications as to type, color and texture of exterior materials of proposed structures.

E. An erosion/sedimentation control plan, in accordance with the requirements of OCMC 17.47 and the public works erosion and sediment control standards, and a drainage plan developed in accordance with city drainage master plan requirements, OCMC 13.12 and the public works stormwater and grading design standards. The drainage plan shall identify the location of drainage patterns and drainage courses on and within one hundred feet of the boundaries of the site. Where development is proposed within an identified hazard area, these plans shall reflect concerns identified in the hydrological/geological/geotechnical development impact statement.

F. An exterior lighting plan, drawn to scale, showing type, height, and area of illumination.

G. Archeological Monitoring Recommendation. For all projects that will involve ground disturbance, the applicant shall provide:

1. A letter or email from the Oregon State Historic Preservation Office Archaeological Division indicating the level of recommended archeological monitoring on-site, or demonstrate that the applicant had notified the Oregon State Historic Preservation Office and that the Oregon State Historic Preservation Office had not commented within forty-five days of notification by the applicant; and

2. A letter or email from the applicable tribal cultural resource representative of the Confederated Tribes of the Grand Ronde, Confederated Tribes of the Siletz, Confederated Tribes of the

Umatilla, Confederated Tribes of the Warm Springs and the Confederated Tribes of the Yakama Nation indicating the level of recommended archeological monitoring on-site, or demonstrate that the applicant had notified the applicable tribal cultural resource representative and that the applicable tribal cultural resource representative had not commented within forty-five days of notification by the applicant.

If, after forty-five days' notice from the applicant, the Oregon State Historic Preservation Office or the applicable tribal cultural resource representative fails to provide comment, the city will not require the letter or email as part of the completeness review. For the purpose of this section, ground disturbance is defined as the movement of native soils.

H. Such special studies or reports as the community development director may require to obtain information to ensure that the proposed development does not adversely affect the surrounding community or identified natural resource areas or create hazardous conditions for persons or improvements on the site. The community development director shall require an applicant to submit one or more development impact evaluations as may be necessary to establish that the city's traffic safety or capacity standards, natural resource, including geologic hazard and flood plain overlay districts, will be satisfied.

I. The community development director may waive the submission of information for specific requirements of this section or may require information in addition to that required by a specific provision of this section, as follows:

1. The community development director may waive the submission of information for a specific requirement upon determination either that specific information is not necessary to evaluate the application properly, or that a specific approval standard is not applicable to the application. If submission of information is waived, the community development director shall, in the decision, identify the waived requirements, explain the reasons for the waiver, and state that the waiver may be challenged on appeal and may be denied by a subsequent review authority. If the matter is forwarded to the planning commission for initial review, the information required by this paragraph shall be included in the staff report;

2. The community development director may require information in addition to that required by a specific provision of this section upon determination that the information is needed to evaluate the application properly and that the need can be justified on the basis of a special or unforeseen circumstance as necessary to comply with the applicable standards. If additional information is required, the community development director shall, in the decision, explain the reasons for requiring the additional information.

J. All new utilities shall be placed underground.

1. Service poles may be allowed on private property when undergrounding service is technically or physically infeasible.

K. One full-sized copy of all architectural and site plans.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 21-1007, § 1(Exh. A), 4-21-2021)

17.62.050 General standards.

All development shall comply with the following standards:

A. Landscaping.

1. Existing native vegetation is encouraged to be retained to the maximum extent practicable. All plants listed on the Oregon City Nuisance Plant List shall be removed from the site prior to issuance of a final occupancy permit for the building.

2. The amount of landscaping required is found in the standards for each underlying zone. Where the underlying zone does not contain and minimum landscaping standard, the minimum site landscaping shall be fifteen percent of the total site area. Except as allowed elsewhere in Title 16 or 17 of this code, all areas to be credited towards landscaping shall be installed with growing plant materials.

3. Pursuant to OCMC 17.49, landscaping requirements within the natural resource overlay district, other than landscaping required for parking lots, may be met by preserving, restoring and permanently protecting native vegetation and habitat on development sites.

4. A landscaping plan shall be prepared by a registered landscape architect for new or revised landscaped areas and parking lots. Landscape architect approval is not required for tree removal and/or installation if the species are chosen from an approved street tree list. A certified landscape designer, arborist, or nurseryman shall be acceptable in lieu of a landscape architect for projects with less than five hundred square feet of landscaping. All landscape plans shall include a mix of vertical (trees and shrubs) and horizontal elements (grass, groundcover, etc.) that within three years will cover one hundred percent of the landscape area. Plant species listed on the Oregon City Nuisance Plant list are prohibited and native species are encouraged. No mulch, bark chips, or similar materials shall be allowed at the time of landscape installation except under the canopy of shrubs and within two feet of the base of trees.

5. Landscaping shall be visible from public thoroughfares to the extent practicable.

6. The landscaping in parking areas shall not obstruct lines of sight for safe traffic operation and shall comply with all requirements of OCMC 10.32, Traffic Sight Obstructions.

B. Vehicular Access and Connectivity.

1. Parking areas shall be located behind the building façade that is closest to the street, below buildings, or on one or both sides of buildings.

2. Existing or future connections to adjacent sites through the use of vehicular and pedestrian access easements which provide connection from the right-of-way to the adjoining property shall be provided.

3. Parcels larger than three acres shall provide streets as required in OCMC 16.12.

4. Parking garage entries shall not be more than half of the streetscape.

C. A well-marked, continuous and protected on-site pedestrian circulation system meeting the following standards shall be provided:

1. Pathways between all building entrances and the street are required. Pathways between the street and buildings fronting on the street shall be as direct as possible and shall not cross a drive aisle. Exceptions may be allowed by the director where steep slopes, a physically constrained site, or protected natural resources prevent a direct connection or where an indirect route would enhance the design and/or use of a common open space.

2. The pedestrian circulation system shall connect all main entrances, transit stops, ADA spaces, parking areas, bicycle parking, recreational areas, common outdoor areas, and any pedestrian amenities on the site. For buildings fronting on the street, the sidewalk may be used to meet this standard.

3. The pedestrian circulation system shall connect the principal building entrance to those of buildings on adjacent sites, except within industrial zoning designations.

4. Elevated external stairways or walkways shall not extend beyond the building facade except for external stairways or walkways located in, or facing interior courtyard areas that are not visible from the street or a public access easement. This standard does not apply to sky-bridges or sky-ways.

5. On-site pedestrian walkways shall be hard surfaced, well drained and at least five feet wide. Surface material shall contrast visually to adjoining surfaces. When bordering parking spaces other than spaces for parallel parking, pedestrian walkways shall be a minimum of seven feet in width unless curb stops are provided. When the pedestrian circulation system is parallel and adjacent to an auto travel lane, the walkway shall be raised or separated from the auto travel lane by a raised curb, bollards, landscaping or other physical barrier. If a raised walkway is used, the ends of the raised portions shall be equipped with curb ramps for each direction of travel.

6. Pedestrian crossings at intersections with drive aisles or other vehicular circulation areas shall be demarcated by a raised surface that slows vehicular travel, or other change in textural material or height to alert the driver of the pedestrian crossing area.

7. Pedestrian facilities within parking lots shall be illuminated to at least the same level as the on-site driveways pursuant to section 17.62.065.

D. All development shall maintain continuous compliance with applicable federal, state, and city standards.

E. Adequate public water and sanitary sewer facilities sufficient to serve the proposed or permitted level of development shall be provided pursuant to OCMC 16.12. The applicant shall demonstrate that adequate facilities and services are presently available or can be made available concurrent with development. Service providers shall be presumed correct in the evidence, which they submit. All facilities shall be designated to city standards as set out in the city's facility master plans and public works design standards. A development may be required to modify or replace existing off-site systems if necessary to provide adequate public facilities. The city may require over sizing of facilities where necessary to meet standards in the city's facility master plan or to allow for the orderly and efficient provision of public facilities and services. Where over sizing is required, the developer may request reimbursement from the city for over sizing based on the city's reimbursement policy and fund availability, or provide for recovery of costs from intervening properties as they develop.

F. If a transit agency, upon review of an application for an industrial, institutional, retail or office development, recommends that a bus stop, bus turnout lane, bus shelter, accessible bus landing pad, lighting, or transit stop connection be constructed, or that an easement or dedication be provided for one of these uses, consistent with an agency adopted or approved plan at the time of development, the review authority shall require such improvement, using designs supportive of transit use. Improvements at a major transit stop may include intersection or mid-block traffic management improvements to allow for crossings at major transit stops, as identified in the city's transportation system plan.

G. Screening of Mechanical Equipment. Commercial, mixed-use, institutional, and multi-family buildings shall include the following measures to screen or block views of mechanical equipment from adjacent streets according to the following requirements:

1. Rooftop mechanical equipment, including HVAC equipment and utility equipment that serves the structure, shall be screened from view from the adjacent street on all new buildings or building additions. Screening shall be accomplished through the use of parapet walls or a sight-obscuring

enclosure around the equipment constructed of one of the primary materials used on the primary facades of the structure, and that is an integral part of the building's architectural design. The parapet or screen shall completely surround the rooftop mechanical equipment to an elevation equal to or greater than the highest portion of the rooftop mechanical equipment being screened from adjacent streets, as viewed from the sidewalk or future sidewalk location on the adjacent street at pedestrian level. In the event such parapet wall does not fully screen all rooftop equipment, then the rooftop equipment shall be enclosed by a screen constructed of one of the primary materials used on the primary facade of the building so as to achieve complete screening. Screening requirements do not apply to new or replacement equipment on existing buildings. New or replacement rooftop mechanical equipment on existing buildings shall be painted or powder-coated.

2. Wall-mounted mechanical HVAC and air conditioning equipment, and groups of multiple utility meters shall not be placed on the front facade of a building or on a facade that faces a right-of-way. Wall-mounted mechanical equipment, including-air conditioning and groups of multiple utility meters, that extend six inches or more from the outer building wall shall be screened from view from adjacent streets; from residential, public, and institutional properties; and from public areas of the site or adjacent sites through the use of (a) sight-obscuring enclosures constructed of one of the primary materials used on the primary facade of the structure, (b) sight-obscuring fences, or (c) trees or shrubs that block at least eighty percent of the equipment from view or (d) painting the units to match the building. Wall-mounted mechanical equipment that extends six inches or less from the outer building wall shall be designed to blend in with the color and architectural design of the subject building. Vents which extend six inches or less from the outer building wall shall [be] exempt from this standard if painted.

3. Ground-mounted above-grade mechanical equipment shall be screened by ornamental fences, screening enclosures, trees, or shrubs that block at least eighty percent of the view from the public right-of-way.

4. This section shall not apply to the installation of solar energy panels, photovoltaic equipment, wind power generating equipment, dishes/antennas, pipes, vents, and chimneys.

H. Building Materials.

1. Prohibited Materials. The following materials shall be prohibited in visible locations from the right-of-way or a public access easement unless an exception is granted by the community development director based on the integration of the material into the overall design of the structure:

   a. Vinyl or plywood siding (including T-111 or similar plywood).

   b. Glass block or highly tinted, reflected, translucent or mirrored glass (except stained glass) as more than ten percent of the building facade.

   c. Corrugated fiberglass.

   d. Chain link fencing (except for temporary purposes such as a construction site, gates for a refuse enclosure, stormwater facilities, when excepted by 17.62.050.H.2.g, or when located on properties within the general industrial district).

   e. Crushed colored rock/crushed tumbled glass.

   f. Non-corrugated and highly reflective sheet metal.

   g. Tarps, except for the protection of outside storage.

2. Special Material Standards. The following materials are allowed if they comply with the requirements found below:

    a. Concrete Block. When used for the front façade of any building, concrete blocks shall be split, rock- or ground-faced and shall not be the prominent material of the elevation. Plain concrete block or plain concrete may be used as foundation material if the foundation material is not revealed more than three feet above the finished grade level adjacent to the foundation wall.

    b. Metal Siding. Metal siding shall have visible corner moldings and trim and incorporate masonry or other similar durable/permanent material near the ground level (first two feet above ground level) except when used for a temporary structure.

    c. Exterior insulation and finish system (EIFS) and similar troweled finishes shall be trimmed in wood, masonry, or other approved materials and shall be sheltered from extreme weather by roof overhangs or other methods.

    d. Building surfaces shall be maintained in a clean condition and painted surfaces shall be maintained to prevent or repair peeling, blistered or cracking paint.

    e. Membrane or fabric covered storage areas are permitted as temporary structures, excluding the use of tarps.

    f. Vinyl or powder coated chain link fencing is permitted for city-owned stormwater management facilities, reservoirs, and other public works facilities such as pump stations, maintenance yards, and storage yards not located within the general industrial district.

    g. Chain link fencing is permitted in the following circumstances:

1. Within city-owned parks and recreational facilities.

2. On any property when used for a baseball or softball backstop or dugout, track and field facility, or sports court.

I. Temporary Structures. Temporary structures are permitted pursuant to the following standards:

1. Structures up to two hundred square feet:

    a. Shall not be on a property for more than three consecutive days;

    b. Shall not be on a property more than six times per year;

    c. Shall comply with the minimum dimensional standards of the zoning designation;

    d. Shall be sited so as to leave adequate parking for the primary uses if required by OCMC 17.52 or as otherwise specified in a land use approval;

    e. Shall not disturb ingress or egress to the site; and

    f. Shall be exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.I and J.

2. Temporary structures larger than two hundred square feet may be permitted up to two times per year; and:

    a. Structures larger than two hundred square feet up to eight hundred square feet:

        i. Shall not be on a property for more than thirty consecutive days;

        ii. Shall comply with the minimum dimensional standards of the zoning designation;

iii. Shall be sited so as to leave adequate parking for the primary uses if required by OCMC 17.52 or as otherwise specified in a land use approval;

iv. Shall not disturb ingress or egress to the site; and

v. Shall be exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.I and J.

b. Structures larger than eight hundred square feet:

i. Shall not be on a property for more than seven consecutive days;

ii. Shall comply with the minimum dimensional standards of the zoning designation;

iii. Shall be sited so as to leave adequate parking for the primary uses if required by OCMC 17.52 or as otherwise specified in a land use approval;

iv. Shall not disturb ingress or egress to the site; and

v. Shall be exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.I and J.

3. Government owned properties are exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.H and I and the dimensional standards of the zoning designation.

J. All new utilities shall be placed underground.

1. Service poles may be allowed on private property when undergrounding service is technically or physically infeasible.

K. Development shall comply with requirements of the following Oregon City Municipal Code chapters, as applicable, including but not limited to:

1. Chapter 12.04, Streets, Sidewalks and Public Places.

2. Chapter 12.08, Public and Street Trees.

3. Chapter 13.04, Water Service System.

4. Chapter 13.08, Sewer Regulations.

5. Chapter 13.12, Stormwater Management.

6. Chapter 16.12, Minimum Improvements and Design Standards for Development.

7. Chapter 17.20, Residential Design Standards for ADU's, Cluster Housing, Internal Conversions, Live/Work Units, and Manufactured Home Parks.

8. Chapter 17.40, Historic Overlay District.

9. Chapter 17.41, Tree Protection Standards.

10. Chapter 17.42, Flood Management Overlay District.

11. Chapter 17.44, Geologic Hazards.

12. Chapter 17.47, Erosion and Sediment Control.

13. Chapter 17.48, Willamette River Greenway.

14. Chapter 17.49, Natural Resource Overlay District.

15. Chapter 17.50, Administration and Procedures.
16. Chapter 17.52, Off-Street Parking and Loading.
17. Chapter 17.54, Supplemental Zoning Regulations and Exceptions.
18. Chapter 17.58, Lawful Nonconforming Uses, Structures, and Lots.
19. Chapter 17.65, Master Plans and Planned Unit Development.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 21-1007, § 1(Exh. A), 4-21-2021)

17.62.055 Institutional, office, multi-family, retail, and commercial building standards.

A. Purpose. The primary objective of the regulations contained in this section is to provide a range of design choices that promote creative, functional, and cohesive development that is compatible with surrounding areas. Buildings approved in compliance with these standards are intended to serve multiple tenants over the life of the building, and are not intended for a one-time occupant. The standards encourage people to spend time in the area, which also provides safety though informal surveillance. Finally, this section is intended to promote the design of an urban environment that is built to human scale by creating buildings and streets that are attractive to pedestrians, create a sense of enclosure, provide activity and interest at the intersection of the public and private spaces, while also accommodating vehicular movement.

B. Applicability. This section applies to institutional, office, multi-family, retail and commercial buildings except accessory structures less than one thousand square feet and temporary structures.

C. Conflicts. With the exception of standards for building orientation and building front setbacks, in the event of a conflict between a design standard in this section and a standard or requirement contained in the underlying zoning district, the standard in the zoning district shall prevail.

D. Siting of Structures. On sites with one hundred feet or more of frontage at least sixty percent of the site frontage width shall be occupied by buildings placed within five feet of the property line. For sites with less than one hundred feet of street frontage, at least fifty percent of the site frontage width shall be occupied by buildings placed within five feet of the property. Multi-family developments shall be placed no farther than twenty feet from the front property line. This section does not apply to properties with less than forty feet of frontage.

A larger front yard setback may be approved through site plan and design review if the setback area incorporates at least one element from the following list for every five feet of increased setback requested:

1. Tables, benches or other approved seating area.
2. Cobbled, patterned or paved stone or enhanced concrete.
3. Pedestrian scale lighting.
4. Sculpture/public art.
5. Fountains/water feature.
6. At least twenty square feet of landscaping or planter boxes for each tenant facade fronting on the activity area.
7. Outdoor café.
8. Enhanced landscaping or additional landscaping.

9. Other elements, as approved by the community development director, that can meet the intent of this section.

E. Building Orientation. All buildings along the street frontage shall face the front most architecturally significant facade toward the street and have a functional primary entrance facing the street. Primary building entrances shall be clearly defined and recessed or framed by a sheltering element such as an awning, arcade or portico in order to provide shelter from the summer sun and winter weather.

F. Entryways. Entrances shall include a doorway and a minimum of four of the following elements:

1. Display windows; recesses or projections; peaked roof or raised parapet over the door; canopy of at least five feet in depth; porch; distinct materials; architectural details such as tile work and moldings; pedestrian amenities such as benches, planters or planter boxes; landscape treatments integrating arbors, low walls, trellis work; or similar elements. Trellises, canopies and fabric awnings may project up to five feet into front setbacks and public rights-of-way, provided that the base is not less than eight feet at the lowest point and no higher than ten feet above the sidewalk.

G. Corner Lots. For buildings located at the corner of intersections, the primary entrance of the building shall be located at the corner of the building or within twenty-five feet of the corner of the building. Additionally, one of the following treatments shall be required:

1. Incorporate prominent architectural elements, such as increased building height or massing, cupola, turrets, or pitched roof, at the corner of the building or within twenty-five feet of the corner of the building.

2. Chamfer the corner of the building (i.e. cut the corner at a forty-five degree angle and a minimum of ten feet from the corner) and incorporate extended weather protection (arcade or awning), special paving materials, street furnishings, or plantings in the chamfered area.

3. Standards 1 and 2 above do not apply to vertically attached 3—4 plexes, multi-family buildings or multi-family portions of residential mixed-use buildings.

H. Variation in Massing. For street facing facades greater than one hundred twenty feet in length a modulation is required which extends through all floors. Decks and roof overhangs may encroach up to three feet per side into the modulation. The modulation shall meet one of the following dimensional requirements:

1. A minimum depth of two percent of the length of the façade and a minimum width of thirty percent of the length of the façade; or

2. A minimum depth of four percent of the length of the façade and a minimum width of twenty percent of the length of the façade.

I. Building Design Elements.

1. All front and side facades shall provide a design element or architectural feature that add interest and detail such that there are no blank walls of thirty feet in length or more, measured horizontally. Features that can meet this requirement include:

a. Change in building material or texture;

b. Window or door;

c. Balcony; or

d. Pillar or post.

2. Street facing facades shall include additional design features. For every thirty feet of façade length, three of the following elements are required:

a. Decorative materials on more than ten percent of the total wall area (e.g., brick or stonework, shingles, wainscoting, ornamentation, and similar features);

b. Decorative cornice and/or roof line (e.g., for flat roofs);

c. Roof gable;

d. Recessed entry;

e. Covered canopy entry;

f. Cupola or tower;

g. Dormer;

h. Balcony;

i. Pillars or posts;

j. Repeating pattern of building materials;

k. A change in plane of at least two feet in width and six inches in depth;

l. Bay or oriel window; or

m. An alternative feature providing visual relief and detail as approved by the community development director.

3. Building Detail Variation. Architectural features shall be varied on different buildings within the same development. At least two of the required features on each street-facing elevation shall be distinct from the street-facing elevations of other buildings within the same development.

J. Windows.

1. The minimum windows requirements are set forth in Table 17.62.055.J. Windows are measured in lineal fashion between 3.5 feet and six feet from the ground. For example, a one hundred-foot long building elevation would be required to have at least sixty feet (sixty percent of one hundred feet) of windows in length between the height of 3.5 feet and six feet from the ground.

Table 17.62.055.J
Minimum Windows

Use	Ground Floor: Front and Street Facing Facades	Upper Floor(s): Front and Street Facing Facades	Ground Floor: Side(s) Facades	Upper Floor(s): Side(s) Facades
Non-Multi-Family (or Portions of Buildings Thereof)	60%	10%	30%	10%
Multi-Family (or Portions of	15%	15%	10%	10%

Buildings Thereof)				

2. Reflective, glazed, mirrored or tinted glass is limited to ten percent of the lineal footage of windows on the street facing facade. Highly reflective or glare-producing glass with a reflective factor of one-quarter or greater is prohibited on all building facades. Any glazing materials shall have a maximum fifteen percent outside visual light reflectivity value. No exception shall be made for reflective glass styles that appear transparent when internally illuminated.
3. Side walls that face walkways may include false windows and door openings only when actual doors and windows are not feasible because of the nature of the use of the interior use of the building. False windows located within twenty feet of a right-of-way shall be utilized as display windows with a minimum display depth of thirty-six inches.
4. Multi-family windows shall incorporate window trim at least four inches in width when surrounded by horizontal or vertical lap siding.

K. Roof Treatments. The maximum length of any continuous roofline on a street-facing façade shall be seventy-five feet without a cross gable or change in height of at least two feet.

L. Drive-through facilities shall:

1. Be located at the side or rear of the building.
2. Be designed to maximize queue storage on-site.

M. Special development standards along transit streets.

1. Purpose. This section is intended to provide direct and convenient pedestrian access to retail, office and institutional buildings from public sidewalks and transit facilities and to promote pedestrian and transit travel to commercial and institutional facilities.
2. Applicability. Except as otherwise provide in this section, the requirements of this section shall apply to the construction of new retail, office and institutional buildings which front on a transit street.
3. Development Standards.
    a. All buildings shall have at least one main building entrance oriented towards the transit street. A main building entrance is oriented toward a transit street if it is directly located on the transit street, or if it is linked to the transit street by an on-site pedestrian walkway that does not cross off-street parking or maneuvering areas.
    i. If the site has frontage on more than one transit street, or on a transit street and a street intersecting a transit street, the building shall provide one main building entrance oriented to the transit street or to the corner where the two streets intersect.
        ii. For building facades over three hundred feet in length on a transit street, two or more main building entrances shall be provided as appropriate and oriented towards the transit street.
    b. In the event a requirement of this section conflicts with other requirements in Title 17, the requirements of this section shall control.
4. Exemptions. The following permitted uses are exempted from meeting the requirements of subsection 3 of this section:
    a. Heavy equipment sales;

b. Motor vehicle service stations, including convenience stores associated therewith; or

c. Solid waste transfer stations.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.62.056 Additional standards for large retail establishments.

Retail building(s) occupying more than ten thousand gross square feet of floor area shall contribute to the establishment or enhancement of community and public spaces by providing at least two of the following:

A. Patio/seating area;

B. Pedestrian plaza with benches;

C. Transportation center;

D. Window shopping walkway;

E. Outdoor playground area;

F. Kiosk area, water feature;

G. Clock tower; or

H. Other such deliberately shaped area and/or a focal feature or amenity that, in the judgment of the appropriate decision maker, adequately enhances such community and public spaces. Any such areas shall have direct access to the public sidewalk network and such features shall not be constructed of materials that are inferior to the principle materials of the building and landscape.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.62.057 Multi-family usable open space requirements.

A. Intent. Creating areas of usable open space that are easily accessed by residents provides focal points for community recreation and interaction and adds to the overall quality of life for residents. Given the environmental and recreational benefits of common open space, it should be integrated purposefully into the overall design of a development and not merely be residual areas left over after buildings and parking lots are sited.

B. Open Space Required. All new multi-family developments in all zones shall provide usable open space.

1. In residential zones, each development shall provide a minimum of one hundred square feet of open space per dwelling unit.

2. In nonresidential, commercial and mixed-use zones, each development shall provide a minimum of fifty square feet of open space per dwelling unit.

3. Required setback areas shall not count toward the open space requirement unless setback areas are incorporated into spaces that meet all other requirements of this section.

4. Required open space areas may be counted towards both the open space requirements and the minimum landscaping requirements in OCMC 17.62.050.A, if the spaces meet the requirements of both sections.

C. Usable Open Space Types.

1. Common open spaces shall be accessible to all residents of the development and include landscaped courtyards, decks, gardens with pathways, children's play areas, common rooftop decks and terraces, and other multipurpose recreational or green spaces. Common open spaces may be used to meet one hundred percent of the usable open space requirement. Design standards:

    a. Minimum dimensions for common open space shall be twelve feet with a minimum size of two hundred square feet for developments with twenty units or less, and twenty feet with a minimum size of four hundred square feet for developments with twenty-one or more units.

    b. Common open space shall feature a mix of natural and recreational amenities to make the area more functional and enjoyable for a range of users. Sites with twenty units or less shall provide a minimum of two of the following amenities, and sites with twenty-one units or more shall provide a minimum of three of the following amenities and an additional amenity for every twenty units over forty, rounded up.

1. Landscaping areas.
2. Community gardening areas.
3. Large trees expected to reach over eighteen inches dbh at maturity.
4. Seating.
5. Pedestrian-scaled lighting.
6. Hard-surfaced pedestrian paths in addition to those required for internal pedestrian circulation.
7. Paved courtyard or plaza.
8. Gazebos or other decorative shelters.
9. Play structures for children.
10. Sports courts.
11. An alternative amenity as approved by the community development director.

    c. Common open space shall be separated from ground level windows, streets, service areas and parking lots with landscaping, low-level fencing, and/or other treatments as approved by the city that enhance safety and privacy for both the common open space and dwelling units.

    d. Common open space shall be accessible from the dwelling units and, as appropriate, from public streets and sidewalks. The space shall be oriented to encourage activity from local residents.

2. Private open space that is not open to all residents includes balconies, patios, and other outdoor multi-purpose recreational or green spaces. It may be used to meet up to fifty percent of the usable open space requirement.

    a. Minimum dimensions for private open space shall be five feet with a minimum size of forty square feet.

3. Indoor recreational space may be used to meet up to twenty-five percent of the usable open space requirement provided the space is:

    a. Accessible to all dwelling units.

    b. Designed for and includes equipment for a recreational use (e.g., exercise, group functions, etc.).

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.62.058 Additional public park and open space requirements in Thimble Creek Concept Plan Area—Nonresidential development.

A. New non-residential development creating new commercial or industrial space will contribute to the creation of the parks and open space within the Thimble Creek Concept Plan by contributing a fee in lieu to the city to support the acquisition and interim use of needed park and open space land within the concept plan boundary as follows:

1. The fee in lieu will be set by the city commission and adopted yearly in the city's fee schedule. The fee shall only be used by the city for park, trail and open space acquisition and interim site development.

2. The fee-in-lieu or other equivalent monetary contribution, approved by the community development director, must be paid prior to approval of the certificate of occupancy.

(Ord. No. 21-1006, § 1(Exh. A), 7-1-2020)

17.62.059 Additional public park and open space requirements in Thimble Creek Concept Plan Area—Residential development.

A. Each development within the Thimble Creek Concept Plan area that includes residential development must dedicate land for neighborhood parks and open space subject to the location requirement set forth in subsection D as follows:

1. The minimum acreage of land dedicated for the South-Central Open Space-Neighborhood Park as provided in the following calculation: (2.6 persons per dwelling units) × (total number of dwelling units proposed) × (four acres)/(one thousand persons);

2. The minimum amount of land in acres dedicated for the East Ridge-Thimble Creek Conservation Area shall be 7.5 acres; and

3. The entire acreage must be dedicated as part of the final plat or site plan development approval for the first phase of development.

B. If a larger area for a neighborhood park or open space is proposed than is required based on the per-unit calculation described in subsection A, for the south Central Open Space Neighborhood Park, the city must reimburse the applicant for the value of the amount of land that exceeds the required dedication based on the fee-in-lieu formula expressed in subsection C.

C. The city may accept a fee-in-lieu as an alternative to this dedication at its discretion or may require a fee-in-lieu if a suitable site meeting the criteria described in subsection D of these provisions is not available within the development site. The calculation of the fee-in-lieu or other monetary contributions must meet the following standards:

1. The amount of the fee in lieu of other monetary contributions shall be determined by a licensed, city selected appraiser retained by the applicant, who will value the excessive dedication assuming that zoning and other land use entitlement necessary for park and open space development are in place.

2. The fee-in-lieu or other monetary contribution shall be paid current with public dedication.

D. Neighborhood park and open space sites proposed for dedication must be located within the South-Central Open Space Network and East Ridge Thimble Creek Conservation Area Park locations as shown in Figure 17.62.059-1 and meet the following locational and development standards:

1. South Central Open Space-Neighborhood Park.

a. Thirty-foot ped/bikeway string along the east side of Center Parkway to be located in a shared-use path and will not be considered part of a pearl.

b. Up to four pearls of various sizes spread along the open space network.

c. Minimum sizes pearl: Two acres minimum.

d. Maximum size pearl: None.

e. Minimum combined size of all pearls: Ten acres.

f. Minimum average pearl width: Two hundred feet.

g. Minimum average pearl depth: Two hundred feet.

h. At least five acres to be developed with active recreation components.

i. The first pearl dedicated must be at least three acres in size.

2. East Ridge-Thimble Creek Conservation Area shall include:

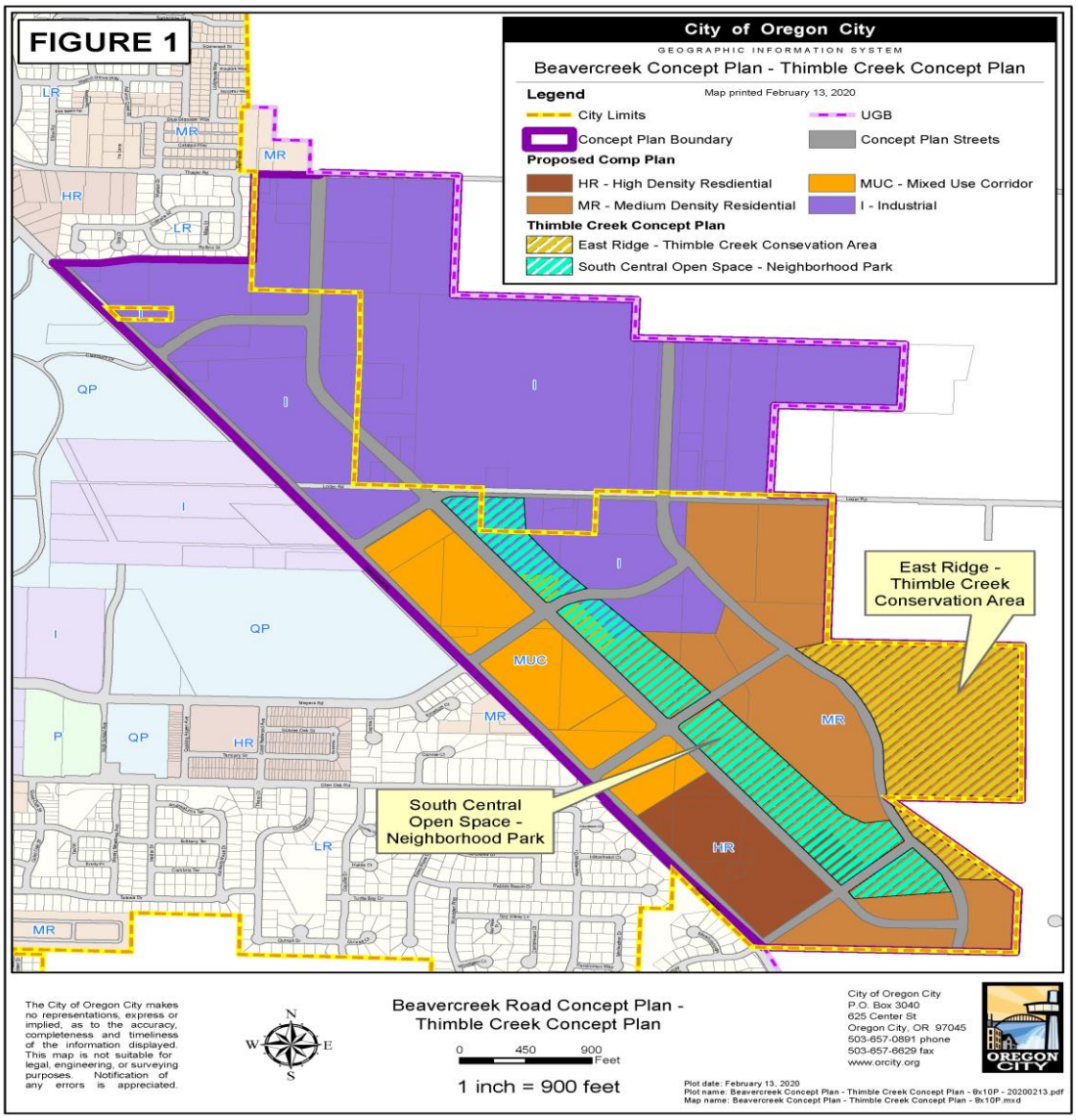
a. One-half of area between the Thimble Creek stream buffer and the four hundred ninety-foot elevation ridgeline to be open space;

b. Two public viewpoints separated by at least four hundred feet with a minimum size of .35 acre at less than ten percent slope for each viewpoint. One of the viewpoints must be visible from a passing vehicle on the Ridge Parkway;

c. Seven hundred-foot non-interrupted view corridor along the open space from the east edge of the Ridge Parkway; and

d. Provide a pedestrian-oriented forest trail from one view-point to another along the Ridge Parkway.

Figure 17.62.059-1



(Ord. No. 21-1006, § 1(Exh. A), 7-1-2020)

17.62.060 Reserved.

Editor's note(s)—Ord. No. 22-1001, § 1(Exh. A), adopted June 1, 2022, repealed § 17.62.060, which pertained to cluster housing and derived from Ord. No. 18-1009, adopted July 3, 2019; Ord. No. 19-1008, adopted December 18, 2019 and Ord. No. 21-1006, adopted July 1, 2020.

17.62.065 Outdoor lighting.

A. Purpose. The general purpose of this section is to require outdoor lighting that is adequate for safety and convenience; in scale with the activity to be illuminated and its surroundings; directed to the surface or activity to be illuminated; and designed to clearly render people and objects and contribute to a pleasant nighttime environment. Additional specific purposes are to:

1. Provide safety and personal security as well as convenience and utility in areas of public use or traverse, for uses where there is outdoor public activity during hours of darkness;

2. Control glare and excessive brightness to improve visual performance, allow better visibility with relatively less light, and protect residents from nuisance and discomfort;

3. Control trespass light onto neighboring properties to protect inhabitants from the consequences of stray light shining in inhabitants' eyes or onto neighboring properties;

4. Result in cost and energy savings to establishments by carefully directing light at the surface area or activity to be illuminated, using only the amount of light necessary; and

5. Control light pollution to minimize the negative effects of misdirected light and recapture views to the night sky.

6. Encourage energy efficient lighting with new technologies such as light emitting diodes (LED) or similar to reduce ongoing electrical demand and operating costs.

B. Applicability.

1. General.

a. All exterior lighting for any type of commercial, mixed-use, industrial, institutional, or multi-family development shall comply with the standards of this section, unless excepted in subsection B.3.

b. The city engineer or public works director shall have the authority to enforce these regulations on private property if any outdoor illumination is determined to present an immediate threat to the public health, safety and welfare.

2. Lighting Plan Requirement. All commercial, industrial, mixed-use, cottage housing and multi-family developments shall submit a proposed exterior lighting plan. The plan shall be submitted concurrently with the site plan. The exterior lighting plan shall include plans and specifications for streetlights, parking lot lights, and exterior building lights. The specifications shall include details of the pole, fixture height and design, lamp type, wattage, and spacing of lights.

3. Excepted Lighting. The following types of lighting are excepted from the requirements of this section:

a. Residential lighting for single-family attached and detached homes, and duplexes.

b. Public street and right-of-way lighting.

c. Temporary decorative seasonal lighting provided that individual lamps have a light output of sixty watts or less.

d. Temporary lighting for emergency or nighttime work and construction.

e. Temporary lighting for theatrical, television, and performance areas, or for special public events.

f. Lighting for a special district, street, or building that, according to an adopted municipal plan or ordinance, is determined to require special lighting aesthetics as part of its physical character.

g. Lighting required and regulated by the Federal Aviation Administration.

C. Design and Illumination Standards.

1. Outdoor lighting, if provided, shall be provided in a manner that enhances security, is appropriate for the use, avoids adverse impacts on surrounding properties, and the night sky through appropriate shielding as defined in this section. Glare shall not cause illumination on other properties in excess of a measurement of 0.5 footcandles of light as measured at the property line.
2. Lighting shall be provided in parking lots, bicycle parking areas, and vehicular circulation areas.
3. Lighting shall be provided in pedestrian walkways, pedestrian plazas, and pedestrian circulation areas.
4. Lighting shall be provided at all building entrances.
5. With the exception of pedestrian scale lighting, all light sources shall be concealed or shielded with a full cut-off style fixture in order to minimize the potential for glare and unnecessary diffusion on adjacent property.
6. The maximum height of any lighting pole serving a multi-family residential use shall be twenty feet. The maximum height serving any other type of use shall be twenty-five feet, except in parking lots larger than five acres, the maximum height shall be thirty-five feet if the pole is located at least one hundred feet from any residential use.
7. Floodlights shall not be utilized to light all or any portion of a building facade between ten p.m. and six a.m.
8. Lighting on outdoor canopies shall be fully recessed into the canopy and shall not protrude downward beyond the ceiling of the canopy.
9. All outdoor light not necessary for security purposes shall be reduced, activated by motion sensor detectors, or turned off during non-operating hours.
10. Light fixtures used to illuminate flags, statues, or any other objects mounted on a pole, pedestal, or platform shall use a narrow cone beam of light that will not extend beyond the illuminated object.
11. For upward-directed architectural, landscape, and decorative lighting, direct light emissions shall not be visible above the building roofline.
12. No flickering or flashing lights shall be permitted, except for temporary decorative seasonal lighting.
13. Lighting for outdoor recreational uses such as ball fields, playing fields, tennis courts, and similar uses, are allowed a light post height up to eighty feet in height.
14. Main building entrances shall be well lighted and visible from any transit street. The minimum lighting level for building entries fronting on a transit street shall be three foot-candles.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

17.62.085 Refuse and recycling standards for commercial, industrial, office, institutional, and multi-family developments.

The purpose and intent of these provisions is to provide an efficient, safe and convenient refuse and recycling enclosure for the public as well as the local collection firm. All new development, change in property use, expansions, or exterior alterations to uses, other than single-family detached residential units, duplexes, triplexes, quadplexes, townhouses, cottage clusters or accessory dwelling units (ADUs), shall include a refuse and recycling enclosure. The area(s) shall be:

A. Fully enclosed and visually screened;

B. Located in a manner easily and safely accessible by collection vehicles;

C. Located in a manner so as not to hinder travel lanes, walkways, streets or adjacent properties;

D. On a level, hard surface designed to discharge surface water runoff and avoid ponding;

E. Maintained by the property owner;

F. Used only for purposes of storing solid waste and recyclable materials;

G. Designed in accordance with applicable sections of the Oregon City Municipal Code (including OCMC 8.20, Solid Waste Collection and Disposal) and city adopted policies.

Enclosures are encouraged to be sized appropriately to meet the needs of current and future tenants and designed with sturdy materials which are compatible to the primary structure(s).

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019; Ord. No. 22-1001, 1(Exh. A), 6-1-2022)

17.62.090 Implementation.

A. Applications for site plan and design review shall be reviewed in the manner provided in OCMC 16.12 and 17.50. The building official may issue a certificate of occupancy only after the improvements required by site plan and design review approval have been completed, or a schedule for completion and a bond or other financial guarantee have been accepted by the city.

B. In performing site plan and design review, the review authority shall consider the effect of additional financial burdens imposed by such review on the cost and availability of needed housing types. Consideration of such factors shall not prevent the imposition of conditions of approval found necessary to meet the requirements of this section. The cost of such conditions of approval shall not unduly increase the cost of housing beyond the minimum necessary to achieve the provisions of this title, nor shall such cost prevent the construction of needed housing types.

C. The site plan and design review provisions of this chapter shall not be applied to reduce the density or height of an application for a development project that reserves at least seventy-five percent of the gross floor area for housing where the proposed density or height is at or below what is allowed in the base zone, except in the following situations:

1. Where the reduction in density is required for development subject to historic overlay provision in OCMC 17.40; or

2. Where the reduction in density is necessary to resolve a health, safety or habitability issue, or to comply with the natural resource overlay district regulations of OCMC 17.49, the geologic hazard overlay district regulations of OCMC 17.44, or the floodplain management overlay district regulations of OCMC 17.42 or steep slope regulations.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 19-1008, § 1(Exh. A), 12-18-2019)

Memorandum

To: Aquilla Hurd-Ravich & Pete Walter, City of Oregon City

CC: Evan Manvel, DLCD

From: Brian Davis, AICP

Date: March 1, 2025

Re: Oregon City Conceptual Approach to CFEC Compliance

Introduction

This memo summarizes Oregon's new administrative rules (OAR) pertaining to parking that were recently enacted as part of the Climate Friendly and Equitable Communities (CFEC) program and examines the nature and extent of code updates that Oregon City will need to implement to comply with the new rules.

The parking-related rules (OAR 660-12-0400 through -0450) generally aim to reduce the amount of unnecessary parking built due to minimum requirements, and to reduce impacts of new parking to the extent possible. There are three broad paths to compliance allowed within the rules ("options," per DLCD's terminology).

- Option 1 is to repeal mandates entirely;
- Options 2 and 3 are to enact either a smaller subset of more significant reforms (Option 2) or a larger subset of less significant reforms (Option 3).

Additionally, there are several requirements regarding newly developed or redeveloped parking specified by OARs 660-012-0405 (Parking Regulation Improvements) and 660-012-0410 (Electric Vehicle Charging) that necessitate updates to Oregon City's code, and additional rules regulations addressing the maximum amount of parking that can be developed specified by OAR 660-012-0415.

This memo discusses the preferred avenue to compliance for Oregon City. This avenue was developed beginning with an initial code audit conducted in 2023 by Jet Planning, and refined through ongoing analysis and outreach conducted by Studio Davis and the City in tandem. The recommendations herein discuss and consider feedback received through an extensive outreach process that included presentations to the various boards and commissions serving Oregon City as well as a public workshop that included in-person and online elements.

Engagement & Outreach

The approach to compliance detailed below was developed through a robust and inclusive outreach process that sought to obtain feedback from the gamut of Oregon City residents, employees, and community leaders.

The initial round of engagement prior to October 2024 was conducted directly by the City. In late 2024, an ad-hoc CFEC Committee was formed to advise the project team on implementing the necessary changes. From the City's initial engagement, Option 3 emerged as the preferred compliance alternative. The CFEC Committee supported this alternative and established the general framework for compliance.

While many elements of Option 3 are prescriptive, there are several areas where Oregon City has some discretion regarding how to meet requirements. The project team sought feedback on these areas through subsequent engagement efforts with the CFEC Committee and other standing committees during January and February, 2025, including with a public open house held on February 10, 2025. For the Open House, the project team created a number of materials to solicit feedback, including creation of a poster that summarized the feedback received to date. That poster is shown below in Figure 1, and represents a good synopsis of feedback received, showing both the key points from the various commissions as well as the workshop's participants' dots indicating agreement or disagreement.

Again, many of the requirements Oregon City needs to update are strictly prescribed by the CFEC rules. However, the engagement process generated detailed and thoughtful feedback on a number of areas where the City does have latitude. To the extent possible, that feedback has been incorporated into the recommended updates described below.

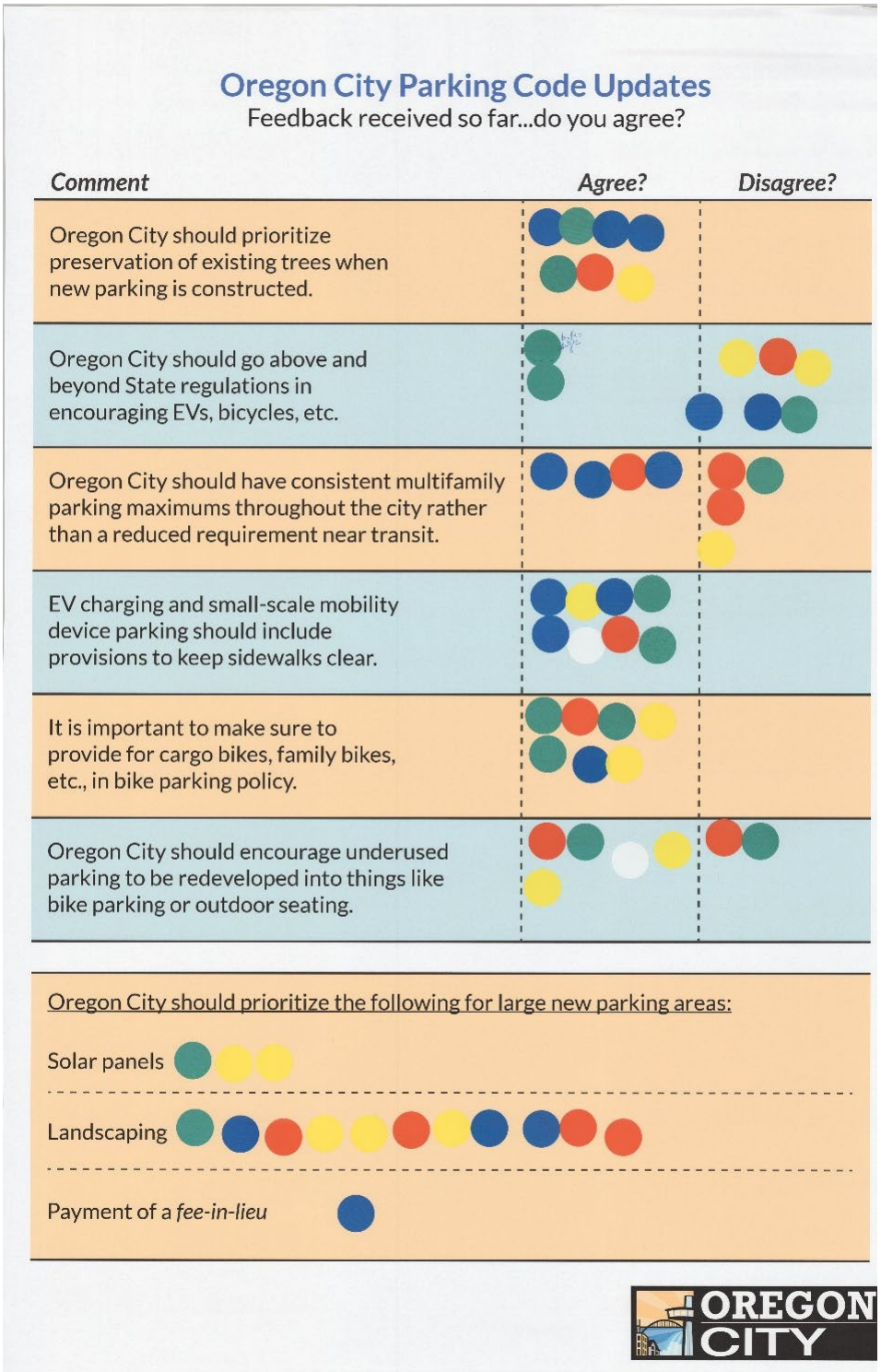


Figure 1: Poster from the *dot exercise* conducted for the public workshop, showing points of feedback received prior to the workshop and agreement or disagreement indicated by workshop attendees

Preferred Approach and Necessary Code Changes

Early in the engagement processes, it became evident that there was a lack of political support for Option 1. Further, both city staff and board/commission members expressed concerns about the implementation of unbundled parking, which is required by Option 2. Option 3 thus emerged as the preferred option, particularly given the fact that Oregon City already manages parking with meters and permits, which is a key requirement of Option 3. The conceptual approach detailed below presents a path to compliance following Option 3.

Parking Management (OAR 660-012-0400)

OAR 660-012-0400 establishes that Oregon City is required to comply with the parking-related CFEC regulations (OAR 660-012-0400 through -0450) and details the parameters of the three compliance options described above. The rule indicates that in lieu of removing parking requirements per OAR 660-012-0420, Oregon City can instead implement the provisions of OAR 660-012-0425, -0430 -0435, -0440, -0445, and -0450.

No code changes are directly required to meet this rule.

Parking Regulation Improvements (OAR 660-012-0405)

New requirements under rule -0405 address any new parking that is developed or redeveloped, and fall under eight broad categories. These are cited below along with code updates needed to meet these rules.

Preferential placement of carpool/vanpool parking (660-012-0405(1)(a))

OCMC 17.52.030(E) currently requires preferential parking for carpools/vanpools for many developments. Generally Oregon City's requirements meet or exceed those from the new OAR, which is limited in applicability to only "designated employee areas." However, the threshold for applicability for these new parking areas is 50 spaces, so OCMC will need to be slightly updated to meet this. The easiest path to compliance will be to update the applicability statement of OCMC 17.52.030(E) to read:

"New developments with seventy-five or more parking spaces, excluding projects where seventy-five percent or more of the total floor area is residential, and new hospitals, government offices, group homes, nursing and retirement homes, schools, *designated employee parking areas,* and transit park-and-ride facilities with fifty or more parking spaces…"

Per feedback from DLCD, this code may be confusing in its present form, particularly after adding an additional use, so the City should consider rewriting this as a bullet-pointed list.

Allow redevelopment of a portion of a parking lot for bike or transit uses (660-012-0405(1)(b))

The current code does not contemplate redevelopment of parking for bike or transit uses. New language will need to be added to the code to allow for this.

Allow and encourage redevelopment of underused parking (660-012-0405(2))

Likewise, the current code does not currently address potential redevelopment of underused parking, so language will need to be added to allow for this possibility. Note that the City can still require review for new or expanded uses or structures. Potential language for this regulation that could address both this rule and the previous one based upon implementation guidance follows. The City also may want add a definition of "underused parking" to 17.04 to provide clarity; a potential definition largely consistent with best practices might be, "parking lots or facilities that are below 50% of capacity most or all of the time."

"(A) Purpose. To minimize the opportunity cost of parking by encouraging other beneficial uses to take its place, especially in situations where parking is underused.

(B) Property owners may choose to redevelop underused off-street parking, pursuant to OCMC 17.52.

(C) Redevelopment of existing off-street parking areas as a bicycle-oriented or transit-oriented facility including bicycle parking, bus stops and pullouts, bus shelters and park and ride stations, and similar facilities is encouraged."

Allow and facilitate shared parking (660-012-0405(3))

Shared parking is currently addressed within OCMC 17.52.20(B)(3) as a permissible path to meet parking requirements. This can be kept as-is for the area where parking requirements will be retained. However, more general language will be needed establishing the permissibility of shared parking. Potential language follows.

"Parking facilities for two or more uses, structures, or parcels of land may be shared, provided that the right of joint use is evidenced by a recorded deed, lease, contract, or similar written instrument authorizing the joint use."

Tree canopy, solar, or fee-in-lieu, for parking more than ½ acre (660-012-0405(4)(a))

This is perhaps the most impactful requirement of Rule -0405, as this requirement will shape what those areas look like and their impact to the overall sense of place. Accordingly, there was a significant amount of discussion on this topic during the outreach process.

The rule indicates that Oregon City must require at least one, or any combination, of the following:

A) Require installation of solar panels capable of generating 0.5 kilowatts per new parking space;

B) Require a fee-in-lieu payment of $1,500 per new parking space to be invested in a city, county, or state fund dedicated to renewable energy development; or

C) Require a tree canopy covering 40% of the parking lot.

Oregon City currently has detailed parking lot landscaping requirements via OCMC 17.52.060, although no tree canopy coverage percentage is specified. Oregon City's code otherwise meets or exceeds requirements, and is largely consistent with implementation guidance.

During the outreach process participants generally indicated support for landscaping, and a plurality felt that there should also be a solar option for parking lot landscaping, which Oregon City does not currently allow for. This could be added as an option via the following clause within (or adjacent to) 17.52.060:

"Developments adding off-street parking areas of one-half acre (21,780 square feet) or more, must provide a tree canopy covering at least 40 percent of the new parking lot area at maturity, but no later than 15 years after planting, consistent with requirements of OCMC 17.52.060."

"If it is infeasible to meet the 40% tree canopy requirement due to site constraints, installation of solar panels with a generation capacity of at least 0.5 kilowatt per new off-street parking space can instead be provided. Panels may be located anywhere on the property, subject to OCMC standards."

Note that a fee-in-lieu program was not widely supported during the outreach process and it is unclear how such a program would be administered, so this is not recommended here.

New parking more than ½ acre must have trees along driveways or 30% coverage (660-012-0405(4)(b))

As above, Oregon City currently has fairly robust landscaping requirements and can meet the letter of this rule via fairly modest adjustments to existing language specifying that 30% coverage is needed.

The 30% perimeter coverage requirement is met prima facie if the overall 40% tree canopy requirement from the previous section is met. Otherwise, 30% tree coverage is required along the perimeter while meeting the previous requirement via the solar option.

Pedestrian connections through large parking lots (660-012-0405(4)(c))

OCMC 17.052.060 discusses pedestrian safety and walkways within parking lots and includes several requirements. Further design criteria are specified by OCMC 17.62.050(c).

DLCD's Implementation Guidance details what safe pedestrian connections should consist of and allows for discretion in the case of site-specific conditions outside of the applicant's control. Based upon this, Oregon City should add the following design requirements to 17.62.050(c) to fully comply with this requirement.

- Pedestrian crossings at intersections with drive aisles and other driveways should be demarcated, preferably by a raised surface that slows vehicular travel, or by different surface materials.
- Crossings demarcated only by striping are discouraged in that they have not been demonstrated to be safe or effective for pedestrian protection.
- The pedestrian facilities should be illuminated to at least the same level as the on-site driveways and public right-of-way.
- Pedestrian facilities from building entrances to the public right-of-way, ADA spaces, and transit stops shall be as direct as possible.

- Driveway crossings should be minimized, and the placement of buildings and their entrances should minimize pedestrian travel distances where possible.

Parking maximums in appropriate locations (660-012-0405(5))
This rule, intentionally worded very loosely, requires implementation of parking maximums in "appropriate locations, such as downtowns, designated regional or community centers, and transit-oriented developments." Since Oregon City currently has citywide parking maximums, it currently meets this requirement with no further adjustments, although some of the specific maximums will need to be adjusted to come into compliance with OAR 660-012-0415, described below.

Electric Vehicle Charging (OAR 660-012-0410)

Rule -0410 calls for new private multi-family residential or mixed-use developments with five or more residential dwelling units to install conduits to serve 40% of vehicle parking spaces.

Currently, Oregon City's code doesn't address EV charging, so language to meet this requirement will be needed. A potential way to do this would be to add the following language (or similar) to code.

"Electrical Service Capacity. Electrical service capacity, as defined in OCMC 17.04.345, must be provided to new off-street parking spaces subject to the following standards. Variance requests to these standards are prohibited.

> a. Non-residential development and residential or mixed use developments with less than five dwelling units must provide electrical service capacity to a minimum of 20 percent of all off-street vehicle parking spaces on the site.
>
> b. Residential or mixed-use development with five or more dwelling units must provide electrical service capacity to a minimum of 40 percent of all off-street vehicle parking spaces on site."

The definition of *Electrical Service Capacity* can then be added as OCMC 17.04.345 -350. Per implementation guidance, potential language is:

"Electrical service capacity" means:

(a) Building electrical service, sized for the anticipated load of electric vehicle charging stations, that has overcurrent devices necessary for electric vehicle charging stations or has adequate space to add the overcurrent devices;
(b) Designated space within a building to add electrical service with capacity for electric vehicle charging stations; **or**
(c) A designated location on building property, in or adjacent to a landscaped area, for installing remote service for electric vehicle charging stations; **and**
(d) A conduit system installed from building electrical service, or from the dedicated spaces or locations described in subparagraph (A) of this paragraph, to parking

spaces that can support, at a minimum, electrical wiring for installation of level 2 electric vehicle charging stations and, if the conduit is for future installation of electric vehicle charging stations, that labels both ends of the conduit to mark the conduit as provided for future electric vehicle charging stations.

"Electric vehicle charging station" means a device or facility for delivering electricity for motor vehicles that use electricity for propulsion.

"Level 2 electric vehicle charging station" means an electric vehicle charging station that uses 240V AC electricity for charging an EV.

Parking Maximums (OAR 660-012-0415)

Cities with 25,000 people or more within the Portland metro area are subject to rule -0415(1), which requires implementation of certain maximum parking requirements within the transit corridors and Climate Friendly areas listed in OAR 660-012-0440. With a population of approximately 40,000, Oregon City is subject to this rule.

As discussed above, Oregon City currently has maximum requirements specified for several uses via OCMC Table 17.52.020. With the exception of multifamily housing, these requirements meet those of the new rule. Thus, Oregon City will need to amend the multifamily maximum in Table 17.52.020 to be 1.2 off-street parking spaces per studio unit and two off-street parking spaces per non-studio residential unit.

Note that a topic that was discussed at length during the outreach process was whether to implement this change only within the required areas (likely through an additional table and/or code section), or to amend Table 17.52.020 to apply these new maximums citywide. There was broad consensus that the latter represented the more sensible path.

Reducing the Burden of Parking Mandates (OAR 660-012-0425)

This section is mostly prescriptive, but will require several updates to OCMC 17.52.020, likely within an expanded subsection C, which addresses reductions to parking minimums. Most requirements below can be met with straightforward updates to 17.52.020, however DLCD did not produce model code or implementation guidance for this subsection.

Table 1: Requirements of OAR 660-012-0425 and necessary updates to meet them

Requirement	Needed Update
Garages and carports may not be required for residential developments.	Oregon City is in compliance per OCMC 17.52.010 – Applicability, but this section does not exception does not expressly mention triplex or 4-plexes. Oregon City may want to add these for clarity.

Garage parking spaces shall count towards off-street parking mandates.	Add section specifying this to OCMC 17.52.020.
Provision of shared parking shall be allowed to meet parking mandates.	Oregon City is in compliance. No change needed.
Required parking spaces may be provided off-site, within 2,000 feet pedestrian travel of a site. If any non-loading parking is provided on site, all required parking for people with disabilities shall be on site. If all parking is off-site, parking for people with disabilities must be located within the shortest possible distance of an accessible entrance via an accessible path and no greater than 200 feet from that entrance.	To wit, none of these requirements are currently contemplated in code. This requirement can likely be added verbatim as a subsection of 17.52.020.
Parking mandates shall be reduced by one off-street parking space for each three kilowatts of capacity in solar panels or wind power that will be provided in a development.	Add section specifying this to OCMC 17.52.020.
Parking mandates shall be reduced by one off-street parking space for each dedicated car-sharing parking space in a development.	Add section specifying this to OCMC 17.52.020, including requirement that these spaces be signed or marked appropriately.
Parking mandates shall be reduced by two off-street parking spaces for every electric vehicle charging station provided in a development.	Add section specifying this to OCMC 17.52.020.
Parking mandates shall be reduced by one off-street parking space for every two units in a development above minimum requirements that are fully accessible to people with mobility disabilities.	Add section specifying this to OCMC 17.52.020.

Note that reductions above must be cumulative and not capped. This should be specified by code as well.

Reduction of Parking Mandates for Development Types (OAR 660-012-0430)

This rule requires the following:

- Oregon City may not require more than one parking space per unit in residential developments with more than one dwelling unit on a single legally-established property.

- No requirements are allowed for the following uses:
    - Facilities and homes designed to serve people with psychosocial, physical, intellectual or developmental disabilities, including but not limited to a: residential care facility, residential training facility, residential treatment facility, residential training home, residential treatment home, and conversion facility as defined in ORS 443.400;
    - Child care facility as defined in ORS 329A.250;
    - Single-room occupancy housing;
    - Residential units smaller than 750 square feet;
    - Affordable housing as defined in OAR 660-039-0010;
    - Publicly supported housing as defined in ORS 456.250;
    - Emergency and transitional shelters for people experiencing homelessness; and
    - Domestic violence shelters.

Oregon City does not appear to require parking for the nonresidential uses listed above. The simplest path to compliance with this option would be to add language exempting "residential developments with more than one unit on a single Lot of Record as defined by 17.04.695, residential units less than 750 square feet, single-room occupancy housing, affordable housing per OAR 660-039-0010, and publicly supported housing as defined in ORS 456.250."

Note that implementation guidance indicates that communities should be sure to conform with parking mandate limits in OAR 660-046 for traditional "missing middle" housing including duplexes, triplexes, quadplexes, townhouses and cottage clusters. In some cases those rules set tighter limits on mandates than those in OAR 660-012; the smaller allowance applies in those situations."

Parking Reform in Climate-Friendly Areas (OAR 660-012-0435)

This rule applies to the downtown Oregon City Metro Region 2040 center and requires Oregon City to either eliminate minimum parking requirements at all sites within one-quarter mile of the center, or reduce significantly reduce parking requirements within this area in addition to implementing a parking benefit district.

As discussed below, Oregon City is already required to remove parking requirements within one-half mile of the corridor served by Tri-Met Bus Line 33. This overlaps with the Climate Friendly Area nearly entirely, so the preferred approach here is to include this area in the section of the city without parking minimums (described below), meeting the requirement.

Parking Reform near Transit Corridors (OAR 660-012-0440)

This rule disallows Oregon City from requiring parking within one-half mile of the Tri-Met Bus Line 33 Corridor, which meets the definitions for service and frequency under any scenario. This corridor comprises a significant portion of Oregon City. The City's map showing the exempt area under this rule (and the previous one) is shown in Figure 2.

Since the City has already identified the exempt areas vis GIS, the most straightforward way for Oregon City to meet this requirement would be to establish an area with no parking mandates in code and include and reference the official map. This is the approach used recently by the City of Sherwood. The code language used, adapted for Oregon City, follows.

"Per OAR 660-012-0440, no off-street parking is required for developments on a lot or parcel that includes lands within one-half (1/2) mile of a frequent transit corridor. Per OAR 660-012-0435, no off-street parking is required within the Oregon City Regional Center and one-quarter mile of the area. These areas are identified by the *CFEC Parking Delineated Area Map*."

In creating/adopting this map, there is an important consideration. As described below, one of the requirements of OAR 660-012-0445 is to include areas "within one-half mile pedestrian travel of climate-friendly areas" as exempt from parking mandates. Oregon City does not currently have a climate-friendly area, so this provision does not apply under existing conditions. However DLCD has indicated that they intend to ask LCDC to add Metro centers to this provision during the next rulemaking process. If the Commission concurs, this will provision would then apply to downtown Oregon City. The map shown in Figure 2 includes a half-mile buffer around the Regional Center in addition to the half-mile buffer around Line 33, and thus would be in compliance with this rule if officially adopted as the *CFEC Parking Delineated Area Map*.

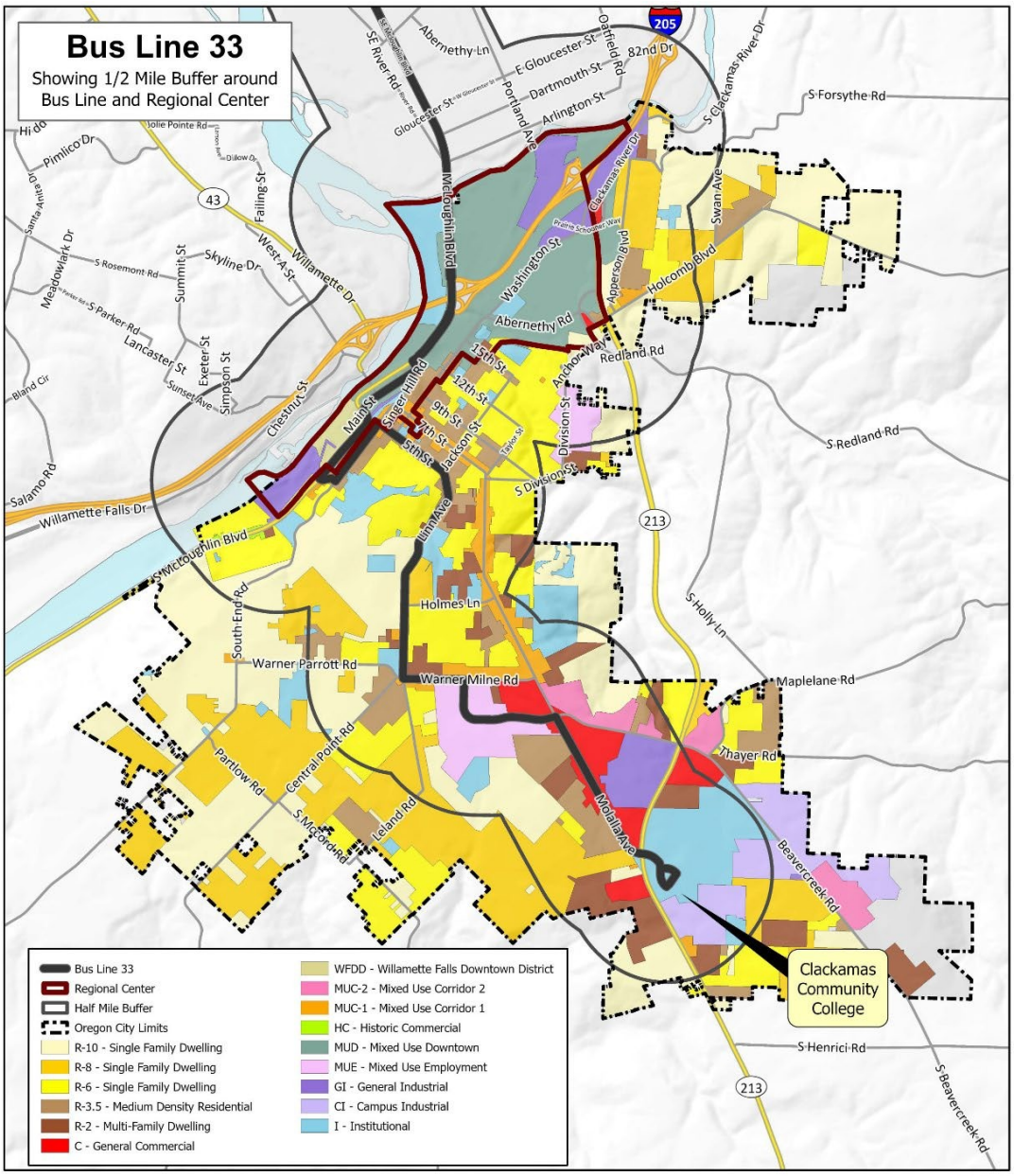


Figure 2: Areas within Oregon City that are disallowed from requiring parking per OAR 660-012-0435, -0440, and -0445

Parking Management Alternative Approaches (OAR 660-012-0445)

This rule essentially distinguishes between Options 2 and 3, allowing cities to either follow subsection 1(a) (Option 2) or subsection 1(b) (Option 3). By electing Option 3, Oregon City must adopt 14 separate measures leading to a "reduced parking management approach." These are detailed below along with needed code changes (if any) to apply.

As above, most requirements below can be met with straightforward updates to 17.52.020, likely with additional notes below Table 17.52.022; however as Oregon City is the first city to elect this option, no model or precedent code exists.

Table 2: Requirements and updates to meet OAR 660-012-0445(b)

Requirement	Needed Update
No parking mandates within one-half mile pedestrian travel of climate-friendly areas	No action required now, as Oregon City does not include a climate-friendly area. However, Metro centers may be included in this provision in the future. See above for considerations related to mapping this area.
No parking mandates for mixed-use development	Add section exempting these developments to OCMC 17.52.020. Strike note 1 below Table 17.52.020.
No parking mandates for group quarters	Add section exempting these uses to OCMC 17.52.020.
No parking mandates for studio apartments, one-bedroom apartments and condominiums	Include new row in table 17.52.020 for these uses, with no minimum and maximums per -0415. Add definition to 17.04 for studio apartment: "A studio apartment is an apartment consisting of a single large room serving as bedroom and living room, with a separate bathroom."
No parking mandates for change of use of, or redevelopment of, buildings vacant for more than two years.	Add section exempting these developments to OCMC 17.52.020, requiring registration of a building as vacant two years prior to the waiving of parking mandates.
No requirements to provide additional parking for change of use or redevelopment where at least 50 percent of the building floor area is retained.	Add section exempting these developments to OCMC 17.52.020.
No parking mandates for expansion of existing businesses by less than 30 percent of a building footprint	Add section exempting these developments to OCMC 17.52.020. Revise note #5 as needed.
No parking mandates for buildings within a National Historic District, on the National Register of Historic Places, or identified as a	Add section exempting these developments to OCMC 17.52.020.

designated or contributing structure on a local inventory of historic resources or buildings	
No parking mandates for commercial properties that have fewer than ten on-site employees or 3,000 square feet floor space	Add section exempting these developments to OCMC 17.52.020.
No parking mandates for developments built under the Oregon Residential Reach Code	Add section exempting these developments to OCMC 17.52.020. Add definition to 17.04 for Oregon Residential Reach Code: "The Oregon Residential Reach Code is a statewide optional energy construction standard approved by the Building Codes Division. It is is separate from the state building code and applicable at the designer's and contractor's discretion."
No parking mandates for developments seeking certification under any Leadership in Energy and Environmental Design (LEED) rating system	Add section exempting these developments to OCMC 17.52.020.
No parking mandates for schools	Revise Table 17.52.020 to show that the minimum requirement is zero for these uses.
No parking mandates for bars and taverns	Ensure that it is clear "restaurant" uses in Table 17.52.020 do not apply here.
Implementation of a pricing mechanism	Oregon City is in compliance. No change needed.

Bicycle Parking Requirements (OAR 660-012-0630)

Lastly, several new requirements regarding bicycle parking are introduced via Rule -0630. These fall under four categories, summarized below.

Minimum bicycle parking requirements for certain uses (660-012-630(2))

OCMC 17.52.040 Table A specifies bicycle parking requirements, and includes a minimum requirement for all uses specified by this rule. The code is currently in compliance and no changes are needed here.

Covered bicycle parking required for multifamily and mixed-use residential (660-012-630(3))

In addition to requiring some minimum number of parking spaces above, this rule stipulates that cities must require at least 0.5 stalls per unit in covered bicycle parking for residential uses. While Oregon City requires 50% of bike parking stalls to be covered, because it only requires one stall per

10 units it does not meet the letter of this rule. The easiest way to meet the requirement would be to change the covered parking requirement in the first row of Table A to the numerical requirement rather than a percentage, updating the header as needed.

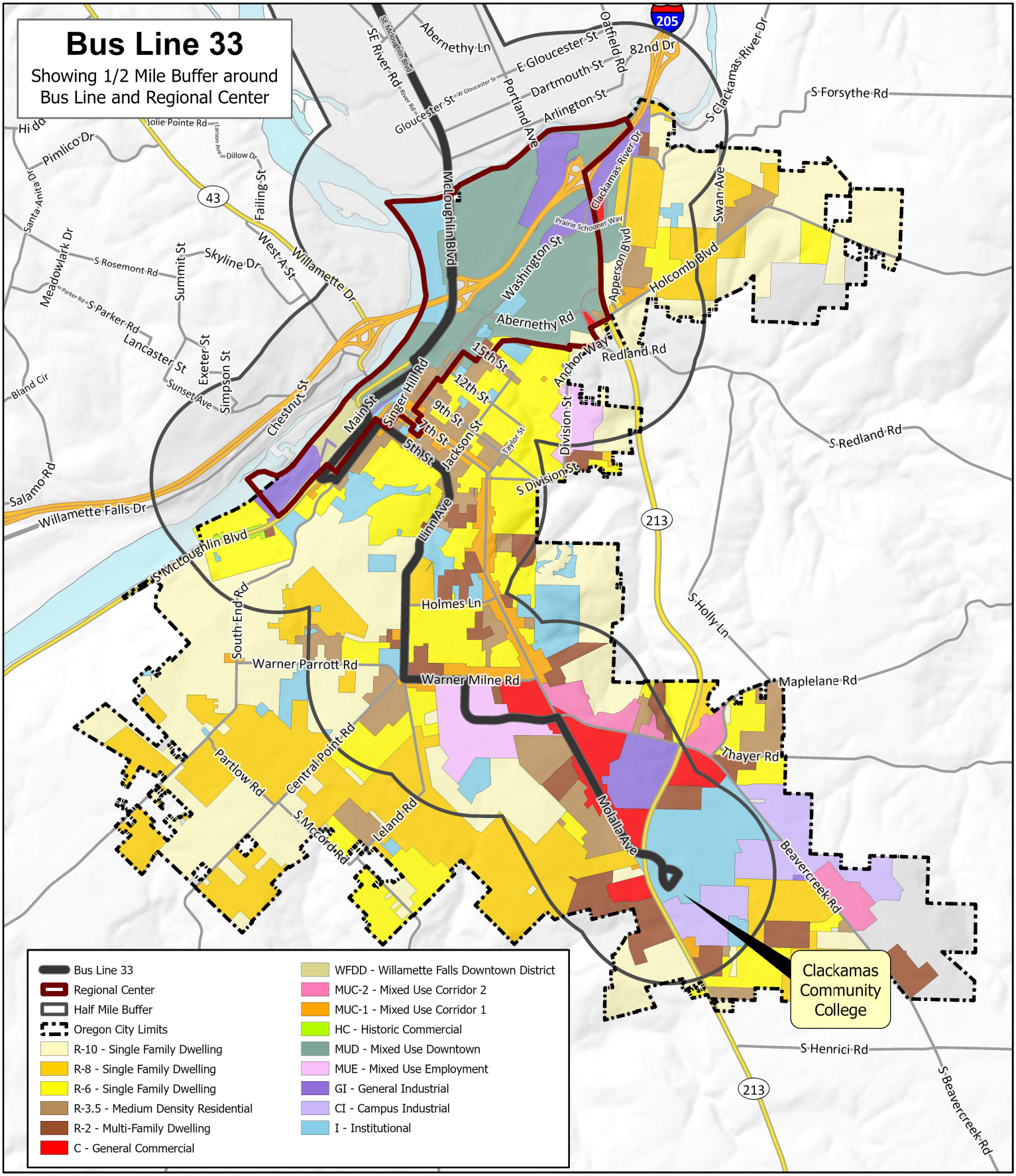
Bike parking must meet certain standards regarding security and accessibility (660-012-630(3))
The design standards specified by OCMC 17.52.040(C) are fairly robust and adequately address most of the requirements regarding the size of spaces, accessibility, and location. It is recommended that the City add language to OCMC 17.52.040(C)(2) to indicate the spaces should also be "well lit." This rule also includes a stipulation that spaces must be included to "accommodate large bicycles, including family and cargo bicycles." Oregon City's design standards are likely adequate to ensure that these bicycles are accommodated at most or all bike spaces.

Provide parking for bikes and other "small-scale mobility devices" at key destinations (660-012-630(4))
Oregon City already requires parking at the key destinations specified by 660-012-360. The other requirements here do not necessitate code updates as part of this process; however the City may need to consider bike and small-scale mobility device parking during its upcoming TSP update.

Conclusion and next steps

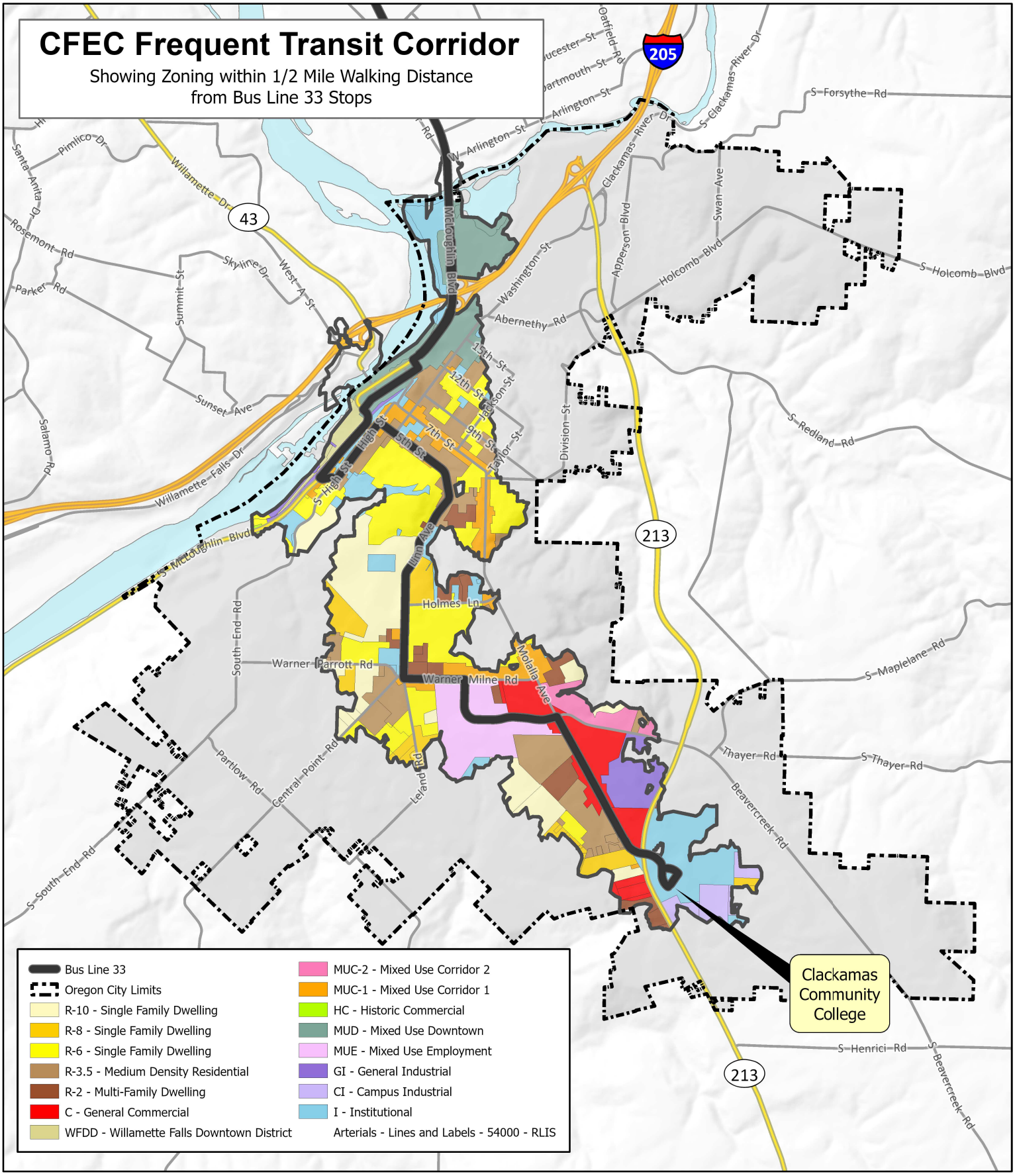
Based upon the approach specified above and the code language described herein, Studio Davis will work with the City to produce a formal set of code language ready for adoption.

If you have any questions or would like additional information, please do not hesitate to contact us.


Bus Line 33
Showing 1/2 Mile Buffer around Bus Line and Regional Center
Bus Line 33
Regional Center
Half Mile Buffer
Oregon City Limits
R-10 - Single Family Dwelling
R-8 - Single Family Dwelling
R-6 - Single Family Dwelling
R-3.5 - Medium Density Residential
R-2 - Multi-Family Dwelling
C - General Commercial
WFDD - Willamette Falls Downtown District
MUC-2 - Mixed Use Corridor 2
MUC-1 - Mixed Use Corridor 1
HC - Historic Commercial
MUD - Mixed Use Downtown
MUE - Mixed Use Employment
GI - General Industrial
CI - Campus Industrial
I - Institutional
Clackamas Community College
205
213
43
Abernethy Ln
E Gloucester St
Dartmouth St
Arlington St
Oatfield Rd
82nd Dr
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Redland Rd
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Apperson Blvd
Holcomb Blvd
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Prairie Schooner Way
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9th St
7th St
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Jackson St
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S Redland Rd
Linn Ave
S McLoughlin Blvd
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Thayer Rd
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The City of Oregon City makes no representations, express or implied, as to the accuracy, completeness and timeliness of the information displayed. This map is not suitable for legal, engineering, or surveying purposes. Notification of any errors is appreciated.
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City of Oregon City
P.O. Box 3040
625 Center St
Oregon City, OR 97045
503-657-0891 phone
503-657-6629 fax
www.orcity.org
OREGON CITY
Plot date: 2/3/2025
Plot name: Bus Line 33 - with Regional Center - 8.5x11P - 20250203.pdf
Map name: Climate Friendly Equitable Communities.aprx\Bus Line 33 - 8.5x11P

CFEC Frequent Transit Corridor

Showing Zoning within 1/2 Mile Walking Distance
from Bus Line 33 Stops



The City of Oregon City makes no representations, express or implied, as to the accuracy, completeness and timeliness of the information displayed. This map is not suitable for legal, engineering, or surveying purposes. Notification of any errors is appreciated.

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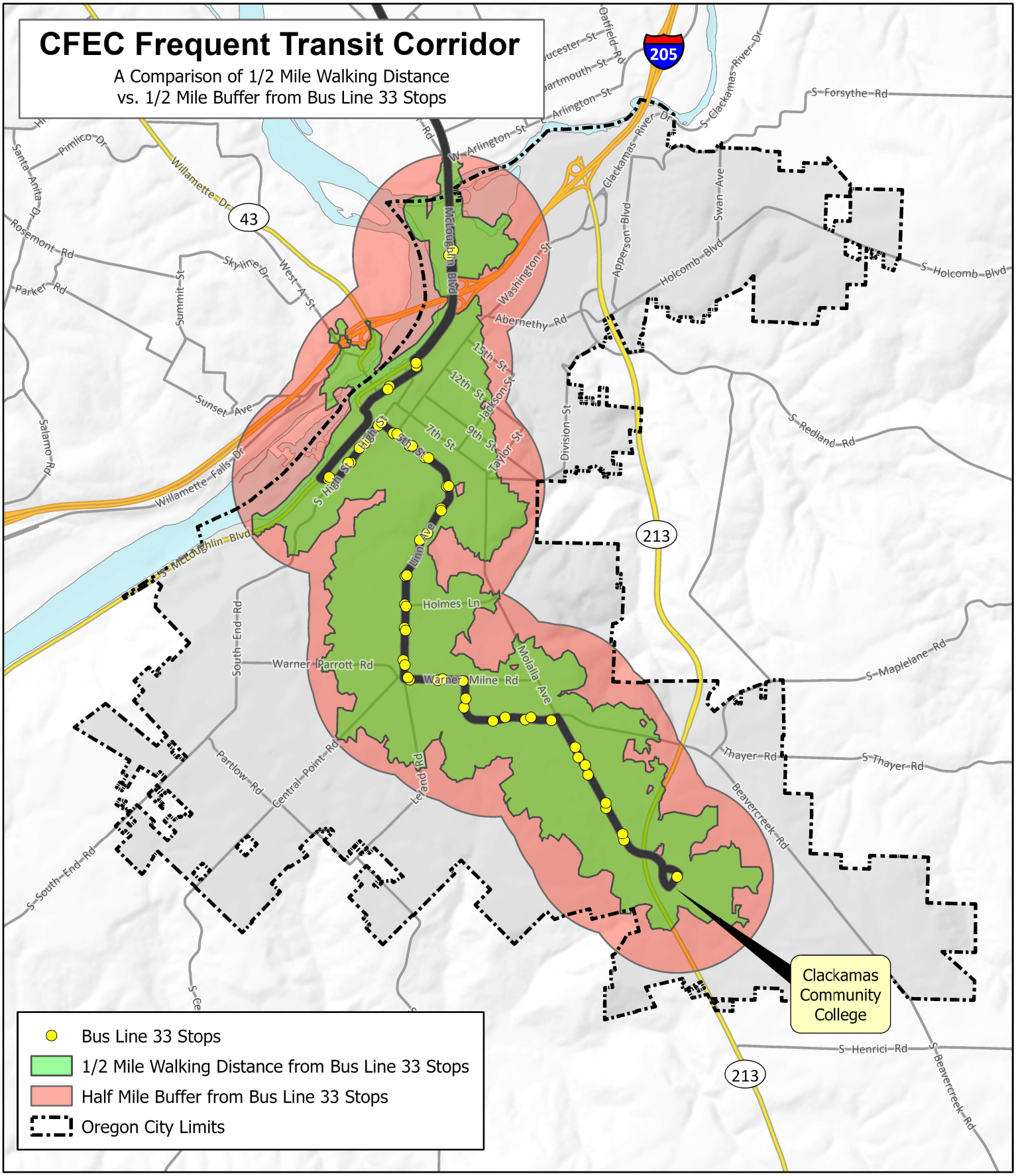
0 5,000 10,000 Feet

City of Oregon City
P.O. Box 3040
625 Center St
Oregon City, OR 97045
503-657-0891 phone
503-657-6629 fax
www.orcity.org

Plot date: 3/27/2025
Plot name: Bus Line 33 - Walkshed - 8.5x11P - 20250327.pdf
Map name: Climate Friendly Equitable Communities.aprx|Bus Line 33 - Walkshed - 8.5x11P

CFEC Frequent Transit Corridor

A Comparison of 1/2 Mile Walking Distance
vs. 1/2 Mile Buffer from Bus Line 33 Stops



- Bus Line 33 Stops
- 1/2 Mile Walking Distance from Bus Line 33 Stops
- Half Mile Buffer from Bus Line 33 Stops
- Oregon City Limits

The City of Oregon City makes no representations, express or implied, as to the accuracy, completeness and timeliness of the information displayed. This map is not suitable for legal, engineering, or surveying purposes. Notification of any errors is appreciated.

N W E S

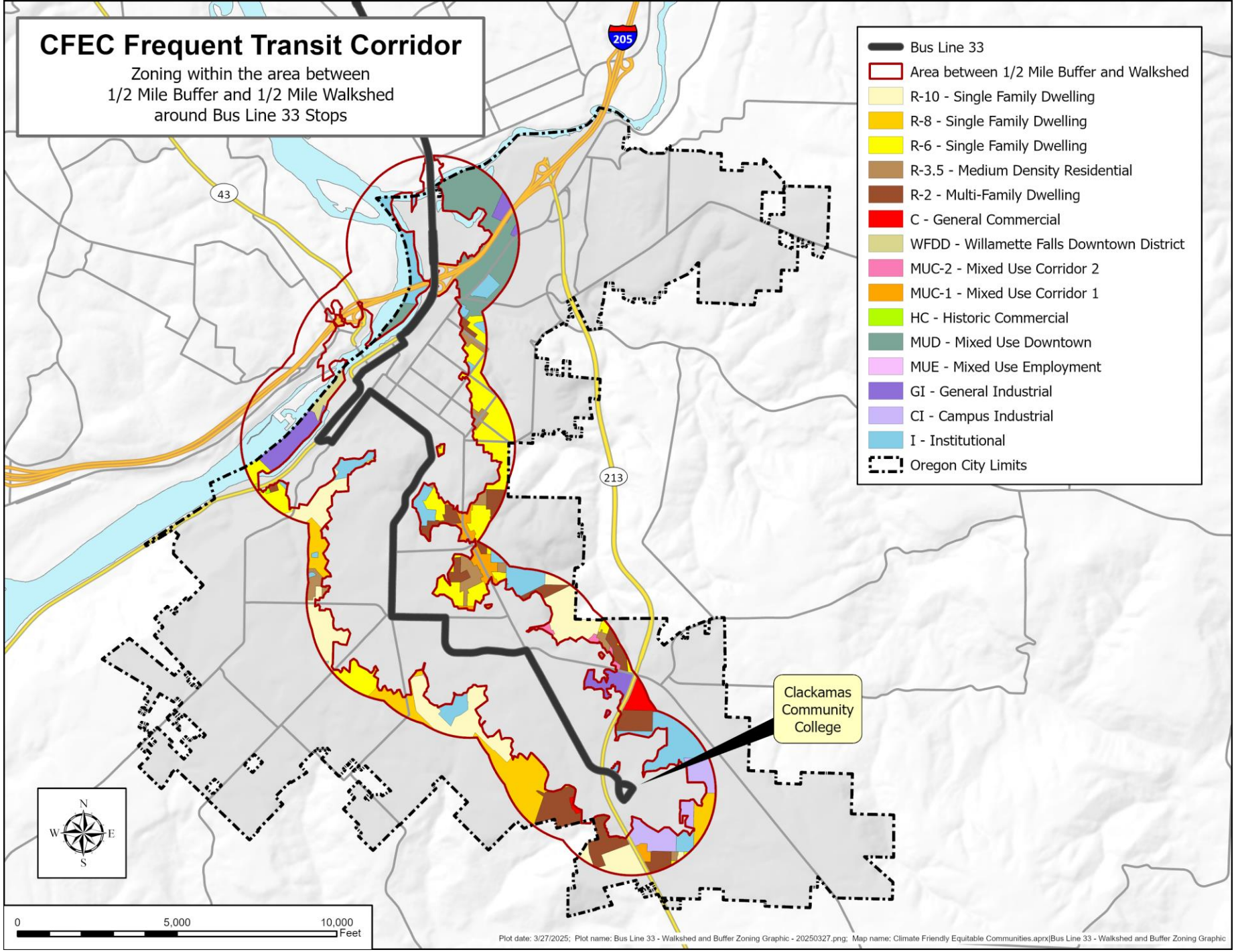
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OREGON CITY

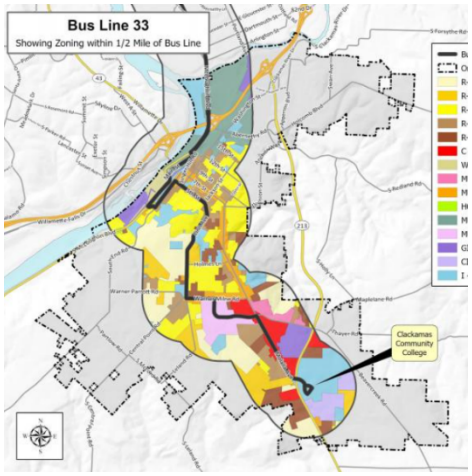
Plot date: 3/27/2025
Plot name: Bus Line 33 - Walkshed and Buffer - 8.5x11P - 20250327.pdf
Map name: Climate Friendly Equitable Communities.aprx|Bus Line 33 - Walkshed and Buffer - 8.5x11P


CFEC Frequent Transit Corridor
Zoning within the area between
1/2 Mile Buffer and 1/2 Mile Walkshed
around Bus Line 33 Stops
Bus Line 33
Area between 1/2 Mile Buffer and Walkshed
R-10 - Single Family Dwelling
R-8 - Single Family Dwelling
R-6 - Single Family Dwelling
R-3.5 - Medium Density Residential
R-2 - Multi-Family Dwelling
C - General Commercial
WFDD - Willamette Falls Downtown District
MUC-2 - Mixed Use Corridor 2
MUC-1 - Mixed Use Corridor 1
HC - Historic Commercial
MUD - Mixed Use Downtown
MUE - Mixed Use Employment
GI - General Industrial
CI - Campus Industrial
I - Institutional
Oregon City Limits
205
43
213
Clackamas Community College
N
W
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5,000
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Feet
Plot date: 3/27/2025; Plot name: Bus Line 33 - Walkshed and Buffer Zoning Graphic - 20250327.png; Map name: Climate Friendly Equitable Communities.aprx|Bus Line 33 - Walkshed and Buffer Zoning Graphic

Summary of Parking Reforms for Oregon City

Phase 1: Owners, Builders Decide Parking Near Transit; No Mandates for Equity Uses

Applies to development applications submitted after December 31, 2022



- City may not enforce parking mandates within ½ mile of TriMet Line 33
- City may not enforce parking mandates for small housing units (<750 sq. ft), affordable housing units, child care, facilities for people with disabilities, domestic violence and emergency/transitional shelters
- City may not require more than 1 parking space/unit for residential developments with more than 1 unit

Phase 2: More Reform; Choose an Approach for Lands Outside Transit Corridors *implement by June 30, 2024*

Code must

- Provide preferential carpool/vanpool parking when >50 spaces
- Allow redevelopment of parking areas for bike or transit uses
- Allow and encourage redevelopment of underused parking
- Allow and facilitate shared parking
- Require new parking areas >½ acre to install 40% tree canopy OR solar panels OR pay a fee-in-lieu
- Require new parking areas of more than ½ acre to provide trees and pedestrian connections
- Have parking maximums within ½ mile of transit

City chooses one of three options for further reform:

<table>
<tr><th>Option 1</th><th colspan="2">Options 2 and 3</th></tr>
<tr><td rowspan="4">Repeal parking mandates

no additional action needed</td><td colspan="2">Reduced mandates based on shared parking, solar panels, EV charging, car sharing, parking space accessibility, on-street parking, garage parking.

May not require garages/carports.</td></tr>
<tr><td colspan="2">In Metro regional center: remove mandates in and near regional center or adopt parking benefit district/remove commercial mandates/reduce residential mandates to ½ space/unit or below.</td></tr>
<tr><td>Option 2, the above plus adopt at least two policies:</td><td>Option 3, the above plus adopt all these policies</td></tr>
<tr><td>1. Charge for parking separate from residential rents
2. Charge for parking separate from commercial lease
3. Flexible commute benefit for businesses with more than 50 employees
4. Tax on parking lot revenue
5. No more than ½ space/unit mandated for multifamily development</td><td>No mandates for a variety of specific uses, schools, bars, small commercial buildings, vacant buildings, studios/one bedrooms, historic buildings, LEED or Oregon Reach Code developments, etc.

No additional parking for changes in use, redevelopments, expansions of over 30%

No mandates within ½ mile walking distance of Metro regional center

Designate on-street paid parking district or unbundle parking</td></tr>
</table>

Oregon
Kate Brown, Governor

Department of Land Conservation and Development
Director's Office
635 Capitol Street NE, Suite 150
Salem, Oregon 97301-2540
Phone: 503-373-0050
Fax: 503-378-5518
www.oregon.gov/LCD

September 19, 2022

TO: Metropolitan Area Local Governments

FROM: Brenda Ortigoza Bateman, Ph.D., Director BOB

SUBJECT: ORS 197.646 notice on Climate-Friendly and Equitable Communities Rulemaking

Oregon Revised Statute (ORS) 197.646(2)(a) requires the Department of Land Conservation and Development to:

> notify local governments when a new requirement in … rules implementing the statutes or the goals requires changes to an acknowledged comprehensive plan, an acknowledged regional framework plan or land use regulations implementing either plan.

This memorandum serves as the required notice for the Climate-Friendly and Equitable Communities rulemaking adopted by the Land Conservation and Development Commission on July 21, 2022. The commission adopted amendments to administrative rules for Greenhouse Gas Reduction (OAR chapter 660, division 44), Housing (OAR chapter 660, division 8), and Transportation (OAR chapter 660, division 12). The amendments are intended to increase housing and transportation choices to cut climate pollution. They apply in Oregon's eight metropolitan areas, which include urban areas in the Portland Metro, Salem/Keizer, Albany, Corvallis, Bend, Eugene/Springfield, Middle Rogue (Grants Pass), and Rogue Valley (Central Point/Medford/Ashland) metropolitan planning areas. The amendments were published by the Oregon Secretary of State's Office on August 17, 2022; and became effective on that date. You are receiving this notice as a staff member for a local government subject to the amended rules.

We are dedicated to partnering with you to help implement these rules.

The amended rules may be viewed at the Secretary of State's website for Oregon Administrative Rules at this location:

State of Oregon: State Archives - Oregon Administrative Rules (OARs).

Additionally, the Department of Land Conservation and Development has developed the following web page with implementation resources and information:

https://www.oregon.gov/lcd/CL/Pages/CFEC.aspx

Other useful information may be found at the following links:

General information about the Climate-Friendly and Equitable Communities Rulemaking:

https://www.oregon.gov/lcd/LAR/Pages/CFEC.aspx

Summary of Rule Amendments from the July 21, 2022, Land Conservation and Development Commission packet:

https://www.oregon.gov/lcd/Commission/Documents/2022-07_Item-3_CFEC_Attachment-C_Summary-of-Proposed-Amendments.pdf

For your convenience, we have attached a copy of our implementation guide, which identifies the local governments within each of the eight regions and which requirements apply to each local government. If you have any questions about how the rules will apply for your jurisdiction, please contact department staff at the email address below:

DLCD.CFEC@dlcd.oregon.gov

Alternatively, feel free to reach out to team members individually if you have questions about implementation of specific sections of the rules.

Transportation Planning Rules; except for parking, electric vehicle charging, and climate friendly areas (OAR 660-012)

Bill Holmstrom, Land Use and Transportation Planning Coordinator, 971-375-5975, or bill.holmstrom@dlcd.oregon.gov

Greenhouse Gas Reduction Targets (OAR 660-044)

Cody Meyer, Land Use and Transportation Planner, 971-239-9475, or cody.meyer@dlcd.oregon.gov

Parking Reform and Electric Vehicle Charging (OAR 660-012-0400 through 660-012-0450)

Evan Manvel, Climate Mitigation Planner, 971-375-5979, or evan.manvel@dlcd.oregon.gov

Climate Friendly Areas, Land Use Requirements, and Housing (OAR 660-012-0310 through 660-012-0330 and OAR 660-008)

Kevin Young, Senior Urban Planner, 503-602-0238, or kevin.young@dlcd.oregon.gov

Thank you!

Attachment: Climate-Friendly and Equitable Communities Implementation Guide

625 Center Street
Oregon City, OR 97045
503-657-0891

CITY OF OREGON CITY

Staff Report

To:	Planning Commission	**Agenda Date:**	April 14, 2025
From:	Jude Thaddaeus, Assistant Planner		

SUBJECT:
GLUA-24-00020/MAS-24-00001: Clackamas Community College Master Plan 2024-44

STAFF RECOMMENDATION:
Based on the findings in this report, staff recommends the Planning Commission approve the Clackamas Community College Master Plan 2024-44 with the recommended conditions.

EXECUTIVE SUMMARY:
This Master Plan application is a General Development Plan (GDP) that achieves 3 main objectives:

1. This General Development Plan establishes a framework by which future phases of development for the Clackamas Community College site on a 20-year timeline, i.e., August 1, 2024 through August 1, 2044.
2. This General Development Plan establishes that review of future Detailed Development Plans and Master Plan Amendments will be based on the Oregon City Municipal Code requirements in effect as of August 1, 2024.
3. This General Development Plan establishes that future accessory structures up to 3,000 square feet in total floor area are to be reviewed through a Type I Master Plan Amendment process, rather than higher levels of review, unless such structures create offsite impacts.

The previous Master Plan has expired, and therefore any new development proposed for the site is due to be reviewed in the context of a new General Development Plan process first. This application represents that general plan.

The applicant has elected not to request any adjustments to existing requirements of the Oregon City Municipal Code at this phase. However, they have requested that individual accessory structures up to 3,000 square feet in floor area be subject to Type I Master Plan Amendment procedures. Currently, OCMC 17.65.080.D.3 permits structures up to 1,500 square feet in size to undergo a Type I Master Plan Amendment process. Staff has provided recommended Conditions of Approval that the Planning Commission can evaluate to address this request.

The applicant also notes that their proposed 106,000 square feet of primary (not including accessory) building additions and other site improvements will not likely trigger offsite impacts beyond the existing capacity of the existing infrastructure buildout. They cite

enrollment statistics that are down 33% since 2019, and enrollment projections and distance learning/onsite learning mixes that suggest the campus will operate below the trip generation and utility capacity thresholds considered and adopted in the campus's previous Master Plan. These items have been included in the applicant's submittal and are on file.

In addition, the applicant has proposed pedestrian infrastructure improvements along Douglas Loop, Clairmont Drive, and Inskeep drive in areas of the site that coincide with the Oregon City Loop Trail identified in the Oregon City Trails Master Plan. The applicant included the funding to complete these trails in the bond that was approved by the voters of Clackamas County in November 2024. Completion of these elements of the Oregon City Loop Trail will be included in a future Detailed Development Plan.
Staff concurs with this approach and has provided applicable conditions to ensure that the impact on the city's infrastructure and utilities are analyzed, and improvements are provided proportionally to any proposed development.

BACKGROUND:
The campus of Clackamas Community College sits on 167 acres of land in Oregon City between Molalla Avenue (Oregon State Highway 213), Meyers Road and Beavercreek Road. The built environment contains approximately 22 buildings, which provide 621,000 square feet of floor space. These buildings are clustered in two groups, or nodes. The campus core is at the center of the property, within Douglas Loop, which is the campus circulation system for vehicular traffic. The other cluster of development is at the northeast edge of the property, among a group of buildings located between Douglas Loop and Beavercreek Road.

The college property contains several natural resources. The most notable of these are in the form of wooded areas and wetlands, such as the ponds and woods in the Environmental Learning Center area in the northeast corner of campus. Another small forested natural area is to the southeast, between Douglas Loop and Oregon City High School. Open space on the CCC campus also includes walking/running trails and athletic playing fields which are heavily used by students and the wider community. Another dominant feature of the College's built environment are the electricity towers and overhead wires for the Bonneville Power Authority high-voltage lines, which run diagonally across the southeast corner of the college property.

NEXT STEPS:
Review the Clackamas Community College Master Plan 2024-44 submittal, Staff Report, and Recommended Conditions of Approval.

OPTIONS:
1. Approve GLUA-24-00020/MAS-24-00001 with recommended conditions.
2. Approve GLUA-24-00020/MAS-24-00001 with revised findings and conditions.
3. Deny GLUA-24-00020/MAS-24-00001 with revised findings and provide further direction to Staff.
4. Continue GLUA-24-00020/MAS-24-00001 and keep the public record open to the next Planning Commission meeting.

OREGON CITY

Community Development – Planning

695 Warner Parrott Road | Oregon City OR 97045
Ph (503) 722-3789 | Fax (503) 722-3880

TYPE III STAFF RECOMMENDATION
April 4, 2025

FILE NUMBER: GLUA-24-00020 / MAS-24-00001

APPLICANT: Bob Cochran
Clackamas Community College
19600 Molalla Ave
Oregon City, OR 97045

OWNER: Clackamas Community College
19600 Molalla Ave
Oregon City, OR 97045

Submitted: 8/1/2024
Complete: 2/11/2025
Hearing Date: 4/14/2025
120 Day Deadline: 6/11/2025
NOD:

REQUEST: Review of a new 2024-44 Master Plan for Clackamas Community College

LOCATION: 19600 Molalla Ave
Oregon City, OR 97045
Map and Taxlot Number: 3-2E-09C -00800

REVIEWER: Jude Thaddaeus | Assistant Planner
Sang Pau | Project Manager

ZONING: Institutional (I) District

RECOMMENDATION: Approval with Conditions

PROCESS: Type III decisions involve the greatest amount of discretion and evaluation of subjective approval standards, yet are not required to be heard by the city commission, except upon appeal. Applications evaluated through this process include conditional use permits. The process for these land use decisions is controlled by ORS 197.763. Notice of the application and the planning commission hearing is published and mailed to the applicant, recognized neighborhood association and property owners within three hundred feet of the subject property. Notice must be issued at least twenty days pre-hearing, and the staff report must be available at least seven days pre-hearing. At the evidentiary hearing held before the planning commission, all issues are addressed. The decision is final unless appealed and description of the requirements for perfecting an appeal. The decision of the planning commission is appealable to the city commission within fourteen days of the issuance of the final decision. The city commission hearing on appeal is on the record and no new evidence shall be allowed. Only those persons or a city-recognized neighborhood association who have participated either orally or in writing have standing to appeal the decision of the planning commission. Grounds for appeal are limited to those issues raised either orally or in writing before the close of the public record. A city-recognized neighborhood association requesting an appeal fee waiver pursuant to OCMC 17.50.290.C must officially

approve the request through a vote of its general membership or board at a duly announced meeting prior to the filing of an appeal. The city commission decision on appeal from the planning commission is the city's final decision and is appealable to the Land Use Board of Appeals (LUBA) within twenty-one days of when it becomes final.

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RECOMMENDED CONDITIONS OF APPROVAL

Planning File: MAS-24-00001

(P) = Verify that condition of approval has been met with the Planning Division.
(DS) = Verify that condition of approval has been met with the Development Services Division.

The applicant shall fulfill the following conditions prior to issuance of a public improvement and/or Building permit associated with the proposed application.

1. The Clackamas County Master Plan – General Development Plan shall be in effect from August 1, 2024 until August 1, 2044. (P)
2. All future Detailed Development Plans and Master Plan Amendments involving ground disturbance within the Natural Resource Overlay District buffer shall be subject to the review and approval criteria of OCMC 17.49. (P)
3. All future Detailed Development Plans that request adjustments from development standards will be required to undergo Detailed Development Plan reviews at the Type III level and meet the submission requirements and approval criteria of OCMC 17.65.060. (P)
4. All adjustments granted in previous Master Plan approvals have expired and do not carry over to the new Master Plan framework. To be eligible for the same adjustments granted in previous Master Plan approvals, the applicant shall request any and all desired adjustments from the standards of the Oregon City Municipal Code in effect at the time of submission of the General Development Plan (i.e., **August 1, 2024**) within subsequent Type III Detailed Development Plan submissions. In so doing, the applicant shall demonstrate compliance with the approval criteria of OCMC 17.65.070 and propose mitigation measures that meet the approval criteria of this section with their submittals. (P)
5. Detailed Development Plans that do not request adjustments may be reviewed through a Type I or Type II procedure, as applicable, according to OCMC 17.65.040 and 070. (P)
6. Future Type II and Type III Detailed Development Plan applications under this General Development Plan shall demonstrate compliance with Traffic Impact Analysis guidelines and assess their impact on public utilities. (P)
7. If the applicant proposes amendments to their Master Plans under the categories listed in OCMC 17.65.080.B, those amendments shall be subject to Type III Master Plan Amendment Procedures. (P)
8. All future accessory structures (e.g., greenhouses, storage buildings, barns, sheds, open-sided shelters,) up to 3,000 square feet in floor area may be processed through a Type I Master Plan Amendment review procedures if:

    a. The structures comply with the design standards of the base zone, as well as OCMC 17.62.050, 055, 065, and 085 as applicable, unless included in a prior Type III Detailed Development plan where adjustments were requested and approved by the City.

    b. For structures greater than 1,500 square feet in floor area up to 3,000 square feet, a Transportation Impact Study or Transportation Impact Letter as determined by the City Engineer shall be included with the Type I Master Plan Amendment, as well as impact analyses on public utilities, to be reviewed by Oregon City Public Works and City Consultants to determine if the structures in question result in offsite impacts and thus require mitigation to be reviewed through a higher-level procedure.

    c. For structures greater than 1,500 square feet in floor area up to 3,000 square feet, the applicant shall submit with their project narrative a cumulative impact assessment showing all accessory structures (regardless of size) and their associated uses that have been added to the site through amendments to this Master Plan, for the previous five years (or the General Development Plan approval date, whichever is later), so that City Staff can assess the cumulative impact of the

added structures and determine if mitigation is required through a higher-level procedure.

d. Any structures that are determined by Staff to create offsite impacts shall be reviewed through a Type II or Type III Master Plan Amendment or Type II or Type III Detailed Development Plan. Such as structures used for habitation, including but not limited to classrooms, offices, or student gathering spaces (P)

9. Development on Taxlots 3-2E-09A -01400 and 01500 within the 2024-44 timeframe of this GDP shall require a new Type III Master Plan process. (P)

10. A 10-foot-wide shared use path shall be constructed along the frontage of Beavercreek Road between Marjorie Lane and Clairmont Drive with the Type II or Type III Detailed Development Plan (DDP) that covers Phase 1 of the GDP, the Natural Resources Center of Excellence. (DS)

11. The Type II or Type III DDP that covers Phase 1 of this GDP, the proposed buildout of the Natural Resources Center of Excellence, shall construct a 10-foot-wide shared use path through the development property for the continuation of an existing shared use path through the development property that follows the alignment of the Oregon City Loop Trail along Douglas Loop Rd, as identified in the Oregon City Trails Master Plan and connects to Beavercreek Road. (DS)

12. Shared use paths through the development property constructed with subsequent DDPs shall be ADA compliant. (DS)

13. For portions of Oregon City Loop Trail within the development property, future DDPs shall provide pedestrian access easements for the entirety of the path which allows use by the public and specifically requires the property owner and future property owners to provide for the liability and maintenance of the accessway. (DS)

14. Future DDPs shall demonstrate compliance with Oregon City Municipal Code 12.04 16.12, 17.62. (DS)

I. SUMMARY

This Master Plan application is a General Development Plan (GDP) that achieves 3 main objectives:

1. This General Development Plan establishes a framework by which future phases of development for the Clackamas Community College site on a 20-year timeline, i.e., August 1, 2024 through August 1, 2044.

2. This General Development Plan establishes that review of future Detailed Development Plans and Master Plan Amendments will be based on the Oregon City Municipal Code requirements in effect as of August 1, 2024.

3. This General Development Plan establishes that future accessory structures up to 3,000 square feet in total floor area are to be reviewed through a Type I Master Plan Amendment process, rather than higher levels of review, unless such structures create offsite impacts.

The previous Master Plan has expired, and therefore any new development proposed for the site is due to be reviewed in the context of a new General Development Plan process first. This application represents that general plan.

The applicant has elected not to request any adjustments to existing requirements of the Oregon City Municipal Code at this phase. However, they have requested that individual accessory structures up to 3,000 square feet in floor area be subject to Type I Master Plan Amendment procedures. Currently, OCMC 17.65.080.D.3 permits structures up to 1,500 square feet in size to undergo a Type I Master Plan Amendment process. Staff has provided recommended Conditions of Approval that the Planning Commission can evaluate to address this request.

The applicant also notes that their proposed 106,000 square feet of primary (not including accessory) building additions and other site improvements will not likely trigger offsite impacts beyond the existing capacity of the existing infrastructure buildout. They cite enrollment statistics that are down 33% since 2019, and enrollment projections and distance learning/onsite learning mixes that suggest the campus will operate below the trip generation and utility capacity thresholds considered and adopted in the campus's previous Master Plan. These items have been included in the applicant's submittal and are on file.

In addition, the applicant has proposed pedestrian infrastructure improvements along Douglas Loop, Clairmont Drive, and Inskeep drive in areas of the site that coincide with the Oregon City Loop Trail identified in the Oregon City Trails Master Plan. The applicant included the funding to complete these trails in the bond that was approved by the voters of Clackamas County in November 2024. Completion of these elements of the Oregon City Loop Trail will be included in a future Detailed Development Plan.

Staff concurs with this approach and has provided applicable conditions to ensure that the impact on the city's infrastructure and utilities are analyzed, and improvements are provided proportionally to any proposed development.

II. BACKGROUND:

1. Existing Conditions

The campus of Clackamas Community College sits on 167 acres of land in Oregon City between Molalla Avenue (Oregon State Highway 213), Meyers Road and Beavercreek Road. The built environment contains approximately 22 buildings, which provide 621,000 square feet of floor space. These buildings are clustered in two groups, or nodes. The campus core is at the center of the property, within Douglas Loop, which is the campus circulation system for vehicular traffic. The other cluster of development is at the northeast edge of the property, among a group of buildings located between Douglas Loop and Beavercreek Road.

The college property contains several natural resources. The most notable of these are in the form of wooded areas and wetlands, such as the ponds and woods in the Environmental Learning Center area in the northeast corner of campus. Another small forested natural area is to the southeast, between Douglas Loop and Oregon City High School. Open space on the CCC campus also includes walking/running trails and athletic

playing fields which are heavily used by students and the wider community. Another dominant feature of the College's built environment are the electricity towers and overhead wires for the Bonneville Power Authority high-voltage lines, which run diagonally across the southeast corner of the college property.

2. **Project Description** – The applicant provided the following information

This Clackamas Community College Master Plan provides direction for future college development. This document addresses the physical development of the Oregon City campus and addresses the needs of a growing educational institution. As facilities age and programmatic needs change, CCC requires modernizing existing space suitable for classrooms, study areas, offices, and laboratories. There is also a need for improving outdoor spaces and pedestrian connections on campus. The master plan forecasts locations of building adaption, modernization, and construction. It also establishes a process for gaining necessary permits and approvals.

Figure 1. Vicinity Map

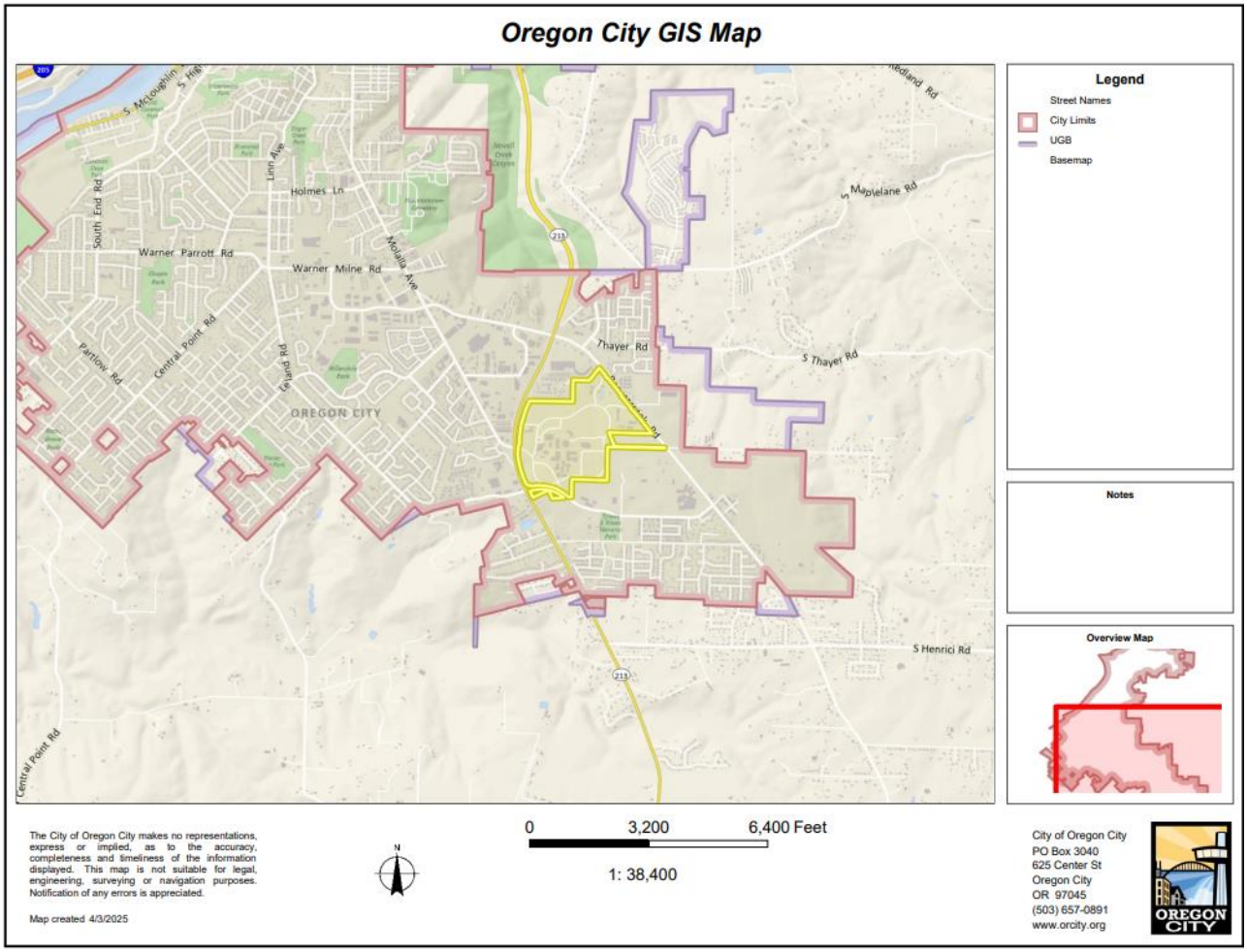


Figure 2: Existing Conditions – Aerial Image

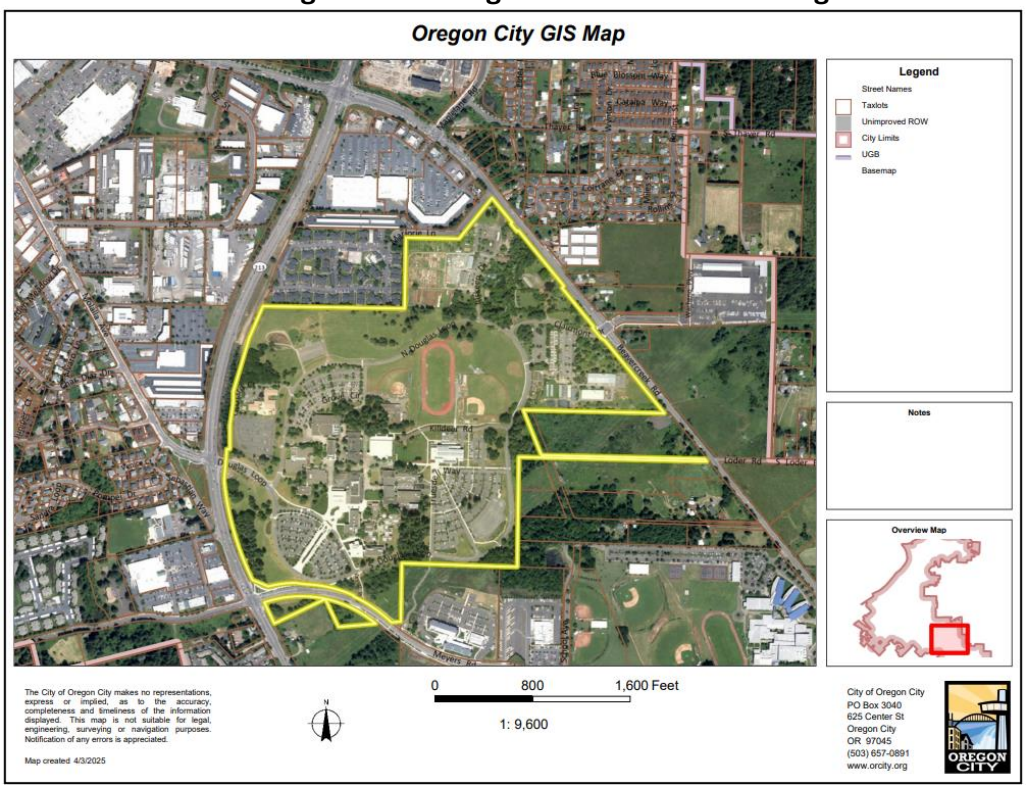
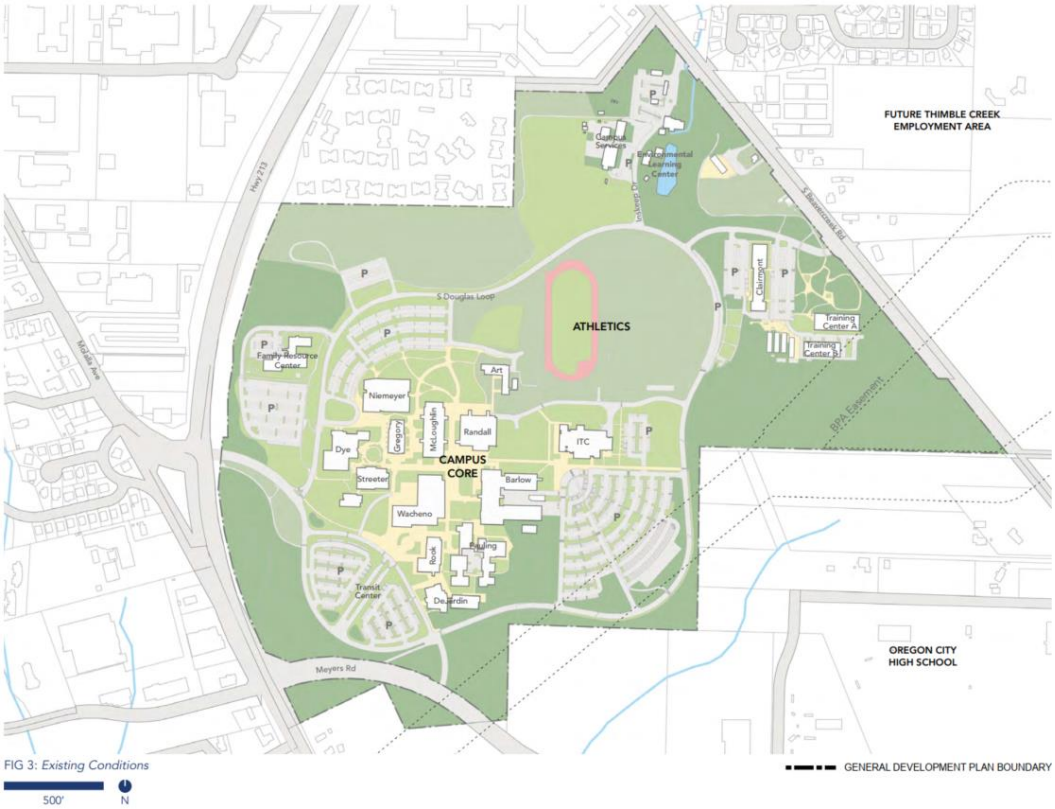


Figure 3: Existing Conditions – Plan Image



Funding is not yet fixed for any of the building or infrastructure projects outlined in this master plan. Money to fund future development will come from a bond measure that must be put forth by the college and approved by Clackamas County voters. This includes a bond measure that was passed by the voters of Clackamas County in November 2024. For this reason, the master plan does not identify specifically which buildings or infrastructure improvements will be constructed. Still, with changes in enrollment, the success of existing programs, and infrastructure that is aging, CCC fully expects planned projects to be completed within the time frame of the master plan.

- **Process**

This submittal requests Oregon City approval of a "general development plan" per city code requirements (OCMC 17.65.050). This land use review is a Type III public process. The general development plan establishes a framework for future development and focuses on infrastructure. The plan has a lifespan of 20 years.

When funding becomes available, and specific building adaptations, modernizations, locations and sizes are determined, the college will complete one or more "detailed development plans" (OCMC 17.65.060). Detailed development plans must follow the direction set out in this general development plan.

The process for this application is driven by three chapters of Oregon City's zoning code: Institutional District (OCMC 17.39), Campus Industrial District (OCMC 17.37), and Master Plans (OCMC 17.65). These chapters offer institutions like Clackamas Community College the opportunity to plan for long-term growth, and to address impacts that may affect neighboring properties and public infrastructure.

- **Existing Conditions**

Clackamas Community College sits on 167 acres of land in Oregon City between Oregon State Highway 213 and Beavercreek Road. The facilities and infrastructure at CCC supports the educational mission of the college. CCC's mission is "to serve the people of the college district with high quality education and training opportunities that are accessible to all students, adaptable to changing needs, and accountable to the community it serves." The CCC District covers nearly all of Clackamas County. The college serves approximately 11,000 students from this district whose average age is 32 years old. The college offers a wide variety of classes under five programs: Professional/Technical, College Transfer, Literacy/Basic Skills, Community Education, and Business Training.

The built environment contains approximately 22 buildings, providing 651,000 gross square feet of floor area. Buildings are clustered in two groups, or nodes. The Campus Core is within Douglas Loop, CCC's primary circulation system for vehicular traffic. The Beavercreek Cluster is at the northeast edge of the property, between Douglas Loop and Beavercreek Road.

The college property also contains several natural resources. The most notable of these are in the form of wooded areas and wetlands, such as the pond and woods around the Environmental Learning Center area in the northeast corner of campus. Another small forested natural area is to the southeast between Douglas Loop and Oregon City High School. Open space on the CCC campus is largely devoted to athletic playing fields—baseball, softball, soccer, track, walking and running trails—which are heavily used by students and by members of the wider community.

Another dominant feature of the College's built environment are the electricity towers and overhead wires for the Bonneville Power Authority high-voltage lines, which run diagonally across the southeast corner of the college property.

Campus land is predominantly (64 percent) landscaped or natural area. Smaller shares of land are dedicated to parking, circulation, and buildings. Approximate acreage for each land category is listed below.

Table 1: Clackamas Community College Buildings

Building	Gross Square Feet
Art Center	11,406
Barlow (A, B and C)	98,000
Community Center	28,449
Clairmont Hall	21,320
DeJardin Hall	41,752
Dye Learning Center	29,215
ELC-Lakeside	1,360
ELC-Pavilion	1,200
Family Resource Center	17,708
Gregory Forum	10,200
Greenhouses	8,000
Industrial Technology Center	44,523
Lewelling	5,728
Maintenance	4,000
McLoughlin Hall	52,292
Niemeyer Center	46,370
Pauling Center (A, B and C)	39,730
Rainbow/Storage	3,000
Randall Hall	60,775
Roger Rook Hall	29,172
Smuckers/Storage	10,000
Streeter Hall and Annex	22,757
Training Center A and B	28,229
Wacheno Welcome Center	36,000
Total	**651,186**

Table 2. Campus Land Area, By Category

Category	Acres	Share (%)
Landscaping, Open Areas, Play Fields	107	64
Parking	22	13
Pedestrian Paths	17	10
Buildings	12	7
Streets and Driveways	10	6
Total	**167**	**100**

- **Future Development Plans**

In very general terms, the likely first phase of development allowed under the master plan includes the Natural Resources Center of Excellence (horticulture, arboriculture, wildland fire, farming, welding) in the Beavercreek cluster on the east side of campus and a new Landscape/Grounds building in the Campus Services area just west of the Environmental Learning Center. Athletic Field improvements and upgrades to pedestrian pathways and outdoor plazas are also part of the first phase. Although they technically do not require land use approval, the first phase also includes numerous existing building renovations, infrastructure upgrades, and deferred maintenance.

Beyond these improvements, the next major project for the campus would be the construction of Wacheno Welcome Center Phase 2. This project will include providing spaces for the existing programs and uses currently housed at Bill Brod Community Center (circa 1975) portion of the Wacheno Welcome Center. This includes staff offices, student clubs, multicultural center, meeting rooms, kitchen, and dining. CCC may also add an enhanced dining hall with improved connections

to the outdoors, conference spaces, and additional program or partnership spaces. The Wacheno project is the only one listed in this master plan that is in a later phase, and would likely require another bond measure, 8 to 10 years away. Further details would be outlined in a future detailed development plan application.

Table 3. Master Plan Projects

Project	Location	Notes
Existing Building Renovations	Existing building sites	May include: Barlow, McLoughlin, Gregory Forum, Dye Learning Center, Family Resource Center, Community Center, Clairmont
Natural Resources Center of Excellence	Beavercreek cluster	Horticulture, arboriculture, wildland fire, farming, welding. (Up to. 50,000 s.f. new buildings.)
Athletics Improvements	Athletic field area	Track and field upgrades, , grandstands, restrooms, lighting, soccer, baseball, softball, equipment storage buildings, etc.
Campus Services	Campus Services area	New grounds building, storage, covered parking. (Approx. 3,000 s.f.)
Pathways and Plazas	Multiple locations	Complete Douglas Loop walking trail, renovate central plaza, ADA upgrades around campus
Wacheno Welcome Center, Phase 2	On footprint of Bill Brod Community Center	Replacement of existing building and expansion of Wacheno Welcome Center (Approx. 50,000 s.f. net)

Net new building square footage over the 20-year life of the general development plan is approximately 106,000 square feet. This includes construction of the Center of Excellence, Wacheno Welcome Center Phase 2, a new grounds building, and demolition of Smuckers/Storage and Bill Brod Community Center.

Future development on the campus may also include other things that do not need land use approval and therefore do not need to be included in a general development plan. Examples of such projects are energy efficiency upgrades, upgrades to heating and cooling systems, interior renovations, and safety/security improvements. Finally, if significant new projects that are not listed in this plan are needed by CCC, and do require land use approval, an amendment to the general development plan could be proposed.

- **Timeline for Improvements**

This document is specifically designed to take a long-term, broad view of the college and its needs. The proposed timeline for this concept development plan is for the 20 years allowed by city code. Development of new facilities will respond to funding and projected growth in CCC District population and in enrollment, and space needs for specific uses.

The college will submit one or more “detailed development plans” (OCMC 17.65.060) when plans for specific development have been created, and when funding for these facilities is available. These detailed plans must be consistent with the general plan. As it did with the last general development plan, CCC will likely submit several detailed plans during the life of the concept plan.

Most of the development described in this plan is expected to occur after voter approval of a new bond measure. If the bond is approved, the projects are anticipated in an approximately 5-year timeframe. The one exception to this is the Wacheno Phase 2 project. That project is not included in the current bond, and therefore anticipated in an approximately 10 to 15-year timeframe. Smaller construction projects like interior building renovations, infrastructure fixes, and landscape changes will likely be sprinkled throughout the 20-year life of the master plan.

Figure 4: Proposed Site Plan

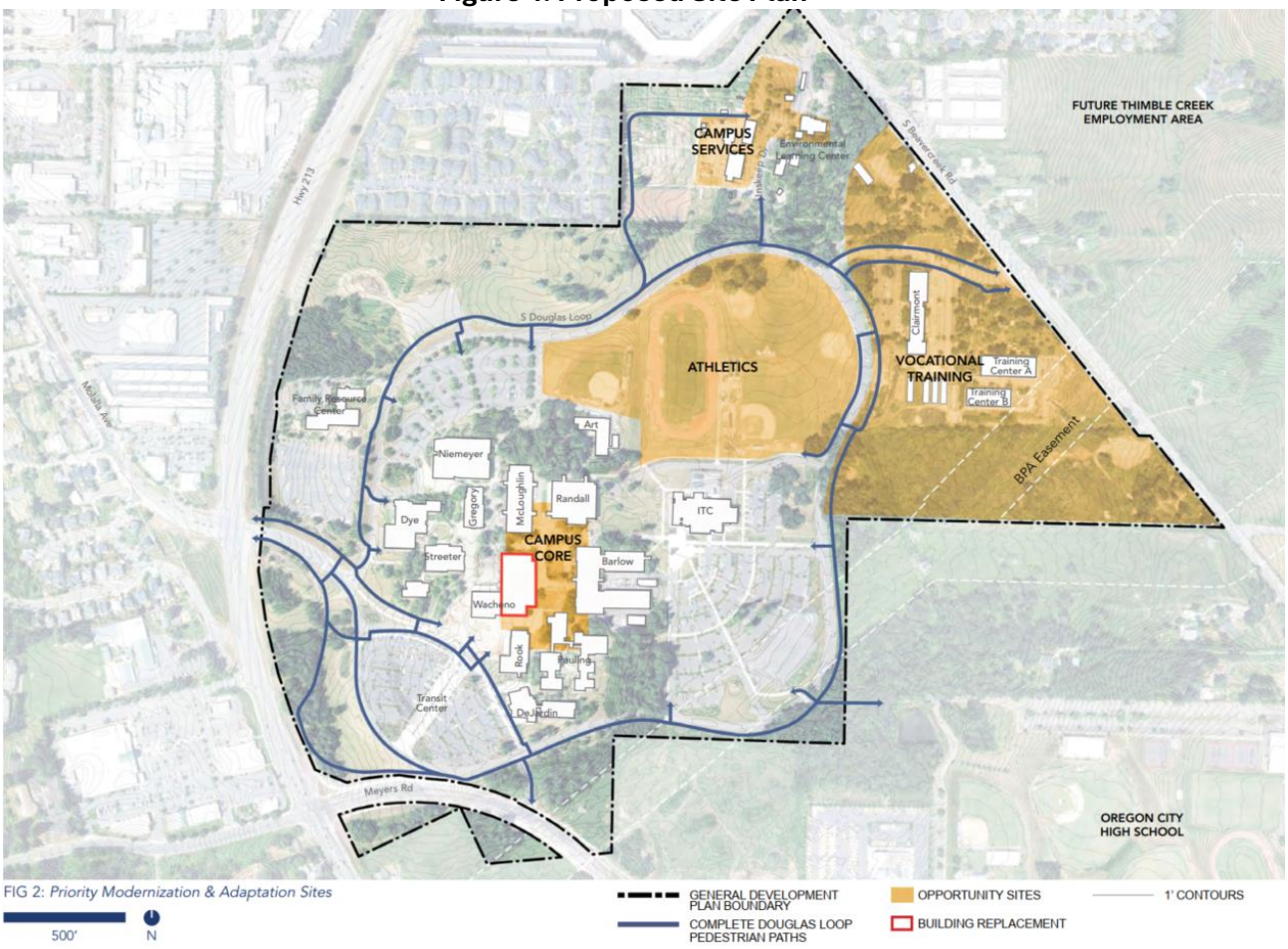


Figure 5: Existing Usable Open Space

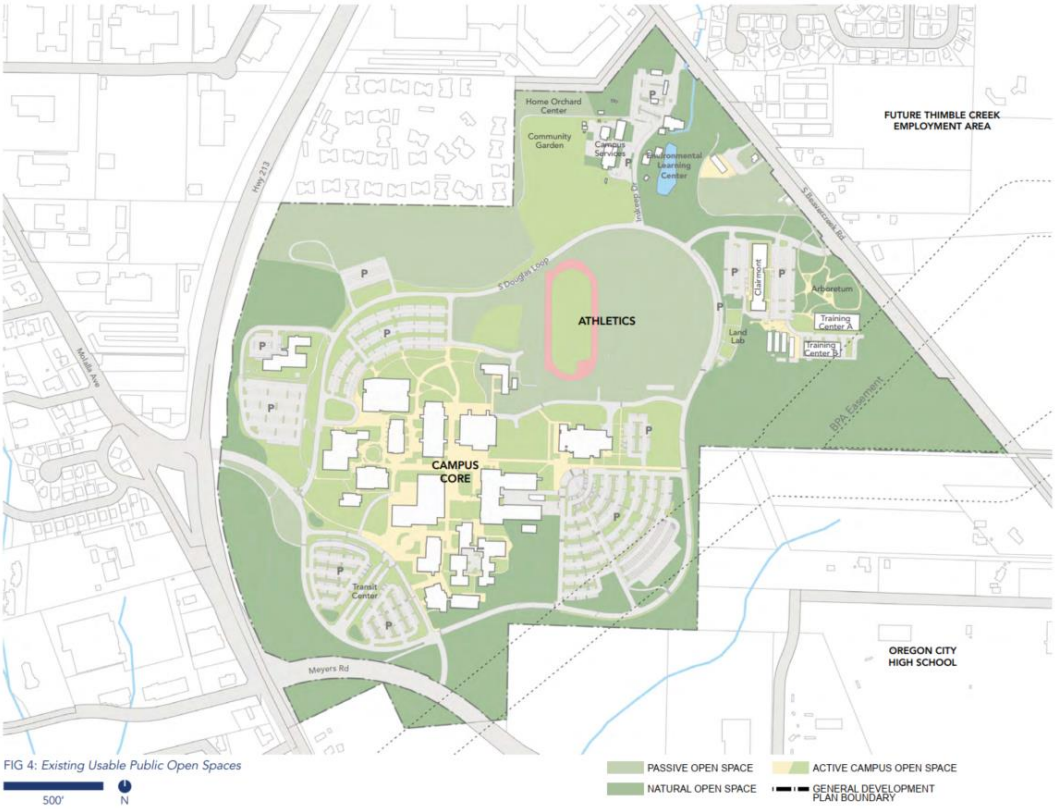


Figure 6: Existing Zoning

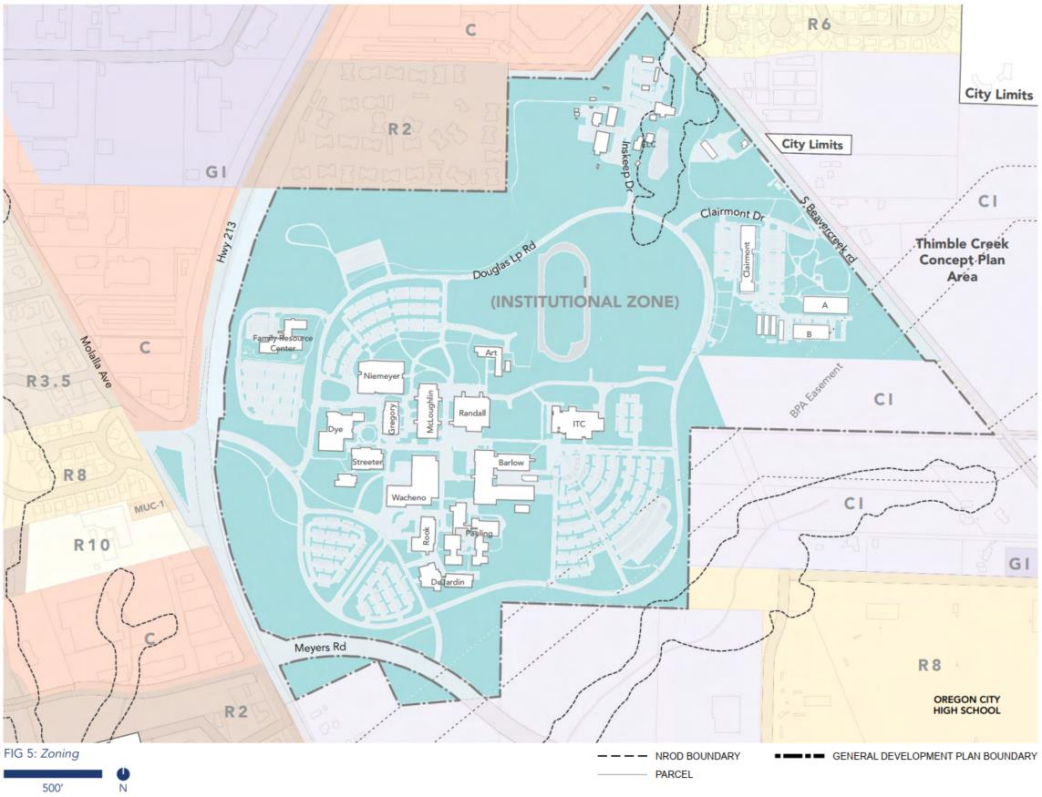


Figure 7: Pedestrian and Vehicle Circulation

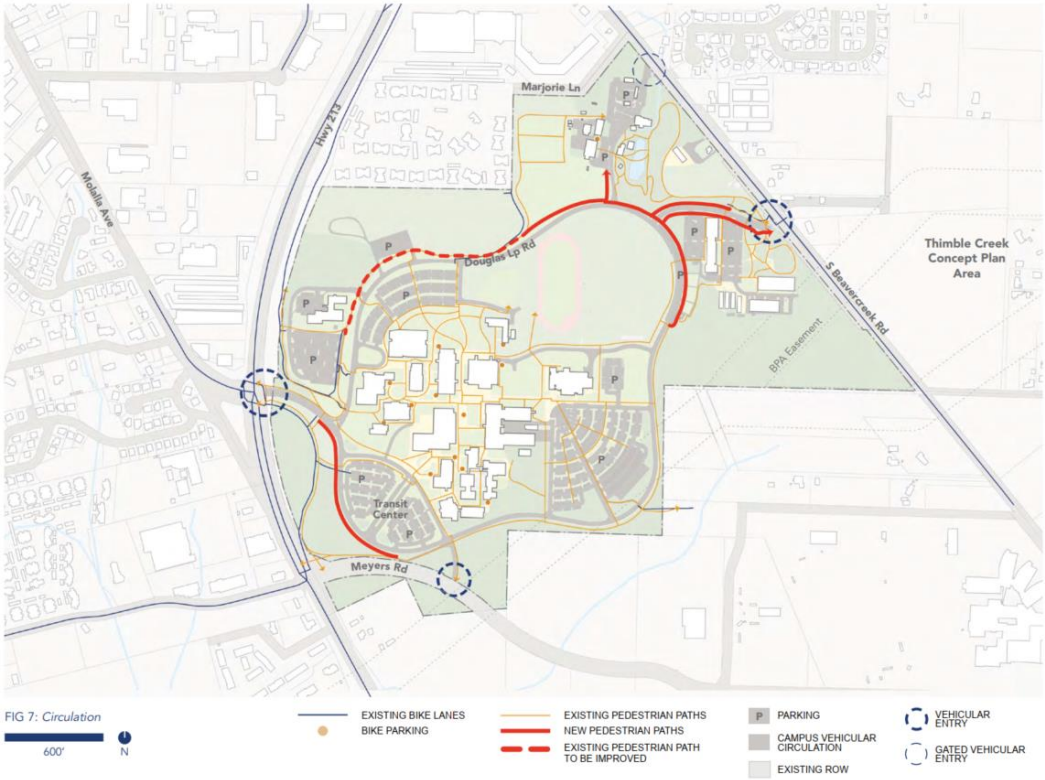


Figure 8: Sanitary Sewer Plan

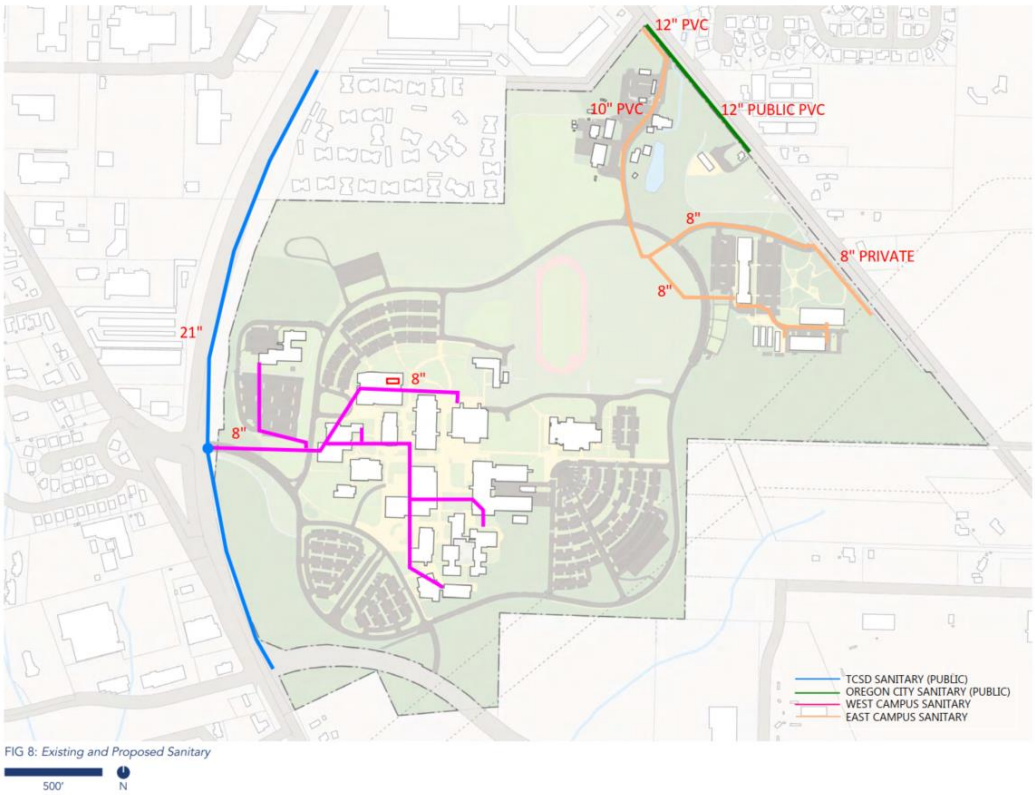


Figure 9: Stormwater Plan

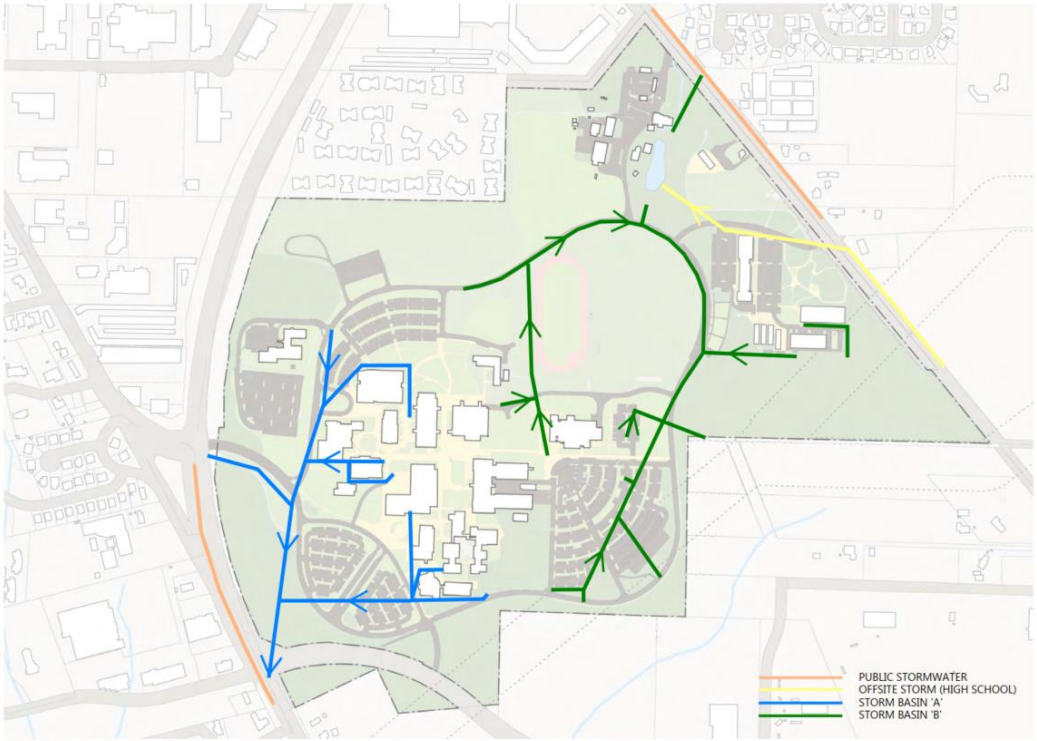
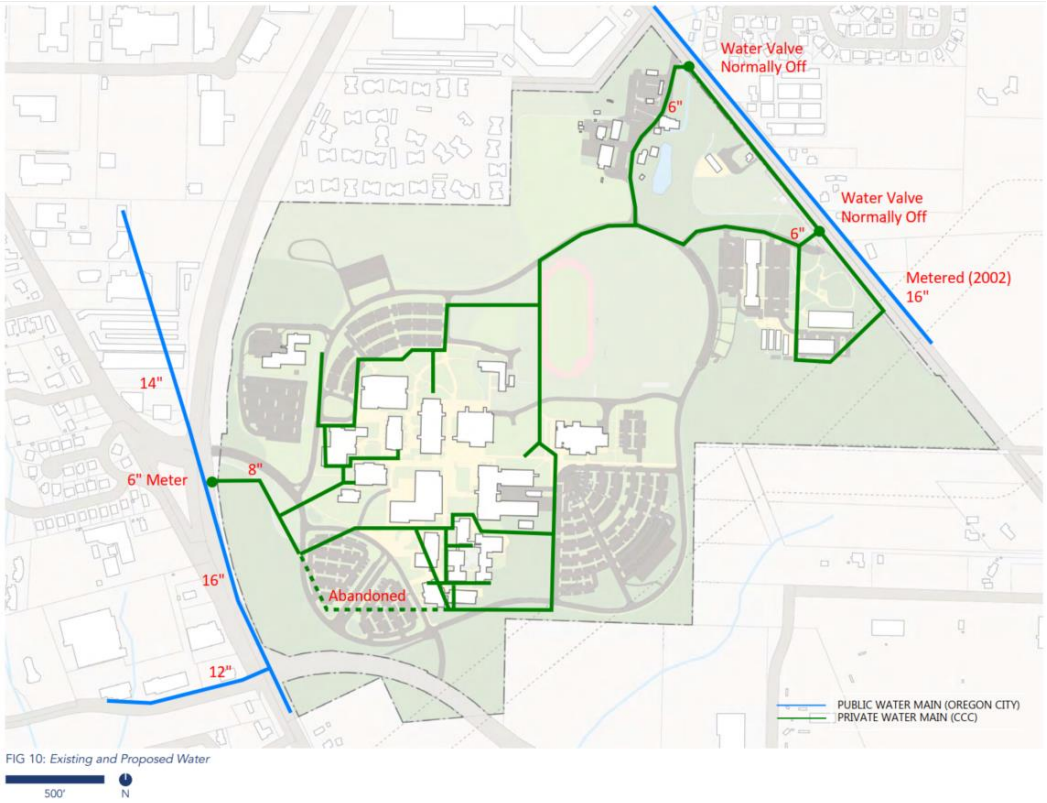


Figure 10: Water Utility Plan



3. **Permits and Approvals:** The applicant is responsible for obtaining approval and permits from each applicable governmental agency and department at Oregon City including but not limited to the Engineering and Building Divisions.

4. **Public Comment**
   Public comments submitted include (Exhibit 3):

   On March 28, 2025, Melissa Gonzalez at the Oregon Department of Transportation contributed the following comment via letter:

   As part of the materials provided to ODOT, ODOT received a copy of a Traffic Impact Analysis (TIA) prepared by Lancaster Mobley and dated July 23, 2024. ODOT has reviewed the TIA and determined no further review is needed. The TIA was limited to the access intersections to the college and did not include other major intersections affected by the proposed project. ODOT recommends the City condition CCC to contribute to Transportation System Plan (TSP) projects within the vicinity including the OR213/Beavercreek Intersection Project that was approved as part of the approval for Alternative Mobility Target at the intersection.

   No other public comments were submitted prior to the date of this Staff Report, and no comments were submitted that indicated that the application cannot meet the approval criteria of the Oregon City Municipal Code.

ANALYSIS AND FINDINGS:

Municipal Code Standards and Requirements: The following sections of the Oregon City Municipal Code are applicable to this land use approval:

CHAPTER 12.04 – STREETS SIDEWALKS AND PUBLIC SPACES

12.04.005 - Jurisdiction and management of the public rights-of-way.
A. The City has jurisdiction and exercises regulatory management over all public rights-of-way within the City under authority of the City Charter and state law by issuing separate public works right-of-way permits or permits as part of issued public infrastructure construction plans. No work in the public right-of-way shall be done without the proper permit. Some public rights-of-way within the City are regulated by the State of Oregon Department of Transportation (ODOT) or Clackamas County and as such, any work in these streets shall conform to their respective permitting requirements.
B. Public rights-of-way include, but are not limited to, streets, roads, highways, bridges, alleys, sidewalks, trails, paths, public easements and all other public ways or areas, including the subsurface under and air space over these areas.
C. The City has jurisdiction and exercises regulatory management over each public right-of-way whether the City has a fee, easement, or other legal interest in the right-of-way. The City has jurisdiction and regulatory management of each right-of-way whether the legal interest in the right-of-way was obtained by grant, dedication, prescription, reservation, condemnation, annexation, foreclosure or other means.

D. No person may occupy or encroach on a public right-of-way without the permission of the City. The City grants permission to use rights-of-way by franchises, licenses and permits.
E. The exercise of jurisdiction and regulatory management of a public right-of-way by the City is not official acceptance of the right-of-way, and does not obligate the City to maintain or repair any part of the right-of-way.

Finding: Applicable. However, this General Development Plan will not impact or require changes to the right of way. Future Detailed Development Plans will require review according to this chapter instead.

CHAPTER 12.08 – PUBLIC AND STREET TREES

12.08.015 - Street tree selection, planting and maintenance requirements.
All development shall provide street trees adjacent to all street frontages. Species and locations of trees shall be selected based upon vision clearance requirements but shall in all cases be selected from the Oregon City Street Tree List, an approved street tree list for a jurisdiction in the Metropolitan region or be approved by a certified arborist unless otherwise approved pursuant to this section. If a setback sidewalk has already been constructed or the public works department determines that the forthcoming street design shall include a setback sidewalk, then all street trees shall be installed with a planting strip or within tree-wells. If existing street design includes a curb-tight sidewalk, then all street trees shall be placed according to OCMC 12.08.035.C.

Finding: Not Applicable. Development of the subject site relevant to this chapter will be proposed at a future Detailed Development Plan stage.

CHAPTER 13.12 – STORMWATER MANAGEMENT

13.12.050 - Applicability and exemptions.
This chapter establishes performance standards for stormwater conveyance, quantity and quality. Additional performance standards for erosion prevention and sediment control are established in OCMC 17.47.
A. Stormwater Conveyance. The stormwater conveyance requirements of this chapter shall apply to all stormwater systems constructed with any development activity, except as follows:
1. The conveyance facilities are located entirely on one privately owned parcel;
2. The conveyance facilities are privately maintained; and
3. The conveyance facilities receive no stormwater runoff from outside the parcel's property limits. Those facilities exempted from the stormwater conveyance requirements by the above subsection will remain subject to the requirements of the Oregon Uniform Plumbing Code. Those exempted facilities shall be reviewed by the building official.

Finding: Applicable. However, this General Development Plan will not impact or require changes to existing stormwater facilities. Future Detailed Development Plans will require review according to this chapter.

CHAPTER 15.48 – GRADING, FILLING AND EXCAVATING

15.48.030 Applicability—Grading permit required.

A. A city-issued grading permit shall be required before the commencement of any of the following filling or grading activities:
1. Grading activities in excess of ten cubic yards of earth;
2. Grading activities which may result in the diversion of existing drainage courses, both natural and man-made, from their natural point of entry or exit from the grading site;
3. Grading and paving activities resulting in the creation of impervious surfaces greater than two thousand square feet or more in area;
4. Any excavation beyond the limits of a basement or footing excavation, having an unsupported soil height greater than five feet after the completion of such a structure; or
5. Grading activities involving the clearing or disturbance of one-half acres (twenty-one thousand seven hundred eighty square feet) or more of land.
B. Those fill and grading activities proposed to be undertaken in conjunction with a land use application, including but not limited to subdivisions, planned unit developments, partitions and site plan reviews, are subject to the standards of this chapter. However, a separate grading permit is not required. Approval of the construction plans submitted through the land use application process shall constitute the grading permit required under this chapter.

Finding: Applicable. However, this General Development Plan will not require grading, filling, or excavating. Future Detailed Development Plans under this GDP will require review according to this chapter.

CHAPTER 16.12 – MINIMUM PUBLIC IMPROVEMENTS AND DESIGN STANDARDS FOR DEVELOPMENT

16.12.011 - Applicability.
A. Compliance with this chapter is required for all development including land divisions, site plan and design review, master plan, detailed development plan and conditional use applications and all public improvements that are required in conjunction with a land use decision.
B. Compliance with this chapter is also required for new construction or additions which exceed fifty percent of the existing square footage of all single-family detached residential and middle housing units' living space. Garages, carports, sheds, and porches may not be included in the calculation if these spaces are not living spaces. Accessory dwelling units are not subject to compliance with this chapter. All single-family detached residential and middle housing units shall provide any necessary dedications, easements or agreements as identified in the transportation system plan and this chapter, subject to constitutional limitations. In addition, the street frontage shall be improved to include the following priorities for improvements:
1. Improve street pavement, construct curbs, gutters, sidewalks and planter strips; and
2. Plant street trees.
The cost of compliance with the standards identified in subsections 16.12.011.B.1 and 16.12.011.B.2 is calculated based on the square footage valuation from the state of Oregon Building Codes Division and limited to ten percent of the total construction costs. The value of the alterations and improvements is based on the total construction costs for a complete project rather than costs of various project component parts subject to individual building permits. The entire proposed construction project cost includes engineering and consulting fees and construction costs. It does not include permit fees, recording fees, or any work associated with drafting or recording dedications or easements.
C. Exemptions. The following are exempt from review by this chapter unless public improvements, driveways, PUEs, or other items regulated by this chapter are proposed:

1. Minor Site Plan and Design Review applications.
2. Work within the right-of-way.
3. Lot Line Adjustments and Abandonments.
4. Public capital improvement projects.

Finding: Applicable. The application is a master plan; therefore, the development shall follow the standards set forth in OCMC 16.12.

16.12.012 - Jurisdiction and management of the public rights-of-way.
The City has jurisdiction and exercises regulatory management over all public rights-of-way as defined and outlined within 12.04 of the Oregon City Municipal Code.

Finding: Applicable. The City has exercised its regulatory management authority by providing findings within this staff report with conditions to be met by the applicant prior to working within all public rights-of-way.

16.12.013 - Modifications.
The applicant may request and the review body may consider modification of the standards in this chapter resulting from constitutional limitations restricting the City's ability to require the dedication of property or for any other reason, based upon the criteria listed below and other criteria identified in the standard to be modified. All modifications, except for adjustments approved by the City Engineer for tree preservation purposes pursuant to Section 16.12.013.A, shall be processed through a Type II land use application and may require additional evidence from a transportation engineer or others to verify compliance. Compliance with the following criteria is required:
A. Compliance with the following criteria is required:
The modification meets the intent of the standard;
Finding: Not Applicable. No modification has been requested.

The modification provides safe and efficient movement of pedestrians, motor vehicles, bicyclists and freight;
Finding: Not Applicable. No modification has been requested.

The modification is consistent with an adopted transportation or utility plan;
Finding: Not Applicable. No modification has been requested.

The modification is complementary with a surrounding street design; or, in the alternative;
Finding: Not Applicable. No modification has been requested.

If a modification is requested for constitutional reasons, the applicant shall demonstrate the constitutional provision or provisions to be avoided by the modification and propose a modification that complies with the state or federal constitution. The City shall be under no obligation to grant a modification in excess of that which is necessary to meet its constitutional obligations.
Finding: Not Applicable. No modification has been requested.

B. The following modifications shall be processed as a Type I modification by the City Engineer using the criteria in 16.12.13.A.
1. Modifications to driveway location, size, and sharing standards in 16.12.035;

2. Modifications to sidewalk and planter strips widths and location in 16.12.016 that preserve existing street trees or trees on private property to ensure compliance with ADA standards.

Finding: Not Applicable. No Type I modification has been requested.

16.12.015 - Street design—Generally.
Development shall be required to provide existing or future connections to adjacent sites through the use of vehicular and pedestrian access easements where applicable. Development shall provide any necessary dedications, easements or agreements as identified in the transportation system plan, trails master plan, and/or parks and recreation master plan and this chapter, subject to constitutional limitations. The location, width and grade of street shall be considered in relation to: Existing and planned streets, topographical conditions, public convenience and safety for all modes of travel, existing and identified future transit routes and pedestrian/bicycle accessways, overlay districts, and the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. To the extent possible, proposed streets shall connect to all existing or approved stub streets that abut the development site. The arrangement of streets shall either:
A. Provide for the continuation or appropriate projection of existing principal streets in the surrounding area and on adjacent parcels or conform to a plan for the area approved or adopted by the City to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical;
B. Where necessary to give access to or permit a satisfactory future development of adjoining land, streets shall be extended to the boundary of the development and the resulting dead-end street (stub) may be approved with a temporary turnaround as approved by the City Engineer. Notification that the street is planned for future extension shall be posted on the stub street until the street is extended and shall inform the public that the dead-end street may be extended in the future. Access control in accordance with OCMC 16.12.017 shall be required to preserve the objectives of street extensions.
C. Adequate right-of-way and improvements to streets, pedestrian ways, bike routes and bikeways, and transit facilities shall be provided and be consistent with the City's transportation system plan. Consideration shall be given to the need for street widening and other improvements in the area of the proposed development impacted by traffic generated by the proposed development. This shall include, but not be limited to, improvements to the right-of-way, such as installation of lighting, signalization, turn lanes, median and parking strips, traffic islands, paving, curbs and gutters, sidewalks, bikeways, street drainage facilities and other facilities needed because of anticipated vehicular and pedestrian traffic generation.

Finding: Complies with Condition. The Oregon City Trails Master Plan has identified a shared use path identified as the Oregon City Loop Trail which contains portions along the frontage of Beavercreek Road of the development property. A 10-foot-wide share use path shall be constructed along the frontage of Beavercreek Road between Marjorie Lane and Clairmont Drive with the next Detailed Development Plan (DDP).
Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.

G. Vehicle and pedestrian access easements may serve in lieu of streets when approved by the decision maker and only where dedication of a street is deemed impracticable.

Finding: Not Applicable. The decision maker has not approved access easements in lieu of streets nor has dedication of a street been deemed impracticable.

H. Vehicular and pedestrian easements shall allow for public access and shall comply with all applicable pedestrian access requirements.
Finding: Not Applicable. The decision maker has not approved access easements in lieu of streets nor has dedication of a street been deemed impracticable.

16.12.032 – Public off-street pedestrian and bicycle accessways.
Pedestrian/bicycle accessways are intended to provide direct, safe and convenient connections between residential areas, retail and office areas, institutional facilities, industrial parks, transit streets, neighborhood activity centers, rights-of-way, and pedestrian/bicycle accessways which minimize out-of-direction travel, and transit orientated developments where public street connections for automobiles, bicycles and pedestrians are unavailable. Pedestrian/bicycle accessways are appropriate in areas where public street options are unavailable, impractical or inappropriate. Pedestrian and bicycle accessways are required through private property or as right-of-way connecting development to the right-of-way at intervals not exceeding three hundred thirty feet of frontage; or where the lack of street continuity creates inconvenient or out of direction travel patterns for local pedestrian or bicycle trips.

Finding: Complies with Condition. The Oregon City Trails Master Plan has identified a shared use path identified as the Oregon City Loop Trail running through the development property. Portions of this trail appear to be constructed within the development property but the entirety of the trail is not completed and there are no easements for the trail. The next DDP shall construct a 10-foot-wide shared use path through the development property for the continuation of an existing shared use path through the development property that follows the alignment of the Oregon City Loop Trail identified in the Oregon City Trails Master Plan and connects to Beavercreek Road.
Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.

A. Entry points shall align with pedestrian crossing points along adjacent streets and with adjacent street intersections.

Finding: Not applicable. Entry points may meet the conceptual alignment of the Oregon City Loop Trail as shown on the Oregon City Trails Master Plan.

B. Accessways shall be free of horizontal obstructions and have a nine foot six inch high vertical clearance to accommodate bicyclists. To safely accommodate both pedestrians and bicycles, accessway right-of-way widths shall be as follows:
1. Accessways shall have a fifteen foot wide right-of-way with a seven foot wide paved surface with a minimum four foot planter strip on either side.
2. If an accessway also provides secondary fire access, the right-of-way width shall be at least twenty- four feet wide with a sixteen foot paved surface between four foot planter strips on either side.

Finding: Not applicable. The path will meet requirements of the Oregon City Trails Master Plan.

C. Accessways shall be direct with at least one end point of the accessway always visible from any point along the accessway. On-street parking shall be prohibited within fifteen feet of the intersection of the accessway with public streets to preserve safe sight distance and promote safety.

Finding: Not applicable. The path shall meet conceptual alignment of the Oregon City Loop Trail as shown on the Oregon City Trails Master Plan.

D. To enhance pedestrian and bicycle safety, accessways shall be lighted with pedestrian-scale lighting. Accessway lighting shall be to a minimum level of one-half-foot-candles, a one and one-half foot-candle average, and a maximum to minimum ratio of seven-to-one and shall be oriented not to shine upon adjacent properties. Street lighting shall be provided at both entrances.

Finding: Not applicable. The path is intended to fulfill requirements of the Oregon City Trails Master Plan.

E. Accessways shall comply with Americans with Disabilities Act (ADA).

Finding: Complies with condition. Shared use paths through the development property constructed with subsequent DDP shall be ADA compliant. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

F. The planter strips on either side of the accessway shall be landscaped along adjacent property by installation of the following:
1. Either an evergreen hedge screen of thirty to forty-two inches high or shrubs spaced no more than four feet apart on average; and
2. Ground cover covering one hundred percent of the exposed ground. No bark mulch shall be allowed except under the canopy of shrubs and within two feet of the base of trees; and
3. A two-inch minimum caliper tree for every thirty-five feet along the accessway. Trees may be planted on either side of the accessway, provided they are spaced no more than thirty-five feet apart; and
4. In satisfying the requirements of this section, evergreen plant materials that grow over forty-two inches in height shall be avoided. All plant materials shall be selected from the Oregon City Native Plant List.

Finding: Not applicable. The path is intended to fulfill requirements of the Oregon City Trails Master Plan and may deviate from this requirement.

G. Accessways shall be designed to prohibit unauthorized motorized traffic. Curbs and removable, lockable bollards are suggested mechanisms to achieve this.

Finding: Not applicable. Specific requirements to prohibit unauthorized motorized traffic will be determined with subsequent DDP.

H. Accessway surfaces shall be paved with all-weather materials as approved by the City. Pervious materials are encouraged. Accessway surfaces shall be designed to drain stormwater runoff to the side or sides of the accessway. Minimum cross slope shall be two percent.

Finding: Not applicable. Specific requirements to prohibit unauthorized motorized traffic will be determined with subsequent DDP.

I. In parks, greenways or other natural resource areas, accessways may be approved with a five-foot wide gravel path with wooden, brick or concrete edgings.

Finding: Not Applicable. The layout of the proposed development shows pedestrian and bicycle accessways with no impact to parks, greenways, or natural resource areas.

J. The decision maker may approve an alternative accessway design due to existing site constraints through the modification process set forth in OCMC 16.12.013.

Finding: Not Applicable. No alternative design has been proposed for pedestrian and bicycle accessways.

K. Ownership, liability and maintenance of accessways. To ensure that all pedestrian/bicycle accessways will be adequately maintained over time, the City Engineer shall require one of the following:
1. Dedicate the accessways to the public as public right-of-way prior to the final approval of the development; or
2. The developer incorporates the accessway into a recorded easement or tract that specifically requires the property owner and future property owners to provide for the ownership, liability and maintenance of the accessway.

Finding: Complies with condition. For portions of Oregon Loop Trail within the development property, future DDP shall provide pedestrian access easements for the entirety of the path which allows use by the public and specifically requires the property owner and future property owners to provide for the liability and maintenance of the accessway.
Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.

16.12.033 - Mobility standards.
Development shall demonstrate compliance with intersection mobility standards. When evaluating the performance of the transportation system, the City of Oregon City requires all intersections, except for the facilities identified in subsection E below, to be maintained at or below the following mobility standards during the two-hour peak operating conditions. The first hour has the highest weekday traffic volumes and the second hour is the next highest hour before or after the first hour. Except as provided otherwise below, this may require the installation of mobility improvements as set forth in the transportation system plan (TSP) or as otherwise identified by the City Engineer.
A. For intersections within the regional center, the following mobility standards apply:
1. During the first hour, a maximum v/c ratio of 1.10 shall be maintained. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
2. During the second hour, a maximum v/c ratio of 0.99 shall be maintained at signalized intersections. For signalized intersections, this standard applies to the intersection as a whole. For

unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
3. Intersections located on the regional center boundary shall be considered within the regional center.
B. For intersections outside of the regional center but designated on the arterial and throughway network, as defined in the regional transportation plan, the following mobility standards apply:
1. During the first hour, a maximum v/c ratio of 0.99 shall be maintained. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
2. During the second hour, a maximum v/c ratio of 0.99 shall be maintained at signalized intersections. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
C. For intersections outside the boundaries of the regional center and not designated on the arterial and throughway network, as defined in the regional transportation plan, the following mobility standards apply:
1. For signalized intersections:
a. During the first hour, LOS "D" or better will be required for the intersection as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0 for the sum of the critical movements.
b. During the second hour, LOS "D" or better will be required for the intersection as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0 for the sum of the critical movements.
2. For unsignalized intersections outside of the boundaries of the regional center:
a. For unsignalized intersections, during the peak hour, all movements serving more than twenty vehicles shall be maintained at LOS "E" or better. LOS "F" will be tolerated at movements serving no more than twenty vehicles during the peak hour.
D. For the intersection of OR 213 and Beavercreek Road, the following mobility standards apply:
1. During the first, second and third hours, a maximum v/c ratio of 1.00 shall be maintained. Calculation of the maximum v/c ratio will be based on an average annual weekday peak hour.
E. Until the City adopts new performance measures that identify alternative mobility targets, the City shall exempt proposed development that is permitted, either conditionally, outright, or through detailed development master plan approval, from compliance with the above-referenced mobility standards for the following state-owned facilities:
I-205/OR 99E Interchange.
State intersections located within or on the regional center boundaries.
1. In the case of conceptual development approval for a master plan that impacts the above references intersections:
a. The form of mitigation will be determined at the time of the detailed development plan review for subsequent phases utilizing the code in place at the time the detailed development plan is submitted; and
b. Only those trips approved by a detailed development plan review are vested.
2. Development which does not comply with the mobility standards for the intersections identified in OCMC 16.12.033 shall provide for the improvements identified in the transportation system plan (TSP) in an effort to improve intersection mobility as necessary to offset the impact caused by development. Where required by other provisions of the code, the applicant shall provide a traffic impact study that includes an assessment of the development's impact on the intersections

identified in this exemption and shall construct the intersection improvements listed in the TSP or required by the code.

Finding: Complies with condition. Phase 2 is not approved at this time and DDP applications will be forthcoming. A full transportation impact study shall be provided with future DDPs. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

CHAPTER 17.39 I INSTITUTIONAL DISTRICT

17.39.010 - Designated.
The purpose of this district is designed to facilitate the development of major public institutions, government facilities and parks and ensure the compatibility of these developments with surrounding areas. The I—Institutional zone is consistent with the public/quasi-public and park designations on the comprehensive plan map.

17.39.020 - Permitted uses.
Permitted uses in the institutional district are:
A. Private and/or public educational or training facilities;
B. Parks, playgrounds, playfields and community or neighborhood community centers;
C. Public facilities and services including courts, libraries and general government offices and maintenance facilities;
D. Stadiums and arenas;
E. Banquet, conference facilities and meeting rooms;
F. Government offices;
G. Transportation facilities;
H. Mobile food units.

Finding: Permitted. The applicant represents Clackamas Community College, and the proposed Master Plan covers public educational or training facilities, which are uses permitted by this section.

17.39.030 - Accessory uses.
The following uses are permitted outright if they are accessory to and related to the primary institutional use:
A. Offices;
B. Retail (not to exceed twenty percent of total gross floor area of all building);
C. Child care centers or nursery schools;
D. Scientific, educational, or medical research facilities and laboratories;
E. Religious institutions.

Finding: Applicable. This Master Plan proposal constitutes a General Development Plan that includes accessory uses in this section.

17.39.040 - Conditional uses.
Uses requiring conditional use permit are:
A. Any uses listed under OCMC 17.39.030 that are not accessory to the primary institutional use;
B. Boarding and lodging houses, bed and breakfast inns;

C. Cemeteries, crematories, mausoleums, and columbariums;
D. Correctional facilities;
E. Helipad in conjunction with a permitted use;
F. Parking lots not in conjunction with a primary use;
G. Public utilities, including sub-stations (such as buildings, plants and other structures);
H. Fire stations;
I. Police Station.

Finding: Not applicable. The applicant is not proposing any Conditional Uses with this application.

17.39.045 - Prohibited uses.
Prohibited uses in the I district are:
A. Any use not expressly listed in OCMC 17.39.020, 17.39.030 or 17.39.040;
B. Marijuana businesses;

Finding: Not applicable. The applicant is not proposing any Prohibited Uses with this application.

17.39.050 - Dimensional standards.
Dimensional standards in the I district are:
A. Maximum building height: Within one hundred feet of any district boundary, not to exceed thirty-five feet; elsewhere, not to exceed seventy feet.
B. Minimum required setbacks: Twenty-five feet from property line except when the development is adjacent to a public right-of-way. When adjacent to a public right-of-way, the minimum setback is zero feet and the maximum setback is five feet.
Public utility easements may supersede the minimum setback. Maximum setback may be increased per OCMC 17.62.055.D.
C. Minimum required landscaping (including landscaping within a parking lot): Fifteen percent.

Finding: Not applicable. The applicant has not proposed specific building dimensions with this General Development Plan. Compliance with these standards will be assessed through future Detailed Development Plan submissions.

17.39.060 - Relationship to master plan.
A. A master plan is required for any development within the I District on a site over ten acres in size that:
1. Is for a new development on a vacant property;
2. Is for the redevelopment of a property previously used an a non-institutional use; or
3. Increases the floor area of the existing development by ten thousand square feet over existing conditions

Finding: Complies as proposed. This Master Plan application fulfills the requirements of this section.

B. Master plan dimensional standards that are less restrictive than those of the Institutional District require adjustments. Adjustments will address the criteria of OCMC 17.65.70 and will be processed concurrently with the master plan application.

C. Modifications to other development standards in the code may be made as part of the phased master plan adjustment process. All modifications shall be in accordance with the requirements of the master plan adjustment process identified in OCMC 17.65.070.

Finding: Not applicable. The applicant does not request less restrictive dimensional standards, and no adjustments are being sought by the applicant under this General Development Plan. Future Detailed Development Plans may include proposals for adjustments to these dimensional standards under Type III review processes,

CHAPTER 17.41 – TREE PROTECTION, PRESERVATION, REMOVAL AND REPLANTING STANDARDS

17.41.010 - Protection of trees—Intent.
The intent of this chapter is to ensure that new development is designed in a manner that preserves trees to the maximum extent practicable. As a requirement of any Type II land use application, the siting of structures, roadways and utility easements, shall provide for the protection of tree resources to the maximum extent practicable. This chapter applies to all land division and site plan and design review applications.

17.41.020 - Tree protection—Applicability.
A. Applications for development subject to OCMC 16.08 (Land Divisions) or OCMC 17.62 (Site Plan and Design Review) shall demonstrate compliance with these standards as part of the review proceedings for those developments. Compliance with this chapter is required from the date a land use application is filed until a land division is recorded or other development approval is final.
B. For public capital improvement projects, the City engineer shall demonstrate compliance with these standards pursuant to a Type I process.
C. Tree canopy removal greater than twenty-five percent on areas with greater than twenty-five percent slope, unless exempted under OCMC 17.41.040, shall be subject to these standards.
D. A heritage tree or grove which has been designated pursuant to the procedures of OCMC 12.32 shall be subject to the standards of this section.
E. A tree that has been planted pursuant to this section shall remain or shall be replaced with a new tree if removed.

Finding: Not applicable. The applicant has not proposed specific construction that requires tree protection, preservation, removal, or mitigation with this General Development Plan. Compliance with these standards will be assessed through future Detailed Development Plan submissions.

CHAPTER 17.47 – CONSTRUCTION SITE RUNOFF CONTROLS

17.47.030- Applicability.
A. This chapter, which may also be referred to as "construction site runoff controls" in this Code, applies to development that may cause discharge of construction site waste materials or the visible or measurable erosion on any property within the city limits of Oregon City.
B. All development that results in 1,000 square feet of new or replaced impervious surface or 1,000 square feet of earth disturbance shall be subject to the construction site runoff controls requirements and the standards found within the Stormwater and Grading Design Standards as referenced in OCMC 13.12.

C. This chapter does not apply to work necessary to protect, repair, maintain or replace existing structures, utility facilities, roadways, driveways, accessory uses and exterior improvements in response to emergencies, provided that after the emergency has passed, adverse impacts are mitigated in accordance with applicable standards.

Finding: Applicable. However, no construction activity is set to result from review and approval of this General Development Plan. Future Detailed Development Plans under this GDP will require review according to this chapter.

CHAPTER 17.49 NATURAL RESOURCES OVERLAY DISTRICT

17.49.040 - NROD permit and review process.
An NROD permit is required for those uses regulated under OCMC 17.49.090, Uses Allowed under Prescribed Conditions. An NROD permit shall be processed under the Type II development permit procedure unless an adjustment of standards pursuant to OCMC 17.49.200 is requested or the application is being processed in conjunction with a concurrent application or action requiring a Type III or Type IV development permit.

Finding: Complies with Condition. While the subject site contains areas within the Natural Resource Overlay District, specific development within the district areas onsite is not proposed by this Master Plan application. All future Detailed Development Plans and Master Plan Amendments involving ground disturbance within the NROD buffer shall be subject to the review and approval criteria of this chapter. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

CHAPTER 17.50 – ADMINISTRATION AND PROCEDURES

17.50.010 Purpose.
This chapter provides the procedures by which Oregon City reviews and decides upon applications for all permits relating to the use of land authorized by ORS 92, 197 and 227. These permits include all form of land divisions, land use, limited land use and expedited land division and legislative enactments and amendments to the Oregon City Comprehensive Plan and Titles 16 and 17 of this code. Pursuant to ORS 227.175, any applicant may elect to consolidate applications for two or more related permits needed for a single development project. Any grading activity associated with development shall be subject to preliminary review as part of the review process for the underlying development. It is the express policy of the City of Oregon City that development review not be segmented into discrete parts in a manner that precludes a comprehensive review of the entire development and its cumulative impacts.

17.50.030 Summary of the City's decision-making processes.
The following decision-making processes chart shall control the City's review of the indicated permits:

Table 17.50.030 – Permit Approval Process

Permit Type	***I***	***II***	***III***	***IV***	***Expedited Land Division***

Master plan/planned unit development - General Development plan			*X*		
Master plan/planned unit development - General Development plan amendment	*X*	*X*	*X*		
*Detailed development plan**	*X*	*X*	*X*		
Natural resource overlay district review		*X*	*X*		

**If any provision or element of the master plan/planned unit development requires a deferred Type III procedure, the detailed development plan shall be processed through a Type III procedure.*

A. Type I decisions do not require interpretation or the exercise of policy or legal judgment in evaluating approval criteria. Because no discretion is involved, Type I decisions do not qualify as a land use, or limited land use, decision. The decision-making process requires no notice to any party other than the applicant. The Community Development Director's decision is final and not appealable by any party through the normal city land use process.

B. Type II decisions involve the exercise of limited interpretation and discretion in evaluating approval criteria, similar to the limited land use decision-making process under state law. Applications evaluated through this process are assumed to be allowable in the underlying zone, and the inquiry typically focuses on what form the use will take or how it will look. Notice of application and an invitation to comment is mailed to the applicant, recognized active neighborhood association(s) and property owners within three hundred feet. The Community Development Director accepts comments for a minimum of fourteen days and renders a decision. The Community Development Director's decision is appealable to the City Commission, by any party who submitted comments in writing before the expiration of the comment period. Review by the City Commission shall be on the record pursuant to OCMC 17.50.190 under ORS 197.195(5). The City Commission decision is the City's final decision and is subject to review by the land use board of appeals (LUBA) within twenty-one days of when it becomes final.

C. Type III decisions involve the greatest amount of discretion and evaluation of subjective approval standards, yet are not required to be heard by the City Commission, except upon appeal. In the event that any decision is not classified, it shall be treated as a Type III decision. The process for these land use decisions is controlled by ORS 197.763. Notice of the application and the Planning Commission or the Historic Review Board hearing is published and mailed to the applicant, recognized neighborhood association(s) and property owners within three hundred feet. Notice shall be issued at least twenty days pre-hearing, and the staff report shall be available at least seven days pre-hearing. At the evidentiary hearing held before the Planning Commission or the Historic Review Board, all issues are addressed. The decision of the Planning Commission or Historic Review Board is appealable to the City Commission, on the record pursuant to OCMC 17.50.190. The City Commission decision on appeal from is the City's final decision and is subject to review by LUBA within twenty-one days of when it becomes final, unless otherwise provided by state law.

D. Type IV decisions include only quasi-judicial plan amendments and zone changes. These applications involve the greatest amount of discretion and evaluation of subjective approval standards and shall be heard by the City Commission for final action. The process for these land use decisions is controlled by ORS 197.763. Notice of the application and Planning Commission hearing is published and mailed to the applicant, recognized neighborhood association(s) and property owners within three hundred feet. Notice shall be issued at least twenty days pre-hearing, and the staff report shall be available at least seven days pre-hearing. At the evidentiary hearing held before the Planning Commission, all issues are addressed. If the Planning Commission denies

the application, any party with standing (i.e., anyone who appeared before the Planning Commission either in person or in writing within the comment period) may appeal the Planning Commission denial to the City Commission. If the Planning Commission denies the application and no appeal has been received within fourteen days of the issuance of the final decision, then the action of the Planning Commission becomes the final decision of the City. If the Planning Commission votes to approve the application, that decision is forwarded as a recommendation to the City Commission for final consideration. In either case, any review by the City Commission is on the record and only issues raised before the Planning Commission may be raised before the City Commission. The City Commission decision is the City's final decision and is subject to review by LUBA within twenty-one days of when it becomes final.
E. Expedited land divisions and middle housing land divisions are subject to the requirements of OCMC 16.24.The expedited land division (ELD) process is set forth in ORS 197.360 to 197.380.
F. Decisions, completeness reviews, appeals, and notices in this chapter shall be calculated according to OCMC 1.04.070 and shall be based on calendar days, not business days.

Finding: Applicable. The applicant's proposal includes a General Development Plan for the subject site, subject to a Type III review process. Future Detailed Development Plans will be subject to the appropriate level of review according to this chapter, as will Site Plan & Design Review and Natural Resource Overlay District applications, as applicable.

17.50.040 Development review in overlay districts and for erosion control.
For any development subject to regulation of geologic hazards overlay district under OCMC 17.44; natural resource overlay district under OCMC 17.49; Willamette River Greenway Overlay District under OCMC 17.48; historic overlay district under OCMC 17.40, and erosion and sediment control under OCMC 17.47, compliance with the requirements of these chapters shall be reviewed as part of the review process required for the underlying development for the site.

Finding: Not Applicable. Development of the subject site relevant to this chapter will be proposed at a future Detailed Development Plan stage.

17.50.050 – Pre-application conference.
A. Pre-application Conference. Prior to a Type II – IV or Legislative application, excluding Historic Review, being deemed complete, the applicant shall schedule and attend a pre-application conference with City staff to discuss the proposal, unless waived by the Community Development Director. The purpose of the pre-application conference is to provide an opportunity for staff to provide the applicant with information on the likely impacts, limitations, requirements, approval standards, fees and other information that may affect the proposal.
1. To schedule a pre-application conference, the applicant shall contact the Planning Division, submit the required materials, and pay the appropriate conference fee.
2. At a minimum, an applicant should submit a short narrative describing the proposal and a proposed site plan, drawn to a scale acceptable to the City, which identifies the proposed land uses, traffic circulation, and public rights-of-way and all other required plans.
3. The Planning Division shall provide the applicant(s) with the identity and contact persons for all affected neighborhood associations as well as a written summary of the pre-application conference.
B. A pre-application conference shall be valid for a period of six months from the date it is held. If no application is filed within six months of the conference or meeting, the applicant shall schedule and attend another conference before the City will accept a permit application. The Community

Development Director may waive the pre-application requirement if, in the Director's opinion, the development has not changed significantly and the applicable municipal code or standards have not been significantly amended. In no case shall a pre-application conference be valid for more than one year.
C. Notwithstanding any representations by City staff at a pre-application conference, staff is not authorized to waive any requirements of this code, and any omission or failure by staff to recite to an applicant all relevant applicable land use requirements shall not constitute a waiver by the City of any standard or requirement.

Finding: Complies as proposed. The applicant attended a Pre-Application Conference (file # PA-23-00031) that fulfilled these requirements on October 4, 2023.

17.50.055 - Neighborhood association meeting.
Neighborhood Association Meeting. The purpose of the meeting with the recognized neighborhood association is to inform the affected neighborhood association about the proposed development and to receive the preliminary responses and suggestions from the neighborhood association and the member residents.
A. Applicants applying for annexations, zone change, comprehensive plan amendments, conditional use, Planning Commission variances, subdivision, or site plan and design review (excluding minor site plan and design review), general development master plans or detailed development plans applications shall schedule and attend a meeting with the City-recognized neighborhood association in whose territory the application is proposed no earlier than one year prior to the date of application. Although not required for other projects than those identified above, a meeting with the neighborhood association is highly recommended.
B. The applicant shall request via email or regular mail a request to meet with the neighborhood association chair where the proposed development is located. The notice shall describe the proposed project. A copy of this notice shall also be provided to the chair of the citizen involvement committee.
C. A meeting shall be scheduled within thirty days of the date that the notice is sent. A meeting may be scheduled later than thirty days if by mutual agreement of the applicant and the neighborhood association. If the neighborhood association does not want to, or cannot meet within thirty days, the applicant shall host a meeting inviting the neighborhood association, citizen involvement committee, and all property owners within three hundred feet to attend. This meeting shall not begin before six p.m. on a weekday or may be held on a weekend and shall occur within the neighborhood association boundaries or at a city facility.
D. If the neighborhood association is not currently recognized by the City, is inactive, or does not exist, the applicant shall request a meeting with the citizen involvement committee.
E. To show compliance with this section, the applicant shall submit a copy of the email or mail notice to the neighborhood association and CIC chair, a sign-in sheet of meeting attendees, and a summary of issues discussed at the meeting. If the applicant held a separately noticed meeting, the applicant shall submit a copy of the meeting flyer, postcard or other correspondence used, and a summary of issues discussed at the meeting and submittal of these materials shall be required for a complete application.

Finding: Complies as proposed. The applicant attended a Caufield Neighborhood Association meeting on March 19, 2025 and submitted the required documentation sufficient to satisfy the requirements of this section on March 20, 2025.

17.50.060 Application requirements.

A permit application may only be initiated by the record property owner or contract purchaser, the City Commission or Planning Commission. If there is more than one record owner, then the City will not complete a Type II—IV application without signed authorization from all record owners. All permit applications shall be submitted on the form provided by the City, along with the appropriate fee and all necessary supporting documentation and information, sufficient to demonstrate compliance with all applicable approval criteria. The applicant has the burden of demonstrating, with evidence, that all applicable approval criteria are, or can be, met.

Finding: Complies as proposed.

17.50.070 Completeness review and one hundred twenty-day rule.

A. Upon submission, the Community Development Director shall date stamp the application form and verify that all of the appropriate application review fee(s) have been submitted. Upon receipt of all review fees and an application form, the Community Development Director will then review the application and all information submitted with it and evaluate whether the application is complete enough to process. Within thirty days of receipt of the application and all applicable review fees, the Community Development Director shall complete this initial review and issue to the applicant a written statement indicating whether the application is complete enough to process, and if not, what information shall be submitted to make the application complete.

B. The applicant has one hundred eighty days from the date the application was made to submit the missing information or the application shall be rejected and the unused portion of the application fee returned to the applicant. If the applicant submits the requested information within the one hundred eighty-day period, the Community Development Director shall again verify whether the application, as augmented, is complete. Each such review and verification shall follow the procedure in subsection A of this section.

The application will be deemed complete for the purpose of this section upon receipt by the Community Development Director of:

1. All the missing information;

2. Some of the missing information and written notice from the applicant that no other information will be provided; or

3. Written notice from the applicant that none of the missing information will be provided.

C. Once the Community Development Director determines the application is complete enough to process, or the applicant refuses to submit any more information, the City shall declare the application complete. Pursuant to ORS 227.178, the City will reach a final decision on an application within one hundred twenty calendar days from the date that the application is determined to be or deemed complete unless the applicant agrees to suspend the one hundred twenty-calendar-day timeline or unless state law provides otherwise. The one hundred twenty-day period, however, does not apply in the following situations:

1. Any hearing continuance or other process delay requested by the applicant shall be deemed an extension or waiver, as appropriate, of the one hundred twenty-day period.

2. Any delay in the decision-making process necessitated because the applicant provided an incomplete set of mailing labels for the record property owners within three hundred feet of the subject property shall extend the one hundred twenty-day period for the amount of time required to correct the notice defect.

3. The one hundred twenty-day period does not apply to any application for a permit that is not wholly within the City's authority and control.

4. The one hundred twenty-day period does not apply to any application for an amendment to the City's comprehensive plan or land use regulations nor to any application for a permit, the approval of which depends upon a plan amendment.
D. A one hundred day-period applies in place of the one hundred twenty-day period for affordable housing projects where:
1. The project includes five or more residential units, including assisted living facilities or group homes;
2. At least fifty percent of the residential units will be sold or rented to households with incomes equal to or less than sixty percent of the median family income for Clackamas County or for the state, whichever is greater; and
3. Development is subject to a covenant restricting the owner and successive owner from selling or renting any of the affordable units as housing that is not affordable for a period of sixty years from the date of the certificate of occupancy.
E. The one hundred twenty-day period specified in OCMC 17.50.070.C or D may be extended for a specified period of time at the written request of the applicant. The total of all extensions may not exceed two hundred forty-five calendar days.
F. The approval standards that control the City's review and decision on a complete application are those which were in effect on the date the application was first submitted.

Finding: Complies as proposed.

17.50.080 Complete application—Required information.
Unless stated elsewhere in OCMC 16 or 17, a complete application includes all the materials listed in this subsection. The Community Development Director may waive the submission of any of these materials if not deemed to be applicable to the specific review sought. Likewise, within thirty days of when the application is first submitted, the Community Development Director may require additional information, beyond that listed in this subsection or elsewhere in Titles 12, 14, 15, 16, or 17, such as a traffic study or other report prepared by an appropriate expert. In any event, the applicant is responsible for the completeness and accuracy of the application and all of the supporting documentation, and the City will not deem the application complete until all information required by the Community Development Director is submitted. At a minimum, the applicant shall submit the following:
A. One copy of a completed application form that includes the following information:
1. An accurate address and tax map and location of all properties that are the subject of the application;
2. Name, address, telephone number and authorization signature of all record property owners or contract owners, and the name, address and telephone number of the applicant, if different from the property owner(s);
B. A complete list of the permit approvals sought by the applicant;
C. A complete and detailed narrative description of the proposed development;
D. A discussion of the approval criteria for all permits required for approval of the development proposal that explains how the criteria are or can be met or are not applicable, and any other information indicated by staff at the pre-application conference as being required;
E. One copy of all architectural drawings and site plans shall be submitted for Type II—IV applications.
One paper copy of all application materials shall be submitted for Type I applications;
F. For all Type II—IV applications, the following is required:
1. An electronic copy of all materials.

2. Mailing labels or associated fee for notice to all parties entitled under OCMC 17.50.090 to receive mailed notice of the application. The applicant shall use the names and addresses of property owners within the notice area indicated on the most recent property tax rolls.
3. Documentation indicating there are no liens favoring the City on the subject site.
4. A receipt from the county assessor's office indicating that all taxes for the lot or parcels involved are paid in full for the preceding tax year.
5. A current preliminary title report or trio for the subject property(ies);
G. All required application fees;
H. Annexation agreements, traffic or technical studies (if applicable);
I. Additional documentation, as needed and identified by the Community Development Director.

Finding: Complies as proposed. The applicant submitted all required completeness items prior to public notice.

17.50.090 - Public notices.
All public notices issued by the City announcing applications or public hearings of quasi-judicial or legislative actions, shall comply with the requirements of this section.
A. Notice of Type II Applications. Once the Community Development Director has deemed a Type II application complete, the City shall prepare and send notice of the application, by first class mail, to all record owners of property within three hundred feet of the subject property and to any city-recognized neighborhood association whose territory includes the subject property. The applicant shall provide or the City shall prepare for a fee an accurate and complete set of mailing labels for these property owners and for posting the subject property with the City-prepared notice in accordance with OCMC 17.50.100. The City's Type II notice shall include the following information:
1. Street address or other easily understood location of the subject property and city-assigned planning file number;
2. A description of the applicant's proposal, along with citations of the approval criteria that the City will use to evaluate the proposal;
3. A statement that any interested party may submit to the City written comments on the application during a fourteen-day comment period prior to the City's deciding the application, along with instructions on where to send the comments and the deadline of the fourteen-day comment period;
4. A statement that any issue which is intended to provide a basis for an appeal shall be raised in writing during the fourteen-day comment period with sufficient specificity to enable the City to respond to the issue;
5. A statement that the application and all supporting materials may be inspected, and copied at cost, at City Hall during normal business hours;
6. The name and telephone number of the planning staff person assigned to the application or is otherwise available to answer questions about the application;
7. The notice shall state that a city-recognized neighborhood association requesting an appeal fee waiver pursuant to OCMC 17.50.290.C must officially approve the request through a vote of its general membership or board at a duly announced meeting prior to the filing of an appeal.
B. Notice of Public Hearing on a Type III or IV Quasi-Judicial Application. Notice for all public hearings concerning a quasi-judicial application shall conform to the requirements of this subsection. At least twenty days prior to the hearing, the City shall prepare and send, by first class mail, notice of the hearing to all record owners of property within three hundred feet of the subject property and to any city-recognized neighborhood association whose territory includes the subject property. The City shall also publish the notice on the City website within the City at least twenty

days prior to the hearing. Pursuant to OCMC 17.50.080.H, the applicant is responsible for providing an accurate and complete set of mailing labels for these property owners and for posting the subject property with the City-prepared notice in accordance with OCMC 17.50.100. Notice of the application hearing shall include the following information:
1. The time, date and location of the public hearing;
2. Street address or other easily understood location of the subject property and city-assigned planning file number;
3. A description of the applicant's proposal, along with a list of citations of the approval criteria that the City will use to evaluate the proposal;
4. A statement that any interested party may testify at the hearing or submit written comments on the proposal at or prior to the hearing and that a staff report will be prepared and made available to the public at least seven days prior to the hearing;
5. A statement that any issue which is intended to provide a basis for an appeal to the City Commission shall be raised before the close of the public record. Issues must be raised and accompanied by statements or evidence sufficient to afford the City and all parties to respond to the issue;
6. The notice shall state that a city-recognized neighborhood association requesting an appeal fee waiver pursuant to OCMC 17.50.290.C must officially approve the request through a vote of its general membership or board at a duly announced meeting prior to the filing of an appeal;
7. A statement that the application and all supporting materials and evidence submitted in support of the application may be inspected at no charge and that copies may be obtained at reasonable cost at the planning division offices during normal business hours; and
8. The name and telephone number of the planning staff person responsible for the application or is otherwise available to answer questions about the application.

Finding: Complies as proposed. Public Notices that met the requirements of this section were mailed and posted to the subject site on March 21, 2025.

C. Notice of Public Hearing on a Legislative Proposal. At least twenty days prior to a public hearing at which a legislative proposal to amend or adopt the City's land use regulations or comprehensive plan is to be considered, the Community Development Director shall issue a public notice that conforms to the requirements of this subsection. Notice shall be sent to affected governmental entities, special districts, providers of urban services, including Tri-Met, Oregon Department of Transportation and Metro, any affected recognized neighborhood associations and any party who has requested in writing such notice. Notice shall also be published on the City website. Notice issued under this subsection shall include the following information:
1. The time, date and location of the public hearing;
2. The City-assigned planning file number and title of the proposal;
3. A description of the proposal in sufficient detail for people to determine the nature of the change being proposed;
4. A statement that any interested party may testify at the hearing or submit written comments on the proposal at or prior to the hearing; and
5. The name and telephone number of the planning staff person responsible for the proposal and who interested people may contact for further information.

Finding: Not applicable. General Development Plans are not Legislative proposals and are not subject to the Legislative process.

17.50.100 - Notice posting requirements.

Where this chapter requires notice of a pending or proposed permit application or hearing to be posted on the subject property, the requirements of this section shall apply.

A. City Guidance and the Applicant's Responsibility. The City shall supply all of the notices which the applicant is required to post on the subject property and shall specify the dates the notices are to be posted and the earliest date on which they may be removed. The City shall also provide a statement to be signed and returned by the applicant certifying that the notice(s) were posted at the correct time and that if there is any delay in the City's land use process caused by the applicant's failure to correctly post the subject property for the required period of time and in the correct location, the applicant agrees to extend the applicable decision-making time limit in a timely manner.

B. Number and Location. The applicant shall place the notices on each frontage of the subject property. If the property's frontage exceeds six hundred feet, the applicant shall post one copy of the notice for each six hundred feet or fraction thereof. Notices do not have to be posted adjacent to alleys or unconstructed right-of-way. Notices shall be posted within ten feet of the street and shall be visible to pedestrians and motorists. Notices shall not be posted within the public right-of-way or on trees. The applicant shall remove all signs within ten days following the event announced in the notice.

Finding: Complies as proposed. Public Notices that met the requirements of this section were posted to the subject site on March 21, 2025.

17.50.110 Assignment of decision-makers.

The following City entity or official shall decide the following types of applications:

A. Type I Decisions. The Community Development Director shall render all Type I decisions. The Community Development Director's decision is the City's final decision on a Type I application.

B. Type II Decisions. The Community Development Director shall render the City's decision on all Type II permit applications, which are then appealable to the City Commission with notice to the Planning Commission. The City's final decision is subject to review by LUBA.

C. Type III Decisions. The Planning Commission or Historic Review Board, as applicable, shall render all Type III decisions. Such decision is appealable to the City Commission, on the record. The City Commission 's decision is the city's final decision and is subject to review by LUBA within twenty-one days of when it becomes final.

D. Type IV Decisions. The Planning Commission shall render the initial decision on all Type IV permit applications. If the Planning Commission denies the Type IV application, that decision is final unless appealed in accordance with OCMC 17.50.190. If the Planning Commission recommends approval of the application, that recommendation is forwarded to the City Commission. The City Commission decision is the City's final decision on a Type IV application and is subject to review LUBA.

E. Expedited Land Division (ELD). The Community Development Director shall render the initial decision on all ELD applications. The Community Development Director's decision is the City's final decision unless appealed in accordance to ORS 197.375 to a City-appointed hearings referee. The hearings referee decision is the City's final decision which is appealable to the Oregon Court of Appeals.

Finding: Complies as proposed. The application is subject to the appropriate level of review and assignment of decision-makers.

17.50.120 Quasi-judicial hearing process.

All public hearings pertaining to quasi-judicial permits, whether before the Planning Commission, Historic Review Board, or City Commission, shall comply with the procedures of this section. In addition, all public hearings held pursuant to this chapter shall comply with the Oregon Public Meetings Law, the applicable provisions of ORS 197.763 and any other applicable law.

A. Once the Community Development Director determines that an application for a Type III or IV decision is complete, the planning division shall schedule a hearing before the Planning Commission or Historic Review Board, as applicable. Once the Community Development Director determines that an appeal of a Type II, Type III or Type IV decision has been properly filed under OCMC 17.50.190, the planning division shall schedule a hearing pursuant to OCMC 17.50.190.

B. Notice of the Type III or IV hearing shall be issued at least twenty days prior to the hearing in accordance with OCMC 17.50.090.B.

C. Written notice of an appeal hearing shall be sent by regular mail no later than fourteen days prior to the date of the hearing to the appellant, the applicant if different from the appellant, the property owner(s) of the subject site, all persons who testified either orally or in writing before the hearing body and all persons that requested in writing to be notified.

D. The Community Development Director shall prepare a staff report on the application which lists the applicable approval criteria, describes the application and the applicant's development proposal, summarizes all relevant city department, agency and public comments, describes all other pertinent facts as they relate to the application and the approval criteria and makes a recommendation as to whether each of the approval criteria are met.

E. At the beginning of the initial public hearing at which any quasi-judicial application or appeal is reviewed, a statement describing the following shall be announced to those in attendance:

1. That the hearing will proceed in the following general order: Staff report, applicant's presentation, testimony in favor of the application, testimony in opposition to the application, rebuttal, record closes, commission deliberation and decision;

2. That all testimony and evidence submitted, orally or in writing, shall be directed toward the applicable approval criteria. If any person believes that other criteria apply in addition to those addressed in the staff report, those criteria shall be listed and discussed on the record. The meeting chairperson may reasonably limit oral presentations in length or content depending upon time constraints. Any party may submit written materials of any length while the public record is open;

3. Failure to raise an issue on the record with sufficient specificity and accompanied by statements or evidence sufficient to afford the City and all parties to respond to the issue, will preclude appeal on that issue to the land use board of appeals;

4. Any party wishing a continuance or to keep open the record shall make that request while the record is still open;

5. That the commission chair shall call for any ex-parte contacts, conflicts of interest or bias before the beginning of each hearing item; and

6. For appeal hearings, only those persons who participated either orally or in writing in the decision or review will be allowed to participate either orally or in writing on the appeal.

F. Requests for continuance and to keep open the record: The hearing may be continued to allow the submission of additional information or for deliberation without additional information. New notice of a continued hearing need not be given so long as a time-certain and location is established for the continued hearing. Similarly, hearing may be closed but the record kept open for the submission of additional written material or other documents and exhibits. The chairperson may limit the factual and legal issues that may be addressed in any continued hearing or open record period.

Finding: Complies as proposed. The application is subject to the appropriate level of review and is set for a public hearing before the Planning Commission on April 14, 2025.

17.50.130 Conditions of approval and notice of decision.
A. All City decision-makers have the authority to impose reasonable conditions of approval designed to ensure that all applicable approval standards, including standards set out in city overlay districts, the City's master plans, and City public works design standards, are, or can be met.
B. Failure to comply with any condition of approval shall be grounds for revocation of the permit(s) and grounds for instituting code enforcement proceedings pursuant to OCMC 1.20 of this code and ORS 30.315.
C. Notice of Decision. The City shall send, by first class mail, a notice of all decisions rendered under this chapter to all persons with standing, i.e., the applicant, all others who participated either orally or in writing before the close of the public record and those who specifically requested notice of the decision. The notice of decision shall include the following information:
1. The file number and date of decision;
2. The name of the applicant, owner and appellant (if different);
3. The street address or other easily understood location of the subject property;
4. A brief summary of the decision, and if an approval, a description of the permit approved;
5. A statement that the decision is final unless appealed and description of the requirements for perfecting an appeal;
6. The contact person, address and a telephone number whereby a copy of the final decision may be inspected or copies obtained.
D. Modification of Conditions. Any request to modify a condition of permit approval is to be considered either minor modification or a major modification, unless otherwise authorized. A minor modification shall be processed as a Type I. A major modification shall be processed in the same manner and shall be subject to the same standards as was the original application. However, the decision-maker may at their sole discretion, consider a modification request and limit its review of the approval criteria to those issues or aspects of the application that are proposed to be changed from what was originally approved.

Finding: Applicable.

17.50.140 – Financial guarantees.
When conditions of permit approval require a permitee to construct certain public improvements, the City shall require the permitee to provide financial guarantee for construction of the certain public improvements. Financial guarantees shall be governed by this section.
A. Form of Guarantee. Guarantees shall be in a form approved by the City attorney. Approvable forms of guarantee include irrevocable standby letters of credit to the benefit of the City issued by a recognized lending institution, certified checks, dedicated bank accounts or allocations of construction loans held in reserve by the lending institution for the benefit of the City. The form of guarantee shall be specified by the City engineer and, prior to execution and acceptance by the City shall be reviewed and approved by the City attorney. The guarantee shall be filed with the City engineer.
B. Performance Guarantees. A permittee shall be required to provide a performance guarantee as follows.

1. After Final Approved Design by the City. The City may request the permittee to submit a performance guarantee for construction of certain public improvements. A permitee may request the option of submitting a performance guarantee when prepared for temporary/final occupancy. The guarantee shall be one hundred twenty percent of the estimated cost of constructing the public improvements as submitted by the permittee's engineer. The engineer's estimated costs shall be supported by a verified engineering estimate and approved by the City engineer.
2. Before Complete Design Approval and Established Engineered Cost Estimate. The City may request a permittee to submit a performance guarantee for construction of certain public improvements. A permitee may request the option of submitting a performance guarantee before public improvements are designed and completed. The guarantee shall be one hundred fifty percent of the estimated cost of constructing the public improvements as submitted by the permittee's engineer and approved by the City engineer. The engineer's estimated costs shall be supported by a verified engineering estimate and approved by the City engineer.
C. Release of Guarantee. The guarantee shall remain in effect until the improvement is actually constructed and accepted by the City. Once the City has inspected and accepted the improvement, the City shall release the guarantee to the permittee. If the improvement is not completed to the City's satisfaction within the time limits specified in the permit approval, the City engineer may, at their discretion, draw upon the guarantee and use the proceeds to construct or complete construction of the improvement and for any related administrative and legal costs incurred by the City in completing the construction, including any costs incurred in attempting to have the permittee complete the improvement. Once constructed and approved by the City, any remaining funds shall be refunded to the permittee. The City shall not allow a permittee to defer construction of improvements by using a performance guarantee, unless the permittee agrees to construct those improvements upon written notification by the City, or at some other mutually agreed-to time. If the permittee fails to commence construction of the required improvements within six months of being instructed to do so, the City may, without further notice, undertake the construction of the improvements and draw upon the permittee's performance guarantee to pay those costs.
D. Fee-in-lieu. When conditions of approval or the City engineer allows a permittee to provide a fee-in-lieu of actual construction of public improvements, the fee shall be one hundred fifty percent of the estimated cost of constructing the public improvements as submitted by the permittee's engineer and approved by the City engineer. The percentage required is to ensure adequate funds for the future work involved in design, bid, contracting, and construction management and contract closeout. The engineer's estimated costs shall be supported by a verified engineering estimate and approved by the City engineer. The fee-in-lieu shall be submitted as cash, certified check, or other negotiable instrument acceptable by the City attorney.

Finding: Not applicable. Public improvements are not quired with this GDP; they will only be required with subsequent DDP.

17.50.141 – Public improvements – Warranty
All public improvements not constructed by the City, shall be maintained and under warranty provided by the property owner or developer constructing the facilities until the City accepts the improvements at the end of the warranty period. The warranty is to be used at the discretion of the City engineer or designee to correct deficiencies in materials or maintenance of constructed public infrastructure, or to address any failure of engineering design.
A. Duration of Warranty. Responsibility for maintenance of public improvements shall remain with the property owner or developer for a warranty period of two years.

B. Financial Guarantee. Approvable forms of guarantee include irrevocable standby letters of credit to the benefit of the City issued by a recognized lending institution, bond, certified checks, dedicated bank accounts or allocations of construction loans held in reserve by the lending institution for the benefit of the City. The form of guarantee shall be specified by the City engineer and, prior to execution and acceptance by the City shall be reviewed and approved by the City attorney. The guarantee shall be filed with the City engineer.
C. Amount of Warranty. The amount of the warranty shall be equal to fifteen percent of the estimated cost of construction of all public improvements (including those improvements that will become owned and maintained by the City at the end of the two-year maintenance period), and shall be supported by a verified engineering estimate and approved by the City engineer. Upon expiration of the warranty period and acceptance by the City as described below, the City shall be responsible for maintenance of those improvements.
D. Transfer of Maintenance. The City will perform an inspection of all public improvements approximately forty-five days before the two-year warranty period expires. The public improvements shall be found to be in a clean, functional condition by the City engineer before acceptance of maintenance responsibility by the City. Transfer of maintenance of public improvements shall occur when the City accepts the improvements at the end of the two-year warranty period.

Finding: Not applicable. Public improvements are not quired with this GDP; they will only be required with subsequent DDP.

CHAPTER 17.52 OFF-STREET PARKING AND LOADING

17.52.010 - Applicability.
The construction of a new structure or parking lot, or alterations to the size or use of an existing structure, parking lot or property use shall require site plan review approval and compliance with this chapter. This chapter does not apply to single-family detached residential dwellings, duplexes, townhouses, and cottage clusters.

Finding: Not Applicable. Development of the subject site relevant to this chapter will be proposed at a future Detailed Development Plan stage. The applicant has submitted enrollment projections and existing onsite parking assessments that will be used in future Detailed Development Plans to assess compliance with this chapter at the development phase. The applicant expects that, given the scale of the proposed new developments, that parking demands will be met within the existing lawful non-conforming parking areas on the subject site, without the need for additional parking. Given the site's proximity to a frequent service transit line, Climate-Friendly Equitable Communities rules apply to the site and would not require the expansion of the parking lot.

CHAPTER 17.54 SUPPLEMENTAL ZONING REGULATIONS AND EXCEPTIONS

17.54.010 - Accessory structures and uses.
Accessory structures and uses shall comply with all requirements for the principal use except where specifically modified by this title and shall comply with the following standards:
A. Signs. Signs shall be permitted as provided in Chapter 15.28.
B. Residential Accessory Structures, Not Including Accessory Dwellings Units. The section applies to all accessory structures within the R-10, R-8, R-6, R-5 and R-3.5 zoning districts and accessory

structures on properties with a residential use with less than five units within a zoning designation not listed above.
1. Accessory Structures with a Footprint Less than Two Hundred Square Feet:
a. Shall be located behind the front line of the primary structure;
b. Shall comply with the dimensional standards of the zoning designation including height, lot coverage and setbacks unless modified pursuant to subsection c herein; and
c. Side and rear setbacks may be reduced to not less than three feet for the accessory structure and its projections if the height does not exceed seventeen feet as defined in OCMC 17.04.550.
2. Accessory Structures with a Footprint from Two Hundred to Six Hundred Square Feet:
a. Shall be located behind the front line of the primary structure;
b. Shall comply with the dimensional standards of the zoning designation, including height, setbacks, and lot coverage unless modified pursuant to subsection c; and
c. Side and rear setbacks may be reduced to not less than three feet for one accessory structure and its projections if the height does not exceed seventeen feet as defined in OCMC 17.04.550.
3. Accessory Structures with a Footprint Over Six Hundred Square Feet:
a. Shall not exceed more than one accessory structure with a footprint in excess of six hundred square feet per parcel;
b. The parcel shall be in excess of twenty thousand square feet;
c. The footprint shall not exceed the footprint of the primary structure;
d. Shall not exceed eight hundred square feet;
e. Shall not exceed the height of the primary structure;
f. Shall be located behind the front line of the primary structure; and
g. Shall comply with the dimensional standards of the zoning designation including height, setbacks, and lot coverage.
4. Prohibited:
a. Cargo containers.
b. Membrane and fabric covered storage areas visible from the adjacent right-of-way.
c. Metal structures within a historic district, or on an individually designated historic property, unless otherwise authorized by OCMC Chapter 17.40.
5. An accessory structure housing a hooved animal shall be located a minimum of twenty-five feet from any property line.
6. Accessory structures constructed prior to January 1, 2017 which are located behind the front building line of the primary structure are exempt from the setback and height requirements in this chapter, except as otherwise limited through an applicable overlay district.
7. Swimming Pools. In-ground and above-ground swimming pools shall be constructed not less than three feet from the side or rear yard lines. Swimming pools shall comply with the front yard setback requirements for the principal structure. A pool shall be surrounded by a fence no less than four feet in height or a suitable alternative such as a locked or electric cover, approved by the building official.

Finding: Not applicable. No residential accessory structures are proposed or anticipated. New commercial accessory structures are to be reviewed through Site Plan & Design Review, or Type I Master Plan Amendment processes.

C. Temporary Structures in the Right-of-Way. This section applies to temporary structures associated with permitted events in the right-of-way. Temporary structures:
1. May be constructed of any building material;
2. Shall comply with all provisions of the Americans with Disabilities Act; and

3. Shall be exempt from all sections of Chapters 12.04 (except 12.04.120), 12.08, 16.12, 17.52 and 17.62.

Finding: Not applicable. No residential temporary structures in the right of way are proposed or anticipated with this application.

17.54.020 - Projections from buildings.
Residential building projections that are cantilevered so that they do not touch the ground (such as cornices, eaves, bay windows, fireplaces, overhangs, canopies, sunshades, gutters, chimneys, flues, sills or similar architectural features) may project into the required setbacks up to twenty-four inches. The projection may be limited by easement restrictions, etc.

Finding: Not applicable. No residential structures are proposed or anticipated.

17.54.030 - Setback exceptions.
A. Through lots having a frontage on two streets shall provide the required front yard on each street. The required rear yard setback shall not apply.
B. Structures within the right-of-way are exempt from setback standards.
C. Uncovered decks or porches with a height of less than thirty inches from grade are exempt from setback standards.

Finding: Not Applicable. Development of the subject site relevant to this chapter will be proposed at a future Detailed Development Plan stage.

17.54.100 Fences, Hedges, Walls, and Retaining Walls.
A. A fence, hedge, wall, retaining wall, or combination thereof may be located on real property, not within the right-of-way, subject to all of the following:
1. A fence, hedge, wall, retaining wall, or combination thereof located in front of a building may be up to 3.5-feet in total height as measured from the finished grade at any point on the fence.
2. A fence, hedge, wall, located next to, or behind the forward most building, or within more than forty feet of the right-of-way, whichever is less may be up to:
a. Six feet in total height for residential properties with less than five units as measured from the finished grade at any point on the fence; or
b. Eight feet in total height for all other uses as measured from the finished grade at any point on the fence.
3. A retaining wall or combination of a fence, hedge, wall located next to and behind the forward most building, or within more than forty feet of the right-of-way, whichever is less, may be up to (as measured from the finished grade) 8.5 feet in height from the finished grade.
4. Fences, hedges, and/or walls located within two feet above a retaining wall, as measured on a horizontal plane, shall be measured together for the purposes of determining height.
5. Property owners shall ensure compliance with the Traffic Sight Obstruction requirements in Chapter 10.32 of the Oregon City Municipal Code.
6. Retaining walls completely below the elevation of the right-of-way may be up to six feet in height.
7. Minimum fall protection required by the Building Official, such as railings, is not included in the height of a retaining wall but must comply with the fence height requirements.
B. When no other practicable alternative exists, the City Engineer may permit a fence, hedge, wall, retaining wall, or combination thereof to be located within the right-of-way subject to all of the following:

1. A Revocable Permanent Obstruction in the Right of Way permit is granted per OCMC 12.04.120;
2. Retaining walls, fences, or hedges comply with OCMC 17.54.100.A, unless determined to be impracticable by the City Engineer.
3. The abutting property owner shall ensure compliance with the Traffic Sight Obstruction requirements in Chapter 10.32 of the Oregon City Municipal Code.
C. It is unlawful for any person to erect any electric fence or any fence constructed in whole or in part of barbed wire or to use barbed wire, except as erected in connection with security installations at a minimum height of six feet, providing further that prior written approval has been granted by the City Manager.

Finding: Not Applicable. Development of the subject site relevant to this chapter will be proposed at a future Detailed Development Plan stage.

17.54.110 - Marijuana businesses.
For the purpose of zoning regulation pursuant to this section, recreational and medical marijuana facilities are considered the same by Oregon City.
A. Applicability. These standards apply to all marijuana businesses in Oregon City.
B. Restrictions on Location—Zoning.
1. Please refer to individual zone districts elsewhere in this title to determine whether marijuana businesses including production, laboratories, processing, wholesale, and retail use are permitted, prohibited or otherwise regulated;
2. Marijuana businesses are prohibited abutting any "R" residentially zoned area, except that this provision shall not apply where the subject property abuts a road that has a freeway, expressway, major arterial, minor arterial, or collector functional classification as shown on Figure 8, Multi-Modal Street System, of the Oregon City Transportation System Plan and;
3. Home Occupation. A marijuana business may not be operated as a home occupation; and
4. The sale or distribution of marijuana is prohibited for mobile vendors and at all special events and outdoor markets.
C. Restrictions on Location: Marijuana Dispensary or Retailer. A marijuana retailer shall not locate:
1. Within two hundred fifty feet of any public parks, licensed child care and day care facilities, and public transit centers.
2. Within one thousand feet of a public elementary or secondary school for which attendance is compulsory under ORS 339.020, or a private or parochial elementary or secondary school, teaching children as described in ORS 339.030(1)(a), or the property located at Clackamas County Map 3-2E-09C, Tax Lot 800.
3. Within one thousand feet of another marijuana retailer.
4. If a new protected property or use described in this section should be established within the aforementioned separation distance of an existing legally established marijuana dispensary or retailer, the existing marijuana dispensary or retailer may remain in place and the separation requirement shall not be applied.
5. The spacing distance specified in this section is a straight-line measurement from the closest points between property lines of the affected properties.
D. Standards of Operation.
1. Compliance with Other Laws. All marijuana businesses shall comply with all applicable laws and regulations, including, but not limited to, the development, land use, zoning, building and fire codes.
2. Registration and Compliance with State Law. The marijuana business's state license or authority shall be in good standing with the Oregon Health Authority or Oregon Liquor Control Commission

and the marijuana business shall comply with all applicable laws and regulations administered by the respective state agency, including, without limitation those rules that relate to labeling, packaging, testing, security, waste management, food handling, and training.
3. No portion of any marijuana business shall be conducted outside, including but not limited to outdoor storage, production, processing, wholesaling, laboratories and retail sale, except for temporary ingress and egress of vehicles, persons and materials associated with the permitted use.
4. Hours of Operation. Operating hours for a marijuana business shall be in accordance with the applicable license issued by the Oregon Liquor Control Commission or Oregon Health Authority.
5. Odors. A marijuana business shall use an air filtration and ventilation system that ensures all odors associated with the marijuana is confined to the licensed premises to the extent practicable. For the purposes of this provision, the standard for judging "objectionable odors" shall be that of an average, reasonable person with ordinary sensibilities after taking into consideration the character of the neighborhood in which the odor is made and the odor is detected.
6. Doors and windows shall remain closed, except for the minimum length of time needed to allow people to ingress or egress the building.
7. Secure Disposal. The facility shall provide for secure disposal of marijuana remnants or by-products; marijuana remnants or by-products shall not be placed within the marijuana business's exterior refuse containers.
8. Drive-Through, Walk-Up. A marijuana business may not have a walk-up window or a drive-through.
9. The facility shall maintain compliance with all applicable security requirements of the OLCC including alarm systems, video surveillance, and a restriction on public access to certain facilities or areas within facilities.

Finding: Not Applicable. No such use is proposed by this application.

17.54.115 - Mobile Food Units
A. Applicability. The following provisions apply to mobile food units not located within a building. The provisions do not apply to indoor mobile food units or mobile food units allowed pursuant to a special event permit issued by the City.

Finding: Not Applicable. No such use is proposed by this application.

17.54.120 - Home occupations.
Home occupations shall comply with all of the following:
A. No employees reporting to work on-site who are not residents unless otherwise required by state law. The business may have off-site employees or partners provided that they do not report for work at the subject residence;
B. All business conducted on-site shall be conducted within the home or accessory structure;
C. No outdoor storage of materials or commercial vehicles associated with the business shall occur on-site; and
D. Not more than one-half of the square-footage of the primary dwelling is devoted to such use.
E. No commodities shall be sold on-site.

Finding: Not Applicable. No such use is proposed by this application.

17.54.123 - Home occupations/cottage industry—Thimble Creek Concept Plan Area.

Home occupations and cottage industries within the Thimble Creek Concept Plan Area are encouraged and allowed as a means to support job creation in Oregon City and shall comply with all of the following:
A. Up to three off-site employees are allowed to work at the residence. Off-site employees may work on-site Monday through Friday seven a.m. to six p.m. Saturday nine a.m. to five p.m.;
B. All business conducted on-site shall be conducted within the home or accessory structure;
C. No outdoor storage of materials associated with the business shall occur on-site;
D. Not more than one-half of the square footage of the primary dwelling is devoted to such use;
E. One commercial vehicle associated with the business that does not require a commercial driver's license and one trailer associated with the business no more than twenty feet in length may be stored on-site outside of an accessory building. No commercial vehicles or trailers associated with the business may be stored in the right-of-way;
F. Any dedicated retail space located within the residence may be no larger than three hundred square feet. Retail hours may not exceed Monday through Friday seven a.m. to six p.m. and Saturday nine a.m. to five p.m.;
G. The following retail uses are not allowed in this district: Food, beverage, and/or marijuana sales.

Finding: Not Applicable. No such use is proposed by this application.

CHAPTER 17.62 – SITE PLAN AND DESIGN REVIEW

17.62.010 Purpose.
The purposes of site plan and design review are to: Encourage site planning in advance of construction; protect lives and property from potential adverse impacts of development; consider natural or man-made hazards which may impose limitations on development; conserve the City's natural beauty and visual character and minimize adverse impacts of development on the natural environment as much as is reasonably practicable; assure that development is supported with necessary public facilities and services; ensure that structures and other improvements are properly related to their sites and to surrounding sites and structure; and implement the City's comprehensive plan and land use regulations with respect to development standards and policies.

17.62.015 - Modifications that will better meet design review requirements.
The review body shall consider modification of certain site related development standards of this chapter specified below. These modifications may be approved as part of a Type II design review process.
A. Applicability.
This process shall apply to modifications to:
a. Landscaping in OCMC 17.62.050.A;
b. Vehicular connections to adjoining properties in OCMC 17.62.050.B.2;
c. On-site pedestrian circulation in OCMC 17.62.050.C;
d. Onsite utility location OCMC 17.62.050.G;
e. Building location in OCMC 17.62.055.D;
f. Building details in OCMC 17.62.055.I;
g. Windows in OCMC 17.62.055.J;
h. Parking lot landscaping in OCMC 17.52.060.
2. Modifications that are denied through Type II design review may be requested as a variance through the variance process pursuant to OCMC 17.60.020 or master plan adjustment pursuant to OCMC 17.65.070 as applicable.

3. Rather than a modification, applicants may choose to apply for a variance through the variance process pursuant to OCMC 17.60.020 or master plan adjustment pursuant to OCMC 17.65.070 as applicable.
B. The review body may approve requested modifications if it finds that the applicant has shown that the following approval criteria are met:
1. The modification will result in a development that better meets the applicable design guidelines; and
2. The modification meets the intent of the standard. On balance, the proposal will be consistent with the purpose of the standard for which a modification is requested.

Finding: Not Applicable. Development of the subject site relevant to this chapter will be proposed at a future Detailed Development Plan stage.

17.62.030 - When required.
Site plan and design review shall be required for all development of real property in all zones except the low and medium density residential districts, unless otherwise provided for by this title or as a condition of approval of a permit. Site plan and design review shall also apply to all conditional uses, cluster housing developments, multi-family uses, manufactured home parks, and non-residential uses in all zones. Site Plan and Design Review does not apply to activities occurring within the right-of-way except for communication facilities pursuant to OCMC 17.80.

Site plan and design review is required for a change in use between the uses in Table 17.62.030:
Table 17.62.030

Existing Use	***Proposed Use***
Residential	*Nonresidential use, including but not limited to: commercial, office, industrial, retail, or institutional*
Single-family or duplex	*3 or more dwellings*

Site plan and design review shall not alter the type and category of uses permitted in the underlying zoning districts.

Only the standards of OCMC 17.62.035 apply to duplex, triplex, quadplex, cottage cluster, townhouse, single-family detached residential unit, live/work dwelling and accessory dwelling unit Type I applications

Finding: Not Applicable. Development of the subject site relevant to this chapter will be proposed at a future Detailed Development Plan stage.

17.62.035 - Minor site plan and design review.
This section provides for a minor site plan and design review process. Minor site plan review is a Type I or Type II decision, as described in OCMC 17.62.035.A, subject to administrative proceedings described in OCMC 17.50 and may be utilized as the appropriate review process only when authorized by the Community Development Director. The purpose of this type of review is to expedite design review standards for uses and activities that require only a minimal amount of review, typical of minor modifications and/or changes to existing uses or buildings.
A. Type I Minor Site Plan and Design Review.
1. Applicability. Type I applications involve no discretion and are typically processed concurrently with a building permit application. The Type I process is not applicable for:
a. Any activity which is included with or initiates actions that require Type II—IV review.

b. Any increase in square footage of a conditional or nonconforming use (excluding nonconforming structures).
c. Any proposal in which nonconforming upgrades are required under OCMC 17.58.
d. Any proposal in which modifications are proposed under OCMC 17.62.015.
2. The following projects may be processed as a Type I application:
a. Addition of up to two hundred square feet to a commercial, institutional, or multi-family structure in which no increases are required to off-street parking. This includes a new ancillary structure, addition to an existing structure, or new interior space (excluding new drive thru). Increases of more than two hundred square feet in a twelve-month period shall be processed as Type II.
b. Addition of up to one thousand square feet to an industrial use in which no increases are required to off-street parking. This includes a new ancillary structure, addition to an existing structure, or *new interior space (excluding ancillary retail and office). Increases of more than one thousand square feet in a twelve-month period shall be processed as Type II.*
c. Temporary structures, excluding mobile vendors.
d. Removal, replacement or addition of awnings, or architectural projections to existing structures.
e. Addition, modification, or relocation of refuse enclosure.
f. Changes to amount, location, or design of bicycle parking.
g. Installation of mechanical equipment.
h. Repaving of previously approved parking lots with no change to striping.
i. Replacement of exterior building materials.
j. Addition of windows and doors, relocation of windows and doors in which transparency levels remain unchanged, or removal of windows and doors provided minimum transparency requirements are still met.
k. Addition or alteration of parapets or rooflines.
l. Modification of building entrances.
m. Addition to or alteration of a legal nonconforming single- or two-family dwelling.
n. Change to parking lot circulation or layout, excluding driveway modifications.
o. Removal or relocation of vehicle parking stalls provided total parking remains between approved minimum and maximum with no new reductions other than through the downtown parking district.
p. Adoption of shared parking agreements.
q. Changes to landscaping that do not require stormwater quality and quantity treatment under OCMC 13.12.
r. New or changes to existing pedestrian accessways, walkways or plazas.
s. Installation of or alterations to ADA accessibility site elements.
t. Modification or installation of a fence, hedge, or wall, or addition of a fence, hedge or wall.
u. Addition of or alterations to outdoor lighting.
v. Demolition of any structure or portion of a structure.
w. Tree removal.
x. Type I master plan amendments under OCMC 17.65.080.
y. Mobile food units in one location for five hours or less as identified in OCMC 17.54.115.
z. Duplex, triplex, quadplex, cottage cluster, townhouse, single-family detached residential unit, live/work dwelling, and accessory dwelling unit.
aa. Placement of a single manufactured home within an existing space or lot in a manufactured home park.
3. Submittal Requirements. A Type I application shall include:
a. A narrative describing the project.
b. Site plan drawings showing existing conditions/uses and proposed conditions/uses.

c. Architectural drawings, including building elevations and envelopes, if architectural work is proposed.
d. A completed application form.
e. Any other information determined necessary by the Community Development Director.

Finding: Not Applicable. No Type I Minor Site Plan & Design Review application is proposed. Future qualifying development plans will be subject to the requirements of this section.

B. Type II Minor Site Plan and Design Review.
1. Type II minor site plan and design review applies to the following uses and activities unless those uses and activities qualify for Type I review per OCMC 17.62.035.A:
a. Modification of an office, commercial, industrial, institutional, public or multi-family structure that does not increase the interior usable space (for example covered walkways or entryways, addition of unoccupied features such as clock tower, etc.).
b. Modification to parking lot layout and landscaping, or the addition of up to five parking spaces.
c. A maximum addition of up to one thousand square feet to a commercial, office, institutional, public, multi-family, or industrial building provided that the addition is not more than thirty-five percent of the original building square footage.
d. Mobile food units in OCMC 17.54.115.
e. Other land uses and activities may be added if the Community Development Director makes written findings that the activity/use will not increase off-site impacts and is consistent with the type and/or scale of activities/uses listed above.
2. Application. The application for the Type II minor site plan and design review shall contain the following elements:
a. The submittal requirements of OCMC 17.50.
b. A narrative explaining all aspects of the proposal in detail and addressing each of the applicable criteria listed in OCMC 17.62.
c. Site plan drawings showing existing conditions/uses and proposed conditions/uses.
d. Architectural drawings, including building elevations and envelopes, if architectural work is proposed.
e. Additional submittal material may be required by the Community Development Director on a case-by-case basis.

Finding: Not Applicable. No Type II Minor Site Plan & Design Review application is proposed at this time. Future qualifying development plans and Master Plan Amendments will be subject to the requirements of this section unless adjustments are requested through a Type III review process.

CHAPTER 17.65 MASTER PLANS AND PLANNED UNIT DEVELOPMENT

17.65.010 Purpose and intent.
It is the intent of this chapter to foster the growth of major institutions, phased residential, commercial or mixed-use development, and other large-scale development, while identifying and mitigating the impacts of such growth on surrounding properties and public infrastructure. The City recognizes the valuable housing options, services and/or employment opportunities that these developments bring to Oregon City residents. The master plan or planned unit development process is intended to facilitate an efficient and flexible review process for major developments, support innovative and creative land development, and to provide long-term assurance to plan for

and execute developments in a phased manner. To facilitate this, the master plan process is structured to allow an applicant to address larger development issues, such as adequacy of infrastructure and transportation capacity, and reserve capacity of the infrastructure and transportation system before expenditure of final design costs. The master plan or planned unit development process is further intended to promote efficiency in land development, maintenance, street systems and utility networks while providing site layouts that integrate usable and attractive open spaces, site circulation, and the general wellbeing of site users. For the purposes of this chapter planned unit developments are considered the same as master plans.

17.65.020 What is included in a master plan or planned unit development.
A. A master plan or planned unit development is a two-step process that includes a general development plan and a detailed development plan. A general development plan incorporates the entire area where development is planned for up to the next twenty years from the date of final approval, including the identification of one or more development phases. The general development plan may encompass land that is not currently under the applicant's control, but which eventually may be controlled by the applicant during the duration of the master plan. The plan shall have no effect for lands not currently controlled by the applicant. "Controlled" shall be defined as leased or owned by the applicant. A detailed development plan is the phase or phases of the general development plan that are proposed for development within two years.
B. A master plan or planned unit development identifies the current and proposed uses of the development, proposed project boundaries, and proposed public and private infrastructure needed to serve the development. If approved, the general development plan may be used to allow existing legal non-conforming uses. If conditions of approval from a previous land use decision have not been completed, they shall be modified through the general development plan or completed with new development.
C. A master plan or planned unit development identifies future development impacts, thresholds for mitigation and mitigation improvements and implementation schedules. A threshold for mitigation is the point that determines when or where a mitigation improvement will be required. Examples of "thresholds" include vehicle trips, square feet of impervious surface area, water usage measured in gallons per minute, construction of a building within a general development plan and construction of a building within a certain distance of a residential lot. Mitigation improvements are necessary when a threshold for mitigation is reached. Examples include road dedication, intersection improvement, road widening, construction of a stormwater or water quality facility, installation of vegetative buffering and wetland restoration or enhancement.

Finding: Applicable. This application qualifies as a General Development Plan, and the applicant proposes the plan to be effective through 2044, twenty years from the date of application submission. Detailed Development Plans for the various phases of development will be submitted subsequently and be subject to the standards of this chapter, as well.

This plan broadly addresses infrastructure and its uses and capacities, as well as proposed locations for future development. The applicant states that, when funding becomes available for specific development projects, multiple Detailed Development Plans will be submitted over the life of this General Development Plan.

The applicant does not anticipate that significant off-site impacts will materialize – relative to thresholds that applied to its previous General Development Plan and its effective timeline. The applicant states that, despite significant site development over the prior General Development

Plan timeframe, enrollment at Clackamas Community College has dropped more than 33% since 2019. Since 2020 and the impact of the COVID-19 pandemic, the use of remote and/or hybrid classes has increased significantly among students and staff, thus reducing campus traffic and therefore trip generation and utility impacts relative to existing capacity.

The applicant proposes the phased addition of 106,000 square feet of building area (a 16.6% increase from the existing 621,000 square feet of floor area) to the campus, and supplied the following table to demonstrate the expected impacts on traffic and public infrastructure:

Impact Category	Quantity	Mitigation Needed
Traffic	1,313 avg. weekday trips	None
Stormwater	Highly variable depending on type of development and location	None
Water	3.4 million additional gallons annually	None
Sanitary Sewer	2.0 million additional gallons annually	None

The applicant has also provided student enrollment projections to support their claims that future development covered under this General Development Plan is not likely to cause offsite impacts to public infrastructure.

17.65.030 - Applicability of the Master Plan or Planned Unit Development Regulations.
A. Required for Large Institutional Uses. If the boundaries of an institutional development exceed ten acres in size, the proposed development shall be master planned using the regulations of this chapter. No land use review other than a Type I or II Minor Site Plan and Design Review shall be issued for any institutional development in excess of ten acres in total acreage unless it is accompanied by or preceded by a master plan approval under this chapter. This requirement does not apply to modifications to existing institutional developments unless the modification results in a cumulative square footage increase of over ten thousand total building square feet in an existing institutional development over ten acres.
B. When Required as Part of Previous Land Use Review. The master plan or planned unit development regulations may be used to fulfill a condition of approval from a previous land use decision-requiring master planning for a development.
C. When identified in the Oregon City Comprehensive Plan. The master plan regulations are required for all properties identified for master planning in the land use section of the Oregon City Comprehensive Plan.
D. Voluntarily. An applicant may voluntarily submit a master plan or planned unit development as part of a land use review, including for residential projects.

Finding: Applicable. Clackamas Community College qualifies as a large institutional use, as the property spans 156.6 acres, and this General Development Plan application is intended to provide a basis for future Detailed Development Plans and Master Plan Amendments that will eventually implement the new developments that are proposed and envisioned.

The applicant notes that all Conditions of Approval related to the previous Master Plan were met within the timeframe of the previous Master Plan.

17.65.040 - Procedure.
A. Preapplication Review. Prior to filing for either general development plan or detailed development plan approval, the applicant shall file a pre-application conference pursuant to OCMC 17.50.030.

Finding: Complies as proposed. The applicant attended a Pre-Application Conference (file # PA-23-00031) that fulfilled these requirements on October 4, 2023.

B. General Development Plan. An application for a general development plan describing the long-term buildout of the site shall be reviewed through a Type III procedure. An applicant shall have an approved general development plan before any detailed development plan may be approved unless both are approved or amended concurrently. Amendments to an approved general development plan shall be reviewed under a Type III procedure pursuant to OCMC 17.65.080.

Finding: Applicable. This application qualifies as a General Development Plan, and the applicant proposes the plan to be effective through August 1, 2044, twenty years from the date of application submission. Detailed Development Plans for the various phases of development will be submitted subsequently and be subject to the standards of this chapter, as well.

C. Detailed Development Plan. An application for a detailed development plan, is processed through a Type II procedure, as long as it is in conformance with the approved general development plan. Amendments to an approved detailed development plan shall be processed pursuant to OCMC 17.65.080. Once a development has an approved detailed development plan, OCMC 17.62 Site Plan and Design Review is not required.

Finding: Applicable. This application qualifies as a General Development Plan. Detailed Development Plans for the various phases of development will be submitted subsequently and be subject to the standards of this chapter, as well. Detailed Development Plans that propose adjustments from Oregon City Municipal Code requirements will require a Type III land use process in order to be approved.

D. Concurrent Review. An applicant may concurrently apply for a general development plan and a detailed development plan. Such a concurrent application is reviewed through the highest procedure that applies to any element of the combined application.

Finding: Not Applicable. The applicant is seeking review of this General Development Plan proposal prior to subsequent Detailed Development Plans.

E. Relationship to Other Reviews. It is the express policy of the City that development review not be segmented into discrete parts in a manner that precludes a comprehensive review of the entire development and its cumulative impacts.

Finding: Complies as proposed. The applicant's submission of a General Development Plan does not segment development review in a way that precludes a comprehensive review of the entire development and its cumulative impacts. However, requirements related to the cumulative

impacts of future Detailed Development Plans and Master Plan Amendments will be addressed in sections 17.65.070 and 17.65.080 below.

F. Duration of General Development Plan. A general development plan shall involve a planning period of up to twenty years. An approved general development plan shall remain in effect until development allowed by the plan has been completed through the detailed development plan process, the plan is amended or superseded, or the plan expires under its stated expiration date either as stated in the approved master plan or planned unit development application or decision of approval.

Finding: Complies as proposed. The applicant requests that this General Development Plan be in effect for twenty years from the submission date of August 1, 2024 until it expires on August 1, 2044.

17.65.050 - General Development Plan.
A. Existing Conditions Submittal Requirements.
1. Narrative Statement. An applicant shall submit a narrative statement that describes the following:
a. Current uses of and development on the site;
b. For institutions, history or background information about the mission and operational characteristics of the institution that may be helpful in the evaluation of the general development plan, and information about current programs or services;
c. A vicinity map showing the location of the general development plan boundary relative to the larger community, along with affected major transportation routes, transit, and parking facilities. At least one copy of the vicinity map shall be eight and one-half inches by eleven inches in size, and black and white reproducible;
d. Land uses that surround the development site. This may also reference submitted maps, diagrams or photographs;
e. Previous land use approvals within the general development plan boundary and related conditions of approval, if applicable;
f. Existing utilization of the site;
g. Site description, including the following items. May also reference submitted maps, diagrams or photographs:
i. Physical characteristics;
ii. Ownership patterns;
iii. Building inventory;
iv. Vehicle/bicycle parking;
v. Landscaping/usable open space;
vi. FAR/lot coverage;
vii. Natural resources that appear on the City's adopted Goal 5 inventory;
viii. Cultural/historic resources that appear on the City's adopted Goal 5 inventory;
ix. Location of existing trees six inches in diameter or greater when measured four feet above the ground. The location of single trees shall be shown. Trees within groves may be clustered together rather than shown individually; and
x. Geologic hazards pursuant to OCMC 17.44.
h. Existing transportation analysis, including the following items. May also reference submitted maps, diagrams or photographs.

i. Existing transportation facilities, including highways, local streets and street classifications, and pedestrian and bicycle access points and ways;
ii. Transit routes, facilities and availability;
iii. Alternative modes utilization, including shuttle buses and carpool programs; and
iv. Baseline parking demand and supply study (may be appended to application or waived if not applicable).
i. Infrastructure facilities and capacity, including the following items:
i. Water;
ii. Sanitary sewer;
iii. Stormwater management; and
iv. Easements.

Finding: Complies as proposed. The applicant has submitted a narrative statement that meets these requirements.

2. Maps and Plans.
a. Existing conditions site plan. Drawn at a minimum scale of one-inch equals one hundred feet (one inch equals one hundred feet) that shows the following items. At least one copy shall be eight and one-half inches x eleven inches in size, and black and white reproducible.
i. Date, north point, and scale of drawing.
ii. Identification of the drawing as an existing conditions site plan.
iii. Proposed development boundary.
iv. All parking, circulation, loading and service areas, including locations of all carpool, vanpool and bicycle parking spaces as required in Chapter 52 of this title.
v. Contour lines at two-foot contour intervals for grades zero to ten percent, and five-foot intervals for grades over ten percent.
b. A site plan or plans, to scale, for the general development plan site and surrounding properties containing the required information identified in OCMC 17.62.040.b, Vicinity map. Depicting the location of the site sufficient to define its location, including identification of nearest cross streets. At least one copy of the vicinity map shall be eight and one-half inches by eleven inches in size, and black and white reproducible.
c. Aerial photo. Depicting the subject site and property within two hundred fifty feet of the proposed development boundaries. At least one copy of the aerial photo shall be eight and one half inches by eleven in size, and black and white reproducible.

Finding: Complies as proposed. The applicant has submitted a narrative statement that meets these requirements.

B. Proposed Development Submittal Requirements.
1. Narrative statement. An applicant shall submit a narrative statement that describes the following:
a. The proposed duration of the general development plan.
b. The proposed development boundary. May also reference submitted maps or diagrams.
c. A description, approximate location, and timing of each proposed phase of development, and a statement specifying the phase or phases for which approval is sought under the current application. May also reference submitted maps or diagrams.
d. An explanation of how the proposed development is consistent with the purposes of Section 17.65, the applicable zone district or districts, and any applicable overlay district.

e. A statement describing the impacts of the proposed development on inventoried Goal 5 natural, historic or cultural resources within the development boundary or within two hundred fifty feet of the proposed development boundary.
f. An analysis of the impacts of the proposed development on the surrounding community and neighborhood, including:
i. Transportation impacts as prescribed in subsection g below;
ii. Internal parking and circulation impacts and connectivity to sites adjacent to the development boundary and public right-of-ways within two hundred fifty feet of the development boundary;
iii. Public facilities impacts (sanitary sewer, water and stormwater management) both within the development boundary and on City-wide systems; including a phasing plan for all onsite and off-site public improvements, including but not limited to transportation, schools, parks, open space, trails, sewer, water and stormwater, with an analysis off the capacity and improvements required as a result of fully implementing the plan. This analysis shall reference any adopted parks and recreation, public facilities plans and concept plans and identify specific funding mechanisms to address the adequacy of public facilities.
systems; including a phasing plan for all onsite and off-site public
iv. Neighborhood livability impacts;
v. Natural, cultural and historical resource impacts within the development boundary and within two hundred fifty feet of the development boundary.
g. A summary statement describing the anticipated transportation impacts of the proposed development. This summary shall include a general description of the impact of the entire development on the local street and road network, and shall specify the maximum projected average daily trips, projected AM and PM peak hour traffic and the maximum parking demand associated with build-out each phase of the master plan or planned unit development.
h. In addition to the summary statement of anticipated transportation impacts, an applicant shall provide a traffic impact study as specified by City requirements. The transportation impact study shall either:
i. Address the impacts of the development of the site consistent with all phases of the general development plan; or
ii. Address the impacts of specific phases if the City engineer determines that the traffic impacts of the full development can be adequately evaluated without specifically addressing subsequent phases.
i. If an applicant chooses to pursue option h.1., the applicant may choose among three options for implementing required transportation capacity and safety improvements:
i. The general development plan may include a phasing plan for the proposed interior circulation system and for all on-site and off-site transportation capacity and safety improvements required on the existing street system as a result of fully implementing the plan. If this option is selected, the transportation phasing plan shall be binding on the applicant.
ii. The applicant may choose to immediately implement all required transportation safety and capacity improvements associated with the fully executed general development plan. If this option is selected, no further transportation improvements will be required from the applicant. However, if a general development plan is later amended in a manner so as to cause the projected average daily trips, the projected a.m. or p.m. peak hour trips, or the peak parking demand of the development to increase over original projections, an additional transportation impact report shall be required to be submitted during the detailed development plan review process for all future phases of the development project and additional improvements may be required.
iii. The applicant may defer implementation of any and all capacity and safety improvements required for any phase until that phase of the development reaches the detailed development plan

stage. If this option is selected, the applicant shall submit a table linking required transportation improvements to vehicle trip thresholds for each development phase.
j. For residential and mixed-use projects:
i. Proposed minimum lot area, width, frontage and yard requirements.
ii. Proposed project density in number of units per acre.
iii. Proposed residential types and number of each.

Finding: Complies as proposed. The applicant has submitted a narrative statement that meets these requirements.

2. Maps and Diagrams. The applicant shall submit, in the form of scaled maps or diagrams, as appropriate, the following information:
a. A preliminary site circulation plan showing the approximate location of proposed vehicular, bicycle, and pedestrian access points and circulation patterns, parking and loading areas or, in the alternative, proposed criteria for the location of such facilities to be determined during detailed development plan review.
b. The approximate location of all proposed streets, alleys, other public ways, sidewalks, bicycle and pedestrian access ways and other bicycle and pedestrian ways, transit streets and facilities, neighborhood activity centers and easements on and within two hundred fifty feet of the site. The map shall identify existing subdivisions and development and un-subdivided or unpartitioned land ownerships adjacent to the proposed development site and show how existing streets, alleys, sidewalks, bike routes, pedestrian/bicycle access ways and utilities within two hundred fifty feet may be extended to and/or through the proposed development.
c. The approximate location of all public facilities to serve the proposed development, including water, sanitary sewer, stormwater management facilities.
d. The approximate location, footprint and building square footage of buildings within of each phase of proposed development, and/or proposed lot patterns for each phase of future development.
e. The approximate locations of proposed parks, playgrounds or other outdoor play areas; outdoor common areas and usable open spaces; and natural, historic and cultural resource areas or features proposed for preservation. This information shall include identification of areas proposed to be dedicated or otherwise preserved for public use and those open areas to be maintained and controlled by the owners of the property and their successors in interest for private use.

Finding: Complies as proposed. The applicant has submitted a narrative statement that meets these requirements.

C. Approval Criteria for a General Development Plan. The Planning Commission may approve an application for general development plan only upon finding that the following approval criteria are met.
1. The proposed General Development Plan is consistent with the purposes of OCMC 17.65.

Finding: Complies as proposed. While the scope of this General Development Plan does not include a great deal of specificity in terms of development forms, it does appropriately define the anticipated growth and changes to be made to the campus over the coming twenty-year period and has taken advantage of the flexibility permitted within Oregon City Municipal Code to leave the specifics of phased developments to future Detailed Development Plans and Master Plan Amendments. The applicant has broadly addressed the anticipated impacts to public infrastructure with supported evidence from enrollment figures and infrastructure analyses.

2. Development shall demonstrate compliance with OCMC 12.04 16.12, 17.62, if applicable, and 16.08, if applicable.

Finding: Complies with condition. Future DDP shall demonstrate compliance with Oregon City Municipal Code 12.04 16.12, 17.62. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

3. Public services for transportation, water supply, police, fire, sanitary waste disposal, storm-water disposal, and any other needed public services and facilities including schools and parks for proposed residential uses, are capable of serving the proposed development, or will be made capable by the time each phase of the development is completed.

Finding: Complies as proposed. The applicant has provided information to confirm that there is sufficient services for transportation, water supply, police, fire, sanitary waste disposal, storm-water disposal. Subsequent DDP will be evaluated with each DDP application.

4. The proposed General Development Plan protects any inventoried Goal 5 natural, historic or cultural resources within the proposed development boundary consistent with the provisions of applicable overlay districts.

Finding: Complies with Condition. The applicant has identified the areas of campus that are impacted by the Natural Resource Overlay District (NROD) and stated that no development is proposed within the NROD buffer areas. While no main campus building additions are proposed in this area, the applicant has proposed improvements to the pedestrian amenities along Douglas Loop Road, and has identified the Environmental Learning Center as an area of potential for new accessory buildings. Therefore, any future development within the mapped NROD buffer areas located on campus, shall meet the requirements of OCMC 17.49, including the appropriate Type I or Type II approval processes. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

5. The proposed General Development Plan, including development standards and impact mitigation thresholds and improvements, adequately mitigates identified impacts from each phase of development. For needed housing, as defined in ORS 197.303(1), the development standards and mitigation thresholds shall contain clear and objective standards.

Finding: Complies with Condition. While the applicant explains that, due to reduced enrollment and enrollment projections, as well as reduced campus-related trip generation, no offsite impacts are anticipated relative to what was accounted for in the current build-out of the campus, future Type III Detailed Development Plans and Type I Master Plan Amendments for structures in excess of 1,500 square feet shall include reassessments of offsite impacts, including cumulative data for all new structures added within five years prior to submission, including a Transportation Impact Analysis with these application submissions. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

6. The proposed general development plan is consistent with the Oregon City Comprehensive Plan.

Finding: Complies as proposed. The applicant cited the following Comprehensive Plan Policies in their Code Response Narrative:

• ***Chapter 2, Policy 3.1***
"Promote efficient use of land and public infrastructure and plan for appropriate infill development, redevelopment, and new development."

The applicant notes that the plan proposes additional institutional infill to use the existing property and public infrastructure more intensively, within the existing buildout of roads, utilities, and infrastructure.

• ***Chapter 2, Policy 4.3***
"Utilize urban design principles that create comfortable and attractive public spaces that are reflective of Oregon City's community vision."

The applicant notes that this General Development Plan provides the forum in which comfortable and attractive public places are created through subsequent Detailed Development Plans that meet the requirements of the Institutional Zone.

• ***Chapter 3, Policy 1.5***
"Support opportunities for safe, affordable, and accessible transit service, including regional efforts to expand public transportation networks.

The applicant states that the proposed plan to expand campus facilities by approximately 16% over the next 20 years will support ridership on the numerous transit lines that serve the campus and community.

• ***Chapter 3, Policy 4.2***
"Continue to implement green, sustainable, and low impact approaches to stormwater management."

The applicant is proposing a General Development Plan that envisions little additional impact to public infrastructure beyond the existing buildout. They also commit to "managing its stormwater using efficient and consolidated approached that are green and sustainable."

• ***Chapter 4, Policy 1.2***
"Provide equitable distribution of parks and trails across the city."

The applicant proposes improvements to the Douglas Loop Road, which is part of a public trail system that connects the southeastern portion of the City. While the specifics of the improvements they propose are not enumerated in the GDP, they will be reflected in a Detailed Development Plan that will be made possible as a result of the approval of this General Development Plan.

Planning Staff find that these aspects demonstrate compatibility with the goals and policies of the Oregon City 2040 Comprehensive Plan.

7. The proposed general development plan is consistent with the underlying zoning district(s) and any applicable overlay zone or concept plans.

Finding: Complies as proposed. All proposed development is consistent with public educational and training facility uses permitted in the Institutional zone.

8. For projects with a residential use component, the proposed general development plan includes common open space for the recreational needs of the development's residents.
a. Required open space shall be located either on-site or off-site within one-quarter mile of the development.

Finding: Complies as proposed. The Clackamas Community College campus has more than enough open space onsite to maintain compliance with this section in the course of the proposed development.

b. Minimum required open space shall be 100 square feet per residential unit in the development.

Finding: Not Applicable. No residential development is located onsite or proposed with this General Development Plan.

c. The open space area may be in private ownership or proposed for public dedication, at the City's discretion whether to accept.
d. The open space shall be developed with a unified design to provide for a mix of passive and active uses. Passive uses include, but are not limited to sitting benches, picnicking, reading, bird watching and natural areas. Active uses include, but are not limited to playgrounds, sports fields and courts, running and walking areas.
e. Land area to be used for the open space area that is required in this section shall not include required setback areas, required landscaping, streets, rights-of-way, driveways, or parking spaces.
f. Unless dedicated to the public, the applicant shall also provide an irrevocable legal mechanism for the maintenance of the open space and any related landscaping and facilities. The applicant shall submit, for City review and approval, all proposed deed restrictions or other legal instruments used to reserve open space and maintenance of open space and any related landscaping and facilities.

Finding: Complies as proposed. The Clackamas Community College campus has more than enough open space onsite to maintain compliance with this section in the course of the proposed development.

9. For projects with a residential use component, the proposed general development plan includes a mix of residential uses such that no single residential use exceeds seventy-five percent of the total proposed units. The mix of residential uses shall provide variety of dwelling types and sizes that are integrated throughout the site, rather than isolated from one another, with smooth transitions between residential types including appropriate setbacks, landscaping or screening as necessary, while maintaining street and pedestrian connectivity between all residential uses. Tenancy (i.e. ownership versus rental) shall not be a consideration in determination of the mix of residential use. For the purposes of this section, residential uses include single-family detached, duplex, triplex, quadplex, townhouse, cottage cluster, and multi-family.

Finding: Not Applicable. No residential use is located onsite, and no residential development is proposed with this General Development Plan.

17.65.060 - Detailed development plan.

A. Submittal Requirements.

1. A transportation impact study documenting the on- and off-site transportation impacts, as specified in OCMC 17.65.050.B.1.h.i. If such an analysis was submitted as part of the general development plan process, the scope of the report may be limited to any changes which have occurred during the interim and any information listed below which was not a part of the initial study.

The on-site portion of the analysis shall include the location, dimensions and names of all proposed streets, alleys, other public ways, sidewalks, bike routes and bikeways, pedestrian/bicycle access ways and other pedestrian and bicycle ways, transit streets and facilities, neighborhood activity centers, and easements on and within two hundred fifty feet of the boundaries of the site. The map shall identify existing subdivisions and development and un-subdivided or unpartitioned land ownerships adjacent to the proposed development site and show how existing streets, alleys, sidewalks, bike routes, pedestrian/bicycle access ways and utilities within two hundred fifty feet may be extended to and/or through the proposed development.

2. The location within the development and in the adjoining streets of existing and proposed sewers, water mains, culverts, drain pipes, underground electric, cable television and telephone distribution lines, gas lines, and the location of existing aerial electric, telephone and television cable lines, if any, to be relocated within the development.

3. For portions of the project that would otherwise be subject to site plan and design review, a site plan or plans, to scale, containing the required information identified in OCMC 17.62.040.

4. For residential portions of the project not otherwise subject to site plan and design review, a site plan or plans, to scale, showing the proposed land uses and densities, building locations, lot patterns, circulation patterns, and open space locations and uses.

5. Any other information the Community Development Director deems necessary to show that the proposed development will comply with all of the applicable Chapter 17 requirements.

B. Approval Criteria. The Community Development Director shall approve an application for detailed development plan approval only upon findings that:

1. All development standards and impact mitigation meet the requirements of the approved general development plan, including conditions of approval.

2. Any other applicable zoning regulations that are not addressed in the general development plan are met, unless an adjustment to those regulations has been applied for and is approved. The approval standards applicable to adjustments required as part of a master plan or planned unit development are contained in OCMC 17.65.070.

3. The detailed development plan conforms with the base zone standards, applicable residential design standards, and applicable standards contained in Chapters 17.62, 17.52, 16.12, and 16.08 unless adjusted as provided in OCMC 17.65.070

Finding: Complies with Condition. While this land use decision covers a General Development Plan rather than Detailed Development Plans, this General Development Plan sets the stage on which future Detailed Development Plans can be reviewed.

To that end, any future Detailed Development Plans that request adjustments from development standards will be required to undergo Master Plan reviews at the Type III level and meet the submission requirements and approval criteria of this chapter. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

17.65.070 - Adjustments to development standards.

A. Purpose. In order to implement the purpose of the City's master plan or planned unit development process, which is to foster the growth of major institutions, major residential, commercial or mixed-use development, and other large-scale development, while identifying and mitigating their impacts on surrounding properties and public infrastructure, an applicant may request one or more adjustments to the applicable development regulations as part of the master planning or planned unit development process, and are not required to go through the variance process pursuant to OCMC Chapter 17.60.

B. Procedure. Requests for adjustments shall be processed concurrently with a general development plan. An adjustment request at the detailed development plan review shall cause the detailed development plan to be reviewed as a Type III application.

C. Regulations That May be Adjusted. Adjustments may be allowed for the following items:

1. Dimensional standards of the underlying zone of up to twenty percent, except the perimeter of the development shall meet the underlying zone's setbacks when adjacent to residentially zoned property.

2. Site plan and design standards.

3. Residential design standards.

4. Increase in allowed maximum residential density of up to ten percent.

5. Standards for land division approval.

6. Additional uses allowed with residential projects, or residential component of projects:

a. Notwithstanding the use provisions of the underlying zones, neighborhood commercial uses as defined in Chapter 17.24.020, including restaurants and eating and drinking establishments without a drive-through, retail trade, and services, are permitted on up to ten percent of the net developable area. The neighborhood commercial uses shall be planned and constructed so as to support and be compatible with the entire development and shall not alter the character of the surrounding area so as to substantially preclude, impair or limit the use of surrounding properties for the primary uses listed in the underlying district.

b. Public or private parks and playgrounds, community buildings and/or outdoor recreational facilities, such as swimming pools and tennis courts.

c. Indoor recreational facilities, such as racquetball or tennis courts, fitness centers or swimming pools.

d. Common public and private open space including trails.

e. Primary or accessory uses that are not identified as a permitted or conditional use in the underlying zone but which are defined in the code.

D. Regulations That May Not be Adjusted. Adjustments are prohibited for the following items:

1. To allow a primary or accessory use that is not identified as a permitted, or conditional use in the underlying zone, with the exception of the additional uses permitted under OCMC 17.65.070.C.6 above;

2. To any regulation that contains the word "prohibited";

3. As an exception to a threshold review, such as a Type III review process; and

4. Minimum density for residential sites may not be reduced.

E. Approval Criteria. A request for an adjustment to one or more applicable development regulations under this section shall be approved if the review body finds that the applicant has shown the following criteria to be met.
1. Granting the adjustment will equally or better meet the purpose of the regulation to be modified;
2. If more than one adjustment is being requested, the cumulative effect of the adjustments results in a project that is still consistent with the overall purpose of the zone;

Finding: Complies with Condition. While this land use decision covers a General Development Plan rather than Detailed Development Plans, this General Development Plan sets the stage on which future Detailed Development Plans can be reviewed. No adjustments are requested by the applicant at this General Development Plan stage.

The applicant, "anticipates staff will make similar interpretations of building design standards under this section of the code in future detailed development plan reviews as Staff made in DP-16-04, CP-18-01, DP-18-01, and GLUA-19-00028/MAS-19-00007."

However, Oregon City Municipal Code has changed since these previous land use decisions were rendered. The Oregon City Comprehensive Plan, Goals, and Policies have changed since the previous decisions were rendered. Previous Master Plans have expired and their allowances and interpretations may cover existing development, but cannot be automatically carried forward to future development.

Staff cannot guarantee that the codes that were in effect and that applied to past plan and development approvals will apply, or apply the same way, to future development. The applicant shall request any and all necessary adjustments from the standards of the Oregon City Municipal Code in effect as of August 1, 2024. In so doing, they must demonstrate compliance with the approval criteria of this section, and propose mitigation measures that meet the approval criteria of this section with their submittals.

Any future Detailed Development Plans that request adjustments from development standards in effect at the time of submittal will be required to undergo Master Plan reviews at the Type III level and meet the submission requirements, review procedures, and approval criteria of this chapter. Detailed Development Plans that do not request adjustments may be reviewed through a Type II procedure as applicable according to this chapter. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

3. City-designated Goal 5 resources are protected to the extent otherwise required by Title 17;

Finding: Complies with Condition. While the subject site contains areas within the Natural Resource Overlay District, specific development within the district areas onsite is not proposed by this Master Plan application. All future Detailed Development Plans and Master Plan Amendments involving ground disturbance within the NROD buffer shall be subject to the review and approval criteria of this chapter. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

4. Any impacts resulting from the adjustment are mitigated such that the development does not create significant adverse impacts on adjacent properties;

Finding: Complies with Condition. See findings in OCMC 17.65.060 above. Future Type I, Type II, and Type III Detailed Development Plan reviews under this General Development Plan will be required to provide a Traffic Impact Study or Traffic Impact Letter as determined by the City Engineer and impact analyses on public utilities and other offsite impacts. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

5. If an environmental zone, the proposal has as few significant detrimental environmental impacts on the resource and resource values as is practicable; and

Finding: Complies with Condition. See findings in OCMC 17.49.

6. The proposed adjustment is consistent with the Oregon City Comprehensive Plan and a concept plan if applicable.

Finding: Complies with Condition. See findings in OCMC 17.65.060 above.

17.65.80 - Amendments to approved plans.
A. When Required. An amendment to an approved general development plan or detailed development plan is required for any use or development that is not in conformance with the applicable plan, as provided below. The approval criteria contained in OCMC 17.65.050 will apply to general development plan amendments, the approval criteria contained in OCMC 17.65.060 will apply to detailed development plan amendments. The thresholds and procedures for amendments are stated below.

Finding: Applicable. No Amendments to approved plans are proposed with this General Development Plan application. This GDP provides the basis for future amendments.

B. Type III Procedure. Unless the approved general development plan or detailed development plan specifically provides differently, amendments to either plan that require a Type III procedure are:
1. A proposed expansion of the approved boundary;
2. A proposed reduction in the approved boundary that affects a condition of approval, or takes the site out of conformance, or further out of conformance, with a development standard;
3. Proposals that increase the amount, frequency, or scale of a use over ten percent of what was approved (examples include the number of students, patients or members; the number of helicopter flights; the number or size of special events; transportation impacts);
4. New uses not covered in the plan that will increase vehicle trips to the site greater than ten percent of the original amount approved;
5. Increases or decreases in overall floor area of development on the site or number of residential units of over ten percent;
6. A increase/decrease greater than ten percent in the amount of approved or required parking; and
7. Proposed uses or development which were reviewed, but were denied because they were found not to be in conformance with an approved plan.

Finding: Complies with Condition. No Amendments to approved plans are proposed with this General Development Plan application. This GDP provides the basis for future amendments. If the applicant proposes amendments to their Master Plans under the categories above, those amendments will be subject to a Type III Master Plan Amendment Procedure. **Staff has**

determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.

C. Type II Procedure. Unless an approved plan specifically provides otherwise, amendments to a general development plan or detailed development plan not specifically stated in subsection B or D are processed through a Type II procedure.

Finding: Complies with Condition. No Amendments to approved plans are proposed with this General Development Plan application. This GDP provides the basis for future amendments. If the applicant proposes amendments to their Master Plans not contained in the Type I or Type III Procedure sections of this chapter, those amendments shall be subject to a Type II Master Plan Amendment Procedure. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

D. Type I Procedure. Unless an approved plan specifically provides otherwise, the following amendments to a general development plan or detailed development plan shall be processed through a Type I procedure:
1. Accessory uses and structures that meet applicable development regulations;
2. Reconfiguration of approved parking or landscape designs that do not alter the points of ingress or egress, and do not change the number of parking spaces required, so long as the reconfiguration meets applicable development regulations; and
3. Structures for approved uses that do not exceed one thousand five hundred square feet in size and that meet applicable development regulations

Finding: Complies with Condition. The applicant is requesting that future accessory structures up to 3,000 square feet in floor area be subject to a Type I Master Plan Amendment process under the following conditions:

1. Qualifying structures are not used for habitation, or as classrooms, offices, or student gathering spaces.
2. Qualifying structures include greenhouses, storage buildings, barns, sheds, and open-sided shelters utilitarian in nature and unlikely to create offsite impacts.
3. The structures meet relevant development standards in OCMC 17.39.
4. The structures do not require adjustments, or trigger Detailed Development Plans, or other Type II reviews.

This section permits structures 1,500 square feet in size to be reviewed at this Type I level. Staff finds the request to include 3,000 square foot structures in Type I Master Plan Amendment review procedures to be reasonable under the following conditions:

1. All new accessory structures (e.g., greenhouses, storage buildings, barns, sheds, open-sided shelters, and not structures used for habitation, as classrooms, offices, or student gathering spaces) shall comply with the design standards of the base zone, as well as OCMC 17.62.050, 055, 065, and 085 as applicable, unless included in a prior Type III Detailed Development plan where adjustments were requested and approved by the City.
2. For structures greater than 1,500 square feet in floor area up to 3,000 square feet, a Transportation Impact Study or Transportation Impact Letter as determined by the City Engineer shall be included with the Type I Master Plan Amendment, as well as impact

analyses on public utilities, to be reviewed by Public Works and City Consultants to determine if the structures in question do not result in offsite impacts and thus require mitigation to be reviewed through a higher-level procedure.

3. For structures greater than 1,500 square feet in floor area up to 3,000 square feet, the applicant shall submit with their project narrative a cumulative impact assessment showing all accessory structures (regardless of size) and their associated uses that have been added to the site through amendments to this Master Plan, for the previous five years (or the General Development Plan approval date, whichever is later), so that City Staff can assess the cumulative impact of the added structures and determine if mitigation is required through a higher-level procedure.
4. Any structures that are determined by Staff to create offsite impacts shall be reviewed through a Type II or Type III Master Plan Amendment or Type II or Type III Detailed Development Plan.

Staff has determined that, while accessory structures and uses may indeed be utilitarian in nature and may be unlikely to create offsite impacts, it is prudent to assess structures larger than the 1,500 square foot standard for offsite impacts, both individually and cumulatively, through a Type I procedure, rather than presume that no such impacts in any case or any structure under the 20-year timeline for this Master Plan might apply. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

17.65.090 - Regulations that apply.
An applicant is entitled to rely on land use regulations in effect on the date its general development plan application was initially submitted, pursuant to ORS 227.178(3), as that statute may be amended from time to time. After a general development plan is approved, and so long as that general development plan is in effect, an applicant is entitled to rely on the land use regulations in effect on the date its general development plan application was initially submitted, as provided above, when seeking approval of detailed development plans that implement an approved general development plan. At its option, an applicant may request that a detailed development plan be subject to the land use regulations in effect on the date its detailed development plan is initially submitted.

Finding: Applicable. The applicant has requested that the regulations that were in effect at the time that this General Development Plan (GLUA-24-00020 / MAS-24-00001) application was submitted, i.e., **August 1, 2024**, are the regulations that apply during the life of the General Development Plan, which expires on August 1, 2044.

CONCLUSION AND DECISION:

Based on the analysis and findings as described above, Staff conclude that the proposed development located at 19600 Molalla Ave, Oregon City, Oregon 97045, identified as Clackamas County Map 3-2E-09C -00800 can meet the requirements as described in the Oregon City Municipal Code by complying with the Conditions of Approval provided in this report. Therefore, the Community Development Director recommends approval with conditions, based upon the findings and exhibits contained in this staff report.

EXHIBITS:

1. Vicinity Map (On File)

2. Applicant's Narrative and Plans (On File)

3. Public Comments (On File)

4. Traffic Analysis Letter (On File)

5. Enrollment Projections (On File)

OREGON CITY
Community Development – Planning
698 Warner Parrott Road | Oregon City OR 97045
Ph (503) 722-3789 | Fax (503) 722-3880

LAND USE APPLICATION FORM

Type I (OCMC 17.50.030.A)
- ☐ Compatibility Review
  - ☐ WRG
  - ☐ Comm. Fac
- ☐ Lot Line Adjustment
- ☐ Non-Conforming Use Review
- ☐ Natural Resource (NROD)
- ☐ Verification
- ☐ Minor Site Plan & Design Review
- ☐ Extension of Approval
- ☐ Historic Review – Remodel
- ☐ Detailed Dev. Plan (DDP)

Type II (OCMC 17.50.030.B)
- ☐ Master Plan / PUD / GDP or Amendment
- ☐ Detailed Development Plan (DDP)
- ☐ Floodplain Review
- ☐ Geologic Hazard Overlay
- ☐ Minor Partition (<4 lots)
- ☐ Minor Site Plan & Design Review
- ☐ Non-Conforming Use Review
- ☐ Site Plan and Design Review / DDP
- ☐ Subdivision (4+ lots)
- ☐ Minor Variance
- ☐ Natural Resource (NROD) Review
- ☐ Public Improvement Modification
- ☐ Willamette Greenway

Type III / IV (OCMC 17.50.030.C & D.)
- ☐ Annexation
- ☐ Code Interpretation / Similar Use
- ☑ Master Plan / PUD / GDP Amendment
- ☐ Conditional Use
- ☐ Comprehensive Plan / Legislative Amendment (Code /Map)
- ☐ Detailed Development Plan DDP
- ☐ Historic Review
- ☐ Municipal Code Amendment
- ☐ Parking Adjustment
- ☐ Variance ☐ Sign Variance
- ☐ Natural Resource (NROD) Review
- ☐ Zone Change (Text/Map)
- ☐ Willamette Greenway

ELD Process (OCMC 17.50.030.E)
- ☐ Expedited Land Division

Legislative Action (OCMC 17.50.170)
- ☐ Legislative

File Number(s):	**Application Date:**
Project Name: CCC General Development Plan	
Proposed Land Use or Activity: CCC master plan	**# of Lots Proposed (If Applicable):**
Physical Address(es) of Site: 19600 S. Molalla Avenue	
Clackamas County Map and Tax Lot Number(s): 3-2E-09C-00800 and 3-2E-09A-01400	

Applicant(s)

Applicant(s) Signature: P. Robert Cochran Digitally signed by P. Robert Cochran Date: 2024.07.24 11:39:10 -07'00'		
Applicant(s) Name Printed: Bob Cochran, Dean of Campus Services		**Date:**
Mailing Address: 19600 S. Molalla Ave., Oregon City, OR 97045		
Phone: 503-594-6790	**Fax:**	**Email:** bobc@clackamas.edu

Property Owner(s) – See reverse for more than two Owners

Property Owner #1 Clackamas Community College		
Property Owner#1 Signature		
Property Owner#1 Name Printed: Clackamas Community College		**Date:**
Mailing Address: 19600 S. Molalla Ave., Oregon City, OR 97045		
Ownership Address: 19600 S. Molalla Ave., Oregon City, OR 97045		
Phone: 503-594-6790	**Fax:**	**Email:** bobc@clackamas.edu

Property Owner #2		
Property Owner#2 Signature		
Property Owner#2 Name Printed:		**Date:**
Mailing Address:		
Ownership Address:		
Phone:	**Fax:**	**Email:**

Representative(s)

Representative(s) Signature		
Representative(s) Name Printed: Ben Schonberger, Winterbrook Planning		**Date:**
Mailing Address: 610 SW Alder St., #810		
Phone: 503-827-4422	**Fax:**	**Email:** ben@winterbrookplanning.com

OREGON CITY

Community Development – Planning

698 Warner Parrott Road | Oregon City OR 97045
Ph (503) 722-3789 | Fax (503) 722-3880

Multiple Property Owner(s) - Additional Signatures Required

Property Owner #3		
Property Owner#3 Signature		
Property Owner#3 Name Printed:		Date:
Mailing Address:		
Ownership Address:		
Phone:	Fax:	Email:

Property Owner #4		
Property Owner#4 Signature		
Property Owner#4 Name Printed:		Date:
Mailing Address:		
Ownership Address:		
Phone:	Fax:	Email:

Property Owner #5		
Property Owner#5 Signature		
Property Owner#5 Name Printed:		Date:
Mailing Address:		
Ownership Address:		
Phone:	Fax:	Email:

Property Owner #6		
Property Owner#6 Signature		
Property Owner#6 Name Printed:		Date:
Mailing Address:		
Ownership Address:		
Phone:	Fax:	Email:

Property Owner #7		
Property Owner#7 Signature		
Property Owner#7 Name Printed:		Date:
Mailing Address:		
Ownership Address:		
Phone:	Fax:	Email:

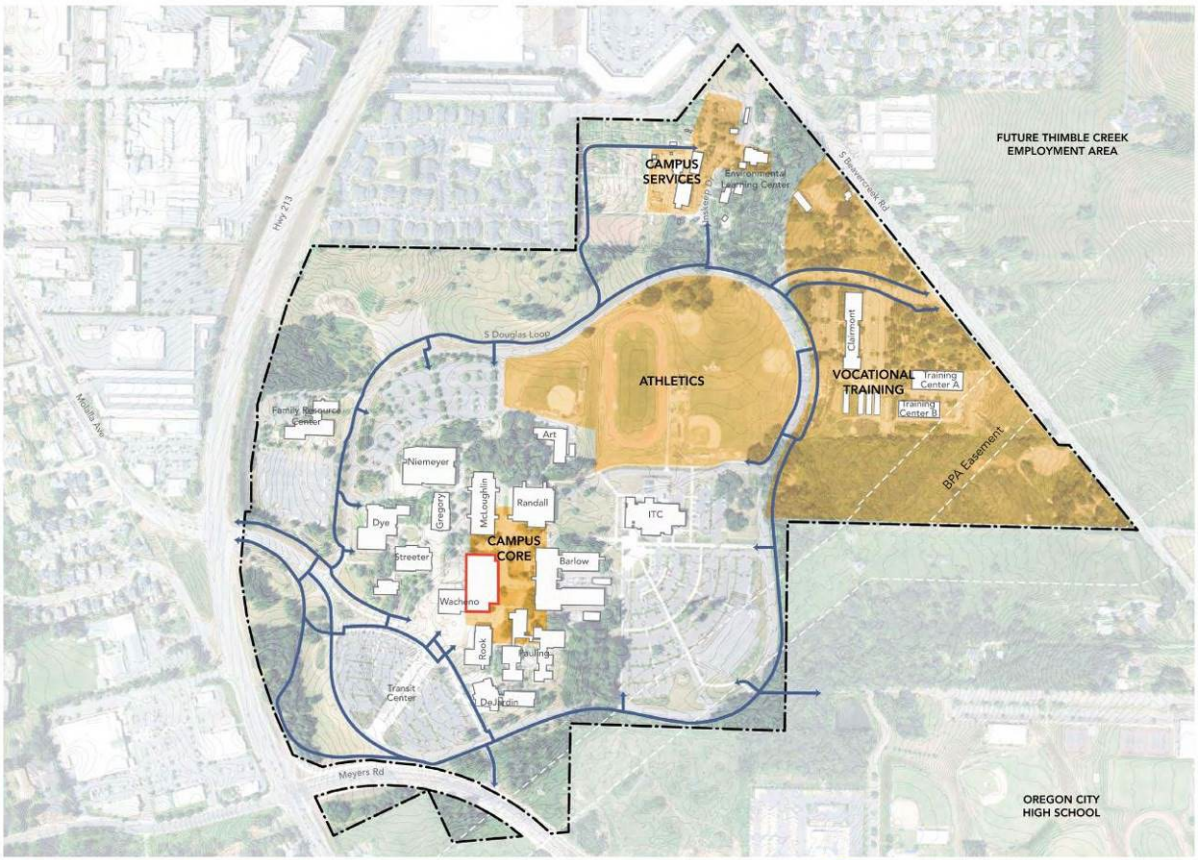
Property Owner #8		
Property Owner#8 Signature		
Property Owner#8 Name Printed:		Date:
Mailing Address:		
Ownership Address:		
Phone:	Fax:	Email:

Property Owner #9		
Property Owner#9 Signature		
Property Owner#9 Name Printed:		Date:
Mailing Address:		
Ownership Address:		
Phone:	Fax:	Email:

Property Owner #10		
Property Owner#10 Signature		
Property Owner#10 Name Printed:		Date:
Mailing Address:		
Ownership Address:		
Phone:	Fax:	Email:

Clackamas Community College Master Plan

Application for Type III General Development Plan



July 2024

Clackamas Community College Master Plan

Type III General Development Plan

APPLICANT: **Clackamas Community College**
19600 S. Molalla Avenue
Oregon City, Oregon 97045
Contact: Bob Cochran, Dean of Campus Services
Phone: (503) 594-6790

REPRESENTED BY:

Winterbrook Planning (Land Use, Regulations) Contact: Ben Schonberger, AICP 610 SW Alder Street, Suite 810 Portland, OR 97205 Phone: (503) 827-4422	***Walker Macy*** (Site Planning) Contact: Saumya Kini 419 SW 11th Avenue, Suite 200 Portland, OR 97204 Phone: (503) 228-3122
Lancaster Mobley (Transportation) Contact: Daniel Stumpf, P.E. 1130 SW Morrison Street, #318 Portland, OR 97205 Phone: (503) 248-0313	***Humber Design Group*** (Utilities, Stormwater) Contact: Dave Humber, P.E. 110 SE Main Street, Suite 200 Portland, OR 97214 Phone: (503) 946-6690

APPLICATION: Type III General Development Plan

LOCATION: 19600 S. Molalla Avenue

TAX LOTS: 3-2E-09C-00800 and 3-2E-09A-01400

ZONING: Institutional, Campus Industrial.
Natural Resource Overlay District.

DATE: July 25, 2024

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SECTION 1: Master Plan Summary

1. Summary of CCC Master Plan

This Clackamas Community College Master Plan provides direction for future college development. This document addresses the physical development of the Oregon City campus and addresses the needs of a growing educational institution. As facilities age and programmatic needs change, CCC requires modernizing existing space suitable for classrooms, study areas, offices, and laboratories. There is also a need for improving outdoor spaces and pedestrian connections on campus. The master plan forecasts locations of building adaption, modernization, and construction. It also establishes a process for gaining necessary permits and approvals.

Funding is not yet fixed for any of the building or infrastructure projects outlined in this master plan. Money to fund future development will come from a bond measure that must be put forth by the college and approved by Clackamas County voters. This includes a bond measure on the ballot in November 2024. For this reason, the master plan does not identify specifically which buildings or infrastructure improvements will be constructed. Still, with changes in enrollment, the success of existing programs, and infrastructure that is aging, CCC fully expects planned projects to be completed within the time frame of the master plan.

2. Land Use Action Proposed

This submittal requests Oregon City approval of a "general development plan" per city code requirements (OCMC 17.65.050). This land use review is a Type III public process. The general development plan establishes a framework for future development and focuses on infrastructure. The plan has a lifespan of 20 years.

When funding becomes available, and specific building adaptations, modernizations, locations and sizes are determined, the college will complete one or more "detailed development plans" (OCMC 17.65.060). Detailed development plans must follow the direction set out in this general development plan.

The process for this application is driven by three chapters of Oregon City's zoning code: Institutional District (OCMC 17.39), Campus Industrial District (OCMC 17.37), and Master Plans (OCMC 17.65). These chapters offer institutions like Clackamas Community College the opportunity to plan for long-term growth, and to address impacts that may affect neighboring properties and public infrastructure.

3. *Existing Conditions (2024)*

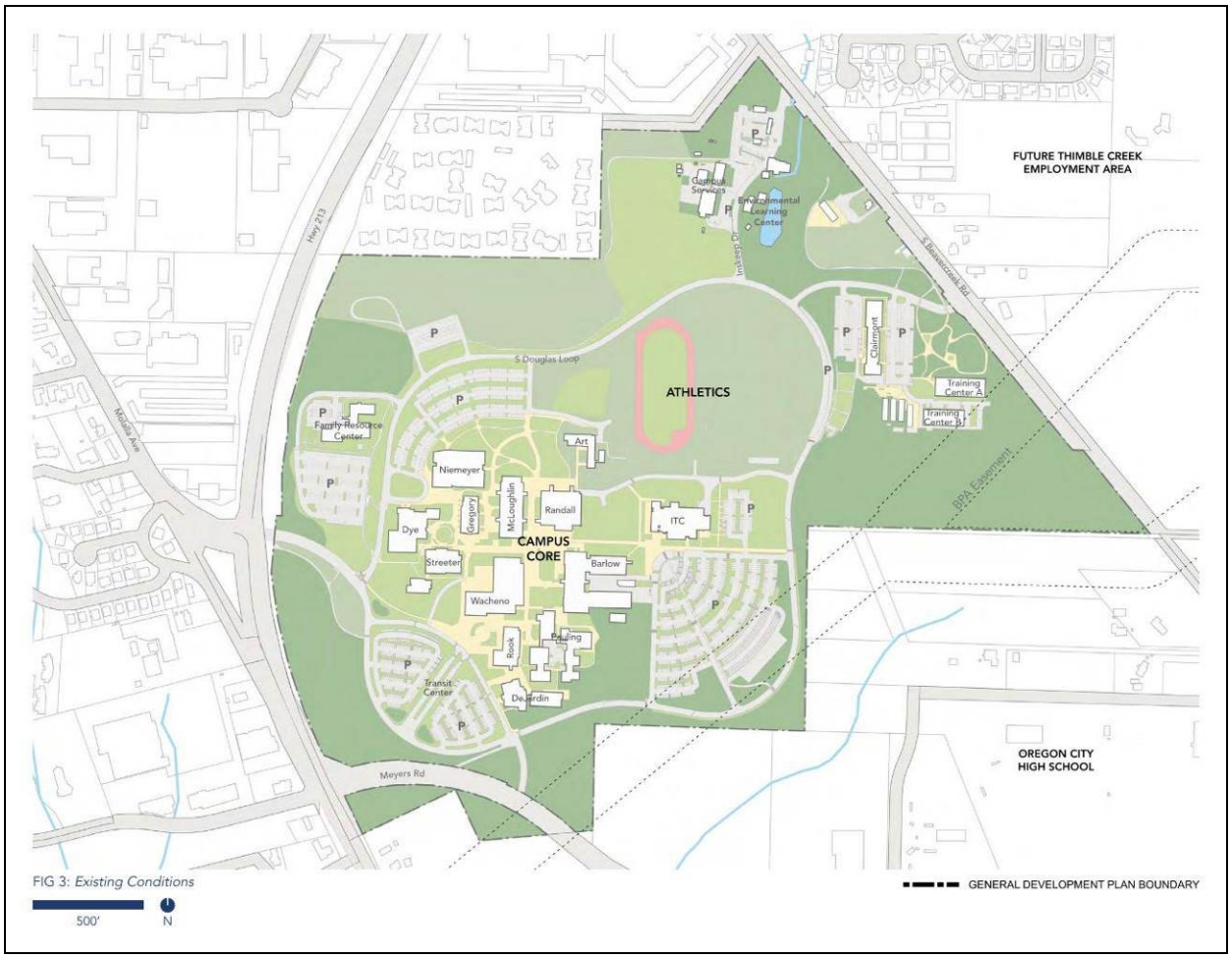


Figure 1. CCC Existing Conditions

Clackamas Community College sits on 167 acres of land in Oregon City between Oregon State Highway 213 and Beavercreek Road.

The facilities and infrastructure at CCC supports the educational mission of the college. CCC's mission is "to serve the people of the college district with high quality education and training opportunities that are accessible to all students, adaptable to changing needs, and accountable to the community it serves." The CCC District covers nearly all of Clackamas County. The college serves approximately 11,000 students from this district whose average age is 32 years old. The college offers a wide variety of classes under five programs: Professional/Technical, College Transfer, Literacy/Basic Skills, Community Education, and Business Training.

The built environment contains approximately 22 buildings, providing 651,000 gross square feet of floor area. Buildings are clustered in two groups, or nodes. The Campus Core is within

Douglas Loop, CCC's primary circulation system for vehicular traffic. The Beavercreek Cluster is at the northeast edge of the property, between Douglas Loop and Beavercreek Road.

Table 1: Clackamas Community College Buildings

Building	Gross Square Feet
Art Center	11,406
Barlow (A, B and C)	98,000
Community Center	28,449
Clairmont Hall	21,320
DeJardin Hall	41,752
Dye Learning Center	29,215
ELC-Lakeside	1,360
ELC-Pavilion	1,200
Family Resource Center	17,708
Gregory Forum	10,200
Greenhouses	8,000
Industrial Technology Center	44,523
Lewelling	5,728
Maintenance	4,000
McLoughlin Hall	52,292
Niemeyer Center	46,370
Pauling Center (A, B and C)	39,730
Rainbow/Storage	3,000
Randall Hall	60,775
Roger Rook Hall	29,172
Smuckers/Storage	10,000
Streeter Hall and Annex	22,757
Training Center A and B	28,229
Wacheno Welcome Center	36,000
Total	**651,186**

The college property also contains several natural resources. The most notable of these are in the form of wooded areas and wetlands, such as the pond and woods around the Environmental Learning Center area in the northeast corner of campus. Another small forested natural area is to the southeast between Douglas Loop and Oregon City High School. Open space on the CCC campus is largely devoted to athletic playing fields—baseball, softball, soccer, track, walking and running trails—which are heavily used by students and by members of the wider community. Another dominant feature of the College's built environment are the electricity towers and overhead wires for the Bonneville Power Authority high-voltage lines, which run diagonally across the southeast corner of the college property.

Campus land is predominantly (64 percent) landscaped or natural area. Smaller shares of land are dedicated to parking, circulation, and buildings. Approximate acreage for each land category is listed below.

Table 2. Campus Land Area, By Category

Category	Acres	Share (%)
Landscaping, Open Areas, Play Fields	107	64
Parking	22	13
Pedestrian Paths	17	10
Buildings	12	7
Streets and Driveways	10	6
Total	**167**	**100**

4. Future Development Plan

In very general terms, the likely first phase of development allowed under the master plan includes the Natural Resources Center of Excellence (horticulture, arboriculture, wildland fire, farming, welding) in the Beavercreek cluster on the east side of campus and a new Landscape/Grounds building in the Campus Services area just west of the Environmental Learning Center. Athletic Field improvements and upgrades to pedestrian pathways and outdoor plazas are also part of the first phase. Although they technically do not require land use approval, the first phase also includes numerous existing building renovations, infrastructure upgrades, and deferred maintenance. These projects depend on passage of a bond measure in 2024.

Beyond these improvements, the next major project for the campus would be the construction of Wacheno Welcome Center Phase 2. This project will include providing spaces for the existing programs and uses currently housed at Bill Brod Community Center (circa 1975) portion of the Wacheno Welcome Center. This includes staff offices, student clubs, multicultural center, meeting rooms, kitchen, and dining. CCC may also add an enhanced dining hall with improved connections to the outdoors, conference spaces, and additional program or partnership spaces. The Wacheno project is the only one listed in this master plan that is in a later phase, and would likely require another bond measure, 8 to 10 years away. Further details would be outlined in a future detailed development plan application.

Table 3. Master Plan Projects

Project	Location	Notes
Existing Building Renovations	Existing building sites	May include: Barlow, McLoughlin, Gregory Forum, Dye Learning Center, Family Resource Center, Community Center, Clairmont
Natural Resources Center of Excellence	Beavercreek cluster	Horticulture, arboriculture, wildland fire, farming, welding. (Up to. 50,000 s.f. new buildings.)

Athletics Improvements	Athletic field area	Track and field upgrades, , grandstands, restrooms, lighting, soccer, baseball, softball, equipment storage buildings, etc.
Campus Services	Campus Services area	New grounds building, storage, covered parking. (Approx. 3,000 s.f.)
Pathways and Plazas	Multiple locations	Complete Douglas Loop walking trail, renovate central plaza, ADA upgrades around campus
Wacheno Welcome Center, Phase 2	On footprint of Bill Brod Community Center	Replacement of existing building and expansion of Wacheno Welcome Center (Approx. 50,000 s.f. net)

Net new building square footage over the 20-year life of the general development plan is approximately 103,000 square feet. This includes construction of the Center of Excellence, Wacheno Welcome Center Phase 2, a new grounds building, and demolition of Smuckers/Storage and Bill Brod Community Center.

Future development on the campus may also include other things that do not need land use approval, and therefore do not need to be included in a general development plan. Examples of such projects are energy efficiency upgrades, upgrades to heating and cooling systems, interior renovations, and safety/security improvements. Finally, if significant new projects that are not listed in this plan are needed by CCC, and do require land use approval, an amendment to the general development plan could be proposed.

5. Timeline for Improvements

This document is specifically designed to take a long-term, broad view of the college and its needs. The proposed timeline for this concept development plan is for the 20 years allowed by city code. Development of new facilities will respond to funding and projected growth in CCC District population and in enrollment, and space needs for specific uses.

The college will submit one or more “detailed development plans” (OCMC 17.65.060) when plans for specific development have been created, and when funding for these facilities is available. These detailed plans must be consistent with the general plan. As it did with the last general development plan, CCC will likely submit several detailed plans during the life of the concept plan.

Most of the development described in this plan is expected to occur after voter approval of a new bond measure. If the bond is approved, the projects are anticipated in an approximately 5-year timeframe. The one exception to this is the Wacheno Phase 2 project. That project is not included in the current bond, and therefore anticipated in an approximately 10 to 15-year timeframe. Smaller construction projects like interior building renovations, infrastructure fixes, and landscape changes will likely be sprinkled throughout the 20-year life of the master plan.

6. History of Campus Development

Clackamas Community College officials broke ground on the existing Molalla Beavercreek campus in 1968.



Figure 2. CCC officials planning the Molalla Avenue site in 1968.

The college's first building, Clairmont Hall, originally housed virtually all college functions. In the early 1970s, Barlow, Randall, and McLoughlin Halls were constructed and occupied, establishing a new campus core. This first wave of development concluded with construction of the Community Center in 1975. In seven years, previously vacant agricultural land was transformed into a college campus made up of nearly 250,000 square feet of new buildings.

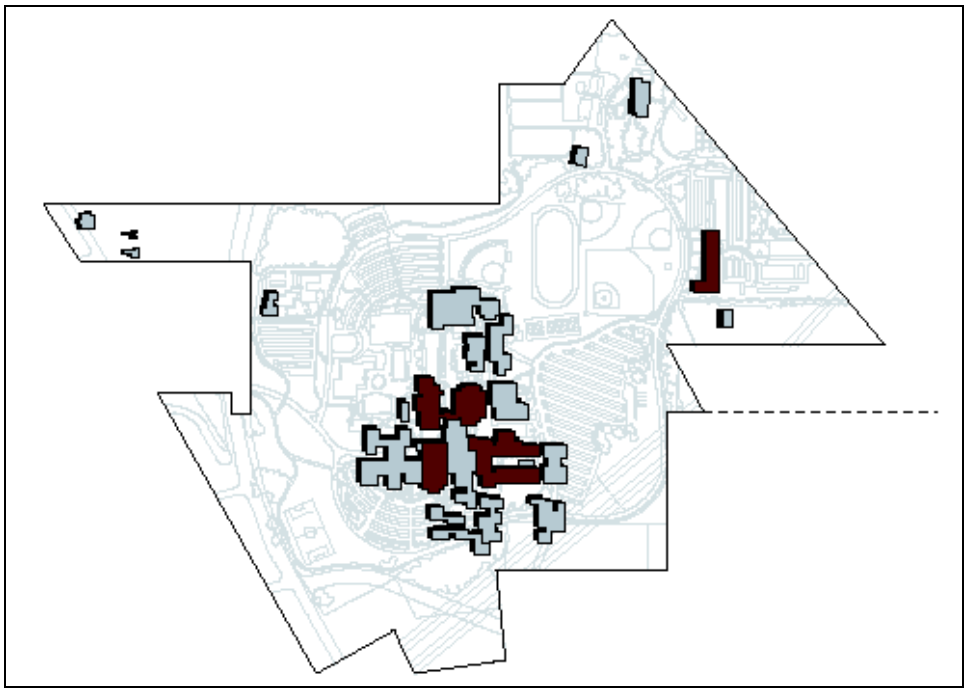


Figure 3. 1976 Campus Plan.

The college's first campus plan was issued in 1976 and codified the direction of the first wave of campus development. This plan envisioned a strong, centralized core within Douglas Loop, with additional satellite buildings in "precincts" on the edges of the college property. Under the direction of this plan, three more buildings were constructed in the early 1980s: The Environmental Learning Center (Lakeside Hall, the Pavilion and the Observatory), the Pauling Hall science complex (Pauling A, B, and C), and the C-Tech building (since demolished).

The original master plan was revised in 1988, leading to another flurry of new construction. Four buildings, anchoring the western side of the campus core, were constructed in 1991-1992: Streeter Hall, Dye Learning Center, Gregory Forum, and the Family Resource Center.

Oregon City approved a new college master plan in 1993. This plan followed the basic guidelines of the 1976 plan but moved towards greater decentralization and increased development on the campus edge. The Apprenticeship/Training Center (Training Center A) was the only building constructed under this plan, in the Beavercreek Cluster.

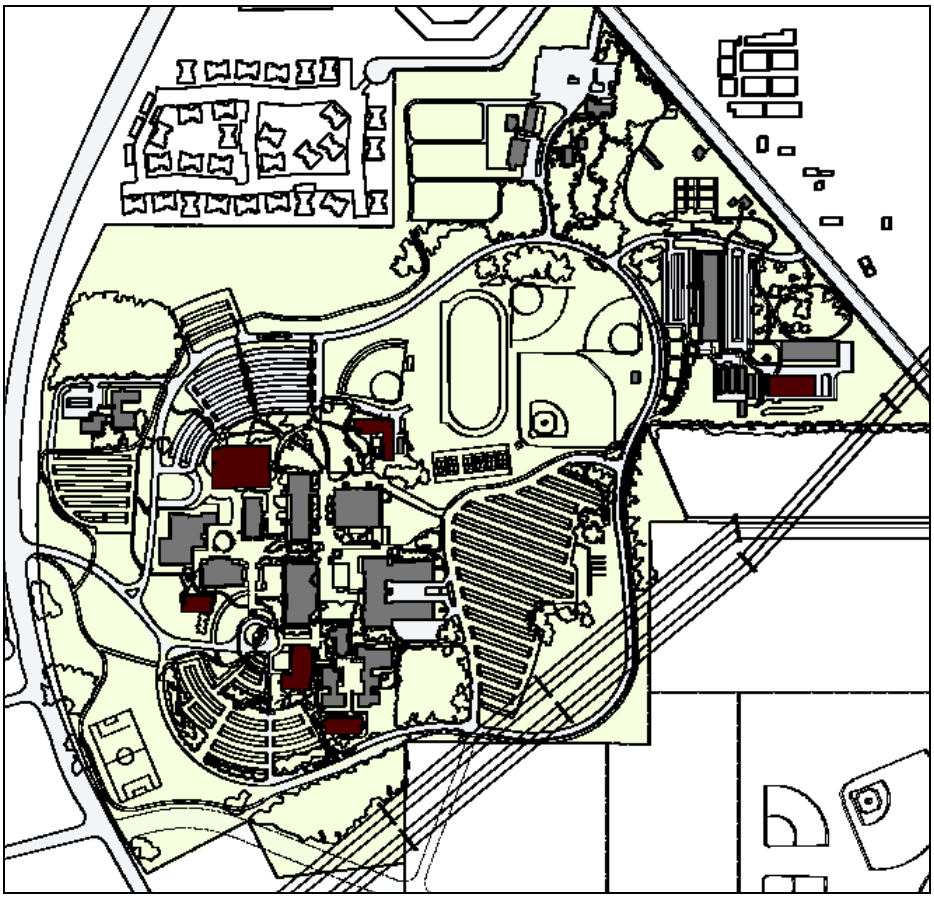


Figure 4. 2002 Projects.

Using funds from a successful 2000 bond measure, the college built six new buildings, beginning in 2002: Roger Rook, DeJardin, Streeter Annex, Studio Arts, Niemeyer, and Welding and Industrial Technology (Training Center B). CCC permitted the work under a limited conditional use approval from Oregon City. A requirement in this approval that *any* future development on the site must obtain a master plan permit from the city, under a newly created chapter of its zoning code.

Following that direction, in 2008 the Oregon City Planning Commission approved a "concept development plan" for the campus (CP 07-01). This long-range institutional master plan is now called "general development plan" in city code. The 2008 approval, which expired in 2022, forecast new buildings and infrastructure and established development standards.

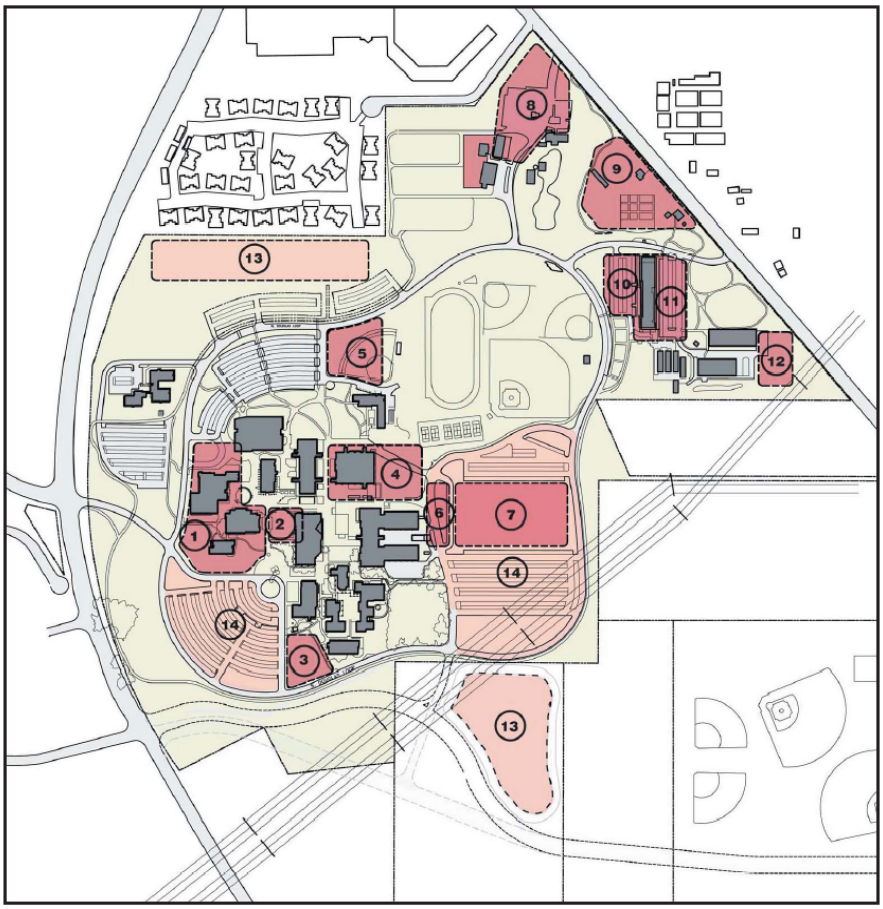


Figure 5. 2008 Concept Development Plan

In November 2014, voters approved a $90 million bond measure that allowed the development anticipated in the 2008 master plan. This new construction updated and expanded college classrooms and labs and modernized equipment to meet industry standards. CCC also received $32 million in state matching funds. These dollars were used to support the construction of the Holden Industrial Technology Center, the DeJardin Science Addition, the Wacheno Welcome Center, a revamped Barlow parking lot with a Team Oregon motorcycle training facility, and a transit hub. For all these projects, CCC sought and was granted detailed development plan approvals from Oregon City.

Other campus buildings not discussed above and which serve college functions are: Lewelling, the maintenance shop, and Beavercreek and Smuckers storage facilities.

7. Campus Planning Process

The proposal contained in this plan grows out of a major college-wide visioning effort in 2021 and 2022, leading to the development of an "CCC Concept Master Plan," an internal plan document that addresses programmatic and space needs at all three CCC campuses.

In addition to seeking input from students and employees, the community, organizational partners, neighbors and other external groups were invited to participate through the Campus Visioning Survey and meetings. Along with the input and data gathered through this outreach and engagement process, the Concept Master Plan incorporated information from other planning efforts, including the college's 2020 DEI Strategic Plan and 2019 DEI Strategic Plan Progress Report. The outreach and engagement process for the Concept Master Plan was conducted with a focus on aligning with the DEI Strategic Plan. This included a strong emphasis on connecting with diverse students, offering videos and surveys translated into Spanish, Russian, and Vietnamese, disaggregating and analyzing survey data with a focus on input from participants with marginalized identities, and opening doors to ongoing engagement with mission-aligned community and organizational partners. The lessons learned from this engagement effort will support the college's continuous improvement of equitable engagement practices and outcomes.

The Campus Visioning survey was developed and deployed over Spring Term 2022 in partnership between the prime consultant Walker Macy and CCC's Chief DEI Officer, DEI Committee, Director of Institutional Research and Reporting, and Vice Presidents Instruction and College Services. It was designed and shared with intentional focus on increasing access for participants who speak a language other than English and for those with disabilities. The survey provided important information about student, employee, and community interests, needs, and ideas related to the campuses. It included a series of open-ended questions that allowed participants to share their 10-year vison for CCC campuses and their ideas for promoting inclusive, safe, and welcoming spaces.

The final 2023 Concept Master Plan was approved by the College's Board of Education at their March 2023 regular meeting.

SECTION 2: THE PLAN

1. Mission and Goals

Clackamas Community College's mission is "to serve the people of the college district with high quality education and training opportunities that are accessible to all students, adaptable to changing needs, and accountable to the community it serves." The goals of this master plan are: to support the college's vision, mission and values by identifying needs and establishing priorities for ongoing improvements to campus facilities.

Campus facilities and grounds carry out the educational mission of the college by providing a physical environment that allows and enhances education opportunities. The primary uses associated with this physical environment are classrooms and laboratories, faculty and administrative offices, athletic and training facilities, auditoriums, campus open spaces, , and student assembly areas. Secondary or accessory uses include parking, campus maintenance, student bookstores, and utility infrastructure.

2. Master Plan Boundary

The regulations and procedures outlined in this master plan are applicable to all lands within the master plan boundary. The Master Plan boundary covers all the college-owned property within its Oregon City campus, bounded by Oregon Highway 213 and Beavercreek Road.

Comparing this boundary on to the one in the 2008 master plan, the campus has added a 10.5-acre parcel on the east side adjacent to Beavercreek Road. This parcel is bisected by a BPA power line easement. Due to the Meyers Road extension having been constructed since the last master plan, the master plan boundary is now also slightly different at the south side of campus, where the property line has been reconfigured around the new Meyers Rod right-of-way and the access of Keyser Way into Douglas Loop.

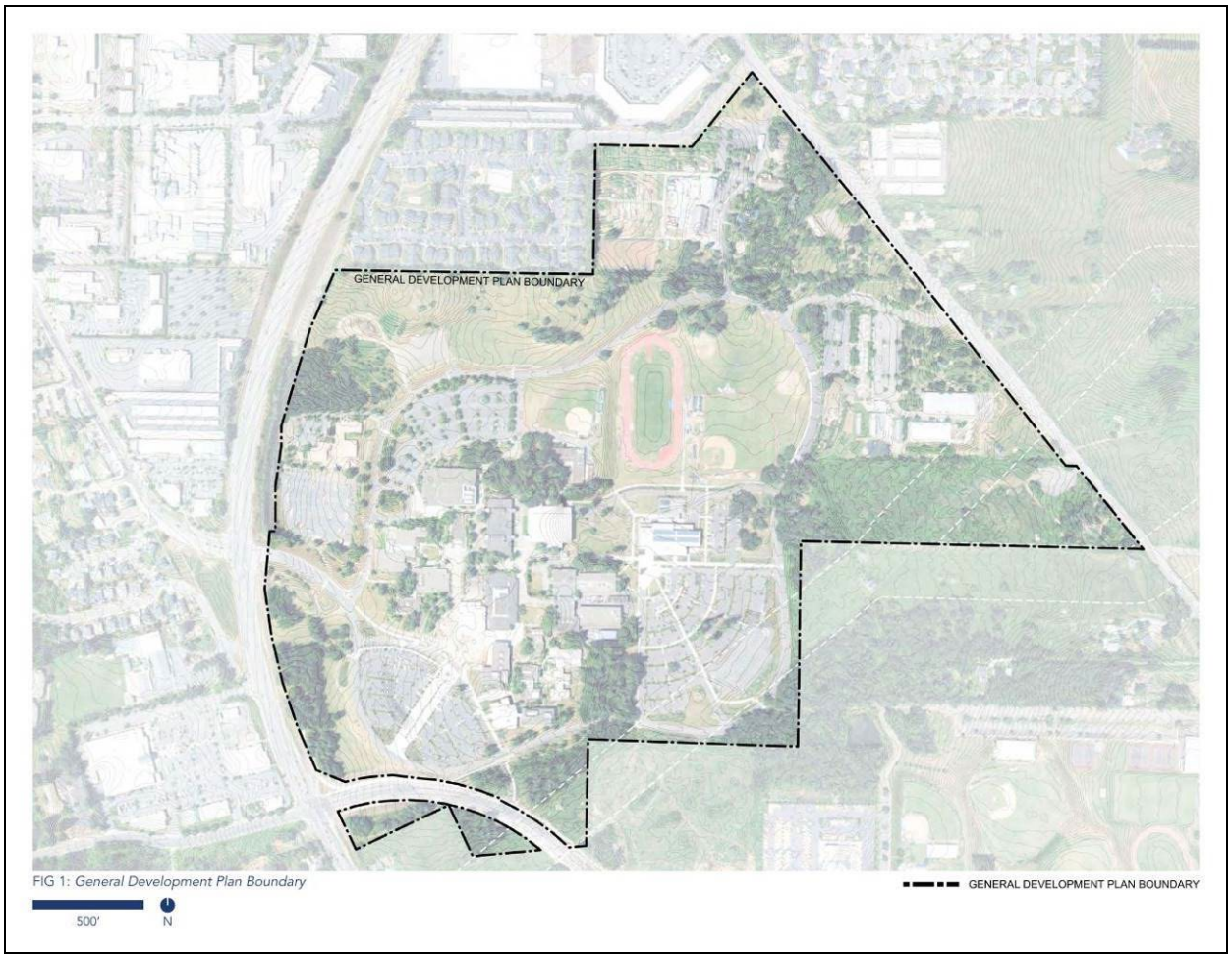


Figure 6. Master Plan Boundary

City regulations require master plans be prepared for institutions greater than 10 acres (OCMC 17.65.030.A). CCC is much larger than 10 acres. The previously approved master plan, under which a great deal of development was reviewed and approved, officially expired in 2022.

3. Existing Zoning

The current base zoning on nearly all of the property within the master plan boundary is Institutional (I). A recently acquired parcel south of the Beavercreek cluster is zoned Campus Industrial (CI). No changes to existing zoning are proposed as part of the concept development plan.

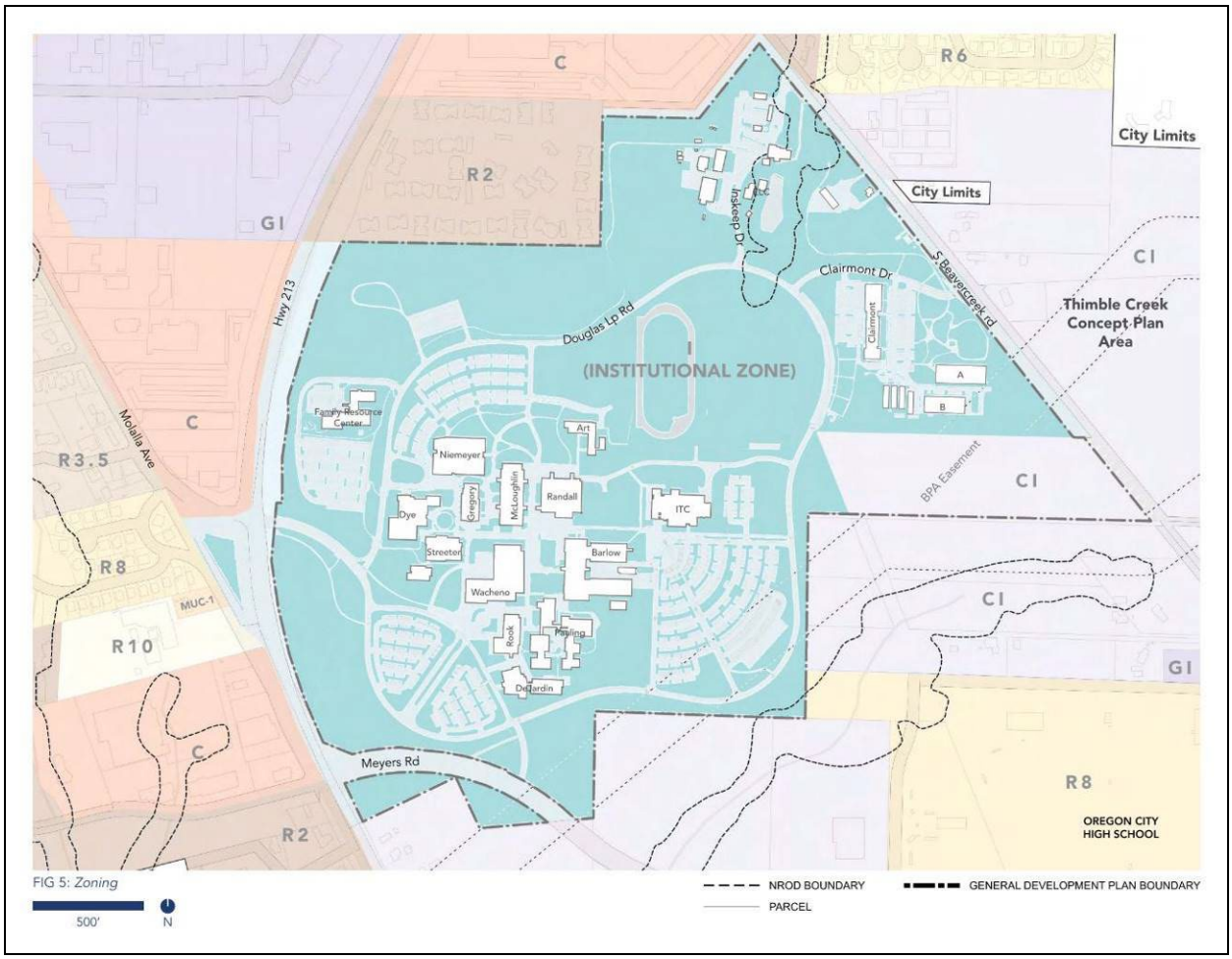


Figure 7. Oregon City Zoning

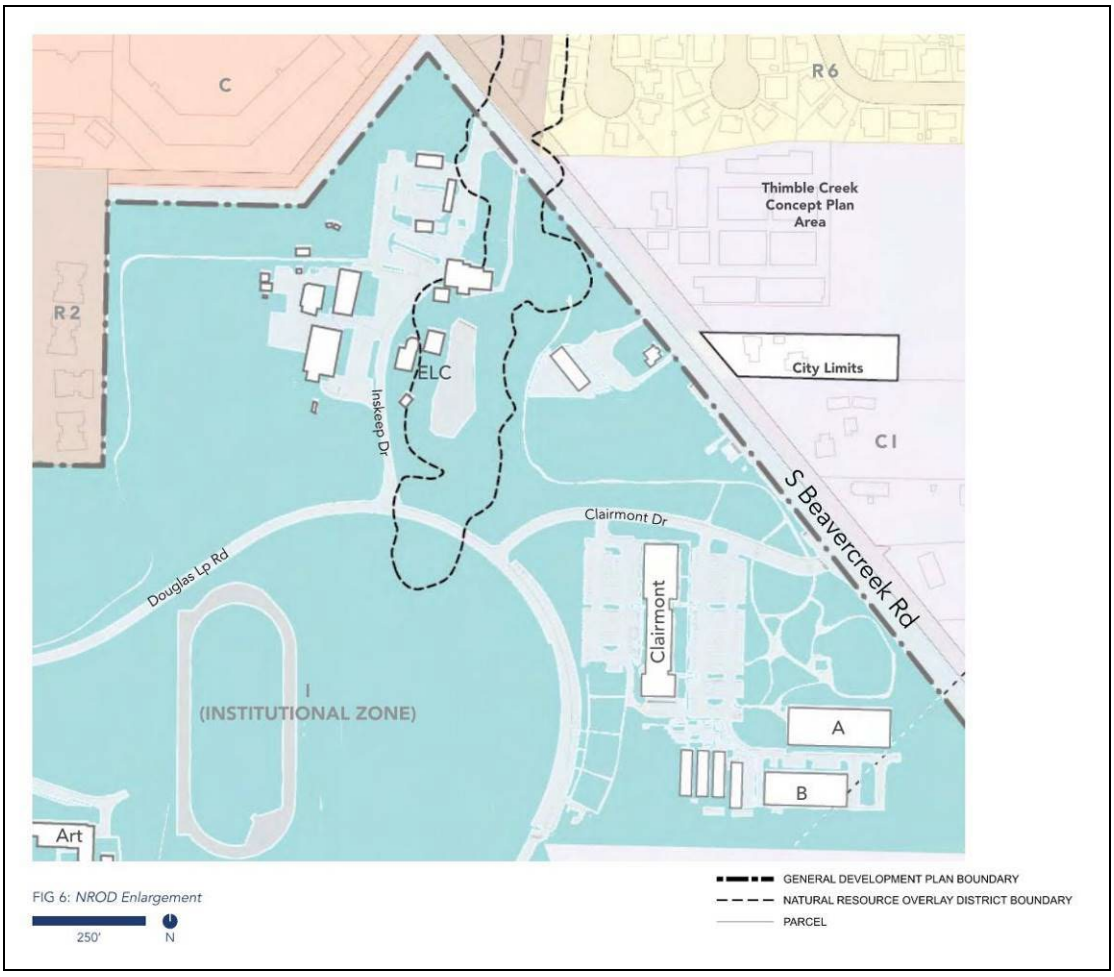


Figure 8. ELC Area Natural Resource Overlay District

In addition to the base zone, there is one overlay zone that affects campus property. The Natural Resource Overlay District affects property at the northeast edge of campus near the Environmental Learning Center. This overlay protects a wetland and pond area around the ELC.

In addition to the area shown above, the NROD affects a small corner of land at the extreme southeast corner of campus, outside Douglas Loop.



Figure 9. SE Corner of Campus with NROD

4. Development Areas

Because this master plan includes relatively few new buildings, it identifies several areas of potential future development rather than showing specific building footprints. These "Priority Modernization and Adaptation Sites" generally follow the pattern of current uses. The name of these reflects the fact that over the next 20 years, changes to the campus are more likely to emphasize changing and modernizing existing building area and upgrading current facilities, rather than adding new building area.

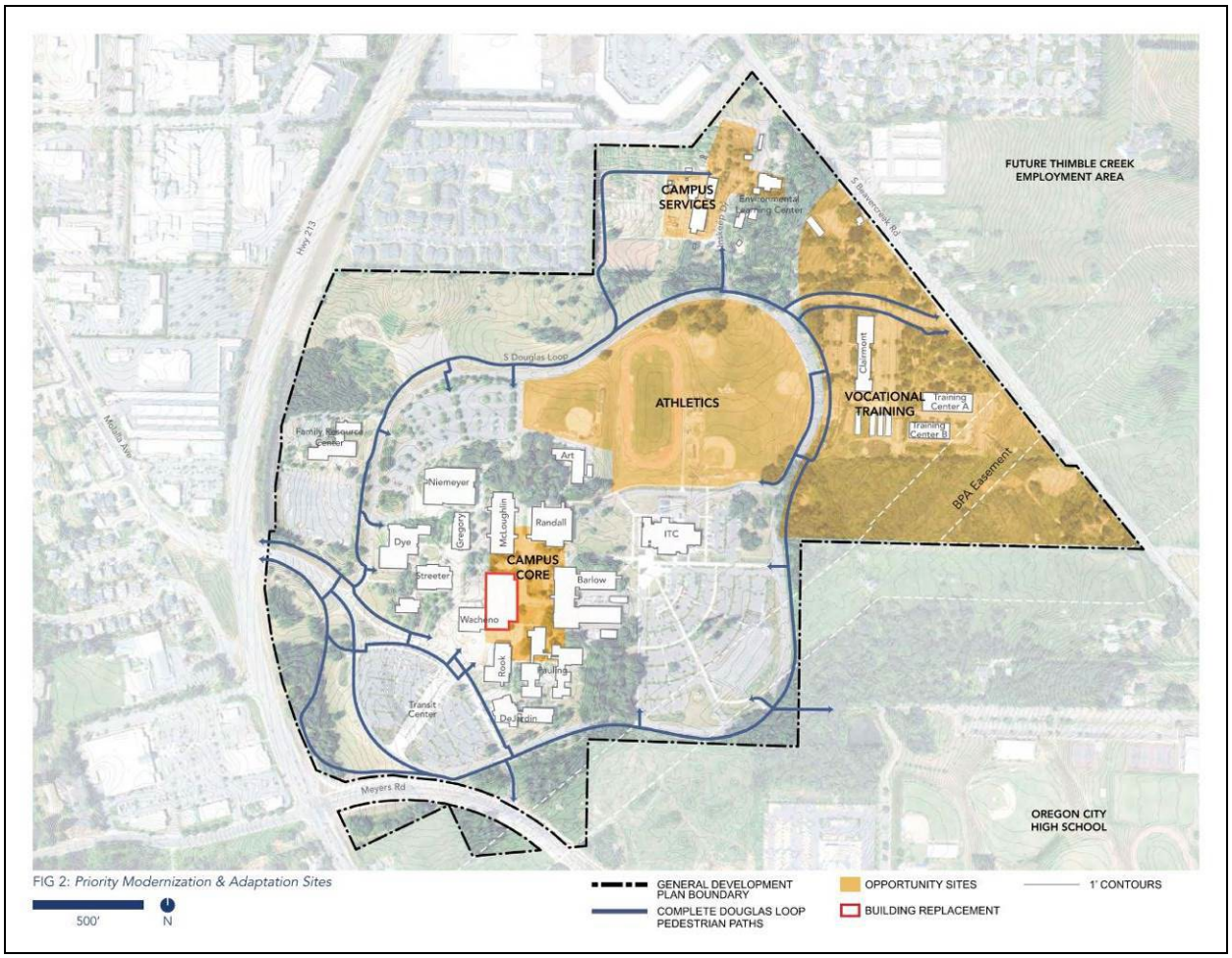


Figure 10. Priority Modernization and Adaptation Sites

5. Timeline

The specific years when new buildings and infrastructure will be constructed have not been determined and will be largely dependent on funding. However, a general timeline has been developed for planning purposes. This timeline is based on projections from an internal college planning process, and anticipated demand for college services and enrollment changes.

Table 4. Development Timeline

Phase	Projects	Timeline (approximate)
1	Existing Building Renovations Natural Resources Center of Excellence Athletics Improvements Campus Services Pathways and Plazas	5 years
2	Wacheno Welcome Center, Phase 2	10-15 years
None	Building Repairs, Infrastructure Fixes, Landscaping, etc. (i.e., not subject to land use)	20 years

Most of the development described in this plan is expected to occur within five years, after voter approval of a new bond measure. The Wacheno Phase 2 project is not included in the current bond, and therefore anticipated in an approximately 10 to 15-year timeframe. Smaller construction projects like interior building renovations, infrastructure upgrades, and landscape changes will likely be sprinkled throughout the 20-year life of the master plan.

6. Infrastructure Improvements

Stormwater Management

The existing campus is comprised largely of pervious surfaces: natural and developed landscape areas. These landscaped areas make up 64 percent of the campus area. The remaining impervious areas (buildings, parking lots, streets, plazas and other hard surface areas) have appropriate stormwater management facilities that were constructed to meet all past or current code policies.

Future detailed development plans will be required to account for existing surfaces and proposed development areas and manage runoff. Proposed facilities will meet city stormwater management engineering requirements in effect at the time of application. New facilities will discharge either to infiltrating facilities or be directly connected to existing campus stormwater infrastructure. How and where to discharge flows will be guided by soil conditions and if infiltration is effective.

Because future development projects identified in this general development plan will be required to specifically meet the city development code, this limits development impacts to a pre-developed rate. No additional mitigation is anticipated.

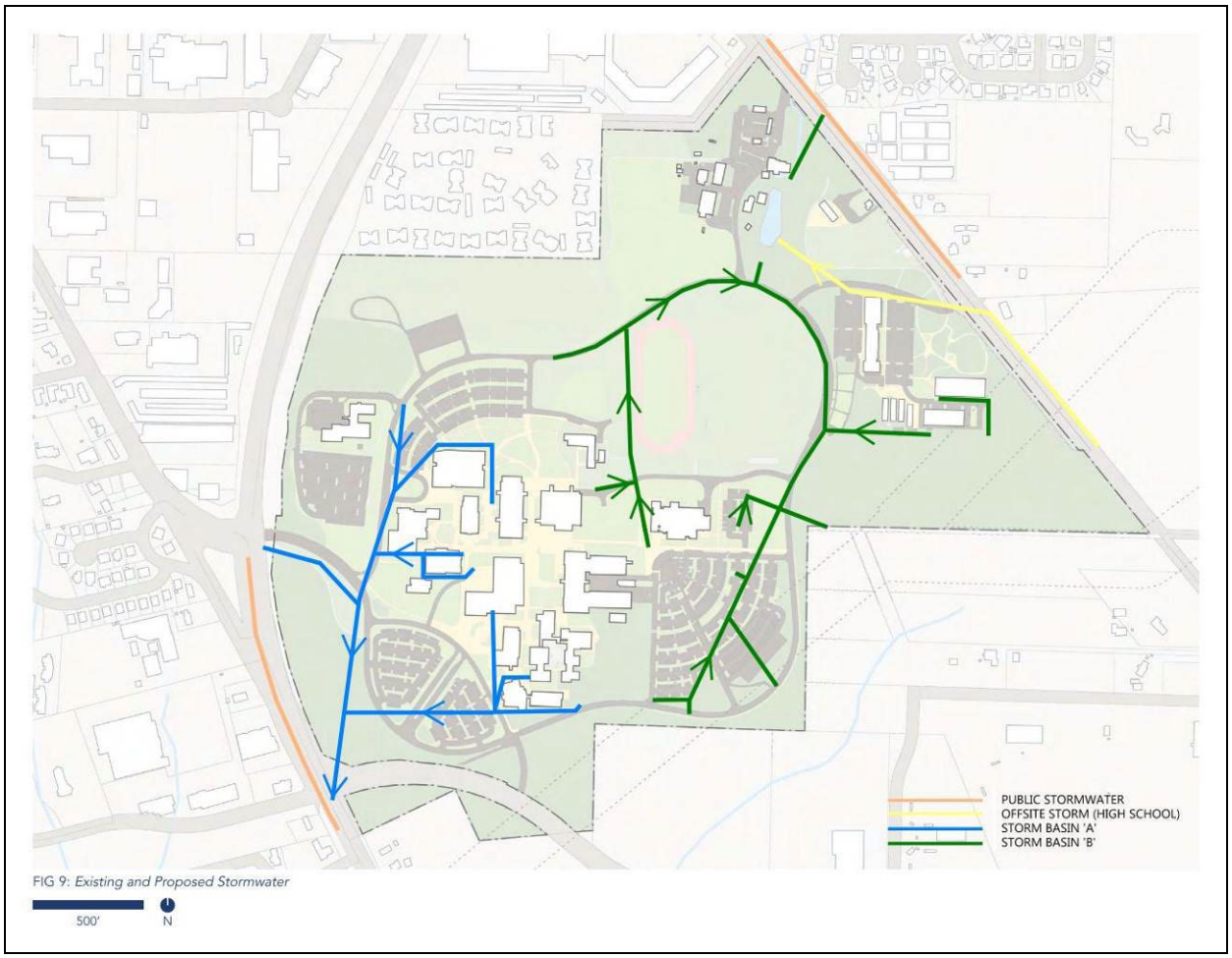


Figure 11. Existing and Proposed Stormwater

Transportation

Key transportation features of the CCC Master Plan are identified below.

Motor Vehicles

Primary roadways that serve the site are Oregon Highway 213, South Beavercreek Road, and Meyers Road. Three intersections enable access to the campus, at OR 213/Molalla Avenue, S Beavercreek Road/Clairmont Drive, and Keyser Way/Meyers Road. The 213 and Beavercreek intersections listed are signalized. All site accesses lead directly to Douglas Loop Road, which circulates around the campus and provides access to 13 parking lots. The primary on-campus circulation route is Douglas Loop, which provides two-way circulation around the central campus. A series of paths, crosswalks, and sidewalks connect the parking lots to the main campus and the Beavercreek cluster.

Traffic counts and projections from a trip generation analysis made several key findings. First, the overall number of vehicle trips to campus has dropped dramatically during the last eight years, which was part of the period of the previous master plan, Daily trip generation is down 23 percent between April 2016 and April 2024. This drop in campus trips is due to numerous factors: the pandemic, enrollment and demographic changes, and the growth of remote and hybrid (part on and off campus) learning opportunities. The effect of this has been much lower trip generation than was anticipated by the 2008 approval. It also indicates a shift in the relationship between new trips and new building square footage on campus.

The traffic analysis estimated the trips that could be generated over the life of the master plan by new development (despite the limitations explained above). It found that in the 20-year timeframe, and the addition of the Natural Resources Center of Excellence and Wacheno Phase 2, all proposed buildings could be anticipated to generate 1,313 average weekday trips. At this volume, signal warrants are not met under 2030 (Phase 1) or 2044 (Phase 2) conditions. All study intersections are projected to continue operating acceptably through the two phases.

No specific mitigation measures are recommended or required for any of the master planned projects, based on this study. Nevertheless, as part of any detailed development plan application, an update to the traffic analysis is required and will be provided for each project. These traffic studies will show consistency with the study approved as part of the general development plan.

Pedestrian/Bike

Key intersections (213/Molalla and S. Beavercreek/Clairmont Drive) accessing CCC campus have signalized pedestrian crossings. Sidewalk improvements in the public right of way surround the campus on Highway 213, S. Beavercreek Road, and Meyers Road. Likewise, sidewalk and path infrastructure exists where these connections lead into Douglas Loop. Within the campus, pedestrian connectivity between the various parking lots and campus buildings is generally good. Striped pedestrian crossings are provided where sidewalks intersect vehicular routes, paved sidewalks connect parking lots, and wide and well-maintained sidewalks provide connectivity between buildings.

As part of this master plan, CCC anticipates completing pedestrian paths around the full circuit of Douglas Loop. The northeast side (near the Beavercreek cluster and ELC) and southwest side (near the transit center and parking lot) of Douglas Loop are incomplete or substandard with regard to path improvements. These changes would allow the path to be fully connected and provide a practical and recreational resource for campus users.

In the surrounding area for bicycles, striped bike lanes exist on both sides of Highway 213, S Beavercreek Road, and Meyers Road, providing bicycle access to CCC. Although the campus does not have exclusive bicycle lanes connecting buildings within the campus, bicyclists can safely travel in the vehicle lanes on internal roads due to the relatively low traffic volumes, slow travel speeds, and adequate lane widths. Between campus buildings, pedestrian traffic is limited and sidewalks are sufficiently wide to accommodate low-speed bicyclists. Bicycle racks are dispersed throughout the campus to provide secure storage.

The college will maintain and expand pedestrian and bicycle facilities as described in this plan. Site Plan and Design Review standards implemented with future Detailed Development Plans will ensure that that new buildings connect to the existing circulation system shown in this plan.

Transit

CCC is a transit hub for the region and has numerous options for public transportation. Service options include:

- Clackamas County Connect Shuttle to Oregon City Transit Center and other Oregon City destinations.
- Clackamas County Express to the Clackamas Town Center and Harmony Campus in Milwaukie
- TriMet lines 32 to Milwaukie, 33 to Clackamas Town Center, and 99 to Portland
- South Clackamas Transportation District to Molalla

The master plan does not anticipate any significant changes to transit service or transit facilities.

Parking

A 2019 campus parking inventory counted 2,343 off street vehicle parking spaces at CCC. Historically, some parking congestion has occurred in limited, high-demand areas and times (like the first week of Fall term). Current observations now show a surplus of available parking spaces on campus. The surplus is especially pronounced with the 30-plus percent drop in in-person enrollment that has occurred since 2016. The master plan does not anticipate a need for new parking spaces. The reason no additional parking is anticipated with master planned development is that a relatively small increase in building square footage is proposed, along with limited program additions, and a shift to more on-line education even as similar education services are being provided.

Also, because of a state-mandated change, Oregon City may no longer require off-street parking for developments within ½ mile of frequent transit corridors. As the site of a transit hub, CCC qualifies for this exemption. Consequently, additional parking spaces are not required at the site.

Of course, CCC will continue to manage its own parking supply of more than 2,300 spaces for campus users and manage it through various means. CCC transportation resources for students and staff include free and reduced-fare transit, a free inter-campus shuttle to the Harmony Campus and Clackamas Town Center (MAX Green Line), and bike parking.

Water

Water is supplied to the campus via two public water mains. The source of the supply is surface water from the lower Clackamas River. The College's onsite water system is looped with an 8-inch water main underneath Oregon Highway 213 and a 16-inch water main in S. Beavercreek Road. There are two additional connections to the water main in Beavercreek Road (at its

intersections with Inskeep and Clairmont Drives), but those are typically valve "off". Underground water distribution within the campus is private and is largely 6- and 8-inch pipe.

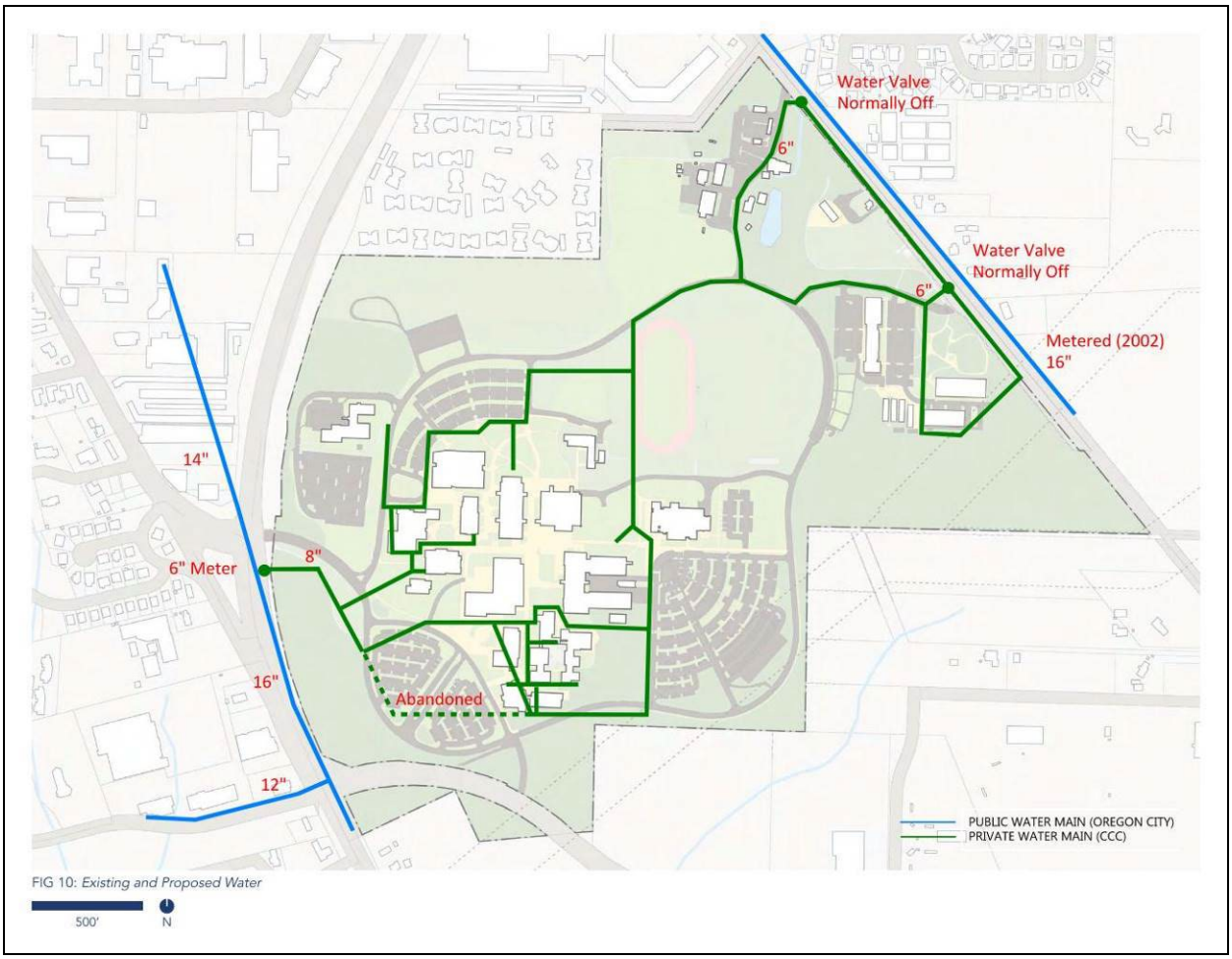


Figure 12. Water System

Upon review of last two full years of water meter records (2022 and 2023), the campus' actual water demand use has been:

- 2023: 21.5 million gallons (with peak August month of 4.8 million gallons)
- 2022: 16.0 million gallons (with peak August month of 5.1 million gallons)

These usage amounts are well below the projection of 35 million gallons in the previously-approved 2008 master plan at CCC. The difference is likely due to lower student head count and the increase in remote learning.

Based on 2023 usage and campus building area, current water usage is 33 gallons per building square foot. (The per square foot rate is lower than it was in the 2008 plan because of fewer in-person students and staff.) Extrapolating out from this rate, 103,000 new square feet would

generate additional annual demand of 3.4 million gallons. At full build out, the total projected annual demand is 24.9 million gallons.

As the existing water usage records indicate substantially less water (approximately 10 million gallons) is currently being used by CCC than can be handled with existing infrastructure, adequate water capacity is available to provide for future campus development. Any threshold for mitigation is well above the predicted build-out for the campus. As a result, no mitigation is anticipated or will be required.

Sanitary Sewer

In a similar pattern as the water system (only in reverse), CCC sanitary sewer flows connect to the public system under Beavercreek Road (15 inch line) and under Oregon Highway 213 (18 inch line) near two main entrances to the college. Both connections are private, gravity fed systems leading into public sewer mains. Eventually, all sanitary sewer flows are conveyed to the Tri-City Water Resource Recovery Facility in northwest Oregon City.

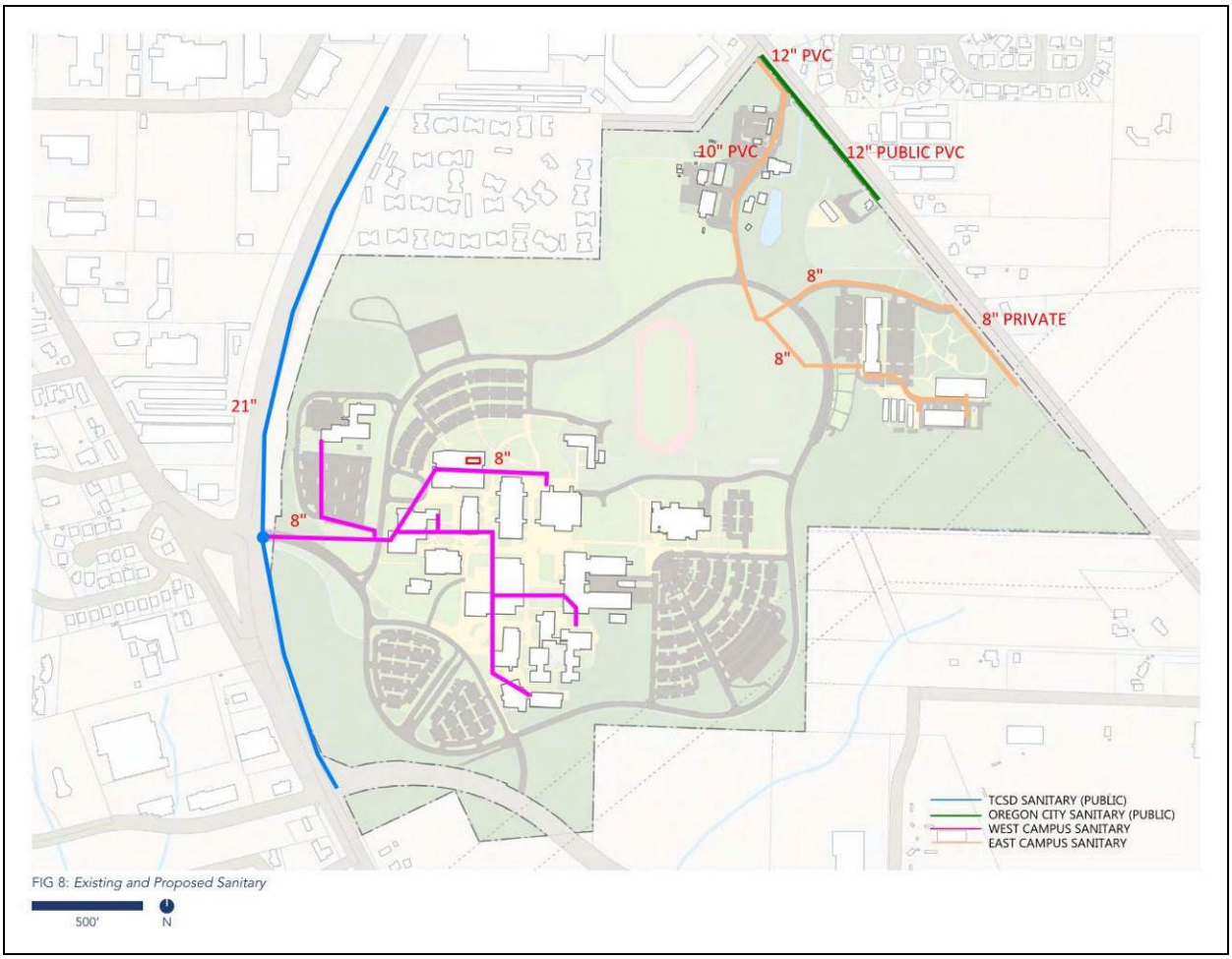


Figure 13. Sanitary Sewer System

Recent studies have shown irrigation in summer months for grass areas, sports fields, horticulture gardens and greenspaces result in higher water usage. Irrigation water does not flow into the sanitary system. To determine the actual discharge, CCC tracked water usage over the six-month period from November 2023 to April 2024 and doubled it, in order to remove the effect of irrigation. That methodology resulted in an estimated annual sewer volume of 5.0 million gallons discharged to the City's Sanitary Sewer system. This translates to 19 gallons of discharge per square foot of campus building.

Based on this established flow rate, the proposed 103,000 square feet of campus building area will generate additional annual demand of 2.0 million gallons, for a total campus-wide annual flow rate of 7.0 million gallons.

The Oregon City Sanitary Sewer Master Plan (2014) identifies future flow rates for low density residential (five dwelling units per acre). This is the land use category for estimating sewer need in the approved 2008 master plan. The planned available capacity of the public sanitary system for CCC is therefore 24.5 million gallons annually. This figure is almost triple the college's anticipated need of 7.0 million gallons.

The threshold for mitigation is well above the predicted build-out for the campus. As such, adequate capacity for sanitary sewer is available to provide for future campus development. As a result, no mitigation is anticipated or will be required.

7. Mitigation Programs

The Oregon City Code introduces the idea of "thresholds for mitigation" in the master planning regulations. The purpose of these thresholds is to allow flexibility in the size and location of future development.

> *A threshold for mitigation is the point that determines when or where a mitigation improvement will be required. Examples of "thresholds" include vehicle trips, square feet of impervious surface area, water usage measured in gallons per minute, construction of a building within a general development plan and construction of a building within a certain distance of a residential lot.* (OCMC 17.65.020.C.)

In addition to establishing these thresholds, the master plan must also identify future development that would trigger them. Finally, the master plan must identify what mitigation measures will be done after these thresholds are reached.

Future Development Impacts

Future impacts from master planned development are connected to two things: the actual bricks-and-mortar development, and the presence of the people that use the new facilities. As noted, this master plan anticipates relatively little new building square footage to be added to the campus. In

the initial phase, the new square footage of development on the campus could be approximately 53,000 square feet. The Wacheno Phase 2 project would add another 50,000 net square feet.

Second, utilization of campus space by students and staff, which creates impacts on things like utility and transportation infrastructure, declined significantly during the pandemic and is still recovering from previous levels. In-person enrollment fell by 33 percent between 2019 and 2023. Due to the increase in remote learning, many students now access CCC programs on-line resulting in less vehicle trips to campus. This reduces impacts from existing buildings and potential development. CCC hopes to increase enrollment and campus utilization, but it will be many years before it returns to pre-pandemic levels. Distance learning fundamentally changes the relationship between new building square footage on campus and trip generation, water/sewer usage, and parking demands.

The presence of new students and new facilities does create some demand on utility and transportation infrastructure. Based on the project list and changes in enrollment, CCC has estimated future development impacts to infrastructure:

Table 5: Expected Development Impacts

Impact Category	Development Impact from Master Planned Development
Traffic	1,313 average weekday trips
Stormwater	Highly variable depending on type of development and location
Water	3.4 million additional gallons annually
Sanitary Sewer	2.0 million additional gallons annually

Future development impacts may not strictly follow current patterns of usage. The impact of future development can be reduced, dramatically in some cases, by newer technologies or different methods of development. Examples are changes to water-efficient systems in new campus buildings, on-site infiltration methods for stormwater, or energy-efficiency upgrades to buildings.

In short, the future development impacts of campus growth are highly variable and will depend on the measures taken by the college to moderate and mitigate them. In most cases, the CCC has a direct financial incentive to reduce impacts, and to internalize the costs of new development. Future detailed master plan applications will be required to show that specific buildings conform to the general plan's outline for reducing and mitigating impacts.

Thresholds for Mitigation

Thresholds for mitigation are discussed more specifically within each category, but they may be summarized as described below:

Table 6. Mitigation Thresholds

Impact Category	Quantity	Mitigation Needed
Traffic	1,313 avg. weekday trips	None
Stormwater	Highly variable depending on type of development and location	None
Water	3.4 million additional gallons annually	None
Sanitary Sewer	2.0 million additional gallons annually	None

Impacts are small and mostly still within the envelope of those approved in the last master plan. In general, there is sufficient capacity in the public system to easily absorb them. This includes, for example, the new college access on Meyers Road that was built and constructed since the approval of the last master plan. Other examples are that the previous master plan anticipated vastly more water and sanitary sewer flows than was actually created, without requiring any mitigation. This plan anticipates even less water and sewer impacts than the 2008 plan. Consequently, this plan does not propose any specific mitigation measures or improvements to address additional impacts.

8. Outstanding Conditions of Approval

The master plan regulations require that a Concept Development Plan identify all unmet conditions of approval on the property and account for them (OCMC 17.65.020.B and 17.65.050.A.1.e). This may either take the form of setting a schedule for their completion or modifying them as part of the master plan application.

The concept master plan consolidates all outstanding conditions into one decision. Therefore, the conditions of this master plan supersede all previous land use conditions relating to master planned development. Nine conditions from the previous plan are summarized below. In short all of them have been addressed and none specifically need to be carried over to a new plan.

Table 7. Conditions from CP 07-01

Condition of Approval	How addressed
1. Provide traffic impact analysis with each detailed development plan.	CCC provided TIA for each detailed plan, consistent with general plan
2. Determine and pay fee for transportation improvements. Fee based on “proportional share” of necessary improvements.	Oregon City and CCC developed a proportional share calculation for future development
3. Use Oregon City level-of-service standards for determining traffic issues.	Individual transportation studies have used O.C. standards
4. Dedicate land for Meyers Road extension.	Land was dedicated and Meyers Road has been constructed. CCC contributed $2.7 million toward construction costs, per Condition 2.
5. Mitigate identified traffic impacts at Beavercreek Road entrance.	Neither city or CCC found impacts that required mitigation
6. Upgrade nonconforming parking lot landscaping.	DeJardin (Orange) and Barlow (Blue) lots were upgraded during renovations.
7. Update plan concurrent with Water, Sewer, and Stormwater reports.	Utility infrastructure was consistent with the master plan and city comments
8. Submit updated master plan narrative.	Updated narrative and plan submitted August 11, 2008.
9. Use city standards to determine adequacy of system and proportional share calculations.	Transportation plans used current performance standards, per guidance from city

SECTION 3: Findings

The following section contains findings that satisfy the applicable submittal requirements and approval criteria for master plans as stated in the Oregon City Code. Quotations from the code are in *italics*; CCC's responses follow the code.

17.65.020 What is included in a master plan or planned unit development

A. A master plan or planned unit development is a two-step process that includes a general development plan and a detailed development plan. A general development plan incorporates the entire area where development is planned for up to the next twenty years from the date of final approval, including the identification of one or more development phases. The general development plan may encompass land that is not currently under the applicant's control, but which eventually may be controlled by the applicant during the duration of the master plan. The plan shall have no effect for lands not currently controlled by the applicant. "Controlled" shall be defined as leased or owned by the applicant. A detailed development plan is the phase or phases of the general development plan that are proposed for development within two years.

Response: The current application is for a general development plan, as outlined above in 17.65.020.A. This plan addresses broad issues of infrastructure, capacity, and potential future locations for development. When funding becomes available for specific development projects, a detailed development plan will be submitted. There will likely be multiple detailed development plans submitted over the life of the master plan.

B. A master plan or planned unit development identifies the current and proposed uses of the development, proposed project boundaries, and proposed public and private infrastructure needed to serve the development. If approved, the general development plan may be used to allow existing legal non-conforming uses. If conditions of approval from a previous land use decision have not been completed, they shall be modified through the general development plan or completed with new development.

Response: Current and proposed uses for the campus are described in the narrative above. No legal, non-conforming uses require approval as part of this plan because "colleges and universities" are uses allowed outright in the Institutional Campus zone, per OCMC 17.39.020.A.

C. A master plan or planned unit development identifies future development impacts, thresholds for mitigation and mitigation improvements and implementation schedules. A threshold for mitigation is the point that determines when or where a mitigation improvement will be required. Examples of "thresholds" include vehicle trips, square feet of mpervious surface area, water usage measured in gallons per minute, construction of a building within a general development plan and construction of a building within a certain distance of a residential lot.

Mitigation improvements are improvements that will be made or constructed by an institution when a threshold for mitigation is reached. Examples include road dedication, intersection improvement, road widening, construction of a stormwater or water quality facility, installation of vegetative buffering and wetland restoration or enhancement.

Response: Development impacts can be generally described as those created by additional people using existing college property more intensively. Yet during the period of time covered by the previous master plan, CCC added square footage and experienced a major shock to in-person enrollment, down 33 percent between 2019 and 2023. This was largely due to the pandemic, but the change has persisted due to the shift toward remote learning and/or hybrid models. This reduces utilization of the campus and impacts on a per square foot basis. While this master plan adds approximately 103,000 square feet of building area to the campus, overall development impacts are still expected to be minor. Development impacts were described in the narrative previously and are summarized as follows.

Table 8. Impacts and Mitigation

Impact Category	Quantity	Mitigation Needed
Traffic	1,313 avg. weekday trips	None
Stormwater	Highly variable depending on type of development and location	None
Water	3.4 million additional gallons annually	None
Sanitary Sewer	2.0 million additional gallons annually	None

17.65.050 General development plan

A. Existing Conditions Submittal Requirements.
1. Narrative Statement. An applicant must submit a narrative statement that describes the following:
a. Current uses of and development on the site, including programs or services;

Response: The campus of Clackamas Community College sits on 167 acres of land in Oregon City between Molalla Avenue (Oregon State Highway 213), Meyers Road and Beavercreek Road. The built environment contains approximately 22 buildings, which provide 621,000 square feet of floor space. These buildings are clustered in two groups, or nodes. The campus core is at the center of the property, within Douglas Loop, which is the campus circulation system for vehicular traffic. The other cluster of development is at the northeast edge of the property, among a group of buildings located between the Douglas Loop and Beavercreek Road.

The college property contains several natural resources. The most notable of these are in the form of wooded areas and wetlands, such as the ponds and woods in the Environmental Learning Center area in the northeast corner of campus. Another small forested natural area is to the

southeast, between Douglas Loop and Oregon City High School. Open space on the CCC campus also includes walking/running trails and athletic playing fields which are heavily used by students and the wider community. Another dominant feature of the College's built environment are the electricity towers and overhead wires for the Bonneville Power Authority high-voltage lines, which run diagonally across the southeast corner of the college property.

b. For institutions, history or background information about the mission and operational characteristics of the institution that may be helpful in the evaluation of the general development plan, and information about current programs or services;

Response: The facilities and infrastructure at CCC exists to fulfill the educational mission of the college. CCC's mission is "to serve the people of the college district with high quality education and training opportunities that are accessible to all students, adaptable to changing needs, and accountable to the community it serves." The CCC District covers nearly all of Clackamas County. Annually, the college serves approximately 32,000 students from this district. The college offers a diverse range of classes under five key programs: Professional/Technical, College Transfer, Literacy/Basic Skills, Community Education, and Business Training.

c. A vicinity map showing the location of the General Development Plan boundary relative to the larger community, along with affected major transportation routes, transit, and parking facilities. At least one copy of the vicinity map must be 8.5 x 11 inches in size, and black and white reproducible;

Response: A vicinity map is included in the drawing set.

d. Land uses that surround the development site. This may also reference submitted maps, diagrams or photographs.

Response: Surrounding land uses are shown on the site plan included with the drawing set. To the north of the college property is the Kingsbury Heights Apartments and a commercial center. East of the college, across Beavercreek Road, is the developing Thimble Creek employment area. South of the campus is a new Meyers Road extension, Oregon City High School, and headquarters campus for Advantis Credit Union. West of the property is the large barrier of Oregon 213 (Molalla Avenue), with commercial development on the west side of the road.

e. Previous land use approvals within the general development plan boundary and related conditions of approval.

Response: The most immediately relevant land use approvals within the master plan boundary is the now-expired concept development plan (CP 07-01). Since then, there have been multiple detailed development plans and amendments for building projects under that concept development plan:

- ITC/Barlow Lot (DP 16-04),
- DeJardin/Transit Center (CP 18-01 DP 18-01), and
- Wacheno Welcome Center (GLUA 19-00028, MAS 19-00007).

f. Existing utilization of the site.

Response: All of the college property is currently used for educational and associated activities. The built environment contains approximately 22 educational buildings, clustered in two nodes. The primary campus node is at the center of the property, within Douglas Loop, which is the campus circulation system for vehicular traffic. The other cluster of development is at the northeast edge of the property, among a group of buildings located between the Douglas Loop and Beavercreek Road.

The college property contains a several natural resources. The most notable of these are in the form of wooded areas and wetlands, such as the pond and woods around the Environmental Learning Center area in the northeast corner of campus. Another small forested natural area is to the southeast, between Douglas Loop and Oregon City High School. Open space on the CCC campus includes walking/running trails and athletic playing fields which are heavily used by students and by members of the wider community. Another dominant feature of the College's built environment are the towers and overhead wires for the Bonneville Power Authority high-voltage power lines, which run diagonally across the southeast corner of the college property.

g. Site description, including the following items. May also reference submitted maps, diagrams or photographs.
i. Physical characteristics;
ii. Ownership patterns;
iii. Building inventory;
iv. Vehicle/bicycle parking;
v. Landscaping/usable open space;
vi. FAR/lot coverage;
vii. Natural resources that appear on the city's adopted Goal 5 inventory;
viii. Cultural/historic resources that appear on the city's adopted Goal 5 inventory; and,
ix. Location of existing trees six inches in diameter or greater when measured four feet above the ground. The location of single trees shall be shown. Trees within groves may be clustered together rather than shown individually
x. Geologic hazards pursuant to OCMC 17.44.

Response: The campus of Clackamas Community College sits on 166 acres of land in Oregon City between Molalla Avenue (Oregon State Highway 213), Meyers Road and Beavercreek Road. The built environment contains approximately 22 buildings, which provide 621,000 square feet of floor space. These buildings are clustered in two groups, or nodes, to facilitate pedestrian connections between buildings. The primary campus node is the Campus Core, which is within Douglas Loop, CCC's primary circulation system for vehicular traffic. The Beavercreek Cluster is at the northeast edge of the property, among a group of buildings located between the Douglas Loop and Beavercreek Road. Other development on campus is dispersed and includes a small grouping of buildings at the Environmental Learning Center and the Campus Services Office and support buildings at the north edge of campus.

All campus property is owned outright by Clackamas Community College. Building inventory on the property is listed below.

Table 9: Clackamas Community College Buildings (2024)

Building	Gross Square Feet
Art Center	11,406
Barlow (A, B and C)	98,000
Community Center	28,449
Clairmont Hall	21,320
DeJardin Hall	41,752
Dye Learning Center	29,215
ELC-Lakeside	1,360
ELC-Pavilion	1,200
Family Resource Center	17,708
Gregory Forum	10,200
Greenhouses	8,000
Industrial Technology Center	44,523
Lewelling	5,728
Maintenance	4,000
McLoughlin Hall	52,292
Niemeyer Center	46,370
Pauling Center (A, B and C)	39,730
Rainbow/Storage	3,000
Randall Hall	60,775
Roger Rook Hall	29,172
Smuckers/Storage	10,000
Streeter Hall and Annex	22,757
Training Center A and B	28,229
Wacheno Welcome Ctr.	36,000
Total	**651,186**

Vehicular parking is available at multiple locations around campus. Current motor vehicle parking inventory is approximately 2,400 spaces. Bicycle parking—in the shape of "staple racks" or similar facilities—is provided near the entrance of all major buildings on campus.

The college property contains a several natural resources. The most notable of these are in the form of wooded areas and wetlands, such as the pond and woods in the Environmental Learning Center area in the northeast corner of campus. Another small forested natural area is to the southeast between Douglas Loop and Oregon City High School.

In all, 64 percent of the 167 acre campus is devoted to landscaping or open space. This includes natural areas, landscaped areas, and playing fields. Lot coverage on the site is approximately 7 percent. The balance of campus land is occupied by parking lots, pedestrian paths, and streets.

There are no cultural or historic resources on college property listed in Oregon City's Goal 5 inventory. The city's Goal 5 inventory does list one natural resource on campus property: the wetland and pond area around the ELC. Another inventoried resource area, a wetland, lies just southeast of Douglas Loop.

h. Existing transportation analysis, including the following items. May also reference submitted maps, diagrams or photographs.

i. Existing transportation facilities, including highways, local streets and street classifications, and pedestrian and bicycle access points and ways;

Response: Streets and classifications are shown below:

Table 10: Roadway Ownership and Classifications

Roadway	Ownership	Classification
ORE 213	ODOT	Major Arterial / Expressway
S Beavercreek Road	Clackamas County / Oregon City	Major Arterial
Molalla Avenue	Oregon City	Major Arterial
Meyers Road	Oregon City	Minor Arterial
Clairmont Drive	Oregon City/Private	Local Street / Collector
S Douglas Loop	Private	Local Street
Keyser Way	Private	Local Street
Truesdell Way	Private	Local Street
Inskeep Drive	Private	Local Street
Killdeer Drive	Private	Local Street

The following table summarizes the characteristics of the transportation facilities in the study area.

Table 11: Existing Transportation Facilities and Roadway Designations

Roadway	Speed Limit	Sidewalks	Bicycle Lanes	On-Street Parking
ORE 213	45 to 55 mph[2]	Partial both sides	Yes	None
S Beavercreek Road	35 to 40 mph	Partial both sides	Yes	None

Molalla Avenue	30 mph	Both sides	Yes	None
Meyers Road	30 mph	Partial both sides	Yes	None
Clairmont Drive	20 mph	Partial both sides	North side	None
S Douglas Loop	20 mph	Partial both sides	No	None
Keyser Way	20 mph	One side (east)	No	None
Truesdell Way	20 mph	North and west sides	No	None
Inskeep Drive	20 mph	No	No	None
Killdeer Drive	20 mph	North side	No	None

ii. Transit routes, facilities and availability;

Response: CCC's Oregon City campus is the location of a regional transit hub. The following lines serve the campus.

- Clackamas County Connect Shuttle to Oregon City Transit Center and the Harmony Campus
- Clackamas County Express to the Clackamas Town Center and Harmony Campus in Milwaukie
- TriMet lines 32 to Milwaukie, 33 to Clackamas Town Center, and 99 to Portland
- South Clackamas Transit District Molalla

iii. Alternative modes utilization, including shuttle buses and carpool programs; and

Response: CCC coordinates with Clackamas County to provide shuttle service between Clackamas Town Center, the Harmony Community Campus and other destinations in Oregon City. Carpool and bike parking are free and available on campus. The college offers free and discounted transit passes, and Associated Student Government has transportation grants available.

iv. Baseline parking demand and supply study (may be appended to application or waived if not applicable).

Response: The campus has an inventory of more than 2,300 spaces, which exceeds observed demand. Per state law ("Climate-Friendly and Equitable Communities" rules in OAR 660-012-0440), off-street parking requirements are not applicable to sites that are within ½ mile of frequent transit corridors. Because CCC is a transit hub and terminus of TriMet's 33 bus line (and others), the campus is within this zone and qualifies as a site where off-street parking is not required. A parking study is not applicable and this requirement should be waived.

i. Infrastructure facilities and capacity, including the following items.
i. Water;

Response: The campus has an existing water system pipe network that provides for adequate domestic and fire water supply to developed parts of campus. Surrounding public infrastructure has capacity to meet all current and future project demands as proposed by this master plan. The utility report included with this application provides more detailed information.

ii. Sanitary sewer;

Response: The campus has an existing network of sanitary pipes that provides for adequate sanitary service to both the west and east portions of campus. Surrounding public infrastructure has capacity to meet all current and future project demands as proposed by this master plan. The utility report included with this application provides more detailed information.

iii. Stormwater management; and

Response: The campus has an existing network of stormwater management facilities and pipes that collect, treat and detain stormwater and ultimately convey to the surrounding public storm systems. The campus is approximately 64 percent landscaped with adequate room to accommodate all stormwater management facilities required with the proposed master plan. See Appendices for supporting information. The utility report included with this application provides more detailed information.

iv. Easements.

Response: The Bonneville Power Administration maintains an easement on college property for transmission across BPA power lines along the southeast section of campus. The college has no direct connection to these power lines. There are no other relevant utility easements on campus.

2. Maps and Plans.

a. Existing conditions site plan. Drawn at a minimum scale of one-inch equals one hundred feet that shows the following items. At least one copy must be 8.5 x 11 inches in size, and black and white reproducible.

i. Date, north point, and scale of drawing;
ii. Identification of the drawing as an existing conditions site plan;
iii. Proposed development boundary;
iv. All parking, circulation, loading and service areas, including locations of all carpool, vanpool and bicycle parking spaces as required in Chapter 52 of this title;
v. Contour lines at two-foot contour intervals for grades zero to ten percent, and five-foot intervals for grades over ten percent;

b. A site plan or plans, to scale, for the general development plan site and surrounding properties containing the required information identified in OCMC 17.62.040.b, Vicinity map. Depicting the location of the site sufficient to define its location, including identification of nearest cross streets. At least one copy of the vicinity map shall be eight and one-half inches by eleven inches in size, and black and white reproducible.

Response: An existing conditions site plan has been prepared that contains all the above referenced information. See Appendix A.

b. Vicinity Map. Depicting the location of the site sufficient to define its location, including identification of nearest cross streets. At least one copy of the vicinity map must be 8.5 x 11 inches in size, and black and white reproducible.

Response: A vicinity map is shown below.

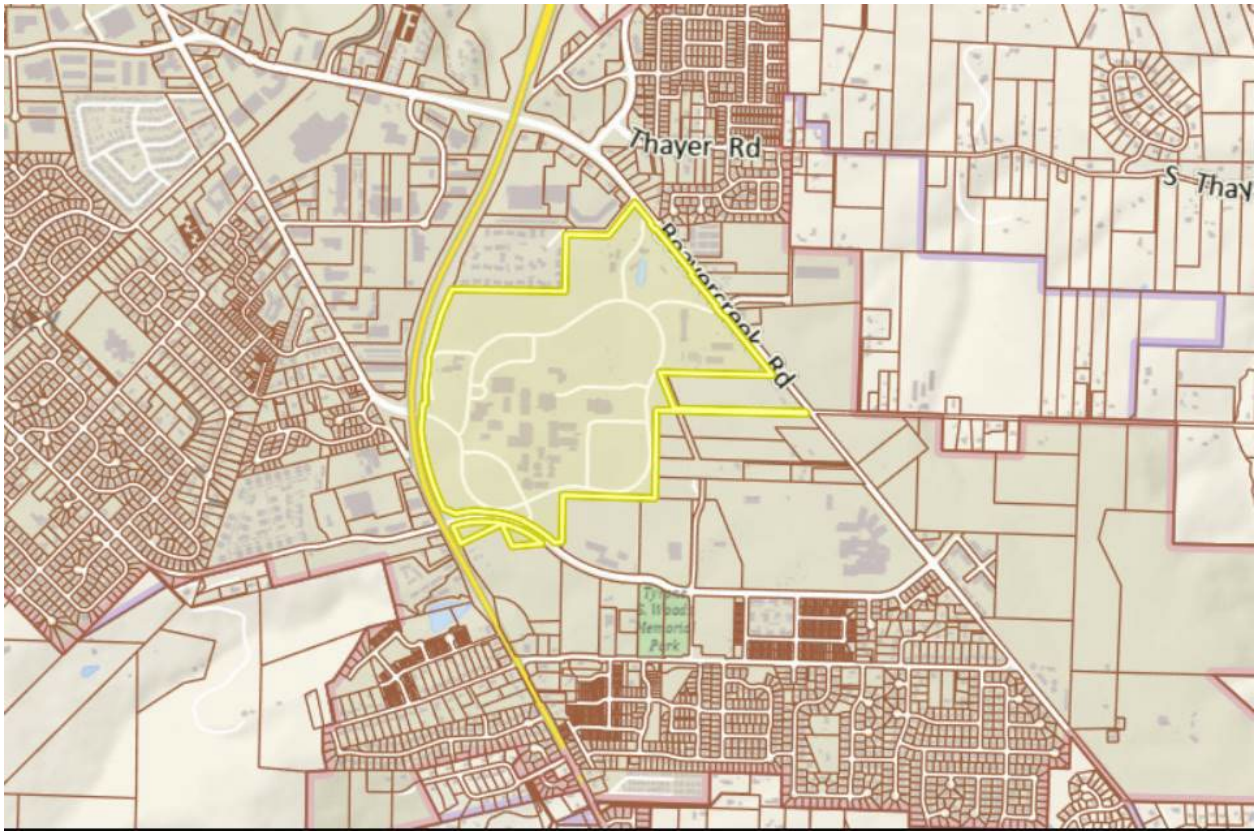


Figure 14. CCC Vicinity Map.

c. Aerial Photo. Depicting the subject site and property within two hundred fifty feet of the proposed development boundaries. At least one copy of the aerial photo must be 8.5 x 11 inches in size, and black and white reproducible.

Response: An aerial photo of the site is shown below.



Figure 15. CCC Aerial Photo (2024).

B. Proposed Development Submittal Requirements.
1. Narrative Statement. An applicant shall submit a narrative statement that describes the following:
a. The proposed duration of the concept development plan.

Response: The duration of the Master Plan is through 2044.

b. The proposed development boundary. May also reference submitted maps or diagrams.

Response: The proposed master plan boundary is shown in Section 2 of this document on page 11.

c. A description, approximate location, and timing of each proposed phase of development, and a statement specifying the phase or phases for which approval is sought under the current application. May also reference submitted maps or diagrams.

Response: Proposed development on this site is broken into two phases. The majority of proposed development will occur in a five-year timeframe, after the passage of a new bond measure. One project is forecast for a second phase, which is in a 10 to 15-year timeframe after approval of this plan. Projects that do not require land use approval, such as utility upgrades or landscape improvements, may occur throughout the life of the plan.

Table 12. Development Phasing

Project	Location	Notes
Phase 1 (approx. 5 years)		
Existing Building Renovations	Existing building sites	May include: Barlow, McLoughlin, Gregory Forum, Dye Learning Center, Family Resource Center, Community Center, Clairmont
Natural Resources Center of Excellence	Beavercreek cluster	Horticulture, arboriculture, wildland fire, farming, welding. (Approx. 50,000 s.f. new buildings.)
Athletics Improvements	Athletic field area	Track and field upgrades, new throwing shelter, grandstands, restrooms, lighting, baseball, softball, etc.
Campus Services	Campus Services area	New grounds building, storage. (Approx. 3,000 s.f.)
Pathways and Plazas	Multiple locations	Complete Douglas Loop walking trail, renovate central plaza, ADA upgrades around campus
Phase 2 (approx. 10-15 years)		
Wacheno Welcome Center, Phase 2	On footprint of Bill Brod Community Center	Expansion of Wacheno (Approx. 50,000 s.f. net)

d. An explanation of how the proposed development is consistent with the purposes of Section 17.65, the applicable zone district or districts, and any applicable overlay district.

Response: The purpose of the Institutional zone is "to facilitate the development of major public institutions, government facilities and parks and ensure the compatibility of these developments with surrounding areas." (OCMC 17.39.010)

Clackamas Community College is a major public institution within Oregon City, and this master plan is essential to facilitate its continued growth and development. The compatibility of future college development is addressed through a master plan that addresses site planning, infrastructure, and other impacts. Taken together, these master plan requirements will insure that any future development will be compatible with surrounding development.

The only applicable overlay district is the NROD (OCMC 17.49) which protects the ELC pond, and a very small area at the extreme southeast corner of campus, in a wooded area outside

Douglas Loop. The purpose section of the NROD chapter is to "to resolve conflicts between development and conservation of habitat, stream corridors, wetlands, and floodplains identified in the city's maps." Conflicts between development and resource conservation are resolved because no development is proposed in the NROD. Two proposed projects are in the northeast area of campus but both areentirely outside NROD boundaries. A campus services building and storage area will occur west of the overlay, and the Natural Resources Center of Excellence will occur southeast of the overlay. No development is proposed in the wooded area at the southeast corner of campus. To the extent that any of these projects affect land within the boundary in any way, they will comply with city regulations in effect at the time. The net result of the plan will be preservation of the condition of the vegetated corridor, which protects water quality, supports beneficial water uses, and protects the values and functions of existing water resources.

e. A statement describing the impacts of the proposed development on inventoried Goal 5 natural, historic or cultural resources within the development boundary or within two hundred fifty feet of the proposed development boundary.

Response: There are no inventoried historic or cultural resources on the site or within 250 feet for the proposed development boundary.

There are no anticipated impacts on the only Goal 5 resource within the development boundary because future projects completely avoid it. Goal 5 natural resources on the site include a wetland and water area connected to the Environmental Learning Center in the northeast corner of the campus. This wetland area has been delineated by CCC. Oregon City zoning protects these Goal 5 resources through implementation of the NROD.

Two proposed projects in the east area of campus will occur entirely outside the boundaries of the NROD. A new campus services building and storage area will occur west of the overlay, and the Natural Resources Center of Excellence will occur southeast of the overlay. No development is proposed as the extreme southeast corner of campus. To the extent that any project affects land within the NROD boundary in any way, it will comply with city regulations in effect at the time.

f. An analysis of the impacts of the proposed development on the surrounding community and neighborhood, including:

i. Transportation impacts as prescribed in subsection (B)(1)(g) below;

Response: Transportation impacts of proposed development on the surrounding community are described in the findings for subsection B.1.g, as indicated below.

ii. Internal parking and circulation impacts and connectivity to sites adjacent to the development boundary and public right-of-ways within two hundred fifty feet of the development boundary;

Response: As noted previously, existing parking substantially exceeds demand. A 2019 campus parking inventory counted 2,343 off street vehicle parking spaces at CCC. Though parking congestion may occur in limited, high-demand areas, there is a surplus of available spaces on campus that will persist through the end of this master plan. This is due to enrollment changes,

over the last decade, a shift to on-line learning, and a large base of campus parking. Due to this surplus and a relatively small amount of new building space, there will be no parking impacts on surrounding properties.

The master plan does not anticipate a need for additional parking inventory. Moreover, because of a state-mandated change, Oregon City may no longer require off-street parking for development within ½ mile of frequent transit corridors. As the site of a transit hub, CCC qualifies for this exemption. Still, CCC will continue to manage its own parking supply for campus users through various means.

Connectivity to adjacent sites and rights of way is currently via three primary entrances to the college: from OR 213, Beavercreek Road, and Meyers Road. The Meyers Road connection was built after the 2008 master plan approval, and it has improved connectivity and dispersed traffic arriving to and leaving the campus. CCC contributed a proportional share to the funding of the Meyers Road extension.

The current transportation analysis that is included with this application found that signal warrants are not met at Meyers Road and Keyser Way, the only unsignalized intersection that enters the campus, under 2030 (Phase 1) or 2044 (Phase 2) conditions. In addition, all study intersections are projected to continue operating acceptably through both phases.

No specific mitigation measures are recommended or required for any of the master planned projects, based on this study. Nevertheless, as part of any detailed development plan application, an update to the traffic analysis is required and will be provided for each project. These traffic studies will show consistency with the study approved as part of the general development plan.

iii. Public facilities impacts (sanitary sewer, water and stormwater management) both within the development boundary and on city-wide systems;

Response: Public facilities impacts on surrounding communities and city-wide systems are small or non-existent. Stormwater, water, and sanitary sewer impact from campus expansion will either be dealt with on-site, or the public system was designed with surplus capacity that can accommodate campus growth. An attached utility report has additional information.

Stormwater Management
The campus has an existing network of stormwater management facilities and pipes that collect, treat and detain stormwater and ultimately convey to the surrounding public storm systems. The campus is approximately 64 percent landscaped with adequate area to accommodate all stormwater management facilities required with the proposed master plan.

Water
The existing campus water pipe network provides for adequate domestic and fire water supply to developed parts of campus. Surrounding public infrastructure has capacity to meet all current and future project demands as proposed by this master plan.

Sanitary Sewer
The campus has an existing network of sanitary pipes that provides adequate service to both the west and east portions of campus. Surrounding public infrastructure has capacity to meet all current and future project demands as proposed by this master plan.

iv. Neighborhood livability impacts;

Response: The current layout of the CCC campus largely insulates its surrounding neighborhood from direct impacts. The edges of the campus are buffered either by major transportation corridors (Beavercreek Road, Highway 213 and Meyers Road) or generously landscaped areas to the north and south. The proposed changes to campus follow the existing pattern of development, and will generally mean alterations or new development in the Campus Core and in the Beavercreek Cluster. As such, the basic experience of the campus will be unchanged for surrounding neighbors. CCC development will not have any significant negative impact on neighborhood livability.

v. Natural, cultural and historical resource impacts within the development boundary and within two hundred fifty feet of the development boundary.

Response: There are no inventoried Goal 5 historic or cultural resources within or near the proposed development boundary.

There are two Goal 5 natural resources within the proposed development boundary. A large wetland area exists at the ELC in the northeast part of campus. The NROD overlay district regulates this area. Second, the outer edge of a stream buffer applies to a wooded area at the extreme southeast corner of the campus, outside Douglas Loop.

Any future development in the area around the NROD overlay will be subject to the regulations in place at the time. This would be a review concurrent with a detailed development plan. Because the overall condition of the natural resource will be improved as the result of this general development plan, consistent with the city's NROD rules, this proposal protects the Goal 5 resources. As a result, there will be no net negative impact to natural resources within the master plan boundary.

g. A summary statement describing the anticipated transportation impacts of the proposed development. This summary shall include a general description of the impact of the entire development on the local street and road network, and shall specify the maximum projected average daily trips, projected a.m. and p.m. peak hour traffic and the maximum parking demand associated with build-out each phase of the master plan or planned unit development.

Response: Trip generation for the proposed development is complicated to estimate because of the changed relationship between campus building square footage and trips, which is no longer as closely aligned as in the past. Also, estimates of anticipated impacts must take into consideration previous estimates that dramatically overstated past impacts, because of changes in enrollment, a pandemic, and a shift to online learning. Observed trip generation fell between

2016 and 2024 by 30% in the AM peak hour and 16% in the PM peak hour. Yet in that same period, CCC added 103,000 square feet of new campus buildings, Holden Industrial Technical Center, a DeJardin Hall expansion, and Wacheno Welcome Center. Generally, shifts in institutional trends and education service delivery have depressed the trips-per-square-foot ratio that has been traditionally used to estimate impacts. Nevertheless, the TIA estimates future trips from master planned development using existing data to be as follows:

- Phase 1: Center of Excellence & Groundskeeping Buildings.
  676 ADT, 43 AM peak hour, and 65 PM peak hour trips

- Phase 1 and 2: Add Wacheno Phase 2.
  1,313 ADT, 84 AM peak hour, and 127 PM peak hour trips.

The above estimates are highly conservative and based on a linear increase in trips based on current conditions. Actual trip generation may be much lower, depending on enrollment and demographic trends at the college, which are unpredictable.

Parking may likewise be estimated based on the ITE Parking Generation Manual, 6th Edition. Notably, that ratio does not account for the enrollment and institutional/service delivery changes that reduce the overall need for users to drive to and park at CCC. According to the ITE manual, master planned development generates parking demand as follows:

- Phase 1: Center of Excellence & Groundskeeping Buildings: 189 spaces
- Phase 1 and 2: Add Wacheno Phase 2: 368 spaces

The above estimates are highly conservative, since the CCC campus has been exhibiting a trend of declining trip generation and parking demand from 2016 to 2024. This is related to enrollment decreases and in-person learning shifting to online/hybrid forms. These trends correlate to overall lower parking demand between 2016 and 2024. Observationally, there is a surplus of parking spaces on campus overall. Despite there being no specific minimum parking requirement for the college, CCC will continue to maintain its inventory for students and staff who drive, while supporting transit amenities based on campus.

h. In addition to the summary statement of anticipated transportation impacts, an applicant shall provide a traffic impact study as specified by city requirements. The transportation impact study shall either:

i. Address the impacts of the development of the site consistent with all phases of the general development plan; or
ii. Address the impacts of specific phases if the city engineer determines that the traffic impacts of the full development can be adequately evaluated without specifically addressing subsequent phases.

i. If an applicant chooses to pursue option h.i., the applicant may choose among three options for implementing required transportation capacity and safety improvements:

i. The general development plan may include a phasing plan for the proposed interior circulation system and for all on-site and off-site transportation capacity and safety improvements required on the existing street system as a result of fully implementing the plan. If this option is selected, the transportation phasing plan shall be binding on the applicant.
ii. The applicant may choose to immediately implement all required transportation safety and capacity improvements associated with the fully executed general development plan. If this option is selected, no further transportation improvements will be required from the applicant. However, if a concept development plan is later amended in a manner so as to cause the projected average daily trips, the projected a.m. or p.m. peak hour trips, or the peak parking demand of the development to increase over original projections, an additional transportation impact report shall be required to be submitted during the detailed development plan review process for all future phases of the development project and additional improvements may be required.
iii. The applicant may defer implementation of any and all capacity and safety improvements required for any phase until that phase of the development reaches the detailed development plan stage. If this option is selected, the applicant shall submit a table linking required transportation improvements to vehicle trip thresholds for each development phase.

Response: The attached transportation study addresses all phases of the general development plan following section h.i above. The study does not anticipate or recommend any changes to on-site or off-site transportation capacity and safety improvements. For context, the previous master plan anticipated a major change in the public street system that was carried out during the life of that plan, the completion of the Meyers Road extension resulting in a third entrance to the campus via Keyser Way. Regarding on-campus circulation, one of the proposed near-term projects if the bond is approved is completion of the Douglas Loop pedestrian path.

As noted in the analysis, signal warrants are not met for the unsignalized study intersection at Meyers Road and Keyser Way through the 2044 planning horizon. The other intersections that lead directly to the campus are already signalized. Also, all study intersections are projected to operate within acceptable mobility standards through the life of the master plan. The intersection at Clairmont Drive and S. Beavercreek Road is forecast to operate above jurisdictional standards in 2044 with construction of all the projects, including Phase 2 of the Wacheno Welcome Center. Because this timeframe is 10-20 years out, the Wacheno Phase 2 project is not funded or designed, and additional traffic analysis will be required with its detailed development plan, near-term changes to the intersection are not proposed. The operation of this intersection may be analyzed as part of that traffic study.

j. For residential and mixed-use projects:
i. Proposed minimum lot area, width, frontage, and yard requirements
ii. Proposed project density in number of units per acre;
iii. Proposed residential types and number of each;

Response: No residential or mixed-use projects are proposed as part of this general development plan. While possibilities for future residential uses on the campus have been discussed, they are so abstract as to not merit inclusion in a general development plan. If these housing ideas begin to take shape, CCC understands it would require an amendment to the general development plan.

2. Maps and Diagrams. The applicant must submit, in the form of scaled maps or diagrams, as appropriate, the following information:

a. A preliminary site circulation plan showing the approximate location of proposed vehicular, bicycle, and pedestrian access points and circulation patterns, parking and loading areas or, in the alternative, proposed criteria for the location of such facilities to be determined during detailed development plan review.

Response: A circulation plan that satisfies all of the above listed items is part of the included drawing set.

b. The approximate location of all proposed streets, alleys, other public ways, sidewalks, bicycle and pedestrian access ways and other bicycle and pedestrian ways, transit streets and facilities, neighborhood activity centers and easements on and within two hundred fifty feet of the site. The map shall identify existing subdivisions and development and un-subdivided or unpartitioned land ownerships adjacent to the proposed development site and show how existing streets, alleys, sidewalks, bike routes, pedestrian/bicycle access ways and utilities within two hundred fifty feet may be extended to and/or through the proposed development.

Response: A site plan and vicinity map showing all the relevant items listed above is contained in the included drawing set.

c. The approximate location of all public facilities to serve the proposed development, including water, sanitary sewer, stormwater management facilities.

Response: A public facilities report is included as an appendix to this document. This report includes maps of all existing and future water, sewer and stormwater infrastructure facilities.

d. The approximate projected location, footprint and building square footage of each phase of proposed development.

Response: The "Priority Modernization and Adaptation Sites" plan shows the areas in which changes will occur over the life of the plan. The Natural Resources Center of Excellence will occur in the Vocational Training area of the Beavercreek Cluster. The Campus Services building will occur in that section of campus, near the ELC. Wacheno Phase 2 will occur on the site of Bill Brod Community Center. The approximate location, footprint and building square footage of each phase is described in a proposed project table on page 4.

e. The approx. locations of proposed parks, playgrounds or other outdoor play areas; outdoor common areas and usable open spaces; and natural, historic and cultural resource areas or features proposed for preservation. This info. shall include identification of areas proposed to be dedicated or otherwise preserved for public use and those open areas to be maintained and controlled by the owners of the property and their successors in interest for private use.

Response: The locations of open and landscaped areas are shown on the "Existing Usable Public Open Space" drawing in the plan set. Currently, pervious-surfaced open areas (which include natural resource areas and playing fields) constitute 64 percent of college property. The college campus is publicly owned, available for public use, and open to the public.

C. Approval Criteria for a General Development Plan. The planning commission shall approve an application for a general development plan approval only upon finding that the following approval criteria are met.

1. The proposed general development plan is consistent with the purposes of OCMC 17.65.

Response: The purpose section of Section 17.65 reads:

> *It is the intent of this chapter to foster the growth of major institutions, phased residential, commercial or mixed-use development, and other large-scale development, while identifying and mitigating the impacts of such growth on surrounding properties and public infrastructure. The city recognizes the valuable housing options, services and/or employment opportunities that these developments bring to Oregon City residents. The master plan or planned unit development process is intended to facilitate an efficient and flexible review process for major developments, support innovative and creative land development, and to provide long-term assurance to plan for and execute developments in a phased manner. To facilitate this, the master plan process is structured to allow an applicant to address larger development issues, such as adequacy of infrastructure and transportation capacity, and reserve capacity of the infrastructure and transportation system before expenditure of final design costs. The master plan or planned unit development process is further intended to promote efficiency in land development, maintenance, street systems and utility networks while providing site layouts that integrate usable and attractive open spaces, site circulation, and the general wellbeing of site users. For the purposes of this chapter planned unit developments are considered the same as master plans. (OCMC 17.65.010)*

This general development plan is consistent with this purpose statement because it fosters the growth of Clackamas Community College through a long-range, flexible, campus-wide master plan. The plan identified potential impacts to surrounding properties and public infrastructure with regard to traffic, parking, natural resources, water supply, sewer, stormwater, and bike/ped connectivity. Impacts were found to be minor or non-existent in every case, largely due to fluctuations in enrollment, the increased use of remote and hybrid learning in the recent past and projecting into the future. Where impacts are identified, the master plan proposes mitigation measures as appropriate. These measures will be implemented in concert with future development on the site.

Combined with the adjustments to existing city development standards, general and detailed development plans create a "flexible and efficient" review process. This also grants a degree of

certainty to CCC and to the City about the expectations for future development, and how it will proceed in a phased manner.

This general development plan does not provide details about specific building projects. Consistent with the purpose section quoted above, it focuses on the larger development issues facing the college, such as stormwater management and transportation. A campus wide analysis of these and other infrastructure needs supports the college in anticipating the expense of future upgrades. It also informs the City about the extent of proposed development on the 166 acre parcel of land owned by the college.

For these reasons, the CCC Master Plan is consistent with the purpose section of Section 17.65.

2. The transportation system has sufficient capacity based on the city's level of service standards and is capable of safely supporting the development proposed in addition to the existing and planned uses in the area, or will be made adequate by the time each phase of the development is completed.

Response: The study intersections operate under the jurisdiction of three separate agencies: Oregon City, Clackamas County, and ODOT. Based on the capacity analysis presented in the Transportation Impact Analysis, all study intersections are projected to operate acceptably according to Oregon City's level of service and capacity standards through the estimated 2030 buildout year for Phase 1 projects, including the Center of Excellence.

For Phase 2, the intersection of Clairmont Drive at S Beavercreek Road (Clackamas County) is projected to exceed County mobility standards by 2044. This is the case regardless of whether Wacheno Phase 2 is constructed. However, the 2044 planning year analysis is intended for informational purposes only, because Wacheno Phase 2 is a long-term project where the building plan, size, and completion year are all uncertain, and the bond measure necessary to finance this project is 10+ years away.

As part of a future detailed development plan application for the Wacheno project, an updated TIA may be conducted to re-evaluate transportation impacts and determine mitigation as needed. Therefore, no capacity or level of service mitigation is necessary or recommended at the study intersections.

Regarding safety, a review of the most recent five-years of available crash data found no significant trends or crash patterns at any of the study intersections that indicate safety concerns. No safety mitigation is recommended per the crash data analysis.

Additional detail is available in the transportation analysis.

3. Public services for water supply, police, fire, sanitary waste disposal, and storm-water disposal are capable of serving the proposed development, or will be made capable by the time each phase of the development is completed.

Response: Based on previous review of public water and sanitary systems, the surrounding public infrastructure has adequate capacity to service the proposed master plan buildout. Stormwater management of proposed master plan projects will be implemented specifically for each project, and integrated in a manner that best fits the proposed project. Police and fire services will be confirmed internally by the city at time of each detailed development proposal.

4. The proposed general development plan protects any inventoried Goal 5 natural, historic or cultural resources within the proposed development boundary consistent with the provisions of applicable overlay districts.

Response: There are no cultural or historic resources within the proposed development boundary on Oregon City's Goal 5 inventory. There are inventoried Goal 5 natural resources within the master plan boundary, but no development is proposed there. The two resources are a large wetland area around the Environmental Learning Center, at the northeast edge of campus, and the edge of a stream buffer at the extreme southeast corner of the campus. Both areas are protected by the city's Natural Resource Overlay District. No development proposed in this plan affects either natural resource. These areas of campus and the NROD overlay are shown below:

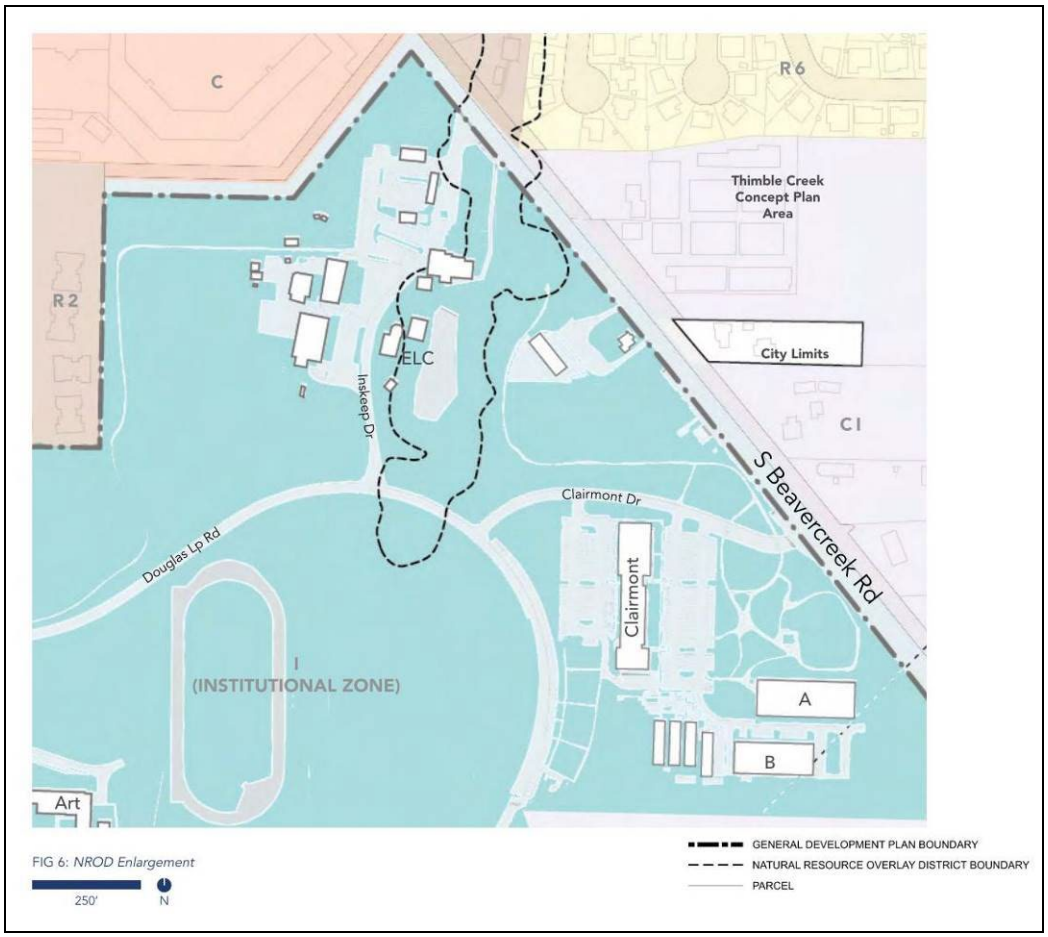


Figure 16. ELC Area and NROD



Figure 17. SE Corner of Campus with NROD

Buildings near or in the NROD around the Environmental Learning Center are existing, were previously approved by the city, and will not move or expand based on any elements of this master plan. Neighboring areas that will see new development in Phase 1 are: the Natural Resources Center of Excellence, which will be sited in the Beavercreek Cluster southeast of the NROD, and a new Grounds Building, which is in an existing developed area west of the NROD. No development is envisioned anywhere near the wooded southeast corner of campus where the NROD protects a stream resource. Therefore, avoidance of the resource is the primary mechanism for protection of the inventoried Goal 5 natural resources. Insofar as any proposed development during the life of the master plan affects campus property that is regulated by the NROD, CCC will comply with the city's regulations. This would be addressed during the detailed development plan stage.

5. The proposed general development plan, including development standards and impact mitigation thresholds and improvements, adequately mitigates identified impacts from each phase of development. For needed housing, as that term is defined in ORS 197.303(1), the development standards and mitigation thresholds shall contain clear and objective standards.

Response: The general development plan has identified the impacts from all phases of master plan development.

Table 13. Development Impacts

Impact Category	Development Impact from Master Planned Development
Traffic	1,313 avg. weekday trips
Stormwater	Highly variable depending on type of development and location
Water	3.4 million additional gallons annually
Sanitary Sewer	2.0 million additional gallons annually

As shown, the impacts from proposed development are minor or non-existent. The reason for this is twofold. Primarily, impacts to any of the above categories derives from enrollment, which is people coming to campus. Enrollment is down (specifically face-to face instruction) since the last master plan, which reduces overall impacts. Second, for any impacts created by the projects described in this plan, there is sufficient capacity in the system to absorb them. This includes, for example the new college access on Meyers Road that was built and constructed since the approval of the last master plan. Consequently, this plan does not propose any specific mitigation measures or improvements to address additional impacts.

6. The proposed general development plan is consistent with the Oregon City Comprehensive Plan.

Response: In general, compliance with zoning code requirements results in a proposal that is consistent with the city's Comprehensive Plan. More specifically, the selected policies in the plan are cited below, with responses relating to this master plan application.

- *Chapter 2, Policy 3.1*

"Promote efficient use of land and public infrastructure and plan for appropriate infill development, redevelopment, and new development."

This master plan creates a mechanism for infill development on the existing CCC campus. Expanding and renovating building area within the campus boundary to accommodate new and changing college programs is an efficient use of city land and public infrastructure.

- *Chapter 2, Policy 4.3*

"Utilize urban design principles that create comfortable and attractive public spaces that are reflective of Oregon City's community vision."

The master plan process, of which this general development plan is the first part, allows for the creation of comfortable and attractive public spaces through identification of the location of those spaces and a later detailed development plan which reviews buildings and their interaction with the public realm in a more precise way.

- *Chapter 3, Policy 1.5*

"Support opportunities for safe, affordable, and accessible transit service, including regional efforts to expand public transportation networks."

CCC is a regional transit hub that is served by numerous public transit lines. A master plan that reinforces new development at the campus will support the opportunity for more users to take advantage of this transit.

- *Chapter 3, Policy 4.2*

"Continue to implement green, sustainable, and low impact approaches to stormwater management."

As demonstrated in the stormwater and utility report, CCC will continue to manage its stormwater on site using efficient and consolidated approaches that are green and sustainable.

- *Chapter 4, Policy 1.2*

"Provide equitable distribution of parks and trails across the city."

This plan includes completing the path all around Douglas Loop Road. As one of a limited number of trails on the east edge of Oregon City, this plan element will enable greater use of this facility and its existing connections to trails off site.

In sum, the proposed general development plan proposed is consistent with the Oregon City Comprehensive Plan.

7. The proposed general development plan is consistent with the underlying zoning district(s) and any applicable overlay zone or concept plans.

Response: The two underlying zoning districts are Institutional and Campus Industrial. The one applicable overlay zone is NROD.

The purpose of the Institutional zone is "to facilitate the development of major public institutions, government facilities and parks and ensure the compatibility of these developments with surrounding areas." (OCMC 17.39.010)

This master plan is essential to facilitate continued growth and development of CCC, a major public institution. The compatibility of future college development is addressed through a plan that addresses site layout, infrastructure, and potential impacts. The master plan will insure that any future construction will be compatible with surrounding development. The projects proposed in this plan are all within the Institutional zone that predominates on campus and they are consistent with the rules of that district.

Campus property that is zoned Campus Industrial is a newly-acquired 10.5 acre piece on the east side of campus that still retains the zoning it had before it became part of the CCC campus. No development is currently planned on this part of the property. Insofar as any future development does occur on that part of the site, it will follow and comply with all the relevant city regulations for the CI district (OCMC 17.37).

Regarding overlay districts, the only one that applies is the NROD (OCMC 17.49) which governs an area around the ELC pond. The purpose section of the NROD chapter is to "to resolve conflicts between development and conservation of habitat, stream corridors, wetlands, and floodplains identified in the city's maps." By completely avoiding development in the NROD, no conflicts with conservation occur. While two projects are proposed in the east area of campus, both occur entirely outside the boundaries of this overlay. To the extent that any future project affects land within the boundary in any way, it will comply with NROD regulations in effect at the time.

Because the general development plan proposed here is consistent with both the purpose and the specific standards of each base zone and the overlay zone that applies, this criterion is met.

8. For projects with a residential use component, the proposed general development plan includes common open space for the recreational needs of the development's residents. […]

Response: The proposed plan does not have a residential use component. This criterion does not apply.

17.65.070 Adjustments to development standards.

A. Purpose. In order to implement the purpose of the city's master plan or planned unit development process, which is to foster the growth of major institutions, major residential, commercial or mixed-use development, and other large-scale development, while identifying and mitigating their impacts on surrounding properties and public infrastructure, an applicant may request one or more adjustments to the applicable development regulations as part of the master planning or planned unit development process, and are not required to go through the variance process pursuant to OCMC Chapter 17.60.

B. Procedure. Requests for adjustments shall be processed concurrently with a general development plan. An adjustment request at the detailed development plan review shall cause the detailed development plan to be reviewed as a Type III application.

C. Regulations That May be Adjusted. Adjustments may be allowed for the following items:
1. Dimensional standards of the underlying zone of up to twenty percent, except the perimeter of the development shall meet the underlying zone's setbacks when adjacent to residentially zoned property.
2. Site plan and design standards.
3. Residential design standards.
4. Increase in allowed maximum residential density of up to ten percent.
5. Standards for land division approval.
6. Additional uses allowed with residential projects, or residential component of projects:[…]

D. Regulations That May Not be Adjusted. Adjustments are prohibited for the following items:

1. To allow a primary or accessory use that is not identified as a permitted, or conditional use in the underlying zone, with the exception of the additional uses permitted under OCMC 17.65.070.C.6 above;
2. To any regulation that contains the word "prohibited";
3. As an exception to a threshold review, such as a Type III review process; and
4. Minimum density for residential sites may not be reduced.

Response: This general development plan does not request any adjustments to development standards.

City staff has determined that certain institutional building standards related to street-facing building façades or maximum street setbacks are not applicable to CCC's campus and therefore do not require adjustments. (See decisions in: DP 16-04; CP 18-01 DP 18-01; and GLUA 19-00028, MAS 19-00007). CCC anticipates staff will make similar interpretations of building design standards under this section of the code in future detailed development plan reviews.

A specific example of this is OCMC 17.62.055(D), which requires 60 percent of the site's frontage to be occupied by buildings within five feet of the property line. This standard clearly presumes projects with an urban orientation and a single street frontage. In contrast, CCC has a campus with hundreds of feet of frontage on three major arterials. It would be literally impossible to construct a building that meets this standard. A parallel requirement in OCMC 17.39.050(B) which has a maximum setback of five feet "when development is adjacent to a public right of way." None of the buildings at CCC comply with this standard. Staff has agreed in past decisions that when standards that talk about street frontage or rights of way, or building elements on "street facing façades," these may be interpreted in a campus context and do not require adjustments.

17.65.080 Amendments to approved plans.

A. When Required. An amendment to an approved general development plan or detailed development plan is required for any use or development that is not in conformance with the applicable plan, as provided below. The approval criteria contained in OCMC 17.65.050 will apply to general development plan amendments, the approval criteria contained in OCMC 17.65.050 will apply to detailed development plan amendments. The thresholds and procedures for amendments are stated below.

B. Type III Procedure. Unless the approved general development plan or detailed development plan specifically provides differently, amendments to either plan that require a Type III procedure are:
1. A proposed expansion of the approved boundary;
2. A proposed reduction in the approved boundary that affects a condition of approval, or takes the site out of conformance, or further out of conformance, with a development standard;
3. Proposals that increase the amount, frequency, or scale of a use over ten percent of what was approved (examples include the number of students, patients or members; the number of helicopter flights; the number or size of special events; transportation impacts);

4. New uses not covered in the plan that will increase vehicle trips to the site greater than ten percent of the original amount approved;
5. Increases or decreases in overall floor area of development on the site or number of residential units of over ten percent;
6. A increase/decrease greater than ten percent in the amount of approved or required parking; and
7. Proposed uses or development which were reviewed, but were denied because they were found not to be in conformance with an approved plan.

C. Type II Procedure. Unless an approved plan specifically provides otherwise, amendments to a general development plan or detailed development plan not specifically stated in subsection B or D are processed through a Type II procedure.

D. Type I Procedure. Unless an approved plan specifically provides otherwise, the following amendments to a general development plan or detailed development plan shall be processed through a Type I procedure:
1. Accessory uses and structures that meet applicable development regulations;
2. Reconfiguration of approved parking or landscape designs that do not alter the points of ingress or egress, and do not change the number of parking spaces required, so long as the reconfiguration meets applicable development regulations; and
3. Structures for approved uses that do not exceed one thousand five hundred square feet in size and that meet applicable development regulations.

Response: In the previous master plan, CCC found that even small accessory buildings that were a minor part of overall campus development could trigger the relatively onerous requirements of a Type II detailed development plan review process. Things like greenhouses, storage buildings, and open-sided shelters can exceed the minimum thresholds of section D above and require a Type II review, despite their utilitarian nature and lack of impacts. These kinds of facilities may be constructed in the next 20 years, but their location, type, and size are undetermined.

As part of this Type III master plan review, CCC proposes that accessory structures as allowed in section D.1 above be subject only to a Type I GDP amendment. The amendment will be to the general development plan (2024) approved with this application. If the proposed accessory structure meets certain standards, CCC may file for its approval through a Type I GDP amendment process, and thereby avoid a Type II detailed development plan review. The "applicable development regulations" are listed below and must be met as part of the Type I request. The proposed structure:

1. Has less than 3,000 square feet of floor area;
2. Is an accessory building or structure, and not primarily used for habitation; (Examples: greenhouses, storage buildings, barns, sheds, open-sided shelters. NOT: classrooms, offices, student gathering spaces.)
3. Meets relevant development standards in OCMC 17.39; and
4. Does not otherwise require an adjustment, detailed development plan, or Type II review.

If the above development regulations are met, the structure may be approved as a Type I GDP amendment (OCMC 17.65.080), and will not be subject to the Type II DDP process or standards (OCMC 17.65.060). CCC requests a condition making clear this approval path for smaller accessory structures.

Humber Design Group, Inc.

MEMORANDUM

Date: July 23, 2024

To: Ben Schonberger, AICP, Sr. Planner
Winterbrook Planning
610 SW Alder St, Suite 810
Portland, OR 97205

CC: Bob Cochran, Clackamas Community College

From: David Humber, PE, Principal
Humber Design Group, Inc.

Subject: Clackamas Community College – 2024 Master Plan
Utilities Review

Summary

Clackamas Community College (CCC) is proposing a new master plan that will lay out proposed development over the next 20 years. The CCC campus comprises 157 acres in addition to a recently added 10 acres near the BPA lines in the SE portion, for a total of approximately 167 acres.

Proposed projects within the current 2024 master plan include the following:

Project	Location	Notes
Existing Building Renovations	Existing building sites	May include: Barlow, McLoughlin, Gregory Forum, Dye Learning Center, Family Resource Center, Community Center, Clairmont
Center for Excellence	Beavercreek cluster	Horticulture, arboriculture, wildland fire, farming, welding. (Approx. 50,000 s.f. new buildings.)
Athletics Improvements	Athletic field area	Track and field upgrades, new throwing shelter, grandstands, restrooms, lighting, baseball, softball, etc.
Campus Services	Campus Services area	New grounds building, storage. (Approx. 3,000 s.f.)
Pathways and Plazas	Multiple locations	Complete Douglas Loop walking trail, renovate central plaza, ADA upgrades around campus
Wacheno Welcome Center, Phase 2	On footprint of Bill Brod Community Center	Expansion of Wacheno (Approx. 50,000 s.f. net)

Total net new building square footage over this 20-year master plan includes 103,000 square feet. The rest of the proposed projects are a variety of building renovations and miscellaneous site improvement projects, and will have little to no utility systems impacts.

Infrastructure Improvements

Stormwater – Existing Systems

The existing campus is largely comprised of pervious natural and developed landscaping. Approximately 64% of the campus is landscaped or in a natural state. The remaining 36% of impervious areas (buildings, parking lots, streets, plazas and other hard surface areas) have appropriate stormwater management facilities constructed in order to meet all past or current code policies. These policies typically include two components of management: water quality treatment, to cleanse the runoff, and volume control, which temporarily holds back large volumes of stormwater and discharges to the downstream system at a reduced rate.

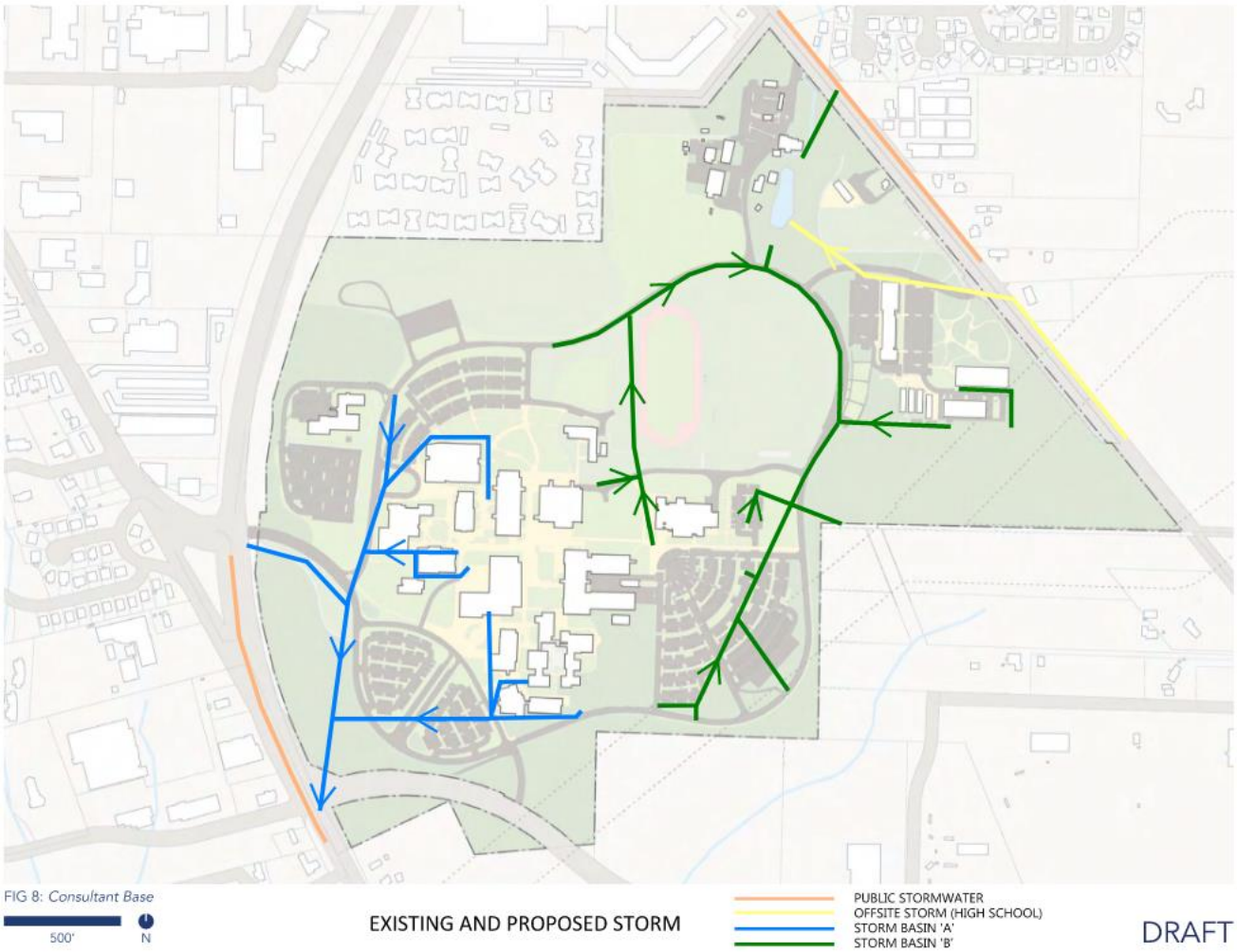


Figure 1 - Existing and Proposed Stormwater System

Current development patterns over the decades have typically included stormwater management systems that have been project-based and are designed to manage a specific development proposal. There are no existing sub-regional stormwater management systems that exist on campus that might manage a large part of campus in one location. This is typical when development is piecemeal and added within the fabric of existing development.

The CCC campus' stormwater systems are split into two basins that drain either west or east via a piped system. The west system ultimately collects and discharges its water to Caufield Creek, and the north and east system drains to Newell Creek. See Figure 1 below.

Rainfall on the campus property either infiltrates directly to the landscape or is collected and directed to a series of individually designed stormwater management facilities that have been built over the decades and were associated with the various projects that have occurred over time that create the current campus.

Stormwater – Future Improvements

As part of the proposed master plan project, those individual projects that create new or redeveloped impervious surfaces of more than 5,000 SF would be required to manage the post-event to pre-developed conditions. This policy requirement will limit runoff to current conditions and could in fact even reduce total runoff from the development area, depending on when the existing improvements were built.

Future Detailed Development Plans will be required to specifically account for existing surfaces and proposed development areas and manage the runoff according to current engineering policy at the time of permit application. These proposed management (water quality and flow control) facilities will meet current City of Oregon City Stormwater Management engineering requirements. Current code encourages use of Low Impact Development (LID) facilities to the Maximum Extent Practical (MEP). These facilities will then discharge either to infiltrating facilities or be directly connected to the existing stormwater infrastructure on campus near the proposed development. The determination of how and where to discharge will be largely guided on what the soils are like and if infiltration is determined to be effective.

As each proposed development project within this 2024 master plan will be required to specifically meet the current city development code, and by doing so, in effect, limits development impacts to a pre-developed rate. No additional mitigation is anticipated.

Water – Existing Systems

Water is supplied to the campus via two public water mains. The source of the supply is surface water from the lower Clackamas River delivered through the City of Oregon City's water infrastructure An 8-inch water main in Oregon Highway 213 provides water through a 6-inch meter to the west side of the campus, and a 16-inch water main in Beaver Creek provides water to the eastern side of the campus through a 2-inch low flow and an 8-inch high flow meter. There are two additional connections to the water main in Beaver Creek Road (at its intersections with Inskeep and Clairmont Drives), but those are typically valve "off". Underground water distribution within the campus is a looped system and is largely 6- and 8-inch pipe.

Upon review of last two full years of water meter records (2022 and 2023), the campus' actual water demand use has been:

- 2023 21.5 million gallons (with peak August month of 4.8 million gallons)
- 2022 16.0 million gallons (with peak August month of 5.1 million gallons)

These usage amounts are all well below previous estimates stated in the 2008 CCC master plan and are likely indicative of the reduced student head count on campus and remote learning that may still be occurring.

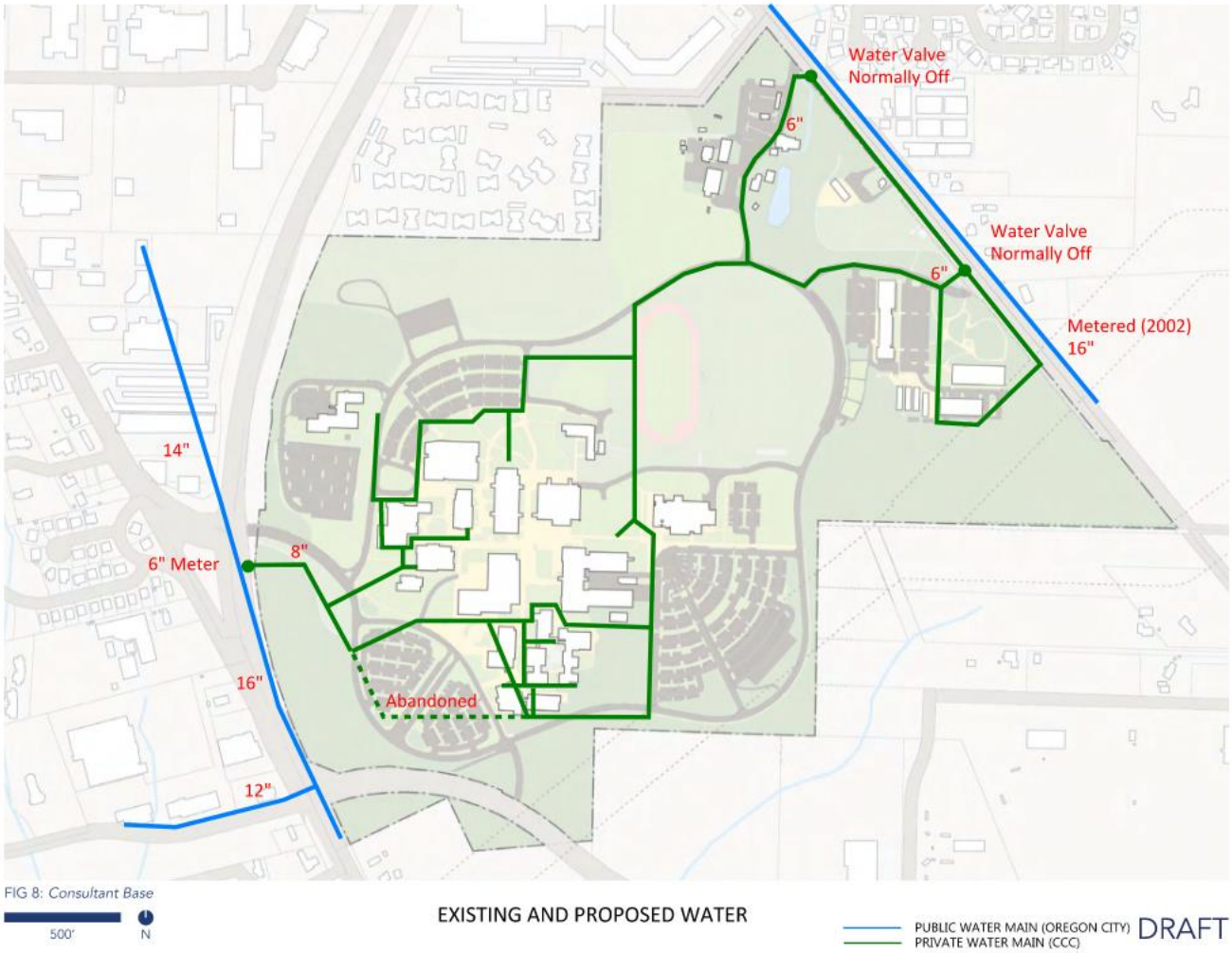


Figure 2 - Existing and Proposed Water System

Water – Future Improvements

In 2012, Oregon City adopted a water master plan (with subsequent amendments in 2021) that establishes the planned capacity of the public water system. System capacity is driven by fire flow requirements of the properties served. The CCC campus is located in the "Upper Zone" pressure zone served by the Henrici Reservoir which maintains a capacity of 3,000 gallons per minute.

The 2012 Oregon City master plan and 2021 amendment indicates that the CCC has available fire flows and peak hour demands met.

The approved 2008 CCC Master Plan document suggests a total demand of 35 million gallons annually, based on full build out. Based on total 2023 water usage of 21.5 million gallons divided by the 651,000 SF of existing campus building development, an estimate of current water usage is approximately 33 gallons/SF of building, which yields an estimated additional water demand from the proposed 103,000 SF of building addition of approximately 3.4 million gallons annually, for a total projected annual demand of 24.9 million gallons annually for the life of this masterplan

As the existing water usage records indicate substantially less water (approximately 10 million gallons) is currently being used by CCC, adequate water capacity is available to provide for future campus development. Any threshold for mitigation is well above the predicted build-out for the campus. As a result, no mitigation is anticipated or will be required.

Sanitary Sewer - Existing Systems

The campus has two major connections to the City of Oregon City's public infrastructure that include an 8-inch sanitary line connecting to an existing 18-inch public line in Highway 213, and a 10-inch sanitary line that connects to an existing 15-inch public line in Beavercreek Road. Wastewater is conveyed via City of Oregon City infrastructure to the Water and Environmental Service's Tri-City Wastewater Treatment Plant.

The approved 2008 CCC Master Plan establishes existing sanitary flow rates at 19 gallons for each square foot of building. This indicates that the existing campus buildout of 651,000 SF creates an approximate annual flow amount of 12.3 million gallons. However, recent studies have shown a high use of water for irrigation on the campus (grass areas, sports fields, horticulture gardens and greenspaces) during the months of May through October. To determine the actual discharge to the sanitary system, irrigation water is removed from the totals. The six-month winter 2023 (November through April) water use was 2.5 million gallons. Doubling this for summer irrigation season that is not discharged to the sanitary sewer system results in an estimated annual sewer volume of 5.0 million gallons discharged to the City's Sanitary Sewer system.

Sanitary Sewer – Future Improvements

Based on an established flow rate of 19 gallons for each square foot of building the currently proposed 103,000 SF of additional proposed building will add an additional annual amount of 2.0 million gallons, for a total annual flow rate of approximately 7.0 million gallons.

The 2014 Oregon City Sanitary Sewer master plan indicates that the future flow rates for low density residential (5 dwelling units per acre), which is the land use category used by the approved 2008 master plan. The planned available capacity of the public sanitary system for CCC is 24.5 million gallons annually. This figure is almost triple the college's anticipated need. As such, adequate capacity for sanitary sewer is available to provide for future campus development.

The threshold for mitigation is well above the predicted build-out for the campus. As a result, no mitigation is anticipated or will be required.

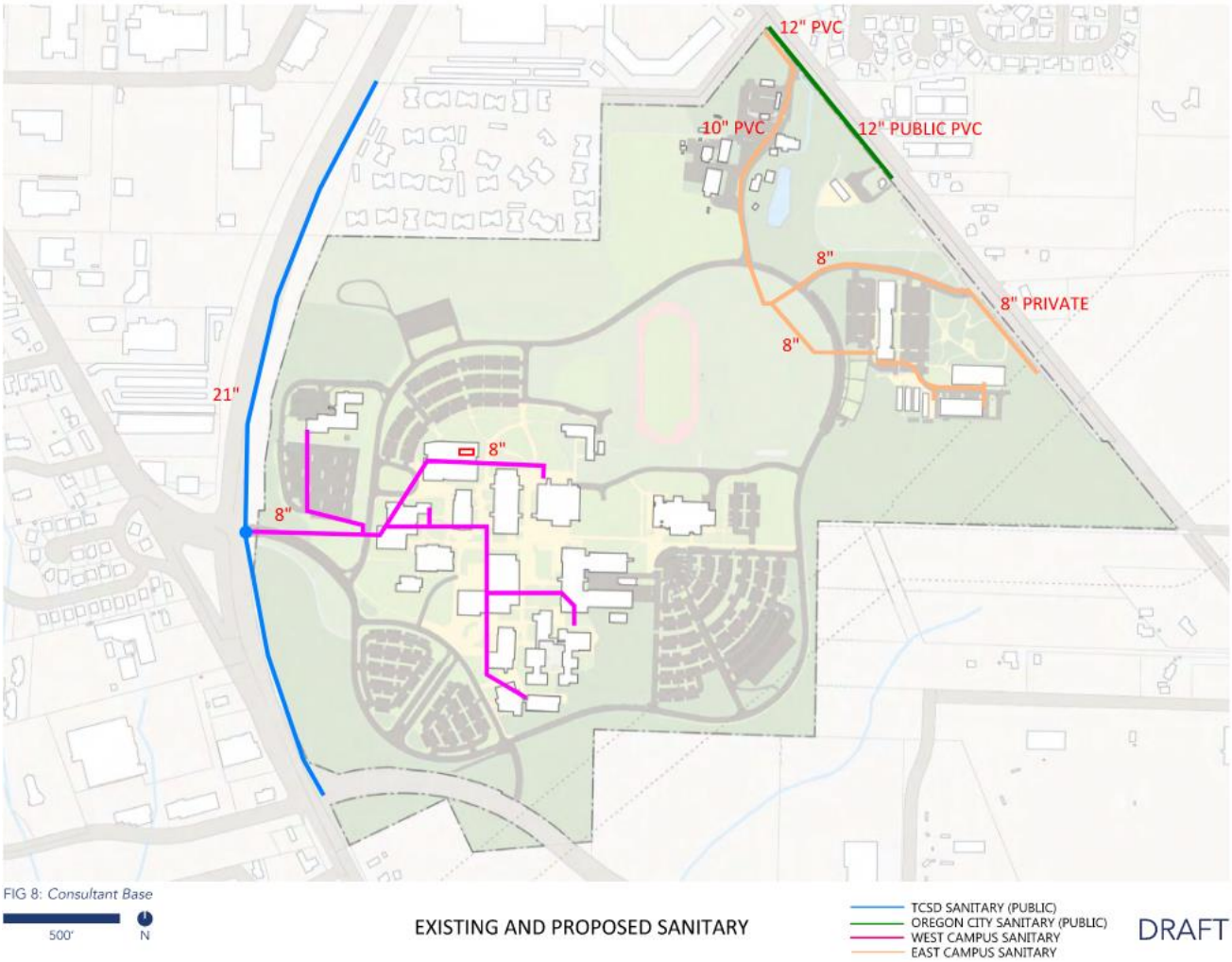


Figure 3 - Existing and Proposed Sanitary System

Future Development Impacts

The master plan is required to assess public impacts from future development. This includes utility impacts. With regard to stormwater, water, sanitary impacts they are quantified in the table below. Stormwater is difficult to quantify on a campus-wide basis, because after incorporating city standards into a particular project, there is likely to be no development impact at all.

Impact Category	**Development Impact from Master Planned Development**
Stormwater	Highly variable depending on type of development and location
Water	3.4 million additional gallons annually
Sanitary Sewer	2.0 million additional gallons annually

Thresholds for Mitigation

In addition to quantifying future development impacts, the master plan is required to spell out mitigation measures that will address those impacts. For utilities, this infrastructure analysis has found no public systems mitigation is necessary for stormwater, water, or sanitary sewer impacts. Briefly, this is because stormwater impacts off-site will be no greater than existing conditions, and water and sanitary impacts are easily managed by capacity in the system and substantially lower than what was forecast in the previous master plan approved by the City.

Impact Category	**Quantity**	**Mitigation Needed**
Stormwater	Highly variable depending on type of development and location	None
Water	3.4 million additional gallons annually	None
Sanitary Sewer	2.0 million additional gallons annually	None

Supporting Documents Referenced

2014 Sanitary Sewer Master Plan
2012 Water System Master plan
2021 Amendment to 2012 Water System Master Plan

2019 Stormwater Master Plan
2008 Clackamas Community College Master Plan (CP 07-01)
CCC Water Meter records (2024 thru May, 2023, 2022)

End of Memo

Clackamas Community College Master Plan

Transportation Impact Analysis

Oregon City, Oregon



Date:
July 23, 2024

Prepared for:
Bob Cochran
Clackamas Community College

Prepared by:
Daniel Stumpf, PE

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Executive Summary

1. This Transportation Impact Analysis (TIA) supports the master plan application of the Clackamas Community College (CCC) Master Plan. Previous master plan applications were prepared for CCC in January 2007 and subsequently in January 2018, both of which addressed impacts for a proposed expansion of the college campus. Located on the CCC campus at 19600 Molalla Avenue in Oregon City, Oregon, the proposal will include constructing the Center of Excellence and groundskeeping buildings totaling approximately 53,000 square feet in building space. Although not planned for construction in the near-term, the Wacheno Welcome Center Phase 2 project may include the construction of an additional 50,000 square feet of building space; however, the Wacheno Phase 2 development plan is susceptible to change, and the timing of future development has not been determined.

2. Based on correspondence with CCC representatives and reviewing enrollment and course-type data from 2016-2024, it is believed that the impacts of the Covid pandemic as well as changing higher educational trends have decreased overall trips generated by the CCC campus. This decrease in trips appears to be associated with decreasing student enrollment and shifting learning opportunities from in-person to online courses. To support CCC's claims of reduced impacts to the transportation system, traffic counts previously conducted at the campus's access driveways on Tuesday, April 12, 2016, were compared to counts conducted on Tuesday, April 9, 2024. From this data the following changes in CCC campus trip generation were found:

    a. AM peak hour trip generation decreased by approximately 30.3%.

    b. PM peak hour trip generation decreased by approximately 16.1%.

    c. Daily trip generation decreased by approximately 23.3%.

    Given the Covid impacts and the decreasing trend of student enrollment, in-person courses, and campus trips being generated, overall CCC campus trip generation has decreased between when the *Clackamas Community College Master Plan Update TIS*, dated January 31, 2018, had been prepared and this current 2024 TIA. This trend is expected to continue in the foreseeable future, even though overall CCC campus building square footages have increased since the 2018 TIA was prepared. The proposed expansion project will not result in additional trips generated beyond the trip generation previously approved/reviewed in the 2018 TIA. The trip generation estimates below are expected to provide a highly conservative evaluation of site trip impacts to the transportation system.

3. Although considered highly conservative based on the above, assuming site trip generation will increase linearly in relation to overall increases in the CCC campus building square footage, the proposed Center of Excellence and other near-term development projects are projected to generate an additional 43 AM peak hour trips, 65 PM peak hour trips, and 678 average weekday trips. If including the Wacheno Phase 2 project as part of the trip generation estimates, the proposal may potentially generate 85 AM peak hour trips, 128 PM peak hour trips, and 1,322 average weekday trips.

4. Based on a review of the most recent available crash data, no significant trends or crash patterns were identified at any of the study intersections that are indicative of safety concerns. Accordingly, no safety mitigation is recommended per the crash data analysis.

5. Based on a preliminary analysis reviewing Warrant 1 in the *Manual on Uniform Traffic Control Devices*, traffic signal warrants are not projected to be met at the intersection of Meyers Road at Keyser Way under year 2030 conditions. Additionally, traffic signal warrants are not projected to be met under the 2044 Planning Horizon with the Wacheno Phase 2 project built. Therefore, no new traffic signals are necessary or recommended as part of the proposed master plan update.
6. All study intersections are currently operating acceptably per their respective agency standards and are projected to continue operating acceptably through the 2030 buildout year of the Center of Excellence and other near-term development projects. No operational mitigation is necessary or recommended at the study intersections.
7. Under the 2044 planning horizon year, with or without the construction of the Wacheno Phase 2 project, all study intersections are projected to operate within acceptable mobility standards with the exception of the intersection of Clairmont Drive at S Beavercreek Road during the PM peak hour. Development of Wacheno Phase 2 is a long-term conceptual project where the building plan, size, and completion year are all subject to change. Additionally, there are no active bond measures proposed or currently being pursued to fund this project. Therefore, reviewing the trip generation impacts associated with the Wacheno project is intended for informational and planning purposes only. As part of a future detailed development plan application for the Wacheno project, an updated TIA may be conducted to re-evaluate transportation impacts and determine mitigation as needed.

Project Description

Introduction

This Transportation Impact Analysis (TIA) supports the master plan application of the Clackamas Community College (CCC) Master Plan. Previous master plan applications were prepared for CCC in January 2007 and subsequently in January 2018, both of which addressed impacts for a proposed expansion of the college campus. Located on the CCC campus at 19600 Molalla Avenue in Oregon City, Oregon, the proposal will include constructing the following:

- Center of Excellence for Farming, Horticulture, and Wildland Fire
    - Construct approximately 50,000 square feet of new building space to relocate and accommodate activities currently conducted at Clairmont Hall. Additionally, some of the new building space will be used as storage, intended to store teaching materials/supplies.
    - No new programs at the Center of Excellence are currently proposed and, it is unknown by CCC whether student enrollment will increase as part of this project.
- Renovate existing buildings on campus with no proposed expansion to the building square footages. These buildings may include Barlow Hall, McLoughlin Hall, Gregory Forum, Dye Learning Resource Center, Family Resource Center, Bill Brod Community Center, and/or Clairmont Hall.
- Upgrade athletics facilities, such as adding a throwing shelter, grandstands, lighting, restrooms, field improvements, etc.
- Construct a new groundskeeping building and associated storage buildings (approximately 3,000 square feet).
- Complete the Doulgas Loop walking trail, renovate the central plaza, and implement ADA upgrades around the campus.
- Construct the Wacheno Welcome Center Phase 2 (approximately 75,000 to 80,000 square feet) over the existing building footprint of the Bill Brod Community Center (approximately 29,000 square feet). Note this is a long-term conceptual project where the building plan, size, and completion year are all subject to change.

Existing accesses to the site will be maintained at the following locations, noting Inskeep Drive is gated and not open for general use by the student body:

- S Douglas Loop at OR-213
- Keyser Way at Meyers Road
- Clairmont Drive at S Beavercreek Road

Based on correspondence with Oregon City and ODOT staff, the report conducts safety and capacity/level of service analyses at the following intersections:

1. S Douglas Loop/Molalla Avenue at OR-213
2. Meyers Road at Keyser Way
3. Clairmont Drive at S Beavercreek Road

The purpose of this study is to determine whether the transportation system within the vicinity of the site is capable of safely and efficiently supporting the existing and proposed uses, and to determine any mitigation that may be necessary to do so. Detailed information on traffic counts, trip generation calculations, safety analyses, and level of service calculations is included in the appendix to this report.

Location Description

The project site is located north of Meyers Road (portions of CCC property are located south of the roadway), east of OR-213, and southwest of S Beavercreek Road in Oregon City, Oregon, near the southeastern edge of the city limits. The project site is surrounded by a mix of commercial retail/service and residential uses to the north and west; low-density residential and rural lands to the east; and a mix of residential uses and Oregon City High School to the south/southeast.

The site includes a two properties (tax lot 32E09C-00800 and 32E09A-01400), which encompass an approximate total of 168.24 acres. Access to the site is currently provided via the intersections of S Douglas Loop/Molalla Avenue at OR-213, Meyers Road at Keyser Way, and Clairmont Drive at S Beavercreek Road. A fourth access intersection, Inskeep Drive at S Beavercreek Road, is gated and not open for general use by the student body.

Figure 1 presents an aerial image of the nearby vicinity with the CCC campus outlined in yellow.

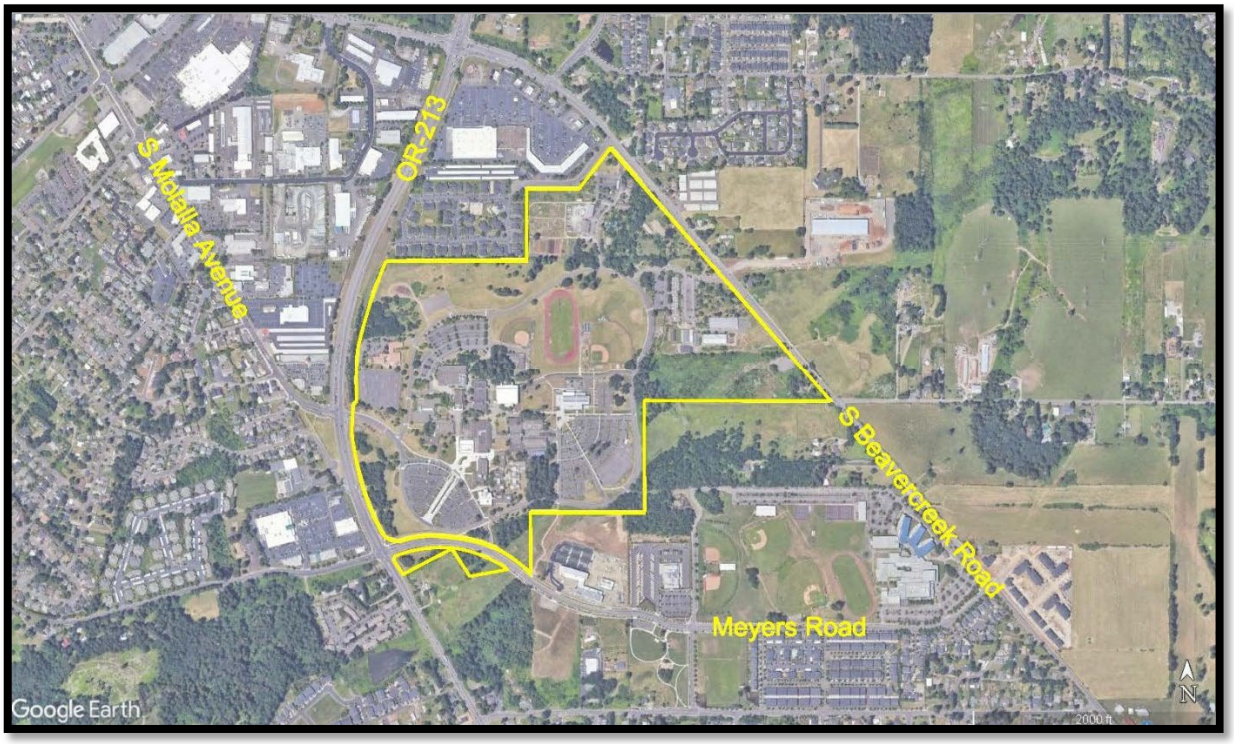


Figure 1: Aerial Photo of Site Vicinity (Image from Google Earth)

Vicinity Streets

The study area near the project site is composed of seven roadways. Table 1 provides a description of these vicinity roadways for segment near the CCC campus.

Table 1: Vicinity Roadway Descriptions

Street Name	Jurisdiction	Functional Classification	Speed (MPH)	On-Street Parking	Curbs & Sidewalks	Bicycle Lanes
S Beavercreek Road	Oregon City/ Clackamas County	Major Arterial	35/40	Not Permitted	Partial Both Sides	Both Sides
Clairmont Drive	Private/Oregon City	Local Street/Collector	20	Not Permitted	Partial Both Sides	Partial North Side
S Molalla Avenue	Oregon City	Major Arterial	30	Not Permitted	Both Sides	Both Sides
S Douglas Loop	Private	Local Street	20	Not Permitted	Partial Both Sides	None
Meyers Road	Oregon City	Minor Arterial	30	Not Permitted	Partial Both Sides	Both Sides
OR-213	ODOT	Major Arterial/Expressway (District Highway)	45/55	Not Permitted	Partial Both Sides	Both Sides
Keyser Way	Private	Local Street	20	Not Permitted	East Side	None

Table Notes: Functional classification based on the Oregon City TSP and ODOT TransGIS website.

Study Intersections

Based on correspondence with agency staff, an analysis of three intersections impacted by the proposal is required. A summarized description of these study intersections under existing conditions is provided in Table 2.

Table 2: Study Intersection Descriptions

Number	Intersection	Geometry	Traffic Control	Phasing/Stopped Approaches
1	S Douglas Loop/Molalla Avenue at OR-213	Four-Legged	Traffic Signal	Protected Left-turns, Overlap EB Right-turn
2	Meyers Road at Keyser Way	Three-Legged	Stop-Controlled	Stop-Controlled SB Approach
3	Clairmont Drive at S Beavercreek Road	Four-Legged	Traffic Signal	FYA NWB/SEB Left-turns, FYA SEB Right-turn, Permitted NEB/SWB Left-turns

Tables Notes: Flashing-Yellow-Arrow denoted as FYA.

A vicinity map showing the project site, vicinity streets, and study intersection configurations are shown in Figure 2.

VICINITY MAP

Site Trips

Trip Generation

Prior CCC Analysis

Based on correspondence with CCC representatives and reviewing enrollment and course-type data from 2016-2024, it is believed that the impacts of the Covid pandemic as well as changing higher educational trends have decreased overall trips generated by the CCC campus. This decrease in trips appears to be associated with decreasing student enrollment and shifting learning opportunities from in-person to online courses.

The following findings regarding enrollment and course data support these claims:

- Between the 2016-2017 and 2019-2020 academic school years, on average the total student enrollment decreased by approximately 11.4% for the Summer, Fall, and Winter terms. Focusing specifically on students enrolled in in-person courses, this enrollment decreased by approximately 10.1%.
- From the 2019-2020 to the 2023-2024 academic school years, on average the total student enrollment increased by approximately 0.6% for the Summer, Fall, and Winter terms. Focusing specifically on students enrolled in in-person courses, this enrollment decreased by approximately 32.8%.
- As a percentage of courses taught at CCC, between the 2016-2017 and 2019-2020 academic school years in-person and hybrid learning courses had decreased by 1.6% and 9.1%, respectively, while online courses increased by 13.1%.
- As a percentage of courses taught at CCC, between the 2019-2020 and 2023-2024 academic school years in-person learning courses decreased by 38.0%, while hybrid learning and online courses increased by 256.2% and 158.9%, respectively.

Note the Spring terms were not considered in the above assessments since CCC was closed during the Spring 2020 term due to Covid.

To further evaluate and support CCC's claims of reduced impacts to the transportation system, traffic counts previously conducted at the campus's access driveways on Tuesday, April 12, 2016, were compared to counts conducted on Tuesday, April 9, 2024. From this data the following changes in CCC campus trip generation were found:

- AM peak hour trip generation decreased from 769 trips to 536 trips between April 2016 and April 2024 (an approximate decrease of 30.3%).
- PM peak hour trip generation decreased from 962 trips to 807 trips between April 2016 and April 2024 (an approximate decrease of 16.1%).
- Daily trip generation decreased from 10,904 trips to 8,365 trips between April 2016 and April 2024 (an approximate decrease of 23.3%).

Given the Covid impacts and the decreasing trend of student enrollment, in-person courses, and campus trips being generated, overall CCC campus trip generation has decreased between when the *Clackamas Community College Master Plan Update TIS*, dated January 31, 2018, had been prepared and this current 2024 TIA. This trend is expected to continue in the foreseeable future, even though overall CCC campus building square footages have increased since the 2018 TIA was prepared (e.g., 50,000 square feet of additional building area had been constructed as part of a DeJardin Hall addition and the Wacheno Welcome Center Phase 1 projects). The proposed expansion project will not result in additional trips generated beyond the trip generation previously approved/reviewed in the 2018 TIA. The trip generation analysis and estimates in the following section are expected to provide a highly conservative evaluation of site trip impacts to the transportation system.

The 2016 traffic counts are included in the appendix. The enrollment and class-type data can be provided upon request.

Existing and Proposed Near-Term Site Trip Generation

The proposal for near-term development on the CCC campus will include the construction of the Center of Excellence (approximately 50,000 square feet building space) and a new groundskeeping building plus associated structures (approximately 3,000 square feet). The Center of Excellence will accommodate activities currently conducted at Clairmont Hall and serve as storage space, intended to store teaching materials/supplies. No new programs are currently proposed at the new building(s).

For developing trip generation for the proposed project, the only known variable/change to the CCC campus will be the increase in overall building square footage with construction of the Center of Excellence. It is unknown whether student enrollment will increase as part of this proposal since no additional school programs are proposed. Although considered highly conservative based on the findings presented in the above section, to estimate potential increases in the CCC campus's trip generation the following was conducted:

- Traffic counts were collected at the school campus access intersections/driveways on Tuesday, April 9, 2024, during the second week of the CCC Spring 2024 term.
- With these observed counts, existing year AM peak hour, PM peak hour, and average weekday trips generated by the school were determined as follows:
    - AM Peak Hour: 536 trips (423 entering, 113 exiting)
    - PM Peak Hour: 807 trips (317 entering, 490 exiting)
    - Average Daily: 8,365 trips
- To estimate future year trip generation, the peak hour and average weekday trips generated were increased by a ratio of the proposed campus building square footage (704,186 square feet, assuming a net increase of 53,000 square feet) to the existing campus building square footage (651,186 square feet), or an 8.1% increase in trips. This increases trip generation to:
    - AM Peak Hour: 579 trips (457 entering, 122 exiting)
    - PM Peak Hour: 872 trips (343 entering, 529 exiting)
    - Average Daily: 9,043 trips

The trip generation calculations show that the proposed project will generate an additional 43 AM peak hour trips, 65 PM peak hour trips, and 678 average weekday trips. The trip generation estimates are summarized in Table 3. Traffic counts used to develop these trip generation estimates are included in the appendix to this report.

Table 3: Trip Generation Summary (Near-Term Campus Projects)

Analysis Scenario	Variable	AM Peak Hour			PM Peak Hour			Weekday Total
		Enter	Exit	Total	Enter	Exit	Total	
Existing CCC Campus	651,186 SF	423	113	536	317	490	807	8,365
Proposed CCC Campus	704,186 SF	457	122	579	343	529	872	9,043
Net Increase in Trips	**53,000 SF**	**34**	**9**	**43**	**26**	**39**	**65**	**678**

When comparing the approved master plan trips generated under the 2018 TIA verses the proposed trip generation under this current 2024 TIA update, CCC campus trip generation is expected to decrease as follows:

- AM peak hour trip generation decreased from 871 trips to 579 trips (an approximate decrease of 33.5%).
- PM peak hour trip generation decreased from 1,025 trips to 872 trips (an approximate decrease of 14.9%).
- Daily trip generation decreased from 11,433 trips to 9,043 trips (an approximate decrease of 20.9%).

Proposed Long-Term Site Trip Generation

As part of the CCC Master Plan update, the Wacheno Welcome Center Phase 2 project (approximately 75,000 to 80,000 square feet) will be constructed over the existing building footprint of the Bill Brod Community Center (approximately 29,000 square feet), for a net increase of approximately 50,000 square feet of campus building space.

To estimate future trip generation of the CCC campus with the long-term planned Wacheno Phase 2 project in place, similar trip generation methodologies described in the previous *Existing and Proposed Near-Term Site Trip Generation* section were used. With the additional 50,000 square feet of potential building space on the CCC campus, the total campus building square footage may increase by approximately 15.8%. If applying this increase in building square footage to existing site trip generation, the long-term trip generation of the CCC campus with the Wacheno Phase 2 project built may include the following:

- AM Peak Hour: 621 trips (490 entering, 131 exiting)
- PM Peak Hour: 935 trips (367 entering, 568 exiting)
- Average Daily: 9,687 trips

The trip generation calculations show that the proposed project will generate an additional 85 AM peak hour trips, 128 PM peak hour trips, and 1,322 average weekday trips. The trip generation estimates are summarized in Table 4.

Table 4: Trip Generation Summary (With Wacheno Phase 2)

Analysis Scenario	Variable	AM Peak Hour			PM Peak Hour			Weekday Total
		Enter	Exit	Total	Enter	Exit	Total	
Existing CCC Campus	651,186 SF	423	113	536	317	490	807	8,365
Proposed CCC Campus	754,186 SF	490	131	621	367	568	935	9,687
Net Increase in Trips	**103,000 SF**	**67**	**18**	**85**	**50**	**78**	**128**	**1,322**

The Wacheno Welcome Center Phase 2 is a long-term conceptual project where the building plan, size, and completion year are all subject to change. Additionally, there are no active bond measures proposed or currently being pursued to fund this project. Therefore, reviewing the trip generation impacts associated with the Wacheno project is intended for informational and planning purposes only. Once the near-term projects associated with this Master Plan update have been completed and a funding mechanism for the Wacheno project has be established, an updated Transportation Impact Analysis (TIA) may be conducted to re-evaluate transportation impacts and determine mitigation as needed.

Trip Distribution

Trip distribution for the CCC campus was referenced from the *Clackamas Community College Master Plan Update Transportation Impact Study* (TIS), dated January 31, 2018. The directional distribution of site trips to/from the project site was estimated based on locations of likely trip destinations, locations of major transportation facilities in the site vicinity, and travel patterns at vicinity intersections.

The following trip distribution was estimated and used for analysis:

- Approximately 40% of site trips will travel to/from the north along OR-213;
- Approximately 20% of site trips will travel to/from the west along S Molalla Avenue;
- Approximately 10% of site trips will travel to/from the south along OR-213;
- Approximately 10% of site trips will travel to/from the west along S Beavercreek Road;
- Approximately 10% of site trips will travel to/from the southeast along S Beavercreek Road;
- Approximately 5% of site trips will travel to/from the west along Meyers Road; and
- Approximately 5% of site trips will travel to/from the north along S Maple Hill Lane.

Based on the collected April 2024 counts conducted at the campus access points, site trips are expected to utilize accesses as follows:

- Approximately 50% of site trips will access the CCC campus via S Douglas Loop.
- Approximately 15% of site trips will access the CCC campus via Keyser Way.
- Approximately 35% of site trips will access the CCC campus via Clairmont Drive.
- No site trips will utilize Inskeep Drive to access the CCC campus.

The trip distribution and assignment for the site trips generated during the AM and PM peak hours are shown in Figure 3.

No Scale
2030 NEAR-TERM MASTER PLAN PROJECTS
AM PEAK HOUR
PM PEAK HOUR
2044 NEAR-TERM MASTER PLAN PROJECTS WITH WACHENO PHASE 2
AM PEAK HOUR
PM PEAK HOUR
S Maplelane Road
S Holly Lane
S Thayer Road
S Loder Road
S Beavercreek Road
S Meyers Road
S Glen Oak Road
S Henrici Road
OR-213
S Molalla Avenue
40%
5%
10%
10%
10%
5%
20%
LEGEND
XX% PERCENT OF PROJECT TRIPS
NEAR-TERM TRIP GENERATION
IN OUT TOTAL
AM 34 9 43
PM 26 39 65
LONG-TERM TRIP GENERATION
IN OUT TOTAL
AM 67 18 85
PM 50 78 128

Traffic Volumes

Existing Conditions

Traffic counts were conducted at the study intersections on Thursday, April 9, 2024, from 6:00/7:00 AM to 9:00 AM and from 3:00/4:00 PM to 6:00 PM. The counts were collected on a day when CCC was in session during the second week of the Spring term. Data was used from each intersection's respective AM and PM peak hours.

Figure 4 shows the year 2024 existing traffic volumes at the study intersections during the AM and PM peak hours.

2030 Background Conditions

Volume Growth

To provide an analysis of the impacts of the proposed Center of Excellence and other near-term master plan projects on the nearby transportation facilities, an estimate of future traffic volumes is required. It is expected that the proposed near-term updates to the CCC campus will be constructed and occupied by year 2030.

In order to approximate the future year 2030 traffic volumes at the ODOT study intersection of S Douglas Loop/Molalla Avenue at OR-213, a linear annual growth rate of 0.59% per year over a six-year period was calculated per ODOT's 2042 Future Volumes Table. The growth rate was applied to the north/south through movements at the intersection. For all other intersection turning movements and for the non-ODOT study intersections, a conservative compounding annual growth rate of two percent per year was applied over a six-year period.

In-Process Data

In addition to the traffic volume growth described above, the in-process Thimble Creek South development, located to the southeast of the CCC campus, is currently approved/proposed for construction and is expected to impact nearby study intersections. The in-process development is not currently/fully contributing trips to the transportation system but may potentially be by the assumed 2030 buildout year of the site. Additional trips corresponding to the in-process development were added to the existing year traffic volumes in addition to the six years of traffic growth at each of the applicable study intersections. To maintain a conservative analysis of operation at the study intersections, the in-process development was assumed to be constructed by year 2030. In-process development trips from the *Thimble Creek South Transportation Impact Analysis*, dated October 13, 2023, are included in the appendix to this report.

Figure 4 shows the projected year 2030 background traffic volumes at the study intersections during the AM and PM peak hours.

2030 Buildout Conditions

Peak hour trips calculated to be generated by the proposed near-term CCC master plan project, as described earlier within the *Site Trips* section, were added to the projected year 2030 background traffic volumes to obtain the expected 2030 site buildout volumes.

Figure 4 shows the year 2030 buildout traffic volumes at the study intersections during the AM and PM peak hours.

2044 Planning Horizon

Since the Wacheno Welcome Center Phase 2 is a long-term project with an unknown development year, to review the potential impacts of this project a 20-year planning horizon analysis scenario was evaluated. The 2044 planning horizon scenario was analyzed both with and without the Wacheno Phase 2 project constructed. Future growth and site trip impacts were estimated utilizing methodologies consistent with those described in the *2030 Background Conditions* and *2030 Buildout Conditions* sections of this report, albeit with 20 years of growth applied to the existing traffic counts rather than 6 years of growth.

Figure 5 shows the year 2030 buildout traffic volumes at the study intersections during the AM and PM peak hours.

No Scale
AM PEAK HOUR
PM PEAK HOUR
EXISTING CONDITIONS
BACKGROUND CONDITIONS
BUILDOUT CONDITIONS
EXISTING CONDITIONS
BACKGROUND CONDITIONS
BUILDOUT CONDITIONS
S Holly Lane
S Maplelane Road
S Thayer Road
S Loder Road
S Beavercreek Road
S Meyers Road
S Glen Oak Road
S Henrici Road
OR-213
S Molalla Avenue

No Scale
AM PEAK HOUR
PM PEAK HOUR
PLANNING HORIZON
PLANNING HORIZON WITH WACHENO PHASE 2
PLANNING HORIZON
PLANNING HORIZON WITH WACHENO PHASE 2
S Holly Lane
S Maplelane Road
S Thayer Road
S Loder Road
S Beavercreek Road
S Meyers Road
S Glen Oak Road
S Henrici Road
OR-213
S Molalla Avenue

Safety Analysis

Crash History Review

Using data obtained from ODOT's Crash Analysis & Reporting Unit and ODOT's online TransGIS website, a review was performed of the most recent five years of available crash data at the study intersections (January 2018 through December 2022). The crash data was evaluated based on the number of crashes, the type of collisions, the severity of the collisions, and the resulting crash rate for each intersection.

Crash rates provide the ability to compare safety risks at different intersections by accounting for both the number of crashes that have occurred during the study period and the number of vehicles that typically travel through the intersection. Crash rates were calculated under the common assumption that traffic counted during the PM peak hour represents approximately ten percent of annual average daily traffic (AADT) at each intersection. Crash rates in excess of 1.00 crashes per million entering vehicles (CMEV) may be indicative of design deficiencies and therefore require a need for further investigation and possible mitigation.

With regard to crash severity, ODOT classifies crashes in the following categories:

- Property Damage Only (*PDO*);
- Possible Injury – Complaint of Pain (*Injury C*);
- Non-Incapacitating Injury (*Injury B*);
- Incapacitating Injury – Bleeding, Broken Bones (*Injury A*); and
- Fatality or Fatal Injury.

The intersection of S Douglas Loop/Molalla Avenue at OR-213 is an ODOT facility which adheres to the crash analysis methodologies in ODOT's Analysis Procedures Manual (APM). According to *Exhibit 4-1: Intersection Crash Rates per MEV by Land Type and Traffic Control* of the APM, intersections which experience crash rates in excess of their respective 90th percentile crash rates should be "flagged for further analysis". The following average and 90th percentile rates are applicable to the study intersection:

- Signalized, four-legged intersections in urban settings:
  - Average rate of 0.477 CMEV
  - 90th percentile rate of 0.860 CMEV

Table 5 provides a summary of crash types while Table 6 summarizes crash severities and rates for each of the study intersections. Detailed crash data reports are provided in the appendix.

Table 5: Crash Type Summary

Number	Intersection	Crash Type						Total
		Rear End	Turn/ Angle	Fixed Object	Side swipe	Ped/ Bike	Other	
1	S Douglas Loop/Molalla Avenue at OR-213	16	4	2	2	0	0	24
2	Meyers Road at Keyser Way	0	0	0	0	0	0	0
3	Clairmont Drive at S Beavercreek Road	8	0	1	0	1	0	10

Table 6: Crash Severity and Rate Summary

Number	Intersection	Crash Severity						Total Crashes	AADT	Crash Rate
		PDO	C	B	A	Fatal	Unknown			
1	S Douglas Loop/Molalla Avenue at OR-213	13	9	1	1	0	0	24	32,970	0.399
2	Meyers Road at Keyser Way	0	0	0	0	0	0	0	5,650	0.000
3	Clairmont Drive at S Beavercreek Road	6	2	2	0	0	0	10	17,670	0.310

Table Notes: ***BOLDED*** *text indicates a crash rate in excess of 1.00 CMEV or ODOT's 90th percentile rate.*

As shown in Tables 5 and 6, there were two crashes at the study intersections that involved a pedestrian/bicyclist or were classified as *Injury A*. The following provides a summary description of these crashes.

1. S Douglas Loop/Molalla Avenue at OR-213

The intersection had one reported crash during the analysis period that was classified as *Injury A*. The crash occurred when the driver of a northwest bound right-turning passenger car conducted an improper turning maneuver and struck a light pole. Only the single driver involved in the crash sustained injuries.

3. Clairmont Drive at S Beavercreek Road

The intersection had one reported crash during the analysis period that involved a pedestrian. The crash occurred when a pedestrian illegally entered the intersection and was struck by a northwest bound passenger car. The pedestrian sustained injuries classified as *Injury B* while the driver of the vehicle was uninjured.

Analysis Summary

Based on this review of available crash data, no significant trends or crash patterns were identified at any of the study intersections that are indicative of safety concerns. Accordingly, no safety mitigation is recommended per the crash data analysis.

Warrant Analysis

Preliminary traffic signal warrants were examined for the unsignalized study intersection of Meyers Road at Keyser Way to determine whether the installation of a new traffic signal will be warranted at the intersection by the 2030 buildout year of the Center for Excellence. Additionally, preliminary signal warrants under the 2044 planning year with the Wacheno Phase 2 project developed were reviewed for planning purposes only.

Based on the preliminary analysis following a review of Warrant 1 in the *Manual on Uniform Traffic Control Devices*, or MUTCD, traffic signal warrants are not projected to be met at the unsignalized study intersection of Meyers Road at Keyser Way under year 2030 conditions. Additionally, traffic signal warrants are not projected to be met under the 2044 Planning Horizon with the Wacheno Phase 2 project built. Therefore, no new traffic signals are necessary or recommended as part of the proposed master plan update.

Operational Analysis

Intersection Capacity Analysis

A capacity and delay analysis were conducted for each of the study intersections per the signalized and unsignalized intersection analysis methodologies in the *Highway Capacity Manual* (HCM)[1]. Intersections are generally evaluated based on the average control delay experienced by vehicles and are assigned a grade according to their operation. The level of service (LOS) of an intersection can range from LOS A, which indicates very little or no delay experienced by vehicles, to LOS F, which indicates a high degree of congestion and delay. The volume-to-capacity (v/c) ratio is a measure that compares the traffic volumes (demand) against the available capacity of an intersection.

Performance Standards

The study intersections operate under the jurisdiction of three separate agencies: Oregon City, Clackamas County, and ODOT. The following mobility standards are applicable to these three agencies.

Oregon City

Accordingly to the *Oregon City Transportation System Plan* (TSP) and Metro's online 2018/2023 Regional Transportation Plan (RTP) Network maps, the study intersections are located within an employment/industrial area (regional center) and are designated on the arterial and throughway network. Per Section *16.12.033 – Mobility Standards* of the Oregon City Municipal Code, the following minimum acceptable operation standards apply to the intersection of Meyers Road at Keyser Way:

[1] Transportation Research Board, *Highway Capacity Manual 7th Edition*, 2022.

A. *For intersections within the regional center, the following mobility standards apply:*

1. *During the first hour, a maximum v/c ratio of 1.10 shall be maintained. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.*
2. *During the second hour, a maximum v/c ratio of 0.99 shall be maintained at signalized intersections. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.*
3. *Intersections located on the regional center boundary shall be considered within the regional center.*

Clackamas County

The intersection of Clairmont Drive at S Beavercreek Road operates under the jurisdiction of Clackamas County, and therefore must operate acceptably per the County's standards. According to the *Clackamas County Comprehensive Plan*, *Chapter 5 Transportation System Plan*, the following operational standards apply to intersections located within urban areas along corridors or within employment/industrial areas:

- Mid-day One-Hour Peak: Maximum v/c ratio of 0.90 or less.
- 1st and 2nd PM Peak: Maximum v/c ratio of 0.99 or less.

ODOT

The intersection of S Douglas Loop/Molalla Avenue at OR-213 is an ODOT facility and must meet standards established in the *Oregon Highway Plan*. Given the study intersection is located within the Portland Metropolitan Region and within/near an industrial/employment area, study intersection is required to operate with a v/c ratio of 0.99 or less during the 1st and 2nd peak hours.

Delay & Capacity Analysis

The LOS, delay, and v/c results of the capacity analysis are shown in Table 7 for the AM and PM peak hours. Capacity results in Table 7 were reported as follows:

- For signalized intersections, the overall LOS, delay, and v/c ratio of the intersection was reported.
- For stop-controlled intersections, the stop-controlled lane LOS, delay, and v/c ratio are shown.

The TrafficWare Synchro software utilized for analysis does not report the overall v/c ratio of signalized intersections in the HCM 7th Edition capacity reports. Therefore, the signalized intersection v/c ratio was calculated utilizing methods detailed in ODOT's APM Sections 13. Detailed calculations as well as tables showing the relationship between delay and LOS are included in the appendix to this report.

Table 7: Intersection Capacity Analysis Summary

Analysis Scenario	AM Peak Hour			PM Peak Hour		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
1. S Douglas Loop/Molalla Avenue at OR-213						
2024 Existing Conditions	B	18	0.60	C	30	0.76
2030 Background Conditions	C	20	0.64	D	39	0.82
2030 Buildout Conditions	C	21	0.65	D	39	0.83
2044 Planning Horizon	C	24	0.70	D	43	0.92
2044 Planning Horizon w/ Wacheno Ph 2	C	24	0.71	D	44	0.93
2. Meyers Road at Keyser Way						
2024 Existing Conditions	B	14	0.07	B	11	0.17
2030 Background Conditions	B	15	0.09	B	12	0.21
2030 Buildout Conditions	B	15	0.09	B	12	0.22
2044 Planning Horizon	C	16	0.11	B	13	0.27
2044 Planning Horizon w/ Wacheno Ph 2	C	16	0.12	B	13	0.28
3. Clairmont Drive at S Beavercreek Road						
2024 Existing Conditions	A	6	0.62	A	10	0.74
2030 Background Conditions	A	6	0.72	B	15	0.85
2030 Buildout Conditions	A	7	0.72	B	17	0.87
2044 Planning Horizon	A	8	0.79	D	36	**1.01**
2044 Planning Horizon w/ Wacheno Ph 2	A	8	0.79	D	37	**1.03**

Table Notes: ***BOLDED*** *text indicates intersection operation above jurisdictional standards.*

Based on the results of the operational analysis, all study intersections are currently operating acceptably per their respective agency standards and are projected to continue operating acceptably through the 2030 buildout year of the Center of Excellence and other near-term development projects. No operational mitigation is necessary or recommended at the study intersections.

Under the 2044 planning horizon year, with or without the construction of the Wacheno Phase 2 project, all study intersections are projected to operate within acceptable mobility standards with the exception of the intersection of Clairmont Drive at S Beavercreek Road during the PM peak hour. Development of Wacheno Phase 2 is a long-term conceptual project where the building plan, size, and completion year are all subject to change. Additionally, there are no active bond measures proposed or currently being pursued to fund this project. Therefore, reviewing the trip generation impacts associated with the Wacheno project is intended for informational and planning purposes only. As part of a future detailed development plan application for the Wacheno project, an updated TIA may be conducted to re-evaluate transportation impacts and determine mitigation as needed.

Conclusions

Based on correspondence with CCC representatives and reviewing enrollment and course-type data from 2016-2024, it is believed that the impacts of the Covid pandemic as well as changing higher educational trends have decreased overall trips generated by the CCC campus. This decrease in trips appears to be associated with decreasing student enrollment and shifting learning opportunities from in-person to online courses. To support CCC's claims of reduced impacts to the transportation system, traffic counts previously conducted at the campus's access driveways on Tuesday, April 12, 2016, were compared to counts conducted on Tuesday, April 9, 2024. From this data the following changes in CCC campus trip generation were found:

- AM peak hour trip generation decreased by approximately 30.3%.
- PM peak hour trip generation decreased by approximately 16.1%.
- Daily trip generation decreased by approximately 23.3%.

Given the Covid impacts and the decreasing trend of student enrollment, in-person courses, and campus trips being generated, overall CCC campus trip generation has decreased between when the *Clackamas Community College Master Plan Update TIS*, dated January 31, 2018, had been prepared and this current 2024 TIA. This trend is expected to continue in the foreseeable future, even though overall CCC campus building square footages have increased since the 2018 TIA was prepared. The proposed expansion project will not result in additional trips generated beyond the trip generation previously approved/reviewed in the 2018 TIA. The trip generation estimates below are expected to provide a highly conservative evaluation of site trip impacts to the transportation system.

Although considered highly conservative based on the above, assuming site trip generation will increase linearly in relation to overall increases in the CCC campus building square footage, the proposed Center of Excellence and other near-term development projects are projected to generate an additional 43 AM peak hour trips, 65 PM peak hour trips, and 678 average weekday trips. If including the Wacheno Phase 2 project as part of the trip generation estimates, the proposal may potentially generate 85 AM peak hour trips, 128 PM peak hour trips, and 1,322 average weekday trips.

Based on a review of the most recent available crash data, no significant trends or crash patterns were identified at any of the study intersections that are indicative of safety concerns. Accordingly, no safety mitigation is recommended per the crash data analysis.

Based on a preliminary analysis reviewing Warrant 1 in the *Manual on Uniform Traffic Control Devices*, traffic signal warrants are not projected to be met at the intersection of Meyers Road at Keyser Way under year 2030 conditions. Additionally, traffic signal warrants are not projected to be met under the 2044 Planning Horizon with the Wacheno Phase 2 project built. Therefore, no new traffic signals are necessary or recommended as part of the proposed master plan update.

All study intersections are currently operating acceptably per their respective agency standards and are projected to continue operating acceptably through the 2030 buildout year of the Center of Excellence and other near-term development projects. No operational mitigation is necessary or recommended at the study intersections.

Under the 2044 planning horizon year, with or without the construction of the Wacheno Phase 2 project, all study intersections are projected to operate within acceptable mobility standards with the exception of the intersection of Clairmont Drive at S Beavercreek Road during the PM peak hour. Development of Wacheno Phase 2 is a long-term conceptual project where the building plan, size, and completion year are all subject to change. Additionally, there are no active bond measures proposed or currently being pursued to fund this project. Therefore, reviewing the trip generation impacts associated with the Wacheno project is intended for informational and planning purposes only. As part of a future detailed development plan application for the Wacheno project, an updated TIA may be conducted to re-evaluate transportation impacts and determine mitigation as needed.

Appendix A – Site Plan

Conceptual Development Plan

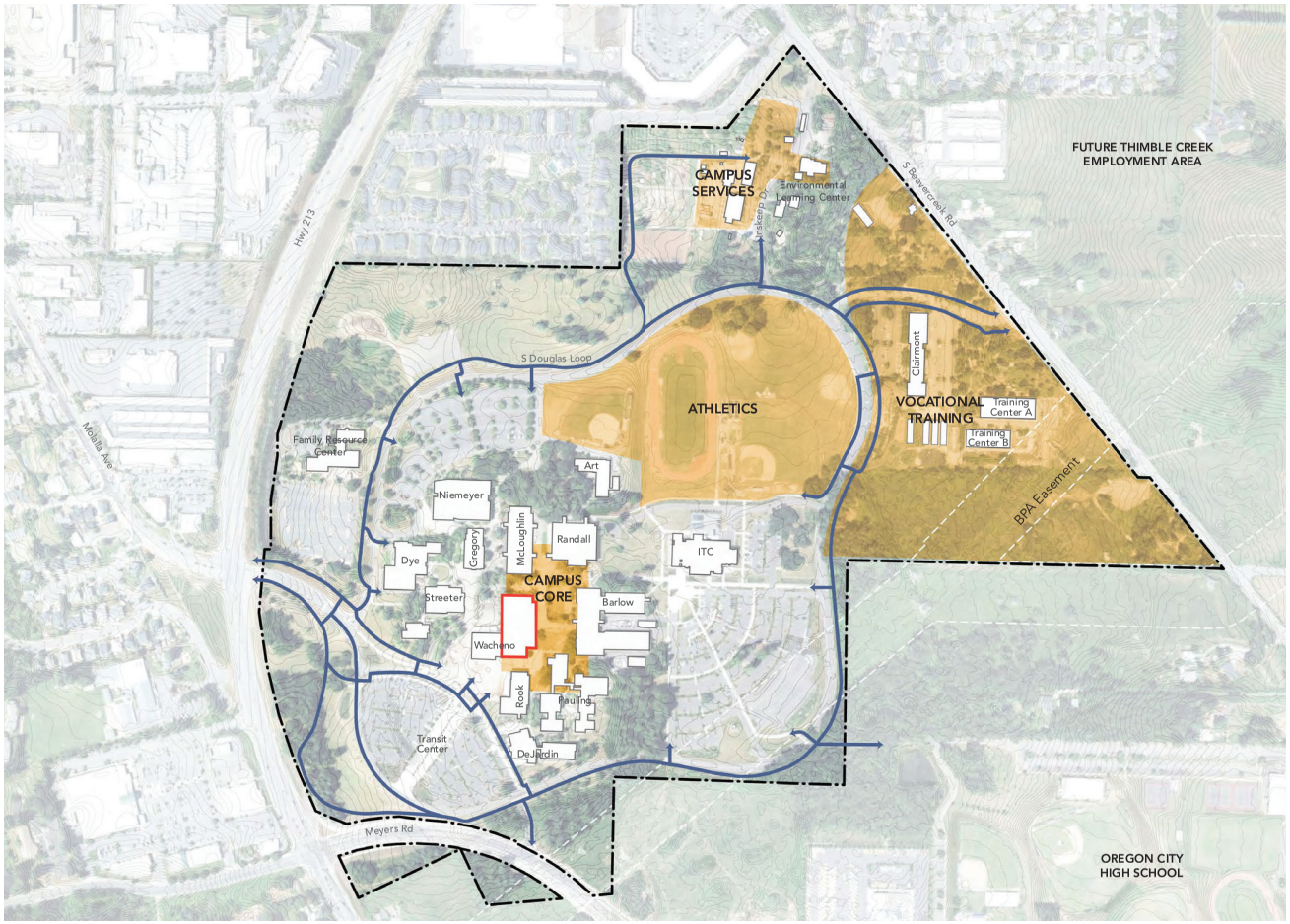


FIG 2: *Priority Modernization & Adaptation Sites*

Appendix B – Traffic Volumes

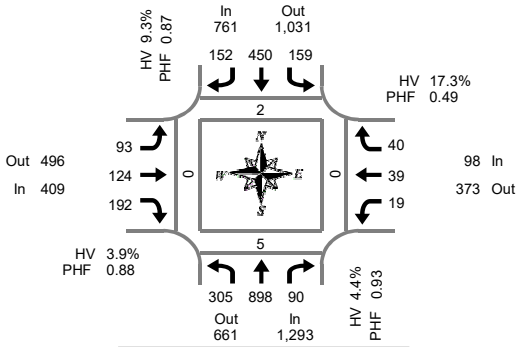
2016 Traffic Counts

2024 Traffic Counts

In-Process Data

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:35 AM to 8:35 AM

Hwy 213 & Molalla Ave

Tuesday, April 12, 2016
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	23	80	4	0	1	26	8	0	8	6	14	0	0	5	2	0	177	0	0	0	0
7:05 AM	22	101	2	0	1	26	11	0	5	3	7	0	1	2	3	0	184	0	0	0	0
7:10 AM	16	72	3	0	5	28	12	0	9	4	11	0	2	4	3	0	169	0	0	0	0
7:15 AM	16	76	9	0	8	32	13	0	6	9	12	0	0	1	2	0	184	0	0	0	0
7:20 AM	21	82	3	0	7	30	6	0	6	7	6	0	1	0	0	0	169	1	2	0	0
7:25 AM	21	98	6	0	12	34	20	0	5	5	15	0	1	3	3	0	223	0	0	0	0
7:30 AM	20	74	6	0	7	27	10	0	8	12	12	0	0	5	2	0	183	0	0	0	0
7:35 AM	20	89	10	0	11	43	14	0	4	4	15	0	2	0	0	0	212	0	0	0	0
7:40 AM	39	64	7	0	14	33	12	0	11	15	14	0	2	12	6	0	229	1	0	0	0
7:45 AM	17	79	9	0	22	41	18	0	3	13	15	0	2	4	7	0	230	0	1	0	0
7:50 AM	35	64	12	0	15	23	10	0	11	19	12	0	4	4	9	0	218	0	1	0	0
7:55 AM	18	74	10	0	25	51	5	0	5	10	14	0	1	4	5	0	222	0	0	0	0
8:00 AM	27	59	4	0	14	34	19	0	7	19	19	0	1	1	3	0	207	1	1	0	0
8:05 AM	21	91	3	0	7	47	17	0	13	4	20	0	2	2	3	0	230	0	0	0	0
8:10 AM	29	79	5	0	6	32	10	0	15	3	16	0	1	4	1	0	201	0	1	0	0
8:15 AM	20	89	9	0	10	37	10	0	6	10	18	0	1	1	0	0	211	0	0	0	0
8:20 AM	28	73	6	0	8	33	11	0	8	8	11	0	0	4	0	0	190	0	0	0	0
8:25 AM	26	67	9	0	18	34	13	0	4	4	16	0	2	2	1	0	196	0	0	0	0
8:30 AM	25	70	6	0	9	42	13	0	6	15	22	0	1	1	5	0	215	0	1	0	0
8:35 AM	26	68	7	0	14	35	5	0	7	5	20	0	3	6	6	0	202	1	0	0	0
8:40 AM	26	63	14	0	17	29	15	0	4	20	12	0	2	5	2	0	209	0	0	0	0
8:45 AM	18	77	16	0	29	50	15	0	5	12	16	0	6	1	1	0	246	0	0	0	0
8:50 AM	31	51	17	0	26	44	10	0	5	18	11	0	3	2	5	0	223	0	2	0	1
8:55 AM	17	66	9	0	17	51	12	0	7	11	17	0	0	5	5	0	217	0	0	0	0
Total Survey	562	1,806	186	0	303	862	289	0	168	236	345	0	38	78	74	0	4,947	4	9	0	1

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	61	253	9	0	7	80	31	0	22	13	32	0	3	11	8	0	530	0	0	0	0
7:15 AM	58	256	18	0	27	96	39	0	17	21	33	0	2	4	5	0	576	1	2	0	0
7:30 AM	79	227	23	0	32	103	36	0	23	31	41	0	4	17	8	0	624	1	0	0	0
7:45 AM	70	217	31	0	62	115	33	0	19	42	41	0	7	12	21	0	670	0	2	0	0
8:00 AM	77	229	12	0	27	113	46	0	35	26	55	0	4	7	7	0	638	1	2	0	0
8:15 AM	74	229	24	0	36	104	34	0	18	22	45	0	3	7	1	0	597	0	0	0	0
8:30 AM	77	201	27	0	40	106	33	0	17	40	54	0	6	12	13	0	626	1	1	0	0
8:45 AM	66	194	42	0	72	145	37	0	17	41	44	0	9	8	11	0	686	0	2	0	1
Total Survey	562	1,806	186	0	303	862	289	0	168	236	345	0	38	78	74	0	4,947	4	9	0	1

Peak Hour Summary
7:35 AM to 8:35 AM

By Approach	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	1,293	661	1,954	0	761	1,031	1,792	0	409	496	905	0	98	373	471	0	2,561	2	5	0	0
%HV	4.4%				9.3%				3.9%				17.3%				6.3%				
PHF	0.93				0.87				0.88				0.49				0.95				

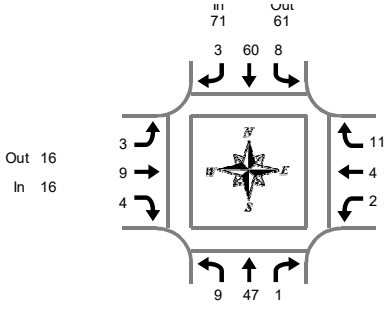
By Movement	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	305	898	90	1,293	159	450	152	761	93	124	192	409	19	39	40	98	2,561
%HV	3.0%	5.2%	1.1%	4.4%	5.0%	13.3%	2.0%	9.3%	3.2%	7.3%	2.1%	3.9%	10.5%	10.3%	27.5%	17.3%	6.3%
PHF	0.84	0.87	0.73	0.93	0.64	0.85	0.83	0.87	0.66	0.65	0.87	0.88	0.59	0.49	0.45	0.49	0.95

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	268	953	81	0	128	394	139	0	81	107	147	0	16	44	42	0	2,400	2	4	0	0
7:15 AM	284	929	84	0	148	427	154	0	94	120	170	0	17	40	41	0	2,508	3	6	0	0
7:30 AM	300	902	90	0	157	435	149	0	95	121	182	0	18	43	37	0	2,529	2	4	0	0
7:45 AM	298	876	94	0	165	438	146	0	89	130	195	0	20	38	42	0	2,531	2	5	0	0
8:00 AM	294	853	105	0	175	468	150	0	87	129	198	0	22	34	32	0	2,547	2	5	0	1

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Hwy 213 & Molalla Ave

Tuesday, April 12, 2016
7:00 AM to 9:00 AM

Peak Hour Summary
7:35 AM to 8:35 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	4	1	5	0	4	1	5	0	1	1	2	0	1	1	2	14
7:05 AM	1	5	0	6	0	2	0	2	0	0	0	0	1	0	1	2	10
7:10 AM	5	3	0	8	0	7	0	7	0	0	1	1	0	1	0	1	17
7:15 AM	0	3	0	3	1	6	0	7	0	1	0	1	0	0	0	0	11
7:20 AM	1	2	0	3	0	4	0	4	0	0	0	0	0	0	0	0	7
7:25 AM	1	2	0	3	0	2	0	2	0	0	0	0	0	2	0	2	7
7:30 AM	0	4	0	4	0	2	0	2	0	1	2	3	0	1	1	2	11
7:35 AM	2	4	0	6	0	4	0	4	0	0	1	1	0	0	0	0	11
7:40 AM	0	4	1	5	2	5	0	7	0	1	1	2	1	1	1	3	17
7:45 AM	0	3	0	3	2	9	0	11	0	1	0	1	0	0	3	3	18
7:50 AM	1	7	0	8	0	1	1	2	0	0	0	0	0	0	0	0	10
7:55 AM	1	5	0	6	1	7	0	8	0	1	0	1	0	1	0	1	16
8:00 AM	1	6	0	7	0	4	0	4	0	1	1	2	1	0	1	2	15
8:05 AM	0	2	0	2	0	3	0	3	1	1	0	2	0	0	0	0	7
8:10 AM	1	5	0	6	1	6	0	7	1	0	1	2	0	1	1	2	17
8:15 AM	0	3	0	3	0	7	1	8	1	1	0	2	0	0	0	0	13
8:20 AM	1	3	0	4	0	9	1	10	0	0	0	0	0	1	0	1	15
8:25 AM	1	4	0	5	2	2	0	4	0	1	0	1	0	0	1	1	11
8:30 AM	1	1	0	2	0	3	0	3	0	2	0	2	0	0	4	4	11
8:35 AM	0	3	0	3	0	1	0	1	0	1	0	1	0	1	1	2	7
8:40 AM	2	2	0	4	1	7	0	8	0	0	0	0	0	0	0	0	12
8:45 AM	1	3	0	4	0	5	0	5	0	0	2	2	0	0	0	0	11
8:50 AM	2	2	0	4	0	7	1	8	0	1	2	3	0	0	0	0	15
8:55 AM	1	3	0	4	0	10	1	11	1	0	0	1	0	1	0	1	17
Total Survey	23	83	2	108	10	117	6	133	4	14	12	30	3	11	15	29	300

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	6	12	1	19	0	13	1	14	0	1	2	3	1	2	2	5	41
7:15 AM	2	7	0	9	1	12	0	13	0	1	0	1	0	2	0	2	25
7:30 AM	2	12	1	15	2	11	0	13	0	2	4	6	1	2	2	5	39
7:45 AM	2	15	0	17	3	17	1	21	0	2	0	2	0	1	3	4	44
8:00 AM	2	13	0	15	1	13	0	14	2	2	2	6	1	1	2	4	39
8:15 AM	2	10	0	12	2	18	2	22	1	2	0	3	0	1	1	2	39
8:30 AM	3	6	0	9	1	11	0	12	0	3	0	3	0	1	5	6	30
8:45 AM	4	8	0	12	0	22	2	24	1	1	4	6	0	1	0	1	43
Total Survey	23	83	2	108	10	117	6	133	4	14	12	30	3	11	15	29	300

Heavy Vehicle Peak Hour Summary
7:35 AM to 8:35 AM

By Approach	Northbound Hwy 213			Southbound Hwy 213			Eastbound Molalla Ave			Westbound Molalla Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	57	66	123	71	61	132	16	16	32	17	18	35	161
PHF	0.68			0.71			0.67			0.71			0.88

By Movement	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	9	47	1	57	8	60	3	71	3	9	4	16	2	4	11	17	161
PHF	0.75	0.65	0.25	0.68	0.50	0.68	0.38	0.71	0.25	0.75	0.50	0.67	0.50	0.50	0.55	0.71	0.88

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

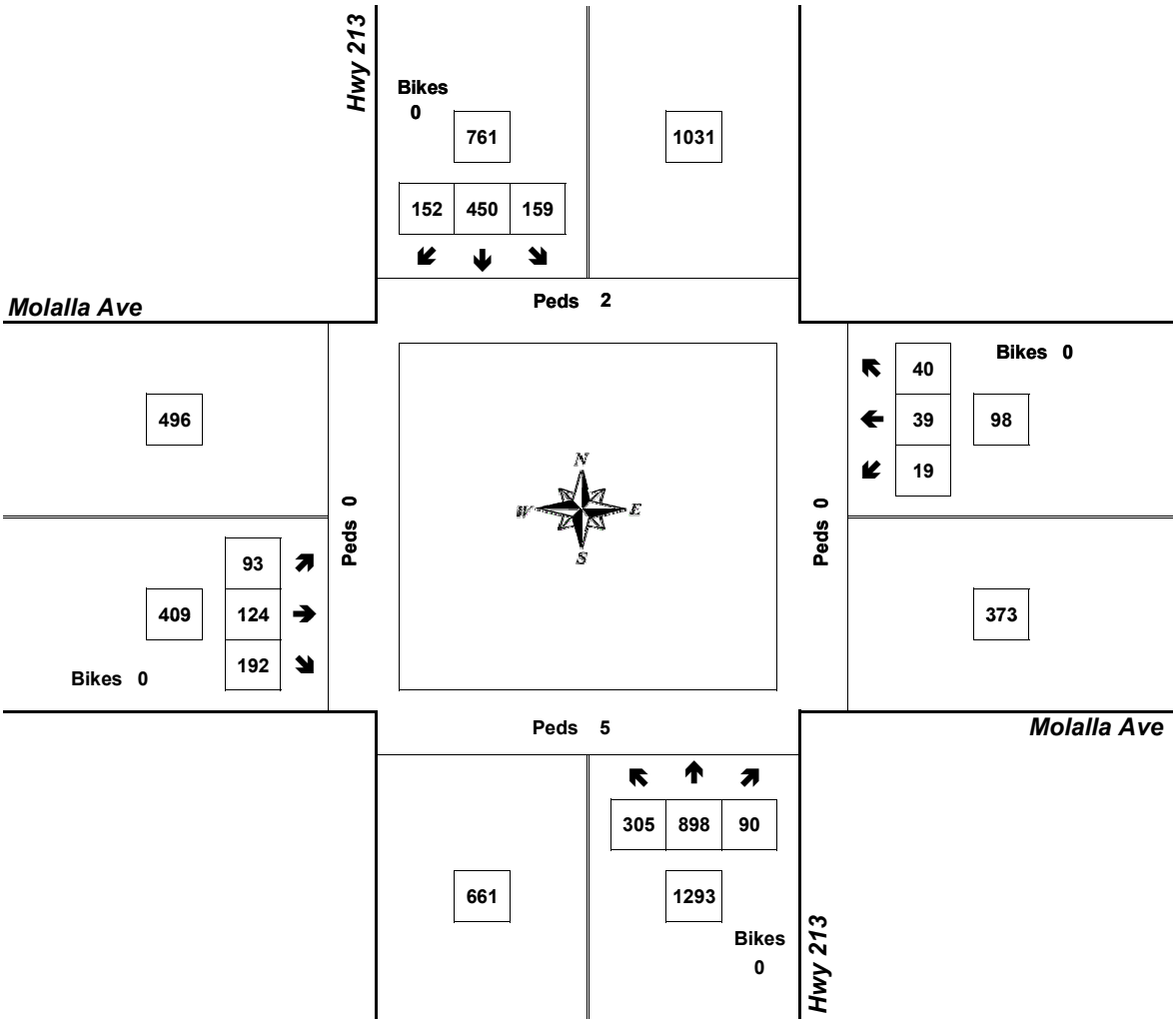
Interval Start Time	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	12	46	2	60	6	53	2	61	0	6	6	12	2	7	7	16	149
7:15 AM	8	47	1	56	7	53	1	61	2	7	6	15	2	6	7	15	147
7:30 AM	8	50	1	59	8	59	3	70	3	8	6	17	2	5	8	15	161
7:45 AM	9	44	0	53	7	59	3	69	3	9	2	14	1	4	11	16	152
8:00 AM	11	37	0	48	4	64	4	72	4	8	6	18	1	4	8	13	151

Peak Hour Summary

Clay Carney
(503) 833-2740

Hwy 213 & Molalla Ave

7:35 AM to 8:35 AM
Tuesday, April 12, 2016

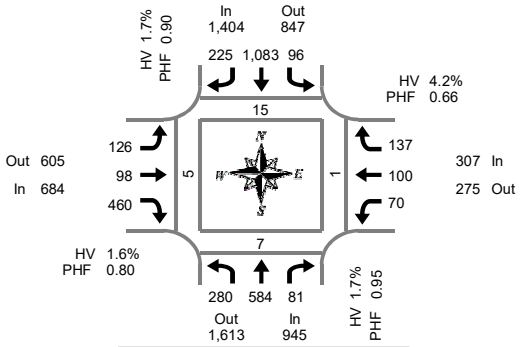


Approach	PHF	HV%	Volume
EB	0.88	3.9%	409
WB	0.49	17.3%	98
NB	0.93	4.4%	1,293
SB	0.87	9.3%	761
Intersection	0.95	6.3%	2,561

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:55 PM to 5:55 PM

Hwy 213 & Molalla Ave

Tuesday, April 12, 2016
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	30	45	2	0	2	84	21	0	12	7	51	0	7	13	19	1	293	0	1	0	0
4:05 PM	16	48	1	0	4	61	19	0	18	5	39	0	8	10	10	0	239	0	2	0	0
4:10 PM	19	54	6	0	4	111	14	1	9	3	29	0	5	3	11	0	268	1	6	0	0
4:15 PM	33	47	1	0	6	71	17	0	12	4	43	0	6	9	10	0	259	4	10	0	1
4:20 PM	16	44	2	0	7	89	17	0	14	5	26	0	7	10	7	0	244	2	1	0	0
4:25 PM	25	50	1	0	5	102	29	0	14	4	29	0	2	6	8	0	275	0	0	0	0
4:30 PM	26	54	1	0	4	67	18	0	15	1	47	0	6	10	9	0	258	0	1	0	0
4:35 PM	19	40	2	0	2	91	21	0	6	9	36	1	8	12	12	0	258	4	0	0	0
4:40 PM	19	47	3	0	11	105	24	0	11	1	35	0	7	8	11	0	282	1	1	0	2
4:45 PM	27	66	2	0	5	76	22	0	7	8	40	0	4	5	8	0	270	2	0	0	2
4:50 PM	30	51	3	0	1	76	21	0	6	5	56	0	5	12	24	0	290	0	0	0	0
4:55 PM	25	47	8	0	7	87	17	0	14	5	30	0	11	6	31	0	288	2	0	0	1
5:00 PM	20	46	5	0	4	85	16	0	8	3	27	0	3	7	16	0	240	0	0	0	0
5:05 PM	31	57	3	0	7	61	13	0	15	8	39	0	5	19	18	0	276	2	0	0	0
5:10 PM	23	28	11	0	5	99	22	0	6	3	38	1	7	10	10	0	262	1	0	0	2
5:15 PM	23	59	7	0	4	135	25	0	9	9	23	0	6	6	12	0	318	0	0	0	0
5:20 PM	26	50	5	0	8	75	16	0	10	6	38	0	2	7	9	0	252	1	1	0	0
5:25 PM	17	40	8	0	6	98	25	0	10	7	45	0	6	10	6	0	278	1	0	0	1
5:30 PM	22	49	3	0	11	98	26	0	11	12	44	0	11	11	9	0	307	1	5	0	0
5:35 PM	27	51	4	0	11	83	13	0	10	12	51	0	4	5	5	0	276	1	0	1	0
5:40 PM	25	52	5	0	12	66	23	0	9	13	51	0	6	8	8	0	278	5	1	0	1
5:45 PM	18	53	10	0	15	86	7	0	13	8	33	0	2	8	10	0	263	1	0	0	0
5:50 PM	23	52	12	0	6	110	22	0	11	12	41	0	7	3	3	0	302	0	0	0	0
5:55 PM	29	45	7	0	9	75	11	0	9	5	48	0	7	9	15	0	269	0	0	0	1
Total Survey	569	1,175	112	0	156	2,091	459	1	259	155	939	2	142	207	281	1	6,545	29	29	1	11

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	65	147	9	0	10	256	54	1	39	15	119	0	20	26	40	1	800	1	9	0	0
4:15 PM	74	141	4	0	18	262	63	0	40	13	98	0	15	25	25	0	778	6	11	0	1
4:30 PM	64	141	6	0	17	263	63	0	32	11	118	1	21	30	32	0	798	5	2	0	2
4:45 PM	82	164	13	0	13	239	60	0	27	18	126	0	20	23	63	0	848	4	0	0	3
5:00 PM	74	131	19	0	16	245	51	0	29	14	104	1	15	36	44	0	778	3	0	0	2
5:15 PM	66	149	20	0	18	308	66	0	29	22	106	0	14	23	27	0	848	2	1	0	1
5:30 PM	74	152	12	0	34	247	62	0	30	37	146	0	21	24	22	0	861	7	6	1	1
5:45 PM	70	150	29	0	30	271	40	0	33	25	122	0	16	20	28	0	834	1	0	0	1
Total Survey	569	1,175	112	0	156	2,091	459	1	259	155	939	2	142	207	281	1	6,545	29	29	1	11

Peak Hour Summary
4:55 PM to 5:55 PM

By Approach	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	945	1,613	2,558	0	1,404	847	2,251	0	684	605	1,289	1	307	275	582	0	3,340	15	7	1	5
%HV	1.7%				1.7%				1.6%				4.2%				1.9%				
PHF	0.95				0.90				0.80				0.66				0.97				

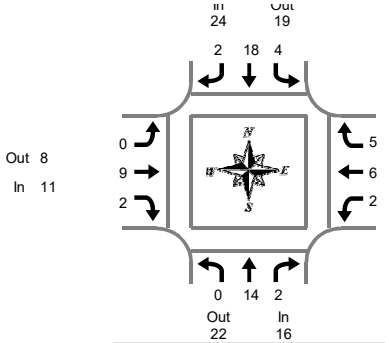
By Movement	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	280	584	81	945	96	1,083	225	1,404	126	98	460	684	70	100	137	307	3,340
%HV	0.0%	2.4%	2.5%	1.7%	4.2%	1.7%	0.9%	1.7%	0.0%	9.2%	0.4%	1.6%	2.9%	6.0%	3.6%	4.2%	1.9%
PHF	0.91	0.93	0.75	0.95	0.63	0.88	0.84	0.90	0.85	0.66	0.79	0.80	0.83	0.69	0.53	0.66	0.97

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	285	593	32	0	58	1,020	240	1	138	57	461	1	76	104	160	1	3,224	16	22	0	6
4:15 PM	294	577	42	0	64	1,009	237	0	128	56	446	2	71	114	164	0	3,202	18	13	0	8
4:30 PM	286	585	58	0	64	1,055	240	0	117	65	454	2	70	112	166	0	3,272	14	3	0	8
4:45 PM	296	596	64	0	81	1,039	239	0	115	91	482	1	70	106	156	0	3,335	16	7	1	7
5:00 PM	284	582	80	0	98	1,071	219	0	121	98	478	1	66	103	121	0	3,321	13	7	1	5

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Hwy 213 & Molalla Ave

Tuesday, April 12, 2016
4:00 PM to 6:00 PM

Peak Hour Summary
4:55 PM to 5:55 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	7	0	8	2	4	0	6	1	0	1	2	0	0	0	0	16
4:05 PM	0	3	0	3	1	2	0	3	1	0	1	2	0	1	0	1	9
4:10 PM	1	4	1	6	0	1	0	1	0	1	1	2	0	0	1	1	10
4:15 PM	0	4	0	4	1	4	0	5	0	1	0	1	0	2	1	3	13
4:20 PM	1	4	0	5	0	3	0	3	0	0	0	0	0	0	0	0	8
4:25 PM	0	3	1	4	0	2	1	3	0	1	0	1	0	0	0	0	8
4:30 PM	2	3	0	5	1	4	0	5	1	0	1	2	0	2	0	2	14
4:35 PM	0	1	0	1	0	1	0	1	0	0	0	0	1	0	1	2	4
4:40 PM	0	4	0	4	1	4	0	5	0	1	0	1	0	0	1	1	11
4:45 PM	1	4	1	6	0	3	1	4	0	1	0	1	0	1	0	1	12
4:50 PM	0	0	0	0	0	2	0	2	1	0	0	1	1	0	0	1	4
4:55 PM	0	0	0	0	2	3	0	5	0	1	0	1	0	0	0	0	6
5:00 PM	0	2	0	2	0	2	0	2	0	0	0	0	0	1	1	2	6
5:05 PM	0	0	0	0	0	1	0	1	0	1	0	1	0	2	1	3	5
5:10 PM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
5:15 PM	0	2	0	2	0	3	0	3	0	1	0	1	0	0	1	1	7
5:20 PM	0	1	0	1	0	0	1	1	0	1	1	2	0	0	0	0	4
5:25 PM	0	2	1	3	0	5	0	5	0	1	0	1	0	2	1	3	12
5:30 PM	0	2	0	2	0	1	0	1	0	1	1	2	1	0	0	1	6
5:35 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
5:40 PM	0	0	1	1	0	2	0	2	0	0	0	0	0	1	1	2	5
5:45 PM	0	1	0	1	1	0	0	1	0	2	0	2	0	0	0	0	4
5:50 PM	0	2	0	2	0	1	0	1	0	1	0	1	1	0	0	1	5
5:55 PM	1	1	0	2	0	1	0	1	0	1	0	1	0	2	2	4	8
Total Survey	7	52	5	64	10	49	4	63	4	15	6	25	4	14	11	29	181

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	2	14	1	17	3	7	0	10	2	1	3	6	0	1	1	2	35
4:15 PM	1	11	1	13	1	9	1	11	0	2	0	2	0	2	1	3	29
4:30 PM	2	8	0	10	2	9	0	11	1	1	1	3	1	2	2	5	29
4:45 PM	1	4	1	6	2	8	1	11	1	2	0	3	1	1	0	2	22
5:00 PM	0	3	0	3	0	3	1	4	0	1	0	1	0	3	2	5	13
5:15 PM	0	5	1	6	0	8	1	9	0	3	1	4	0	2	2	4	23
5:30 PM	0	3	1	4	1	3	0	4	0	1	1	2	1	1	1	3	13
5:45 PM	1	4	0	5	1	2	0	3	0	4	0	4	1	2	2	5	17
Total Survey	7	52	5	64	10	49	4	63	4	15	6	25	4	14	11	29	181

Heavy Vehicle Peak Hour Summary
4:55 PM to 5:55 PM

By Approach	Northbound Hwy 213			Southbound Hwy 213			Eastbound Molalla Ave			Westbound Molalla Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	16	22	38	24	19	43	11	8	19	13	15	28	64
PHF	0.67			0.67			0.55			0.65			0.70

By Movement	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	14	2	16	4	18	2	24	0	9	2	11	2	6	5	13	64
PHF	0.00	0.70	0.50	0.67	0.50	0.56	0.25	0.67	0.00	0.75	0.25	0.55	0.50	0.50	0.63	0.65	0.70

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Hwy 213				Southbound Hwy 213				Eastbound Molalla Ave				Westbound Molalla Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	6	37	3	46	8	33	2	43	4	6	4	14	2	6	4	12	115
4:15 PM	4	26	2	32	5	29	3	37	2	6	1	9	2	8	5	15	93
4:30 PM	3	20	2	25	4	28	3	35	2	7	2	11	2	8	6	16	87
4:45 PM	1	15	3	19	3	22	3	28	1	7	2	10	2	7	5	14	71
5:00 PM	1	15	2	18	2	16	2	20	0	9	2	11	2	8	7	17	66

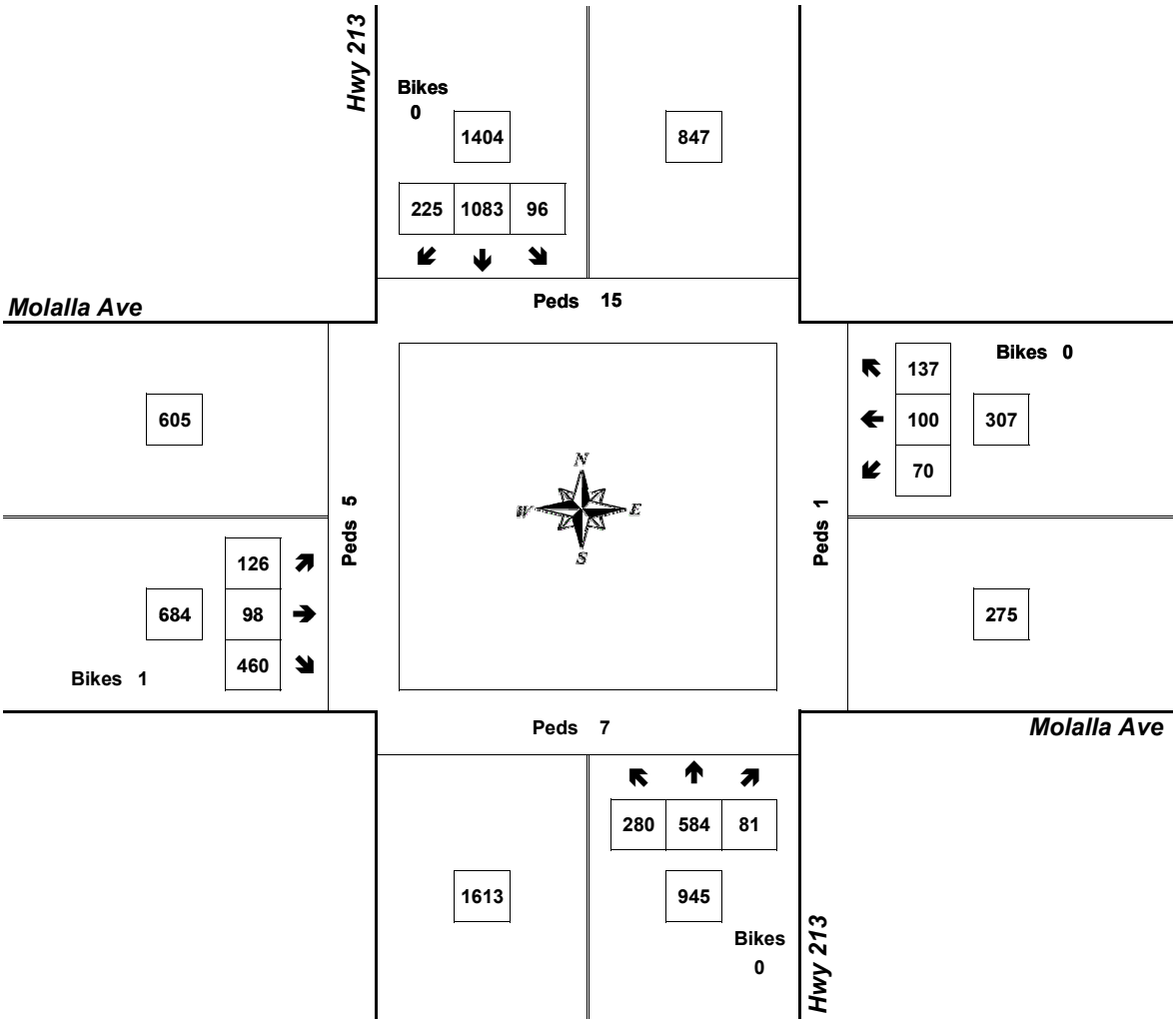
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

Hwy 213 & Molalla Ave

4:55 PM to 5:55 PM
Tuesday, April 12, 2016

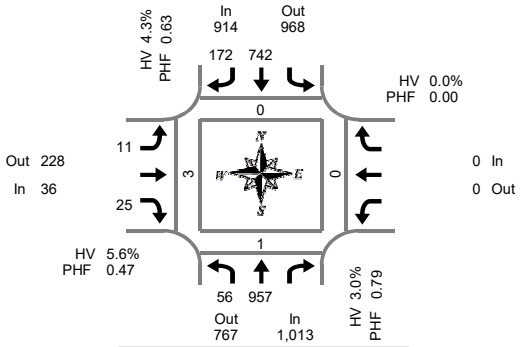


Approach	PHF	HV%	Volume
EB	0.80	1.6%	684
WB	0.66	4.2%	307
NB	0.95	1.7%	945
SB	0.90	1.7%	1,404
Intersection	0.97	1.9%	3,340

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:00 AM to 8:00 AM

Beavercreek Rd & Clairmont Dr

Tuesday, April 12, 2016
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Interval Total	Pedestrians Crosswalk			
	L	T		Bikes	T	R	Bikes	L		R	Bikes				Bikes		North	South	East	West
7:00 AM	4	66		0	40	2	0	0		2	0				0	114	0	0	0	0
7:05 AM	5	76		0	48	4	0	0		2	0				0	135	0	0	0	0
7:10 AM	2	85		0	55	2	0	1		1	0				0	146	0	0	0	0
7:15 AM	3	90		0	66	13	0	0		0	0				0	172	0	0	0	0
7:20 AM	0	82		0	108	4	0	2		4	0				0	200	0	1	0	2
7:25 AM	2	72		0	106	12	0	3		5	0				0	200	0	0	0	0
7:30 AM	5	101		0	119	12	0	0		2	0				0	239	0	0	0	0
7:35 AM	4	111		0	58	15	0	3		6	0				0	197	0	0	0	0
7:40 AM	9	90		0	37	18	0	2		2	0				0	158	0	0	0	1
7:45 AM	6	76		0	41	24	0	0		0	0				0	147	0	0	0	0
7:50 AM	7	60		0	36	33	0	0		1	0				0	137	0	0	0	0
7:55 AM	9	48		0	28	33	0	0		0	0				0	118	0	0	0	0
8:00 AM	6	59		0	13	18	0	0		1	0				0	97	0	0	0	0
8:05 AM	7	78		0	20	12	0	0		1	0				0	118	0	0	0	1
8:10 AM	2	56		0	15	12	0	0		2	0				0	87	0	0	0	0
8:15 AM	0	59		0	10	8	0	0		1	0				0	78	0	0	0	0
8:20 AM	2	64		0	15	8	0	0		1	0				0	90	0	0	0	0
8:25 AM	4	58		0	15	11	0	1		0	0				0	89	0	0	0	0
8:30 AM	1	37		0	23	18	0	2		0	0				0	81	0	0	0	0
8:35 AM	4	64		0	22	9	0	3		1	0				0	103	0	0	0	0
8:40 AM	3	57		0	35	21	0	2		0	0				0	118	0	0	0	0
8:45 AM	2	55		0	40	21	0	3		2	0				0	123	0	0	0	0
8:50 AM	2	37		0	46	24	0	2		1	0				0	112	0	0	0	0
8:55 AM	7	42		0	27	26	0	1		0	0				0	103	0	0	0	0
Total Survey	96	1,623		0	1,023	360	0	25		35	0				0	3,162	0	1	0	4

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Interval Total	Pedestrians Crosswalk			
	L	T		Bikes	T	R	Bikes	L		R	Bikes				Bikes		North	South	East	West
7:00 AM	11	227		0	143	8	0	1		5	0				0	395	0	0	0	0
7:15 AM	5	244		0	280	29	0	5		9	0				0	572	0	1	0	2
7:30 AM	18	302		0	214	45	0	5		10	0				0	594	0	0	0	1
7:45 AM	22	184		0	105	90	0	0		1	0				0	402	0	0	0	0
8:00 AM	15	193		0	48	42	0	0		4	0				0	302	0	0	0	1
8:15 AM	6	181		0	40	27	0	1		2	0				0	257	0	0	0	0
8:30 AM	8	158		0	80	48	0	7		1	0				0	302	0	0	0	0
8:45 AM	11	134		0	113	71	0	6		3	0				0	338	0	0	0	0
Total Survey	96	1,623		0	1,023	360	0	25		35	0				0	3,162	0	1	0	4

Peak Hour Summary
7:00 AM to 8:00 AM

By Approach	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	1,013	767	1,780	0	914	968	1,882	0	36	228	264	0	0	0	0	0	1,963	0	1	0	3
%HV	3.0%				4.3%				5.6%				0.0%				3.6%				
PHF	0.79				0.63				0.47				0.00				0.77				

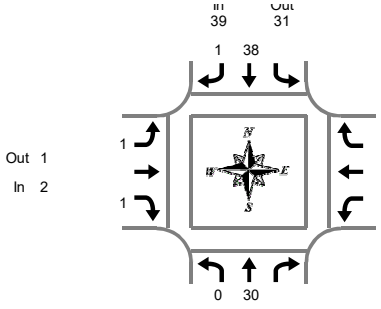
By Movement	Northbound Beavercreek Rd				Southbound Beavercreek Rd			Eastbound Clairmont Dr				Westbound Clairmont Dr				Total
	L	T		Total	T	R	Total	L		R	Total				Total	
Volume	56	957		1,013	742	172	914	11		25	36				0	1,963
%HV	0.0%	3.1%	NA	3.0%	5.1%	0.6%	4.3%	9.1%	NA	4.0%	5.6%	NA	NA	NA	0.0%	3.6%
PHF	0.64	0.79		0.79	0.56	0.48	0.63	0.46		0.48	0.47				0.00	0.77

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Interval Total	Pedestrians Crosswalk			
	L	T		Bikes	T	R	Bikes	L		R	Bikes				Bikes		North	South	East	West
7:00 AM	56	957		0	742	172	0	11		25	0				0	1,963	0	1	0	3
7:15 AM	60	923		0	647	206	0	10		24	0				0	1,870	0	1	0	4
7:30 AM	61	860		0	407	204	0	6		17	0				0	1,555	0	0	0	2
7:45 AM	51	716		0	273	207	0	8		8	0				0	1,263	0	0	0	1
8:00 AM	40	666		0	281	188	0	14		10	0				0	1,199	0	0	0	1

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Beavercreek Rd & Clairmont Dr

Tuesday, April 12, 2016
7:00 AM to 9:00 AM

Peak Hour Summary
7:00 AM to 8:00 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Interval Total
	L	T		Total	T	R	Total		L		R	Total				Total	
7:00 AM	0	3		3	12	0	12		0		0	0				0	15
7:05 AM	0	5		5	5	0	5		0		0	0				0	10
7:10 AM	0	6		6	2	0	2		0		0	0				0	8
7:15 AM	0	5		5	3	0	3		0		0	0				0	8
7:20 AM	0	4		4	3	0	3		0		0	0				0	7
7:25 AM	0	0		0	3	0	3		1		1	2				0	5
7:30 AM	0	1		1	2	0	2		0		0	0				0	3
7:35 AM	0	0		0	4	1	5		0		0	0				0	5
7:40 AM	0	2		2	1	0	1		0		0	0				0	3
7:45 AM	0	0		0	1	0	1		0		0	0				0	1
7:50 AM	0	3		3	1	0	1		0		0	0				0	4
7:55 AM	0	1		1	1	0	1		0		0	0				0	2
8:00 AM	0	2		2	1	0	1		0		0	0				0	3
8:05 AM	0	2		2	1	0	1		0		0	0				0	3
8:10 AM	0	0		0	1	0	1		0		0	0				0	1
8:15 AM	0	1		1	1	0	1		0		0	0				0	2
8:20 AM	0	6		6	0	0	0		0		0	0				0	6
8:25 AM	0	1		1	1	0	1		0		0	0				0	2
8:30 AM	0	1		1	1	1	2		0		0	0				0	3
8:35 AM	0	4		4	0	0	0		1		0	1				0	5
8:40 AM	0	3		3	1	0	1		0		0	0				0	4
8:45 AM	0	2		2	0	0	0		0		0	0				0	2
8:50 AM	0	1		1	1	0	1		0		0	0				0	2
8:55 AM	0	0		0	2	0	2		0		0	0				0	2
Total Survey	0	53		53	48	2	50		2		1	3				0	106

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Interval Total
	L	T		Total	T	R	Total		L		R	Total				Total	
7:00 AM	0	14		14	19	0	19		0		0	0				0	33
7:15 AM	0	9		9	9	0	9		1		1	2				0	20
7:30 AM	0	3		3	7	1	8		0		0	0				0	11
7:45 AM	0	4		4	3	0	3		0		0	0				0	7
8:00 AM	0	4		4	3	0	3		0		0	0				0	7
8:15 AM	0	8		8	2	0	2		0		0	0				0	10
8:30 AM	0	8		8	2	1	3		1		0	1				0	12
8:45 AM	0	3		3	3	0	3		0		0	0				0	6
Total Survey	0	53		53	48	2	50		2		1	3				0	106

Heavy Vehicle Peak Hour Summary
7:00 AM to 8:00 AM

By Approach	Northbound Beavercreek Rd			Southbound Beavercreek Rd			Eastbound Clairmont Dr			Westbound Clairmont Dr			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	30	39	69	39	31	70	2	1	3	0	0	0	71
PHF	0.47			0.51			0.25			0.00			0.54

By Movement	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Total
	L	T		Total	T	R	Total		L		R	Total				Total	
Volume	0	30		30	38	1	39		1		1	2				0	71
PHF	0.00	0.47		0.47	0.50	0.25	0.51		0.25		0.25	0.25				0.00	0.54

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

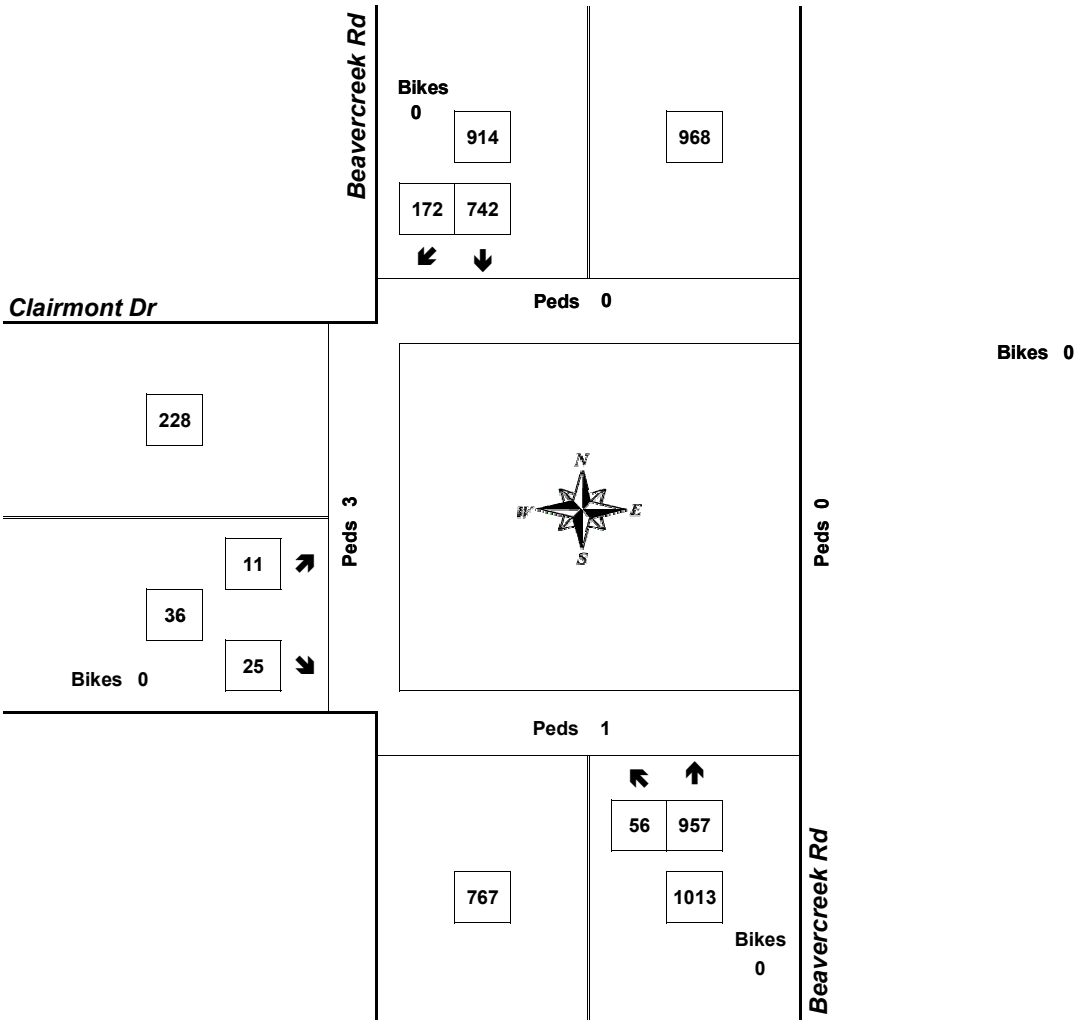
Interval Start Time	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Interval Total
	L	T		Total	T	R	Total		L		R	Total				Total	
7:00 AM	0	30		30	38	1	39		1		1	2				0	71
7:15 AM	0	20		20	22	1	23		1		1	2				0	45
7:30 AM	0	19		19	15	1	16		0		0	0				0	35
7:45 AM	0	24		24	10	1	11		1		0	1				0	36
8:00 AM	0	23		23	10	1	11		1		0	1				0	35

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

Beavercreek Rd & Clairmont Dr

7:00 AM to 8:00 AM
Tuesday, April 12, 2016

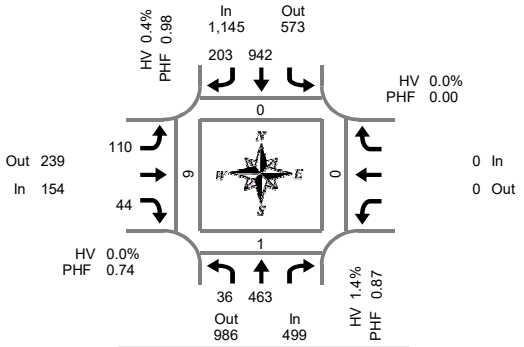


Approach	PHF	HV%	Volume
EB	0.47	5.6%	36
WB	0.00	0.0%	0
NB	0.79	3.0%	1,013
SB	0.63	4.3%	914
Intersection	0.77	3.6%	1,963

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
5:00 PM to 6:00 PM

Beavercreek Rd & Clairmont Dr

Tuesday, April 12, 2016
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Interval Total	Pedestrians Crosswalk			
	L	T		Bikes	T	R	Bikes	L		R	Bikes				Bikes		North	South	East	West
4:00 PM	2	32		0	62	9	0	9		4	0				0	118	0	1	0	0
4:05 PM	1	38		0	77	6	0	5		5	0				0	132	0	0	0	0
4:10 PM	0	24		0	66	7	0	7		3	0				0	107	0	0	0	0
4:15 PM	0	39		0	64	8	0	15		2	0				0	128	0	0	0	0
4:20 PM	0	35		0	77	7	0	6		4	0				0	129	0	0	0	0
4:25 PM	1	37		0	56	3	0	3		2	0				0	102	0	0	0	0
4:30 PM	0	42		0	56	9	0	17		2	0				0	126	0	0	0	0
4:35 PM	1	30		0	79	14	0	10		2	0				0	136	0	0	0	1
4:40 PM	2	34		0	79	8	0	6		3	0				0	132	0	0	0	0
4:45 PM	1	36		0	89	13	0	4		6	0				0	149	0	0	0	0
4:50 PM	2	49		0	75	6	0	6		2	0				0	140	0	0	0	0
4:55 PM	1	37		0	71	5	0	13		7	0				0	134	0	0	0	0
5:00 PM	0	37		0	84	17	0	12		7	0				0	157	0	0	0	2
5:05 PM	3	29		0	75	13	0	12		3	0				0	135	0	1	0	2
5:10 PM	3	32		0	79	14	0	12		6	0				0	146	0	0	0	3
5:15 PM	3	42		0	80	25	0	9		1	0				0	160	0	0	0	0
5:20 PM	2	49		0	72	15	0	10		1	0				0	149	0	0	0	0
5:25 PM	2	45		0	80	13	0	7		5	0				0	152	0	0	0	0
5:30 PM	2	30		0	71	14	0	12		4	0				0	133	0	0	0	0
5:35 PM	3	44		0	89	15	0	6		4	1				0	161	0	0	0	1
5:40 PM	5	37		0	84	18	0	4		1	0				0	149	0	0	0	1
5:45 PM	6	49		0	69	16	0	9		6	0				0	155	0	0	0	0
5:50 PM	5	31		0	80	18	0	8		3	0				0	145	0	0	0	0
5:55 PM	2	38		0	79	25	0	9		3	0				0	156	0	0	0	0
Total Survey	47	896		0	1,793	298	0	211		86	1				0	3,331	0	2	0	10

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Interval Total	Pedestrians Crosswalk			
	L	T		Bikes	T	R	Bikes	L		R	Bikes				Bikes		North	South	East	West
4:00 PM	3	94		0	205	22	0	21		12	0				0	357	0	1	0	0
4:15 PM	1	111		0	197	18	0	24		8	0				0	359	0	0	0	0
4:30 PM	3	106		0	214	31	0	33		7	0				0	394	0	0	0	1
4:45 PM	4	122		0	235	24	0	23		15	0				0	423	0	0	0	0
5:00 PM	6	98		0	238	44	0	36		16	0				0	438	0	1	0	7
5:15 PM	7	136		0	232	53	0	26		7	0				0	461	0	0	0	0
5:30 PM	10	111		0	244	47	0	22		9	1				0	443	0	0	0	2
5:45 PM	13	118		0	228	59	0	26		12	0				0	456	0	0	0	0
Total Survey	47	896		0	1,793	298	0	211		86	1				0	3,331	0	2	0	10

Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	499	986	1,485	0	1,145	573	1,718	0	154	239	393	1	0	0	0	0	1,798	0	1	0	9
%HV	1.4%				0.4%				0.0%				0.0%				0.7%				
PHF	0.87				0.98				0.74				0.00				0.97				

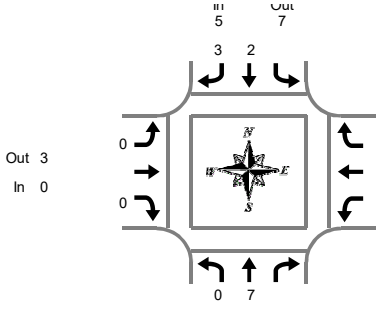
By Movement	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Total
	L	T		Total		T	R	Total	L		R	Total				Total	
Volume	36	463		499		942	203	1,145	110		44	154				0	1,798
%HV	0.0%	1.5%	NA	1.4%	NA	0.2%	1.5%	0.4%	0.0%	NA	0.0%	0.0%	NA	NA	NA	0.0%	0.7%
PHF	0.56	0.85		0.87		0.97	0.86	0.98	0.76		0.69	0.74				0.00	0.97

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Interval Total	Pedestrians Crosswalk			
	L	T		Bikes	T	R	Bikes	L		R	Bikes				Bikes		North	South	East	West
4:00 PM	11	433		0	851	95	0	101		42	0				0	1,533	0	1	0	1
4:15 PM	14	437		0	884	117	0	116		46	0				0	1,614	0	1	0	8
4:30 PM	20	462		0	919	152	0	118		45	0				0	1,716	0	1	0	8
4:45 PM	27	467		0	949	168	0	107		47	1				0	1,765	0	1	0	9
5:00 PM	36	463		0	942	203	0	110		44	1				0	1,798	0	1	0	9

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Beavercreek Rd & Clairmont Dr

Tuesday, April 12, 2016
4:00 PM to 6:00 PM

Peak Hour Summary
5:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Interval Total
	L	T		Total	T	R	Total		L		R	Total				Total	
4:00 PM	0	0		0	1	0	1		0		0	0				0	1
4:05 PM	0	4		4	1	1	2		1		0	1				0	7
4:10 PM	0	0		0	0	0	0		1		0	1				0	1
4:15 PM	0	4		4	1	1	2		0		0	0				0	6
4:20 PM	0	1		1	1	1	2		0		0	0				0	3
4:25 PM	0	2		2	0	0	0		0		0	0				0	2
4:30 PM	0	1		1	0	0	0		0		0	0				0	1
4:35 PM	0	1		1	0	1	1		0		0	0				0	2
4:40 PM	0	1		1	0	0	0		0		0	0				0	1
4:45 PM	0	0		0	1	0	1		0		0	0				0	1
4:50 PM	0	1		1	0	0	0		0		0	0				0	1
4:55 PM	0	0		0	0	0	0		0		0	0				0	0
5:00 PM	0	1		1	0	0	0		0		0	0				0	1
5:05 PM	0	0		0	0	1	1		0		0	0				0	1
5:10 PM	0	1		1	0	0	0		0		0	0				0	1
5:15 PM	0	0		0	0	0	0		0		0	0				0	0
5:20 PM	0	1		1	0	0	0		0		0	0				0	1
5:25 PM	0	0		0	0	0	0		0		0	0				0	0
5:30 PM	0	0		0	1	0	1		0		0	0				0	1
5:35 PM	0	2		2	0	0	0		0		0	0				0	2
5:40 PM	0	2		2	0	0	0		0		0	0				0	2
5:45 PM	0	0		0	0	0	0		0		0	0				0	0
5:50 PM	0	0		0	0	0	0		0		0	0				0	0
5:55 PM	0	0		0	1	2	3		0		0	0				0	3
Total Survey	0	22		22	7	7	14		2		0	2				0	38

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Interval Total
	L	T		Total	T	R	Total		L		R	Total				Total	
4:00 PM	0	4		4	2	1	3		2		0	2				0	9
4:15 PM	0	7		7	2	2	4		0		0	0				0	11
4:30 PM	0	3		3	0	1	1		0		0	0				0	4
4:45 PM	0	1		1	1	0	1		0		0	0				0	2
5:00 PM	0	2		2	0	1	1		0		0	0				0	3
5:15 PM	0	1		1	0	0	0		0		0	0				0	1
5:30 PM	0	4		4	1	0	1		0		0	0				0	5
5:45 PM	0	0		0	1	2	3		0		0	0				0	3
Total Survey	0	22		22	7	7	14		2		0	2				0	38

Heavy Vehicle Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound Beavercreek Rd			Southbound Beavercreek Rd			Eastbound Clairmont Dr			Westbound Clairmont Dr			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	7	2	9	5	7	12	0	3	3	0	0	0	12
PHF	0.44			0.42			0.00			0.00			0.60

By Movement	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Total
	L	T		Total	T	R	Total		L		R	Total				Total	
Volume	0	7		7	2	3	5		0		0	0				0	12
PHF	0.00	0.44		0.44	0.50	0.38	0.42		0.00		0.00	0.00				0.00	0.60

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

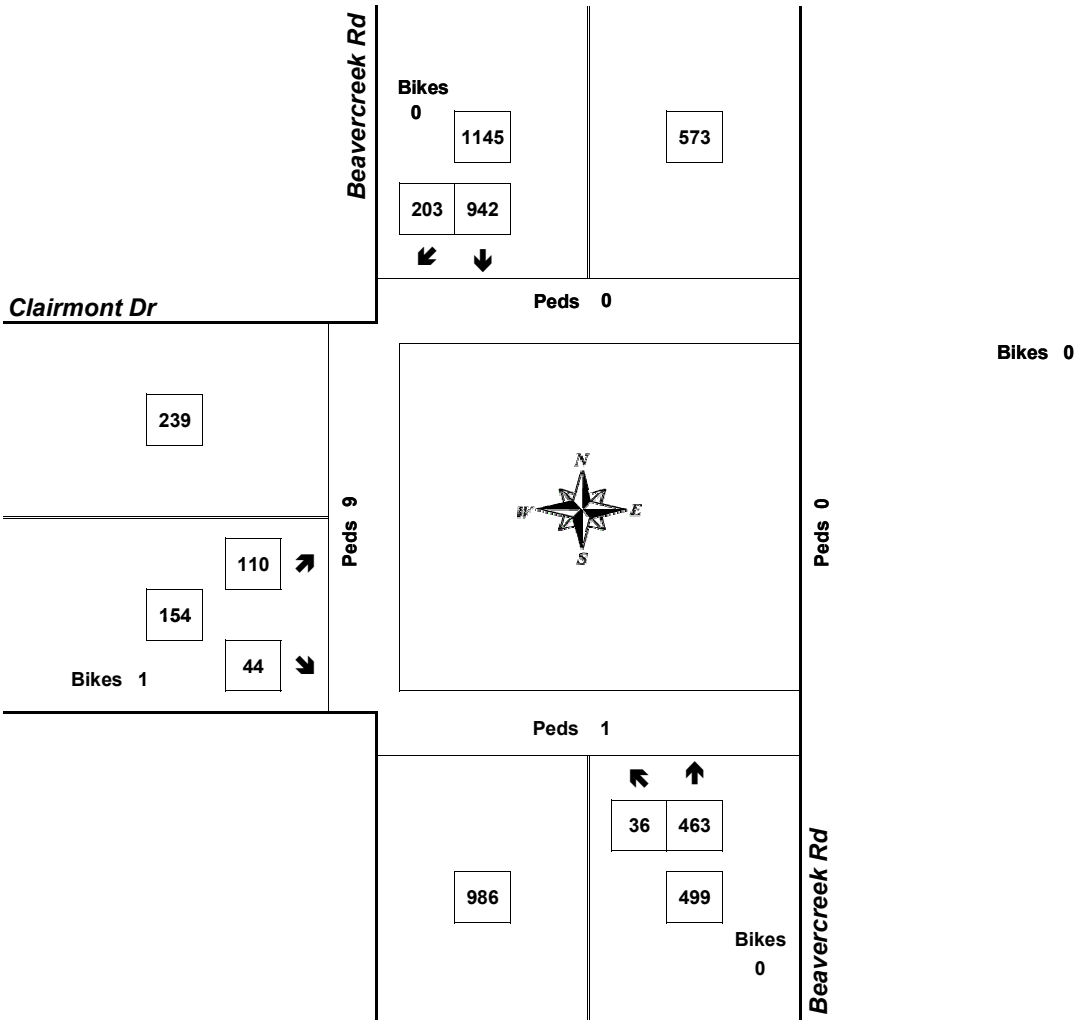
Interval Start Time	Northbound Beavercreek Rd				Southbound Beavercreek Rd				Eastbound Clairmont Dr				Westbound Clairmont Dr				Interval Total
	L	T		Total	T	R	Total		L		R	Total				Total	
4:00 PM	0	15		15	5	4	9		2		0	2				0	26
4:15 PM	0	13		13	3	4	7		0		0	0				0	20
4:30 PM	0	7		7	1	2	3		0		0	0				0	10
4:45 PM	0	8		8	2	1	3		0		0	0				0	11
5:00 PM	0	7		7	2	3	5		0		0	0				0	12

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

Beavercreek Rd & Clairmont Dr

5:00 PM to 6:00 PM
Tuesday, April 12, 2016



Approach	PHF	HV%	Volume
EB	0.74	0.0%	154
WB	0.00	0.0%	0
NB	0.87	1.4%	499
SB	0.98	0.4%	1,145
Intersection	0.97	0.7%	1,798

Count Period: 4:00 PM to 6:00 PM

All Traffic Data
15105 SE 17th St.
Vancouver, WA. 98683
503-833-2740

Site Code: 1
Community College Access On Clairmont

Start Time	12-Apr-16 Tue	Enter	Exit							Total
12:00 AM		1	5							6
01:00		0	1							1
02:00		0	1							1
03:00		0	0							0
04:00		2	2							4
05:00		9	0							9
06:00		34	4							38
07:00		240	38							278
08:00		229	26							255
09:00		**258**	66							**324**
10:00		130	105							235
11:00		92	**203**							295
12:00 PM		216	195							**411**
01:00		97	143							240
02:00		138	**216**							354
03:00		124	131							255
04:00		110	149							259
05:00		**240**	156							396
06:00		88	140							228
07:00		30	136							166
08:00		14	162							176
09:00		9	98							107
10:00		2	5							7
11:00		0	7							7
Total		2063	1989							4052
Percent		50.9%	49.1%							
AM Peak	-	09:00	11:00	-	-	-	-	-	-	09:00
Vol.	-	258	203	-	-	-	-	-	-	324
PM Peak	-	17:00	14:00	-	-	-	-	-	-	12:00
Vol.	-	240	216	-	-	-	-	-	-	411

All Traffic Data
15105 SE 17th St.
Vancouver, WA. 98683
503-833-2740

Site Code: 1
Community College Access on Molalla

Start Time	12-Apr-16 Tue	Enter	Exit							Total
12:00 AM		3	4							7
01:00		0	1							1
02:00		0	0							0
03:00		0	0							0
04:00		8	0							8
05:00		30	13							43
06:00		67	31							98
07:00		328	99							427
08:00		**421**	91							512
09:00		410	146							556
10:00		201	190							391
11:00		182	**381**							**563**
12:00 PM		**440**	311							**751**
01:00		189	209							398
02:00		218	**366**							584
03:00		166	353							519
04:00		155	346							501
05:00		284	297							581
06:00		128	186							314
07:00		60	248							308
08:00		14	141							155
09:00		18	100							118
10:00		5	3							8
11:00		5	4							9
Total		3332	3520							6852
Percent		48.6%	51.4%							
AM Peak	-	08:00	11:00	-	-	-	-	-	-	11:00
Vol.	-	421	381	-	-	-	-	-	-	563
PM Peak	-	12:00	14:00	-	-	-	-	-	-	12:00
Vol.	-	440	366	-	-	-	-	-	-	751

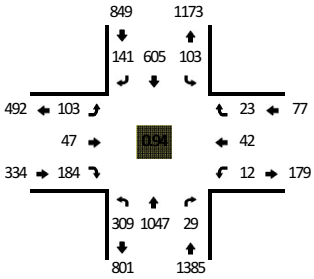
Type of peak hour being reported: Intersection Peak

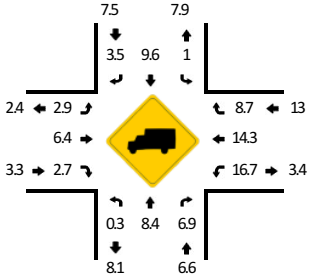
Method for determining peak hour: Total Entering Volume

LOCATION: OR-213 -- Molalla Ave/S Douglas Loop
CITY/STATE: Oregon City, OR

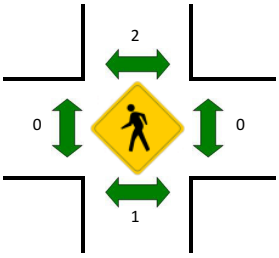
QC JOB #: 16554901
DATE: Tue, Apr 9 2024

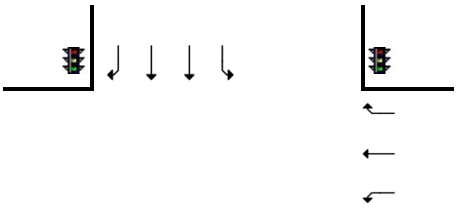
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

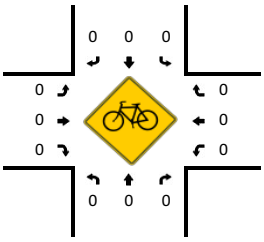


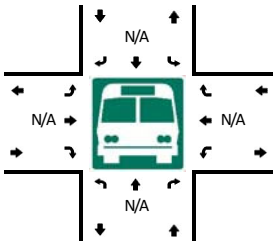


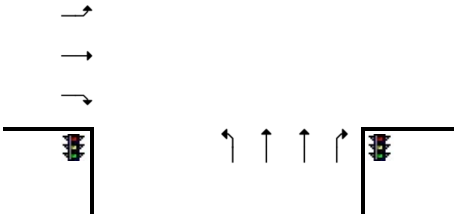
TRUE DATA TO IMPROVE MOBILITY

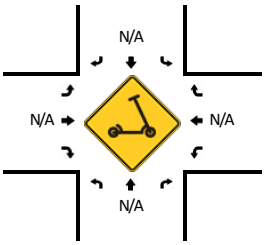












5-Min Count Period Beginning At	OR-213 (Northbound)				OR-213 (Southbound)				Molalla Ave/S Douglas Loop (Eastbound)				Molalla Ave/S Douglas Loop (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	4	81	2	0	2	19	2	0	4	0	3	0	0	1	0	0	118	
6:05 AM	17	87	0	0	1	15	2	0	0	1	3	0	0	0	1	0	127	
6:10 AM	6	70	0	0	1	20	3	0	8	0	4	0	0	1	0	0	113	
6:15 AM	15	89	2	0	0	23	4	0	5	0	2	0	1	0	0	0	141	
6:20 AM	5	72	0	0	4	29	1	0	11	0	9	0	0	0	0	0	131	
6:25 AM	16	100	0	0	3	26	5	0	4	1	5	0	0	1	0	0	161	
6:30 AM	15	105	1	0	1	39	2	0	5	1	4	0	0	1	0	0	174	
6:35 AM	19	85	1	0	0	33	7	0	7	1	12	0	0	1	0	0	166	
6:40 AM	12	114	2	0	0	28	8	0	6	1	10	0	0	2	0	0	183	
6:45 AM	28	88	1	0	2	18	8	0	8	0	4	0	1	1	2	0	161	
6:50 AM	17	82	0	0	4	32	5	0	9	1	5	0	0	1	0	0	156	
6:55 AM	17	73	1	0	1	20	9	0	5	1	13	0	0	0	2	0	142	1773
7:00 AM	13	90	0	0	2	36	7	0	6	2	7	0	0	0	0	0	163	1818
7:05 AM	20	112	1	0	2	28	5	0	7	2	11	0	1	1	1	0	191	1882
7:10 AM	12	74	0	0	6	31	5	0	7	1	6	0	1	2	2	0	147	1916
7:15 AM	21	127	0	0	4	23	12	0	5	1	7	0	0	5	0	0	205	1980
7:20 AM	10	80	1	0	5	58	10	0	11	5	12	0	0	0	1	0	193	2042
7:25 AM	29	90	0	0	7	24	9	0	9	1	6	0	1	0	1	0	177	2058
7:30 AM	19	78	1	0	7	37	15	0	8	3	4	0	0	1	0	0	173	2057
7:35 AM	23	131	2	0	10	35	9	0	4	4	12	0	0	2	0	0	232	2123
7:40 AM	17	78	2	0	14	56	6	0	8	6	5	0	1	5	2	0	200	2140
7:45 AM	30	103	3	0	5	53	12	0	5	1	14	0	1	5	4	0	236	2215
7:50 AM	23	74	3	0	17	44	11	0	6	3	16	0	1	4	2	0	204	2263
7:55 AM	36	76	4	0	9	50	9	0	8	4	21	0	0	6	2	0	225	2346
8:00 AM	21	82	1	0	5	65	10	0	9	5	12	0	1	3	3	0	217	2400
8:05 AM	26	63	2	0	11	53	19	0	5	3	16	0	1	5	2	0	206	2415
8:10 AM	21	72	1	0	7	41	22	0	24	7	16	0	1	0	1	0	213	2481
8:15 AM	35	103	3	0	11	44	17	0	9	4	17	0	3	4	2	0	252	2528
8:20 AM	17	91	5	0	7	73	4	0	6	2	25	0	0	2	4	0	236	2571
8:25 AM	40	84	1	0	0	45	12	0	4	2	20	0	1	5	0	0	214	2608
8:30 AM	20	90	2	0	7	46	10	0	15	6	10	0	2	1	1	0	210	2645
8:35 AM	27	65	1	0	5	37	9	0	7	9	14	0	0	3	1	0	178	2591
8:40 AM	21	70	1	0	12	42	5	0	7	8	11	0	0	4	4	0	185	2576
8:45 AM	31	69	5	0	16	24	12	0	6	2	15	0	2	1	3	0	186	2526
8:50 AM	15	69	7	0	20	26	1	0	10	10	12	0	1	0	2	0	173	2495
8:55 AM	22	40	4	0	15	56	15	0	8	5	17	0	0	1	3	0	186	2456

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	368	1112	36	0	72	648	132	0	76	32	248	0	16	44	24	0	2808
Heavy Trucks	4	96	0		4	68	0		4	0	8		4	8	0		196
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 4/18/2024 6:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

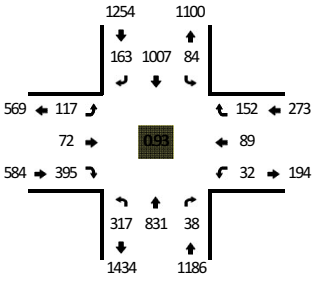
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

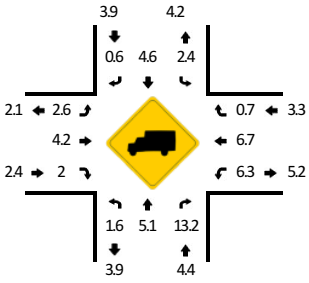
LOCATION: OR-213 -- Molalla Ave/S Douglas Loop
CITY/STATE: Oregon City, OR

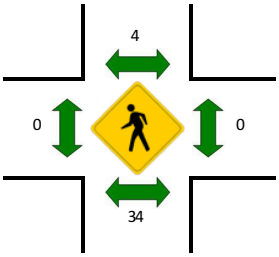
QC JOB #: 16554902
DATE: Tue, Apr 9 2024

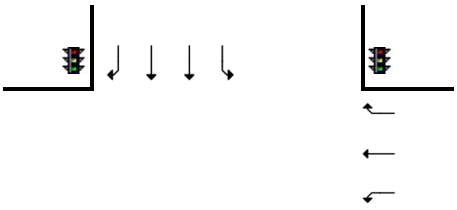
Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:25 PM -- 3:40 PM

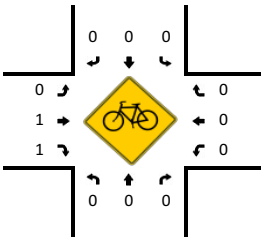


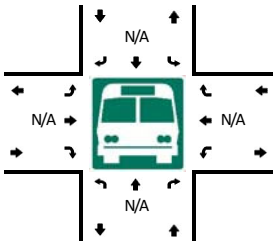


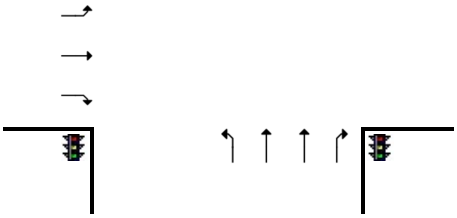


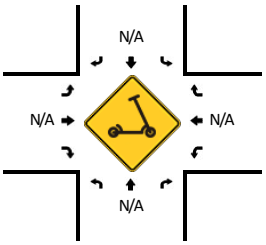












5-Min Count Period Beginning At	OR-213 (Northbound)				OR-213 (Southbound)				Molalla Ave/S Douglas Loop (Eastbound)				Molalla Ave/S Douglas Loop (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	21	70	4	0	13	97	13	0	18	5	32	0	5	10	33	0	321	
3:05 PM	25	58	1	0	3	91	9	0	11	7	35	0	1	0	16	0	257	
3:10 PM	25	59	3	0	2	74	10	0	10	7	35	0	0	7	11	0	243	
3:15 PM	18	57	5	0	16	67	14	0	8	4	33	0	2	7	11	0	242	
3:20 PM	25	87	5	0	7	102	18	0	5	14	30	0	3	11	8	0	315	
3:25 PM	34	73	5	0	9	81	16	0	9	7	35	0	1	12	21	0	303	
3:30 PM	26	73	2	0	5	71	9	0	6	4	31	0	5	8	11	0	251	
3:35 PM	29	91	4	0	6	117	14	0	10	0	35	0	5	12	7	0	330	
3:40 PM	34	60	3	0	10	68	15	0	10	8	30	0	0	6	8	0	252	
3:45 PM	23	80	4	0	1	69	18	0	15	4	28	0	7	2	8	0	259	
3:50 PM	28	65	1	0	7	109	16	0	7	7	33	0	0	9	5	0	287	
3:55 PM	29	58	1	0	5	61	11	0	8	5	38	0	3	5	13	0	237	3297
4:00 PM	17	70	1	0	1	92	11	0	8	6	26	0	1	10	10	0	253	3229
4:05 PM	23	40	2	0	5	83	19	0	7	3	36	0	2	11	16	0	247	3219
4:10 PM	29	69	1	0	3	102	11	0	7	5	41	0	1	7	9	0	285	3261
4:15 PM	17	41	0	0	3	55	18	0	17	7	32	0	1	8	12	0	211	3230
4:20 PM	18	68	0	0	8	115	25	0	5	4	35	0	2	7	12	0	299	3214
4:25 PM	22	55	1	0	4	77	11	0	7	2	34	0	2	3	22	0	240	3151
4:30 PM	25	70	2	0	1	66	15	0	11	8	37	0	5	8	11	0	259	3159
4:35 PM	23	58	0	0	7	81	16	0	16	3	34	0	3	14	25	0	280	3109
4:40 PM	20	74	2	0	5	116	22	0	10	3	34	0	5	7	11	0	309	3166
4:45 PM	29	56	1	0	1	86	13	0	9	4	40	0	2	7	11	0	259	3166
4:50 PM	21	39	1	0	5	68	19	0	13	7	38	0	5	10	13	0	239	3118
4:55 PM	14	70	4	0	2	116	18	0	6	5	24	0	3	6	26	0	294	3175
5:00 PM	26	46	1	0	3	47	14	0	9	7	47	0	5	6	13	0	224	3146
5:05 PM	21	52	4	0	6	80	12	0	18	3	30	0	1	13	21	0	261	3160
5:10 PM	22	54	1	0	4	95	20	0	9	4	41	0	5	6	12	0	273	3148
5:15 PM	30	59	1	0	2	106	24	0	8	5	37	0	0	5	9	0	286	3223
5:20 PM	29	57	0	0	1	68	14	0	13	8	34	0	2	5	6	0	237	3161
5:25 PM	19	60	3	0	5	107	13	0	14	8	28	0	1	3	7	0	268	3189
5:30 PM	24	80	3	0	0	109	18	0	4	4	32	0	3	4	9	0	290	3220
5:35 PM	23	55	2	0	5	67	17	0	7	8	31	0	3	9	4	0	231	3171
5:40 PM	17	53	2	0	3	100	15	0	5	9	19	0	1	4	3	0	231	3093
5:45 PM	16	49	2	0	5	81	23	0	8	7	26	0	2	7	7	0	233	3067
5:50 PM	22	41	1	0	6	53	13	0	7	7	38	0	3	5	9	0	205	3033
5:55 PM	19	54	1	0	9	87	23	0	7	1	24	0	5	6	6	0	242	2981

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	356	948	44	0	80	1076	156	0	100	44	404	0	44	128	156	0	3536
Heavy Trucks	8	24	12		0	68	0		0	0	16		4	16	4		152
Buses																	
Pedestrians		40				0				0				0			40
Bicycles	0	0	0		0	0	0		0	4	4		0	0	0		8
Scooters																	

Comments:

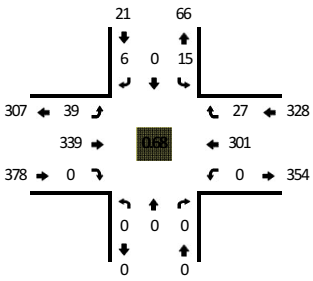
Report generated on 4/18/2024 6:39 PM

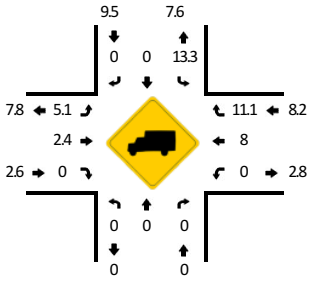
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

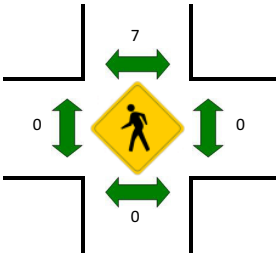
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

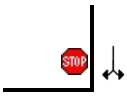
LOCATION: Keyser Wy -- Meyers Rd | **QC JOB #:** 16554903
CITY/STATE: Oregon City, OR | **DATE:** Tue, Apr 9 2024

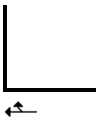
Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 8:05 AM -- 8:20 AM

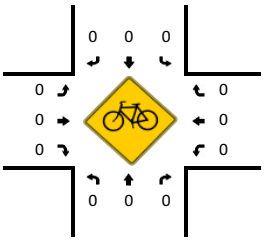


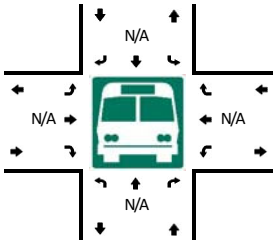


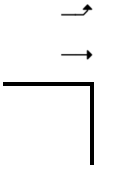




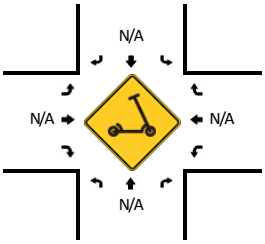












5-Min Count Period Beginning At	Keyser Wy (Northbound)				Keyser Wy (Southbound)				Meyers Rd (Eastbound)				Meyers Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	1	0	1	14	0	0	0	16	2	0	34	
7:05 AM	0	0	0	0	1	0	0	0	1	18	0	0	0	13	1	0	34	
7:10 AM	0	0	0	0	0	0	0	0	3	9	0	0	0	19	1	0	32	
7:15 AM	0	0	0	0	0	0	0	0	4	10	0	0	0	13	2	0	29	
7:20 AM	0	0	0	0	0	0	0	0	1	8	0	0	0	15	0	0	24	
7:25 AM	0	0	0	0	0	0	0	0	2	14	0	0	0	8	0	0	24	
7:30 AM	0	0	0	0	1	0	0	0	1	11	0	0	0	11	3	0	27	
7:35 AM	0	0	0	0	1	0	1	0	2	17	0	0	0	11	1	0	33	
7:40 AM	0	0	0	0	2	0	0	0	2	12	0	0	0	18	3	0	37	
7:45 AM	0	0	0	0	4	0	0	0	4	23	0	0	0	13	2	0	46	
7:50 AM	0	0	0	0	1	0	1	0	3	18	0	0	0	18	0	0	41	
7:55 AM	0	0	0	0	1	0	1	0	6	31	0	0	0	25	0	0	64	425
8:00 AM	0	0	0	0	1	0	0	0	4	30	0	0	0	24	2	0	61	452
8:05 AM	0	0	0	0	1	0	0	0	2	53	0	0	0	38	3	0	97	515
8:10 AM	0	0	0	0	2	0	0	0	2	35	0	0	0	32	2	0	73	556
8:15 AM	0	0	0	0	0	0	3	0	1	53	0	0	0	37	5	0	99	626
8:20 AM	0	0	0	0	1	0	0	0	4	27	0	0	0	45	4	0	81	683
8:25 AM	0	0	0	0	1	0	1	0	2	24	0	0	0	22	2	0	52	711
8:30 AM	0	0	0	0	0	0	0	0	3	12	0	0	0	14	2	0	31	715
8:35 AM	0	0	0	0	1	0	0	0	6	21	0	0	0	15	2	0	45	727
8:40 AM	0	0	0	0	1	0	1	0	5	4	0	0	0	13	0	0	24	714
8:45 AM	0	0	0	0	0	0	1	0	5	14	0	0	0	7	4	0	31	699
8:50 AM	0	0	0	0	2	0	0	0	6	11	0	0	0	9	1	0	29	687
8:55 AM	0	0	0	0	0	0	1	0	5	18	0	0	0	7	2	0	33	656

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	12	0	12	0	20	564	0	0	0	428	40	0	1076
Heavy Trucks	0	0	0		4	0	0		4	4	0		0	8	0		20
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

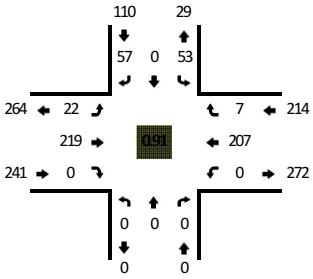
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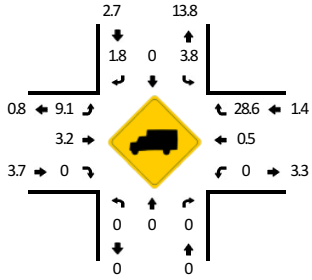
Report generated on 4/18/2024 6:39 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

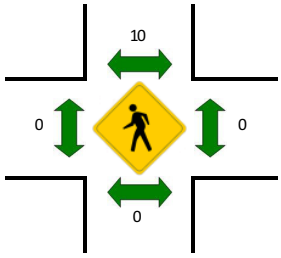
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

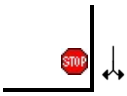
LOCATION: Keyser Wy -- Meyers Rd | **QC JOB #:** 16554904
CITY/STATE: Oregon City, OR | **DATE:** Tue, Apr 9 2024

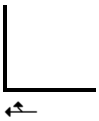
Peak-Hour: 4:40 PM -- 5:40 PM
Peak 15-Min: 4:40 PM -- 4:55 PM

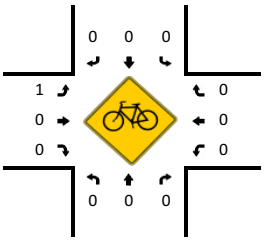


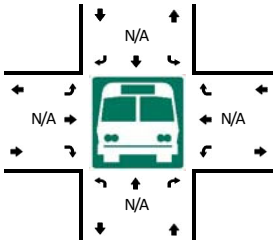


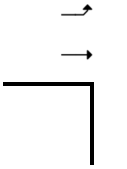




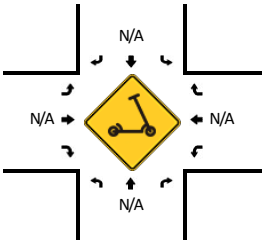












5-Min Count Period Beginning At	Keyser Wy (Northbound)				Keyser Wy (Southbound)				Meyers Rd (Eastbound)				Meyers Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	7	0	9	0	6	15	0	0	0	14	0	0	51	
4:05 PM	0	0	0	0	1	0	6	0	4	13	0	0	0	8	2	0	34	
4:10 PM	0	0	0	0	5	0	7	0	1	18	0	0	0	18	1	0	50	
4:15 PM	0	0	0	0	0	0	5	0	2	14	0	0	0	14	2	0	37	
4:20 PM	0	0	0	0	2	0	4	0	2	9	0	0	0	17	2	0	36	
4:25 PM	0	0	0	0	2	0	5	0	1	14	0	0	0	9	1	0	32	
4:30 PM	0	0	0	0	2	0	4	0	0	14	0	0	0	15	0	0	35	
4:35 PM	0	0	0	0	2	0	3	0	1	13	0	0	0	22	0	0	41	
4:40 PM	0	0	0	0	4	0	5	0	2	25	0	0	0	11	1	0	48	
4:45 PM	0	0	0	0	5	0	4	0	1	17	0	0	0	13	3	0	43	
4:50 PM	0	0	0	0	5	0	6	0	4	28	0	0	0	20	1	0	64	
4:55 PM	0	0	0	0	3	0	5	0	2	23	0	0	0	15	0	0	48	519
5:00 PM	0	0	0	0	3	0	5	0	3	13	0	0	0	14	0	0	38	506
5:05 PM	0	0	0	0	4	0	4	0	1	16	0	0	0	18	0	0	43	515
5:10 PM	0	0	0	0	4	0	10	0	1	14	0	0	0	19	0	0	48	513
5:15 PM	0	0	0	0	1	0	4	0	2	16	0	0	0	20	0	0	43	519
5:20 PM	0	0	0	0	5	0	3	0	3	18	0	0	0	26	1	0	56	539
5:25 PM	0	0	0	0	5	0	3	0	1	11	0	0	0	16	0	0	36	543
5:30 PM	0	0	0	0	8	0	4	0	1	21	0	0	0	10	0	0	44	552
5:35 PM	0	0	0	0	6	0	4	0	1	17	0	0	0	25	1	0	54	565
5:40 PM	0	0	0	0	2	0	3	0	4	17	0	0	0	12	0	0	38	555
5:45 PM	0	0	0	0	4	0	4	0	5	12	0	0	0	8	2	0	35	547
5:50 PM	0	0	0	0	3	0	3	0	3	24	0	0	0	12	1	0	46	529
5:55 PM	0	0	0	0	4	0	5	0	4	6	0	0	0	14	3	0	36	517

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	56	0	60	0	28	280	0	0	0	176	20	0	620
Heavy Trucks	0	0	0		4	0	0		4	12	0		0	0	8		28
Buses																	
Pedestrians		0				16				0				0			16
Bicycles	0	0	0		0	0	0		4	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 4/18/2024 6:39 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

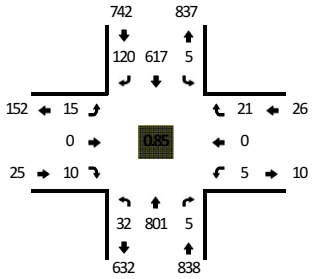
Type of peak hour being reported: Intersection Peak

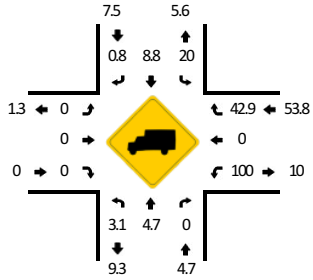
Method for determining peak hour: Total Entering Volume

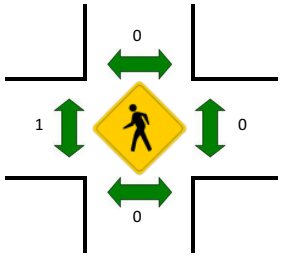
LOCATION: S Beavercreek Rd -- Clairmont Dr
CITY/STATE: Oregon City, OR

QC JOB #: 16554905
DATE: Tue, Apr 9 2024

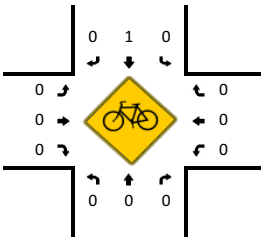
Peak-Hour: 7:25 AM -- 8:25 AM
Peak 15-Min: 8:05 AM -- 8:20 AM

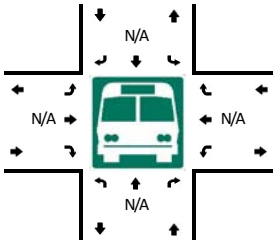




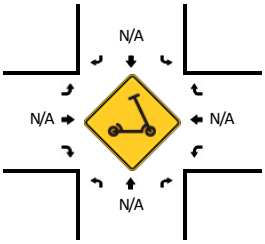












5-Min Count Period Beginning At	S Beavercreek Rd (Northbound)				S Beavercreek Rd (Southbound)				Clairmont Dr (Eastbound)				Clairmont Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	62	0	0	1	31	4	0	1	0	0	0	0	0	1	0	100	
7:05 AM	0	75	2	0	0	44	3	0	3	0	1	0	0	0	0	0	128	
7:10 AM	3	64	0	0	1	41	4	0	1	0	0	0	0	0	5	0	119	
7:15 AM	1	69	0	0	0	34	3	0	0	0	0	0	4	0	2	0	113	
7:20 AM	0	59	0	0	0	33	4	0	3	0	1	0	1	0	3	0	104	
7:25 AM	1	71	0	0	0	28	11	0	1	0	0	0	1	0	3	0	116	
7:30 AM	0	71	0	0	0	34	6	0	0	0	0	0	0	0	1	0	112	
7:35 AM	1	57	0	0	0	30	5	0	0	0	1	0	1	0	1	0	96	
7:40 AM	1	61	1	0	0	42	9	0	2	0	1	0	1	0	2	0	120	
7:45 AM	5	65	0	0	0	47	10	0	1	0	0	0	0	0	5	0	133	
7:50 AM	7	73	0	0	0	39	23	0	2	0	0	0	1	0	0	0	145	
7:55 AM	4	73	1	0	1	39	17	0	1	0	1	0	0	0	0	0	137	1423
8:00 AM	3	56	1	0	1	65	15	0	0	0	4	0	0	0	4	0	149	1472
8:05 AM	0	66	0	0	0	74	5	0	2	0	0	0	0	0	1	0	148	1492
8:10 AM	5	64	1	0	2	89	5	0	1	0	2	0	0	0	0	0	169	1542
8:15 AM	4	73	1	0	1	71	5	0	3	0	1	0	0	0	1	0	160	1589
8:20 AM	1	71	0	0	0	59	9	0	2	0	0	0	1	0	3	0	146	1631
8:25 AM	0	57	1	0	1	30	6	0	1	0	1	0	1	0	1	0	99	1614
8:30 AM	0	68	0	0	0	31	6	0	0	0	0	0	0	0	0	0	105	1607
8:35 AM	1	68	0	0	0	26	2	0	2	0	0	0	0	0	0	0	99	1610
8:40 AM	4	59	0	0	0	22	11	0	1	0	0	0	0	0	0	0	97	1587
8:45 AM	1	51	0	0	0	20	11	0	1	0	0	0	0	0	0	0	84	1538
8:50 AM	3	52	0	0	0	18	14	0	3	1	0	0	1	0	0	0	92	1485
8:55 AM	4	55	0	0	1	23	22	0	2	0	2	0	0	0	2	0	111	1459

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	36	812	8	0	12	936	60	0	24	0	12	0	0	0	8	0	1908
Heavy Trucks	4	36	0		0	144	0		0	0	0		0	0	0		184
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	4	0		0	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 4/18/2024 6:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

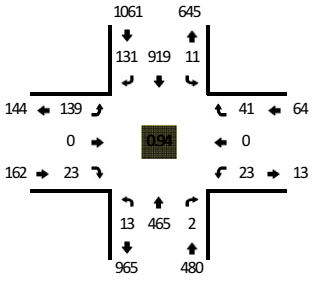
Type of peak hour being reported: Intersection Peak

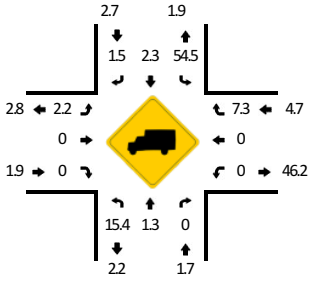
Method for determining peak hour: Total Entering Volume

LOCATION: S Beavercreek Rd -- Clairmont Dr
CITY/STATE: Oregon City, OR

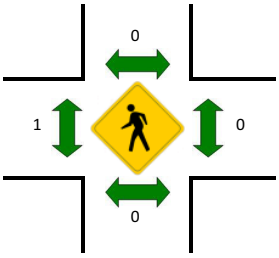
QC JOB #: 16554906
DATE: Tue, Apr 9 2024

Peak-Hour: 4:55 PM -- 5:55 PM
Peak 15-Min: 5:20 PM -- 5:35 PM

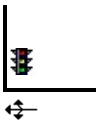


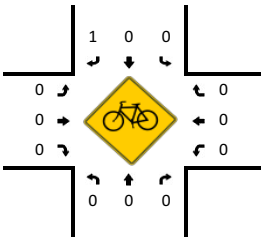


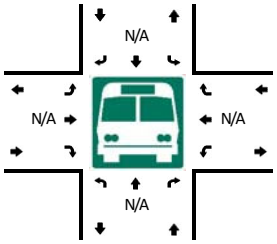
TRUE DATA TO IMPROVE MOBILITY

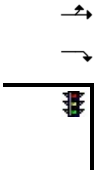


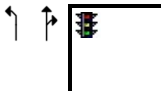


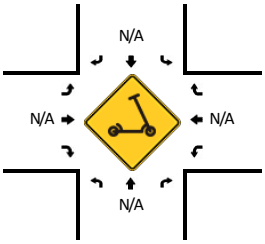












5-Min Count Period Beginning At	S Beavercreek Rd (Northbound)				S Beavercreek Rd (Southbound)				Clairmont Dr (Eastbound)				Clairmont Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	35	0	0	0	72	10	0	18	0	1	0	3	0	5	0	145	
4:05 PM	2	38	0	0	2	62	8	0	12	0	2	0	0	0	0	0	126	
4:10 PM	0	38	1	0	1	75	8	0	9	0	3	0	0	0	1	0	136	
4:15 PM	0	40	0	0	1	78	8	0	4	0	1	0	0	0	0	0	132	
4:20 PM	2	30	0	0	0	95	5	0	11	0	0	0	1	0	0	0	144	
4:25 PM	0	27	1	0	2	75	7	0	6	0	1	0	0	0	0	0	119	
4:30 PM	3	21	1	0	1	72	8	0	5	0	1	0	0	0	0	0	112	
4:35 PM	0	44	0	0	0	76	5	0	11	0	2	0	0	0	0	0	138	
4:40 PM	0	45	2	0	3	75	5	0	13	0	1	0	0	0	0	0	144	
4:45 PM	2	42	0	0	1	91	6	0	3	0	3	0	0	0	2	0	150	
4:50 PM	0	29	1	0	1	74	7	0	8	0	1	0	0	0	0	0	121	
4:55 PM	2	25	1	0	4	78	6	0	15	0	1	0	0	0	0	0	132	1599
5:00 PM	0	59	0	0	4	85	13	0	11	0	1	0	1	0	1	0	175	1629
5:05 PM	0	47	0	0	1	87	6	0	15	0	1	0	0	0	1	0	158	1661
5:10 PM	0	41	0	0	0	52	6	0	17	0	3	0	0	0	1	0	120	1645
5:15 PM	4	38	0	0	0	66	7	0	10	0	1	0	0	0	0	0	126	1639
5:20 PM	2	40	0	0	0	87	9	0	12	0	1	0	0	0	0	0	151	1646
5:25 PM	0	36	0	0	1	93	6	0	10	0	0	0	0	0	0	0	146	1673
5:30 PM	0	37	0	0	1	78	13	0	9	0	2	0	15	0	20	0	175	1736
5:35 PM	1	41	0	0	0	65	18	0	5	0	3	0	5	0	10	0	148	1746
5:40 PM	1	37	1	0	0	74	17	0	15	0	2	0	0	0	2	0	149	1751
5:45 PM	0	33	0	0	0	82	12	0	13	0	3	0	2	0	5	0	150	1751
5:50 PM	3	31	0	0	0	72	18	0	7	0	5	0	0	0	1	0	137	1767
5:55 PM	3	31	0	0	0	66	17	0	6	0	2	0	0	0	1	0	126	1761

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	452	0	0	8	1032	112	0	124	0	12	0	60	0	80	0	1888
Heavy Trucks	0	12	0		0	12	0		4	0	0		0	0	4		32
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 4/18/2024 6:39 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of report: Tube Count - Volume Data

LOCATION: Inskeep Dr south of Beavercreek Rd **QC JOB #:** 16554907

SPECIFIC LOCATION: **DIRECTION:** EB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 AM		**0**				**0**			**0**	
12:15 AM		0				0			0	
12:30 AM		0				0			0	
12:45 AM		0				0			0	
01:00 AM		0				0			0	
01:15 AM		0				0			0	
01:30 AM		0				0			0	
01:45 AM		0				0			0	
02:00 AM		0				0			0	
02:15 AM		0				0			0	
02:30 AM		0				0			0	
02:45 AM		0				0			0	
03:00 AM		0				0			0	
03:15 AM		0				0			0	
03:30 AM		0				0			0	
03:45 AM		0				0			0	
04:00 AM		0				0			0	
04:15 AM		0				0			0	
04:30 AM		0				0			0	
04:45 AM		0				0			0	
05:00 AM		0				0			0	
05:15 AM		0				0			0	
05:30 AM		0				0			0	
05:45 AM		0				0			0	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Inskeep Dr south of Beavercreek Rd **QC JOB #:** 16554907

SPECIFIC LOCATION: **DIRECTION:** EB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 AM		0				0			0	
06:15 AM		0				0			0	
06:30 AM		0				0			0	
06:45 AM		0				0			0	
07:00 AM		0				0			0	
07:15 AM		0				0			0	
07:30 AM		0				0			0	
07:45 AM		0				0			0	
08:00 AM		0				0			0	
08:15 AM		0				0			0	
08:30 AM		0				0			0	
08:45 AM		0				0			0	
09:00 AM		0				0			0	
09:15 AM		0				0			0	
09:30 AM		0				0			0	
09:45 AM		0				0			0	
10:00 AM		0				0			0	
10:15 AM		0				0			0	
10:30 AM		0				0			0	
10:45 AM		0				0			0	
11:00 AM		0				0			0	
11:15 AM		0				0			0	
11:30 AM		0				0			0	
11:45 AM		0				0			0	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Inskeep Dr south of Beavercreek Rd **QC JOB #:** 16554907

SPECIFIC LOCATION: **DIRECTION:** EB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 PM		**0**				**0**			**0**	
12:15 PM		0				0			0	
12:30 PM		0				0			0	
12:45 PM		0				0			0	
01:00 PM		0				0			0	
01:15 PM		0				0			0	
01:30 PM		0				0			0	
01:45 PM		0				0			0	
02:00 PM		0				0			0	
02:15 PM		0				0			0	
02:30 PM		0				0			0	
02:45 PM		0				0			0	
03:00 PM		0				0			0	
03:15 PM		0				0			0	
03:30 PM		0				0			0	
03:45 PM		0				0			0	
04:00 PM		0				0			0	
04:15 PM		0				0			0	
04:30 PM		0				0			0	
04:45 PM		0				0			0	
05:00 PM		0				0			0	
05:15 PM		0				0			0	
05:30 PM		0				0			0	
05:45 PM		0				0			0	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Inskeep Dr south of Beavercreek Rd **QC JOB #:** 16554907

SPECIFIC LOCATION: **DIRECTION:** EB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 PM		0				0			0	
06:15 PM		0				0			0	
06:30 PM		0				0			0	
06:45 PM		0				0			0	
07:00 PM		0				0			0	
07:15 PM		0				0			0	
07:30 PM		0				0			0	
07:45 PM		0				0			0	
08:00 PM		0				0			0	
08:15 PM		0				0			0	
08:30 PM		0				0			0	
08:45 PM		0				0			0	
09:00 PM		0				0			0	
09:15 PM		0				0			0	
09:30 PM		0				0			0	
09:45 PM		0				0			0	
10:00 PM		0				0			0	
10:15 PM		0				0			0	
10:30 PM		0				0			0	
10:45 PM		0				0			0	
11:00 PM		0				0			0	
11:15 PM		0				0			0	
11:30 PM		0				0			0	
11:45 PM		0				0			0	
Day Total		0				0			0	
% Weekday Average		0%								
% Week Average		0%				0%				
AM Peak 15-min Vol		12:00 AM 0				12:00 AM 0			12:00 AM 0	
PM Peak 15-min Vol		12:00 PM 0				12:00 PM 0			12:00 PM 0	

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Inskeep Dr south of Beavercreek Rd **QC JOB #:** 16554907

SPECIFIC LOCATION: **DIRECTION:** WB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 AM		**0**				**0**			**0**	
12:15 AM		0				0			0	
12:30 AM		0				0			0	
12:45 AM		0				0			0	
01:00 AM		0				0			0	
01:15 AM		0				0			0	
01:30 AM		0				0			0	
01:45 AM		0				0			0	
02:00 AM		0				0			0	
02:15 AM		0				0			0	
02:30 AM		0				0			0	
02:45 AM		0				0			0	
03:00 AM		0				0			0	
03:15 AM		0				0			0	
03:30 AM		0				0			0	
03:45 AM		0				0			0	
04:00 AM		0				0			0	
04:15 AM		0				0			0	
04:30 AM		0				0			0	
04:45 AM		0				0			0	
05:00 AM		0				0			0	
05:15 AM		0				0			0	
05:30 AM		0				0			0	
05:45 AM		0				0			0	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Inskeep Dr south of Beavercreek Rd **QC JOB #:** 16554907

SPECIFIC LOCATION: **DIRECTION:** WB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 AM		0				0			0	
06:15 AM		0				0			0	
06:30 AM		0				0			0	
06:45 AM		0				0			0	
07:00 AM		0				0			0	
07:15 AM		0				0			0	
07:30 AM		0				0			0	
07:45 AM		0				0			0	
08:00 AM		0				0			0	
08:15 AM		0				0			0	
08:30 AM		0				0			0	
08:45 AM		0				0			0	
09:00 AM		0				0			0	
09:15 AM		0				0			0	
09:30 AM		0				0			0	
09:45 AM		0				0			0	
10:00 AM		0				0			0	
10:15 AM		0				0			0	
10:30 AM		0				0			0	
10:45 AM		0				0			0	
11:00 AM		0				0			0	
11:15 AM		0				0			0	
11:30 AM		0				0			0	
11:45 AM		0				0			0	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Inskeep Dr south of Beavercreek Rd **QC JOB #:** 16554907

SPECIFIC LOCATION: **DIRECTION:** WB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 PM		**0**				**0**			**0**	
12:15 PM		0				0			0	
12:30 PM		0				0			0	
12:45 PM		0				0			0	
01:00 PM		0				0			0	
01:15 PM		0				0			0	
01:30 PM		0				0			0	
01:45 PM		0				0			0	
02:00 PM		0				0			0	
02:15 PM		0				0			0	
02:30 PM		0				0			0	
02:45 PM		0				0			0	
03:00 PM		0				0			0	
03:15 PM		0				0			0	
03:30 PM		0				0			0	
03:45 PM		0				0			0	
04:00 PM		0				0			0	
04:15 PM		0				0			0	
04:30 PM		0				0			0	
04:45 PM		0				0			0	
05:00 PM		0				0			0	
05:15 PM		0				0			0	
05:30 PM		0				0			0	
05:45 PM		0				0			0	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Inskeep Dr south of Beavercreek Rd **QC JOB #:** 16554907

SPECIFIC LOCATION: **DIRECTION:** WB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 PM		0				0			0	
06:15 PM		0				0			0	
06:30 PM		0				0			0	
06:45 PM		0				0			0	
07:00 PM		0				0			0	
07:15 PM		0				0			0	
07:30 PM		0				0			0	
07:45 PM		0				0			0	
08:00 PM		0				0			0	
08:15 PM		0				0			0	
08:30 PM		0				0			0	
08:45 PM		0				0			0	
09:00 PM		0				0			0	
09:15 PM		0				0			0	
09:30 PM		0				0			0	
09:45 PM		0				0			0	
10:00 PM		0				0			0	
10:15 PM		0				0			0	
10:30 PM		0				0			0	
10:45 PM		0				0			0	
11:00 PM		0				0			0	
11:15 PM		0				0			0	
11:30 PM		0				0			0	
11:45 PM		0				0			0	
Day Total		0				0			0	
% Weekday Average		0%								
% Week Average		0%				0%				
AM Peak 15-min Vol		12:00 AM 0				12:00 AM 0			12:00 AM 0	
PM Peak 15-min Vol		12:00 PM 0				12:00 PM 0			12:00 PM 0	

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Clairmont Dr west of Beavercreek Rd **QC JOB #:** 16554908

SPECIFIC LOCATION: **DIRECTION:** EB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 AM		0				0			0	
12:15 AM		0				0			0	
12:30 AM		0				0			0	
12:45 AM		0				0			0	
01:00 AM		1				1			1	
01:15 AM		0				0			0	
01:30 AM		0				0			0	
01:45 AM		0				0			0	
02:00 AM		0				0			0	
02:15 AM		0				0			0	
02:30 AM		0				0			0	
02:45 AM		0				0			0	
03:00 AM		0				0			0	
03:15 AM		1				1			1	
03:30 AM		0				0			0	
03:45 AM		0				0			0	
04:00 AM		0				0			0	
04:15 AM		0				0			0	
04:30 AM		0				0			0	
04:45 AM		1				1			1	
05:00 AM		0				0			0	
05:15 AM		1				1			1	
05:30 AM		0				0			0	
05:45 AM		0				0			0	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Clairmont Dr west of Beavercreek Rd **QC JOB #:** 16554908

SPECIFIC LOCATION: **DIRECTION:** EB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 AM		4				4			4	
06:15 AM		1				1			1	
06:30 AM		1				1			1	
06:45 AM		3				3			3	
07:00 AM		5				5			5	
07:15 AM		5				5			5	
07:30 AM		5				5			5	
07:45 AM		5				5			5	
08:00 AM		9				9			9	
08:15 AM		7				7			7	
08:30 AM		3				3			3	
08:45 AM		9				9			9	
09:00 AM		13				13			13	
09:15 AM		9				9			9	
09:30 AM		9				9			9	
09:45 AM		9				9			9	
10:00 AM		7				7			7	
10:15 AM		12				12			12	
10:30 AM		3				3			3	
10:45 AM		6				6			6	
11:00 AM		8				8			8	
11:15 AM		17				17			17	
11:30 AM		20				20			20	
11:45 AM		**42**				**42**			**42**	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Clairmont Dr west of Beavercreek Rd **QC JOB #:** 16554908

SPECIFIC LOCATION: **DIRECTION:** EB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 PM		27				27			27	
12:15 PM		28				28			28	
12:30 PM		12				12			12	
12:45 PM		16				16			16	
01:00 PM		18				18			18	
01:15 PM		11				11			11	
01:30 PM		8				8			8	
01:45 PM		7				7			7	
02:00 PM		10				10			10	
02:15 PM		16				16			16	
02:30 PM		17				17			17	
02:45 PM		26				26			26	
03:00 PM		31				31			31	
03:15 PM		26				26			26	
03:30 PM		28				28			28	
03:45 PM		31				31			31	
04:00 PM		36				36			36	
04:15 PM		20				20			20	
04:30 PM		35				35			35	
04:45 PM		28				28			28	
05:00 PM		47				47			47	
05:15 PM		36				36			36	
05:30 PM		39				39			39	
05:45 PM		30				30			30	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Clairmont Dr west of Beavercreek Rd **QC JOB #:** 16554908

SPECIFIC LOCATION: **DIRECTION:** EB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 PM		17				17			17	
06:15 PM		35				35			35	
06:30 PM		51				51			51	
06:45 PM		**53**				**53**			**53**	
07:00 PM		27				27			27	
07:15 PM		8				8			8	
07:30 PM		7				7			7	
07:45 PM		20				20			20	
08:00 PM		9				9			9	
08:15 PM		13				13			13	
08:30 PM		38				38			38	
08:45 PM		33				33			33	
09:00 PM		45				45			45	
09:15 PM		11				11			11	
09:30 PM		6				6			6	
09:45 PM		11				11			11	
10:00 PM		4				4			4	
10:15 PM		2				2			2	
10:30 PM		1				1			1	
10:45 PM		0				0			0	
11:00 PM		3				3			3	
11:15 PM		1				1			1	
11:30 PM		0				0			0	
11:45 PM		0				0			0	
Day Total		1194				1194			1194	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak 15-min Vol		11:45 AM 42				11:45 AM 42			11:45 AM 42	
PM Peak 15-min Vol		6:45 PM 53				6:45 PM 53			6:45 PM 53	

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Clairmont Dr west of Beavercreek Rd **QC JOB #:** 16554908

SPECIFIC LOCATION: **DIRECTION:** WB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 AM		0				0			0	
12:15 AM		1				1			1	
12:30 AM		0				0			0	
12:45 AM		1				1			1	
01:00 AM		0				0			0	
01:15 AM		0				0			0	
01:30 AM		0				0			0	
01:45 AM		0				0			0	
02:00 AM		0				0			0	
02:15 AM		0				0			0	
02:30 AM		0				0			0	
02:45 AM		0				0			0	
03:00 AM		2				2			2	
03:15 AM		1				1			1	
03:30 AM		2				2			2	
03:45 AM		3				3			3	
04:00 AM		2				2			2	
04:15 AM		0				0			0	
04:30 AM		1				1			1	
04:45 AM		2				2			2	
05:00 AM		3				3			3	
05:15 AM		2				2			2	
05:30 AM		2				2			2	
05:45 AM		4				4			4	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Clairmont Dr west of Beavercreek Rd **QC JOB #:** 16554908

SPECIFIC LOCATION: **DIRECTION:** WB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 AM		5				5			5	
06:15 AM		6				6			6	
06:30 AM		10				10			10	
06:45 AM		17				17			17	
07:00 AM		14				14			14	
07:15 AM		20				20			20	
07:30 AM		27				27			27	
07:45 AM		**63**				**63**			**63**	
08:00 AM		32				32			32	
08:15 AM		23				23			23	
08:30 AM		23				23			23	
08:45 AM		54				54			54	
09:00 AM		35				35			35	
09:15 AM		30				30			30	
09:30 AM		40				40			40	
09:45 AM		48				48			48	
10:00 AM		12				12			12	
10:15 AM		11				11			11	
10:30 AM		19				19			19	
10:45 AM		14				14			14	
11:00 AM		15				15			15	
11:15 AM		15				15			15	
11:30 AM		20				20			20	
11:45 AM		28				28			28	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Clairmont Dr west of Beavercreek Rd **QC JOB #:** 16554908

SPECIFIC LOCATION: **DIRECTION:** WB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 PM		31				31			31	
12:15 PM		35				35			35	
12:30 PM		30				30			30	
12:45 PM		**62**				**62**			**62**	
01:00 PM		23				23			23	
01:15 PM		10				10			10	
01:30 PM		15				15			15	
01:45 PM		23				23			23	
02:00 PM		18				18			18	
02:15 PM		25				25			25	
02:30 PM		35				35			35	
02:45 PM		49				49			49	
03:00 PM		25				25			25	
03:15 PM		50				50			50	
03:30 PM		49				49			49	
03:45 PM		38				38			38	
04:00 PM		23				23			23	
04:15 PM		24				24			24	
04:30 PM		20				20			20	
04:45 PM		26				26			26	
05:00 PM		27				27			27	
05:15 PM		24				24			24	
05:30 PM		48				48			48	
05:45 PM		52				52			52	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Clairmont Dr west of Beavercreek Rd **QC JOB #:** 16554908

SPECIFIC LOCATION: **DIRECTION:** WB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 PM		37				37			37	
06:15 PM		27				27			27	
06:30 PM		15				15			15	
06:45 PM		6				6			6	
07:00 PM		8				8			8	
07:15 PM		6				6			6	
07:30 PM		5				5			5	
07:45 PM		6				6			6	
08:00 PM		3				3			3	
08:15 PM		1				1			1	
08:30 PM		8				8			8	
08:45 PM		4				4			4	
09:00 PM		0				0			0	
09:15 PM		0				0			0	
09:30 PM		0				0			0	
09:45 PM		2				2			2	
10:00 PM		0				0			0	
10:15 PM		1				1			1	
10:30 PM		2				2			2	
10:45 PM		1				1			1	
11:00 PM		1				1			1	
11:15 PM		0				0			0	
11:30 PM		0				0			0	
11:45 PM		0				0			0	
Day Total		1502				1502			1502	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak 15-min Vol		7:45 AM 63				7:45 AM 63			7:45 AM 63	
PM Peak 15-min Vol		12:45 PM 62				12:45 PM 62			12:45 PM 62	

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Keyser Wy south of Douglas Loop
QC JOB #: 16554909
SPECIFIC LOCATION:
DIRECTION: NB
CITY/STATE: Oregon City, OR
DATE: Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 AM		1				1			1	
12:15 AM		0				0			0	
12:30 AM		0				0			0	
12:45 AM		0				0			0	
01:00 AM		0				0			0	
01:15 AM		0				0			0	
01:30 AM		0				0			0	
01:45 AM		0				0			0	
02:00 AM		1				1			1	
02:15 AM		0				0			0	
02:30 AM		0				0			0	
02:45 AM		0				0			0	
03:00 AM		1				1			1	
03:15 AM		0				0			0	
03:30 AM		0				0			0	
03:45 AM		0				0			0	
04:00 AM		0				0			0	
04:15 AM		0				0			0	
04:30 AM		0				0			0	
04:45 AM		0				0			0	
05:00 AM		1				1			1	
05:15 AM		0				0			0	
05:30 AM		3				3			3	
05:45 AM		0				0			0	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Keyser Wy south of Douglas Loop **QC JOB #:** 16554909

SPECIFIC LOCATION: **DIRECTION:** NB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 AM		1				1			1	
06:15 AM		7				7			7	
06:30 AM		5				5			5	
06:45 AM		7				7			7	
07:00 AM		8				8			8	
07:15 AM		10				10			10	
07:30 AM		10				10			10	
07:45 AM		15				15			15	
08:00 AM		14				14			14	
08:15 AM		19				19			19	
08:30 AM		18				18			18	
08:45 AM		23				23			23	
09:00 AM		13				13			13	
09:15 AM		11				11			11	
09:30 AM		15				15			15	
09:45 AM		**35**				**35**			**35**	
10:00 AM		10				10			10	
10:15 AM		5				5			5	
10:30 AM		6				6			6	
10:45 AM		3				3			3	
11:00 AM		12				12			12	
11:15 AM		8				8			8	
11:30 AM		6				6			6	
11:45 AM		6				6			6	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Keyser Wy south of Douglas Loop | **QC JOB #:** 16554909

SPECIFIC LOCATION: | **DIRECTION:** NB

CITY/STATE: Oregon City, OR | **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 PM		12				12			12	
12:15 PM		15				15			15	
12:30 PM		16				16			16	
12:45 PM		40				40			40	
01:00 PM		6				6			6	
01:15 PM		7				7			7	
01:30 PM		5				5			5	
01:45 PM		8				8			8	
02:00 PM		15				15			15	
02:15 PM		13				13			13	
02:30 PM		18				18			18	
02:45 PM		13				13			13	
03:00 PM		13				13			13	
03:15 PM		**46**				**46**			**46**	
03:30 PM		29				29			29	
03:45 PM		16				16			16	
04:00 PM		19				19			19	
04:15 PM		8				8			8	
04:30 PM		6				6			6	
04:45 PM		9				9			9	
05:00 PM		7				7			7	
05:15 PM		7				7			7	
05:30 PM		7				7			7	
05:45 PM		16				16			16	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Keyser Wy south of Douglas Loop
QC JOB #: 16554909
SPECIFIC LOCATION:
DIRECTION: NB
CITY/STATE: Oregon City, OR
DATE: Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 PM		5				5			5	
06:15 PM		6				6			6	
06:30 PM		5				5			5	
06:45 PM		6				6			6	
07:00 PM		6				6			6	
07:15 PM		7				7			7	
07:30 PM		3				3			3	
07:45 PM		5				5			5	
08:00 PM		8				8			8	
08:15 PM		6				6			6	
08:30 PM		1				1			1	
08:45 PM		3				3			3	
09:00 PM		1				1			1	
09:15 PM		1				1			1	
09:30 PM		3				3			3	
09:45 PM		4				4			4	
10:00 PM		1				1			1	
10:15 PM		0				0			0	
10:30 PM		0				0			0	
10:45 PM		0				0			0	
11:00 PM		0				0			0	
11:15 PM		0				0			0	
11:30 PM		1				1			1	
11:45 PM		0				0			0	
Day Total		697				697			697	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak 15-min Vol		9:45 AM 35				9:45 AM 35			9:45 AM 35	
PM Peak 15-min Vol		3:15 PM 46				3:15 PM 46			3:15 PM 46	

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Keyser Wy south of Douglas Loop | **QC JOB #:** 16554909

SPECIFIC LOCATION: | **DIRECTION:** SB

CITY/STATE: Oregon City, OR | **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 AM		0				0			0	
12:15 AM		1				1			1	
12:30 AM		0				0			0	
12:45 AM		0				0			0	
01:00 AM		0				0			0	
01:15 AM		0				0			0	
01:30 AM		0				0			0	
01:45 AM		0				0			0	
02:00 AM		1				1			1	
02:15 AM		0				0			0	
02:30 AM		0				0			0	
02:45 AM		0				0			0	
03:00 AM		0				0			0	
03:15 AM		0				0			0	
03:30 AM		0				0			0	
03:45 AM		0				0			0	
04:00 AM		0				0			0	
04:15 AM		0				0			0	
04:30 AM		0				0			0	
04:45 AM		1				1			1	
05:00 AM		0				0			0	
05:15 AM		0				0			0	
05:30 AM		1				1			1	
05:45 AM		0				0			0	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Keyser Wy south of Douglas Loop
QC JOB #: 16554909
SPECIFIC LOCATION:
DIRECTION: SB
CITY/STATE: Oregon City, OR
DATE: Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 AM		1				1			1	
06:15 AM		1				1			1	
06:30 AM		1				1			1	
06:45 AM		2				2			2	
07:00 AM		3				3			3	
07:15 AM		0				0			0	
07:30 AM		5				5			5	
07:45 AM		8				8			8	
08:00 AM		4				4			4	
08:15 AM		6				6			6	
08:30 AM		3				3			3	
08:45 AM		4				4			4	
09:00 AM		2				2			2	
09:15 AM		8				8			8	
09:30 AM		2				2			2	
09:45 AM		4				4			4	
10:00 AM		8				8			8	
10:15 AM		5				5			5	
10:30 AM		12				12			12	
10:45 AM		3				3			3	
11:00 AM		5				5			5	
11:15 AM		7				7			7	
11:30 AM		12				12			12	
11:45 AM		**20**				**20**			**20**	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Keyser Wy south of Douglas Loop **QC JOB #:** 16554909

SPECIFIC LOCATION: **DIRECTION:** SB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 PM		12				12			12	
12:15 PM		9				9			9	
12:30 PM		7				7			7	
12:45 PM		8				8			8	
01:00 PM		10				10			10	
01:15 PM		10				10			10	
01:30 PM		7				7			7	
01:45 PM		6				6			6	
02:00 PM		7				7			7	
02:15 PM		10				10			10	
02:30 PM		14				14			14	
02:45 PM		18				18			18	
03:00 PM		19				19			19	
03:15 PM		14				14			14	
03:30 PM		23				23			23	
03:45 PM		11				11			11	
04:00 PM		**37**				**37**			**37**	
04:15 PM		19				19			19	
04:30 PM		17				17			17	
04:45 PM		32				32			32	
05:00 PM		29				29			29	
05:15 PM		21				21			21	
05:30 PM		28				28			28	
05:45 PM		22				22			22	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: Keyser Wy south of Douglas Loop | **QC JOB #:** 16554909

SPECIFIC LOCATION: | **DIRECTION:** SB

CITY/STATE: Oregon City, OR | **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 PM		15				15			15	
06:15 PM		22				22			22	
06:30 PM		17				17			17	
06:45 PM		13				13			13	
07:00 PM		11				11			11	
07:15 PM		2				2			2	
07:30 PM		8				8			8	
07:45 PM		12				12			12	
08:00 PM		3				3			3	
08:15 PM		5				5			5	
08:30 PM		7				7			7	
08:45 PM		16				16			16	
09:00 PM		7				7			7	
09:15 PM		2				2			2	
09:30 PM		0				0			0	
09:45 PM		1				1			1	
10:00 PM		2				2			2	
10:15 PM		1				1			1	
10:30 PM		1				1			1	
10:45 PM		1				1			1	
11:00 PM		0				0			0	
11:15 PM		0				0			0	
11:30 PM		0				0			0	
11:45 PM		0				0			0	
Day Total		666				666			666	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak 15-min Vol		11:45 AM 20				11:45 AM 20			11:45 AM 20	
PM Peak 15-min Vol		4:00 PM 37				4:00 PM 37			4:00 PM 37	

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: S Douglas Loop east of OR-213 **QC JOB #:** 16554910

SPECIFIC LOCATION: **DIRECTION:** EB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 AM		0				0			0	
12:15 AM		0				0			0	
12:30 AM		0				0			0	
12:45 AM		1				1			1	
01:00 AM		2				2			2	
01:15 AM		0				0			0	
01:30 AM		0				0			0	
01:45 AM		0				0			0	
02:00 AM		1				1			1	
02:15 AM		0				0			0	
02:30 AM		0				0			0	
02:45 AM		0				0			0	
03:00 AM		0				0			0	
03:15 AM		1				1			1	
03:30 AM		0				0			0	
03:45 AM		0				0			0	
04:00 AM		0				0			0	
04:15 AM		0				0			0	
04:30 AM		2				2			2	
04:45 AM		0				0			0	
05:00 AM		2				2			2	
05:15 AM		2				2			2	
05:30 AM		1				1			1	
05:45 AM		1				1			1	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: S Douglas Loop east of OR-213 **QC JOB #:** 16554910

SPECIFIC LOCATION: **DIRECTION:** EB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 AM		10				10			10	
06:15 AM		8				8			8	
06:30 AM		7				7			7	
06:45 AM		11				11			11	
07:00 AM		17				17			17	
07:15 AM		24				24			24	
07:30 AM		49				49			49	
07:45 AM		49				49			49	
08:00 AM		45				45			45	
08:15 AM		33				33			33	
08:30 AM		52				52			52	
08:45 AM		90				90			90	
09:00 AM		51				51			51	
09:15 AM		45				45			45	
09:30 AM		83				83			83	
09:45 AM		**110**				**110**			**110**	
10:00 AM		38				38			38	
10:15 AM		23				23			23	
10:30 AM		25				25			25	
10:45 AM		18				18			18	
11:00 AM		18				18			18	
11:15 AM		25				25			25	
11:30 AM		38				38			38	
11:45 AM		29				29			29	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: S Douglas Loop east of OR-213 **QC JOB #:** 16554910

SPECIFIC LOCATION: **DIRECTION:** EB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
		9 Apr 24								
12:00 PM		34				34			34	
12:15 PM		59				59			59	
12:30 PM		58				58			58	
12:45 PM		**108**				**108**			**108**	
01:00 PM		40				40			40	
01:15 PM		23				23			23	
01:30 PM		20				20			20	
01:45 PM		20				20			20	
02:00 PM		23				23			23	
02:15 PM		33				33			33	
02:30 PM		34				34			34	
02:45 PM		46				46			46	
03:00 PM		45				45			45	
03:15 PM		67				67			67	
03:30 PM		40				40			40	
03:45 PM		39				39			39	
04:00 PM		24				24			24	
04:15 PM		30				30			30	
04:30 PM		29				29			29	
04:45 PM		29				29			29	
05:00 PM		34				34			34	
05:15 PM		34				34			34	
05:30 PM		38				38			38	
05:45 PM		39				39			39	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: S Douglas Loop east of OR-213 **QC JOB #:** 16554910

SPECIFIC LOCATION: **DIRECTION:** EB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 PM		27				27			27	
06:15 PM		35				35			35	
06:30 PM		12				12			12	
06:45 PM		16				16			16	
07:00 PM		6				6			6	
07:15 PM		5				5			5	
07:30 PM		5				5			5	
07:45 PM		7				7			7	
08:00 PM		6				6			6	
08:15 PM		6				6			6	
08:30 PM		7				7			7	
08:45 PM		5				5			5	
09:00 PM		3				3			3	
09:15 PM		1				1			1	
09:30 PM		2				2			2	
09:45 PM		2				2			2	
10:00 PM		1				1			1	
10:15 PM		0				0			0	
10:30 PM		1				1			1	
10:45 PM		3				3			3	
11:00 PM		1				1			1	
11:15 PM		0				0			0	
11:30 PM		1				1			1	
11:45 PM		0				0			0	
Day Total		2009				2009			2009	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak 15-min Vol		9:45 AM 110				9:45 AM 110			9:45 AM 110	
PM Peak 15-min Vol		12:45 PM 108				12:45 PM 108			12:45 PM 108	

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: S Douglas Loop east of OR-213 **QC JOB #:** 16554910

SPECIFIC LOCATION: **DIRECTION:** WB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 AM		1				1			1	
12:15 AM		1				1			1	
12:30 AM		0				0			0	
12:45 AM		1				1			1	
01:00 AM		0				0			0	
01:15 AM		2				2			2	
01:30 AM		0				0			0	
01:45 AM		0				0			0	
02:00 AM		1				1			1	
02:15 AM		0				0			0	
02:30 AM		0				0			0	
02:45 AM		0				0			0	
03:00 AM		0				0			0	
03:15 AM		0				0			0	
03:30 AM		0				0			0	
03:45 AM		0				0			0	
04:00 AM		0				0			0	
04:15 AM		0				0			0	
04:30 AM		0				0			0	
04:45 AM		0				0			0	
05:00 AM		1				1			1	
05:15 AM		2				2			2	
05:30 AM		0				0			0	
05:45 AM		4				4			4	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: S Douglas Loop east of OR-213 **QC JOB #:** 16554910

SPECIFIC LOCATION: **DIRECTION:** WB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 AM		3				3			3	
06:15 AM		2				2			2	
06:30 AM		5				5			5	
06:45 AM		6				6			6	
07:00 AM		8				8			8	
07:15 AM		7				7			7	
07:30 AM		13				13			13	
07:45 AM		26				26			26	
08:00 AM		14				14			14	
08:15 AM		19				19			19	
08:30 AM		16				16			16	
08:45 AM		13				13			13	
09:00 AM		23				23			23	
09:15 AM		16				16			16	
09:30 AM		15				15			15	
09:45 AM		23				23			23	
10:00 AM		26				26			26	
10:15 AM		10				10			10	
10:30 AM		15				15			15	
10:45 AM		12				12			12	
11:00 AM		21				21			21	
11:15 AM		63				63			63	
11:30 AM		83				83			83	
11:45 AM		**98**				**98**			**98**	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: S Douglas Loop east of OR-213 **QC JOB #:** 16554910

SPECIFIC LOCATION: **DIRECTION:** WB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
		9 Apr 24								
12:00 PM		69				69			69	
12:15 PM		58				58			58	
12:30 PM		42				42			42	
12:45 PM		50				50			50	
01:00 PM		32				32			32	
01:15 PM		28				28			28	
01:30 PM		30				30			30	
01:45 PM		25				25			25	
02:00 PM		23				23			23	
02:15 PM		64				64			64	
02:30 PM		43				43			43	
02:45 PM		**104**				**104**			**104**	
03:00 PM		78				78			78	
03:15 PM		73				73			73	
03:30 PM		62				62			62	
03:45 PM		54				54			54	
04:00 PM		55				55			55	
04:15 PM		70				70			70	
04:30 PM		72				72			72	
04:45 PM		83				83			83	
05:00 PM		80				80			80	
05:15 PM		40				40			40	
05:30 PM		35				35			35	
05:45 PM		45				45			45	
Day Total										
% Weekday Average										
% Week Average										
AM Peak 15-min Vol										
PM Peak 15-min Vol										

Comments:

Report generated on 4/12/2024 10:48 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

TRUE DATA TO IMPROVE MOBILITY

Type of report: Tube Count - Volume Data

LOCATION: S Douglas Loop east of OR-213 **QC JOB #:** 16554910

SPECIFIC LOCATION: **DIRECTION:** WB

CITY/STATE: Oregon City, OR **DATE:** Apr 9 2024 - Apr 9 2024

Start Time	Mon	Tue 9 Apr 24	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 PM		42				42			42	
06:15 PM		40				40			40	
06:30 PM		48				48			48	
06:45 PM		51				51			51	
07:00 PM		34				34			34	
07:15 PM		18				18			18	
07:30 PM		24				24			24	
07:45 PM		11				11			11	
08:00 PM		13				13			13	
08:15 PM		19				19			19	
08:30 PM		24				24			24	
08:45 PM		31				31			31	
09:00 PM		31				31			31	
09:15 PM		16				16			16	
09:30 PM		7				7			7	
09:45 PM		3				3			3	
10:00 PM		6				6			6	
10:15 PM		1				1			1	
10:30 PM		2				2			2	
10:45 PM		5				5			5	
11:00 PM		2				2			2	
11:15 PM		1				1			1	
11:30 PM		2				2			2	
11:45 PM		1				1			1	
Day Total		2297				2297			2297	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak 15-min Vol		11:45 AM 98				11:45 AM 98			11:45 AM 98	
PM Peak 15-min Vol		2:45 PM 104				2:45 PM 104			2:45 PM 104	

Comments:

Report generated on 4/12/2024 10:48 AM

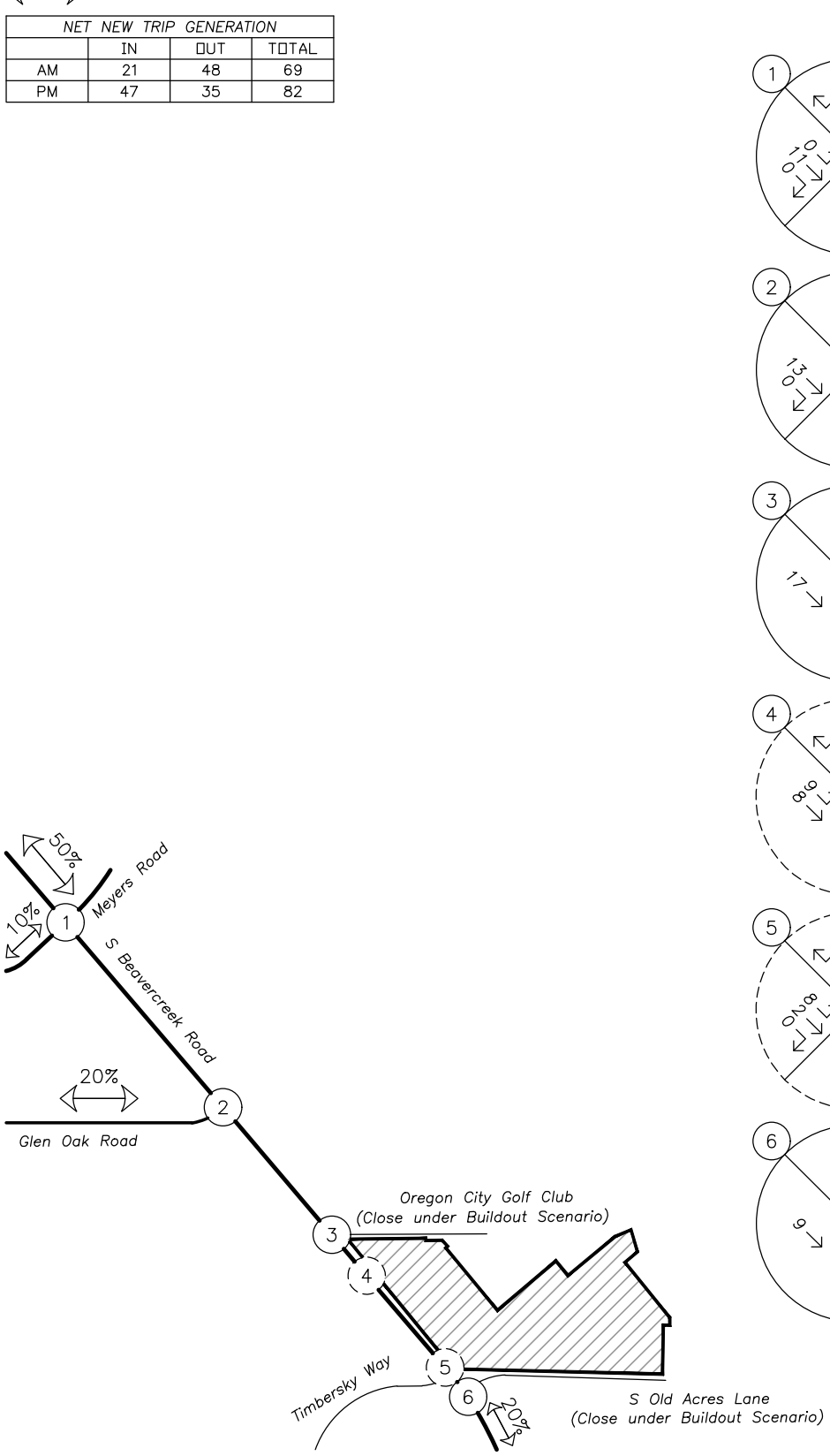
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

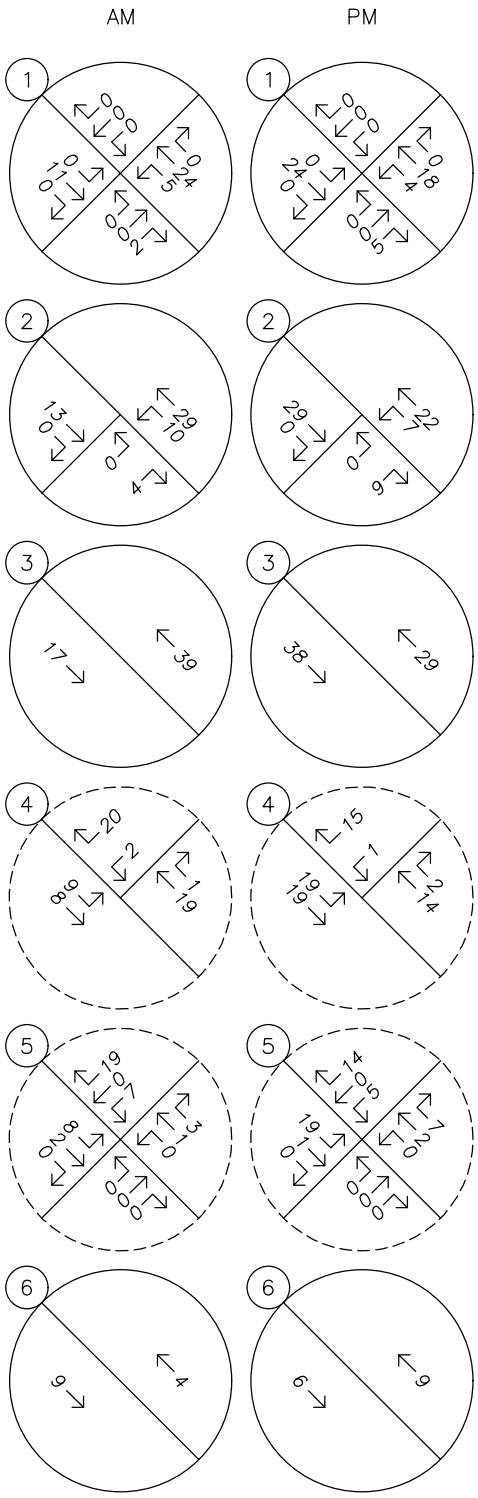
TRUE DATA TO IMPROVE MOBILITY

In-Process Development Trips

XX% PERCENT OF PROJECT TRIPS

NET NEW TRIP GENERATION			
	IN	OUT	TOTAL
AM	21	48	69
PM	47	35	82





no scale

TRAFFIC VOLUME

Proposed Development Plan - Site Trips
AM & PM Peak Hours

Figure 3

Thimble Creek South

9/18/2023

Appendix C – Safety Analysis

Crash History Data

Traffic Signal Warrant Analysis

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

CITY OF OREGON CITY, CLACKAMAS COUNTY

N DOUGLAS LP and CASCADE HY SOUTH, City of Oregon City, Clackamas County, 01/01/2018 to 12/31/2022

1 - 1 of 1 Crash records shown.

SER#	S P	D R	M J	S	W	DATE	CLASS	CITY STREET		INT-TYPE				SPCL USE										
INVEST	E	A	U	I	C	O	DAY	DIST	FIRST STREET	RD CHAR	(MEDIAN)	INT-REL	OFFRD	WTHR	CRASH		TRLR QTY	MOVE			A	S			
RD DPT	E	L	G	N	H	R	TIME	FROM	SECOND STREET	DIRECT	LEGS	TRAF-	RNDBT	SURF	COLL		OWNER	FROM	PRTC	INJ	G	E	LICNS	PED		
UNLOC?	D	C	S	V	L	K	LAT	LONG	LRS	LOCTN	(#LANES)	CONTL	DRVWY	LIGHT	SVRTY	V#	TYPE	TO	P# TYPE	SVRTY	E	X	RES	LOC	ERROR	ACT EVENT	CAUSE
00815	N	N	N	N			03/02/2020	19	N DOUGLAS LP	STRGHT		N	N	CLR	S-STRGHT	01	NONE 9	STRGHT									13
NO RPT							MO	100	CASCADE HY SOUTH	E	(NONE)	NONE	N	DRY	SS-O		N/A	SE-NW								000	00
N							10A			08			N	DAY	PDO		PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
N							45 19 24.87	-122 34 42.35			(03)												UNK				
																02	NONE 9	STRGHT									
																	N/A	SE-NW								000	00
																	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
																							UNK				

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is

CITY OF OREGON CITY, CLACKAMAS COUNTY

N DOUGLAS LP and MOLALLA AVE, City of Oregon City, Clackamas County, 01/01/2018 to 12/31/2022

	S		D	M																															
SER#	P		R	J	S	W	DATE	CLASS	CITY STREET		INT-TYPE							SPCL USE					A	S											
INVEST	E	A	U	I	C	O	DAY	DIST	FIRST STREET	RD CHAR	(MEDIAN)	INT-REL	OFFRD	WTHR	CRASH			TRLR QTY	MOVE				G	E	LICNS	PED									
RD DPT	E	L	G	N	H	R	TIME	FROM	SECOND STREET	DIRECT	LEGS	TRAF-	RNDBT	SURF	COLL			OWNER	FROM		PRTC	INJ		X	RES	LOC	ERROR		ACT	EVENT		CAUSE			
UNLOC?	D	C	S	V	L	K	LAT	LONG	LRS	LOCTN	(#LANES)	CONTL	DRVWY	LIGHT	SVRTY	V#	TYPE	TO	P#	TYPE	SVRTY	E												

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CITY OF OREGON CITY, CLACKAMAS COUNTY

CASCADE HY SOUTH and MOLALLA AVE, City of Oregon City, Clackamas County, 01/01/2018 to 12/31/2022

1 - 24 of 24 Crash records shown. (ONLY 23 APPLICABLE CRASHES SHOWN)

SER# / INVEST / RD DPT / UNLOC?	S P / E / D / C	A / L	U / G	I / N	C / H	O / R	W / K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / TYPE / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S X	LICNS RES	PED LOC	ERROR	ACT EVENT	CAUSE
02020	N	N	N	N				06/17/2019	14	CASCADE HY SOUTH	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT										29
NONE								MO		MOLALLA AVE	N		TRF SIGNAL	N	DRY	REAR		N/A	N -S								000	00
N								8A			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N								45 19 25.02	-122 34 43.77	016000100S00															UNK				
																	02	NONE 9	STOP										
																		N/A	N -S								011	00
																		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																									UNK				
02021	N	N	N	N				06/17/2019	14	CASCADE HY SOUTH	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT										29
NONE								MO		MOLALLA AVE	N		TRF SIGNAL	N	DRY	REAR		N/A	N -S								000	00
N								5P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N								45 19 25	-122 34 43.78	016000100S00															UNK				
																	02	NONE 9	STOP										
																		N/A	N -S								011	00
																		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																									UNK				
02557	N	N	N	N				07/28/2019	14	CASCADE HY SOUTH	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT										29
NO RPT								SU		MOLALLA AVE	N		TRF SIGNAL	N	DRY	REAR		N/A	N -S								000	00
N								1P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N								45 19 25.03	-122 34 43.84	016000100S00															UNK				
																	02	NONE 9	STOP										
																		N/A	N -S								011	00
																		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																									UNK				
02831	N	N	N	N				08/17/2019	14	CASCADE HY SOUTH	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT										29
NO RPT								SA		MOLALLA AVE	N		TRF SIGNAL	N	DRY	REAR		N/A	N -S								000	00
N								4P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00

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CITY OF OREGON CITY, CLACKAMAS COUNTY

CASCADE HY SOUTH and MOLALLA AVE, City of Oregon City, Clackamas County, 01/01/2018 to 12/31/2022

1 - 24 of 24 Crash records shown. (ONLY 23 APPLICABLE CRASHES SHOWN)

N 45 19 25.02 -122 34 43.81 016000100S00 UNK

02 NONE 9 STOP

N/A N -S 011 00

PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00

UNK

01333 N N N N 05/15/2020 14 CASCADE HY SOUTH INTER CROSS N N RAIN S-1STOP 01 NONE 9 STRGHT 29

NONE FR MOLALLA AVE N TRF SIGNAL N WET REAR N/A N -S 000 00

N 12P 06 0 N DAY PDO SEMI TOW 01 DRVR NONE 00 Unk UNK 000 000 00

N 45 19 25.05 -122 34 43.79 016000100S00 UNK

02 NONE 9 STOP

N/A N -S 011 00

PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00

UNK

04268 N N N N N N 11/28/2019 14 CASCADE HY SOUTH INTER CROSS N Y CLR FIX OBJ 01 NONE 0 TURN-R 054 08

CITY TH MOLALLA AVE SE TRF SIGNAL N DRY FIX PRVTE SE-NE 000 054 00

N 2P 06 0 N DAY INJ PSNGR CAR 01 DRVR INJA 91 M OR-Y 002 026 08

N 45 19 25.01 -122 34 43.78 016000100S00 OR>25

03657 Y Y N N N N 10/11/2018 14 CASCADE HY SOUTH INTER CROSS N N CLR S-1STOP 01 NONE 0 STRGHT 01,07,33

CITY TH MOLALLA AVE S TRF SIGNAL N DRY REAR PRVTE S -N 000 00

N 5P 06 0 N DUSK INJ PSNGR CAR 01 DRVR NONE 20 M OR-Y 047,043,051 000 01,07,33

N 45 19 25 -122 34 43.79 016000100S00 OR<25

02 NONE 0 STOP

PRVTE S -N 011 00

PSNGR CAR 01 DRVR INJC 26 F OR-Y 000 000 00

OR<25

03519 N N N N 10/02/2018 14 CASCADE HY SOUTH INTER CROSS N N CLR S-1STOP 01 NONE 9 STRGHT 29

NONE TU MOLALLA AVE S TRF SIGNAL N DRY REAR N/A S -N 000 00

N 1P 06 0 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00

N 45 19 24.99 -122 34 43.78 016000100S00 UNK

02 NONE 9 STOP

N/A S -N 011 00

PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00

UNK

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is

02833 N N N N N N 10/20/2020 14 CASCADE HY SOUTH INTER CROSS N N CLR S-1STOP 01 NONE 0 STRGHT 29

CITY TU MOLALLA AVE S TRF SIGNAL N DRY REAR UNKN S -N 000 00

N 9P 06 0 N DLIT INJ PSNGR CAR 01 DRVR NONE 00 Unk UNK 026 000 29

N 45 19 25.01 -122 34 43.78 016000100S00 UNK

02 NONE 0 STOP

PRVTE S -N 011 00

PSNGR CAR 01 DRVR INJC 24 F OTH-Y 000 000 00

OR<25

02 NONE 0 STOP

PRVTE S -N 011 00

PSNGR CAR 02 PSNG INJC 21 F 000 000 00

00170 N N N N N N 01/19/2021 14 CASCADE HY SOUTH INTER CROSS N N CLR S-1STOP 01 NONE 0 STRGHT 29,32

CITY TU MOLALLA AVE S TRF SIGNAL N DRY REAR PRVTE S -N 000 00

N 2P 06 0 N DAY INJ PSNGR CAR 01 DRVR NONE 38 M OTH-Y 026,052 000 29,32

N 45 19 25.01 -122 34 43.8 016000100S00 N-RES

02 NONE 0 STOP

PRVTE S -N 011 00

PSNGR CAR 01 DRVR INJC 21 F OR-Y 000 000 00

OR<25

02 NONE 0 STOP

PRVTE S -N 011 00

PSNGR CAR 02 PSNG INJC 26 M 000 000 00

03628 Y Y N N N N 11/11/2022 14 CASCADE HY SOUTH INTER CROSS N Y CLR FIX OBJ 01 NONE 0 STRGHT 040,044 01

STATE FR MOLALLA AVE W TRF SIGNAL N DRY FIX PRVTE NW-SE 000 040,044 00

N 10P 06 0 N DLIT INJ PSNGR CAR 01 DRVR INJB 26 F OR-Y 047 000 01

N 45 19 25.01 -122 34 43.78 016000100S00 OR<25

02 NONE 0 STOP

PUBLC S -N 012 00

PSNGR CAR 01 DRVR NONE 29 M OR-Y 000 000 00

OR<25

03 NONE 0 STOP

PRVTE S -N 011 00

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CITY OF OREGON CITY, CLACKAMAS COUNTY

CASCADE HY SOUTH and MOLALLA AVE, City of Oregon City, Clackamas County, 01/01/2018 to 12/31/2022

1 - 24 of 24 Crash records shown. (ONLY 23 APPLICABLE CRASHES SHOWN)

															PSNGR CAR			01 DRVR	INJC	29	F	OR-Y	000	000	00
																						OR<25			
00819	N N N N N N	03/06/2018		16	CASCADE HY SOUTH	INTER	CROSS	N	N	CLR	S-1STOP	01 NONE	0	STRGHT												29,33
CITY		TU		0	MOLALLA AVE	NW		TRF SIGNAL	N	DRY	REAR			PRVTE		NW-SE								000	00
N		3P				06	0		N	DAY	INJ			PSNGR CAR				01 DRVR	NONE	18	M	OR-Y	026,051	000	29,33
N		45 19 25.02	-122 34 43.81																			OR<25			
												02 NONE	0	STOP											
														PRVTE		NW-SE								011	00
														PSNGR CAR				01 DRVR	INJC	28	F	SUSP	000	000	00
																						OR<25			
00986	N N N N N N	03/26/2019		14	CASCADE HY SOUTH	INTER	CROSS	N	N	CLR	ANGL-OTH	01 NONE	0	STRGHT												27,04
CITY		TU			MOLALLA AVE	CN		TRF SIGNAL	N	DRY	ANGL			PRVTE		E -W								000	00
N		4P				01	0		N	DAY	INJ			PSNGR CAR				01 DRVR	NONE	32	F	OR-Y	020	000	27,04
N		45 19 25.02	-122 34 43.79		016000100S00																	OR<25			
												02 NONE	0	STRGHT											
														PRVTE		N -S								000	00
														PSNGR CAR				01 DRVR	INJC	25	M	OR-Y	000	000	00
																						OR<25			
04441	N N N N	12/10/2019		14	CASCADE HY SOUTH	INTER	CROSS	N	N	RAIN	O-OTHER	01 NONE	9	TURN-L												02
NONE		TU			MOLALLA AVE	CN		TRF SIGNAL	N	WET	TURN			N/A		E -S								000	00
N		4P				03	0		N	DUSK	PDO			PSNGR CAR				01 DRVR	NONE	00	Unk	UNK	000	000	00
N		45 19 25	-122 34 43.79		016000100S00																	UNK			
												02 NONE	9	TURN-R											
														N/A		W -S								000	00
														PSNGR CAR				01 DRVR	NONE	00	Unk	UNK	000	000	00
																						UNK			
02048	N N N N	08/03/2020		14	CASCADE HY SOUTH	INTER	CROSS	N	N	CLR	ANGL-OTH	01 NONE	9	STRGHT												02
CITY		MO			MOLALLA AVE	CN		TRF SIGNAL	N	DRY	ANGL			N/A		W -E								000	00
N		9A				03	0		N	DAY	PDO			PSNGR CAR				01 DRVR	NONE	00	Unk	UNK	000	000	00
N		45 19 25.01	-122 34 43.77		016000100S00																	UNK			
												02 NONE	9	STRGHT											
														N/A		N -S								000	00
														PSNGR CAR				01 DRVR	NONE	00	Unk	UNK	000	000	00

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CITY OF OREGON CITY, CLACKAMAS COUNTY

CASCADE HY SOUTH and MOLALLA AVE, City of Oregon City, Clackamas County, 01/01/2018 to 12/31/2022

1 - 24 of 24 Crash records shown. (ONLY 23 APPLICABLE CRASHES SHOWN)

																							UNK		
02357	N N N N	08/14/2021	14	CASCADE HY SOUTH	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE	9	STRGHT											02
NONE		SA		MOLALLA AVE	CN		TRF SIGNAL	N	DRY	TURN		N/A		N -S										000	00
N		4P			01	0		N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK	000	000	00
N		45 19 25.01	-122 34 43.78	016000100S00																UNK					
											02	NONE	9	TURN-L											
												N/A		S -NW										000	00
												PSNGR CAR			01	DRVR	NONE	00	Unk	UNK	000	000	00
																				UNK					
01668	N N N N	05/22/2019	14	CASCADE HY SOUTH	STRGHT		N	N	CLR	S-1STOP	01	NONE	9	STRGHT											29
NONE		WE		MOLALLA AVE	N	(NONE)	NONE	N	DRY	REAR		N/A		N -S										000	00
N		12P			03			N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK	000	000	00
N		45 19 31.28	-122 34 43.31	016000100S00		(04)														UNK					
											02	NONE	9	STOP											
												N/A		N -S										011	00
												PSNGR CAR			01	DRVR	NONE	00	Unk	UNK	000	000	00
																				UNK					
02952	N N N N N N	09/21/2022	14	CASCADE HY SOUTH	STRGHT		N	N	CLR	S-1STOP	01	NONE	0	STRGHT											29
CITY		WE		MOLALLA AVE	N	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE		N -S										000	00
N		3P			03			N	DAY	INJ		PSNGR CAR			01	DRVR	NONE	18	F	N-VAL	026	000	29
N		45 19 26.05	-122 34 43.85	016000100S00		(04)														OR<25					
											02	NONE	0	STOP											
												PRVTE		N -S										011	00
												PSNGR CAR			01	DRVR	INJC	48	F	OR-Y	000	000	00
																				OR<25					
02402	N N N N	07/11/2018	14	CASCADE HY SOUTH	STRGHT		N	N	CLR	S-1STOP	01	NONE	9	STRGHT											29
NONE		WE		MOLALLA AVE	S	(NONE)	NONE	N	DRY	REAR		N/A		S -N										000	00
N		11A			06			N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK	000	000	00
N		45 19 23.92	-122 34 43.57	016000100S00		(04)														UNK					
											02	NONE	9	STOP											
												N/A		S -N										011	00
												PSNGR CAR			01	DRVR	NONE	00	Unk	UNK	000	000	00
																				UNK					

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CITY OF OREGON CITY, CLACKAMAS COUNTY

CASCADE HY SOUTH and MOLALLA AVE, City of Oregon City, Clackamas County, 01/01/2018 to 12/31/2022

1 - 24 of 24 Crash records shown. (ONLY 23 APPLICABLE CRASHES SHOWN)

01097	N N N N	04/04/2019	14	CASCADE HY SOUTH	STRGHT		N	N	CLR	S-1STOP	01	NONE	0	STRGHT																29
NONE		TH		MOLALLA AVE	S	(NONE)	R-GRN-SIG	N	DRY	REAR		PRVTE		S -N														000		00
N		3P			06			N	DAY	INJ		PSNGR CAR			01	DRVR	NONE	16	M	OR-Y		026		000		29				
N		45 19 22.87	-122 34 43.37	016000100S00		(05)														OR<25										
											02	NONE	0	STOP																
												PRVTE		S -N														011		00
												PSNGR CAR			01	DRVR	INJC	43	F	OTH-Y		000		000		00				
																				N-RES										
01223	N N N N	04/15/2019	14	CASCADE HY SOUTH	STRGHT		Y	N	CLR	S-1STOP	01	NONE	0	STRGHT																29
NONE		MO		MOLALLA AVE	S	(NONE)	L-GRN-SIG	N	DRY	REAR		PRVTE		S -N														000		00
N		12P			05			N	DAY	INJ		PSNGR CAR			01	DRVR	NONE	62	F	OR-Y		026		000		29				
N		45 19 23.95	-122 34 43.58	016000100S00		(05)														OR<25										
											02	NONE	0	STOP																
												PRVTE		S -N														012		00
												PSNGR CAR			01	DRVR	INJC	61	F	OR-Y		000		000		00				
																				OR<25										
00106	N N N N N N	01/13/2022	14	CASCADE HY SOUTH	STRGHT		Y	N	RAIN	S-1STOP	01	NONE		STRGHT																07,29
CITY		TH		MOLALLA AVE	S	(NONE)	NONE	N	WET	REAR		PRVTE		S -N														000		00
N		2P			05			N	DAY	INJ		PSNGR CAR			01	DRVR	NONE	39	M	SUSP		043		000		07,29				
N		45 19 23.96	-122 34 43.57	016000100S00		(04)														OR>25										
											02	NONE		STOP																
												PRVTE		S -N														011		00
												PSNGR CAR			01	DRVR	INJC	59	M	OR-Y		000		000		00				
																				OR<25										
											02	NONE		STOP																
												PRVTE		S -N														011		00
												PSNGR CAR			02	PSNG	INJC	59	F			000		000		00				
00057	N N N N N N	01/06/2022	14	CASCADE HY SOUTH	STRGHT		N	N	RAIN	S-STRGHT	01	NONE	9	STRGHT																13
NO RPT		TH		MOLALLA AVE	S	(NONE)	UNKNOWN	N	WET	SS-O		N/A		S -N														000		00
N		5P			05			N	DLIT	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000		000		00				
N		45 19 20.2	-122 34 42.65	016000100S00		(04)														UNK										
											02	NONE	9	STRGHT																
												N/A		S -N														000		00

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OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

CASCADE HY SOUTH and MOLALLA AVE, City of Oregon City, Clackamas County, 01/01/2018 to 12/31/2022

1 - 24 of 24 Crash records shown. (ONLY 23 APPLICABLE CRASHES SHOWN)

	PSNGR CAR	01	DRVR	NONE	00	Unk	UNK	000	000	00
							UNK			

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CITY OF OREGON CITY, CLACKAMAS COUNTY

CLAIRMONT DR and S BEAVERCREEK RD, City of Oregon City, Clackamas County, 01/01/2018 to 12/31/2022

1 - 11 of 11 Crash records shown. (ONLY 10 APPLICABLE CRASHES SHOWN)

SER# / INVEST / RD DPT / UNLOC?	S P / E / E / D	D R / A / L / C	M J / U / G / S	S W / I / N / V	C / H / L	O / R / K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE TRLR QTY / TYPE / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S X RES	LICNS	PED LOC	ERROR	ACT	EVENT	CAUSE
01993	N	N	N	N	N	N	07/07/2022	16	S BEAVERCREEK RD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE							TH	0	CLAIRMONT DR	SE		UNKNOWN	N	DRY	REAR		N/A	SE-NW									000		00
N							10A			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 19 36.49	-122 33 59.21																	UNK					
																02	NONE 9	STOP											
																	N/A	SE-NW									011		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK					
00677	Y	N	N	N	N	N	02/22/2018	16	S BEAVERCREEK RD	INTER	3-LEG	N	Y	CLR	FIX OBJ	01	NONE 9	STRGHT										124,040,072	01,05
CITY							TH	0	CLAIRMONT DR	NW		TRF SIGNAL	N	ICE	FIX		N/A	SE-NW									000		00
N							8A			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 19 36.54	-122 33 59.21																	UNK					
01839	N	N	N	N			05/30/2018	16	S BEAVERCREEK RD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE							WE	0	CLAIRMONT DR	NW		TRF SIGNAL	N	DRY	REAR		N/A	NW-SE									000		00
N							9P			06	0		N	DUSK	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 19 36.54	-122 33 59.22																	UNK					
																02	NONE 9	STOP											
																	N/A	NW-SE									011		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK					
02636	N	N	N	N			09/30/2020	16	S BEAVERCREEK RD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE							WE	0	CLAIRMONT DR	NW		TRF SIGNAL	N	DRY	REAR		N/A	NW-SE									000		00
N							2P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 19 36.54	-122 33 59.22																	UNK					
																02	NONE 9	STOP											
																	N/A	NW-SE									011		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK					

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CITY OF OREGON CITY, CLACKAMAS COUNTY

CLAIRMONT DR and S BEAVERCREEK RD, City of Oregon City, Clackamas County, 01/01/2018 to 12/31/2022

1 - 11 of 11 Crash records shown. (ONLY 10 APPLICABLE CRASHES SHOWN)

00583	N N N N	02/24/2022	16	S BEAVERCREEK RD	INTER	3-LEG	N	N	CLR	S-1STOP	01 NONE		STRGHT																07,29
CITY		TH	0	CLAIRMONT DR	NW		TRF SIGNAL	N	DRY	REAR	PRVTE		NW-SE														000		00
N		7P			06	0		N	DARK	INJ	PSNGR CAR			01 DRVR	INJB	18	F	OR-Y		026						000		07,29
N		45 19 36.54	-122 33 59.22															OR<25										
											02 NONE		STOP																
											PRVTE		NW-SE														011		00
											PSNGR CAR			01 DRVR	INJC	37	M	OR-Y		000						000		00
																		OR<25										
03555	N N N N	11/20/2021	16	S BEAVERCREEK RD	INTER	3-LEG	N	N	CLD	PED	01 NONE	0	STRGHT																18,19
CITY		SA	0	CLAIRMONT DR	CN		TRF SIGNAL	N	DRY	PED	PRVTE		SE-NW														000		00
N		7P			02	0		N	DLIT	INJ	PSNGR CAR			01 DRVR	NONE	56	M	OR-Y		000						000		00
N		45 19 36.54	-122 33 59.22															OR<25										
													-																
													STRGHT	01 PED	INJB	79	F		I XWLK	055						035		18,19
													SW NE																
00140	N N N N	01/11/2022	16	S BEAVERCREEK RD	STRGHT		Y	N	CLD	S-1STOP	01 NONE		STRGHT																07,29
NONE		TU	50	CLAIRMONT DR	SE	(NONE)	TRF SIGNAL	N	WET	REAR	PRVTE		SE-NW														000		00
N		3P			06			N	DAY	INJ	PSNGR CAR			01 DRVR	INJC	17	F	OR-Y		026						000		07,29
N		45 19 35.92	-122 33 58.53			(02)												OR<25										
											02 NONE		STOP																
											PRVTE		SE-NW														011		00
											PSNGR CAR			01 DRVR	NONE	45	F	OR-Y		000						000		00
																		OR<25										
00903	N N N N	03/05/2020	16	S BEAVERCREEK RD	STRGHT		N	N	CLR	S-1STOP	01 NONE	0	STRGHT																29
CITY		TH	150	CLAIRMONT DR	SE	(NONE)	NONE	N	DRY	REAR	PRVTE		SE-NW														000		00
N		8A			08			N	DAWN	INJ	PSNGR CAR			01 DRVR	INJC	40	F	OR-Y		026						000		29
N		45 19 35.41	-122 33 57.86			(02)												OR<25										
											02 NONE	0	STOP																
											PRVTE		SE-NW														011		00
											OTH BUS			01 DRVR	NONE	61	M	OR-Y		000						000		00
																		OR<25										
04570	N N N N	12/12/2018	16	S BEAVERCREEK RD	STRGHT		N	N	CLR	S-1STOP	01 NONE	9	STRGHT																07

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CITY OF OREGON CITY, CLACKAMAS COUNTY

CLAIRMONT DR and S BEAVERCREEK RD, City of Oregon City, Clackamas County, 01/01/2018 to 12/31/2022

1 - 11 of 11 Crash records shown. (ONLY 10 APPLICABLE CRASHES SHOWN)

CITY WE 200 CLAIRMONT DR NW (NONE) NONE N DRY REAR N/A NW-SE 000 00
N 4P 08 N DUSK PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 19 38.04 -122 34 1.05 (02) UNK
02 NONE 9 STOP
N/A NW-SE 011 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
UNK

03669 N N N N 10/17/2019 16 S BEAVERCREEK RD STRGHT N N RAIN S-1STOP 01 NONE 9 STRGHT 29
NO RPT TH 250 CLAIRMONT DR NW (NONE) NONE N WET REAR N/A NW-SE 000 00
N 7A 08 N DAWN PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 19 38.45 -122 34 1.59 (02) UNK
02 NONE 9 STOP
N/A NW-SE 011 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
UNK

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Traffic Signal Warrant Analysis

Project: CCC Master Plan
Date: 11/2/2022
Scenario: 2030 Buildout Conditions

Major Street:	Meyers Road	Minor Street:	Keyser Way
Number of Lanes:	1	Number of Lanes:	1
PM Peak Hour Volumes:	519	PM Peak Hour Volumes:	116

Warrant Used:

X 100 percent of standard warrants used

_____ 70 percent of standard warrants used due to 85th percentile speed in excess of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
WARRANT 1, CONDITION A		100%	70%	100%	70%
Major St.	Minor St.	Warrants	Warrants	Warrants	Warrants
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
WARRANT 1, CONDITION B					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	5,190	8,850	
Minor Street*	1,160	2,650	**No**
Condition B: Interruption of Continuous Traffic			
Major Street	5,190	13,300	
Minor Street*	1,160	1,350	**No**
Combination Warrant			
Major Street	5,190	10,640	
Minor Street*	1,160	2,120	**No**

* Minor street right-turning traffic volumes reduced by 25%

Traffic Signal Warrant Analysis

Project: CCC Master Plan
Date: 11/2/2022
Scenario: 2044 Planning Horizon with Wacheno Phase 2

Major Street:	Meyers Road	Minor Street:	Keyser Way
Number of Lanes:	1	Number of Lanes:	1
PM Peak Hour Volumes:	685	PM Peak Hour Volumes:	155

Warrant Used:

X 100 percent of standard warrants used

_____ 70 percent of standard warrants used due to 85th percentile speed in excess of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
WARRANT 1, CONDITION A		100%	70%	100%	70%
Major St.	Minor St.	Warrants	Warrants	Warrants	Warrants
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
WARRANT 1, CONDITION B					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	6,850	8,850	
Minor Street*	1,550	2,650	**No**
Condition B: Interruption of Continuous Traffic			
Major Street	6,850	13,300	
Minor Street*	1,550	1,350	**No**
Combination Warrant			
Major Street	6,850	10,640	
Minor Street*	1,550	2,120	**No**

* Minor street right-turning traffic volumes reduced by 25%

Appendix D – Operation Analysis

Level of Service Descriptions

Capacity Reports

LEVEL OF SERVICE

Level of service is used to describe the quality of traffic flow. Levels of service A to C are considered good, and rural roads are usually designed for level of service C. Urban streets and signalized intersections are typically designed for level of service D. Level of service E is considered to be the limit of acceptable delay. For unsignalized intersections, level of service E is generally considered acceptable. Here is a more complete description of levels of service:

Level of service A: Very low delay at intersections, with all traffic signal cycles clearing and no vehicles waiting through more than one signal cycle. On highways, low volume and high speeds, with speeds not restricted by other vehicles.

Level of service B: Operating speeds beginning to be affected by other traffic; short traffic delays at intersections. Higher average intersection delay than for level of service A resulting from more vehicles stopping.

Level of service C: Operating speeds and maneuverability closely controlled by other traffic; higher delays at intersections than for level of service B due to a significant number of vehicles stopping. Not all signal cycles clear the waiting vehicles. This is the recommended design standard for rural highways.

Level of service D: Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.

Level of service E: Restricted speeds, very long traffic delays at traffic signals, and traffic volumes near capacity. Flow is unstable so that any interruption, no matter how minor, will cause queues to form and service to deteriorate to level of service F. Traffic signal cycle failures are frequent occurrences. For unsignalized intersections, level of service E or better is generally considered acceptable.

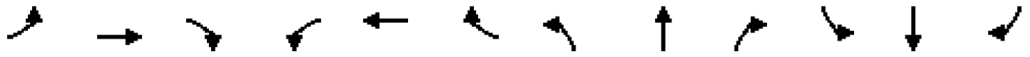
Level of service F: Extreme delays, resulting in long queues which may interfere with other traffic movements. There may be stoppages of long duration, and speeds may drop to zero. There may be frequent signal cycle failures. Level of service F will typically result when vehicle arrival rates are greater than capacity. It is considered unacceptable by most drivers.

LEVEL OF SERVICE CRITERIA
FOR SIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-20
C	20-35
D	35-55
E	55-80
F	>80

LEVEL OF SERVICE CRITERIA
FOR UNSIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-15
C	15-25
D	25-35
E	35-50
F	>50



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	47	184	12	42	23	309	1047	29	103	605	141
Future Volume (veh/h)	103	47	184	12	42	23	309	1047	29	103	605	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1707	1707	1707	1796	1796	1796	1781	1781	1781
Adj Flow Rate, veh/h	110	50	92	13	45	4	329	1114	13	110	644	41
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	13	13	13	7	7	7	8	8	8
Cap, veh/h	141	306	621	27	174	146	394	1483	662	139	969	432
Arrive On Green	0.08	0.17	0.17	0.02	0.10	0.10	0.23	0.43	0.43	0.08	0.29	0.29
Sat Flow, veh/h	1767	1856	1567	1626	1707	1438	1711	3413	1522	1697	3385	1510
Grp Volume(v), veh/h	110	50	92	13	45	4	329	1114	13	110	644	41
Grp Sat Flow(s),veh/h/ln	1767	1856	1567	1626	1707	1438	1711	1706	1522	1697	1692	1510
Q Serve(g_s), s	3.2	1.2	2.0	0.4	1.3	0.1	9.7	14.5	0.3	3.4	8.9	1.1
Cycle Q Clear(g_c), s	3.2	1.2	2.0	0.4	1.3	0.1	9.7	14.5	0.3	3.4	8.9	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	141	306	621	27	174	146	394	1483	662	139	969	432
V/C Ratio(X)	0.78	0.16	0.15	0.49	0.26	0.03	0.84	0.75	0.02	0.79	0.66	0.09
Avail Cap(c_a), veh/h	234	701	954	169	596	502	614	2030	905	224	1246	556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	19.0	10.3	25.8	21.9	21.4	19.4	12.6	8.5	23.9	16.7	13.9
Incr Delay (d2), s/veh	8.9	0.2	0.1	13.1	0.8	0.1	5.9	1.1	0.0	9.7	0.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.5	0.6	0.3	0.5	0.0	3.8	4.1	0.1	1.5	2.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.9	19.2	10.4	38.9	22.7	21.5	25.3	13.6	8.6	33.6	17.6	14.0
LnGrp LOS	C	B	B	D	C	C	C	B	A	C	B	B
Approach Vol, veh/h		252			62			1456			795	
Approach Delay, s/veh		22.0			26.0			16.2			19.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	27.0	4.9	12.7	16.2	19.2	8.2	9.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	31.5	5.5	20.0	19.0	19.5	7.0	18.5
Max Q Clear Time (g_c+I1), s	5.4	16.5	2.4	4.0	11.7	10.9	5.2	3.3
Green Ext Time (p_c), s	0.0	6.5	0.0	0.4	0.6	2.7	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	18.1
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	39	339	301	27	15	6
Future Vol, veh/h	39	339	301	27	15	6
Conflicting Peds, #/hr	7	0	0	7	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	3	3	8	8	10	10
Mvmt Flow	57	499	443	40	22	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	489	0	-	0	1083	470
Stage 1	-	-	-	-	470	-
Stage 2	-	-	-	-	613	-
Critical Hdwy	4.13	-	-	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.227	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	1069	-	-	-	232	578
Stage 1	-	-	-	-	613	-
Stage 2	-	-	-	-	525	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1062	-	-	-	217	574
Mov Cap-2 Maneuver	-	-	-	-	414	-
Stage 1	-	-	-	-	576	-
Stage 2	-	-	-	-	522	-

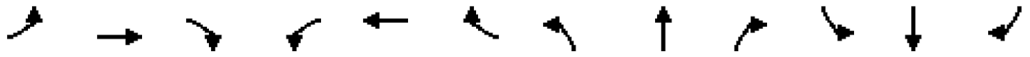
Approach	EB	WB	SB
HCM Control Delay, s/v	0.89	0	13.59
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1062	-	-	-	450
HCM Lane V/C Ratio	0.054	-	-	-	0.069
HCM Control Delay (s/veh)	8.6	-	-	-	13.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	5	617	120	32	801	5	15	0	10	5	0	21
Future Volume (veh/h)	5	617	120	32	801	5	15	0	10	5	0	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1826	1826	1826	1900	1900	1900	1100	1100	1100
Adj Flow Rate, veh/h	6	726	101	38	942	6	18	0	0	6	0	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	8	8	8	5	5	5	0	0	0	54	54	54
Cap, veh/h	357	1108	938	492	1191	8	225	58	0	208	0	28
Arrive On Green	0.01	0.62	0.62	0.04	0.66	0.66	0.03	0.00	0.00	0.03	0.00	0.03
Sat Flow, veh/h	1697	1781	1508	1739	1812	12	1439	1900	0	833	0	932
Grp Volume(v), veh/h	6	726	101	38	0	948	18	0	0	6	0	1
Grp Sat Flow(s),veh/h/ln	1697	1781	1508	1739	0	1824	1439	1900	0	833	0	932
Q Serve(g_s), s	0.1	10.2	1.1	0.3	0.0	14.6	0.5	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.1	10.2	1.1	0.3	0.0	14.6	0.5	0.0	0.0	0.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	357	1108	938	492	0	1198	225	58	0	208	0	28
V/C Ratio(X)	0.02	0.66	0.11	0.08	0.00	0.79	0.08	0.00	0.00	0.03	0.00	0.04
Avail Cap(c_a), veh/h	559	2487	2106	637	0	2546	839	868	0	564	0	426
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.0	4.8	3.0	3.7	0.0	4.8	18.8	0.0	0.0	18.7	0.0	18.5
Incr Delay (d2), s/veh	0.0	0.7	0.1	0.1	0.0	1.2	0.2	0.0	0.0	0.1	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.5	0.1	0.0	0.0	1.7	0.2	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.0	5.4	3.1	3.7	0.0	6.0	18.9	0.0	0.0	18.7	0.0	19.0
LnGrp LOS	A	A	A	A		A	B			B		B
Approach Vol, veh/h		833			986			18			7	
Approach Delay, s/veh		5.1			6.0			18.9			18.8	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.3	29.9		5.2	5.7	28.5		5.2				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	5.0	55.0		18.0	5.0	55.0		18.0				
Max Q Clear Time (g_c+I1), s	2.1	16.6		2.5	2.3	12.2		2.3				
Green Ext Time (p_c), s	0.0	9.3		0.0	0.0	6.3		0.0				

Intersection Summary			
HCM 7th Control Delay, s/veh		5.8	
HCM 7th LOS		A	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	72	395	32	89	152	317	831	38	84	1007	163
Future Volume (veh/h)	117	72	395	32	89	152	317	831	38	84	1007	163
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	126	77	363	34	96	22	341	894	19	90	1083	63
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	4	4	4	4	4	4
Cap, veh/h	157	404	663	58	298	236	377	1719	767	116	1197	534
Arrive On Green	0.09	0.22	0.22	0.03	0.16	0.16	0.22	0.49	0.49	0.07	0.34	0.34
Sat Flow, veh/h	1781	1870	1490	1767	1856	1473	1753	3497	1560	1753	3497	1560
Grp Volume(v), veh/h	126	77	363	34	96	22	341	894	19	90	1083	63
Grp Sat Flow(s),veh/h/ln	1781	1870	1490	1767	1856	1473	1753	1749	1560	1753	1749	1560
Q Serve(g_s), s	5.7	2.8	15.1	1.6	3.8	1.1	15.7	14.4	0.5	4.2	24.4	2.3
Cycle Q Clear(g_c), s	5.7	2.8	15.1	1.6	3.8	1.1	15.7	14.4	0.5	4.2	24.4	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	404	663	58	298	236	377	1719	767	116	1197	534
V/C Ratio(X)	0.80	0.19	0.55	0.59	0.32	0.09	0.90	0.52	0.02	0.78	0.90	0.12
Avail Cap(c_a), veh/h	160	450	700	128	415	330	397	1719	767	218	1244	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	26.5	17.7	39.4	30.7	29.6	31.6	14.3	10.8	38.0	25.9	18.6
Incr Delay (d2), s/veh	24.2	0.2	0.8	9.1	0.6	0.2	22.9	0.3	0.0	10.7	9.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	1.2	5.1	0.8	1.7	0.4	8.5	4.9	0.2	2.0	10.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.1	26.7	18.5	48.5	31.3	29.7	54.5	14.6	10.8	48.7	35.2	18.7
LnGrp LOS	E	C	B	D	C	C	D	B	B	D	D	B
Approach Vol, veh/h		566			152			1254			1236	
Approach Delay, s/veh		29.1			34.9			25.4			35.3	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	44.6	6.7	21.9	21.8	32.3	11.3	17.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.3	37.8	6.0	19.9	18.7	29.4	7.4	18.5
Max Q Clear Time (g_c+I1), s	6.2	16.4	3.6	17.1	17.7	26.4	7.7	5.8
Green Ext Time (p_c), s	0.1	5.9	0.0	0.5	0.1	1.9	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	30.3
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	219	207	7	53	57
Future Vol, veh/h	22	219	207	7	53	57
Conflicting Peds, #/hr	10	0	0	10	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	1	1	3	3
Mvmt Flow	24	241	227	8	58	63

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	245	0	-	0	530	241
Stage 1	-	-	-	-	241	-
Stage 2	-	-	-	-	289	-
Critical Hdwy	4.14	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.236	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1309	-	-	-	508	795
Stage 1	-	-	-	-	796	-
Stage 2	-	-	-	-	758	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1297	-	-	-	489	788
Mov Cap-2 Maneuver	-	-	-	-	637	-
Stage 1	-	-	-	-	774	-
Stage 2	-	-	-	-	751	-

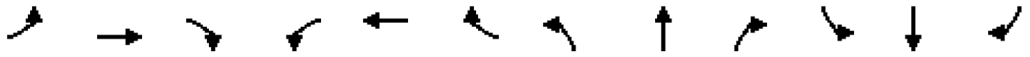
Approach	EB	WB	SB
HCM Control Delay, s/v	0.71	0	11.14
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1297	-	-	-	707
HCM Lane V/C Ratio	0.019	-	-	-	0.171
HCM Control Delay (s/veh)	7.8	-	-	-	11.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	11	919	131	13	465	2	139	0	23	23	0	41
Future Volume (veh/h)	11	919	131	13	465	2	139	0	23	23	0	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	12	978	89	14	495	2	148	0	4	24	0	8
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	5	5	5
Cap, veh/h	599	1162	964	273	1170	5	319	0	220	319	0	215
Arrive On Green	0.02	0.63	0.63	0.02	0.63	0.63	0.14	0.00	0.14	0.14	0.00	0.14
Sat Flow, veh/h	1767	1856	1539	1781	1861	8	1407	0	1585	1379	0	1547
Grp Volume(v), veh/h	12	978	89	14	0	497	148	0	4	24	0	8
Grp Sat Flow(s),veh/h/ln	1767	1856	1539	1781	0	1869	1407	0	1585	1379	0	1547
Q Serve(g_s), s	0.1	23.0	1.3	0.2	0.0	7.4	5.6	0.0	0.1	0.8	0.0	0.2
Cycle Q Clear(g_c), s	0.1	23.0	1.3	0.2	0.0	7.4	5.9	0.0	0.1	1.0	0.0	0.2
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	599	1162	964	273	0	1174	319	0	220	319	0	215
V/C Ratio(X)	0.02	0.84	0.09	0.05	0.00	0.42	0.46	0.00	0.02	0.08	0.00	0.04
Avail Cap(c_a), veh/h	732	1852	1536	403	0	1865	584	0	518	578	0	505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.1	8.1	4.1	8.4	0.0	5.2	23.1	0.0	20.5	20.9	0.0	20.6
Incr Delay (d2), s/veh	0.0	2.1	0.0	0.1	0.0	0.2	1.0	0.0	0.0	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.1	0.3	0.1	0.0	1.8	1.8	0.0	0.0	0.3	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.1	10.2	4.1	8.5	0.0	5.4	24.1	0.0	20.5	21.0	0.0	20.6
LnGrp LOS	A	B	A	A		A	C		C	C		C
Approach Vol, veh/h		1079			511			152			32	
Approach Delay, s/veh		9.7			5.5			24.0			20.9	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	38.6		11.6	5.0	38.5		11.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	5.0	55.0		18.0	5.0	55.0		18.0				
Max Q Clear Time (g_c+I1), s	2.1	9.4		7.9	2.2	25.0		3.0				
Green Ext Time (p_c), s	0.0	3.4		0.3	0.0	9.5		0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			9.9									
HCM 7th LOS			A									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	53	207	14	47	26	348	1084	33	116	626	159
Future Volume (veh/h)	116	53	207	14	47	26	348	1084	33	116	626	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1707	1707	1707	1796	1796	1796	1781	1781	1781
Adj Flow Rate, veh/h	123	56	120	15	50	4	370	1153	15	123	666	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	13	13	13	7	7	7	8	8	8
Cap, veh/h	157	310	658	30	165	139	430	1490	665	155	935	417
Arrive On Green	0.09	0.17	0.17	0.02	0.10	0.10	0.25	0.44	0.44	0.09	0.28	0.28
Sat Flow, veh/h	1767	1856	1567	1626	1707	1438	1711	3413	1522	1697	3385	1510
Grp Volume(v), veh/h	123	56	120	15	50	4	370	1153	15	123	666	43
Grp Sat Flow(s),veh/h/ln	1767	1856	1567	1626	1707	1438	1711	1706	1522	1697	1692	1510
Q Serve(g_s), s	3.8	1.4	2.7	0.5	1.5	0.1	11.5	16.1	0.3	4.0	9.9	1.2
Cycle Q Clear(g_c), s	3.8	1.4	2.7	0.5	1.5	0.1	11.5	16.1	0.3	4.0	9.9	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	310	658	30	165	139	430	1490	665	155	935	417
V/C Ratio(X)	0.78	0.18	0.18	0.50	0.30	0.03	0.86	0.77	0.02	0.79	0.71	0.10
Avail Cap(c_a), veh/h	221	664	956	160	565	476	582	1923	858	212	1181	527
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.9	20.0	10.2	27.2	23.5	22.9	20.0	13.4	9.0	24.9	18.2	15.1
Incr Delay (d2), s/veh	11.2	0.3	0.1	12.0	1.0	0.1	9.6	1.5	0.0	13.2	1.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.6	0.8	0.3	0.6	0.0	5.0	4.8	0.1	2.0	3.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.1	20.3	10.4	39.2	24.5	22.9	29.5	14.9	9.0	38.1	19.7	15.2
LnGrp LOS	D	C	B	D	C	C	C	B	A	D	B	B
Approach Vol, veh/h		299			69			1538			832	
Approach Delay, s/veh		22.8			27.6			18.4			22.2	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	28.4	5.0	13.3	18.1	19.4	9.0	9.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	31.5	5.5	20.0	19.0	19.5	7.0	18.5
Max Q Clear Time (g_c+I1), s	6.0	18.1	2.5	4.7	13.5	11.9	5.8	3.5
Green Ext Time (p_c), s	0.0	6.3	0.0	0.5	0.6	2.6	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	20.2
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	44	382	339	33	18	7
Future Vol, veh/h	44	382	339	33	18	7
Conflicting Peds, #/hr	7	0	0	7	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	3	3	8	8	10	10
Mvmt Flow	65	562	499	49	26	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	554	0	-	0	1221	530
Stage 1	-	-	-	-	530	-
Stage 2	-	-	-	-	691	-
Critical Hdwy	4.13	-	-	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.227	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	1011	-	-	-	191	534
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	483	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1004	-	-	-	177	530
Mov Cap-2 Maneuver	-	-	-	-	375	-
Stage 1	-	-	-	-	534	-
Stage 2	-	-	-	-	480	-

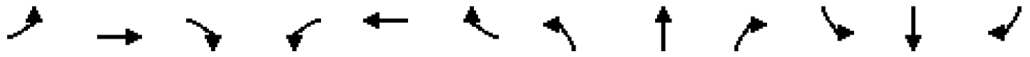
Approach	EB	WB	SB
HCM Control Delay, s/v	0.91	0	14.69
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1004	-	-	-	408
HCM Lane V/C Ratio	0.064	-	-	-	0.09
HCM Control Delay (s/veh)	8.8	-	-	-	14.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	6	706	135	36	926	6	17	0	11	6	0	24
Future Volume (veh/h)	6	706	135	36	926	6	17	0	11	6	0	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1826	1826	1826	1900	1900	1900	1100	1100	1100
Adj Flow Rate, veh/h	7	831	118	42	1089	7	20	0	1	7	0	2
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	8	8	8	5	5	5	0	0	0	54	54	54
Cap, veh/h	299	1206	1021	451	1290	8	193	0	55	175	0	32
Arrive On Green	0.01	0.68	0.68	0.04	0.71	0.71	0.03	0.00	0.03	0.03	0.00	0.03
Sat Flow, veh/h	1697	1781	1509	1739	1812	12	1437	0	1610	833	0	932
Grp Volume(v), veh/h	7	831	118	42	0	1096	20	0	1	7	0	2
Grp Sat Flow(s),veh/h/ln	1697	1781	1509	1739	0	1824	1437	0	1610	833	0	932
Q Serve(g_s), s	0.1	13.9	1.3	0.3	0.0	21.3	0.7	0.0	0.0	0.4	0.0	0.1
Cycle Q Clear(g_c), s	0.1	13.9	1.3	0.3	0.0	21.3	0.8	0.0	0.0	0.4	0.0	0.1
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	1206	1021	451	0	1298	193	0	55	175	0	32
V/C Ratio(X)	0.02	0.69	0.12	0.09	0.00	0.84	0.10	0.00	0.02	0.04	0.00	0.06
Avail Cap(c_a), veh/h	456	1997	1691	551	0	2044	671	0	591	452	0	342
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.4	4.8	2.8	4.1	0.0	5.1	23.3	0.0	22.9	23.1	0.0	22.9
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.1	0.0	2.0	0.2	0.0	0.1	0.1	0.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.3	0.2	0.0	0.0	3.0	0.2	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.4	5.5	2.8	4.2	0.0	7.1	23.5	0.0	23.0	23.2	0.0	23.7
LnGrp LOS	A	A	A	A		A	C		C	C		C
Approach Vol, veh/h		956			1138			21			9	
Approach Delay, s/veh		5.2			7.0			23.5			23.3	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.5	38.9		5.7	6.2	37.2		5.7				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	5.0	55.0		18.0	5.0	55.0		18.0				
Max Q Clear Time (g_c+I1), s	2.1	23.3		2.8	2.3	15.9		2.4				
Green Ext Time (p_c), s	0.0	11.6		0.0	0.0	7.8		0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			6.4									
HCM 7th LOS			A									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	81	445	36	100	171	357	860	43	95	1043	184
Future Volume (veh/h)	132	81	445	36	100	171	357	860	43	95	1043	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	142	87	418	39	108	26	384	925	22	102	1122	70
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	4	4	4	4	4	4
Cap, veh/h	154	425	686	62	326	260	384	1676	747	130	1169	521
Arrive On Green	0.09	0.23	0.23	0.04	0.18	0.18	0.22	0.48	0.48	0.07	0.33	0.33
Sat Flow, veh/h	1781	1870	1493	1767	1856	1481	1753	3497	1560	1753	3497	1560
Grp Volume(v), veh/h	142	87	418	39	108	26	384	925	22	102	1122	70
Grp Sat Flow(s),veh/h/ln	1781	1870	1493	1767	1856	1481	1753	1749	1560	1753	1749	1560
Q Serve(g_s), s	6.9	3.3	18.7	1.9	4.4	1.3	19.0	16.2	0.6	5.0	27.3	2.7
Cycle Q Clear(g_c), s	6.9	3.3	18.7	1.9	4.4	1.3	19.0	16.2	0.6	5.0	27.3	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	154	425	686	62	326	260	384	1676	747	130	1169	521
V/C Ratio(X)	0.92	0.20	0.61	0.63	0.33	0.10	1.00	0.55	0.03	0.78	0.96	0.13
Avail Cap(c_a), veh/h	154	425	686	128	396	316	384	1676	747	240	1169	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	27.2	18.5	41.3	31.3	30.0	33.9	16.0	11.9	39.5	28.3	20.1
Incr Delay (d2), s/veh	50.0	0.2	1.6	10.0	0.6	0.2	45.9	0.4	0.0	9.8	17.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	1.5	6.5	1.0	2.0	0.5	12.4	5.7	0.2	2.4	13.1	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	89.3	27.4	20.0	51.3	31.9	30.2	79.8	16.4	12.0	49.3	45.8	20.2
LnGrp LOS	F	C	C	D	C	C	F	B	B	D	D	C
Approach Vol, veh/h		647			173			1331			1294	
Approach Delay, s/veh		36.2			36.0			34.6			44.7	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	45.6	7.0	23.7	23.0	33.0	11.5	19.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.9	36.1	6.3	19.7	19.0	29.0	7.5	18.5
Max Q Clear Time (g_c+I1), s	7.0	18.2	3.9	20.7	21.0	29.3	8.9	6.4
Green Ext Time (p_c), s	0.1	5.8	0.0	0.0	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	38.8
HCM 7th LOS	D

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	247	233	10	63	64
Future Vol, veh/h	25	247	233	10	63	64
Conflicting Peds, #/hr	10	0	0	10	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	1	1	3	3
Mvmt Flow	27	271	256	11	69	70

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	277	0	-	0	598	272
Stage 1	-	-	-	-	272	-
Stage 2	-	-	-	-	326	-
Critical Hdwy	4.14	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.236	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1274	-	-	-	464	765
Stage 1	-	-	-	-	772	-
Stage 2	-	-	-	-	729	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1262	-	-	-	445	757
Mov Cap-2 Maneuver	-	-	-	-	605	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	722	-

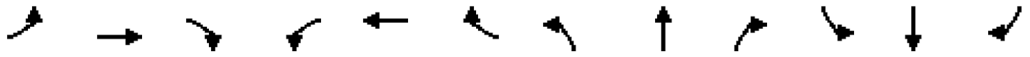
Approach	EB	WB	SB
HCM Control Delay, s/v	0.73	0	11.74
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1262	-	-	-	673
HCM Lane V/C Ratio	0.022	-	-	-	0.207
HCM Control Delay (s/veh)	7.9	-	-	-	11.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	12	1059	148	15	542	2	157	0	26	26	0	46
Future Volume (veh/h)	12	1059	148	15	542	2	157	0	26	26	0	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	13	1127	113	16	577	2	167	0	5	28	0	8
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	5	5	5
Cap, veh/h	559	1236	1025	201	1246	4	303	0	236	301	0	230
Arrive On Green	0.02	0.67	0.67	0.02	0.67	0.67	0.15	0.00	0.15	0.15	0.00	0.15
Sat Flow, veh/h	1767	1856	1539	1781	1863	6	1407	0	1585	1378	0	1547
Grp Volume(v), veh/h	13	1127	113	16	0	579	167	0	5	28	0	8
Grp Sat Flow(s),veh/h/ln	1767	1856	1539	1781	0	1869	1407	0	1585	1378	0	1547
Q Serve(g_s), s	0.2	37.3	1.9	0.2	0.0	10.7	8.3	0.0	0.2	1.3	0.0	0.3
Cycle Q Clear(g_c), s	0.2	37.3	1.9	0.2	0.0	10.7	8.6	0.0	0.2	1.5	0.0	0.3
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	559	1236	1025	201	0	1251	303	0	236	301	0	230
V/C Ratio(X)	0.02	0.91	0.11	0.08	0.00	0.46	0.55	0.00	0.02	0.09	0.00	0.03
Avail Cap(c_a), veh/h	653	1415	1174	290	0	1425	445	0	396	440	0	386
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.5	10.2	4.3	13.6	0.0	5.7	30.0	0.0	26.2	26.8	0.0	26.3
Incr Delay (d2), s/veh	0.0	8.5	0.0	0.2	0.0	0.3	1.6	0.0	0.0	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	13.2	0.4	0.1	0.0	3.0	2.9	0.0	0.1	0.4	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.5	18.7	4.4	13.8	0.0	6.0	31.5	0.0	26.3	27.0	0.0	26.3
LnGrp LOS	A	B	A	B		A	C		C	C		C
Approach Vol, veh/h		1253			595			172			36	
Approach Delay, s/veh		17.3			6.2			31.4			26.8	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	52.3		14.7	5.4	52.0		14.7				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	5.0	55.0		18.0	5.0	55.0		18.0				
Max Q Clear Time (g_c+I1), s	2.2	12.7		10.6	2.2	39.3		3.5				
Green Ext Time (p_c), s	0.0	4.2		0.3	0.0	8.8		0.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			15.4									
HCM 7th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	60	207	14	49	29	348	1084	33	126	626	159
Future Volume (veh/h)	116	60	207	14	49	29	348	1084	33	126	626	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1707	1707	1707	1796	1796	1796	1781	1781	1781
Adj Flow Rate, veh/h	123	64	119	15	52	5	370	1153	14	134	666	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	13	13	13	7	7	7	8	8	8
Cap, veh/h	157	309	656	30	164	138	430	1472	657	169	947	422
Arrive On Green	0.09	0.17	0.17	0.02	0.10	0.10	0.25	0.43	0.43	0.10	0.28	0.28
Sat Flow, veh/h	1767	1856	1567	1626	1707	1438	1711	3413	1522	1697	3385	1510
Grp Volume(v), veh/h	123	64	119	15	52	5	370	1153	14	134	666	43
Grp Sat Flow(s),veh/h/ln	1767	1856	1567	1626	1707	1438	1711	1706	1522	1697	1692	1510
Q Serve(g_s), s	3.8	1.7	2.7	0.5	1.6	0.2	11.6	16.3	0.3	4.3	9.9	1.2
Cycle Q Clear(g_c), s	3.8	1.7	2.7	0.5	1.6	0.2	11.6	16.3	0.3	4.3	9.9	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	309	656	30	164	138	430	1472	657	169	947	422
V/C Ratio(X)	0.78	0.21	0.18	0.50	0.32	0.04	0.86	0.78	0.02	0.79	0.70	0.10
Avail Cap(c_a), veh/h	220	659	951	159	561	472	577	1848	824	241	1172	523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	20.3	10.3	27.4	23.7	23.1	20.1	13.8	9.2	24.8	18.2	15.0
Incr Delay (d2), s/veh	11.4	0.3	0.1	12.1	1.1	0.1	9.8	1.8	0.0	11.1	1.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.7	0.9	0.3	0.7	0.1	5.0	5.0	0.1	2.1	3.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.5	20.6	10.5	39.5	24.8	23.2	29.9	15.5	9.2	35.9	19.6	15.1
LnGrp LOS	D	C	B	D	C	C	C	B	A	D	B	B
Approach Vol, veh/h		306			72			1537			843	
Approach Delay, s/veh		23.1			27.8			18.9			22.0	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	28.3	5.0	13.4	18.2	19.8	9.0	9.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	30.5	5.5	20.0	19.0	19.5	7.0	18.5
Max Q Clear Time (g_c+I1), s	6.3	18.3	2.5	4.7	13.6	11.9	5.8	3.6
Green Ext Time (p_c), s	0.0	6.0	0.0	0.6	0.6	2.5	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	20.6
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	49	382	339	33	18	8
Future Vol, veh/h	49	382	339	33	18	8
Conflicting Peds, #/hr	7	0	0	7	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	3	3	8	8	10	10
Mvmt Flow	72	562	499	49	26	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	554	0	-	0	1236	530
Stage 1	-	-	-	-	530	-
Stage 2	-	-	-	-	706	-
Critical Hdwy	4.13	-	-	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.227	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	1011	-	-	-	187	534
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	475	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1004	-	-	-	172	530
Mov Cap-2 Maneuver	-	-	-	-	369	-
Stage 1	-	-	-	-	530	-
Stage 2	-	-	-	-	472	-

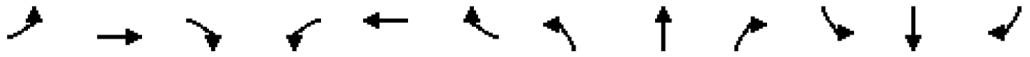
Approach	EB	WB	SB
HCM Control Delay, s/v	1.01	0	14.76
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1004	-	-	-	407
HCM Lane V/C Ratio	0.072	-	-	-	0.094
HCM Control Delay (s/veh)	8.9	-	-	-	14.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	6	706	144	39	926	6	19	0	12	6	0	24
Future Volume (veh/h)	6	706	144	39	926	6	19	0	12	6	0	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1826	1826	1826	1900	1900	1900	1100	1100	1100
Adj Flow Rate, veh/h	7	831	125	46	1089	7	22	0	1	7	0	2
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	8	8	8	5	5	5	0	0	0	54	54	54
Cap, veh/h	297	1199	1015	451	1289	8	195	0	58	176	0	34
Arrive On Green	0.01	0.67	0.67	0.05	0.71	0.71	0.04	0.00	0.04	0.04	0.00	0.04
Sat Flow, veh/h	1697	1781	1509	1739	1812	12	1437	0	1610	833	0	932
Grp Volume(v), veh/h	7	831	125	46	0	1096	22	0	1	7	0	2
Grp Sat Flow(s),veh/h/ln	1697	1781	1509	1739	0	1824	1437	0	1610	833	0	932
Q Serve(g_s), s	0.1	14.1	1.5	0.4	0.0	21.4	0.7	0.0	0.0	0.4	0.0	0.1
Cycle Q Clear(g_c), s	0.1	14.1	1.5	0.4	0.0	21.4	0.8	0.0	0.0	0.4	0.0	0.1
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	297	1199	1015	451	0	1297	195	0	58	176	0	34
V/C Ratio(X)	0.02	0.69	0.12	0.10	0.00	0.84	0.11	0.00	0.02	0.04	0.00	0.06
Avail Cap(c_a), veh/h	454	1988	1683	545	0	2035	668	0	588	450	0	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.4	4.9	2.9	4.2	0.0	5.1	23.4	0.0	22.9	23.1	0.0	23.0
Incr Delay (d2), s/veh	0.0	0.7	0.1	0.1	0.0	2.0	0.3	0.0	0.1	0.1	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	0.2	0.1	0.0	3.1	0.2	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.5	5.7	2.9	4.3	0.0	7.2	23.6	0.0	23.0	23.2	0.0	23.7
LnGrp LOS	A	A	A	A		A	C		C	C		C
Approach Vol, veh/h		963			1142			23			9	
Approach Delay, s/veh		5.3			7.1			23.6			23.3	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.5	39.1		5.8	6.3	37.2		5.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	5.0	55.0		18.0	5.0	55.0		18.0				
Max Q Clear Time (g_c+I1), s	2.1	23.4		2.8	2.4	16.1		2.4				
Green Ext Time (p_c), s	0.0	11.6		0.0	0.0	7.9		0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			6.5									
HCM 7th LOS			A									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	86	445	36	108	182	357	860	43	103	1043	184
Future Volume (veh/h)	132	86	445	36	108	182	357	860	43	103	1043	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	142	92	418	39	116	28	384	925	22	111	1122	70
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	4	4	4	4	4	4
Cap, veh/h	154	425	686	62	326	260	384	1654	738	141	1169	521
Arrive On Green	0.09	0.23	0.23	0.04	0.18	0.18	0.22	0.47	0.47	0.08	0.33	0.33
Sat Flow, veh/h	1781	1870	1493	1767	1856	1481	1753	3497	1560	1753	3497	1560
Grp Volume(v), veh/h	142	92	418	39	116	28	384	925	22	111	1122	70
Grp Sat Flow(s),veh/h/ln	1781	1870	1493	1767	1856	1481	1753	1749	1560	1753	1749	1560
Q Serve(g_s), s	6.9	3.5	18.7	1.9	4.8	1.4	19.0	16.4	0.7	5.4	27.3	2.7
Cycle Q Clear(g_c), s	6.9	3.5	18.7	1.9	4.8	1.4	19.0	16.4	0.7	5.4	27.3	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	154	425	686	62	326	260	384	1654	738	141	1169	521
V/C Ratio(X)	0.92	0.22	0.61	0.63	0.36	0.11	1.00	0.56	0.03	0.79	0.96	0.13
Avail Cap(c_a), veh/h	154	425	686	128	396	316	384	1654	738	251	1169	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	27.3	18.5	41.3	31.4	30.0	33.9	16.4	12.2	39.2	28.3	20.1
Incr Delay (d2), s/veh	50.0	0.3	1.6	10.0	0.7	0.2	45.9	0.4	0.0	9.3	17.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	1.6	6.5	1.0	2.2	0.5	12.4	5.8	0.2	2.6	13.1	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	89.3	27.5	20.0	51.3	32.1	30.2	79.8	16.8	12.2	48.5	45.8	20.2
LnGrp LOS	F	C	C	D	C	C	F	B	B	D	D	C
Approach Vol, veh/h		652			183			1331			1303	
Approach Delay, s/veh		36.2			35.9			34.9			44.6	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	45.0	7.0	23.7	23.0	33.0	11.5	19.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.4	35.6	6.3	19.7	19.0	29.0	7.5	18.5
Max Q Clear Time (g_c+I1), s	7.4	18.4	3.9	20.7	21.0	29.3	8.9	6.8
Green Ext Time (p_c), s	0.1	5.7	0.0	0.0	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	38.9
HCM 7th LOS	D

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	247	233	10	63	70
Future Vol, veh/h	29	247	233	10	63	70
Conflicting Peds, #/hr	10	0	0	10	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	1	1	3	3
Mvmt Flow	32	271	256	11	69	77

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	277	0	-	0	607	272
Stage 1	-	-	-	-	272	-
Stage 2	-	-	-	-	335	-
Critical Hdwy	4.14	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.236	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1274	-	-	-	458	765
Stage 1	-	-	-	-	772	-
Stage 2	-	-	-	-	722	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1262	-	-	-	438	757
Mov Cap-2 Maneuver	-	-	-	-	600	-
Stage 1	-	-	-	-	745	-
Stage 2	-	-	-	-	715	-

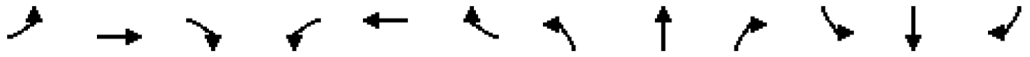
Approach	EB	WB	SB
HCM Control Delay, s/v	0.83	0	11.82
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1262	-	-	-	674
HCM Lane V/C Ratio	0.025	-	-	-	0.217
HCM Control Delay (s/veh)	7.9	-	-	-	11.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	12	1059	154	18	542	2	167	0	30	26	0	46
Future Volume (veh/h)	12	1059	154	18	542	2	167	0	30	26	0	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	13	1127	116	19	577	2	178	0	5	28	0	8
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	5	5	5
Cap, veh/h	553	1226	1017	197	1242	4	310	0	247	308	0	241
Arrive On Green	0.02	0.66	0.66	0.02	0.67	0.67	0.16	0.00	0.16	0.16	0.00	0.16
Sat Flow, veh/h	1767	1856	1539	1781	1863	6	1407	0	1585	1378	0	1547
Grp Volume(v), veh/h	13	1127	116	19	0	579	178	0	5	28	0	8
Grp Sat Flow(s),veh/h/ln	1767	1856	1539	1781	0	1869	1407	0	1585	1378	0	1547
Q Serve(g_s), s	0.2	39.0	2.1	0.3	0.0	11.1	9.1	0.0	0.2	1.3	0.0	0.3
Cycle Q Clear(g_c), s	0.2	39.0	2.1	0.3	0.0	11.1	9.5	0.0	0.2	1.5	0.0	0.3
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	553	1226	1017	197	0	1246	310	0	247	308	0	241
V/C Ratio(X)	0.02	0.92	0.11	0.10	0.00	0.46	0.57	0.00	0.02	0.09	0.00	0.03
Avail Cap(c_a), veh/h	644	1373	1139	278	0	1383	432	0	384	427	0	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.7	10.9	4.6	14.5	0.0	6.0	30.6	0.0	26.6	27.2	0.0	26.6
Incr Delay (d2), s/veh	0.0	9.5	0.0	0.2	0.0	0.3	1.7	0.0	0.0	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.5	0.5	0.2	0.0	3.3	3.2	0.0	0.1	0.4	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.7	20.4	4.7	14.7	0.0	6.2	32.3	0.0	26.6	27.3	0.0	26.7
LnGrp LOS	A	C	A	B		A	C		C	C		C
Approach Vol, veh/h		1256			598			183			36	
Approach Delay, s/veh		18.8			6.5			32.1			27.2	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	53.6		15.6	5.6	53.1		15.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	5.0	55.0		18.0	5.0	55.0		18.0				
Max Q Clear Time (g_c+I1), s	2.2	13.1		11.5	2.3	41.0		3.5				
Green Ext Time (p_c), s	0.0	4.2		0.3	0.0	8.1		0.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			16.6									
HCM 7th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	70	273	18	62	34	459	1171	43	153	676	210
Future Volume (veh/h)	153	70	273	18	62	34	459	1171	43	153	676	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1707	1707	1707	1796	1796	1796	1781	1781	1781
Adj Flow Rate, veh/h	153	70	195	18	62	5	459	1171	19	153	676	51
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	13	13	13	7	7	7	8	8	8
Cap, veh/h	193	321	745	35	146	123	516	1514	675	190	860	384
Arrive On Green	0.11	0.17	0.17	0.02	0.09	0.09	0.30	0.44	0.44	0.11	0.25	0.25
Sat Flow, veh/h	1767	1856	1567	1626	1707	1437	1711	3413	1522	1697	3385	1510
Grp Volume(v), veh/h	153	70	195	18	62	5	459	1171	19	153	676	51
Grp Sat Flow(s),veh/h/ln	1767	1856	1567	1626	1707	1437	1711	1706	1522	1697	1692	1510
Q Serve(g_s), s	5.4	2.1	4.8	0.7	2.2	0.2	16.4	18.6	0.5	5.6	11.9	1.7
Cycle Q Clear(g_c), s	5.4	2.1	4.8	0.7	2.2	0.2	16.4	18.6	0.5	5.6	11.9	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	193	321	745	35	146	123	516	1514	675	190	860	384
V/C Ratio(X)	0.79	0.22	0.26	0.52	0.43	0.04	0.89	0.77	0.03	0.80	0.79	0.13
Avail Cap(c_a), veh/h	248	637	1013	140	493	415	695	1988	887	244	1083	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	22.8	10.1	31.0	27.8	26.9	21.3	15.1	10.0	27.7	22.3	18.4
Incr Delay (d2), s/veh	12.7	0.3	0.2	11.4	2.0	0.1	10.8	1.4	0.0	13.9	3.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.9	1.5	0.4	1.0	0.1	7.1	5.9	0.1	2.8	4.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.5	23.1	10.3	42.4	29.8	27.0	32.1	16.5	10.1	41.7	25.3	18.6
LnGrp LOS	D	C	B	D	C	C	C	B	B	D	C	B
Approach Vol, veh/h		418			85			1649			880	
Approach Delay, s/veh		23.5			32.3			20.8			27.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	32.4	5.4	15.1	23.3	20.3	11.0	9.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.2	37.3	5.5	22.0	26.0	20.5	9.0	18.5
Max Q Clear Time (g_c+I1), s	7.6	20.6	2.7	6.8	18.4	13.9	7.4	4.2
Green Ext Time (p_c), s	0.1	7.3	0.0	0.9	0.9	2.4	0.1	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	23.5
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	58	504	447	43	23	9
Future Vol, veh/h	58	504	447	43	23	9
Conflicting Peds, #/hr	7	0	0	7	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	3	3	8	8	10	10
Mvmt Flow	73	630	559	54	29	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	620	0	-	0	1368	593
Stage 1	-	-	-	-	593	-
Stage 2	-	-	-	-	775	-
Critical Hdwy	4.13	-	-	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.227	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	956	-	-	-	156	491
Stage 1	-	-	-	-	537	-
Stage 2	-	-	-	-	441	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	950	-	-	-	142	488
Mov Cap-2 Maneuver	-	-	-	-	337	-
Stage 1	-	-	-	-	493	-
Stage 2	-	-	-	-	438	-

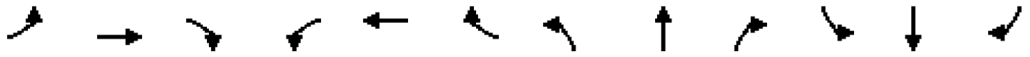
Approach	EB	WB	SB
HCM Control Delay, s/v	0.94	0	15.93
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	950	-	-	-	369
HCM Lane V/C Ratio	0.076	-	-	-	0.108
HCM Control Delay (s/veh)	9.1	-	-	-	15.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	7	928	178	48	1214	7	22	0	15	7	0	31
Future Volume (veh/h)	7	928	178	48	1214	7	22	0	15	7	0	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1826	1826	1826	1900	1900	1900	1100	1100	1100
Adj Flow Rate, veh/h	7	928	138	48	1214	7	22	0	1	7	0	2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	8	8	8	5	5	5	0	0	0	54	54	54
Cap, veh/h	253	1290	1093	416	1379	8	164	0	55	146	0	32
Arrive On Green	0.01	0.72	0.72	0.05	0.76	0.76	0.03	0.00	0.03	0.03	0.00	0.03
Sat Flow, veh/h	1697	1781	1509	1739	1814	10	1437	0	1610	833	0	932
Grp Volume(v), veh/h	7	928	138	48	0	1221	22	0	1	7	0	2
Grp Sat Flow(s),veh/h/ln	1697	1781	1509	1739	0	1824	1437	0	1610	833	0	932
Q Serve(g_s), s	0.1	18.4	1.7	0.4	0.0	29.7	0.9	0.0	0.0	0.5	0.0	0.1
Cycle Q Clear(g_c), s	0.1	18.4	1.7	0.4	0.0	29.7	1.0	0.0	0.0	0.5	0.0	0.1
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	253	1290	1093	416	0	1387	164	0	55	146	0	32
V/C Ratio(X)	0.03	0.72	0.13	0.12	0.00	0.88	0.13	0.00	0.02	0.05	0.00	0.06
Avail Cap(c_a), veh/h	376	1891	1601	479	0	1936	537	0	473	362	0	274
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.4	4.9	2.6	4.7	0.0	5.3	29.1	0.0	28.6	28.8	0.0	28.6
Incr Delay (d2), s/veh	0.0	0.8	0.1	0.1	0.0	3.7	0.4	0.0	0.1	0.1	0.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.3	0.3	0.1	0.0	5.0	0.3	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.5	5.6	2.6	4.8	0.0	9.1	29.5	0.0	28.7	29.0	0.0	29.4
LnGrp LOS	A	A	A	A		A	C		C	C		C
Approach Vol, veh/h		1073			1269			23			9	
Approach Delay, s/veh		5.3			8.9			29.5			29.1	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.6	50.6		6.1	6.8	48.4		6.1				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	5.0	65.0		18.0	5.0	65.0		18.0				
Max Q Clear Time (g_c+I1), s	2.1	31.7		3.0	2.4	20.4		2.5				
Green Ext Time (p_c), s	0.0	14.9		0.0	0.0	9.8		0.0				

Intersection Summary			
HCM 7th Control Delay, s/veh		7.5	
HCM 7th LOS		A	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	107	587	48	132	226	471	929	56	125	1126	242
Future Volume (veh/h)	174	107	587	48	132	226	471	929	56	125	1126	242
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.92	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	174	107	536	48	132	28	471	929	29	125	1126	84
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	3	3	3	4	4	4	4	4	4
Cap, veh/h	187	380	749	62	247	193	494	1877	837	152	1196	533
Arrive On Green	0.11	0.20	0.20	0.03	0.13	0.13	0.28	0.54	0.54	0.09	0.34	0.34
Sat Flow, veh/h	1781	1870	1485	1767	1856	1452	1753	3497	1560	1753	3497	1560
Grp Volume(v), veh/h	174	107	536	48	132	28	471	929	29	125	1126	84
Grp Sat Flow(s),veh/h/ln	1781	1870	1485	1767	1856	1452	1753	1749	1560	1753	1749	1560
Q Serve(g_s), s	11.2	5.6	23.6	3.1	7.7	2.0	30.6	19.4	1.0	8.1	36.2	4.3
Cycle Q Clear(g_c), s	11.2	5.6	23.6	3.1	7.7	2.0	30.6	19.4	1.0	8.1	36.2	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	380	749	62	247	193	494	1877	837	152	1196	533
V/C Ratio(X)	0.93	0.28	0.72	0.78	0.53	0.14	0.95	0.49	0.03	0.82	0.94	0.16
Avail Cap(c_a), veh/h	187	380	749	136	296	232	499	1877	837	246	1216	542
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	39.0	24.0	55.5	46.9	44.4	40.9	16.9	12.7	52.0	37.0	26.5
Incr Delay (d2), s/veh	45.7	0.4	3.3	18.6	1.8	0.3	28.7	0.2	0.0	10.8	14.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	2.6	12.3	1.7	3.7	0.7	16.5	7.2	0.4	3.9	17.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	97.1	39.4	27.2	74.1	48.7	44.8	69.6	17.1	12.7	62.9	51.1	26.7
LnGrp LOS	F	D	C	E	D	D	E	B	B	E	D	C
Approach Vol, veh/h		817			208			1429			1335	
Approach Delay, s/veh		43.7			54.0			34.3			50.6	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	66.2	8.0	27.6	36.7	43.6	16.2	19.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.3	57.0	8.9	21.8	33.0	40.3	12.2	18.5
Max Q Clear Time (g_c+I1), s	10.1	21.4	5.1	25.6	32.6	38.2	13.2	9.7
Green Ext Time (p_c), s	0.1	7.1	0.0	0.0	0.1	1.4	0.0	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	43.2
HCM 7th LOS	D

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	325	308	12	82	85
Future Vol, veh/h	33	325	308	12	82	85
Conflicting Peds, #/hr	10	0	0	10	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	1	1	3	3
Mvmt Flow	33	325	308	12	82	85

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	330	0	-	0	715	324
Stage 1	-	-	-	-	324	-
Stage 2	-	-	-	-	391	-
Critical Hdwy	4.14	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.236	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1218	-	-	-	396	715
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	681	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1207	-	-	-	378	708
Mov Cap-2 Maneuver	-	-	-	-	555	-
Stage 1	-	-	-	-	704	-
Stage 2	-	-	-	-	675	-

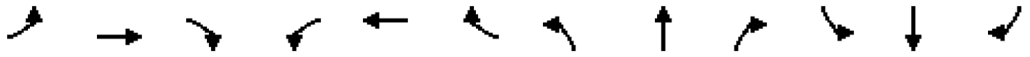
Approach	EB	WB	SB
HCM Control Delay, s/v	0.74	0	12.87
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1207	-	-	-	624
HCM Lane V/C Ratio	0.027	-	-	-	0.268
HCM Control Delay (s/veh)	8.1	-	-	-	12.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	16	1390	195	19	709	3	207	0	34	34	0	61
Future Volume (veh/h)	16	1390	195	19	709	3	207	0	34	34	0	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	16	1390	158	19	709	3	207	0	5	34	0	9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	5	5	5
Cap, veh/h	501	1345	1115	96	1353	6	270	0	243	269	0	237
Arrive On Green	0.02	0.72	0.72	0.02	0.73	0.73	0.15	0.00	0.15	0.15	0.00	0.15
Sat Flow, veh/h	1767	1856	1539	1781	1861	8	1406	0	1585	1378	0	1547
Grp Volume(v), veh/h	16	1390	158	19	0	712	207	0	5	34	0	9
Grp Sat Flow(s),veh/h/ln	1767	1856	1539	1781	0	1869	1406	0	1585	1378	0	1547
Q Serve(g_s), s	0.3	85.0	3.7	0.3	0.0	19.7	17.2	0.0	0.3	2.5	0.0	0.6
Cycle Q Clear(g_c), s	0.3	85.0	3.7	0.3	0.0	19.7	17.8	0.0	0.3	2.8	0.0	0.6
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	501	1345	1115	96	0	1359	270	0	243	269	0	237
V/C Ratio(X)	0.03	1.03	0.14	0.20	0.00	0.52	0.77	0.00	0.02	0.13	0.00	0.04
Avail Cap(c_a), veh/h	546	1345	1115	137	0	1359	270	0	243	269	0	237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.6	16.2	5.0	34.7	0.0	7.1	49.9	0.0	42.2	43.4	0.0	42.3
Incr Delay (d2), s/veh	0.0	33.7	0.1	1.0	0.0	0.4	12.4	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	41.3	1.1	0.4	0.0	6.8	7.0	0.0	0.1	0.9	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.6	49.9	5.0	35.7	0.0	7.4	62.2	0.0	42.2	43.6	0.0	42.3
LnGrp LOS	A	F	A	D		A	E		D	D		D
Approach Vol, veh/h		1564			731			212			43	
Approach Delay, s/veh		44.9			8.2			61.8			43.3	
Approach LOS		D			A			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	89.3		22.0	6.3	89.0		22.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	5.0	85.0		18.0	5.0	85.0		18.0				
Max Q Clear Time (g_c+I1), s	2.3	21.7		19.8	2.3	87.0		4.8				
Green Ext Time (p_c), s	0.0	5.8		0.0	0.0	0.0		0.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			35.7									
HCM 7th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	84	273	18	65	40	459	1171	43	173	676	210
Future Volume (veh/h)	153	84	273	18	65	40	459	1171	43	173	676	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1707	1707	1707	1796	1796	1796	1781	1781	1781
Adj Flow Rate, veh/h	153	84	195	18	65	6	459	1171	18	173	676	51
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	13	13	13	7	7	7	8	8	8
Cap, veh/h	192	319	743	35	144	121	515	1480	660	213	873	389
Arrive On Green	0.11	0.17	0.17	0.02	0.08	0.08	0.30	0.43	0.43	0.13	0.26	0.26
Sat Flow, veh/h	1767	1856	1567	1626	1707	1437	1711	3413	1522	1697	3385	1510
Grp Volume(v), veh/h	153	84	195	18	65	6	459	1171	18	173	676	51
Grp Sat Flow(s),veh/h/ln	1767	1856	1567	1626	1707	1437	1711	1706	1522	1697	1692	1510
Q Serve(g_s), s	5.5	2.5	4.8	0.7	2.3	0.2	16.6	19.1	0.4	6.4	12.0	1.7
Cycle Q Clear(g_c), s	5.5	2.5	4.8	0.7	2.3	0.2	16.6	19.1	0.4	6.4	12.0	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	319	743	35	144	121	515	1480	660	213	873	389
V/C Ratio(X)	0.80	0.26	0.26	0.52	0.45	0.05	0.89	0.79	0.03	0.81	0.77	0.13
Avail Cap(c_a), veh/h	246	631	1007	138	489	411	688	1911	852	270	1073	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	23.2	10.2	31.3	28.2	27.2	21.6	15.8	10.5	27.5	22.2	18.4
Incr Delay (d2), s/veh	13.0	0.4	0.2	11.4	2.2	0.2	11.1	1.8	0.0	13.7	2.9	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	1.1	1.5	0.4	1.0	0.1	7.2	6.3	0.1	3.1	4.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.1	23.6	10.4	42.7	30.4	27.4	32.7	17.6	10.5	41.2	25.1	18.6
LnGrp LOS	D	C	B	D	C	C	C	B	B	D	C	B
Approach Vol, veh/h		432			89			1648			900	
Approach Delay, s/veh		23.9			32.7			21.7			27.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	32.0	5.4	15.1	23.5	20.7	11.0	9.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.3	36.2	5.5	22.0	26.0	20.5	9.0	18.5
Max Q Clear Time (g_c+I1), s	8.4	21.1	2.7	6.8	18.6	14.0	7.5	4.3
Green Ext Time (p_c), s	0.1	6.9	0.0	0.9	0.9	2.3	0.1	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	24.1
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	68	504	447	43	23	12
Future Vol, veh/h	68	504	447	43	23	12
Conflicting Peds, #/hr	7	0	0	7	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	3	3	8	8	10	10
Mvmt Flow	85	630	559	54	29	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	620	0	-	0	1393	593
Stage 1	-	-	-	-	593	-
Stage 2	-	-	-	-	800	-
Critical Hdwy	4.13	-	-	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.227	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	956	-	-	-	150	491
Stage 1	-	-	-	-	537	-
Stage 2	-	-	-	-	429	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	950	-	-	-	135	488
Mov Cap-2 Maneuver	-	-	-	-	329	-
Stage 1	-	-	-	-	486	-
Stage 2	-	-	-	-	426	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.09	0	16.03
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	950	-	-	-	370
HCM Lane V/C Ratio	0.09	-	-	-	0.118
HCM Control Delay (s/veh)	9.2	-	-	-	16
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	0.4

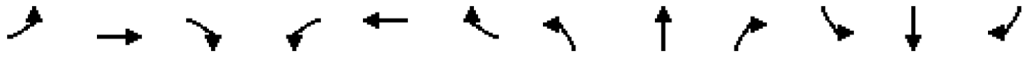
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	7	928	194	55	1214	7	26	0	17	7	0	31
Future Volume (veh/h)	7	928	194	55	1214	7	26	0	17	7	0	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1826	1826	1826	1900	1900	1900	1100	1100	1100
Adj Flow Rate, veh/h	7	928	148	55	1214	7	26	0	1	7	0	2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	8	8	8	5	5	5	0	0	0	54	54	54
Cap, veh/h	250	1281	1085	414	1377	8	167	0	60	147	0	35
Arrive On Green	0.01	0.72	0.72	0.05	0.76	0.76	0.04	0.00	0.04	0.04	0.00	0.04
Sat Flow, veh/h	1697	1781	1509	1739	1814	10	1437	0	1610	833	0	932
Grp Volume(v), veh/h	7	928	148	55	0	1221	26	0	1	7	0	2
Grp Sat Flow(s),veh/h/ln	1697	1781	1509	1739	0	1824	1437	0	1610	833	0	932
Q Serve(g_s), s	0.1	18.9	1.9	0.5	0.0	30.1	1.1	0.0	0.0	0.5	0.0	0.1
Cycle Q Clear(g_c), s	0.1	18.9	1.9	0.5	0.0	30.1	1.2	0.0	0.0	0.5	0.0	0.1
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	250	1281	1085	414	0	1385	167	0	60	147	0	35
V/C Ratio(X)	0.03	0.72	0.14	0.13	0.00	0.88	0.16	0.00	0.02	0.05	0.00	0.06
Avail Cap(c_a), veh/h	372	1874	1587	469	0	1919	532	0	469	359	0	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.6	5.1	2.7	5.0	0.0	5.4	29.3	0.0	28.7	28.9	0.0	28.7
Incr Delay (d2), s/veh	0.0	0.8	0.1	0.1	0.0	3.9	0.4	0.0	0.1	0.1	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.6	0.3	0.2	0.0	5.3	0.4	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.6	5.9	2.8	5.1	0.0	9.3	29.7	0.0	28.8	29.0	0.0	29.4
LnGrp LOS	A	A	A	A		A	C		C	C		C
Approach Vol, veh/h		1083			1276			27			9	
Approach Delay, s/veh		5.5			9.1			29.7			29.1	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.6	50.9		6.3	7.1	48.4		6.3				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	5.0	65.0		18.0	5.0	65.0		18.0				
Max Q Clear Time (g_c+I1), s	2.1	32.1		3.2	2.5	20.9		2.5				
Green Ext Time (p_c), s	0.0	14.8		0.0	0.0	9.9		0.0				

Intersection Summary			
HCM 7th Control Delay, s/veh		7.8	
HCM 7th LOS		A	

HCM 7th Signalized Intersection Summary
1: OR-213 & S Molalla Avenue/S Douglas Loop

07/08/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	117	587	48	147	250	471	929	56	140	1126	242
Future Volume (veh/h)	174	117	587	48	147	250	471	929	56	140	1126	242
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.92	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	174	117	536	48	147	33	471	929	28	140	1126	83
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	3	3	3	4	4	4	4	4	4
Cap, veh/h	187	384	751	62	251	197	494	1841	821	168	1192	532
Arrive On Green	0.10	0.21	0.21	0.03	0.14	0.14	0.28	0.53	0.53	0.10	0.34	0.34
Sat Flow, veh/h	1781	1870	1486	1767	1856	1454	1753	3497	1560	1753	3497	1560
Grp Volume(v), veh/h	174	117	536	48	147	33	471	929	28	140	1126	83
Grp Sat Flow(s),veh/h/ln	1781	1870	1486	1767	1856	1454	1753	1749	1560	1753	1749	1560
Q Serve(g_s), s	11.3	6.2	23.9	3.1	8.7	2.3	30.7	20.0	1.0	9.1	36.5	4.3
Cycle Q Clear(g_c), s	11.3	6.2	23.9	3.1	8.7	2.3	30.7	20.0	1.0	9.1	36.5	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	384	751	62	251	197	494	1841	821	168	1192	532
V/C Ratio(X)	0.93	0.30	0.71	0.78	0.58	0.17	0.95	0.50	0.03	0.83	0.94	0.16
Avail Cap(c_a), veh/h	187	384	751	135	295	231	497	1841	821	271	1210	540
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	39.2	23.9	55.8	47.3	44.5	41.1	17.8	13.3	51.7	37.3	26.7
Incr Delay (d2), s/veh	46.9	0.4	3.2	18.6	2.2	0.4	29.0	0.2	0.0	11.2	14.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	2.9	12.3	1.7	4.2	0.9	16.7	7.5	0.4	4.4	17.1	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	98.7	39.7	27.1	74.4	49.4	44.9	70.1	18.0	13.3	62.9	51.8	26.9
LnGrp LOS	F	D	C	E	D	D	E	B	B	E	D	C
Approach Vol, veh/h		827			228			1428			1349	
Approach Delay, s/veh		44.0			54.0			35.1			51.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	65.3	8.1	27.9	36.8	43.7	16.2	19.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	55.3	8.9	21.8	33.0	40.3	12.2	18.5
Max Q Clear Time (g_c+I1), s	11.1	22.0	5.1	25.9	32.7	38.5	13.3	10.7
Green Ext Time (p_c), s	0.2	7.0	0.0	0.0	0.1	1.3	0.0	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	43.9
HCM 7th LOS	D

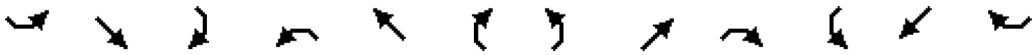
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	325	308	12	82	97
Future Vol, veh/h	40	325	308	12	82	97
Conflicting Peds, #/hr	10	0	0	10	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	1	1	3	3
Mvmt Flow	40	325	308	12	82	97

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	330	0	-	0	729	324
Stage 1	-	-	-	-	324	-
Stage 2	-	-	-	-	405	-
Critical Hdwy	4.14	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.236	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1218	-	-	-	388	715
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	671	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1207	-	-	-	368	708
Mov Cap-2 Maneuver	-	-	-	-	547	-
Stage 1	-	-	-	-	700	-
Stage 2	-	-	-	-	665	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.89	0	13.07
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1207	-	-	-	624
HCM Lane V/C Ratio	0.033	-	-	-	0.287
HCM Control Delay (s/veh)	8.1	-	-	-	13.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.2



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	16	1390	208	24	709	3	226	0	42	34	0	61
Future Volume (veh/h)	16	1390	208	24	709	3	226	0	42	34	0	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	16	1390	168	24	709	3	226	0	6	34	0	9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	5	5	5
Cap, veh/h	502	1340	1111	102	1355	6	269	0	242	267	0	237
Arrive On Green	0.02	0.72	0.72	0.02	0.73	0.73	0.15	0.00	0.15	0.15	0.00	0.15
Sat Flow, veh/h	1767	1856	1539	1781	1861	8	1406	0	1585	1376	0	1547
Grp Volume(v), veh/h	16	1390	168	24	0	712	226	0	6	34	0	9
Grp Sat Flow(s),veh/h/ln	1767	1856	1539	1781	0	1869	1406	0	1585	1376	0	1547
Q Serve(g_s), s	0.3	85.0	4.0	0.4	0.0	19.7	17.4	0.0	0.4	2.5	0.0	0.6
Cycle Q Clear(g_c), s	0.3	85.0	4.0	0.4	0.0	19.7	18.0	0.0	0.4	2.9	0.0	0.6
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	502	1340	1111	102	0	1360	269	0	242	267	0	237
V/C Ratio(X)	0.03	1.04	0.15	0.23	0.00	0.52	0.84	0.00	0.02	0.13	0.00	0.04
Avail Cap(c_a), veh/h	546	1340	1111	137	0	1360	269	0	242	267	0	237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.6	16.4	5.1	34.6	0.0	7.0	50.8	0.0	42.4	43.6	0.0	42.5
Incr Delay (d2), s/veh	0.0	34.9	0.1	1.2	0.0	0.4	20.4	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	41.9	1.1	0.5	0.0	6.8	8.3	0.0	0.2	0.9	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.6	51.2	5.2	35.7	0.0	7.4	71.3	0.0	42.4	43.8	0.0	42.5
LnGrp LOS	A	F	A	D		A	E		D	D		D
Approach Vol, veh/h		1574			736			232			43	
Approach Delay, s/veh		45.8			8.3			70.5			43.6	
Approach LOS		D			A			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	89.7		22.0	6.7	89.0		22.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	5.0	85.0		18.0	5.0	85.0		18.0				
Max Q Clear Time (g_c+I1), s	2.3	21.7		20.0	2.4	87.0		4.9				
Green Ext Time (p_c), s	0.0	5.8		0.0	0.0	0.0		0.1				

Intersection Summary			
HCM 7th Control Delay, s/veh		37.3	
HCM 7th LOS		D	

1. S Douglas Loop/Molalla Avenue at OR-213

Intersection v/c
APM Section 13.4.4: Critical Intersection v/c ratio
Method: Determine Critical Movements
HCM 7th reports, detemine adjusted and sat flow rates
Adjust Flow/Sat Flow
Sum up Crit Movement Flow Rates
Xc of intersection = sum(crit.move. Flow rates*(C/(C-L))

AM Peak Hour

	Critcial Movement				Adjust Flow				Saturated Flow				Adj/Sat Flows					C	L	Xc
					EBL	WBT	NBT	SBL	EBL	WBT	NBT	SBL	EBL	WBT	NBT	SBL	Sum			
2024 Existing	EBL	WBT	NBT	SBL	110	45	1114	110	1767	1707	3413	1697	0.062252	0.026362	0.326399	0.06482	0.479834	80	16	0.600
2030 Background					123	50	1153	123	1767	1707	3413	1697	0.06961	0.029291	0.337826	0.072481	0.509207	80	16	0.637
2030 Buildout					123	52	1153	134	1767	1707	3413	1697	0.06961	0.030463	0.337826	0.078963	0.516861	80	16	0.646
2044 Planning Horizon					153	62	1171	153	1767	1707	3413	1697	0.086587	0.036321	0.3431	0.090159	0.556167	80	16	0.695
2044 Planning Horizon w/ Wacheno Ph. 2					153	65	1171	173	1767	1707	3413	1697	0.086587	0.038079	0.3431	0.101945	0.56971	80	16	0.712

PM Peak Hour

	Critcial Movement				Adjust Flow				Saturated Flow				Adj/Sat Flows					C	L	Xc
					EBL	WBT	NBL	SBT	EBL	WBT	NBL	SBT	EBL	WBT	NBL	SBT	Sum			
2024 Existing	EBL	WBT	NBL	SBT	126	96	341	1083	1781	1856	1753	3497	0.070747	0.051724	0.194524	0.309694	0.626689	90	16	0.762
2030 Background					142	108	384	1122	1781	1856	1753	3497	0.07973	0.05819	0.219053	0.320846	0.67782	90	16	0.824
2030 Buildout					142	116	384	1122	1781	1856	1753	3497	0.07973	0.0625	0.219053	0.320846	0.68213	90	16	0.830
2044 Planning Horizon					174	132	471	1126	1781	1856	1753	3497	0.097698	0.071121	0.268682	0.32199	0.759491	90	16	0.924
2044 Planning Horizon w/ Wacheno Ph. 2					174	147	471	1126	1781	1856	1753	3497	0.097698	0.079203	0.268682	0.32199	0.767573	90	16	0.934

3. Clairmont Drive at S Beavercreek Road

Intersection v/c
APM Section 13.4.4: Critical Intersection v/c ratio
Method: Determine Critical Movements
HCM 7th reports, detemine adjusted and sat flow rates
Adjust Flow/Sat Flow
Sum up Crit Movement Flow Rates
Xc of intersection = sum(crit.move. Flow rates*(C/(C-L))

AM Peak Hour

	Critcial Movement				Adjust Flow				Saturated Flow				Adj/Sat Flows					C	L	Xc
					SEL	NWTR	NEL	SWTR	SEL	NWTR	NEL	SWTR	SEL	NWTR	NEL	SWTR	Sum			
2024 Existing	SEL	NWTR	NEL	SWTR	6	948	18	1	1697	1824	1439	932	0.003536	0.519737	0.012509	0.001073	0.536854	90	12	0.619
2030 Background					7	1096	20	2	1697	1824	1437	932	0.004125	0.600877	0.013918	0.002146	0.621066	90	12	0.717
2030 Buildout					7	1096	22	2	1697	1824	1437	932	0.004125	0.600877	0.01531	0.002146	0.622458	90	12	0.718
2044 Planning Horizon					7	1221	22	2	1697	1824	1437	932	0.004125	0.669408	0.01531	0.002146	0.690988	100	12	0.785
2044 Planning Horizon w/ Wacheno Ph. 2					7	1221	26	2	1697	1824	1437	932	0.004125	0.669408	0.018093	0.002146	0.693772	100	12	0.788

PM Peak Hour

	Critcial Movement				Adjust Flow				Saturated Flow				Adj/Sat Flows					C	L	Xc
					SET	NWL	NEL	SWTR	SET	NWL	NEL	SWTR	SET	NWL	NEL	SWTR	Sum			
2024 Existing	SET	NWL	NEL	SWTR	978	14	148	8	1856	1781	1407	1547	0.52694	0.007861	0.105188	0.005171	0.64516	90	12	0.744
2030 Background					1127	16	167	8	1856	1781	1407	1547	0.60722	0.008984	0.118692	0.005171	0.740067	90	12	0.854
2030 Buildout					1127	19	178	8	1856	1781	1407	1547	0.60722	0.010668	0.12651	0.005171	0.74957	90	12	0.865
2044 Planning Horizon					1390	19	207	9	1856	1781	1406	1547	0.748922	0.010668	0.147226	0.005818	0.912634	120	12	1.014
2044 Planning Horizon w/ Wacheno Ph. 2					1390	24	226	9	1856	1781	1406	1547	0.748922	0.013476	0.16074	0.005818	0.928955	120	12	1.032

Clackamas Community College
INSTITUTIONAL RESEARCH & REPORTING

Clackamas Community College (CCC): Oregon City Campus ONLY
PM Peak Hour and Enrollment Projections

PM Peak Hour

In Fall Term 2024, it was most common for students to end their final class between 2:00PM and 2:50PM. The 3:00PM – 3:50PM and 4:00PM-4:50PM ending times were also common. Most enrollments occur Monday – Thursday.

PM Peaks: Latest Course End Time per Student

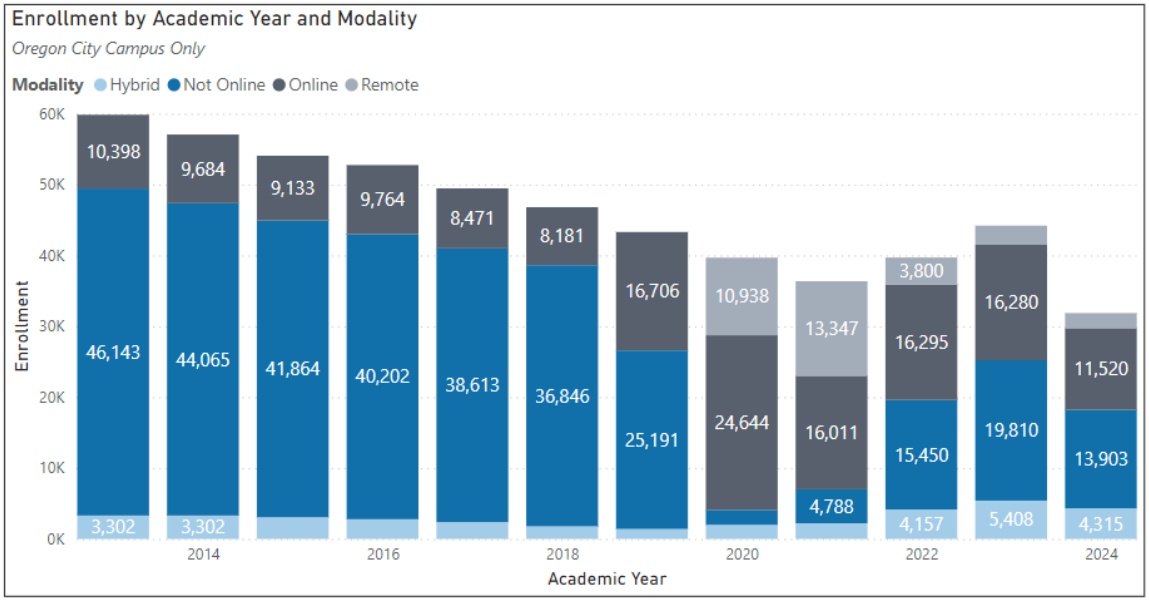
Fall Term 2024 | Week 4 | Oregon City Campus Only

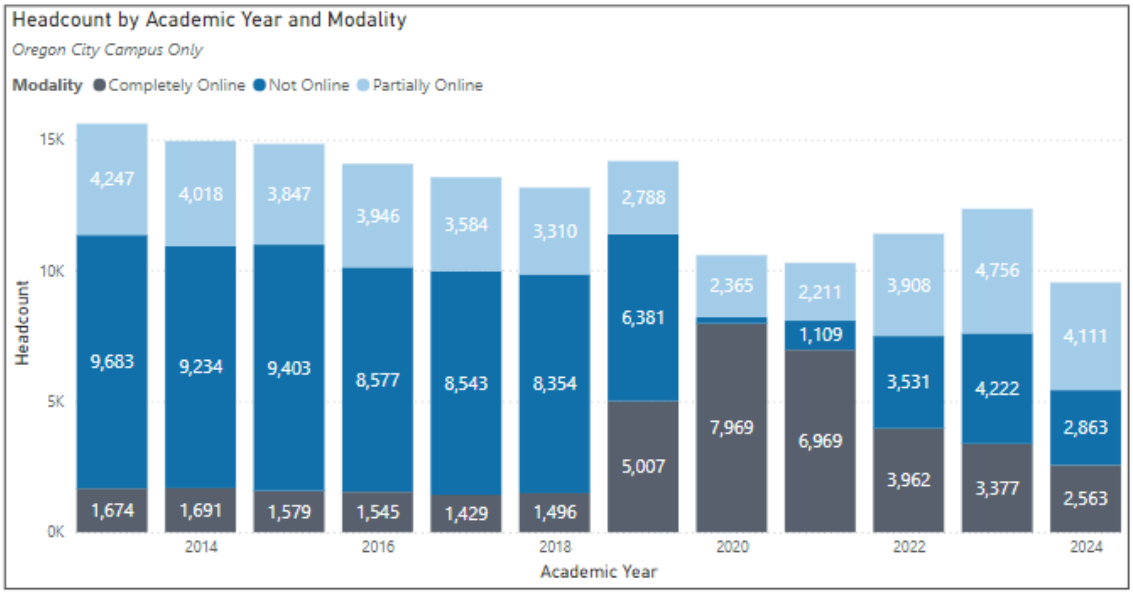
Time Grouping	Monday	Tuesday	Wednesday	Thursday	Friday	Total
12:00 - 12:50	73	55	80	52	50	**310**
1:00 - 1:50	57	52	67	74	28	**278**
2:00 - 2:50	603	487	701	409	80	**2,280**
3:00 - 3:50	235	216	285	221	12	**969**
4:00 - 4:50	218	238	189	223	46	**914**
5:00 - 5:50	75	56	103	66		**300**
6:00 - 6:50	22	35		16		**73**
7:00 - 7:50	177	53	152	90	30	**502**
8:00 - 8:50	64	218	59	53	37	**431**
9:00 - 9:50	135	160	168	125	51	**639**
Total	**1,659**	**1,570**	**1,804**	**1,329**	**334**	**6,696**

Enrollment Projections

After the height of enrollment following the 2008 recession, enrollment steadily declined and appeared to be leveling out during the 2017-18 and 2018-19 years to the "new normal." Then in 2019-20, the pandemic hit, drastically reducing enrollment (number of courses students are enrolled in) and headcount (unique number of students). While CCC's headcount and enrollment has been increasing since the pandemic, we do not know where the "new, new normal" will be. Our working assumption is that we will return to the levels seen in 2017-18 and 2018-19. Given the impending high school enrollment cliff, we do not anticipate any significant increases in our enrollment or headcount.

We cannot simply project to the enrollment (~39k) and headcount (~10k) numbers seen in 2017-18 and 2018-19 because the proportion of enrollments that are online has changed. Prior to the pandemic, 80% of our enrollments were in person whereas only 60% of enrollments are currently in person. In addition, while 90% of students were taking at least one class in person prior to the pandemic, only 75% of students are currently taking at least one class in person. See below for two graphs illustrating these changes. (Please note that 2024 is still in progress.)

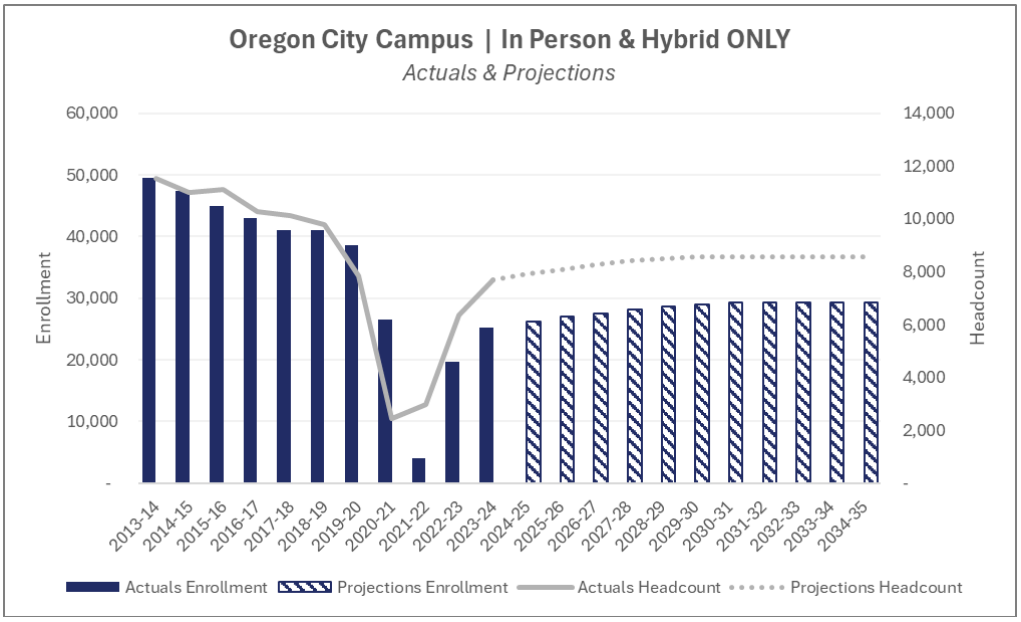




As we have experienced significant changes in students' modality preferences, we need to adjust our approach to enrollment projections when we are focusing on students who attend classes on campus. Rather than aiming for the enrollment and headcount numbers we experienced in 2017-18 and 2018-19, we need to lower these numbers to account for the increase in students studying online. Enrollment in 2017-18 and 2018-19 was approximately 39,000. **To reflect the increase in online enrollment, the new goal for enrollment is approximately 29,000**. Headcount in 2017-18 and 2018-19 was approximately 10,000. **To reflect the increase in students studying completely online, the new goal for headcount is approximately 8,500.**

In addition to students' modality preferences, CCC plans to bring in-person courses to the rural communities of Estacada, Molalla, Colton, and Canby in the next 10 years further reducing trips to the Oregon City campus. In each academic year, approximately 11% of the in person and hybrid enrollments at the Oregon City campus are currently from students in these communities. We are estimating a 50% decrease in enrollments on the Oregon City campus from students in these communities over the next 10 years.

We further assume that we will see steeper increases in both headcount and enrollment in the short term, with smaller increases over time until our new goals are reached.



	Enrollment	Headcount		
2013-14	49,445	11,552		
2014-15	47,367	11,001		
2015-16	44,929	11,097		
2016-17	42,982	10,270		
2017-18	40,982	10,127		
2018-19	40,989	9,788		
2019-20	38,626	7,860		
2020-21	26,596	2,443		
2021-22	4,097	2,987		
2022-23	19,607	6,366		
2023-24	25,218	7,696	Enrollment	Headcount
2024-25	26,227	7,927	+ 4%	+ 3%
2025-26	27,014	8,085	+ 3%	+ 2%
2026-27	27,554	8,247	+ 2%	+ 2%
2027-28	28,105	8,412	+ 2%	+ 2%
2028-29	28,667	8,496	+ 2%	+ 1%
2029-30	28,954	8,581	+ 1%	+ 1%
2030-31	29,243	8,581	+ 1%	+ 0%
2031-32	29,243	8,581	+ 0%	+ 0%
2032-33	29,243	8,581	+ 0%	+ 0%
2033-34	29,243	8,581	+ 0%	+ 0%
2034-35	29,243	8,581	+ 0%	+ 0%



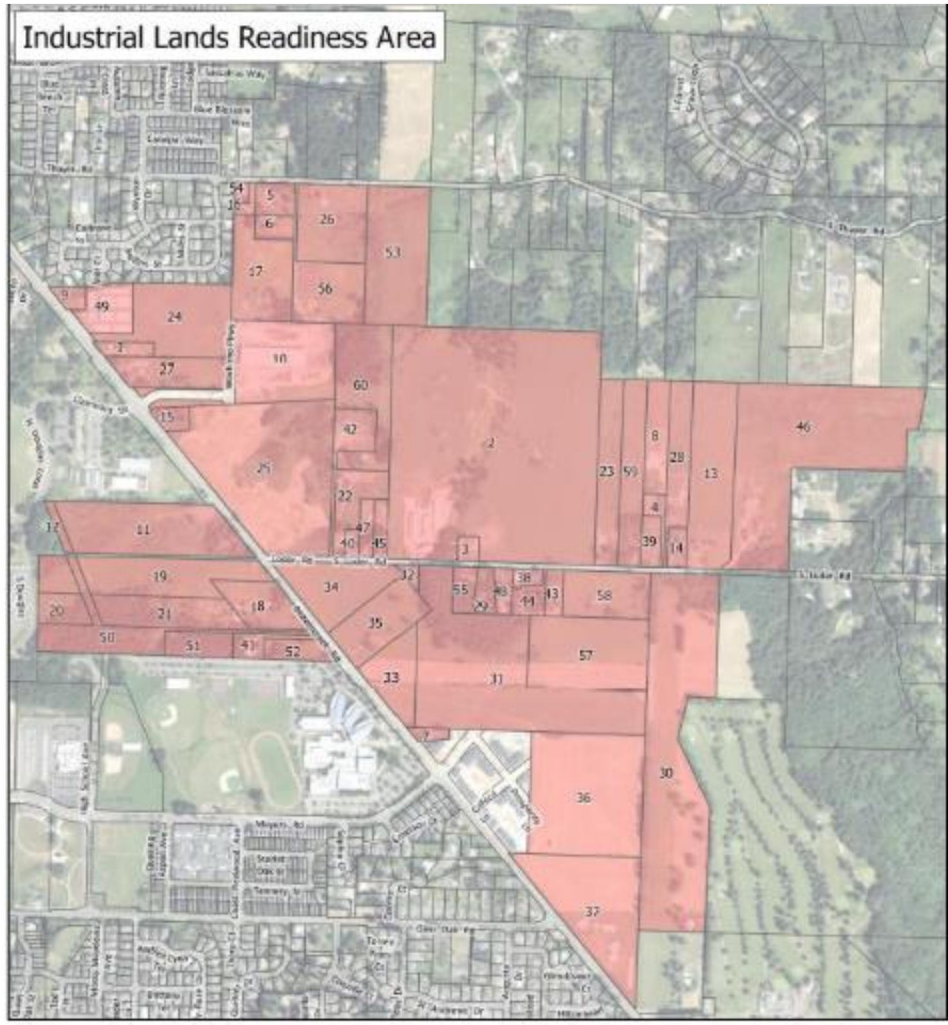
Thimble Creek Concept Plan Area Market Assessment

Oregon City - PlanningCommission

April 14, 2025

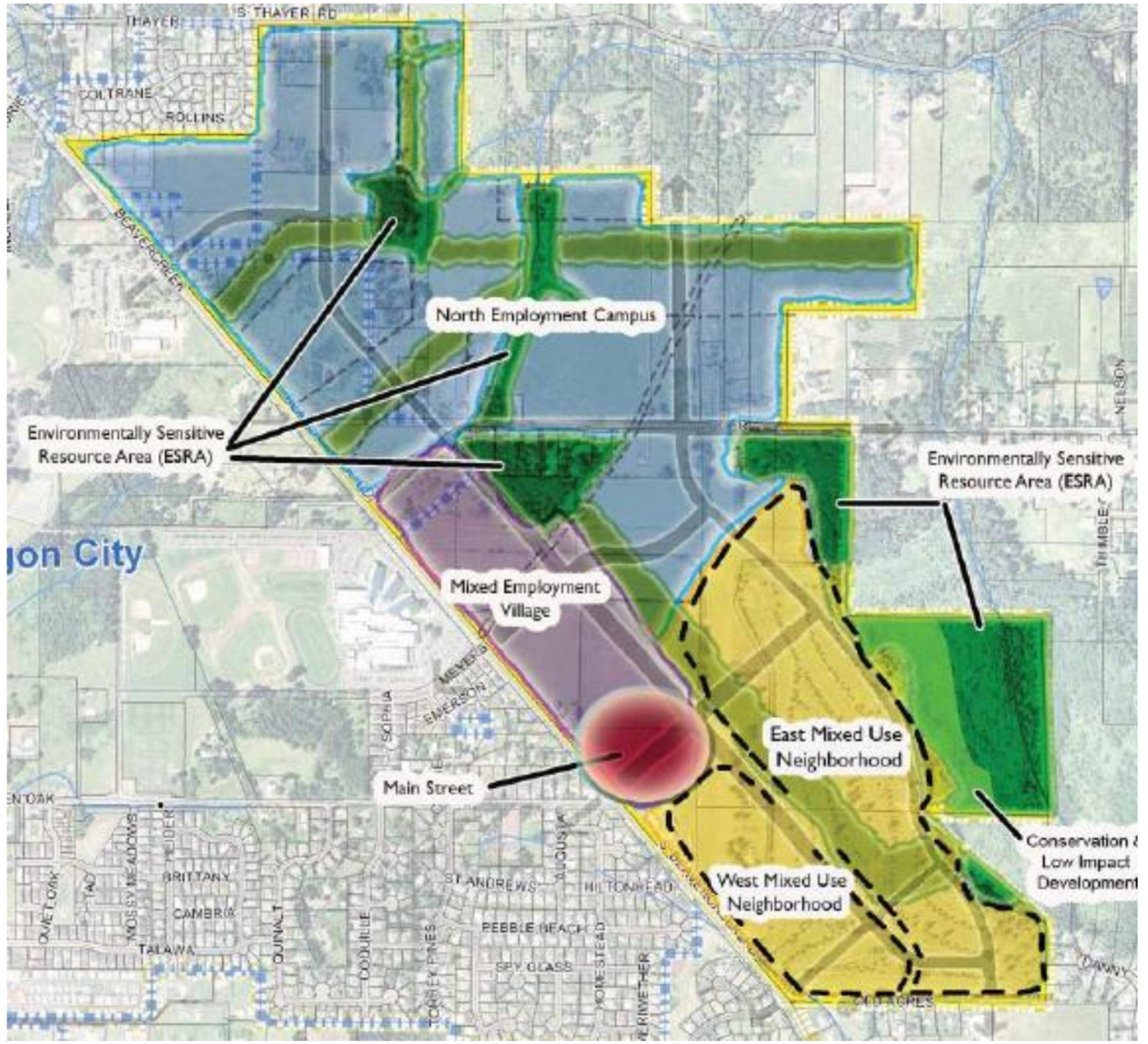
Presentation Purpose

- No action is required.
- Staff will provide a project update and can forward any feedback to the Commission champions (Mayor Mcgriff, Commission Mitchell).
- Future implementation measures could involve targeted development code revisions through the Legislative process



Background

- Concept Plan (2008/2020)
- 450-Acre mixed-use community
- Employment sub-areas
- Slow market adoption
- Project: Identify factors that might be slowing development, recommend possible policies



Employment Land

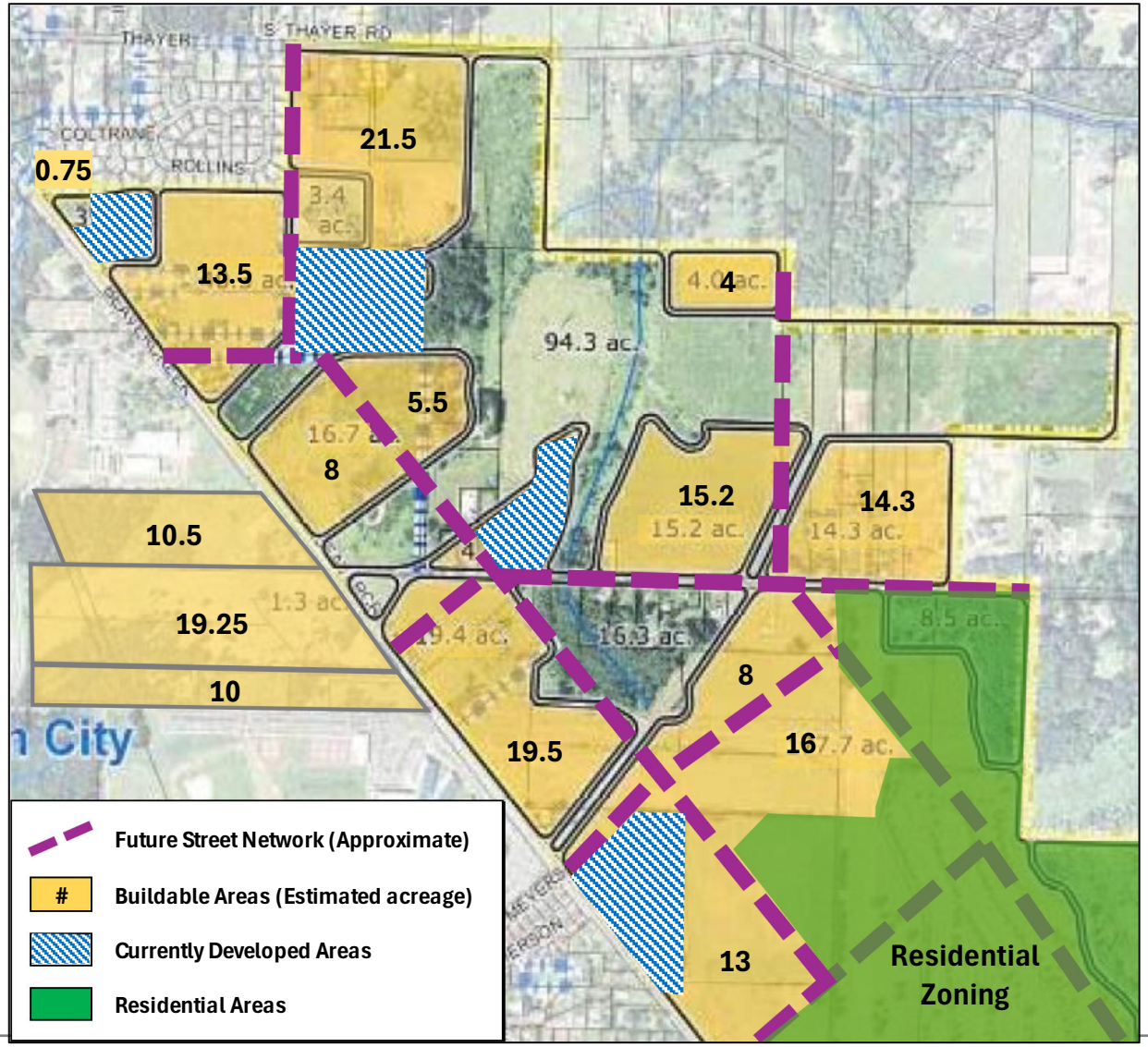
Why is Employment Land Important?

- More job variety for local residents
- Sustainable wage industries
- Jobs-to-household balance
- Complete community (plan area & city)
- Improved tax base and fiscal health



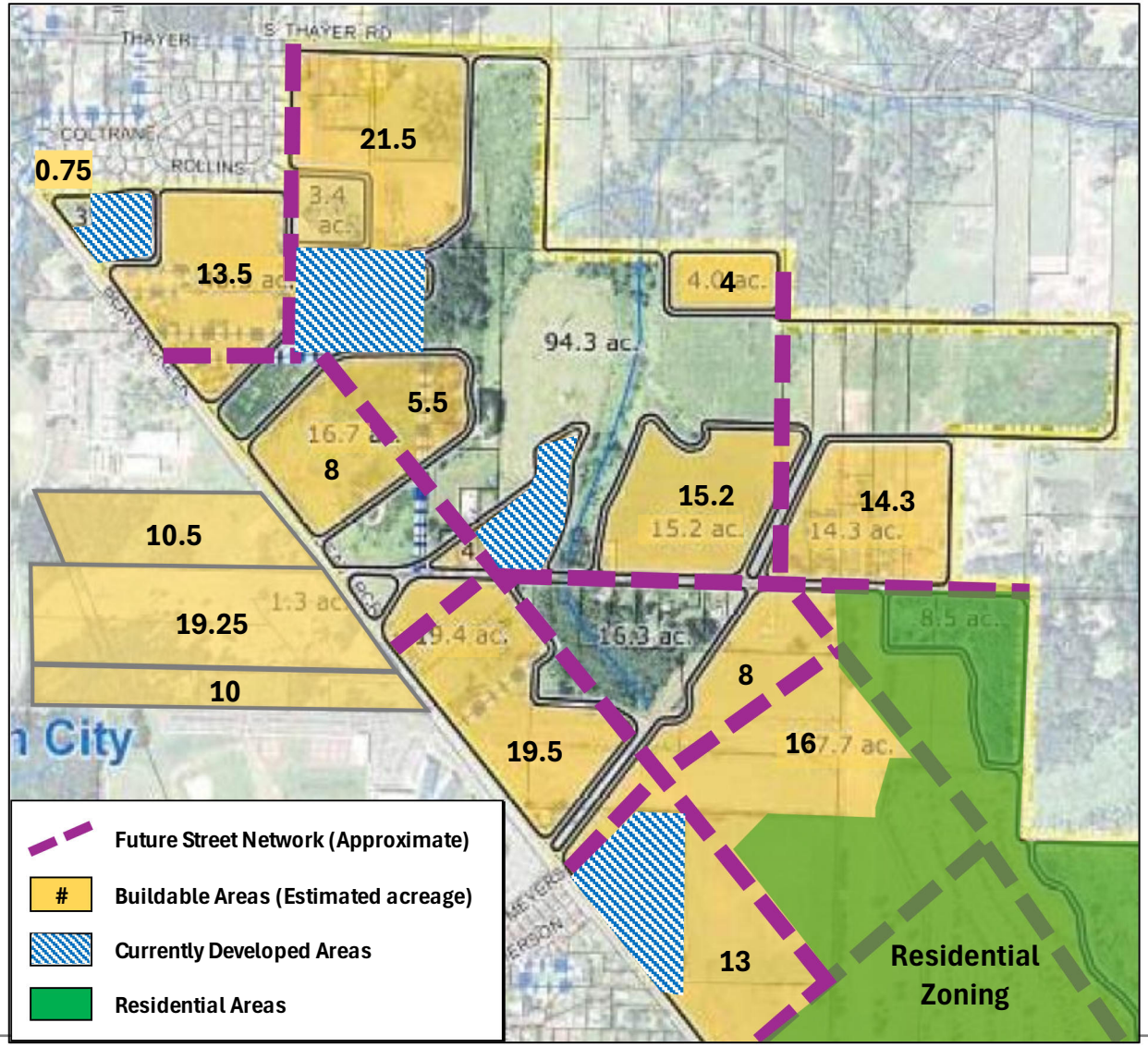
Factors Impacting Pace of Development

- Public infrastructure costs
- Buildable land and land assembly
- No large-lot sites
- Transportation and traffic
- Future street network



Factors Impacting Pace of Development

- Public and private utilities
- Permitted land uses/business types
- Development code standards
- Development incentives and funding



Policy Considerations

Levers of Public Policy

None: No changes, market-driven

Low: Update Concept Plan, Development Code, Land Uses

Moderate: Partner with CCC on 40-acre development

High: Contribute to infrastructure, development incentives

Development Code





Development Scenario
Proposed Standards

Industrial development site: 8 acres

Landscaping (15%): 1.2 acres
Outdoor Storage (50%): 4 acres
Stormwater Facility (~6%): 0.5 acres
Parking (~7%): 0.6 acres
Remaining Building Area (~22%): 1.8 acres
Building Footprint: 65,000 sq. ft.

Legend

- Future Street Network
- Thimble Creek Concept Plan Area
- Oregon City Limits
- Taxlots
- Landscaping and Buffer
- Building
- Parking
- Outdoor Storage
- Stormwater Facility

**All lines and areas shown are approximate and does not account for additional landscaping or pathways.*

Development Code

Recommendations to Provide More Flexibility

- Allow more outdoor storage space
- Decrease buffer requirements
- Make warehousing and distribution a permitted *accessory* use
- Consider reviewing and reducing # of sustainability requirements



Infrastructure Funding

- Status quo
- State Loans and Grants
- Local Improvement District (not recommended)
- Tax Increment Financing, Bonds



Next Steps

March 5, 2025, City Commission meeting

- Adopt report via resolution in May 2025 (required by grant)
- Appoint two fellow City Commissioners (Mayor McGriff and Commission Mitchell) as project Champions.
  - Work with staff on communication and coordination with property owners and developing policy options
  - Provide recommendations to the full City Commission on further action steps.



Thimble Creek Concept Plan Area Market Assessment

Oregon City - City Commission

April 14, 2025

Legislative Code Amendments LEG-25-02

Climate Friendly & Equitable Communities (CFEC)

Planning Commission Public Hearing

4/14/2025



Purpose of tonight's meeting

- Summarize CFEC, outreach, conceptual approach
- Overview of code amendments
- Make recommendation to the City Commission



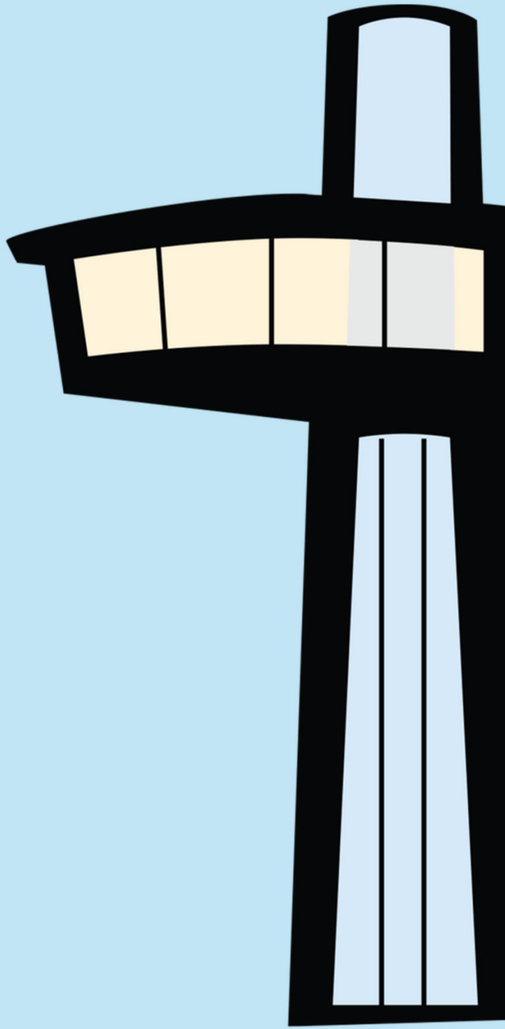
Climate Friendly and Equitable Communities Background

"The Climate-Friendly and Equitable Communities program aims to reduce climate pollution, provide more transportation and housing choices, and promote equitable land use planning outcomes." –DLCD Website

- 2007- Oregon legislature adopted a goal to reduce climate pollution by 75% by 2050
- 2022- Oregon is off track to meet this goal particularly in reducing pollution from transportation
- LCDC Directed DLCD to adopt changes in Oregon's planning system for communities in the State's most populated areas

Rules require cities to:

1. Adopt Climate Friendly Areas
2. Support electric vehicles
3. Reduce Parking Mandates
4. Address critical gaps in walking, biking, and transit networks



Process and adoption timeline

- **Pre-October, 2024:** Initial code audits and related work to determine compliance options and general framework
- **Late 2024:** Ad hoc advisory committee convened and met twice, gave feedback and made recommendations
- **Jan-Mar 2025:** Broader outreach to committees & the public
- **Apr-May 2025:** Formal Type IV adoption process via Planning Commission and City Commission

You Are Here



Outreach Summary

- Formed an ad-hoc committee which met three times (October 2024, November 2024, March 2025) and provided initial feedback on decision points.

- Presented to Development Stakeholders Group (Jan), Citizen Involvement Committee (Feb), Natural Resources Committee (Feb), Oregon City Library Board (Feb), City Commission Work Session (March) in addition to previous appearances before this Commission

- Public Open House held February featuring opportunities to offer feedback in person or online



Conceptual Approach Summary

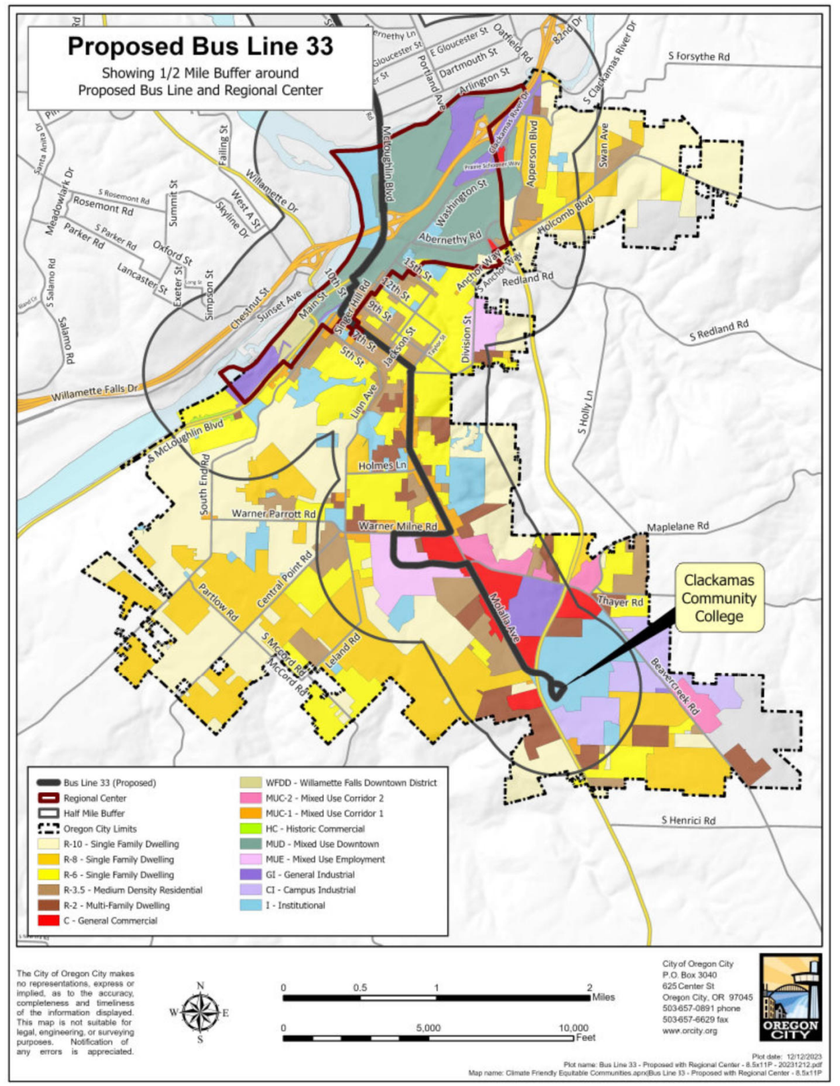
- Option 3: Eliminate requirements near transit (-0440) and Regional Center (-0435) and implement several prescriptive measures.
  - Implement options to reduce the burden of parking mandates (-0425)
  - Eliminate mandates for certain uses (-0430)
  - Implement several management approaches and alternatives to mandates (-0445)

- Update landscaping and design requirements, some additions to bike parking (-0405, -0630)



  - Add language to require 40% of parking be EV-ready in 5+ unit residential development (-0410)

  - Reduce multifamily maximums (-0415)



Feedback from Planning Commission

- Look at possible incentives to encourage developers to either provide more charging capacity than required or set aside land for future charging purposes
- Do not include fee-in-lieu option under the possible climate mitigation actions
- Prioritize native tree species in parking lot landscaping and use the “right tree right place” philosophy
- Define Level 2 electric vehicle charging stations (OAR 918-020-0380)



Chapter 17.04 Definitions

New definitions for:

- change of use,
- electrical service capacity,
- electric vehicle charging station,
- level 2 electric vehicle charging station,
- mixed use development, new parking lot,
- new parking lot area,
- Oregon City regional center,
- Oregon Residential Reach Code,
- small scale mobility device,
- surface parking,
- underused parking

Revised definition for: Institutional development



Residential facilities

Code Change	Chapters
“Residential Care Facilities” is revised to “Residential Facilities” to be consistent with ORS 443.400, and the existing definition in OCMC 17.04.1025.	• This change is made in Chapters 17.08 (LDR), 17.10 (MDR), 17.12 (HDR), 17.29 (MUC), 17.34 (MUD), 17.35 (WFD), 17.56 (conditional uses)



17.04.1025 - Residential facility.
"Residential facility" means a residential care, residential training or residential treatment facility licensed or registered by or under the authority of the state licensing agency, as defined in ORS 443.400, under ORS 443.400 to 443.460 or licensed by the State Office for Services to Children and Families under ORS 418.205 to 418.327 which provides residential care alone or in conjunction with treatment or training or a combination thereof for six to fifteen individuals who need not be related. Staff persons required to meet licensing requirements shall not be counted in the number of facility residents, and need not be related to each other or to any resident of the residential facility.

Chapter 17.52 – Off Street Parking and Loading

Code Change	Explanation
17.52.005 – Purpose New purpose statement added	• Although not required for CFEC compliance, this adds a purpose statement to clarify the chapter's intent. • The "Applicability" section below remains separate.



Chapter 17.52 – Off Street Parking and Loading

Code Change	Explanation
• **17.52.010 Applicability** • Expands exempt residential development types to tri-plexes / four-plexes	• CFEC Requirement - Reducing the Burden of Parking Mandates (OAR 660-012-0425) • Oregon City complies per OCMC 17.52.010 – Applicability, but this addition now expressly mentions triplex and 4-plexes for clarity.



Chapter 17.52 – Off Street Parking and Loading

Code Change	Explanation

• **17.52.020 – Number of automobile spaces**
  • Expands the list of exempt uses
  • Adds requirement that parking areas may not exceed floor area for buildings 65,000+.
  • Clarifies shared parking allowance
  • Counts driveways 20’ deep
  • Counts off site parking within 2,000 feet pedestrian travel
  • Accessibility requirements for off-site parking
	• Implements the majority of CFEC requirements in OAR 660-012-0425 and 660-012-0430
	
	• Revised Table 17.52.020 displays minimum and maximum parking by specific use
	
	• Clean-up language references to “minimum” and “required” parking where needed.



Chapter 17.52 – Off Street Parking and Loading

Code Change	Explanation

• **17.52.020(C) Reductions in number of minimum spaces required**
  • Reductions are cumulative / not capped
  • Specifies reductions for
  • solar / wind power
  • Car sharing
  • EV charging
  • Accessible residential units
	• CFEC Requirement - *Reduction of Parking Mandates for Development Types* (OAR 660-012-0430)
	• Self-explanatory
	• Prescriptive



Chapter 17.52 – Off Street Parking and Loading

Code Change	Explanation

• **New section 17.52.025(C) Reuse and redevelopment of underused parking allowed**
  • Allowed through a Type I process
  • References to “minimum” and “required” parking have been removed in accordance with CFEC guidance
	• CFEC Requirement - *Allow redevelopment of a portion of a parking lot for bike or transit uses* (660-012-0405(1)(b))
	• *Allow and encourage redevelopment of underused parking* (660-012-0405(2))
	• See new definition for underused parking –
	“parking lots or facilities that are below 50% of capacity most or all of the time.”



Chapter 17.52 – Off Street Parking and Loading

Code Change	Explanation

• **Section 17.52.030 – Standards for Automobile Parking - (E) Carpool and Vanpool Parking**
  • Lowers threshold for preferential location from 75 to 50 spaces
  • Adds specific uses – government offices, group homes, nursing and retirement homes, schools, designated employee parking areas, transit park-and-ride facilities to which this applies
	• CFEC Requirement - *Preferential placement of carpool/vanpool parking (660-012-0405(1)(a)).*
	• Oregon City's requirements meet or exceed those from the new OAR, except for the lower threshold of 50 spaces



Chapter 17.52 – Off Street Parking and Loading

Code Change	Explanation

• **17.52.040 Bicycle parking standards.**
  • Increases bicycle spaces for multi-family and mixed use with 5 or more units
  • 1 space per 2 units
  • Requires lighting
  • Requires space for large, family and cargo bikes (3’ X 6’)
	• CFEC Requirement
	• Bicycle Parking Requirements (OAR 660-012-0630)
	• Minimum bicycle parking requirements for certain uses (660-012-630(2))
	• Covered bicycle parking required for multifamily and mixed-use residential (660-012-630(3))



Chapter 17.52 – Off Street Parking and Loading

Code Change	Explanation

• **17.52.060. Parking Lot Landscaping**
  • Adds 40% tree canopy requirement for new parking lots of ½ acre or more
  • 30% minimum tree canopy along drive aisles
  • Allows solar panels in lieu of trees, 0.5 kw per space
	CFEC Requirement
	• *Tree canopy, solar, or fee-in-lieu, for parking more than ½ acre (660-012-0405(4)(a))*
	• Does not allow fee-in-lieu of planting per public engagement direction
	• NRC / Staff to develop list of appropriate trees for parking lot canopy



Chapter 17.52 – Off Street Parking and Loading

Code Change	Explanation

• **17.52.070. Electrical Vehicle Charging**
  • Min. 20% of spaces EV ready for non-residential & mixed use with < 5 units
  • Min. 40% of spaces “EV ready” for multi-family and mixed use with > 5 units
	CFEC Requirement
	• *Electric Vehicle Charging (OAR 660-012-0410)*
	• *Electric Vehicle Charging (OAR 660-012-0410)* New definitions for electrical service capacity, level 2 electric vehicle charging station (240V)



Chapter 17.62 – Site Plan and Design Review

Code Change	Explanation

• **17.62.035.A.(2). Type I Minor Site Plan and Design Review**
  • Revise (o), removal of relocation of vehicle parking stalls to accommodate
  • "… tree planting, landscaping, stormwater facilities, solar and wind power equipment, outdoor seating, parking for bicycles, scooters and other small scale mobility devices, pedestrian improvements and similar purposes"
	CFEC Requirement
	Allow redevelopment of a portion of a parking lot for bike or transit uses (660-012-0405(1)(b))
	
	Allow and encourage redevelopment of underused parking (660-012-0405(2))
	
	Type I administrative review process for redevelopment and repurposing of parking lots (already permitted).



Chapter 17.62 – Site Plan and Design Review

Code Change	Explanation

• **17.62.050. General Standards**
  • Revises (C) pertaining to pedestrian circulation to alert drivers with a raised surface or change in texture / height at drive-aisles crossings, not striping
  • Requires illumination of pedestrian paths to same level as parking lot
	CFEC Requirement
	Implements the requirement for certain designs for Pedestrian connections through large parking lots (660-012-0405(4)(c))

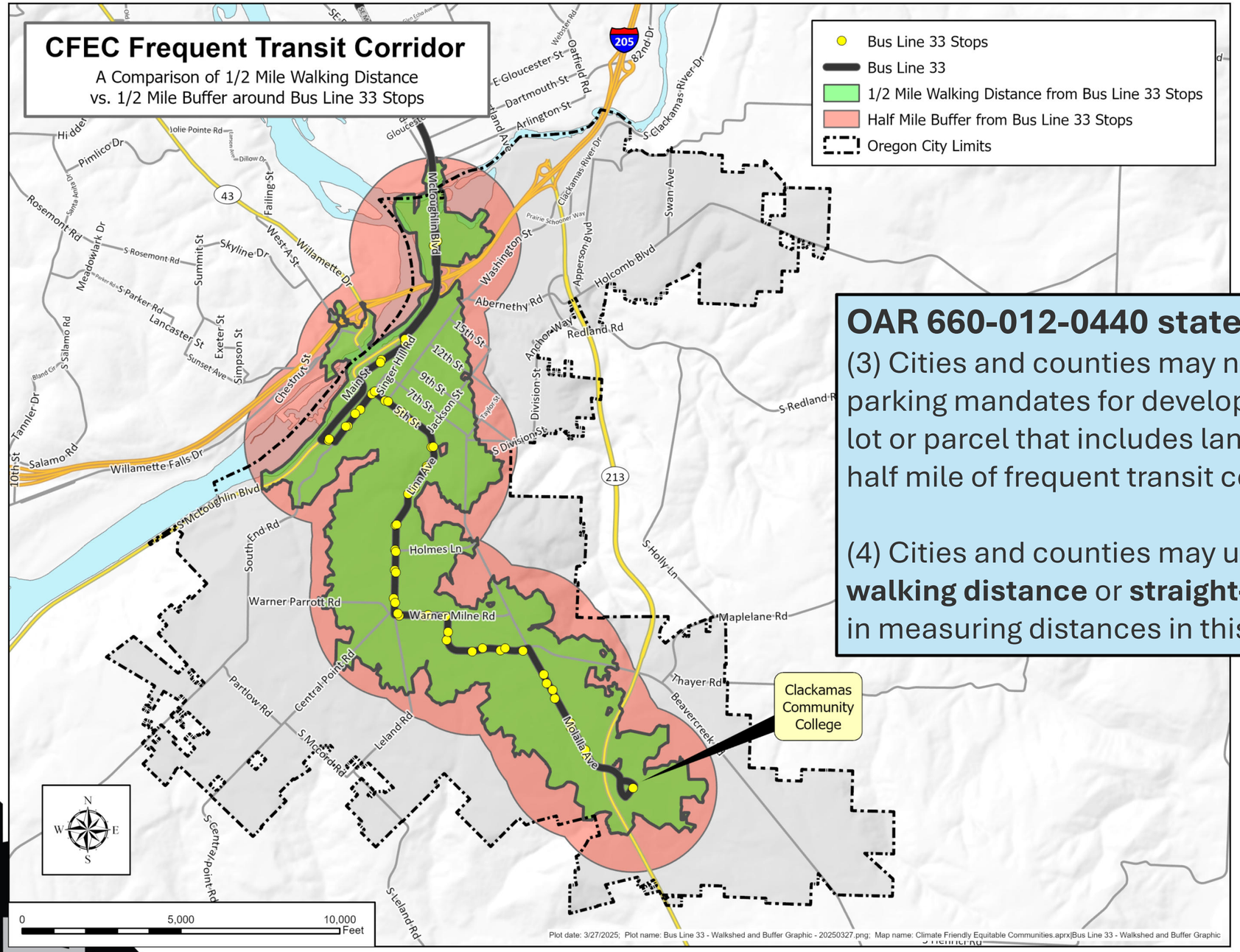


Additional Chapters / Sections

Code Change	Explanation
• **17.54.115 – Mobile Food Units**	• Clean-up language references to “minimum” and “required” parking where needed.
• **17.62.065 Outdoor Lighting**	• Adds lighting requirement for bicycle parking areas.
• Chapters 17.08 (LDR), 17.10 (MDR), 17.12 (HDR), 17.29 (MUC), 17.34 (MUD), 17.35 (WFD), 17.56 (conditional uses)	• Residential Care Facilities” is revised to “Residential Facilities” to be consistent with ORS 443.400, and the existing definition in OCMC 17.04.1025*

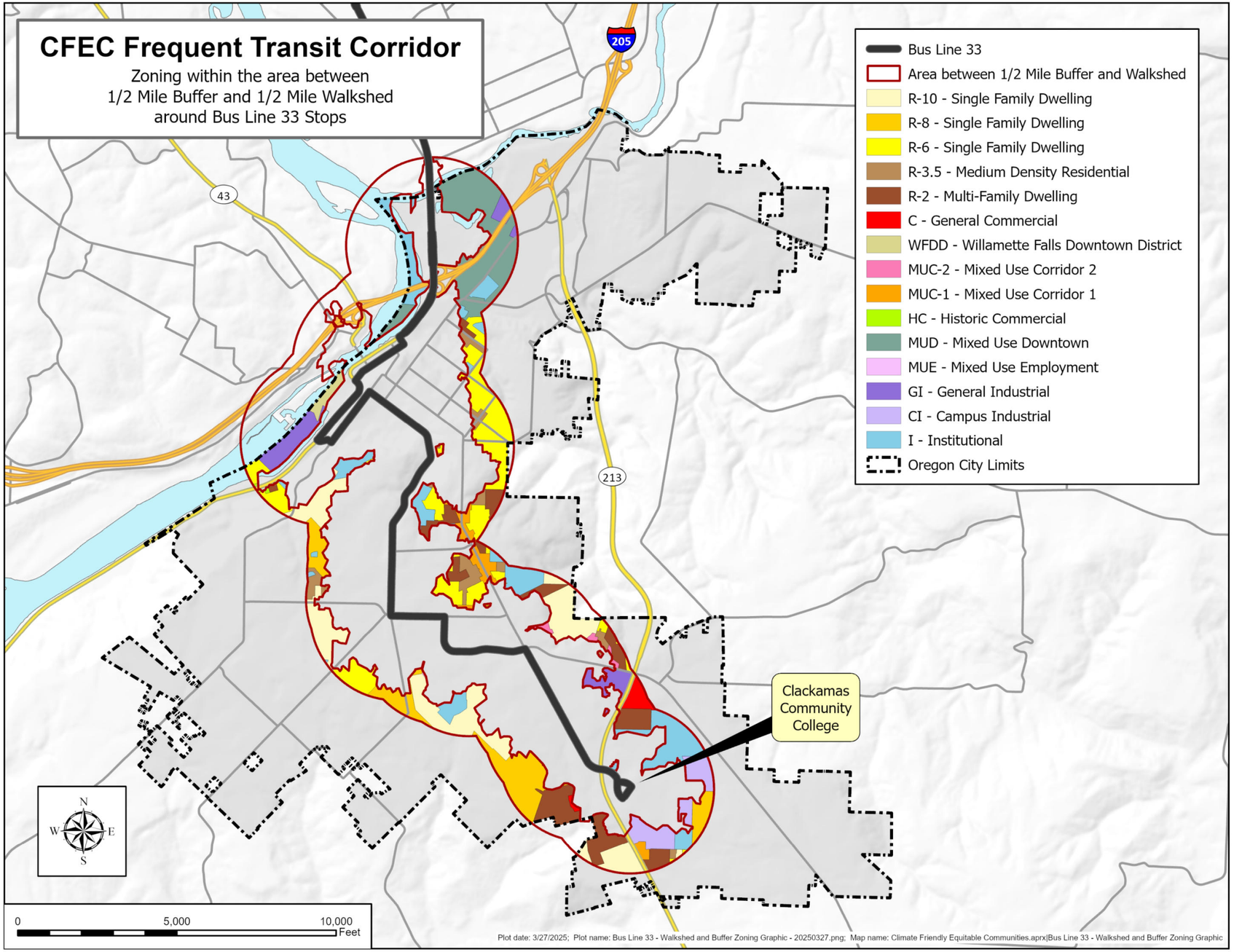


**17.04.1025 - Residential facility.*
"Residential facility" means a residential care, residential training or residential treatment facility licensed or registered by or under the authority of the state licensing agency, as defined in ORS 443.400, under ORS 443.400 to 443.460 or licensed by the State Office for Services to Children and Families under ORS 418.205 to 418.327 which provides residential care alone or in conjunction with treatment or training or a combination thereof for six to fifteen individuals who need not be related. Staff persons required to meet licensing requirements shall not be counted in the number of facility residents, and need not be related to each other or to any resident of the residential facility.


CFEC Frequent Transit Corridor
A Comparison of 1/2 Mile Walking Distance
vs. 1/2 Mile Buffer around Bus Line 33 Stops
Bus Line 33 Stops
Bus Line 33
1/2 Mile Walking Distance from Bus Line 33 Stops
Half Mile Buffer from Bus Line 33 Stops
Oregon City Limits
OAR 660-012-0440 states:
(3) Cities and counties may not enforce parking mandates for developments on a lot or parcel that includes lands within one-half mile of frequent transit corridors,
(4) Cities and counties may use either walking distance or straight-line distance in measuring distances in this rule.
Clackamas Community College
McLoughlin Blvd
Main St
Singer Hill Rd
12th St
15th St
9th St
7th St
5th St
Jackson St
Linn Ave
Holmes Ln
Warner Milne Rd
Warner Parrott Rd
Molalla Ave
Washington St
Abernethy Rd
Redland Rd
Holcomb Blvd
Swan Ave
Apperson Blvd
Division St
S Holly Ln
Maplelane Rd
Thayer Rd
Beavercreek Rd
Willamette Falls Dr
Salamo Rd
Chestnut St
Central Point Rd
Leland Rd
Partlow Rd
South End Rd
S McLoughlin Blvd
Oatfield Rd
Dartmouth St
Arlington St
E Gloucester St
82nd Dr
S Clackamas River Dr
Pimlico Dr
Rosemont Rd
S Rosemont Rd
Skyline Dr
Willamette Dr
West A St
Failing St
Summit St
Meadowlark Dr
S Parker Rd
Lancaster St
Exeter St
Simpson St
Sunset Ave
S Salamo Rd
Tannler Dr
10th St
Bland Cir
Prairie Schooner Way
Anchor Way
S Redland Rd
S Central Point Rd
S Leland Rd
43
205
213
N
W
E
S
0
5,000
10,000
Feet
Plot date: 3/27/2025; Plot name: Bus Line 33 - Walkshed and Buffer Graphic - 20250327.png; Map name: Climate Friendly Equitable Communities.aprx|Bus Line 33 - Walkshed and Buffer Graphic

- If the walkshed measurement is used, there are several zones with uses that may require minimum parking.
- Walkshed measurement was suggested as a method to potentially mitigate for the topography changes in Oregon City that could present challenges to pedestrians.
- **Staff is requesting direction from the Planning Commission on which measurement to use:**
  - **Straight-line distance; or**
  - **Walking distance**





Amended language for walkshed approach

Code Change
• **17.53.020 – Number of Automobile Spaces** A. Exemptions. The City shall not require a minimum number of parking spaces in the following situations. 2. Developments on a lot or parcel that includes lands within one-half (1/2) mile **walking distance** of a frequent transit corridor **per OAR-012-0440**. 3. Per OAR 660-012-0435, no off-street parking is required within the Oregon City Regional Center, and within one-quarter mile **walking distance** of the Oregon City Regional Center.



Options

1. Recommend approval of the proposed CFEC code amendments to the City Commission with a recommendation to use the walking distance measurement for the half-mile transit corridor.

2. Recommend approval with modifications to the proposed CFEC code amendments to the City Commission and a recommendation to use the walking distance measurement for the half-mile transit corridor.

3. Request revisions and modifications and continue the public hearing to a date certain.



Clackamas Community College Master Plan 2024-44

Planning Commission Hearing
April 14, 2025



The 2024-44 Clackamas Community College Master Plan…

…is a General Development Plan (GDP) that achieves 3 main objectives:

1. Establishes a 20-year horizon (2024-44) in which the future phases of anticipated development will be reviewed.
2. Locks the review criteria for future development phases to the code in effect as of August 1, 2024.
3. Requests that future accessory structures up to 3,000 square feet - that do not create offsite impacts - are reviewed through a Type I Master Plan Amendment process, rather than what would typically be a higher level of review.



Overview

- The previous Concept Plan (CP-07-0001) has expired. Any new development, even for small accessory structures, is due to be reviewed under a new GDP.
- The applicant is requesting no adjustments to Oregon City Municipal Code at this stage.
- The applicant proposes an expansion of 106,000 square feet of new primary structures in 2 separate phases:
  - **Phase I:** Natural Resources Center of Excellence expansion.
  - **Phase II:** Wacheno Welcome Center.
  - **Additional Items:**
    - Various new accessory structures such as greenhouses, storage buildings, barns, sheds, open-sided shelters, etc.
    - Requested to be reviewed through a Type I Master Plan Amendment process.



Project List

Project	Location	Notes
Existing Building Renovations	Existing building sites	May include: Barlow, McLoughlin, Gregory Forum, Dye Learning Center, Family Resource Center, Community Center, Clairmont
Natural Resources Center of Excellence	Beavercreek cluster	Horticulture, arboriculture, wildland fire, farming, welding. (Up to. 50,000 s.f. new buildings.)
Athletics Improvements	Athletic field area	Track and field upgrades, , grandstands, restrooms, lighting, soccer, baseball, softball, equipment storage buildings, etc.
Campus Services	Campus Services area	New grounds building, storage, covered parking. (Approx. 3,000 s.f.)
Pathways and Plazas	Multiple locations	Complete Douglas Loop walking trail, renovate central plaza, ADA upgrades around campus
Wacheno Welcome Center, Phase 2	On footprint of Bill Brod Community Center	Replacement of existing building and expansion of Wacheno Welcome Center (Approx. 50,000 s.f. net)



Table provided by Applicant and included in the Staff Report

Items To Consider

- The applicant explains that the proposed 106,000 square feet of additional building area will not likely create off-site impacts because enrollment is down 33% since 2019 and on-campus trips are now well below the capacity of the current build-out.
- Staff acknowledges these aspects, but has determined that offsite impacts should be examined when Type II or Type III Detailed Development Plans and significant Master Plan Amendments are submitted.
- The applicant is not requesting any adjustments from Oregon City Municipal Code as this GDP phase.
- Any adjustments will be requested at the Detailed Development Plan stage for each phase of development.
  - Such adjustment requests will require a Type III DDP review process.



Existing Conditions

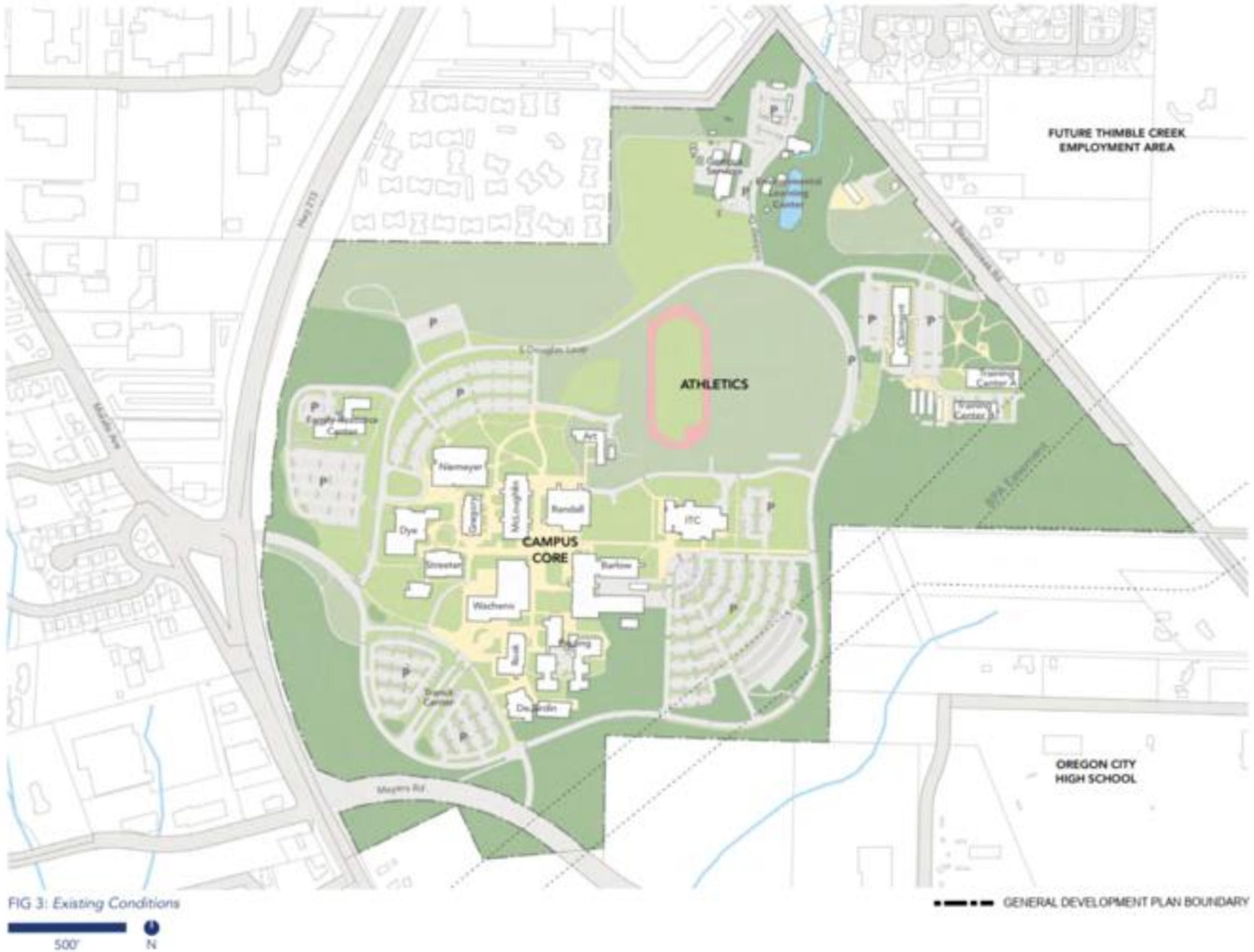


Figure provided by Applicant and included in the Staff Report

Proposed Development Areas

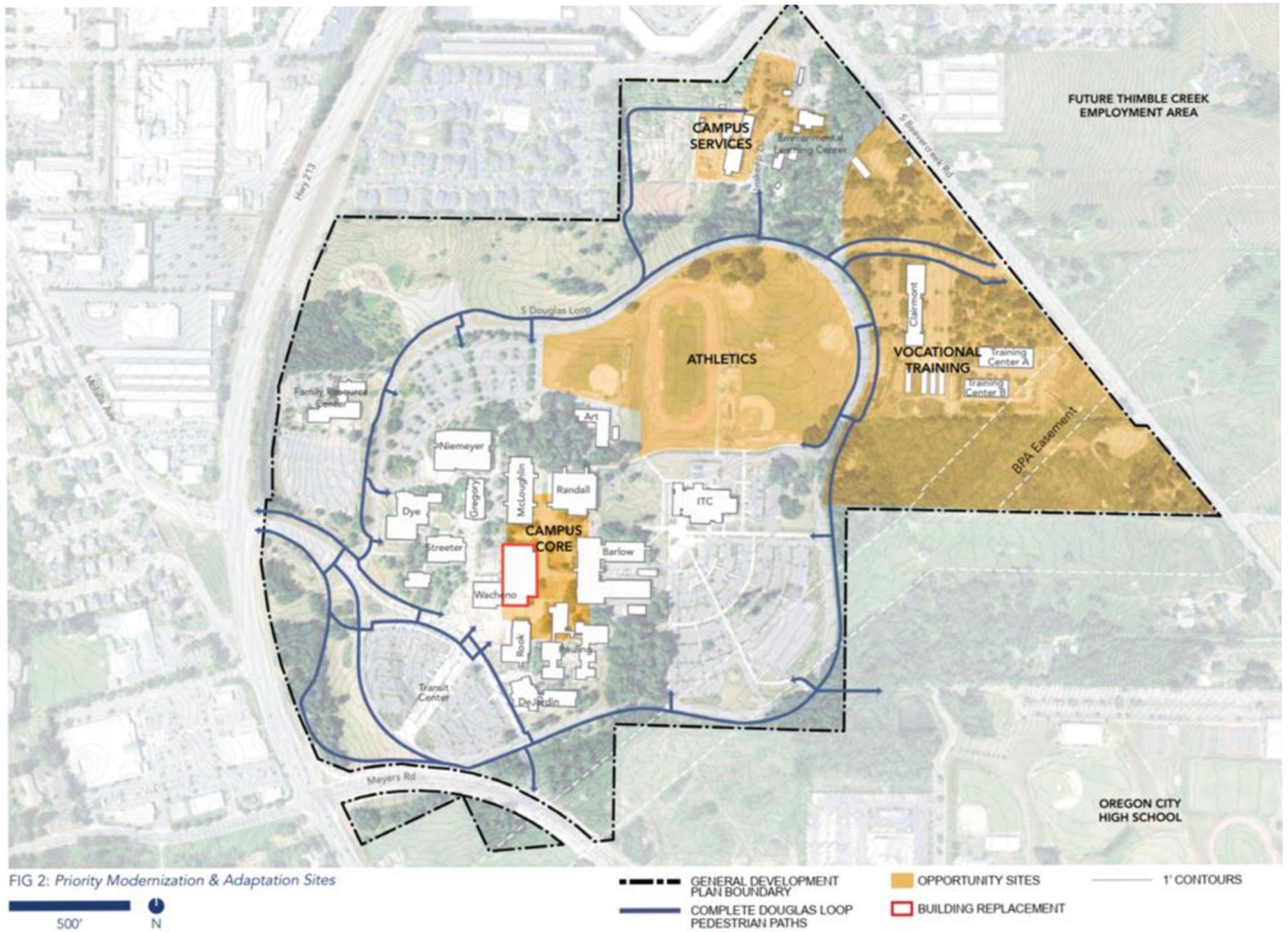


Figure provided by Applicant and included in the Staff Report

Zoning & Overlays

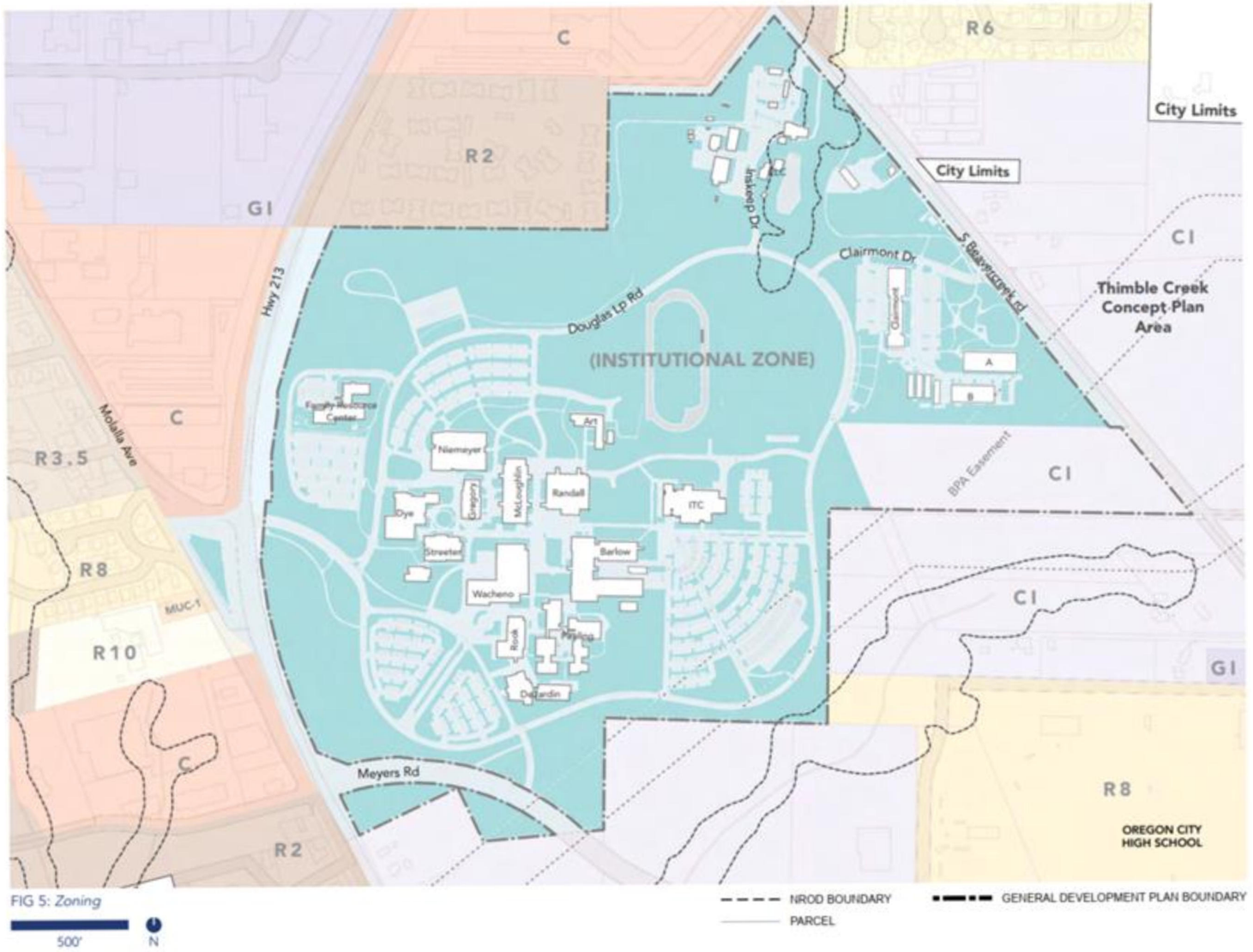


Figure provided by Applicant and included in the Staff Report

Site Circulation Plan

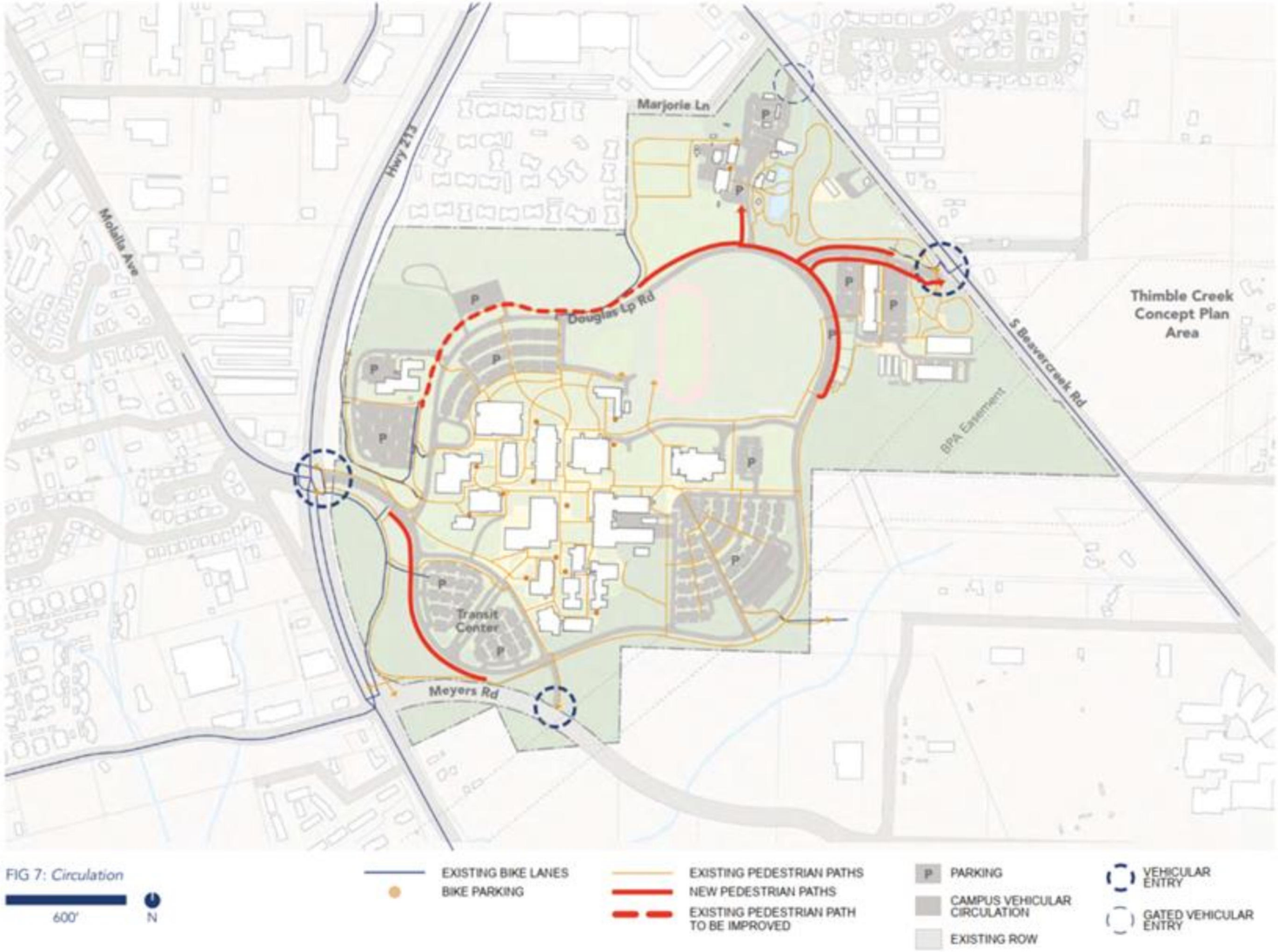


Figure provided by Applicant and included in the Staff Report

Sanitary Sewer Plan

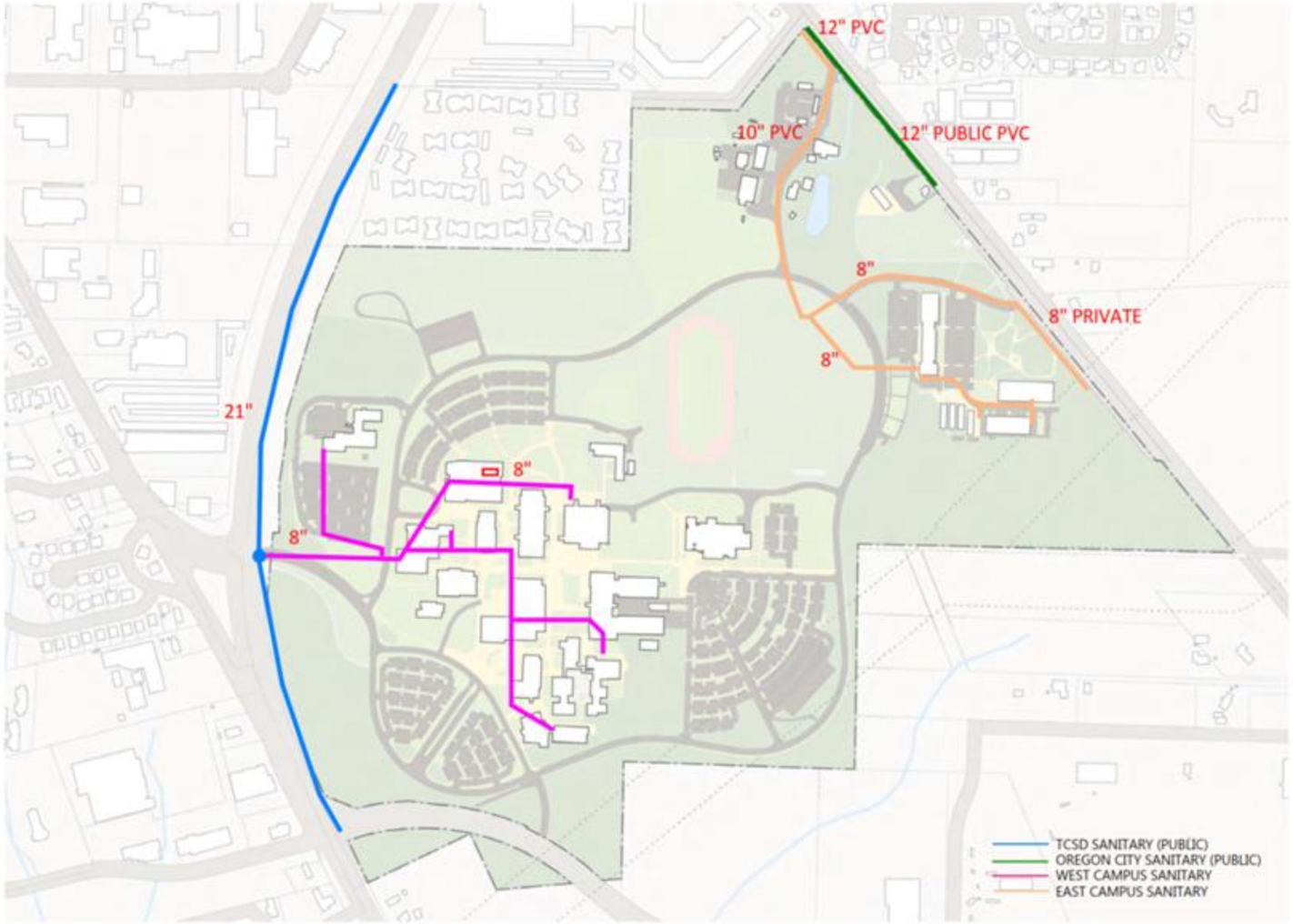


Figure provided by Applicant and included in the Staff Report

Stormwater Plan

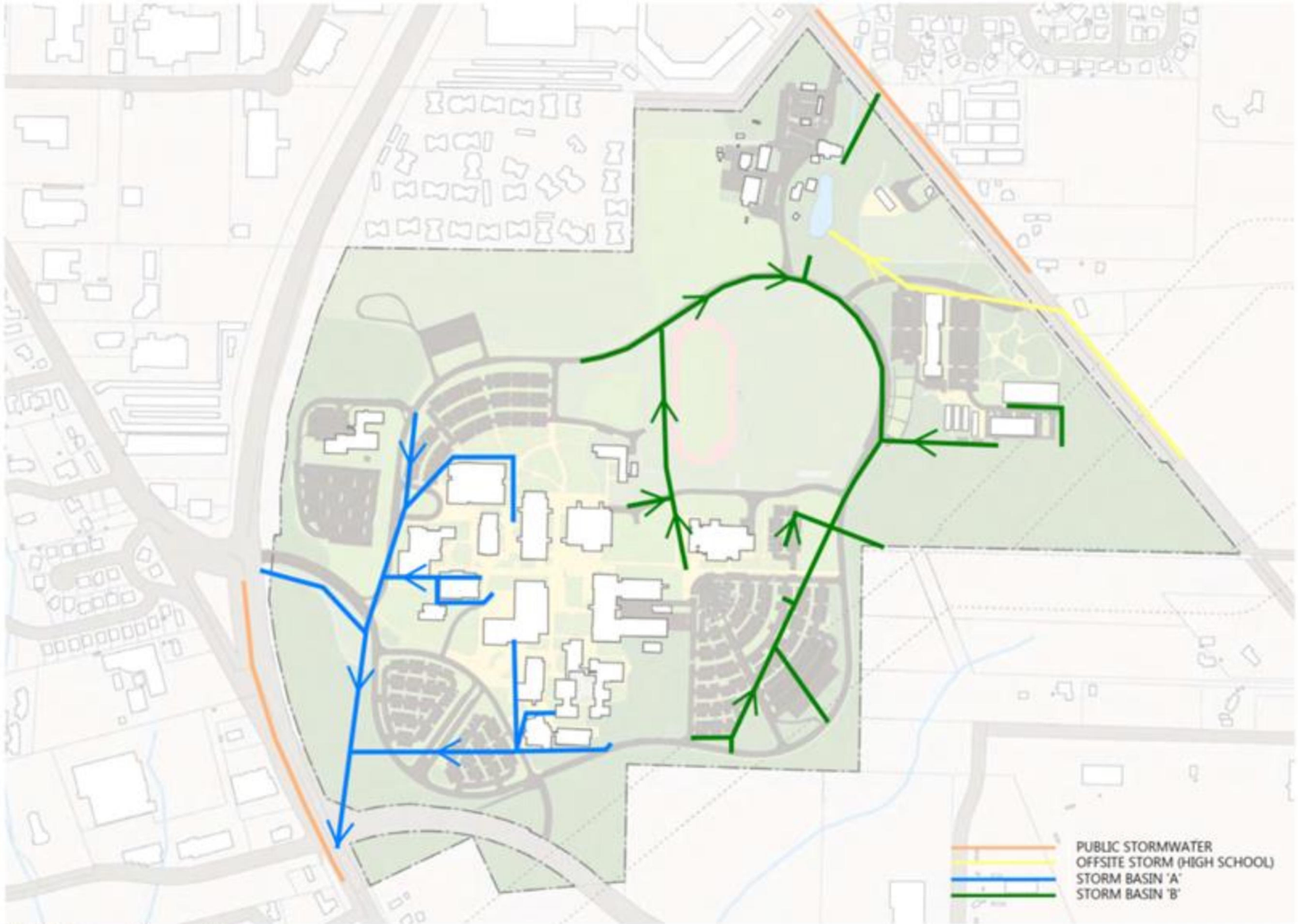


FIG 9: *Existing and Proposed Stormwater*

Figure provided by Applicant and included in the Staff Report

Water Utility Plan

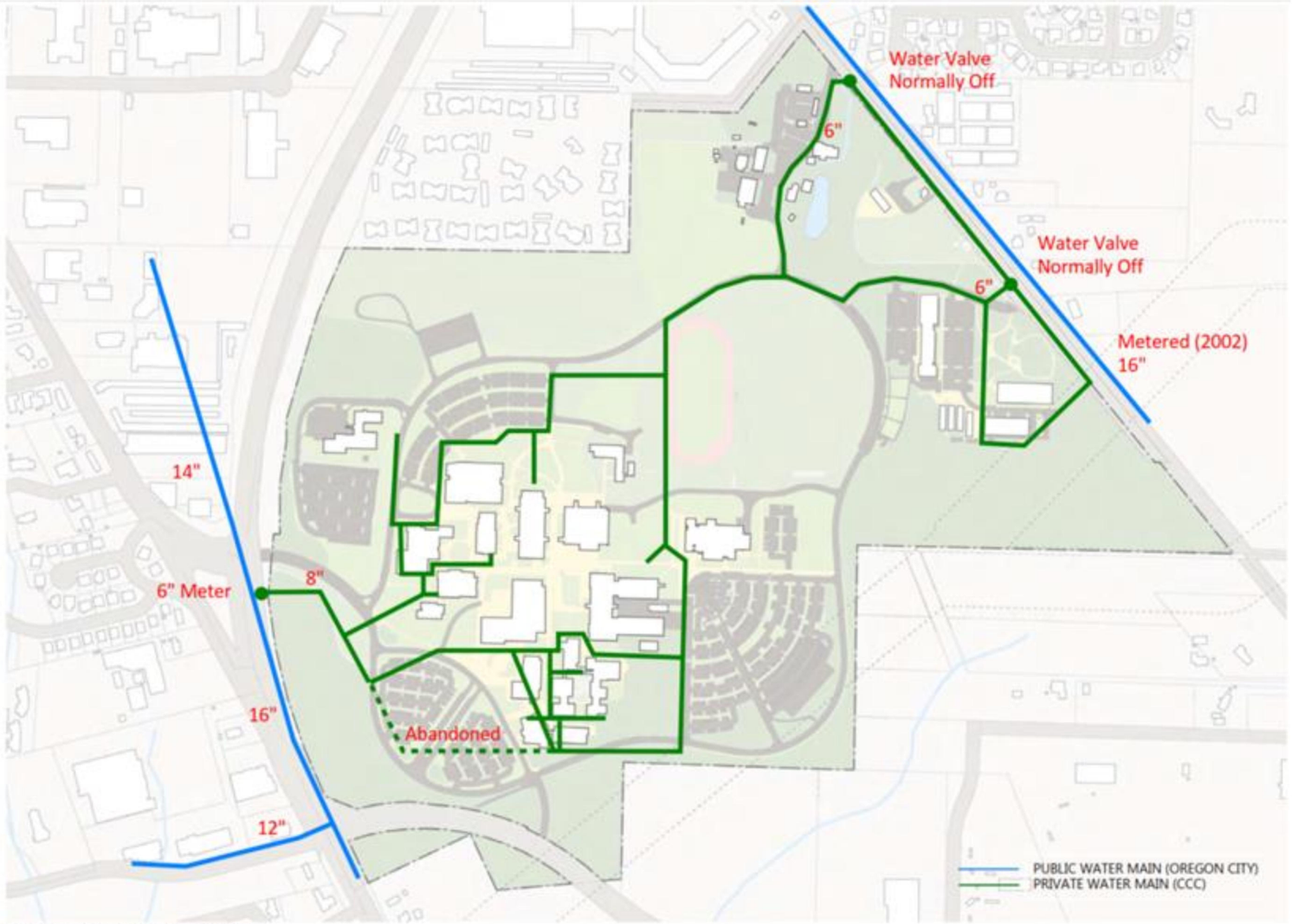


FIG 10: *Existing and Proposed Water*

Figure provided by Applicant and included in the Staff Report

General Development Plan Approval Criteria

1. The proposed general development plan is consistent with the purposes of OCMC 17.65.

2. Development shall demonstrate compliance with OCMC 12.04 16.12, 17.62, if applicable, and 16.08, if applicable.

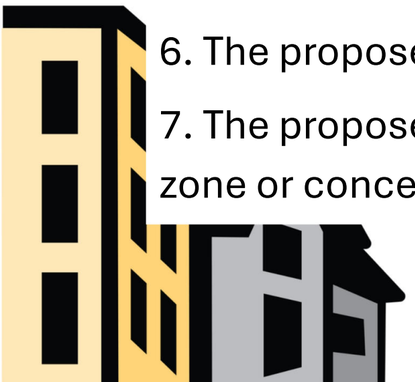
3. Public services for transportation, water supply, police, fire, sanitary waste disposal, storm-water disposal, and any other needed public services and facilities including schools and parks for proposed residential uses, are capable of serving the proposed development, or will be made capable by the time each phase of the development is completed.

4. The proposed general development plan protects any inventoried Goal 5 natural, historic or cultural resources within the proposed development boundary consistent with the provisions of applicable overlay districts.

5. The proposed general development plan, including development standards and impact mitigation thresholds and improvements, adequately mitigates identified impacts from each phase of development. For needed housing, as defined in ORS 197.303(1), the development standards and mitigation thresholds shall contain clear and objective standards.

6. The proposed general development plan is consistent with the Oregon City Comprehensive Plan.

7. The proposed general development plan is consistent with the underlying zoning district(s) and any applicable overlay zone or concept plans.



General Development Plan Approval Criteria

8. For projects with a residential use component, the proposed general development plan includes common open space for the recreational needs of the development's residents.

a. Required open space shall be located either on-site or off-site within one-quarter mile of the development.

b. Minimum required open space shall be one hundred square feet per residential unit in the development.

c. The open space area may be in private ownership or proposed for public dedication, at the city's discretion whether to accept.

d. The open space shall be developed with a unified design to provide for a mix of passive and active uses. Passive uses include, but are not limited to sitting benches, picnicking, reading, bird watching and natural areas. Active uses include, but are not limited to playgrounds, sports fields and courts, running and walking areas.

e. Land area to be used for the open space area that is required in this section shall not include required setback areas, required landscaping, streets, rights-of-way, driveways, or parking spaces.

f. Unless dedicated to the public, the applicant shall also provide an irrevocable legal mechanism for the maintenance of the open space and any related landscaping and facilities. The applicant shall submit, for city review and approval, all proposed deed restrictions or other legal instruments used to reserve open space and maintenance of open space and any related landscaping and facilities.



Revised Conditions of Approval

Condition 9: Development on Taxlots 3-2E-09D -00100, 00200, 00201, and 00202 within the 2024-44 timeframe of this GDP shall require a new Type III Master Plan process. (P)

Reason: Taxlot 3-2E-09A -01400 is part of the original applicant submittal and is covered by this GDP. The additional taxlots listed above were recently purchased by Clackamas Community College and are not included in this GDP.

Condition 10: The curb ramp at Marjorie Lane and driveway approaches that intersect with the public sidewalk along the frontage of Beavercreek Road shall be reconstructed as needed to be ADA compliant with the Type II or Type III Detailed Development Plan (DDP) that covers Phase 1 of the GDP, the Natural Resources Center of Excellence. (DS)

Reason: The applicant requested additional specificity for the requirements surrounding ADA compliance.



Next Steps

1. **Approve** GLUA-24-00020/MAS-24-00001 with recommended and revised conditions.

2. **Approve** GLUA-24-00020/MAS-24-00001 with revised Planning Commission findings and Conditions of Approval.

3. **Deny** GLUA-24-00020/MAS-24-00001 with revised findings and provide further direction to Staff.

4. **Continue** GLUA-24-00020/MAS-24-00001 and keep the public record open to the next Planning Commission meeting.





General Development Plan
GLUA-24-00020 / MAS-24-00001



FIG 3: *Existing Conditions*

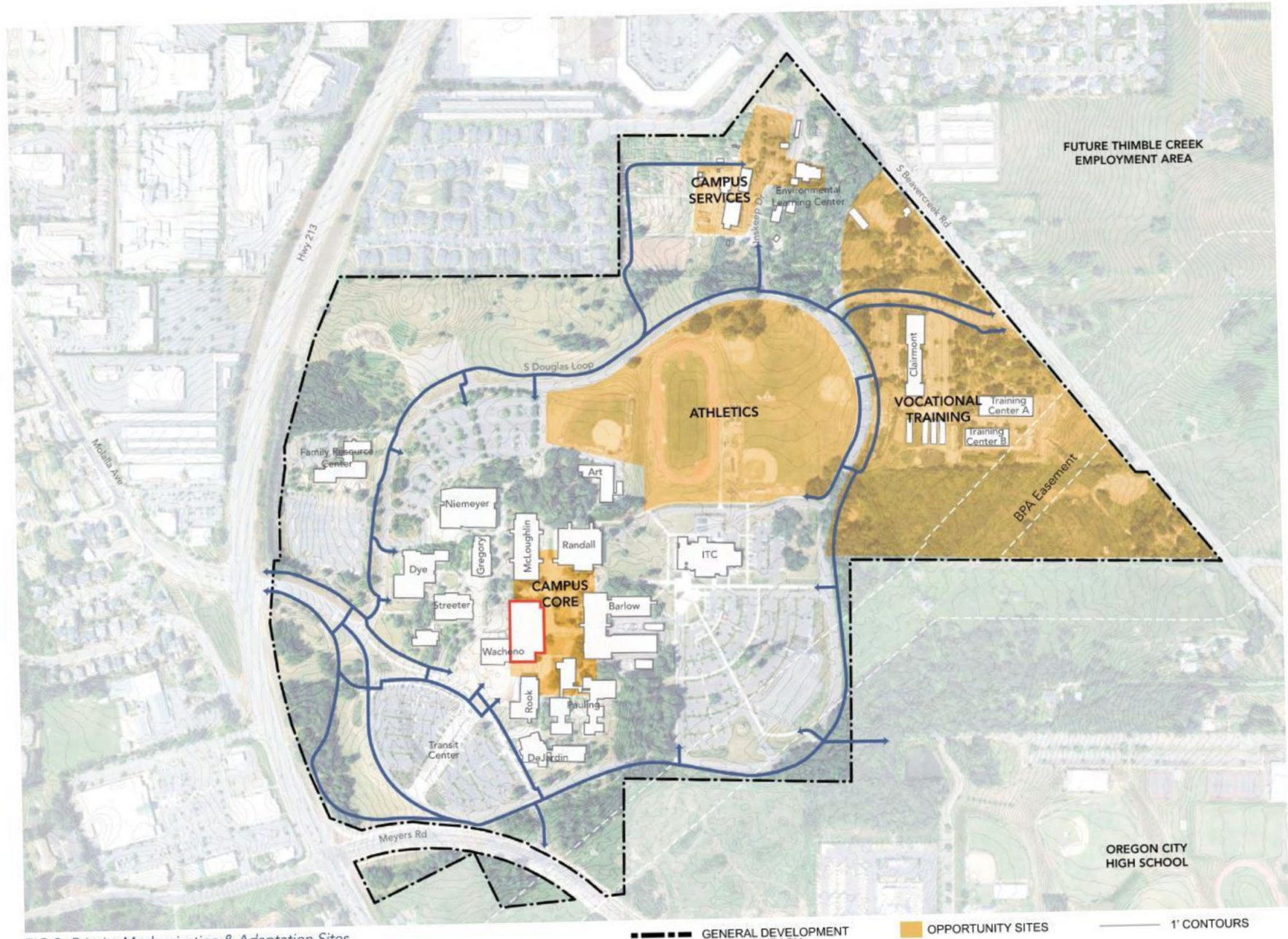


FIG 2: *Priority Modernization & Adaptation Sites*

Master Plan Project List

Project	Location	Notes
Existing Building Renovations	Existing building sites	May include: Barlow, McLoughlin, Gregory Forum, Dye Learning Center, Family Resource Center, Community Center, Clairmont
Natural Resources Center of Excellence	Beavercreek cluster	Horticulture, arboriculture, wildland fire, farming, welding. (Up to. 50,000 s.f. new buildings.)
Athletics Improvements	Athletic field area	Track and field upgrades, grandstands, restrooms, lighting, soccer, baseball, softball, equipment storage buildings, etc.
Campus Services	Campus Services area	New grounds building, storage, covered parking. (Approx. 3,000 s.f.)
Pathways and Plazas	Multiple locations	Complete Douglas Loop walking trail, renovate central plaza, ADA upgrades around campus
Wacheno Welcome Center, Phase 2	On footprint of Bill Brod Community Center	Replacement of existing building and expansion of Wacheno Welcome Center (Approx. 50,000 s.f. net)

News

CCC thanks community for support in passing bond

Nov 18, 2024, 17:01 by CCC Staff



OREGON CITY – Clackamas Community College extends its gratitude to the voters for their support

Public Impacts Are Reduced

