



CASTLE ROCK CITY COUNCIL AGENDA

Regular Meeting: Wednesday, January 24, 2024
6:00 PM

Location

Castle Rock Senior Center
222 Second Ave SW
Castle Rock, WA 98611

AGENDA

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1. CALL TO ORDER

- a. Pledge of Allegiance
- b. Roll Call

2. PUBLIC HEARINGS

- a. Public Hearing Procedures
- b. Proposed Development Agreement for the Landing on the Cowlitz Master Planned Mixed Use Development.

3. NEW BUSINESS

- a. Resolution No. 2024-03, a resolution of the Castle Rock, Washington City Council approving and authorizing execution of a Development Agreement for the Landing on the Cowlitz Mixed-Use Master Planned Development.

4. ADJOURNMENT

NEXT REGULAR COUNCIL MEETINGS:

February 12, 2024

February 26, 2024

March 11, 2024

Non-Discrimination Statement: This institution is an equal opportunity provider and employer. If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at https://www.ascr.usda.gov/sites/default/files/Complain_combined_6_8_12_508_0.pdf or at any USDA office, or call 866.632.9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter by mail to USDA, Office of the Assistant Secretary for Civil Rights, 1400 Independence Ave, SW, Stop 9410, Washington, DC 20250-9410 or email to program.intake@usda.gov or by fax (202) 690-7442.

Title VI: The City of Castle Rock ensures compliance with Title VI of the Civil Rights Act of 1964 and American Disabilities Act of 1990 by prohibiting discrimination against any person on the basis of race, color, national origin, sex or disabilities in the provision of benefits and services from its federal assisted programs and activities. If you need special accommodations to participate in this meeting, please contact Carie Cuttonaro at 360.274.8181 by 9:00 a.m. three days prior to the meeting.

City Council may add and take action on other items not listed on this Agenda.



City of Castle Rock

Public Hearing Procedures

Ensuring Order and Safety

- Every person must be respectfully treated. Any kind of intimidation will not be tolerated.
- No clapping, cheering, or jeering during the meeting. This includes speaking out of turn and loud talking, either in support or in opposition.

Virtual/Phone-in Rules

- Remain muted unless called on to speak. If you are calling in, try dialing *6 to mute and unmute yourself.
- Turn off your video camera.
- Please be respectful to all participants.

Public Hearing Testimony

- Individuals wishing to participate by providing testimony, may sign-in on the sign-in sheet and may speak after being recognized by the Mayor.
- Virtual/phone attendees will be given an opportunity to provide testimony.

- Testimony shall be limited to three (3) minutes, or another time limit, at the discretion of the Mayor.
- Councilmembers will not rebut, question, or make comments on the specific testimony that has been made.
- After all individuals have spoken, the hearing will be closed to testimony.
- Council will then proceed with deliberation and decision making.

If an individual or group of persons becomes as disruptive as to render the orderly conduct of a Council meeting unfeasible, the following actions may be taken under RCW 42.30.050:

- a. The person presiding over the meeting may request that the individual or group voluntarily leave the meeting. If they refuse to do so, the police may be summoned to remove them;
- b. A majority of the members of the governing body may vote to clear the room. Persons with a valid press credential, or scheduled to appear on the agenda may be readmitted; or
- c. A majority of the members may vote to adjourn the meeting and reconvene in a new location. When doing so, the governing body must:
 - i. Provide the media in attendance and persons scheduled to appear on the agenda, who were not part of the disruption, with notice of the new location and an opportunity to attend;
 - ii. Post an order or adjournment citing the new time and location at the entrance to the disrupted meeting location; and
 - iii. At the reconvened meeting, take final disposition only on matters appearing on the agenda.
- d. Disruptive behavior includes impertinent or slanderous remarks or being boisterous, threatening, or personally abusive to elected officials, staff or the public.

City of Castle Rock, WA
Proposed Development Agreement—Landing on the Cowlitz Master Planned Mixed Use
Development
Notice of Public Hearing

NOTICE IS HEREBY GIVEN that the City Council of the City of Castle Rock will conduct a public hearing to receive and consider public testimony on the proposal described below:

Project Name: Landing on the Cowlitz Development Agreement

Description: Development agreement for a previously approved mixed-use development with light industrial, commercial, residential, recreational, and open space uses, and supporting infrastructure.

Location: At the southern end of the City of Castle Rock between the BNSF rail line and Salmon Creek to the east, the Cowlitz River to the west, and Timberlake Church to the north. Parcel nos. 30812, 308640200, 30864, 308100100, 30813, 6143802, and 308640100.

Applicant: Shane Tapani of CT6, LLC

Hearing Date: January 16, 2024 at 6:00 P.M.

Hearing Place: Castle Rock Senior Center, 222 Second Avenue SW, Castle Rock, WA.

YOU ARE INVITED to attend and provide testimony to the City Council on the above proposal. You may also attend the meeting and participate in the hearing via phone or virtually through GoTo Meeting:

To join this meeting from your computer, tablet or smartphone:

<https://global.gotomeeting.com/join/201632365> To join this meeting using your phone: +1 (646) 749-3112 Access Code: 201-632-365 (Press *6 to speak) New to GoToMeeting? Get the app now and be ready: <https://global.gotomeeting.com/install/201632365>

Written comments will be accepted up to and at the public hearing. You may also provide written comments via email by contacting the staff member listed below.

Questions: For more information on the proposal, please contact Karlene Akesson at 360-274-8181 ext. 302 or kakesson@ci.castle-rock.wa.us or at the address listed below. Documents can be viewed at Castle Rock City Hall, 141 "A" Street SW, Castle Rock, WA 98611.

RESOLUTION NO. 2024-03

A RESOLUTION OF THE CASTLE ROCK, WASHINGTON CITY COUNCIL APPROVING AND
AUTHORIZING EXECUTION OF A DEVELOPMENT AGREEMENT FOR THE LANDING ON THE
COWLITZ MIXED-USE MASTER PLANNED DEVELOPMENT

WHEREAS, the Washington State legislature authorizes development agreements pursuant to RCW 36.70B.170 through 36.70B.210; and

WHEREAS, on March 8, 2021, the Council of the City of Castle Rock met and adopted Ordinance No. 2021-01 adopting interim zoning controls to establish procedures for the public review of master planned developments including entering into development agreements; and

WHEREAS, on November 8, 2021, the Council of the City of Castle Rock met and adopted Ordinance No. 2021-10 approving the Landing on the Cowlitz Mixed-Use Master Planned Development to construct up to 624,000 square feet of light industrial uses, 98,000 square feet of commercial uses, 200 residential units, and 200 recreational vehicle spaces, subject to conditions and authorizing the preparation of a Development Agreement; and

WHEREAS, CT6, LLC has requested the City of Castle Rock, CT6, LLC, Raymond Pieren, and MLC Ventures LLC enter into a Development Agreement to implement the Landing on the Cowlitz Mixed-Use Master Planned Development by setting forth the development standards and other provisions that will vest and govern the development, use, and mitigation of the aforementioned property; and

WHEREAS, pursuant to RCW 36.70B.200, the Castle Rock City Council held a public hearing on the proposed development agreement on January 16, 2024, and after considering all testimony presented at the public hearing, determined that a development agreement for the aforementioned property should be approved; and

WHEREAS, the City of Castle Rock and CT6, LLC are providing mutual benefits as described in the Development Agreement; and

WHEREAS, the City Council finds that approval of this Development Agreement will promote the public health, safety, and general welfare within the City of Castle Rock and is in the City's best interest.

NOW, THEREFORE the City Council of the City of Castle Rock does resolve as follows;

SECTION 1. Development Agreement Approved. That certain agreement entitled, "Landing on the Cowlitz Mixed-Use Master Planned Development Final Development Agreement Between the City of Castle Rock, Washington, CT6, LLC, Raymond Pieren, and MLC Ventures LLC" attached hereto as Exhibit A and incorporated herein by this reference as if set forth in full, is hereby approved and shall govern the development of the aforementioned Landing on the Cowlitz property described in said agreement. The Mayor is hereby authorized to execute the development agreement on behalf of the City.

SECTION 2. Recording. As provided in RCW 36.70B.190, a signed original of the agreement shall be recorded with the real property records of Cowlitz County, Washington and shall be binding on all parties and their successors and assigns for the term of the agreement.

RESOLVED by the City Council and signed by the Mayor at a regular meeting thereof on the _____ day of _____, 2024.

Mayor Paul Helenberg

ATTEST:

APPROVED AS TO FORM:

Carie Cuttonaro, Clerk-Treasurer

Frank Randolph, City Attorney

City of Castle Rock

PO Box 370
Castle Rock, WA 98611
(360) 274-7478



Landing on the Cowlitz—Proposed Development Agreement

Date of Application: August 7, 2023
Notice of Public Hearing: December 30, 2023
Staff Recommendation: Approval

Staff Contact

Cristina Haworth, AICP, Planning Consultant
SCJ Alliance
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Lacey, WA 98516
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Applicant & Property Owner

Shane Tapani
CT6, LLC
1705 SE 9th Avenue
Battle Ground, WA 98604
360.687.1148
shanet@tapani.com

Summary of Proposal

The proposal is a Development Agreement between the Applicant (CT6, LLC) and the City of Castle Rock (City) to implement the Landing on the Cowlitz Master Planned Development approved on November 8, 2021. The proposed Development Agreement establishes development standards and procedures, reservation of utility and transportation capacity, and ongoing collaboration over a 20-year timeframe.

Parcel Information

1. The Development Agreement (Attachment 1) includes the following parcels: 30812, 308640200, 30864, 308100100, 30813, 6143802, and 308640100 (collectively, the “property”; Attachment 2). The total property area included in the Development Agreement is approximately 118 acres (Attachment 3). The property is located at the south end of the City of Castle Rock and is accessed from Huntington Avenue S.

Introduction & Background Information

2. The Castle Rock City Council approved Ordinance No. 2021-10 on November 8, 2021, authorizing the Landing on the Cowlitz Master Planned Mixed Use Development subject to conditions of approval. A Development Agreement was contemplated throughout the review and approval process for the Landing on the Cowlitz project and is referenced several times in the conditions of approval.

3. Section 17.100.060 of the Castle Rock Municipal Code and RCW 36.70B.170-210 allow the City to enter into Development Agreements with property owners to establish development standards and other provisions that apply to, govern, and vest development, use, and mitigation on the property subject to the Development Agreement.
4. CT6, LLC owns or otherwise controls an interest in the properties subject to the Development Agreement. Jaclyn Smith, PE, of MacKay Sposito, Inc., representing CT6, LLC, submitted a proposal for the Development Agreement on July 14, 2023 (Attachments 2 through 11). Additional information and fees were submitted on August 7, 2023.
5. The City issued comments on the proposed Development Agreement on September 15, 2023 (Attachment 12). The City and the Applicant reviewed comments and negotiated provisions of the Development Agreement through early December 2023 and a revised Development Agreement was submitted to the City on December 21, 2023.
6. The project underwent environmental (SEPA) review prior to approval of Ord. No. 2021-10. The City issued a Revised Mitigated Determination of Nonsignificance (MDNS) on September 8, 2021. The MDNS is final and further environmental review is not required.

Development Agreements—General Information

7. A Development Agreement is a voluntary agreement that establishes a contractual relationship between the City and a property owner. The Development Agreement establishes standards, uses, and mitigation requirements for the development of property defined in the Development Agreement. Once fully executed, the Development Agreement is a legally binding contract between the City and the property owner(s) (and their successors) for the term of the Development Agreement. Development Agreements are governed under the rules of contract law in Washington. Any permit subsequently issued by the City for property included in the Development Agreement must be consistent with the Development Agreement.
8. Under RCW 36.70B.170(3), a Development Agreement is required to set forth the “development standards” for the project, which may include:
 - Project elements such as permitted uses, residential densities, and nonresidential densities and intensities or building sizes.
 - The amount and payment of impact fees imposed or agreed to in accordance with any applicable provisions of state law, any reimbursement provisions, other financial contributions by the property owner, inspection fees, or dedications.
 - Mitigation measures, development conditions, and other requirements under chapter 43.21C RCW.
 - Design standards such as maximum heights, setbacks, drainage and water quality requirements, landscaping, and other development features.
 - Affordable housing.
 - Parks and open space preservation.
 - Phasing.

- Review procedures and standards for implementing decisions.
- A build-out or vesting period for applicable standards.
- Any other appropriate development requirement or procedure.

Entering into a Development Agreement does not waive or amend the Castle Rock Municipal Code; RCW 36.70B.170(1) requires that the Development Agreement be consistent with the City's development regulations and comprehensive plan.

9. Unless amended or terminated, a Development Agreement and the standards therein will govern during the term of the agreement or the buildout period (as specified in the Development Agreement) and is not subject to any amendments to zoning ordinances, development standards, or regulations adopted after the effective date of the Agreement.
10. Pursuant to RCW 36.70B.170(4), the execution of a Development Agreement is a proper exercise of city police power and contract authority. A Development Agreement is processed as a legislative action taken by the City Council through the adoption of an ordinance or resolution. The passage of resolutions and ordinances is governed under Chapter 2.04 CRMC. RCW 36.70B.200 requires a public hearing prior to approving a Development Agreement.

Proposal

11. The Landing on the Cowlitz project is a mixed-use development that includes light industrial, commercial, residential, and recreational uses. As specified in Ord. No. 2021-10, the project can include up to the following development maximums for each use type:

Use Type	Allowable Construction	Proposed Acreage ¹
Employment	624,000 Square Feet	50.9
• Light Industrial • Accessory Uses		
Commercial	98,000 Square Feet	8.6
• Neighborhood Retail • Commercial • Professional Services		
Flex	Complying with limitations for Employment and Commercial uses (see above)	10.9
• Employment (see above) • Commercial (see above)		
Residential	200 Dwelling Units	9.1
Recreational	200 RV Spaces	14.6
Open Space	None	13.3

12. The proposed Development Agreement establishes and/or vests the Landing on the Cowlitz project to certain development standards for a period of 20 years. The Development Agreement allows CT6, LLC to develop the project up to the allowable maximums in Ord. No. 2021-10 with certainty

¹ Acreage allocated to each use can be adjusted through a Master Plan Amendment process.

and consistency in the review process and application of development standards and mitigation requirements. The Development Agreement is not a project action, but will be implemented over the development period through project-specific permits. Project details, including engineering and architectural plans, will be submitted with future permit applications.

13. The proposed Development Agreement (Attachment 1) addresses many topics. Key components of the Development Agreement are described below:

- a. **Development Period.** The Development Agreement will be in effect for 20 years (Sec. 1.6). The development period is calculated based on the date the Development Agreement is fully executed by all parties (the City of Castle Rock and all property owners). CT6, LLC is authorized to act on behalf of the property owners for the duration of the Development Agreement when those owners sign the Development Agreement.
- b. **Modifications to the Project Area.** The property governed by the Development Agreement can be modified (increased, decreased, reconfigured such as through a Boundary Line Adjustment, or otherwise) by mutual agreement of all parties and following a Minor or Major Modification process (Sec. 4.3). Acreages allocated to each land use type can be adjusted following a Minor or Major Modification process. Modifications to the property area or land use allocations does not require an amendment to the Development Agreement.
- c. **Vesting.** The project is vested to development standards in place on November 8, 2021, the Conditions of Approval in Ord. No. 2021-10, and the SEPA Mitigation Measures in the Revised MDNS for the project (Sec. 5). The Development Agreement includes some exceptions to vested standards:
 - i. **International Codes.** The project does not vest to International Building, Fire, Mechanical, or other International Codes under 19.27 RCW (Sec. 5.1). The current code in effect at the time of submittal of a complete permit application will apply.
 - ii. **Utility Standards.** The project does not vest to engineering standards or fire standards for stormwater or utility infrastructure (Sec. 5.2). The current standards in effect at the time of submittal of a complete permit application will apply.
 - iii. **Other Regulations.** Under limited circumstances as needed to address a threat to public health and safety and/or to avoid affecting eligibility for grant funding and other financial benefits, the City may apply additional regulations (Sec. 5.3).
- d. **Modified Development Standards—Residential Uses.** The original Landing on the Cowlitz project envisioned moderate-density residential uses. The Development Agreement allows for single-family detached residential development at a higher density than otherwise allowed in the R-1 zoning district (Sec. 6.1). The Development

Agreement also applies setback requirements and sight distance requirements for corner lots to ensure a safe and cohesive neighborhood is developed. Single-wide mobile homes are prohibited; manufactured or modular homes that are permanently constructed on a foundation are allowed. The Development Agreement also requires the dedication of a public park sized to be consistent with the definition of a “mini park” in the Castle Rock Park and Recreation Plan and specifies the amenities to be provided with the park.

The Development Agreement also includes flexibility to consider alternative residential development types, if a single-family detached residential neighborhood is not financially viable. Regardless of the ultimate residential development type, the 20-foot landscape buffer required by Ord. No. 2021-10 will be installed.

- e. **Alternative Review Processes.** Preliminary plats will be processed consistent with existing provisions in CRMC 16.12. The Development Agreement requires that the City consider adopting an exempt subdivision review process for non-residential properties in an approved master plan, and includes provisions for a streamlined boundary line adjustment (BLA) process.

The exempt subdivision process is authorized under RCW 58.17.040(2) and allows subdivisions meeting certain criteria to be recorded without the City’s typical subdivision review process. Specific eligibility criteria would be developed by the City as it considers whether to adopt the exempt subdivision process and may include a minimum lot size and/or location within a previously-approved master plan area.

The streamlined BLA process is intended to reduce staff review effort and overall approval timelines. The streamlined BLA process eliminates certain requirements that are not anticipated to apply to the project and simplifies final signatory requirements on the face of the BLA.

The combination of the exempt subdivision review process and streamlined BLA process would significantly streamline the build-out by allowing CT6, LLC to create lots to meet the needs of potential tenants, while also reducing the effort required by staff and consultants. If the City adopts the exempt subdivision review process, the Applicant is required to follow a consistency review process to ensure the subdivision conforms to the approved master plan and a subset of specific review criteria.

- f. **Ongoing Collaboration.** To adequately plan for upcoming development activity, the Applicant and the City will meet on an ongoing basis (monthly, or as needed) (Sec. 6.3). Meetings are anticipated to include an overview of the proposed development schedule to the intent known at the time of the meeting, an update on any substantial changes anticipated for the project, and an accounting as appropriate of the development thresholds allowed by Ord. No. 2021-10 and the Revised MDNS.
- g. **Reservation of Water and Sewer Capacity.** The Development Agreement will reserve 40,000 gallons per day of municipal water capacity and sewer capacity (Sec. 6.6 and sub-

parts). Upon reaching 80 percent of the reserved capacity (32,000 gallons per day of water and/or sewer capacity), CT6, LLC is allowed to purchase additional capacity, up to a total of 80,000 gallons per day of water and sewer capacity. While there is currently adequate system capacity for the foreseeable future, CT6, LLC will be offered the option to purchase the necessary capacity for its build-out if another developer requests the remaining water and/or sewer system capacity.

- h. **System Development Charges and Latecomer Fees.** Water and sewer system development charges are required for applications implementing the project and CT6, LLC may receive latecomer fees for those systems (Sec. 6.7 and sub-parts). Latecomer agreements allow developers to recover a portion of the costs of installing new utility facilities when they serve more than a single development. The City is responsible for processing latecomer fees and agreements and will be compensated for administrative time by CT6, LLC.
- i. **Transportation—General.** The project will be primarily accessed at Huntington Avenue S, with emergency egress provided on Larsen Lane (Sec. 7.1.5). The City's *Development Policies and Public Works Standards* will apply to road and access improvements, except where additional road sections (Industrial Collectors) are authorized through the Development Agreement (Sec. 7.1 and sub-parts). Private roads and utilities will be maintained by CT6, LLC or an Owner's Association (Sec. 7.1.3). Improvements within WSDOT's right-of-way will be designed to WSDOT standards and coordinated directly with that agency (Sec. 7.1.2).

The Development Agreement includes provisions requiring nonmotorized access into and throughout the project area, and specifies when sidewalks and pedestrian pathways must be provided with development (Sec. 7.1.4 and Sec. 7.2).

- j. **Transportation—Round-About.** The Development Agreement obligates CT6, LLC to identify right-of-way reservation areas for a one-lane roundabout at Huntington Avenue S and a potential future two-lane roundabout at the same location (Sec. 7.1.6). The single-lane roundabout right-of-way will be dedicated prior to engineering as-built approval of the first development. This means that dedication will occur after approval of the first development application and construction, but before improvements are accepted and the permit is closed out. Additional right-of-way for the two-lane roundabout will be dedicated if the project generates enough PM peak hour trips to warrant it; until such time, the Applicant will have limited use of the right-of-way area for parking, landscaping, and similar features. Dedication of all right-of-way will be at no cost to the City.

The one-lane roundabout will be built when the site access reaches the PM peak hour trip threshold for intersection failure. The round-about will be expanded to two lanes when and if the project reaches the PM peak hour trip threshold for failure of the one-lane round-about (2,445 trips). The Development Agreement requires CT6, LLC to design and construct the single-lane roundabout per Section 7.1.7 and CT6, LLC is

entitled to latecomer/reimbursement fees. The City may apply for grant funding to assist with design and/or construction of the roundabouts.

- k. **Transportation—Proportionate Share at Failure Intersections.** The project is anticipated to contribute to failure at two additional intersections: SR-411 at Westside Highway and the northbound ramps at Huntington Avenue S (Sec. 7.1.9 and sub-parts). In both cases, CT6, LLC will provide a traffic analysis identifying a preferred alternative for traffic control which will be used by the City of Castle Rock to determine CT6, LLC's proportionate share for the cost of improvements. The method for calculating CT6, LLC's proportionate share is specified in the proposed Development Agreement and is based on trips added to the intersection by CT6, LLC.
 - l. **Transportation—Trip Reservation.** The City will allow CT6, LLC to reserve capacity created by the intersection improvements constructed for the project (Sec. 7.3 and sub-parts). Capacity reservation will occur in phases and requires updated trip generation analysis to support requests for additional capacity.
14. The foregoing list is not exhaustive. The proposed Development Agreement includes other provisions and requirements that will govern the development over the 20-year build-out period. See Attachment 1 for the full proposed Development Agreement.

Analysis and Findings

15. Development Agreements are allowed under CRMC 17.100.060. There are no adopted review standards or approval criteria for Development Agreements in the Castle Rock Municipal Code.
16. Development Agreements must meet applicable requirements in State law, codified in RCW 36.70B.170 through RCW 36.70B.210:

RCW 36.70B.170: Development Agreements—Authorized.

- a. *A local government may enter into a development agreement with a person having ownership or control of real property within its jurisdiction. ... A development agreement must set forth the development standards and other provisions that shall apply to and govern and vest the development, use, and mitigation of the development of the real property for the duration specified in the agreement. A development agreement shall be consistent with applicable development regulations adopted by a local government planning under chapter 36.70A RCW.*

Staff Analysis: The City of Castle Rock is a local government planning under Chapter 36.70A RCW and can enter into Development Agreements. CT6, LLC owns or controls interest in and is authorized to make decisions about the properties subject to the Development Agreement. The property is within the City of Castle Rock. The City is authorized to enter into a Development Agreement with CT6, LLC.

The proposed Development Agreement vests the Landing on the Cowlitz project to all applicable provisions of the Castle Rock Municipal Code in effect on November 8, 2021,

and clearly outlines exceptions (including International Codes and other measures necessary to protect public health and safety) and modifications to regulations and processes. The Development Agreement also specifies applicable fees, dedications, and mitigation requirements. The provisions in the Development Agreement are consistent with the Castle Rock Municipal Code and the City's Comprehensive Plan.

- b. *RCW 36.70B.170 through 36.70B.190 and section 501, chapter 347, Laws of 1995 do not affect the validity of a contract rezone, concomitant agreement, annexation agreement, or other agreement in existence on July 23, 1995, or adopted under separate authority, that includes some or all of the development standards provided in subsection (3) of this section.*

Staff Analysis: There are no contract rezones, concomitant agreements, annexation agreements, or other legally-binding agreements affecting the property. The proposed Development Agreement is consistent with State law related to prior agreements.

- c. *...["Development] standards" includes, but is not limited to: (a) Project elements such as permitted uses, residential densities, and nonresidential densities and intensities or building sizes; (b) The amount and payment of impact fees imposed or agreed to in accordance with any applicable provisions of state law, any reimbursement provisions, other financial contributions by the property owner, inspection fees, or dedications; (c) Mitigation measures, development conditions, and other requirements under chapter 43.21C RCW; (d) Design standards such as maximum heights, setbacks, drainage and water quality requirements, landscaping, and other development features; (e) Affordable housing; (f) Parks and open space preservation; (g) Phasing; (h) Review procedures and standards for implementing decisions; (i) A build-out or vesting period for applicable standards; and (j) Any other appropriate development requirement or procedure.*

Staff Analysis: The Development Agreement incorporates project requirements established in the conditions of approval adopted by Ord. No. 2021-10 and the Revised MDNS and further establishes project requirements, dedications, and mitigation requirements. Specifications related to design standards, parks, and review procedures are included. The vesting period is 20 years, calculated based on the date the Development Agreement is fully executed by all parties. The proposed Development Agreement is consistent with State requirements for development standards.

- d. *The execution of a development agreement is a proper exercise of county and city police power and contract authority. A development agreement may obligate a party to fund or provide services, infrastructure, or other facilities. A development agreement shall reserve authority to impose new or different regulations to the extent required by a serious threat to public health and safety.*

Staff Analysis: The proposed Development Agreement obligates CT6, LLC to provide infrastructure and other facilities. The Development Agreement also reserves authority to impose new or different regulations to the extent required by a serious threat to

public health and safety. The proposed Development Agreement is consistent with these State requirements.

RCW 36.70B.190: Development Agreements—Recording—Parties and Successors Bound.

- e. *A development agreement shall be recorded with the real property records of the county in which the property is located. During the term of the development agreement, the agreement is binding on the parties and their successors....*

Staff Analysis: The Development Agreement will be recorded by the Applicant and proof of recording will be sent to the City of Castle Rock. The Development Agreement specifies that it will apply to the current property owners and any successors (Sec. 8.2). The proposed Development Agreement is consistent with these State requirements.

RCW 36.70B.200: Development Agreements—Public Hearing.

- f. *A county or city shall only approve a development agreement by ordinance or resolution after a public hearing. The county or city legislative body or a planning commission, hearing examiner, or other body designated by the legislative body to conduct the public hearing may conduct the hearing. If the development agreement relates to a project permit application, the provisions of chapter 36.70C RCW shall apply to the appeal of the decision on the development agreement.*

Staff Analysis: The Castle Rock City Council will conduct a public hearing on January 16, 2024, prior to passing the ordinance to approve the proposed Development Agreement. The Development Agreement will be consistent with these State requirements.

RCW 36.70B.210: Development Agreements—Authority to Impose Fees not Extended.

- g. *Nothing in RCW 36.70B.170 through 36.70B.200 and section 501, chapter 347, Laws of 1995 is intended to authorize local governments to impose impact fees, inspection fees, or dedications or to require any other financial contributions or mitigation measures except as expressly authorized by other applicable provisions of state law.*

Staff Analysis: The proposed Development Agreement obligates CT6, LLC to pay fees consistent with the Castle Rock Municipal Code and make dedications consistent with the City's adopted development codes and policies. The required fees, dedications, and other mitigation measures are consistent with local and State law.

- 17. The proposed Development Agreement is consistent with the goals and policies of the Comprehensive Plan, the Castle Rock Municipal Code, all other applicable regulations, and the requirements of Ord. No. 2021-10.
- 18. The project proposal was reviewed under the State Environmental Policy Act and a Revised Mitigated Determination of Nonsignificance was issued. The proposed Development Agreement incorporates applicable mitigation measures necessary to result in no probable significant adverse environmental impact. No further analysis or mitigation is required.

19. The proposed Development Agreement includes appropriate language reserving authority to impose new or different regulations to the extent required by a serious threat to public health and safety.

Staff Recommendation

Based on the foregoing analysis, staff recommends **APPROVAL** of the Development Agreement.

Attachments:

1. Proposed Development Agreement
2. Exhibit A: Property Legal Description
3. Exhibit B: Approved Master Plan
4. Exhibit C: Integrated Conditions of Master Site Plan Approval & Required SEPA Mitigation Measures
5. Exhibit D: Findings of Fact and Conclusions of Law Number 40-81 dated 09-14-21
6. Exhibit E: consistency Review Process Documentation (Consistency Notice, Expedited BLA Consistency Form, Expedited Short Subdivision Consistency Form)
7. Exhibit F: Roadway Sections
8. Exhibit G: Circulation and Access Plan
9. Exhibit H: Right-of-Way Set-Aside Area
10. Exhibit I: Traffic Approach Documentation (Traffic Summary, Development Agreement Transportation Impact Study, Example Transportation Compliance Letter)
11. Exhibit J: Utility Infrastructure Engineering and Design Standards
12. City Comments, dated September 15, 2023

July 2023, revised December 2023

Landing on the Cowlitz

Development Agreement

Castle Rock, WA

Contact/Planner:

MacKay Sposito, Inc.
Attn: Jaclyn Smith, PE
18405 SE Mill Plain Blvd. Ste. 100
Vancouver, WA 98683
(360) 823-1320
jwsmith@mackaysposito.com

Applicant:

CT6, LLC
Attn: Shane Tapani
1705 SE 9th Ave.
Battle Ground, WA 98604
(360) 687-1148
shanet@tapani.com

MSi Job #: 17783
Jurisdiction Case #:

MacKay  Sposito

EXECUTIVE SUMMARY OF DEVELOPMENT AGREEMENT BETWEEN
CITY OF CASTLE ROCK, WASHINGTON AND CT6, LLC, RAYMOND PIEREN, AND MLC VENTURES LLC
FOR
LANDING ON THE COWLITZ

Authority

State law permits cities to enter into development agreements with property owners to set forth development standards and other provisions that will apply to and govern and vest the development, use, and mitigation of the development of the real property for the duration specified in the agreement.

Purpose

Development agreements are well-suited to large, multi-phased projects to address issues not fully covered by code or the development approvals. Development agreements cannot change, or be inconsistent with, the code.

Benefits to the City and Property Owners

- Establishes expectations about the nature and extent of the development.
- Provides predictability for the developer and City on what will be provided by the developer in terms of uses, design standards and vehicular and pedestrian access, and the mitigation measures for project impacts.
- Confirms review processes for future actions and modifications.
- Sets a finite term for build out of the project consistent with the approvals and code at the time of vesting.

Summary of key terms

- References and incorporates the City Council and the hearings examiner's master plan and other land use approvals, as amended.
- Defines key terms.
- Addresses the modification processes for changes to the Project and provides for expedited review of certain boundary line adjustments and exempt land divisions.
- Vests the p\Project to the land use control ordinances in effect at the time of approval except for building codes, utility standards, and regulations necessary to address a serious threat to public health and safety or to comply with the law.
- Clarifies allowed residential uses.
- Addresses parks and road standards applicable to the Project, including pedestrian access and connections.
- Establishes a process for analyzing trip generation, distribution, and mitigation for traffic impacts.
- Requires accommodation for a future roundabout at the Project entrance.
- Ensures continued collaboration between the City and CT6 as the Project builds out.
- Reserves trips, and sewer and water capacity.
- Recognizes a potential connection to DNR lands.
- Allows for SDC credits and latecomer fees for infrastructure CT6 provides in excess of its needs.
- Lists additional design standards, infrastructure requirements, permitting processes, and other matters addressed in the project approvals.
- Requires CC&Rs to ensure maintenance of private infrastructure
- Sets a term of 20 years.

RETURN ADDRESS

CT6, LLC
P.O. Box 1419
Battle Ground, WA 98604

**Landing on the Cowlitz Mixed-Use Master Planned Development
Draft Development Agreement
Between the City of Castle Rock, Washington, CT6, LLC, Raymond Pieren, and MLC Ventures
LLC**

Document Title : Development Agreement

Grantors : CT6, LLC a Washington limited liability company;
Raymond Pieren; MLC Ventures LLC

Grantee : City of Castle Rock, Washington, a Washington
Municipal Corporation

Abbreviated Legal Description : Parcel 30812 including Adjusted Tract B:814
(CASTLE ROCK OUTLOT) -CROL -300, 301 14 -9N -2W
HUNTINGTON B DLC.

Parcel 308640200: 814 (CASTLE ROCK OUTLOT) -
CROL -413 24 -9N -2W HUNTINGTON B DLC FKA T-9A
PT LOT 1 BETWN

*Landing on the Cowlitz Mixed Use Master Planned Development
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Between the City of Castle Rock, Washington, and CT6, LLC,
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Parcel 30864: 814 (CASTLE ROCK OUTLOT) -CROL -
355 23 -9N -2W HUNTINGTON B DLC. EXC CROL
355A FEE 3454723

Parcel 308100100: 814 (CASTLE ROCK OUTLOT) -
CROL -298, 299 14 -9N -2W B HUNTINGTON DLC.
CR08080 LOT 2.

Parcel 30813:814 (CASTLE ROCK OUTLOT) -CROL -
302 14 -9N -2W HUNTINGTON B DLC. EXC CROL 306
FEE 639136 EXC

Parcel 6143802: 694 (HUNTINGTON B DLC) 23 -9N -
2W T-10C-2,30B INCL FEE 900326031

Parcel 308640100: 814 (CASTLE ROCK OUTLOT) -
CROL -355A 23 -9N -2W HUNTINGTON B DLC

Full Legal Description : See attached **Exhibit A**

Assessor's Property Tax Parcel Nos. : 30812, 308640200, 30864 (Pieren); 308100100
(MLC); 30813, 6143802, 308640100 (CT6, LLC)

*Landing on the Cowlitz Mixed Use Master Planned Development
Draft Development Agreement
Between the City of Castle Rock, Washington, and CT6, LLC,
Raymond Pieren, and MLC Ventures LLC*

Draft Castle Rock Landing on the Cowlitz Development Agreement

This Development Agreement (Agreement) is entered into effective the ____ day of _____, 2023, by and between the City of Castle Rock, Washington, a Washington municipal corporation (City) and CT6, LLC, a Washington limited liability company (CT6, LLC), Raymond Pieren, and MLC Ventures LLC (collectively, Owners). For and in consideration of the mutual covenants contained herein, the City and the Owners do hereby agree as follows regarding the real property legally described in **Exhibit A**, attached hereto, and incorporated into this Agreement by reference known as the Property or Landing on the Cowlitz.

1. Recitals.

1.1 The City of Castle Rock. The City of Castle Rock is a code city organized under the laws of Washington State. It has authority to enact laws and enter into agreements to promote the health, safety, and welfare of its citizens and to control the use and development of property within its jurisdiction. This authority includes the execution of Development Agreements in accordance with the provisions of RCW 36.70B.170-.210.

1.2 CT6, LLC. CT6, LLC is a Washington limited liability company. It holds property interests in the Property and has been designated by the following property owners as the Developer of Landing on the Cowlitz (formerly known as Castle Rock Landing on the Cowlitz).

1.2.1 CT6, LLC owns tax parcel number 30813 (4.33-acres), 6143802 (6.45 acres); and tax parcel number parcel 308640100 (.34-acres).

1.2.2 MLC Ventures LLC owns tax parcel number 308100100 (1.06-acres); and

1.2.3 Raymond Pieren owns tax parcel number 30812 (20.88-acres), tax parcel number 30864 (78.34-acres), and tax parcel number 308640200 (7.81-acres).

1.3 CT6, LLC, MLC Ventures LLC, and Raymond Pieren have authorized Shane Tapani to serve as the Project Sponsor and duly authorized agent to act on their behalf. The City shall be notified in writing of any changes to the Project Sponsor or authorized agent(s).

*Landing on the Cowlitz Mixed Use Master Planned Development
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1.4 Master Planned Developments and Approval. The City of Castle Rock has adopted regulations governing the preparation, review, approval, and implementation of Master Planned Developments in all zoning districts in the city (CRMC 17.100). On October 25 and November 8, 2021, the Castle Rock City Council held hearings and adopted Ordinance 2021-10 approving the application for Castle Rock Landing on the Cowlitz as a Mixed-Use Master Planned Development on certain terms and conditions (Project).

1.4.1 Prior to City Council action on Ordinance 2021-10, the City issued a Revised MDNS with Mitigating Measures that were included as conditions of approval.

1.4.2 The conditions of approval in Ordinance 2021-10 and the required SEPA Mitigation Measures have been integrated into a single document and are adopted as part of this Development Agreement by this reference (**Exhibit C**).

1.5 Voluntary Agreement. The City and the Owners agree that each has entered into this Agreement knowingly and voluntarily, and that each agrees to be bound by the terms and conditions set forth herein.

1.6 Effective Date. This Agreement will be effective upon signature by all parties and will remain in full force and effect for a term of twenty years, unless extended or terminated in accordance with the provisions within this Agreement.

1.7 Materiality of Recitals. The City and the Owners agree that the foregoing recitals are material to this Agreement and that each party has relied upon the material nature of such recitals in entering into this Agreement.

2. Purpose. The general purpose of this Development Agreement is to:

2.1 Define and describe the development plan for the Property consistent with the Ordinance.

2.2 Provide for predictable designation of permitted uses and development standards for the Property.

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2.3 Provide for predictable vehicular and pedestrian access, use, and circulation to serve the Property.

2.4 Reserve transportation, sanitary sewer, and water capacity for the full development of the Property as envisioned.

2.5 Provide for the appropriate phasing of transportation and other improvements to coincide with the phased development of the Property.

2.6 Provide for vesting of development rights.

2.7 Ensure that the development of the property implements the provisions of any approved Master Planned Development and related permits as required by applicable City code.

3. Definitions.

3.1 “Conditions of Approval” shall mean Conditions of Approval of the Castle Rock Landing on the Cowlitz project adopted in Ordinance no. 2021-10 and the SEPA Mitigation Measures attached to the Revised Mitigated Determination of Nonsignificance issued by the City of Castle Rock for the project and any conditions of approval applied to future licenses, entitlements, master plan modifications, permits, or other decisions. If there is a conflict between any Conditions of Approval in the foregoing permits and decisions, the Condition of Approval in the most recent document controls.

3.2 “Development Standards” shall mean applicable provisions set forth in Titles 12, 15, 16, 17, and 18 of the Castle Rock Municipal Code, and adopted Development Policies and Public Works Standards.

3.3 “Project” shall mean Landing on the Cowlitz (formerly known as Castle Rock Landing on the Cowlitz), as approved by Ordinance no. 2021-10 and as modified pursuant to this Agreement, or through subsequent City modification processes.

3.4 “Property” shall mean that real property legally described in **Exhibit A**.

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4. Approved Mixed Use Master Planned Development.

4.1 Legal Description of Properties. The approved Castle Rock Landing on the Cowlitz Master Planned Mixed-Use Development applies to the following properties totaling approximately 118 acres legally described in **Exhibit A** hereby adopted by reference (Property).

4.1.1 Tax parcel number 30812 including Adjusted Tract B (20.88-acres), 2542 Larsen Lane SW.

4.1.2 Tax parcel number 308100100 (1.06-acres), 1955 Huntington Avenue S.

4.1.3 Tax parcel number 30813 (4.33-acres).

4.1.4 Tax parcel number 30864 (78.34-acres).

4.1.5 Tax parcel number 6143802 (6.45-acres).

4.1.6 Tax parcel number 308640100 (.34-acres).

4.1.7 Tax parcel number 308640200 (7.81-acres).

4.2 Approved Master Plan. The Castle Rock Landing on the Cowlitz Master Plan (aka Landing on the Cowlitz) as approved by the City Council includes the following documents and are hereby adopted by reference (Project).

4.2.1 Approved Master Site Plan (**Exhibit B**).

4.2.2 Integrated Conditions of Master Site Plan Approval Required SEPA Mitigation Measures. (**Exhibit C**).

4.2.3 Findings of Fact and Conclusions of Law Number 40-81 dated 09-14-21 (**Exhibit D**).

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4.2.4 All subsequent development activities must be consistent with the approved Master Site Plan unless a modification is approved in writing in accordance with the provisions of this Agreement, including the exhibits.

4.3 Modifications. The Project area within the Property may be increased, decreased, or otherwise modified by mutual agreement, in writing, of the parties in accordance with the provisions governing Minor and Major Modifications in Condition of Approval 24 of the Master Site Plan Approval (**Exhibit D**) or this Development Agreement. This may include, but is not limited to boundary line adjustments, exempt and non-exempt land divisions, the acquisition of additional property, and the execution of a long-term lease(s) with the Washington State Department of Natural Resources. Adjustment of property lines and creation or consolidation of lots following the foregoing provisions is limited to the Property. Expansions of the Project area beyond the boundaries of the Property must comply with the provisions governing Minor and Major Modifications, as applicable.

4.3.1 CT6, LLC may with the consent of the applicable property owner, propose adjustments to the boundaries of the land use areas depicted on the Master Site Plan in accordance with the provisions governing Minor and Major Modifications in the Master Site Plan approval or this Development Agreement.

The City agrees that boundary line adjustments for properties within the approved Master Plan under common ownership may be approved by the City through an expedited process, consistent with chapter 58.17 RCW, because such adjustments are not divisions of land under state law nor boundary line agreements necessary to resolve a dispute or establish boundaries of uncertain location under RCW 58.04.007. Chapter 16.34 CRMC will not apply to such boundary line adjustments. The expedited process is as outlined in **Exhibit E** and must result in the setting of monuments and recording of new legal descriptions and a map of the adjusted lots with the Cowlitz County Auditor.

4.3.2 Park and Recreational Facilities. CT6, LLC is in consultation with the Washington State Department of Natural Resources (DNR) regarding the potential for CT6, LLC to provide access to DNR land for recreational purposes, provided that the DNR properties shall not be used to satisfy the on-site recreation standards for the residential subdivision.

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5. Development Standards – Vesting. All implementing actions shall comply with the applicable provisions of the City of Castle Rock Municipal Code in effect on November 8, 2021 (which the City must keep separately intact on file for future reference), the Conditions of Approval (**Exhibit D**), and the required SEPA Mitigation Measures (**Exhibit C**), unless otherwise provided by this Agreement (collectively, Applicable Standards). The Project, as defined in Section 2.3, shall be vested to all of the Applicable Standards and may not be subject to later enacted land use control ordinances during the term of this Agreement, except as provided in Sections 5.1, 5.2, and 5.3, unless CT6, LLC elects to be subject to any later enacted land use control ordinance. CT6, LLC is entitled to build out the Project during the term of this Agreement consistent with the Applicable Standards even if a shorter approval period is established in City code for master plan, site plan, subdivision, or any other land use approval required for full buildout of the Project.

5.1 International Building and Fire Codes. All development activities shall comply with the provisions of the International Building, Fire, Mechanical, and related International Codes under chapter 19.27 RCW, in effect at the time complete applications for implementing approvals are submitted for processing.

5.2 Utility Standards. Unless other standards are specifically agreed to in this Agreement, the final engineering design of all stormwater and utility infrastructure must be in accordance with the City's Development Policies and Public Works Standards and fire standards adopted and in force at the time that subsequent applications are submitted and deemed by the City to be complete and ready for processing. The final stormwater design shall be evaluated by the Plan Approving Authority for compliance with the drainage requirements outlined in the ordinances and rules established by the State of Washington and the City of Castle Rock at the time of application. All contributing drainage basins, courses, and pathways shall be reviewed. If existing drainage patterns are found to contribute runoff to the project site during peak flow conditions (up to and including the 100-year storm event), the overall stormwater management plan and design shall demonstrate mitigation of contributing runoff in compliance with the current stormwater regulations at the time of application.

5.3 Different Regulations. The City has the authority to impose new or different regulations to the extent required as follows, provided, that such action may only be taken by legislative act of the Castle Rock City Council after appropriate public process:

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5.3.1 To address a serious threat to public health and safety as required by RCW 36.70B.170(4); or

5.3.2 To avoid a decision by a state or federal administrative agency, or a court of competent jurisdiction, that the City's eligibility for funding, grants, program eligibility, or other resources sought by the City would be impaired (for example, if approval of any portion of the development would prohibit the City from being eligible under the National Flood Insurance Program or result in higher premium rates to the City or its property owners).

6. Modified Development Standards. The following modifications to the City Development Standards shall apply, provided that the Owners may by mutual agreement adopt more contemporary standards that have been adopted by the City. Further modifications may be approved by the City in accordance with the provisions governing Minor and Major Modifications in this Agreement.

6.1 Residential Uses. CT6, LLC contemplates pursuing a single-family detached subdivision within the residential portion of the Master Plan. If CT6, LLC later decides to pursue approval of attached housing units, not including apartments, which are already approved as part of the Master Plan, any modified standards applicable to the attached housing project, including setback requirements, will be documented through a memorandum of understanding between the City and CT6, LLC, and will not require an amendment to the Master Plan or this Development Agreement.

6.1.1 Single-family lots shall be a minimum of 3,500 square feet in size.

6.1.2 Buildings within single-family subdivisions must comply with the setback requirements for the R-2 zone except that for corner lots, in lieu of meeting those setback requirements, CT6, LLC must follow the minimum sight distance triangle and fencing requirements in Section 4.12 *Sight Obstruction* of the City's development regulations and public works standards. Sight distance triangles shall be shown on building permit drawings for buildings on the corner lots to ensure that sight distance requirements are met with the proposed building placement.

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6.1.3 Single-wide mobile homes for residential use are not allowed on the Property, individually or in a mobile home park. A single-wide mobile home means a structure designed for residential use, up to 14 feet wide, transportable in one or more sections, that is built on a permanent chassis and designed for use with or without a permanent foundation when attached to the required utilities. The term mobile home does not include a recreational vehicle or a manufactured or modular home built on a permanent foundation that does not meet the definition of single-wide mobile home.

6.1.4 A public park shall be dedicated with residential development. The park shall be sized at a ratio of one acre per 750 residents (mini park as defined in the Castle Rock Park and Recreation Plan, adopted 2022) anticipated in the development. The number of persons within the proposed residential development shall be calculated at the rate of 3 persons per household. Using the foregoing ratios, the required park allocation will be set according to the projected population. The park shall be developed with lawn, landscape, irrigation (if needed), fencing, at least one picnic shelter with picnic table meeting ADA requirements and standards, and an adequate playground that satisfies the needs of pre-school and upper primary aged children, or similar amenities meeting the needs of the community. The picnic shelter shall provide a minimum footprint of 12 feet by 12 feet, with a roof covering. Specific design, layout, and amenities shall be reviewed with the preliminary subdivision for the residential community.

6.2 Preliminary Plat Review Process. The City will review any preliminary plat consistent with CRMC 16.12. Final plat approval may proceed in phases, with or without the concurrent approval of individual lot site plans. It is the intent of CT6, LLC to develop and record the plat in multiple phases according to a phasing plan. CT6, LLC reserves the right to develop the phases out of order and not chronologically according to the phase number.

6.2.1 Infrastructure required for each phase must be in place, or the financial obligation to provide the infrastructure secured, at final plat approval for each phase, if necessary to serve that phase.

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6.2.2 Infrastructure must be designed to “standalone” and function in accordance with City standards, regardless of when future phases are approved and constructed.

6.2.3 The City may require as a condition of approval of each phase, that the applicant take additional measures to protect critical areas within the project boundaries from direct and indirect adverse impacts that may be attributable to project phasing, or the use of facilities such as trails. This may include but is not limited to the installation of split rail fences, gates, and/or signage.

6.2.4 The City agrees to consider an amendment to its code providing for exempt subdivisions allowed under RCW 58.17.040(2) for non-residential properties within an approved master plan. An exempt land division must be reviewed by the City through a consistency process outlined in **Exhibit E**.

6.3 **Continued Collaboration between City and CT6, LLC; Updated Environmental Review**. Once CT6, LLC has defined a specific development proposal that it intends to seek City approval for, CT6, LLC and the City agree to meet monthly, or more or less often as needed, to discuss any substantial development updates to the Master Plan until such time when the proposal is capable of approval. Either party may cancel any meeting if there is no new information to discuss. CT6, LLC and the City agree to initiate additional environmental review under the State Environmental Policy Act for specific proposals consistent with the Master Plan only if there are substantial changes from what was studied in the environmental review for the Master Plan so that the proposal is likely to have significant adverse environmental impacts, or there is new information indicating a proposal’s probable significant adverse environmental impacts.

6.4 **Critical Area Impact Mitigation**. Prior to any required critical area impact mitigation, CT6, LLC must ensure that its professional consultants with expertise in wetlands, fish and wildlife habitat, or similar field will verify actual critical areas at the time of proposed development impacts. Critical areas and impacts may be different than what was in existence at the time of Master Site Plan approval.

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6.5 Utility Infrastructure Engineering and Design Standards. With regard to minimum elevations of any proposed improvements within the Property, only structures that require a certificate of occupancy or are related to critical infrastructure operations and maintenance are required to be constructed above the 100-year flood elevation. The standards and procedures for establishing the elevation are set forth in **Exhibit J**.

6.6 Reservation of Sanitary Sewer and Water Capacity. There is hereby reserved for the exclusive use of the Property for the Project for the term of this Agreement the following capacities:

6.6.1 Up to 40,000 gallons per day of sanitary sewer via at least one pump station to be located on or in the vicinity of the Property.

6.6.2 Up to 40,000 gallons per day of potable public water.

6.6.3 Upon reaching 80 percent of the reserved capacity in Section 6.6.1 and 6.6.2, CT6, LLC may obtain additional capacity reservation from the City to serve development within the Property up to an additional 40,000 gallons per day each for water and sewer (80,000 gallons per day total each for water and sewer) upon request to serve development in an approved master plan. In addition, if a third party developer seeks the remaining capacity in the water and sewer system prior to CT6, LLC reserving the capacity needed for full buildout of the Property, the City must first offer that remaining capacity to CT6, LLC to purchase up to an additional 40,000 gallons per day each of water and/or sewer (80,000 gallons per day total each for water and sewer). The City and CT6, LLC agree to reserve to CT6, LLC the additional capacity requested by CT6, LLC pursuant to this subsection upon purchase of the additional capacity. The terms of the purchase will be negotiated between CT6, LLC and the City at the time of the requested additional water and sanitary sewer capacity, including cost and terms to CT6, LLC. If the Parties fail to reach agreement on the terms related to the purchase of the additional capacity, then the parties agree to engage in the dispute resolution process outlined in Section 8.9.1.

6.6.4 On-site well capacity may be available for onsite irrigation and fire flow needs to lessen the demand on the public water system, provided that an air gap or backflow devices

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shall be installed as determined by the City to keep this water separate from the Municipal system.

6.7 System Development Charges, Credits, and Latecomer Fees.

6.7.1 The applicant for development within the Property shall pay the appropriate water and sewer system development charge in effect at the time that an application for an implementing approval, such as a site plan or plat application, is submitted and deemed to be complete and ready for processing, and be entitled to any system development charge credits allowed under City code or the law.

6.7.2 CT6, LLC may receive sewer and water latecomer fees (current or future adopted) to the extent available under the terms of state law, the Castle Rock Municipal Code or City Development Policies and Public Works Standards pursuant to reimbursement or latecomer agreement(s). The City agrees to establish reimbursement agreements for latecomer fees at CT6, LLC's request consistent with chapter 13.20 CRMC.

6.7.3 CT6, LLC may also seek latecomer fees pursuant to reimbursement or latecomer agreements for transportation improvements pursuant to state law, Castle Rock Municipal Code, or City Development Policies and Public Works Standards. CT6, LLC will request that the City enter into a latecomer reimbursement contract consistent with chapter 13.20 CRMC.

6.7.4 The City agrees to process latecomer/reimbursement agreements for the benefit of CT6, LLC related to any street projects that CT6, LLC constructs or improves and required as a condition of development approval that benefits more than the Property, as authorized by chapter 35.72 RCW. In addition, CT6, LLC improvements must accommodate existing Huntington Avenue traffic in addition to the Project's projected traffic and latecomer fees are applicable only for future background traffic on Huntington Avenue South. CT6, LLC shall compensate the City for all staff time and expenses necessary to administer a latecomer fee/reimbursement agreement, to collect, process, and disburse latecomer/reimbursement fees, and any other costs related to the latecomer/reimbursement agreement(s) within 30 days

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of CT6, LLC's receipt of a detailed invoice detailing the tasks and time related only to the foregoing.

6.8 Dedications. The City may, at its sole discretion, defer required dedications until the completion of a phase or a subsequent phase of development has been completed. Given the uncertainty of the timing of subsequent phases of development, proposed dedications may be further deferred until such time that the City determines, in its sole discretion, that it can reasonably assume maintenance responsibilities without the completion of related improvements or without interference by subsequent construction activities.

6.8.1 Signs. In only the commercially zoned properties and the flex and industrial lots abutting the railroad, freestanding signs may be permitted subject to the following restrictions. Signs may extend to the minimum height necessary to be visible from the I-5 corridor and surrounding access roads. Where visibility from I-5 is not intended, signs are limited to a height of 40 feet to be measured from top of sign to average grade. The foregoing allowance and other provisions applicable to signs will be included in a master signage plan as required by Condition of Approval 17 (**Exhibit D**). Sign permits are required from the City of Castle Rock to install a new sign, per CRMC 17.82, and will implement the approved master signage plan.

6.9 CC&Rs. Prior to the City issuing a temporary occupancy permit for any structure in Phase 1 of the Property, CT6, LLC must record a declaration of covenants, conditions, and restrictions applicable to the Property, and form an owner's association that must address at a minimum, the association's obligation to maintain private roads, stormwater facilities, streetlights, and sidewalks and paths.

7. Transportation.

7.1 Road Standards. Access to the Property and internal circulation within the Property shall be provided in accordance with the Conditions of Approval and the approved Circulation and Access Plan depicted in **Exhibit G**.

7.1.1 All road and access improvements shall be designed and constructed by CT6, LLC in accordance with City Development Policies and Public Works Standards, except as

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modified in this Agreement including **Exhibit F**. As with any right or obligation of CT6, LLC under this Agreement, the obligations of CT6, LLC under this Section 7 will transfer to any successor by operation of Section 8.2.

7.1.2 It is understood by the parties that improvements to state highways shall be designed and constructed to WSDOT standards and are subject to WSDOT review and approval.

7.1.3 All internal private roads and utility systems within the Project shall be maintained and owned by CT6, LLC, until transferred to an owner's association, unless otherwise provided by this Agreement.

7.1.4 Sidewalks on the frontage of a lot must be installed during each phase of the Project prior to the occupancy permit being issued for a structure on that lot; provided that, all sidewalk sections or pedestrian paths must be completed within five years after the date of recording of the plat for that phase. All cross-circulation routes within the cross-circulation easements must, at a minimum, meet the City's private road standards. The Circulation and Access Plan is attached as **Exhibit G**.

7.1.5 CT6, LLC may access Larsen Lane SW within the existing right-of-way for emergency ingress and egress subject to the Conditions of Approval, including the requirement to design and construct improvements to Larsen Lane SW. Surfacing must provide an all-weather driving capability and a minimum unobstructed width of 20 feet conforming to the International Fire Code requirements for fire apparatus access roads. The City agrees to continue to maintain Larsen Lane SW before and after it is improved by CT6, LLC.

7.1.6 CT6, LLC must show sufficient right-of-way dedication for a single-lane roundabout on the Property, consistent with **Exhibit H**, on the plans submitted for the first development application. All public right-of-way as shown on the approved engineering plans shall be dedicated prior to engineering as-built approval of the first development. CT6, LLC must set aside an additional area of land on the Property for future dedication of an additional lane for the roundabout, including bicycle and pedestrian pathways consistent with code, and substantially consistent with **Exhibit H** (Set-Aside Area). CT6, LLC must dedicate the Set-Aside

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Area, at no cost to the City, when traffic growth has triggered the need for an additional dual-circulating lane within the roundabout at Huntington Avenue and the site access. CT6, LLC shall not construct any permanent structures within the Set-Aside Area, and until dedication, CT6, LLC may use the Set-Aside Area for parking, storage, landscaping, and other non-structural uses. All setbacks associated with the Set-Aside Area boundary shall be consistent with the requirements listed in chapter 17.40.060 CRMC, where the Set-Aside Area shall be treated as public right-of-way. Any future roundabout is subject to City review and approval.

7.1.7 Upon reaching the PM Peak Hour threshold for site access at Huntington Avenue South identified in **Exhibit I**, CT6, LLC shall design and construct, subject to City review and approval, the single-lane roundabout at the intersection with Huntington Avenue South substantially in conformance with **Exhibit H**.

7.1.8 CT6, LLC shall, in consultation with the City and WSDOT, establish and implement a traffic monitoring program as described in the Transportation Impact Study prepared by Lancaster Mobley dated November 13, 2023 (**Exhibit I**) and as further described in Landing on the Cowlitz Traffic Summary document dated November 14, 2023 (**Exhibit I**) and the Draft Transportation Compliance Letter dated November 13, 2023 (**Exhibit I**).

7.1.9 It is understood by the parties that the following intersections are projected to exceed acceptable levels of operation during build-out of the Project and that CT6, LLC shall make proportionate share contributions to implement required mitigation. CT6, LLC agrees to prepare and share with the City the engineering and construction cost documentation for each of the improvements described below in this Section 7.1.9 and the amount of any proportionate share required to be paid by CT6, LLC related to those improvements. In lieu of CT6, LLC paying any proportionate share under this Agreement, CT6, LLC may elect to construct any or all of the full improvements listed below and seek reimbursement from other responsible parties for their share of the cost of the improvements under Section 6.7.4 of this Agreement. If the Parties fail to reach agreement related to the amount of any proportionate share required to be paid by CT6, LLC, or the amount of any reimbursement allowed under this section and Section 6.7.4, then the parties agree to engage in the dispute resolution process outlined in Section 8.9.1.

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7.1.9.1 SR-411 at Westside Highway. The proportionate share shall be determined based on the Project's contribution of additional PM peak hour trips to baseline PM peak hour trips. The percentage increase shall be used to calculate the proportionate share based on a cost estimate for proposed improvements, unless the Parties execute a Memorandum of Agreement committing to a different method of proportionate share calculation.

7.1.9.2 I-5 Northbound Ramps at Huntington Avenue. Mitigation will be triggered when 384 additional PM peak hour trips are added to this intersection. The proportionate share shall be determined based on the Project's contribution of additional PM peak hour trips to baseline PM peak hour trips. The percentage increase shall be used to calculate the proportionate share based on a cost estimate for proposed improvements, unless the Parties execute a Memorandum of Agreement committing to a different method of proportionate share calculation.

7.1.9.3 Site Access at Huntington Avenue. It is projected that when 2,445 PM peak hour trips occur at this intersection, the addition of a second circulating lane to the roundabout will be required. When 80 percent (1,956 PM peak hour trips) of the PM peak hour trips are consumed by the Project at this intersection, CT6, LLC shall begin design of the second lane to the roundabout. CT6, LLC shall dedicate the required right-of-way area, at no cost to the City, at the time of design, to accommodate this improvement to the roundabout. The required right-of-way shall be dedicated from the Set-Aside Area depicted in Exhibit H. Any remaining property within the Set-Aside Area may be developed consistent with the Conditions of Approval and will no longer be restricted to the uses listed in Section 7.1.6. CT6, LLC shall make a proportionate share contribution to the expansion of the roundabout only if the Project is projected to create more than 1,522 PM peak hour trips at this intersection excluding internal capture trips.

7.2 Pedestrian Access and Connections. On-site pedestrian facilities must be provided consistent with the Conditions of Approval to adequately connect sidewalk and other pedestrian amenities within the Project, but in recognition that the Project includes light industrial uses. Pedestrian amenities are proposed in a manner to avoid conflicts between pedestrians and operations by CT6, LLC and its tenants. Where Industrial Collector roads are used, sidewalks are not required if an alternative pedestrian path is provided. Pedestrian

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paths may consist of asphalt instead of concrete for the Industrial Collector roads at CT6, LLC's option. Sidewalks are required for other road Types as shown on **Exhibit F**. CT6, LLC agrees to provide a letter to the City in support of a project that connects the pedestrian access along Huntington Avenue South from the north in the area of Larsen Lane, through the proposed roundabout to continue to the south. Design of the single lane and double lane roundabouts must include safe pedestrian and bicycle access.

7.3 Trip Generation, Reservation, and Mitigation. The Development will be subject to the findings and processes outlined in the traffic approach, attached as **Exhibit I**.

7.3.1 Reservation of transportation capacity shall be allowed for the Project to the minimum amount set forth in **Exhibit I**. Additional transportation capacity up to the maximum amount set forth in **Exhibit I** may be reserved upon reaching 80 percent of the initial capacity reservation. Updated trip generation analysis shall be provided as the basis for capacity reservation with the initial submittal for each phase, consistent with Condition of Approval 22 (**Exhibit D**).

7.3.2 Right-of-way for final build-out, including on-site and off-site right-of-way for future public roads and related improvements, and property or easements for utility infrastructure, if required by a Condition of Approval, shall be dedicated by the applicable owner at the initial implementation of each phase at no cost to the City except that CT6, LLC is not required to dedicate right-of-way on property it does not own. Construction of interim improvements appropriate to each phase of development shall be allowed by the City in its sole discretion, which will not be unreasonably withheld.

8. General Provisions.

8.1 Governing Law. This Agreement will be governed by and interpreted in accordance with the laws of the State of Washington.

8.2 Binding on Successors, Assignment, and Release of Liability.

8.2.1 This Agreement is binding upon and inures to the benefit of the successors and assigns of the Owners and upon the City.

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8.2.2 The parties acknowledge that development of the Project likely will involve sale and assignment of portions of the Property to other persons who will own, develop and/or occupy portions of the Property and buildings thereon. Upon the transfer under this Section, the transferee will be entitled to all interests and rights and be subject to all obligations under this Agreement, and the applicable Owner will be released from liability with respect to such portion as has been assigned and assumed. Transfers or attempted transfers that are undertaken in a manner inconsistent with these provisions will be *void ab initio* and will not excuse the performance of the Owners of any of its obligations under this Agreement.

8.2.3 An Owner has the right to assign or transfer all or any portion of the respective interests, rights or obligations under this Agreement or in the Project to other parties acquiring an interest or estate in all or any portion of the Property, including transfer of all interests through foreclosure (judicial or nonjudicial) or by deed in lieu of foreclosure, without notice or consent from the City, if the transfer is within the scope of one of the following: (a) a single-family residential parcel, a single-family residential unit or a multi-family unit, to a purchaser; (b) any property that has been established as a separate legal parcel, provided that the transferee assumes in writing all obligations of the Owner under this Agreement pertaining or proportionate to the parcel being transferred, and the transferee has not breached a similar written agreement with, or obligation to, another municipal corporation; or (c) a transfer where the Owner has bonded for, or provided other suitable assurance of performance, of all conditions set forth in the Agreement that are applicable to the parcel that is being transferred.

8.2.4 Any transfer that is not within the scope of Section 8.2.3 will not release the Owner from its obligations under this Agreement unless the City has consented in writing to such transfer. The City may not unreasonably withhold, condition, or delay its consent, and in the event the City withholds, conditions, or delays consent, the City must provide express findings therefor. The City agrees to cooperate in executing such documentation as reasonably necessary to evidence any obligations under this Agreement that have been satisfied with respect to a portion of Property that is proposed for transfer.

8.2.5 If the conditions for assignment are met under this subsection, then from and after the date of transfer, the Owner will be released of all liabilities and obligations under

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this Agreement that arise in relation to events occurring after the date of transfer and that are associated with the portion of Property being transferred. From and after the date of transfer, the transferee must exercise the rights and perform the obligations of the Owner under this Agreement for that portion of the Property acquired by the transferee. If, after release of liability, a default occurs relating to the transferred portion of the Property, such default will not constitute a default by the released party, nor will it be deemed a default as to any other portion of the Property not subject to the defaulted obligation. Notwithstanding any other provision hereof, the owner of any portion of the Property whose interest has been transferred through forfeiture, judicial or nonjudicial foreclosure, or through a deed given in lieu of foreclosure will be released of liability from and after the effective date of transfer through foreclosure or deed in lieu thereof provided, however, all liabilities, duties and obligations arising from this Agreement remain recorded encumbrances upon the Property and remain fully enforceable against the successor in interest following such forfeiture, foreclosure or deed in lieu thereof.

8.3 Recording. Pursuant to RCW 36.70B, a memorandum of this Agreement must be recorded against all Property that comprises the Project as a covenant running with the land and must be binding on the Owners, their successors, and assigns. The City must reasonably cooperate with the applicable Owners in executing such releases or partial releases of portions of the Property from this Agreement once the obligations or liabilities associated with such portions of the Property have been fulfilled.

8.4 Interpretation and Severability.

8.4.1 In the event of a conflict between provisions of this Agreement and the terms of the Exhibits, the terms of the Exhibits will prevail.

8.4.2 Invalidation or unenforceability of any provision of this Agreement will in no way invalidate or nullify the balance of this Agreement. If any provisions of this Agreement are determined to be unenforceable or invalid by a court of competent jurisdiction, then this Agreement will thereafter be modified to implement the intent of the parties to the maximum extent allowable under law. If a court finds unenforceability or invalidity of any portion of this Agreement, the parties agree to seek diligently to modify the Agreement consistent with the court decision, and no party may undertake any actions inconsistent with the intent of this

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Agreement until the modification to this Agreement has been completed. If the parties do not mutually agree to modifications within forty-five (45) days after the court ruling, then either party may initiate the dispute resolution proceedings in Section 8.9 for determination of the modifications which implement the intent of this Agreement and the court decision.

8.5 Authority. The City and the Owners each represent and warrant it has the respective power and authority, and is duly authorized, to execute, deliver, perform, and enforce its rights and the other Party's obligations under this Agreement.

8.6 Headings. The headings in this Agreement are inserted for reference only and may not be construed to expand, limit, or otherwise modify the terms and conditions of this Agreement.

8.7 Time is of Essence. Time is of the essence of this Agreement in every provision hereof. Unless otherwise set forth in this Agreement, the reference to "days" means calendar days. If any time for action occurs on a weekend or legal holiday, then the time period will be extended automatically to the next business day.

8.8 Integration. This Agreement represents the entire agreement of the parties with respect to the subject matter hereof. There are no other agreements, oral or written, except as expressly set forth herein.

8.9 Disputes, Defaults, and Remedies. In the event of any dispute relating to this Agreement, all parties upon the request of any other party must meet within seven (7) days to seek in good faith to resolve the dispute. The City must send its chief administrative officer, or as his designee a department director and/or persons with information relating to the dispute, and the Owners must send an owner's representative and any consultant or other person with technical information or expertise related to the dispute. The parties must use good faith efforts to directly resolve all claims, disputes, and other matters in question between the parties arising out of or relating to this Agreement.

8.9.1 For disputes on amounts arising under Section 6.6.3 and Section 7.1.9, the Parties must refer the issues and costs in dispute to a mutually acceptable licensed engineer with at least 10 years of development experience ("Arbiter"). The Parties may each provide written information to the Arbiter regarding their positions. The Arbiter shall provide a

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written decision on the amount of the costs in dispute within ten (10) business days after the date such dispute is referred to him/her. The decision of the Arbiter shall be final and binding on the Parties and may be enforced by any court of competent jurisdiction. The Arbiter's fees incurred in resolving such dispute shall be shared equally by the Parties.

8.9.2 No party will be in default under this Agreement unless it has failed to perform under this Agreement for a period of thirty (30) days after written notice of default from any other party. Each notice of default must specify the nature of the alleged default and the manner in which the default may be cured satisfactorily. If the nature of the alleged default is such that it cannot be reasonably cured within the thirty (30) day period, then commencement of the cure within such time period and the diligent prosecution to completion of the cure will be deemed a cure. Any party not in default under this Agreement will have all rights and remedies provided by law including without limitation damages, specific performance, or writs to compel performance or require action consistent with this Agreement. The prevailing party (or the substantially prevailing party if no one party prevails entirely) will be entitled to reasonable attorneys' fees and arbitrator fees, expert fees, costs and out of pocket expenses, including attorney's fees, costs and out of pocket expenses incurred on any appeal.

8.9.3 In recognition of the anticipated sale(s) by an Owner of portions of the property to others to own, develop and/or occupy, the remedies under this Agreement must be reasonably tailored to the Property or parties as provided in the remaining provisions of this subsection. After the transfer of portions of the Property for which the release of liability provisions apply under Section 8.2, any claimed default must relate as specifically as possible to the portion of the Property involved and any remedy against any party will be limited to the extent reasonably possible to the owners of such portion of the Property. To the reasonable extent possible, the City may seek only those remedies which do not adversely affect the rights, duties, or obligations of any other non-defaulting owner of portions of the Property under this Agreement and must seek to utilize the severability provisions set forth in this Agreement. The City will have no liability to any person or party for any damages, costs, or attorney's fees under this Section 8.9.3 so long as the City exercises reasonable and good faith judgment in seeking remedies against appropriate parties or portions of the Property.

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8.10 Mortgage Rights. Any person who is the beneficiary of a deed of trust or mortgagee (Mortgagee) of a mortgage secured against all or any portion of the Property (Mortgaged Parcel) who has provided written notice to the City of the Mortgagee's interest in the Mortgaged Parcel is entitled to notice of default and opportunities to cure as provided in this section. Any Mortgagee may provide written notice to the City requesting a copy of all notices of default and correspondence, claims or litigation related thereto or the Mortgaged Parcel. For each Mortgagee who has provided such notice, the City during the remaining term in this Agreement must notify such Mortgagee of any event of default, claim or litigation relating to an Owner or the Mortgaged Parcel under this Agreement and provide the same opportunity to cure such event of default, within the times provided below, as provided to the Owner under this Agreement. Notwithstanding any other provision of this Agreement, this Agreement may not be terminated by the City in the event of default as to any Mortgagee either (1) who has requested notice but has not been given notice by the City or (2) to whom notice of default is given by the City and to which either of the following is true:

8.10.1 The Mortgagee cures a default involving the payment of money by the Owner within sixty (60) days after notice of default; or

8.10.2 For defaults which require title or possession of all or any portion of the Property to effect a cure, then:

the Mortgagee agrees in writing, within ninety (90) days after its receipt of written notice of default, to perform the defaulted obligation allocable to the Mortgaged Parcels conditioned upon the Mortgagee's acquisition of the Mortgaged Parcel by foreclosure (judicial or nonjudicial) or through a deed in lieu of foreclosure;

the Mortgagee commences foreclosure proceedings to acquire title to the Mortgaged Parcel within ninety (90) days and thereafter diligently pursues the foreclosure to completion; and

the Mortgagee (or any purchaser of the Mortgaged Parcel at foreclosure, trustee's sale or by deed in lieu of foreclosure) promptly and diligently cures the default after obtaining title or possession. Subject to the foregoing, if Mortgagee delivers a notice of default to the City, then the Owner's rights and obligations under this Agreement may be transferred to the Mortgagee

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or to any purchaser of the Mortgaged Parcel at a foreclosure, trustee's sale or conveyance by deed in lieu of foreclosure.

8.11 Estoppel Certificate. Within thirty (30) days following any written request which a party or a Mortgagee may make from time to time, the other party to this Agreement must execute and deliver to the requesting person a statement certifying that: (a) this Agreement is unmodified and in full force and effect, or stating the date and nature of any modification; and (b) to the best knowledge of the certifying party (i) no notice of default has been sent under Section 8.9 of this Agreement or specifying the date(s) and nature of the notice of such default and (ii) no written notice of infraction has been issued in connection with the Project. Failure to deliver such statement to the requesting party within the thirty (30) day period will constitute a conclusive presumption against the party failing to deliver such statement that this Agreement is in full force and effect without modification (except as may be represented by the requesting party) and that there are no notices of default nor infraction (except as may be represented by the requesting party). The delivery of an estoppel certificate on behalf of the City pursuant to this section will be deemed an administrative matter and will not require legislative action. The City will not have any liability to the requesting party or to any third party for inaccurate information if it provides the estoppel certificate in good faith and with reasonable care.

8.12 No Third-Party Beneficiaries. Except for the mortgagee rights under Section 8.10, this Agreement is made and entered into for the sole protection and benefit of the parties hereto and their successors and assigns. No other person has any right of action based upon any provision of this Agreement.

8.13 Interpretation. This Agreement has been reviewed and revised by legal counsel for both parties and no presumption or rule that ambiguity will be construed against the party drafting the document will apply to the interpretation or enforcement of this Agreement.

8.14 Notice. All communications, notices and demands of any kind which a party under this Agreement requires or desires to give to any other party must be in writing and either (i) delivered personally, (ii) sent by facsimile transmission with an additional copy mailed first class, or (iii) deposited in the U.S. mail, certified mail postage prepaid, return receipt requested, and addressed as follows:

- a. To the City of Castle Rock:

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Carie Cuttonaro, Clerk-Treasurer
PO Box 370
Castle Rock, WA 98611
Phone: 360-274-8181, Ex. 303
Email: ccuttonaro@ci.castle-rock.wa.us

b. To CT6, LLC:

Shane Tapani
P.O. Box 1419
Battle Ground, WA 98604
Phone: 360-687-1148
Email: shanet@tapani.com

c. To Owners:

Raymond Pieren
503-541-3785
backinoregon1@gmail.com
944 NW Hill Avenue, Roseburg, OR 97471

MCL Ventures, LLC.
Mike Canton
360-608-7808
cantonsells@yahoo.com
4404 Willamette Ct, Vancouver, WA 98661

8.15 Cooperation. The parties may not unreasonably withhold requests for information, approvals or consents provided for in this Agreement. The parties agree to take reasonable further actions and execute further documents, either jointly or within their respective powers and authority, to implement the intent of this Agreement. The City agrees to work cooperatively in good faith with CT6, LLC to achieve the mutually agreeable goals as set forth in this Agreement, subject to the City's independent exercise of judgment.

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4888-9095-5669.3

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8.16 Delays. If either party is delayed in the performance of its obligations under this Agreement due to Force Majeure, then performance of those obligations will be excused for the period of delay.

8.17 Third Party Legal Challenge and Indemnification.

8.17.1 Except and to the extent resulting from the City's negligence or intentional act(s) or omission(s), CT6, LLC agrees to hold the City harmless from, defend and indemnify it against, any and all fines or penalties that result or arise directly or indirectly from CT6, LLC's negligent or intentional acts.

8.17.2 Except and to the extent resulting from CT6, LLC's negligence or intentional act(s) or omission(s), the City agrees to hold CT6, LLC harmless from, and indemnify it against, any and all fines or penalties that result or arise directly or indirectly from the City's sole negligent or intentional acts.

8.17.3 In the event any legal or equitable action or other proceeding is instituted by a party, entity, or organization (including governmental units), their officials or agents, challenging the validity of any provision of the City's approval and/or implementation of the Ordinance, this Agreement, or any actions precipitating the same, then the Parties hereto must reasonably cooperate in entering a joint defense agreement.

8.17.4 Unless otherwise agreed, joint defense counsel will be selected through the following process:

CT6, LLC must present to the City its preferred attorney and related credentials and unless the City can provide a verifiable objection to such attorney, whether related to prior experience, general knowledge or otherwise, that attorney will be engaged for joint representation; (b) If the preferred attorney of CT6, LLC is not engaged, then (i) CT6, LLC must present to the City a list of three attorneys and such attorneys' credentials; (ii) from such list, the City must identify the attorney (if any) with which the City is willing to engage for joint representation pursuant to this Agreement; (c) in the event that none of the candidates are acceptable to the City, then each party must propose a list of three candidates with qualifications, and a combined list of

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the six attorneys must be provided to a mutually agreed-upon neutral, independent person for selection of the attorney that such person believes is best suited to jointly represent the City and CT6, LLC.

If the parties enter into a joint defense agreement then CT6, LLC will bear all costs of, and hold the City harmless from and otherwise indemnify the City against the costs of the defense and reasonable investigation of any such claim, lawsuit or liability, incurred from the joint defense, including all attorney fees associated with the joint defense, provided, however, that in no event will CT6, LLC be obligated to pay the costs and attorney fees associated with any claim, action, or lawsuit arising from the negligence of the City or the inability on the part of the City to fulfill an obligation under this Agreement. Neither CT6, LLC nor the City may settle a claim or lawsuit challenging this Agreement without the consent of the other, which consent may not be unreasonably withheld. Notwithstanding any suggestion to the contrary herein, consistent with the provisions of hereof, CT6, LLC will not be liable for the costs and attorney fees associated with any claim, action, or lawsuit arising from the negligence of the City or the inability on the part of the City to fulfill an obligation under this Agreement or that involves a legal proceeding between the City and CT6, LLC, including its successors and assigns.

Nothing herein may preclude either party from retaining its own independent legal defense at its own expense in lieu of, or addition to, entering a joint defense agreement although if a joint defense agreement is entered into the City will bear the cost (and will not be reimbursed by CT6, LLC) for the costs of retaining its own independent legal defense.

8.17.5 Insurance Required. The City of Castle Rock and CT6, LLC shall obtain and keep in force during the terms of this Agreement Comprehensive General Liability insurance coverage in the amount of \$2 million.

8.18 Authority to Approve Agreement.

8.18.1 By executing this Development Agreement, Owners represent and warrant that they have taken all necessary steps under their corporate authorities to authorize such act, and that execution of this Development Agreement is valid and binding for all purposes.

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8.18.2 By executing this Development Agreement, the City represents and warrants that it has taken all necessary steps under its corporate authorities to authorize such act, and that its execution of this Development Agreement is valid and binding for all purposes, subject only to subsequent appeals filed in accordance with RCW 36.70B.200.

Signatures on the following page.

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City of Castle Rock, Washington,
a Washington municipal corporation

CT6, LLC,
a Washington limited liability company

By: _____
Its: _____

By: _____
Its: _____

MLC Ventures LLC,
a Washington limited liability company

Raymond Pieren

By: _____
Its: _____

By: _____
Its: _____

Exhibits

Exhibit A: Property Legal Description

Exhibit B: Approved Master Plan

Exhibit C: Integrated Conditions of Master Site Plan Approval Required SEPA Mitigation Measures

Exhibit D: Findings of Fact and Conclusions of Law Number 40-81 dated 09-14-21

Exhibit E: Consistency Review Process Documentation:

Consistency Notice

Expedited BLA Consistency Form

Expedited Short Subdivision Consistency Form

Exhibit F: Roadway Sections

Exhibit G: Circulation and Access Plan

Exhibit H: Right-of-Way Set-Aside Area

Exhibit I: Traffic Approach Documentation:
Traffic Summary

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Development Agreement Transportation Impact Study
Example Transportation Compliance Letter

Exhibit J: Utility Infrastructure Engineering and Design Standards

EXHIBIT "C"
LEGAL DESCRIPTION FOR ADJUSTED TRACT B, PARCEL NO. 30812
COWLITZ COUNTY, WASHINGTON

ADJUSTED TRACT B, PARCEL NO. 30812

TRACT B

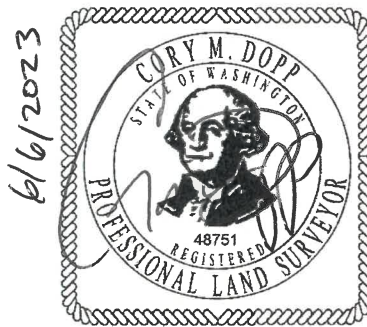
A PORTION OF THAT TRACT OF LAND CONVEYED BY STATUTORY WARRANTY DEED TO TIMBERLAKE CHRISTIAN FELLOWSHIP, DESCRIBED IN EXHIBIT "A" AND RECORDED UNDER AUDITOR'S FILE NO. 3559110, AND A PORTION OF THAT TRACT OF LAND DESCRIBED IN TRACT B OF THAT BOUNDARY LINE AGREEMENT BETWEEN RAYMOND PIEREN, WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, AND STATE OF WASHINGTON RECORDED UNDER AUDITOR'S FILE NO. 3597924, RECORDS OF COWLITZ COUNTY, LYING IN THE BENJAMIN HUNTINGTON DONATION LAND CLAIM (DLC) IN SECTION 14, TOWNSHIP 9 NORTH, RANGE 2 WEST, OF THE WILLAMETTE MERIDIAN, COWLITZ COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND 1-1/2 INCH IRON PIPE AS SHOWN ON RECORD-OF-SURVEY FOR "TAPANI", RECORDED IN BOOK 43 OF SURVEY MAPS, AT PAGE 120-121, RECORDS OF SAID COUNTY, FROM WHICH THE MOST EASTERLY CORNER OF LOT 2 OF SHORT SUBDIVISION NO. CR 95-01, RECORDED IN VOLUME 8 OF SHORT PLATS, AT PAGE 80, RECORDS OF SAID COUNTY, BEARS NORTH 55°00'09" EAST 610.87 FEET; THENCE SOUTH 40°51'53" EAST 84.27 FEET TO A POINT ON THE DIVIDING LINE BETWEEN THE NORTH AND SOUTH HALF OF THE BENJAMIN HUNTINGTON DLC LINE AS SHOWN ON SAID RECORD-OF-SURVEY FOR "TAPANI"; THENCE SOUTH 88°18'14" EAST ALONG SAID DIVIDING LINE 62.38 FEET TO THE **POINT OF BEGINNING**; THENCE LEAVING SAID DIVIDING LINE NORTH 70°18'12" EAST 142.25 FEET TO A 530.00 FOOT RADIUS NON-TANGENT CURVE TO THE RIGHT; THENCE FROM A TANGENT BEARING OF NORTH 21°54'25" WEST ALONG SAID CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 15°05'44" A DISTANCE OF 139.64 FEET; THENCE NORTH 06°48'41" WEST 181.18 FEET TO A 330.00 FOOT RADIUS CURVE TO THE RIGHT; THENCE ALONG SAID CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 22°46'08" A DISTANCE OF 131.14 FEET TO A POINT ON THE SOUTHWESTERLY LINE OF SAID LOT 2; THENCE SOUTH 49°20'46" EAST ALONG SAID SOUTHWESTERLY LINE 239.24 FEET TO THE MOST SOUTHERLY CORNER THEREOF; THENCE NORTH 55°00'09" EAST ALONG THE SOUTHEASTERLY LINE OF SAID LOT 2, AND THE PROJECTION THEREOF 154.23 FEET TO THE SOUTHERLY RIGHT-OF-WAY LINE OF OLD PACIFIC

HIGHWAY; THENCE SOUTH 60°12'51" EAST ALONG SAID SOUTHERLY RIGHT-OF-WAY 318.00 FEET; THENCE CONTINUING ALONG SAID SOUTHERLY RIGHT-OF-WAY SOUTH 52°26'51" EAST 262.01 FEET TO THE WESTERLY RIGHT-OF-WAY OF THE BURLINGTON NORTHERN SANTA FE RAILWAY; THENCE SOUTH 27°15'58" EAST ALONG SAID WESTERLY RIGHT-OF-WAY 152.60 FEET TO SAID DIVIDING LINE; THENCE NORTH 88°18'14" WEST ALONG SAID DIVIDING LINE 950.17 FEET TO THE **POINT OF BEGINNING**.

SUBJECT TO A NON—EXCLUSIVE ACCESS AND UTILITIES EASEMENT OF 35 FEET WIDTH IS GRANTED THROUGH CASTLE ROCK OUTLOT 298 AND THE REMAINDER OF 299, SAID EASEMENT BEING THE WEST PORTION OF LOT 2 OF SHORT PLAT CR 95-01 IN BOOK 8, PAGE 80.

CONTAINING APPROXIMATELY 6.26 ACRES.



RETURN ADDRESS:

CHRIS ROUBICEK,
Attorney at Law
P.O. Box 600
Castle Rock, WA 98611

3428843

12/20/2010 11:54:07 AM Pages: 2
Quit Claim Deed CHRIS ROUBICEK 63.00
Cowlitz County Washington



Received \$ **EXEMPT** excise tax levied
pursuant to Chap. 11. Laws Ex. 1951
JUDY AINSLIE
AFFNO. 103128 COWLITZ COUNTY TREAS.
Date 12/20/10 Deputy

QUIT CLAIM DEED

THE GRANTORS, ROY A. HENSON and LINDA M. HENSON, who took title to Parcel No. 308100100 as LINDA N. HENSON, husband and wife, 1933 Huntington Avenue South, Castle Rock, WA, FOR AND IN CONSIDERATION OF TRANSFER TO LIMITED LIABILITY COMPANY WHOLLY OWNED BY THE GRANTORS, hereby GRANT, CONVEY, and QUIT CLAIM to MIMJ'S RENTALS LLC, a Washington limited liability company, GRANTEE, the following described property located in Cowlitz County, Washington, to wit:

Parcel No. 30591	Abbrev. Legal: 10-9N-2W BLK:CROL LOT:74
Parcel No. 30800	Abbrev. Legal: 14-9N-2W CROL 287 HUNTINGTON DLC
Parcel No. 30179	Abbrev. Legal: CASTLE ROCK HGTS 1 LOT 5 BLK 8
Parcel No. 308100100	Abbrev. Legal: 14 9N 2W, SHORT PLAT CR 08-080 LOT 2

10-9N-2W CROL LOT 74

A tract of land in Section 10, Township 9 North, Range 2 West of the W.M., more particularly described as follows:

BEGINNING at a point on the Section line between Sections 10 and 15, Township 9 North, Range 2 West of the W.M., 150 feet West of the West line of 3rd Street in the Town of Castle Rock, Washington;
thence West to the East line of the Felix Miller Tract;
thence in a Northerly direction on a line between Minnie Michener and Felix Miller Tracts, 110 feet;
thence East to a point 150 feet West of the West Line of 3rd Street;
thence in a Southerly direction to the place of beginning,
this being the same tract of land conveyed to John B. Miller and Minnie Michener by Warranty Deed dated August 8, 1890, and recorded on the 25th day of August, 1890, in Book P of Deeds, Cowlitz County, Washington, pages 458 and 459.

Also known as Castle Rock Outlet 77.

And

14-9N-2W CROL 287 HUNTINGTON DLC

That portion of the Benjamin Huntington Donation Land Claim described as follows:

Beginning at the most Southerly corner of the tract of land conveyed by Emma Rein, a widow to Myrtle Ray Lingenfelter, a widow as described in Volume 138 Deed Records of Cowlitz County, Washington at Page 499, Auditor's File No. 87548, which point is on the Easterly right of way line of the Pacific Highway South 53° 58' East 690 feet, more or less from the intersection of the Easterly line of said highway with the East and West centerline of Section 14, Township 9 North, Range 2 West of the Willamette Meridian;

thence along Lingenfelters line in a Northeasterly direction and at right angles with Pacific Highway right of way line 70 feet;
thence Southeasterly and at right angles 75 feet;

Return Address:

Timberlake Christian Fellowship
Attn: John Williams
4505 236th Ave NE
Redmond WA 98053-8404

\$0.00
E 164741
12/29/2016
AJ
Location Code: 0801
Chicago Title

Vancouver-Title Only

Washington State Recorder's Cover Sheet

Document Title:	Statutory Warranty Deed	622-82472
Reference No. of Related Documents:	N/A	
Grantor:	THE ROCK CHURCH OF COWLITZ COUNTY, a Washington nonprofit corporation	
Grantee:	TIMBERLAKE CHRISTIAN FELLOWSHIP, a Washington nonprofit corporation	
Abbreviated Legal Description:	CROL Lot 299A, Section 14, Township 9 North, Range 2 West, also being a ptn of the Benjamin Huntington DLC	
Assessor's Tax Parcel/Account No.:	308110100	

Statutory Warranty Deed

Grantor, THE ROCK CHURCH OF COWLITZ COUNTY, a Washington nonprofit corporation, as a gift and for no consideration, TIMBERLAKE CHRISTIAN FELLOWSHIP, a Washington nonprofit corporation, conveys and warrants to Grantee all the described on the attached Exhibit A, attached hereto and incorporated herein, including all after acquired title of the Grantor herein, and subject to the Special Exceptions on the attached Exhibit B.

Dated this 28 day of December, 2016.

THE ROCK CHURCH OF COWLITZ
COUNTY

By: _____

Jared Hughes

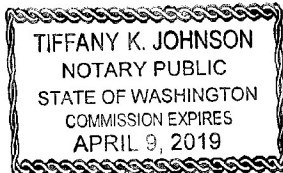
Jared Hughes

Its: President and Senior Pastor

STATE OF WASHINGTON)
COUNTY OF Clark) ss.

On this day personally appeared before me Jared Hughes to me known to be the individual described in and who executed the within and foregoing instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as President and Senior Pastor of THE ROCK CHURCH OF COWLITZ COUNTY, to be the free and voluntary act of such party for the uses and the purposes therein mentioned.

Given under my hand and official seal this 28 day of December, 2016.



Tiffany K. Johnson [Print Name]
NOTARY PUBLIC in and for the State of
Washington, residing at: Battle Ground
My commission expires: 4/9/19

EXHIBIT A

Legal Description

Parcel I

A tract of land located in the Benjamin Huntington DLC being more particularly described as follows:

Beginning at a point 801.4 feet North and 2009.6 feet West of an iron pipe which marks the corner common to Section 13, 14, 23 and 24, Township 9 North, Range 2 West of the Willamette Meridian, Cowlitz County, Washington; thence North 53° 12' East 472.62 feet along the Northwesternly line of property conveyed to Hornstra under Auditor's File No. 825832; thence North 51° 09' West 482.84 feet; thence South 32° 09' West approximately 413.30 feet to a point that is North 42° 39'30" West of the Point of Beginning; thence South 42° 39'30" East 310 feet more or less to the Point of Beginning.

Parcel II

A non-exclusive access and utilities easement of 35 feet in width is granted through Castle Rock Outlot 298 and the remainder of 299, said easement being the West portion of Lot 2 of Short Plat CR 95-01 in Book 8, Page 80.

Tax Parcel ID No.: 308110100

Commonly known as: 1955 Huntington Ave S
Castle Rock WA 98611-9693

EXHIBIT B

Special Exceptions

1. Restrictions contained in deed and obligations to maintain access easement:

Recording Date: December 30, 1994
Recording No.: 941230003
2. Any rights, interests, or claims which may exist or arise by reason of the following matters disclosed by survey,

Recording Date: February 13, 1995
Recording No.: Survey Book 14, Page 12
Matters shown: Fence
3. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:

In favor of: Public Utility District No. 1 of Cowlitz County, Washington, a municipal corporation
Purpose: Underground electric line system
Recording Date: June 24, 2003
Recording No.: 3189330
Affects: Said premises
4. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:

In favor of: City of Castle Rock, a municipal corporation
Purpose: Utility easement for water line
Recording Date: June 8, 2004
Recording No.: 3226047
Affects: A portion of said premises

*Statutory Warranty Deed.docx (16741.00)

THE ROCK CHURCH OF COWLITZ COUNTY

CERTIFICATE OF SECRETARY

The undersigned certifies that she is the Secretary of The Rock Church of Cowlitz County (the "**Corporation**"), and that, as such, she is authorized to execute and deliver this certificate in the name of, and on behalf of, the Corporation, and further certifies that:

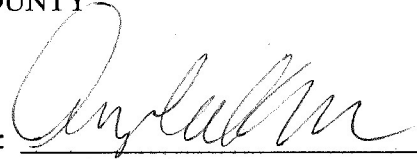
(a) Attached hereto as Exhibit A is a true, correct and complete copy of the Articles of Incorporation of the Corporation in effect on and as of the date hereof;

(b) Attached hereto as Exhibit B is a true, correct and complete copy of the Constitution & Bylaws of the Corporation as in effect on and as of the date hereof; and

(c) Attached hereto as Exhibit C is a true, correct and complete copy of a resolution adopted by the board of directors by unanimous consent in lieu of meeting. Such resolution has not been supplemented, amended, modified or rescinded and remains in full force and effect on and as of the date hereof.

IN WITNESS WHEREOF I have affixed my signature this ____ day of December, 2016.

THE ROCK CHURCH OF COWLITZ
COUNTY

By: 
Angela Hughes, Secretary

WHEN RECORDED RETURN TO:

Robin Hammill
1111 Washington St SE
PO BOX 47027
Olympia, WA 98504-7027

3597924

07/27/2018 03:17:41 PM Pages: 23
Boundary Line Agreement HAMMILL ROBIN 121.00
Cowlitz County Washington



Received \$ **EXEMPT** excise tax levied
pursuant to Chap. 11, Laws Ex. 1951
182920 KATHY HANKS
AFF. NO. COWLITZ COUNTY TREAS.
Date JUL 27 2018 MC Deputy

BOUNDARY LINE AGREEMENT
(Pursuant to RCW 58.04.007)

Grantors: Raymond Pieren; The Entrust Group, Inc., FBO Raymond Pieren IRA #55-00603; Washington State Department of Transportation; and State of Washington, acting by and through Department of Natural Resources

Grantees: Raymond Pieren; The Entrust Group, Inc. FBO Raymond Pieren IRA #55-00603; Washington State Department of Transportation; and State of Washington, acting by and through Department of Natural Resources

Legal Descriptions: Part of the Benjamin Huntington D.L.C. and the SW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$ SECTION 14 and the NW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$ SECTION 23 and the NW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$ SECTION 24, all in TWN. 9 N., RANGE 2 W., W.M.
Full legal descriptions on pages 15-23.

Assessor's Parcel Numbers: 6143802, 308640100, 308640200, 30812 and 30864

Auditor Reference Numbers 3573564, 3545380, 3545382, 3545379

THIS BOUNDARY LINE AGREEMENT (the "Agreement") is entered into by and between the STATE OF WASHINGTON, by and through its Department of Natural Resources (the "State"), RAYMOND PIEREN ("Pieren"), THE ENTRUST GROUP, INC. FBO RAYMOND ALFRED PIEREN IRA #55-00603 ("Entrust"), and WASHINGTON STATE DEPARTMENT OF TRANSPORTATION ("WSDOT"). Hereinafter, the parties may be referred to collectively as the "Parties."

Boundary Line Agreement
Page 1 of 23

I. RECITALS

WHEREAS, in 1889 the State of Washington, upon statehood, obtained ownership to the beds of navigable waters within the State's boundaries. The State's ownership includes the bedlands and shorelands of the Cowlitz River, which are legally described as follows ("State Bedlands and Shorelands"):

LEGAL DESCRIPTION STATE OF WASHINGTON

That portion of bedlands and shorelands of the Cowlitz River lying between government lots 2 and 3, between lots 2 and 4, and between lots 1 and 5, all in Section 23, Township 9 North, Range 2 West, of the Willamette Meridian;

Also together with that portion of bedlands and shorelands of the Cowlitz River lying between the northwest quarter of the northwest quarter of Section 24 and government lot 5 of said Section 23, and between lot 1 of said Section 24 and lot 5 of said Section 23, all in Township 9 North, Range 2 West, of the Willamette Meridian, Cowlitz County, Washington;
Said bedlands and shorelands are owned by the State of Washington, which took ownership of the bed of the Cowlitz River at statehood by virtue of Article 17 of the Washington State Constitution and the Equal Footing Doctrine, which reserves to the future states ownership of the beds of navigable waters within their boundaries.

SITUATE IN COWLITZ COUNTY, WASHINGTON.

WHEREAS, ENTRUST is the current owner of Parcel Numbers 6143802 and 308640100 which are legally described as follows ("Entrust Property"):

ORIGINAL PROPERTY DESCRIPTION:

TAX PARCEL NUMBERS 6143802 and 308640100

Those portions of Government Lot 8, Section 14, Township 9 North, Range 2 West, of the Willamette Meridian, Cowlitz County, Washington and of Government Lot 2, Section 23, said Township and Range, described as follows:

Beginning at the Southeast corner of said Section 14;
Thence West a distance of 2158.7 feet;
Thence North a distance of 220.2 feet;
Thence South 87°46'30" West a distance of 300 feet to the true point of beginning;
Thence South 26°14'30" East a distance of 505.1 feet;
Thence North 51°43'00" East a distance of 374.8 feet, more or less, to the Southwesterly right of way line of the County Road;
Thence South 42°52'30" East, along said right of way line, a distance of 40.12 feet;

Boundary Line Agreement
Page 2 of 23

Thence South 51°43'00" West to a point South 26°01'00" East a distance of 40.79 feet from a point South 26°14'30" East a distance of 505.1 feet from the true point of Beginning;
Thence South 26°01'00" East a distance of 449.21 feet;
Thence South 67°54'30" West a distance of 500 feet;
Thence North 26°01'00" West a distance of 998.2 feet;
Thence North 11°08'00" West to a point from which the true point of beginning bears North 87°46'30" East;
Thence North 87°46'30" East to the true point of beginning.

Excepting therefrom those portions of Government Lot 8, Section 14, Township 9 North, Range 2 West and Government Lot 2, Section 23, Township 9 North, Range 2 West, of the Willamette Meridian, described as follows:

Beginning at the Southeast corner of said Section 14;
Thence West a distance of 2158.7 feet;
Thence North a distance of 220.2 feet;
Thence South 87°46'30" West a distance of 300.0 feet to the true point of beginning of this description;
Thence South 26°14'30" East a distance of 530.1 feet;
Thence South 87°50'44" West a distance of 542.94 feet;
Thence North 26°01' 00" West a distance of 388.2 feet;
Thence North 11°08' 00" West to a point from which the true point of beginning bears North 87°46'30" East;
Thence North 87°46'30" East a distance of 500.0 feet to the true point of beginning.

SOURCE OF LEGAL DESCRIPTION IS DEED AF#3545380, RECORDS OF COWLITZ COUNTY

SITUATE IN COWLITZ COUNTY, WASHINGTON.

WHEREAS, RAYMOND PIEREN is the current owner of Parcel Numbers 308640200, 30812 and 30864 which are legally described as follows ("Pieren Properties"):

ORIGINAL PROPERTY DESCRIPTION:

TAX PARCEL NUMBER 308640200

Beginning at the Northwest corner of the Southwest Quarter of the Northwest Quarter of Section 24, Township 9 North, Range 2 West of the Willamette Meridian; running, thence South 28°15' West to the Cowlitz River; thence Southerly following the Cowlitz River to the South line of Lot 1, Section 24, Township 9 North, Range 2 West of the Willamette Meridian otherwise known as the Southwest Quarter of Section 24;

Thence Northerly along the West line of the Northern Pacific Railroad Company right of way as now surveyed and located across Section 24 to a point directly East of the point of beginning; thence West to the point of beginning.

SOURCE OF LEGAL DESCRIPTION IS DEED AF#3545382, RECORDS OF COWLITZ COUNTY

SITUATE IN COWLITZ COUNTY, WASHINGTON.

TAX PARCEL NUMBERS 30812 and 30864

TRACT A

All that portion of the South half of Benjamin Huntington Donation Land Claim lying Westerly of the Northern Pacific Railroad right of way in Cowlitz County, Washington:

Excepting the following:

PARCEL 1

Commencing at a point on the division line of the Benjamin Huntington Donation Land Claim 2787 feet West and 742 ½ feet North of the Southeast corner of Section 14, Township 9 North, Range 2 West of the Willamette Meridian; Thence East along said division line 140 feet, more or less to the West edge of the County Road; Thence following the West line of said County Road, a distance of 750 feet; Thence West parallel with said division line 455 feet, more or less to the low water mark on the left bank of the Cowlitz River; Thence North 21° West a distance of 600 feet; Thence East 30 feet to the place of beginning.

PARCEL 2

Commencing at a point on the East edge of the County Road and 20 feet South of the division line of the Benjamin and Jerusha Huntington Donation Land Claim, said point being 722.5 feet North and 2557 feet West of the Southeast corner of Section 14, Township 9 North, Range 2 West of the Willamette Meridian; running thence East parallel with and 20 feet south of said division line 646 feet; thence South 11°25' West 591.5 feet to the East sideline of the County Road; thence North 41°49' West a distance of 775 feet to the place of beginning.

PARCEL 3

Beginning at the Northeast corner of a certain tract of land conveyed to Samuel McKone by Issac B. Huntington and Etta May Huntington, his wife, particularly described as recorded in Volume 9 of Deeds at page 475, deed records of Cowlitz County, Washington; Thence running East, a distance of 270 feet; thence South 11° 25' West a distance of 849.2 feet; Thence North 41° 49' West a distance of 336.8 feet; Thence North 11° 25' East 591.5 feet to the place of beginning, (the above described tract being a portion of and situate in Lot 8, Section 14, and Lot 2 of Section 23, Township 9 North, Range 2 West of the Willamette Meridian).

PARCEL 4

Beginning at a point 220.2 feet North 2158.7 feet West of an iron pipe which marks that corner common to Sections 13, 14, 23, and 24, Township 9 North, Range 2 West of the Willamette Meridian; Thence South 87°46'30" West 300 feet, more or less, to the Cowlitz River; Thence South 26°14'30" East along said river for a distance of 505.1 feet; thence North 51°43' East a distance of 374.8 feet, more or less, to the right of way of the County Road; Thence North 42°52'30" West along said County Road right of way 319.2 feet to the point of Beginning, (the above parcel of land being located in Section 14 and 23, Township 9 North, Range 2 West, of the Willamette Meridian, Cowlitz County, Washington).

PARCEL 5

Commencing at Section corner common to Section 13, 14, 23, and 24, Township 9 North, Range 2 West, of the Willamette Meridian; running thence West a distance of 2158.7 feet; thence North a distance of 220.2 feet; Thence South 87°46'30" West a distance of 300 feet to the true point of beginning of the lands herein conveyed; Thence South 26°14'30" East a distance of 505.1 feet; Thence North 51°43' East a distance of 374.8 feet, more or less, to the right of way line of the County Road; Thence South 42°52'30" East along said County Road a distance of 40.12 feet; Thence South 51°43' West to a line projected South 26°01' East a distance of 40.79 feet from a point from which the true point of beginning bears North 26°14'30" West, a distance of 505.1 feet; Thence South 26°01' East a distance of 449.21 feet; Thence South 67°54'30" West a distance of 500 feet; Thence North 26°01' West a distance of 998.2 feet; Thence North 11°08' West to a point from which the true point of beginning bears North 87°46'30" East; thence North 87°46'30" East to the true point of beginning.

PARCEL 6

Commencing at a point on the East edge of the County Road and 20 feet south of the division line between the North and South halves of the Benjamin and Jerusha Huntington Donation Land Claim said point being 722.5 feet North 2557 feet West of the Southeast corner of Section 14, Township 9 North, Range 2 West, of the Willamette Meridian; Thence in a Northerly direction along the right of way of County Road 20.0 feet, more or less, to the division line of the Benjamin and Jerusha Huntington Donation Land Claim; Thence East on the said division line a distance of 607.0 feet; Thence South 42°39'30" East a distance of 27.2 feet; Thence West a distance of 625.4 feet more or less to the place of beginning. Except that portion for County Road.

TRACT B

A portion of the Benjamin Huntington Donation Land Claim in Township 9 North, Range 2 West, of the Willamette Meridian; Cowlitz County, Washington, described as follows:

Beginning at the most Southerly corner of the tract conveyed by Mary E. Graves to Samuel Hoffman as described in Volume 87 of Deeds, Page 147, records of said county; thence South 39°21' East a distance of 56.0 feet to the dividing line between the North and South half of the said Donation Land Claim; Thence along said dividing line South 86°37' East a distance of 330.7 feet; Thence South 88°26' East a distance of 197.0 feet; Thence South 88°15' East a distance of 280.3 feet; Thence South 87°50' East a distance of 221.0 feet to the Westerly right of

way line of the Northern Pacific Railroad; Thence along said Westerly right of way line North 28°46' West to its intersection with the Westerly right of way of the old Pacific Highway; Thence along said Westerly right of way line of said Old Pacific Highway North 52°27' West 258.9 feet; Thence North 60°13' West a distance of 318.00 feet; Thence leaving Highway South 55°00' West a distance of 627.00 feet to the place of beginning.

SOURCE OF LEGAL DESCRIPTION IS DEED AF#3545379, RECORDS OF COWLITZ COUNTY

SITUATE IN COWLITZ COUNTY, WASHINGTON

WHEREAS, since statehood, the Cowlitz River has migrated throughout the Cowlitz River basin. On the 18th of May 1980, Mount St. Helens erupted creating a lahar on the Toutle River which flows into the Cowlitz River approximately one river mile upstream from the site. This lahar altered the course of the river and fixed the boundary between the shorelands and uplands at this site along the Cowlitz River.

WHEREAS, the Parties recognize that the State continues to own the bedlands and shorelands of the Cowlitz River as it was prior to the eruption of Mount St. Helens.

WHEREAS, due to the lahars and mass deposition of dredge spoils upon the properties owned by the Parties, the boundary between such properties has been difficult to determine. The Parties dispute the location of the boundaries that separate the State Bedlands and Shorelands from the Entrust Property and Pieren Properties.

WHEREAS, Pursuant to the Quitclaim Deed recorded December 6, 1991, in Volume 1111, Page 0939, Auditor's File No. 911206001 ("1991 WSDOT Deed"), wherein WSDOT (the grantor) conveyed Parcel Number 308640200 to the Cowlitz County Soil and Water Conservation District (the grantee), WSDOT asserts a reversionary interest in Parcel Number 308640200. The 1991 WSDOT Deed also includes the following condition: "Grantee shall not sell or exchange any lands described herein without Grantor's prior written consent, which consent shall not be unreasonably withheld." The WSDOT deed also states, "These conditions shall be binding upon Grantee and Grantee's successors in interest."

WHEREAS, the Parties wish to fully and finally resolve their dispute regarding the location of the boundaries between the State Bedlands and Shorelands and the Entrust Property and Pieren Properties, without admitting fault or liability.

NOW, THEREFORE, the parties hereby agree as follows:

II. TERMS AND CONDITIONS

1. **Boundary Line Agreement.** The Parties agree that the lines determining the boundaries between the State Bedlands and Shorelands and the Entrust Property and the Pieren Properties cannot be identified from the existing public record, monuments, and landmarks, or are in dispute, within the meaning of RCW 58.04.007. Therefore, pursuant to RCW 58.01.007(1), the Parties agree to fix the location of the boundary lines as follows:
 - 1.1 The final boundary lines between the State Bedlands and Shorelands and the Entrust Property and the Pieren Properties shall be the boundary lines shown on the Record of Survey recorded on August 2, 2017 in Cowlitz County under Auditor's File # 3573564 and Book 36 of Surveys at Page 143. The Parties recognize that the Cowlitz River will continue to migrate, and accordingly agree that the State owns the bedlands and shorelands of the Cowlitz River up to the line of ordinary high water as that line currently exists or comes to rest now or in the future.
 - 1.2 A true and accurate legal description of the State Bedlands and Shorelands is attached hereto as **Exhibit A**, and is fully incorporated herein by this reference.
 - 1.3 A true and accurate legal description of the Entrust Property is attached hereto as **Exhibit B**, and is fully incorporated herein by this reference.
 - 1.4 A true and accurate legal description of the Pieren Properties is attached hereto as **Exhibit C**, and is fully incorporated herein by this reference.
2. **Recording.** State shall record this Agreement with the Cowlitz County Auditor within thirty (30) days of the date the last signature below is provided.
3. **Further Acts.** The Parties agree to reasonably cooperate with each other to execute any documents and take any steps reasonably necessary to carry out the purpose and intent of this Agreement and complete the transaction provided for herein.
4. **Amendment.** No modification, termination, or amendment of this Agreement may be made except by written agreement signed by all Parties.
5. **Captions.** The captions of this Agreement are for convenience and reference only and in no way define, limit, or describe the scope or intent of this Agreement.
6. **Counterparts.** This Agreement may be executed in any number of counterparts, and each such counterpart hereof shall be deemed to be an original instrument, but all such counterparts together shall constitute but one agreement. This document will be recorded; therefore, all signatures must be original.

Boundary Line Agreement
Page 7 of 23

7. **Neutral Authorship.** Each of the provisions of this Agreement has been reviewed and negotiated, and represents the combined work product of all Parties hereto. No presumption or other rules of construction which would interpret the provisions of the Agreement in favor of or against the party preparing the same shall be applicable in connection with the construction or interpretation of any of the provisions of this Agreement.
8. **Time of Performance.** Time is specifically declared to be the essence of this Agreement and of all acts required to be done and performed by the Parties hereto.
9. **Default and Remedies.** In the event of a material breach or default in or of this Agreement by any party hereto, then the other party shall have, in addition to a claim for the damages for such breach or default, and in the addition to and without prejudice to any other right or remedy available under this Agreement or at law or equity, the right to (a) demand and have specific performance of the Agreement; or (b) terminate this Agreement upon written notice without liability to the other party.
10. **Waiver.** No failure by any party to insist upon the strict performance of any covenant, duty, agreement, or condition of the Agreement or to exercise any right or remedy consequent upon a breach thereof shall constitute a waiver of any such breach or any other covenant, agreement, term or condition. Any party hereto, by written notice, and only by written notice as provided herein may, but shall be under no obligation to, waive any of its rights or any condition to its obligations hereunder, or any duty, obligation or covenant of any other party hereto.
11. **Entire Agreement.** The entire agreement between the Parties hereto is contained in this Agreement and the exhibits hereto; and this Agreement supersedes all of their previous understandings and agreements, written and oral, with respect to this transaction.

12. Authority. The natural persons signing this Agreement represent and warrant that they are authorized to execute the Agreement on behalf of the Parties.

AGREED TO by the Parties as of the date of the last signature below.

RAYMOND PIEREN



Raymond Pieren

Title: Owner

Address: 944 NW Hill Avenue
Roseburg, OR 97471

6-12-2018
Date

THE ENTRUST GROUP, INC.

FBO RAYMOND ALFRED PIEREN IRA #55-00603



Title: *Maria Corp. 1B Authorized Signer*

Address: 4800 SW Meadows Rd Site 353
Lake Oswego OR 97035

6-22-2018
Date

WASHINGTON STATE

DEPARTMENT OF TRANSPORTATION



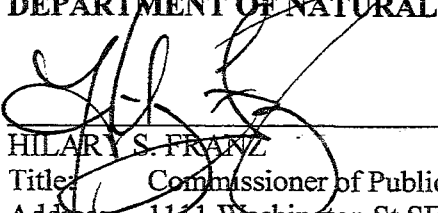
RANDY JOHNSON

Title: *Property Management Program Manager*

Address: *7345 Hinderson Way Tumwater WA 98501*

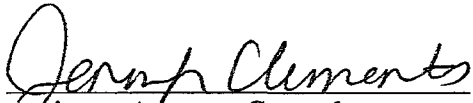
July 12, 2018
Date

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES


HILARY S. FRANZ
Title: Commissioner of Public Lands
Address: 1111 Washington St SE
PO Box 47000
Olympia WA 98504-7000

Date

Boundary Line Agreement
Approved as to Form this 7th day of
June, 2018.


Assistant Attorney General
State of Washington

REPRESENTATIVE ACKNOWLEDGMENT

STATE OF California)
) ss.
County of Alameda)

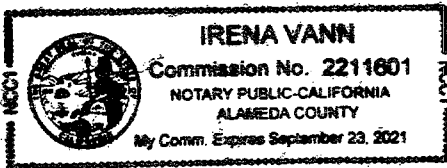
I certify that I ~~know~~ or have satisfactory evidence that Maria Lopez is the person who appeared before me, and said person acknowledged that (he/she) signed this instrument, on oath stated that (he/she) was authorized to execute the instrument and acknowledged it as the Authorized Signer (type of authority) of THE ENTRUST GROUP, INC. FBO RAYMOND ALFRED PIEREN IRA #55-00603, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: June 22, 2018

(Seal or stamp)

(Signature)

(Print Name)



Notary Public in and for the State of California, residing at

Alameda, California

My appointment expires Sep. 23, 2021

INDIVIDUAL ACKNOWLEDGMENT

STATE OF Oregon)
) ss.
County of Douglas)

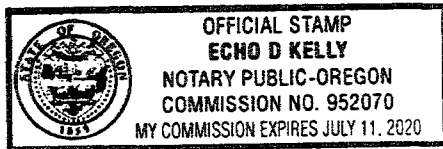
I certify that I know or have satisfactory evidence that RAYMOND PIEREN is the person who appeared before me, and said person acknowledged that (he/she) signed this instrument and acknowledged it to be (his/her) free and voluntary act for the uses and purposes mentioned in this instrument.

Dated: June 12, 2018

(Seal or stamp)

Echo D Kelly
(Signature)

Echo D Kelly
(Print Name)



Notary Public in and for the State of
Oregon, residing at
Roseburg, OR

My appointment expires 07/11/2020

STATE ACKNOWLEDGMENT

STATE OF WASHINGTON)

Aquatics Div.) ss.

County of Thurston)

I certify that I know or have satisfactory evidence that RANDY JOHNSON is the person who appeared before me, and said person acknowledged that (he/she) signed this instrument, on oath stated that (he/she) was authorized to execute the instrument and acknowledged it as the Property Management of the Washington State Department of Transportation, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: July 12, 2018

(Seal or stamp)

Sue Coen

(Signature)

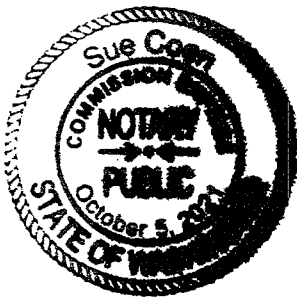
Sue Coen

(Print Name)

Notary Public in and for the State of
Washington, residing at

Olympia

My appointment expires 10/5/2021



STATE ACKNOWLEDGMENT

STATE OF WASHINGTON)

) ss.

County of Thurston)

I certify that I know or have satisfactory evidence that HILARY S. FRANZ is the person who appeared before me, and said person acknowledged that (he/she) signed this instrument, on oath stated that (he/she) was authorized to execute the instrument and acknowledged it as the COMMISSIONER OF PUBLIC LANDS of the Department of Natural Resources, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: 7-19, 2018

(Signature)

(Print Name)

Notary Public in and for the State of
Washington, residing at

My appointment expires

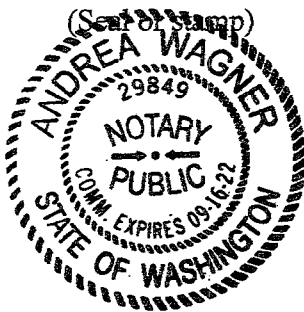


EXHIBIT A

Legal Description for State Bedlands and Shorelands

NEW LEGAL DESCRIPTION

A portion of the Northeast quarter and the Southeast quarter of Section 23, Township 9 North, Range 2 West, W.M., Cowlitz County, Washington lying northerly and easterly of the line of ordinary high water on the left bank of the Cowlitz River as it exists now or may move through natural processes of accretion, erosion or reliction in the future; being northerly and westerly of the westerly right of way line of the Burlington Northern Santa Fe Railroad, and westerly, southwesterly, and southerly of the following described line as shown on that Record of Survey recorded August 2, 2017 in Book 36 of Surveys at page 143,

Commencing at the North one-sixteenth corner between said Section 23 and Section 24, from which, the Northeast corner of said Section 23 bears North 00°06'15" West 1314.15 feet; thence South 89°41'50" East 159.52 feet, more or less, to the westerly right of way of the Burlington Northern Railroad being on a horizontal curve; from which the radius point bears South 78°12'02" West 1809.86 feet; Thence southerly along said westerly right of way along said 1809.86 feet radius curve to the right, through a central angle of 42°10'44" for an arc length of 1332.35 feet to the True Point of Beginning for said described line; said line being the line of ordinary high water as it existed prior to the eruption of Mt. St. Helens on May 18, 1980 as shown on said records of survey; thence continuing along said line of ordinary high water prior to the eruption of Mount St. Helens in 1980 through the following courses:

Thence North 09°23'09" West 197.45 feet;

Thence westerly along a curve to the left with a radius of 600.00 feet, from which the radius point bears South 80°36'51" West, through a central angle of 49°43'54" for an arc length of 520.79 feet;

Thence continuing northwesterly along said curve to the left with a radius of 600.00 feet, from which the radius point bears South 30°52'57" West, through a central angle of 16°20'08" for an arc length of 171.06 feet;

Thence North 75°27'11" West 584.40 feet;

Thence Northwesterly along a curve to the right with a radius of 1000 feet, through a central angle of 23°12'01" for an arc length of 404.92 feet;

Thence North 52°15'10" West 735.92 feet;

Thence South 73°15'38" West 101.81 feet more or less, to the line of ordinary high water on the left bank of the Cowlitz River as it exists now or may move through natural processes of accretion, erosion or reliction in the future;

Thence Northwesterly along said line of ordinary high water on the left bank of the Cowlitz River approximated by the following courses:

North 16°44'22" West 214.12 feet;

North 24°06'10" West 199.43 feet;

North 24°06'10" West 262.41 feet;

North 18°37'32" West 169.80 feet; -

North 12°35'16" 116.81 feet, more or less, to the terminus of Said Line,
from which a 5/8 inch x 24 inch rebar with a yellow plastic cap marked LS 10997 was found as
noted on said Record of Survey recorded August 2, 2017 in Book 36 of Surveys at page 143,
bears North 87°50'44" East 105.62 feet.

EXHIBIT B

Legal Description for Entrust Property

NEW LEGAL DESCRIPTION

TAX PARCEL NUMBERS 6143802 and 308640100:

Those portions of Government Lot 8, Section 14, Township 9 North, Range 2 West, of the Willamette Meridian, Cowlitz County, Washington and of Government Lot 2, Section 23, said Township and Range, described as follows:

Beginning at the Southeast corner of said Section 14;

Thence West a distance of 2158.7 feet;

Thence North a distance of 220.2 feet;

Thence South $87^{\circ}46'0''$ West a distance of 300 feet to the true point of beginning;

Thence South $26^{\circ}14'30''$ East a distance of 505.1 feet;

Thence North $51^{\circ}43'00''$ East a distance of 374.8 feet, more or less, to the Southwesterly right of way line of the County Road;

Thence South $42^{\circ}52'30''$ East, along said right of way line, a distance of 40.12 feet;

Thence South $51^{\circ}43'00''$ West to a point south $26^{\circ}01'00''$ East of 40.49 feet from a point South $26^{\circ}14'30''$ East a distance of 505.1 feet from the true point of Beginning;

Thence South $26^{\circ}01'00''$ East a distance of 449.21 feet;

Thence South $67^{\circ}54'30''$ West a distance of 500 feet;

Thence North $26^{\circ}01'00''$ West a distance of 998.2 feet;

Thence North $11^{\circ}08'00''$ West to a point from which the true point of beginning bears North $87^{\circ}46'30''$ East;

Thence North $87^{\circ}46'30''$ East of the True point of beginning.

Excepting therefrom those portions of Government Lot 8, Section 14, Township 9 North, Range 2 West and Government Lot 2, Section 23, Township 9 North, Range 2 West, of the Willamette Meridian, described as follows:

Beginning at the Southeast corner of said Section 14;

Thence West a distance of 2158.7 feet;

Thence North a distance of 220.2 feet;

Thence South 87°46'30" West a distance of 300.0 feet to the true point of beginning;

Thence South 26°14'30" East a distance of 530.1 feet;

Thence South 87°50'44" West a distance of 542.94 feet;

Thence North 26°01' 00" West a distance of 388.2 feet;

Thence North 11°08' 00" West to a point from which the true point of beginning bears North 87°46'30" East;

Thence North 87°46'30" East a distance of 500.0 feet to the true point of beginning.

ALSO EXCEPTING THEREFROM a portion of the Northeast quarter and the Southeast quarter of Section 23, Township 9 North, Range 2 West, W.M., Cowlitz County, Washington lying westerly, southwesterly, and southerly of the following described line as shown on that Record of Survey recorded August 2, 2017 in Book 36 of Surveys at page 143:

Commencing at the North one-sixteenth corner between said Section 23 and Section 24, from which, the Northeast corner of said Section 23 bears North 00°06'15" West 1314.15 feet; thence South 28°33'10" West 767.71 feet to the described said line and being the line of ordinary high water as it existed prior to the eruption of Mt. St. Helens on May 18, 1980 as shown on said records of survey; thence continuing along said line of ordinary high water through the following courses:

Thence westerly along a curve to the left with a radius of 600.00 feet, from which the radius point bears South 32°11'06" West, through a central angle of 16°20'08" for an arc length of 171.06 feet;

Thence North 75°27'11" West 584.40 feet;

Thence Northwesterly along a curve to the right with a radius of 1000 feet, from which the radius point bears North 14°32'29" East, through a central angle of 23°12'01" for an arc length of 404.92 feet;

Thence North 52°15'10" West 735.92 feet; thence South 73°15'38" West 101.81 feet more or less, to the line of ordinary high water on the left bank of the Cowlitz River as it exists now or may move through natural processes of accretion, erosion or reliction in the future; Thence Northwesterly along said line of ordinary high water on the left bank of the Cowlitz River approximated by the following courses:

North 16°44'22" West 214.12 feet;

North 24°06'10" West 199.43 feet;

North 24°06'10" West 262.41 feet;

North 18°37'32" West 169.80 feet;

North $12^{\circ}35'16''$ West 116.81 feet, more or less, to the terminus of Said Line, from which a 5/8 inch x 24 inch rebar with a yellow plastic cap marked LS 10997 was found as noted on said Record of Survey recorded August 2, 2017 in Book 36 of Surveys at page 143, bears North $87^{\circ}50'44''$ East 105.62 feet.

EXHIBIT C

Legal Description for Pieren Properties

NEW LEGAL DESCRIPTION

TAX PARCEL NUMBER 308640200:

Beginning at the Northwest corner of the Southwest Quarter of the Northwest Quarter of Section 24, Township 9 North, Range 2 West of the Willamette meridian; running, thence South 28°15' West to the Cowlitz River; thence Southerly following the Cowlitz River to the South line of Lot 1, Section 24, Township 9 North, Range 2 West of the Willamette Meridian otherwise known as the Northwest Quarter of Section 24;

Thence Northerly along the West line of the Northern Pacific Railroad Company right of way as now surveyed and located across Section 24 to a point directly East of the point of beginning; thence West to the point of beginning.

NEW LEGAL DESCRIPTION

TAX PARCEL NUMBER 30812 and 30864:

TRACT A

All that portion of the south half of Benjamin Huntington Donation Land claim lying westerly of the Northern Pacific Railroad right of way in Cowlitz County, Washington:

Excepting therefrom the following 6 parcels:

PARCEL 1

Commencing at a point on the division line of the Benjamin Huntington Donation Land Claim 2787 west and 742 ½ feet North of the Southeast corner of Section 14, Township 9 North, Range 2 West of the Willamette Meridian; Thence East along said division line 140 feet, more or less to the west edge of the county road; Thence following the West line of said county road, a distance of 750 feet; Thence West parallel with said division line 455 feet, more or less to the low water mark on the left bank of the Cowlitz River; Thence North 21° West a distance of 600 feet; thence East 30 feet to the place of beginning.

PARCEL 2

Commencing at a point on the East edge of the county road and 20 feet South of the division line of the Benjamin and Jerisha Huntington Donation Land Claim, said point being 722.5 feet North and 2557 feet West of the Southeast corner of Section 14, Township 9 North, Range 2 West of the Willamette Meridian; running thence East parallel with and 20 feet south of said division line

646 feet; thence South $11^{\circ}25'$ West 591.5 feet to the East edge of the county road; thence North $41^{\circ}49'$ West a distance of 775 feet to the place of beginning.

PARCEL 3

Beginning at the Northeast corner of a certain tract of land conveyed to Samuel McKone by Issac B. Huntington and Etta May Huntington, his wife, particularly described as recorded in Volume 9 of Deeds at page 475, deed records of Cowlitz County, Washington; Thence running East, a distance of 270 feet; thence South $11^{\circ}25'$ West a distance of 849.2 feet; Thence North $41^{\circ}49'$ West a distance of 336.8 feet; Thence North $11^{\circ}25'$ East 591.5 feet to the place of beginning, (the above described tract being a portion of and situate in Lot 8, Section 14, and Lot 2 of Section 23, Township 9 North, Range 2 West of the Willamette Meridian).

PARCEL 4

Beginning at a point 220.2 feet North 2158.7 feet West of an iron pipe which marks that corner common to Sections 13, 14, 23, and 24, Township 9 North, Range 2 West of the Willamette Meridian; Thence South $87^{\circ}46'30''$ West 300 feet, more or less, to the Cowlitz River; Thence South $26^{\circ}14'30''$ East along said river for a distance of 505.1 feet; thence North $51^{\circ}43'$ East a distance of 374.8 feet, more or less, to the right of way of the county road; Thence North $42^{\circ}52'30''$ West along said county road right of way 319.2 feet to the point of Beginning, (the above parcel of land being located in Section 14 and 23, Township 9 North, Range 2 West, of the Willamette Meridian, Cowlitz County, Washington).

PARCEL 5

Commencing at Section corner common to Section 13, 14, 23, and 24, Township 9 North, Range 2 West, of the Willamette Meridian; running thence West a distance of 2158.7 feet; thence North a distance of 220.2 feet; Thence South $87^{\circ}46'30''$ West a distance of 300 feet to the true point of beginning of the lands herein conveyed; Thence South $26^{\circ}14'30''$ East a distance of 505.1 feet; Thence North $51^{\circ}43'$ East a distance of 374.8 feet, more or less, to the right of way line of the county road; Thence south $42^{\circ}52'30''$ East along said county road a distance of 40.12 feet; Thence South $51^{\circ}43'$ West to a line projected South $26^{\circ}01'$ East a distance of 40.79 feet from a point from which the true point of beginning bears North $26^{\circ}14'30''$ West, a distance of 505.1 feet; Thence south $26^{\circ}01'$ East a distance of 449.21 feet; Thence South $67^{\circ}54'30''$ West a distance of 500 feet; Thence North $26^{\circ}01'$ West a distance of 998.2 feet; Thence North $11^{\circ}08'$ West to a point from which the true point of beginning bears North $87^{\circ}46'30''$ East; thence North $87^{\circ}46'30''$ East to the true point of beginning.

PARCEL 6

Commencing at a point on the East edge of the county road and 20 feet south of the division line between the North and South halves of the Benjamin and Jerisha Huntington Donation Land Claim said point being 722.5 feet North 2557 feet West of the Southeast corner of Section 14, Township 9 North, Range 2 West, of the Willamette Meridian; Thence in a Northerly direction

along the right of way of county road 20.0 feet more or less to the division line of the Benjamin and Jerisha Huntington Donation Land Claim; Thence East on the said division line a distance of 607.0 feet; Thence South $42^{\circ}39'30''$ East a distance of 27.2 feet; Thence West a distance of 625.4 feet more or less to the place of beginning. Except that portion for county road.

Together with TRACT B

A portion of the Benjamin Huntington Donation Land Claim in Township 9 North, Range 2 West, of the Willamette Meridian; Cowlitz County, Washington, described as follows:

Beginning at the most Southerly corner of the tract conveyed by Mary E. graves top Samuel Hoffman as described in Volume 87 of Deeds, Page 147, records of said county; thence south $39^{\circ}21'$ East a distance of 56.0 feet to the dividing line between the North and South half of the said Donation Land Claim; Thence along said dividing line South $86^{\circ}37'$ East a distance of 330.7 feet; Thence South $88^{\circ}26'$ East a distance of 197.0 feet; Thence South $88^{\circ}15'$ East a distance of 280.3 feet; Thence South $87^{\circ}50'$ East a distance of 221.0 feet to the Westerly right of way of the Northern Pacific Railroad; Thence along said Westerly right of way North $28^{\circ}46'$ West to its intersection with the Westerly right of way of the old Pacific highway; Thence along said Westerly right of way of said Old Pacific Highway North $52^{\circ}27'$ West 258.9 feet; Thence North $60^{\circ}13'$ West a distance of 318.00 feet; Thence leaving Highway South $55^{\circ}00'$ West a distance of 627.00 feet to the place of Beginning.

ALSO EXCEPTING THEREFROM a portion of the Northeast quarter and the Southeast quarter of Section 23, Township 9 North, Range 2 West, W.M., Cowlitz County, Washington lying northerly and easterly of the line of ordinary high water on the left bank of the Cowlitz River as it exists now or may move through natural processes of accretion, erosion or reliction in the future; being northerly and westerly of the westerly right of way line of the Burlington Northern Santa Fe Railroad, and westerly, southwesterly, and southerly of the following described line as shown on that Record of Survey recorded August 2, 2017 in Book 36 of Surveys at page 143,

Commencing at the North one-sixteenth corner between said Section 23 and Section 24, from which, the Northeast corner of said Section 23 bears North $00^{\circ}06'15''$ West 1314.15 feet; thence South $89^{\circ}41'50''$ East 159.52 feet, more or less, to the westerly right of way of the Burlington Northern Railroad being on a horizontal curve; from which the radius point bears South $78^{\circ}12'02''$ West 1809.86 feet; Thence southerly along said westerly right of way along said 1809.86 feet radius curve to the right, through a central angle of $42^{\circ}10'44''$ for an arc length of 1332.35 feet to the True Point of Beginning for said described line; said line being the line of ordinary high water as it existed prior to the eruption of Mt. St. Helens on May 18, 1980 as shown on said records of survey; thence continuing along said line of ordinary high water prior to the eruption of Mount St. Helens in 1980 through the following courses:

Thence North $09^{\circ}23'09''$ West 197.45 feet;

Boundary Line Agreement
Page 22 of 23

Thence westerly along a curve to the left with a radius of 600.00 feet, from which the radius point bears South 80°36'51" West, through a central angle of 49°43'54" for an arc length of 520.79 feet;

Thence continuing northwesterly along said curve to the left with a radius of 600.00 feet, from which the radius point bears South 30°52'57" West, through a central angle of 16°20'08" for an arc length of 171.06 feet;

Thence North 75°27'11" West 584.40 feet;

Thence Northwesterly along a curve to the right with a radius of 1000 feet, through a central angle of 23°12'01" for an arc length of 404.92 feet;

Thence North 52°15'10" West 735.92 feet;

Thence South 73°15'38" West 101.81 feet more or less, to the line of ordinary high water on the left bank of the Cowlitz River as it exists now or may move through natural processes of accretion, erosion or reliction in the future;

Thence Northwesterly along said line of ordinary high water on the left bank of the Cowlitz River approximated by the following courses:

North 16°44'22" West 214.12 feet;

North 24°06'10" West 199.43 feet;

North 24°06'10" West 262.41 feet;

North 18°37'32" West 169.80 feet;

North 12°35'16" 116.81 feet, more or less, to the terminus of Said Line,

from which a 5/8 inch x 24 inch rebar with a yellow plastic cap marked LS 10997 was found as noted on said Record of Survey recorded August 2, 2017 in Book 36 of Surveys at page 143, bears North 87°50'44" East 105.62 feet.

When recorded return to:

Roy A. Henson
 MIMI's Rentals LLC
 2278 Larsen Lane
 Castle Rock, WA 98611

\$3392
 E 183919
 10/04/2018
 SD
 Location Code: 0801
 Chicago Title Fishers
 Landing

Filed for record at the request of:



CHICAGO TITLE
 COMPANY OF WASHINGTON

1499 SE Tech Center Pl, Suite 100
 Vancouver, WA 98683

Escrow No.: 622-103790

REAL ESTATE CONTRACT

Residential Short Form

ANY OPTIONAL PROVISION NOT INITIALED BY ALL PERSONS SIGNING THIS CONTRACT--WHETHER INDIVIDUALLY OR AS AN OFFICER OR AGENT -- IS NOT A PART OF THIS CONTRACT.

1. **PARTIES AND DATE.** This Contract is entered into on October 2, 2018, between MIMI's Rentals LLC, a Washington limited liability company as "Seller" and MLC Ventures LLC as "Purchaser."
2. **SALE AND LEGAL DESCRIPTION.** Seller agrees to sell to Purchaser and Purchaser agrees to purchase from Seller the following described real estate in Cowlitz County, State of Washington:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Abbreviated Legal: (Required if full legal not inserted above.)

Lot(s) 2 of Castle Rock Short Subdivision No. 95-01, recorded in Book 8, Page 80

Tax Parcel Number(s): 308100100

3. **PERSONAL PROPERTY.** Personal property, if any, included in the sale is as follows:

No part of the purchase price is attributed to personal property.

4. a. **PRICE.** Purchaser agrees to pay:

\$265,000.00 Total Price

Less \$12,500.00 Down Payment

Less \$ _____ Assumed Obligation(s)

Results in \$252,500.00 Amount Financed by Seller.
- b. **ASSUMED OBLIGATIONS.** Purchaser agrees to pay the above assumed obligation(s) by assuming and agreeing to pay that certain _____
 (Mortgage/Deed of Trust/Contract) dated _____ recorded as
 Auditor's File No. _____.

Seller warrants the unpaid balance of said obligation is \$ _____ which is payable \$ _____ on or before the _____ day of _____,

☐ including ☐ plus interest at the rate of _____% per annum on the declining balance thereof; and a like amount on or before the _____ day of each and every _____, _____ thereafter until paid in full.

(month/year)

NOTE: Fill in the date in the following two lines only if there is an early cash out date on the assumed obligation.

REAL ESTATE CONTRACT
Residential Short Form
(continued)

NOTWITHSTANDING THE ABOVE, THE ENTIRE BALANCE OF PRINCIPAL AND INTEREST IS DUE IN FULL NOT LATER THAN _____.

ANY ADDITIONAL ASSUMED OBLIGATIONS ARE INCLUDED IN ADDENDUM

c. PAYMENT OF AMOUNT FINANCED BY SELLER.

Purchaser agrees to pay the sum of \$252,500.00 as follows:

Please see Attached Exhibit B and B1



NOTE: Fill in the date in the following two lines only if there is an early cash out date on the amount financed by seller.

NOTWITHSTANDING THE ABOVE, THE ENTIRE BALANCE OF PRINCIPAL AND INTEREST IS DUE IN FULL NOT LATER THAN DECEMBER 31, 2021.

Payments are applied first to interest and then to principal. Payments shall be made at 2278 Larsen Lane, Castle Rock, WA 98611 or such other place as the Seller may hereafter indicate in writing.

5. FAILURE TO MAKE PAYMENTS ON ASSUMED OBLIGATIONS. If Purchaser fails to make any payments on assumed obligation(s), Seller may give written notice to Purchaser that unless Purchaser makes the delinquent payment(s) within 15 days, Seller will make the payment(s), together with any late charge, additional interest, penalties, and costs assessed by the Holder of the assumed obligation(s). The 15-day period may be shortened to avoid the exercise of any remedy by the Holder of the assumed obligation(s). Purchaser shall immediately after such payment by Seller reimburse Seller for the amount of such payment plus a late charge equal to five percent (5%) of the amount so paid plus all costs and attorney fees incurred by Seller in connection with making such payment.

6. a. OBLIGATIONS TO BE PAID BY SELLER. The Seller agrees to continue to pay from payments received hereunder the following obligation, which obligation must be paid in full when Purchaser pays the purchase price in full: That certain _____ (Mortgage/Deed of Trust/Contract) dated _____ recorded as Auditor's File No. _____.

ANY ADDITIONAL OBLIGATION TO BE PAID BY SELLER ARE INCLUDED IN ADDENDUM.

b. EQUITY OF SELLER PAID IN FULL. If the balance owed the Seller on the purchase price herein becomes equal to the balance owed on prior encumbrances being paid by Seller, Purchaser will be deemed to have assumed said encumbrances as of that date. Purchaser shall thereafter make payments directly to the holders of said encumbrances and make no further payments to Seller. Seller shall at that time deliver to Purchaser a fulfillment deed in accordance with the provisions of paragraph 8.

c. FAILURE OF SELLER TO MAKE PAYMENTS ON PRIOR ENCUMBRANCES. If Seller fails to make any payments on any prior encumbrance, Purchaser may give written notice to Seller that unless Seller makes the delinquent payments within 15 days, Purchaser will make the payments together with any late charge, additional interest, penalties, and costs assessed by the holder of the prior encumbrance. The 15-day period may be shortened to avoid the exercise of any remedy by the holder of the prior encumbrance. Purchaser may deduct the amounts so paid plus a late charge of 5% of the amount so paid and any attorneys' fees and costs incurred by Purchaser in connection with the delinquency from payments next becoming due Seller on the purchase price. In the event Purchaser makes such delinquent payments on three occasions, Purchaser shall have the right to make all payments due thereafter directly to the holder of such prior encumbrance and deduct the then balance owing on such prior encumbrance from the then balance owing on the purchase price and reduce periodic payments on the balance due Seller by the payments called for in such prior encumbrance as such payments become due.

REAL ESTATE CONTRACT
Residential Short Form
(continued)

NOTWITHSTANDING THE ABOVE, THE ENTIRE BALANCE OF PRINCIPAL AND INTEREST IS DUE IN FULL NOT LATER THAN _____

ANY ADDITIONAL ASSUMED OBLIGATIONS ARE INCLUDED IN ADDENDUM

c. PAYMENT OF AMOUNT FINANCED BY SELLER.

Purchaser agrees to pay the sum of \$252,500.00 as follows:

Please see Attached Exhibit B and B1



NOTE: Fill in the date in the following two lines only if there is an early cash out date on the amount financed by seller.

NOTWITHSTANDING THE ABOVE, THE ENTIRE BALANCE OF PRINCIPAL AND INTEREST IS DUE IN FULL NOT LATER THAN DECEMBER 31, 2021.

Payments are applied first to interest and then to principal. Payments shall be made at 2278 Larsen Lane, Castle Rock, WA 98611 or such other place as the Seller may hereafter indicate in writing.

5. FAILURE TO MAKE PAYMENTS ON ASSUMED OBLIGATIONS. If Purchaser fails to make any payments on assumed obligation(s), Seller may give written notice to Purchaser that unless Purchaser makes the delinquent payment(s) within 15 days, Seller will make the payment(s), together with any late charge, additional interest, penalties, and costs assessed by the Holder of the assumed obligation(s). The 15-day period may be shortened to avoid the exercise of any remedy by the Holder of the assumed obligation(s). Purchaser shall immediately after such payment by Seller reimburse Seller for the amount of such payment plus a late charge equal to five percent (5%) of the amount so paid plus all costs and attorney fees incurred by Seller in connection with making such payment.

6. a. OBLIGATIONS TO BE PAID BY SELLER. The Seller agrees to continue to pay from payments received hereunder the following obligation, which obligation must be paid in full when Purchaser pays the purchase price in full: That certain _____ (Mortgage/Deed of Trust/Contract) dated _____ recorded as Auditor's File No. _____.

ANY ADDITIONAL OBLIGATION TO BE PAID BY SELLER ARE INCLUDED IN ADDENDUM.

b. EQUITY OF SELLER PAID IN FULL. If the balance owed the Seller on the purchase price herein becomes equal to the balance owed on prior encumbrances being paid by Seller, Purchaser will be deemed to have assumed said encumbrances as of that date. Purchaser shall thereafter make payments directly to the holders of said encumbrances and make no further payments to Seller. Seller shall at that time deliver to Purchaser a fulfillment deed in accordance with the provisions of paragraph 8.

c. FAILURE OF SELLER TO MAKE PAYMENTS ON PRIOR ENCUMBRANCES. If Seller fails to make any payments on any prior encumbrance, Purchaser may give written notice to Seller that unless Seller makes the delinquent payments within 15 days, Purchaser will make the payments together with any late charge, additional interest, penalties, and costs assessed by the holder of the prior encumbrance. The 15-day period may be shortened to avoid the exercise of any remedy by the holder of the prior encumbrance. Purchaser may deduct the amounts so paid plus a late charge of 5% of the amount so paid and any attorneys' fees and costs incurred by Purchaser in connection with the delinquency from payments next becoming due Seller on the purchase price. In the event Purchaser makes such delinquent payments on three occasions, Purchaser shall have the right to make all payments due thereafter directly to the holder of such prior encumbrance and deduct the then balance owing on such prior encumbrance from the then balance owing on the purchase price and reduce periodic payments on the balance due Seller by the payments called for in such prior encumbrance as such payments become due.

REAL ESTATE CONTRACT
Residential Short Form
(continued)

7. **OTHER ENCUMBRANCES AGAINST THE PROPERTY.** The property is subject to encumbrances including the following listed tenancies, easements, restrictions, and reservations in addition to the obligations assumed by Purchaser and the obligations being paid by Seller:

ANY ADDITIONAL NON-MONETARY ENCUMBRANCES ARE INCLUDED IN EXHIBIT ATTACHED HERETO.

8. **FULFILLMENT DEED.** Upon payment of all amounts due Seller, Seller agrees to deliver to Purchaser a Statutory Warranty Deed in fulfillment of this Contract. The covenants of warranty in said deed shall not apply to any encumbrances assumed by Purchaser or to defects in title arising subsequent to the date of this Contract by, through, or under persons other than the Seller herein. Any personal property included in the sale shall be included in the fulfillment deed.
9. **LATE CHARGES.** If any payment on the purchase price is not made within ten (10) days after the date it is due, Purchaser agrees to pay a late charge equal to 5% of the amount of such payment. Such late payment charge shall be in addition to all other remedies available to Seller and the first amounts received from Purchaser after such late charges are due shall be applied to the late charges.
10. **NO ADVERSE EFFECT ON PRIOR ENCUMBRANCES.** Seller warrants that entry into this Contract will not cause in any prior encumbrance (a) a breach, (b) accelerated payments, or (c) an increased interest rate; unless (a), (b), or (c) has been consented to by Purchaser in writing.
11. **POSSESSION.** Purchaser is entitled to possession of the property from and after the date of this Contract or October 4, 2018, whichever is later, subject to any tenancies described in paragraph 7.
12. **TAXES, ASSESSMENTS, AND UTILITY LIENS.** Purchaser agrees to pay by the date due all taxes and assessments becoming a lien against the property after the date of this Contract. Purchaser may in good faith contest any such taxes or assessments so long as no forfeiture or sale of the property is threatened as the result of such contest. Purchaser agrees to pay when due any utility charges which may become liens superior to Seller's interest under this Contract. If real estate taxes and penalties are assessed against the property subsequent to date of this Contract because of a change in use prior to the date of this Contract for Open Space, Farm, Agricultural, or Timber classifications approved by the County or because of a Senior Citizen's Declaration to Defer Property Taxes filed prior to the date of this Contract, Purchaser may demand in writing payment of such taxes and penalties within 30 days. If payment is not made, Purchaser may pay and deduct the amount thereof plus 5% penalty from the payments next becoming due Seller under the Contract.
13. **INSURANCE.** Purchaser agrees to keep all buildings now or hereafter erected on the property described herein continuously insured under fire and extended coverage policies in an amount not less than the balances owed on obligations assumed by Purchaser plus the balance due Seller, or full insurable value, whichever is lower. All policies shall be held by the Seller and be in such companies as the Seller may approve and have loss payable first to any holders of underlying encumbrances, then to Seller as their interests may appear and then to Purchaser. Purchaser may within 30 days after loss negotiate a contract to substantially restore the premises to their condition before the loss. If insurance proceeds are sufficient to pay the contract price for restoration or if the Purchaser deposits in escrow any deficiency with instructions to apply the funds on the restoration contract, the property shall be restored unless the underlying encumbrances provide otherwise. Otherwise the amount collected under any insurance policy shall be applied upon any amounts due hereunder in such order as Seller shall determine. In the event of forfeiture, all rights of Purchaser in insurance policies then in force shall pass to Seller.
14. **NONPAYMENT OF TAXES, INSURANCE, AND UTILITIES CONSTITUTING LIENS.** If Purchaser fails to pay taxes or assessments, insurance premiums, or utility charges constituting liens prior to Seller's interest under this Contract, Seller may pay such items and Purchaser shall forthwith pay Seller the amount thereof plus a late charge of 5% of the amount thereof plus any costs and attorney's fees incurred in connection with making such payment.
15. **CONDITION OF PROPERTY.** Purchaser accepts the property in its present condition and acknowledges that Seller, his/her agents, and subagents have made no representation or warranty concerning the physical condition of the property or the uses to which it may be put other than as set forth herein. Purchaser agrees to maintain the property in such condition as complies with all applicable laws.
16. **RISK OF LOSS.** Purchaser shall bear the risk of loss for destruction or condemnation of the property. Any such loss shall not relieve Purchaser from any of Purchaser's obligations pursuant to this Contract.

REAL ESTATE CONTRACT
Residential Short Form
(continued)

17. **WASTE.** Purchaser shall keep the property in good repair and shall not commit or suffer waste or willful damage to or destruction of the property. Purchaser shall not remove commercial timber without the written consent of Seller.
18. **AGRICULTURAL USE.** If this property is to be used principally for agricultural purposes, Purchaser agrees to conduct farm and livestock operations in accordance with good husbandry practices. In the event a forfeiture action is instituted, Purchaser consents to Seller's entry on the premises to take any reasonable action to conserve soil, crops, trees, and livestock.
19. **CONDEMNATION.** Seller and Purchaser may each appear as owners of an interest in the property in any action concerning condemnation of any part of the property. Purchaser may within 30 days after condemnation and removal of improvements, negotiate a contract to substantially restore the premises to their condition before the removal. If the condemnation proceeds are sufficient to pay the contract price for restoration or if the Purchaser deposits in escrow any deficiency with instructions to apply the funds on the restoration contract, the property shall be restored unless underlying encumbrances provide otherwise. Otherwise, proceeds of the award shall be applied in payment of the balance due on the purchase price, as Seller may direct.
20. **DEFAULT.** If the Purchaser fails to observe or perform any term, covenant, or condition of this Contract, Seller may:
- a. **Suit for Installments.** Sue for any delinquent periodic payment; or
 - b. **Specific Performance.** Sue for specific performance of any of Purchaser's obligations pursuant to this Contract; or
 - c. **Forfeit Purchaser's Interest.** Forfeit this Contract pursuant to Ch. 61.30, RCW, as it is presently enacted and may hereafter be amended. The effect of such forfeiture includes: (i) all right, title, and interest in the property of the Purchaser and all persons claiming through the Purchaser shall be terminated; (ii) the Purchaser's rights under the Contract shall be canceled; (iii) all sums previously paid under the Contract shall belong to and be retained by the Seller or other person to whom paid and entitled thereto; (iv) all improvements made to and unharvested crops on the property shall belong to the Seller; and (v) Purchaser shall be required to surrender possession of the property, improvements, and unharvested crops to the Seller 10 days after the forfeiture.
 - d. **Acceleration of Balance Due.** Give Purchaser written notice demanding payment of said delinquencies and payment of a late charge of 5% of the amount of such delinquent payments and payment of Seller's reasonable attorney's fees and costs incurred for services in preparing and sending such Notice and stating that if payment pursuant to said Notice is not received within 30 days after the date said Notice is either deposited in the mail addressed to the Purchaser or personally delivered to the Purchaser, the entire balance owing, including interest, will become immediately due and payable. Seller may thereupon institute suit for payment of such balance, interest, late charge, and reasonable attorney's fees and costs.
 - e. **Judicial Foreclosure.** Sue to foreclose this Contract as a mortgage, in which event Purchaser may be liable for a deficiency.
21. **RECEIVER.** If Seller has instituted any proceedings specified in Paragraph 20 and Purchaser is receiving rental or other income from the property, Purchaser agrees that the appointment of a receiver for the property is necessary to protect Seller's interest.
22. **PURCHASER'S REMEDY FOR SELLER'S DEFAULT.** If Seller fails to observe or perform any term, covenant, or condition of this Contract, Purchaser may, after 30 days' written notice to Seller, institute suit for damages or specific performance unless the breaches designated in said notice are cured.
23. **NON-WAIVER.** Failure of either party to insist upon strict performance of the other party's obligations hereunder shall not be construed as a waiver of strict performance thereafter of all of the other party's obligations hereunder and shall not prejudice any remedies as provided herein.
24. **ATTORNEY'S FEES AND COSTS.** In the event of any breach of this Contract, the party responsible for the breach agrees to pay reasonable attorney's fees and costs, including costs of service of notices and title searches, incurred by the other party. The prevailing party in any suit instituted arising out of this Contract and in any forfeiture proceedings arising out of this Contract shall be entitled to receive reasonable attorney's fees and costs incurred in such suit or proceedings.
25. **NOTICES.** Notices shall be either personally served or shall be sent certified mail, return receipt requested, and by regular first class mail to Purchaser at:

4404 Willamette Court, Vancouver, WA 98661

REAL ESTATE CONTRACT
Residential Short Form
(continued)

and to the Seller at:

2278 Larsen Lane, Castle Rock, WA 98611

or such other addresses as either party may specify in writing to the other party. Notices shall be deemed given when served or mailed. Notice to Seller shall also be sent to any institution receiving payments on the Contract.

26. **TIME FOR PERFORMANCE.** Time is of the essence in performance of any obligations pursuant to this Contract.
27. **SUCCESSORS AND ASSIGNS.** Subject to any restrictions against assignment, the provisions of this Contract shall be binding on the heirs, successors, and assigns of the Seller and the Purchaser.
28. **OPTIONAL PROVISION – SUBSTITUTION AND SECURITY ON PERSONAL PROPERTY.** Purchaser may substitute for any personal property specified in Paragraph 3 herein other personal property of like nature which Purchaser owns free and clear of any encumbrances. Purchaser hereby grants Seller a security interest in all personal property specified in Paragraph 3 and future substitutions for such property and agrees to execute a financing statement under the Uniform Commercial Code reflecting such security interest.

SELLER

INITIALS:

PURCHASER

29. **OPTIONAL PROVISION – ALTERATIONS.** Purchaser shall not make any substantial alteration to the improvements on the property without the prior written consent of Seller, which consent will not be unreasonably withheld.

SELLER

INITIALS:

PURCHASER

30. **OPTIONAL PROVISION – DUE ON SALE.** If Purchaser, without written consent of Seller, (a) conveys, (b) sells, (c) leases, (d) assigns, (e) contracts to convey, sell, lease or assign, (f) grants an option to buy the property, (g) permits a forfeiture or foreclosure or trustee or sheriffs sale of any of the Purchaser's interest in the property or this Contract, Seller may at any time thereafter either raise the interest rate on the balance of the purchase price or declare the entire balance of the purchase price due and payable. If one or more of the entities comprising the Purchaser is a corporation, any transfer or successive transfers in the nature of items (a) through (g) above of 49% or more of the outstanding capital stock shall enable Seller to take the above action. A lease of less than 3 years (including options for renewals), a transfer to a spouse or child of Purchaser, a transfer incident to a marriage dissolution or condemnation, and a transfer by inheritance will not enable Seller to take any action pursuant to this Paragraph; provided the transferee other than a condemnor agrees in writing that the provisions of this paragraph apply to any subsequent transaction involving the property entered into by the transferee.

SELLER

INITIALS:

PURCHASER

31. **OPTIONAL PROVISION – PRE-PAYMENT PENALTIES ON PRIOR ENCUMBRANCES.** If Purchaser elects to make payments in excess of the minimum required payments on the purchase price herein, and Seller, because of such prepayments, incurs prepayment penalties on prior encumbrances, Purchaser agrees to forthwith pay Seller the amount of such penalties in addition to payments on the purchase price.

SELLER

INITIALS:

PURCHASER

32. **OPTIONAL PROVISION – PERIODIC PAYMENTS ON TAXES AND INSURANCE.** In addition to the periodic payments on the purchase price, Purchaser agrees to pay Seller such portion of the real estate taxes and assessments and fire insurance premium as will approximately total the amount due during the current year based on Seller's reasonable estimate.

REAL ESTATE CONTRACT
Residential Short Form
(continued)

and to the Seller at:

2278 Larsen Lane, Castle Rock, WA 98611

or such other addresses as either party may specify in writing to the other party. Notices shall be deemed given when served or mailed. Notice to Seller shall also be sent to any institution receiving payments on the Contract.

26. **TIME FOR PERFORMANCE.** Time is of the essence in performance of any obligations pursuant to this Contract.
27. **SUCCESSORS AND ASSIGNS.** Subject to any restrictions against assignment, the provisions of this Contract shall be binding on the heirs, successors, and assigns of the Seller and the Purchaser.
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SELLER

INITIALS:

PURCHASER

29. **OPTIONAL PROVISION -- ALTERATIONS.** Purchaser shall not make any substantial alteration to the improvements on the property without the prior written consent of Seller, which consent will not be unreasonably withheld.

SELLER

INITIALS:

PURCHASER

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SELLER

INITIALS:

PURCHASER

31. **OPTIONAL PROVISION -- PRE-PAYMENT PENALTIES ON PRIOR ENCUMBRANCES.** If Purchaser elects to make payments in excess of the minimum required payments on the purchase price herein, and Seller, because of such prepayments, incurs prepayment penalties on prior encumbrances, Purchaser agrees to forthwith pay Seller the amount of such penalties in addition to payments on the purchase price.

SELLER

INITIALS:

PURCHASER

32. **OPTIONAL PROVISION -- PERIODIC PAYMENTS ON TAXES AND INSURANCE.** In addition to the periodic payments on the purchase price, Purchaser agrees to pay Seller such portion of the real estate taxes and assessments and fire insurance premium as will approximately total the amount due during the current year based on Seller's reasonable estimate.

REAL ESTATE CONTRACT
Residential Short Form
(continued)

The payments during the current year shall be \$_____ per
_____. Such "reserve" payments from Purchaser shall not accrue
interest. Seller shall pay when due all real estate taxes and insurance premiums, if any, and debit
the amounts so paid to the reserve account. Purchaser and Seller shall adjust the reserve account
in April of each year to reflect excess or deficit balances and changed costs. Purchaser agrees to
bring the reserve account balance to a minimum of \$10 at the time of adjustment.

SELLER

INITIALS:

PURCHASER

33. ADDENDA. Any addenda attached hereto are a part of this Contract.

34. ENTIRE AGREEMENT. This Contract constitutes the entire agreement of the parties and
supersedes all prior agreements and understandings, written or oral. This Contract may be
amended only in writing executed by Seller and Purchaser.

IN WITNESS WHEREOF the parties have signed this and sealed this Contract the day and year first
above written.

MLC Ventures LLC

BY: _____

Michael Canton
Member

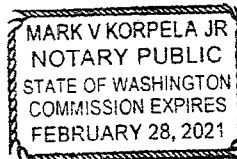
State of Washington

County of Clark

I certify that I know or have satisfactory evidence that Michael Canton is the person who appeared
before me, and said person acknowledged that he/she signed this instrument, on oath stated that
he/she was authorized to execute the instrument and acknowledged it as Member of MLC Ventures
LLC to be the free and voluntary act of such party for the uses and purposes mentioned in the
instrument.

Dated: 10/3/18

Name: Mark V. Korpele Jr
Notary Public in and for the State of WA
Residing at: Woodland
My appointment expires: 2-28-21



REAL ESTATE CONTRACT
Residential Short Form
(continued)

MIMI's Rentals LLC

BY: Roy A. Henson
Roy A. Henson
Manager

BY: Linda M. Henson
Linda M. Henson
Manager

State of WASHINGTON
County of COWLITZ

I certify that I know or have satisfactory evidence that Roy A. Henson and Linda M. Henson are the persons who appeared before me, and said persons acknowledged that they signed this instrument, on oath stated that they were authorized to execute the instrument and acknowledged it as Manager and Manager, respectively, of MIMI's Rentals LLC to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: 3 October 2018

Sherrey Admire
Name: Sherrey Admire
Notary Public in and for the State of Washington
Residing at: Oregon
My appointment expires: 12-14-2021

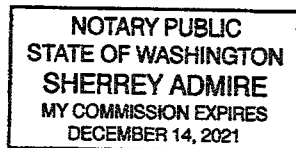


EXHIBIT "A"
Legal Description

For APN/Parcel ID(s): 308100100

Lot(s) 2 of Castle Rock Short Subdivision No. 95-01, recorded in Book 8, Page 80, records of Cowlitz County, Washington, being a portion of the Northwest quarter of Section 14, Township 9 North, Range 2 West of the Willamette Meridian, recorded March 22, 1995, recorded under Auditor's File No. 950322055, records of Cowlitz County, Washington.

EXHIBIT B

DocuSign Envelope ID: 92850E84-FE85-4FFD-A0FF-352354B41A21

Form 34
Addendum/Amendment to P&S
Rev. 7/10
Page 1 of 1

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Northwest Multiple Listing Service
ALL RIGHTS RESERVED

ADDENDUM / AMENDMENT TO PURCHASE AND SALE AGREEMENT

The following is part of the Purchase and Sale Agreement dated September 7, 2018 1
between MLC Ventures LLC ("Buyer") 2
Buyer Buyer
and MIMIS Rentals LLC ("Seller") 3
Seller Seller
concerning 1955 S Huntington Ave Castlerock WA 98611 (the "Property"). 4
Address City State Zip

IT IS AGREED BETWEEN THE SELLER AND BUYER AS FOLLOWS: 5

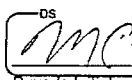
The terms of this owner carry contract shall be calculated on a 5% interest only amortization schedule as indicated in
scheduled "B". Payments of principal and interest shall be made according to the payment schedule agreed upon and
attached as exhibit "B". Additional payments over and above this schedule will require the schedule to be adjusted
accordingly. 6
7
8
9

Closing extended to on or before October 4th 2018. 10
11
12
13
14
15
16
17
18

Read and Approved By:  19
20
21
22
23
24
25
26
27
28
29
30

Read and Approved By: _____

ALL OTHER TERMS AND CONDITIONS of said Agreement remain unchanged. 31

 10/1/2018 8:00:03 AM PDT
Buyer's Initials Date Buyer's Initials Date

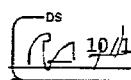
 10/1/2018 8:20:09 AM PDT
Seller's Initials Date Seller's Initials Date

EXHIBIT B

DocuSign Envelope ID: 92850E84-FE85-4FFD-A0FF-352354B41A21

Form 34
Addendum/Amendment to P&S
Rev. 7/10
Page 1 of 1

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Buyer Buyer
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Seller Seller
concerning 1955 S Huntington Ave Castlerock WA 98611 (the "Property"). 4
Address City State Zip

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The terms of this owner carry contract shall be calculated on a 5% interest only amortization schedule as indicated in scheduled "B". Payments of principal and interest shall be made according to the payment schedule agreed upon and attached as exhibit "B". Additional payments over and above this schedule will require the schedule to be adjusted accordingly.

Closing extended to on or before October 4th 2018.

Read and Approved By: [Signature]

Read and Approved By: _____

ALL OTHER TERMS AND CONDITIONS of said Agreement remain unchanged.

^{DS}
[Signature] 10/1/2018 8:00:03 AM PDT
Buyer's Initials Date Buyer's Initials Date

^{DS}
[Signature] 10/1/2018 8:20:09 AM PDT
Seller's Initials Date Seller's Initials Date

DocuSign Envelope ID: 92850E84-FE85-4FFD-A0FF-352354B41A21

EXHIBIT "B" 1

Bankrate

MORTGAGES

BANKING

CREDIT
CARDS

LOANS

INVESTING

HOME
EQUITY

PERSONAL
FINANCE

QSe

Interest Only Mortgage Calculator

The rates on interest-only loans can change as often as every month, or may be fixed for a 10-year period.
Check to see how your interest-only rate can change your mortgage payment.

Loan amount

\$ 252,500

Interest rate

5

%

New Monthly Payment

\$ 1,052.08

CALCULATE

DS
MC

10/1/2018 8:00:03 AM PDT

DS
CAH

10/1/2018 8:20:09 AM PDT

the terms of
this owner
carry
contract
shall be
calculated on
a 5%
interest only
amortization
schedule as
indicated in
scheduled
"B". Payments
of principal
and interest
shall be
made
according to
the payment
schedule
agreed upon
and attached
as exhibit
"B".
Additional
payments over
and above
this schedule
will require
the schedule
to be
adjusted
accordingly.

Bankrate

MORTGAGES

BANKING

CREDIT
CARDS

LOANS

INVESTING

HOME
EQUITY

PERSONAL
FINANCE

QSe

Interest Only Mortgage Calculator

The rates on interest-only loans can change as often as every month, or may be fixed for a 10-year period.
Check to see how your interest-only rate can change your mortgage payment.

Loan amount

\$ 244,208.3

Interest rate

5

%

New Monthly Payment

\$ 1,017.53

CALCULATE

DS
MC

10/1/2018 8:00:03 AM PDT

DS
CAH

10/1/2018 8:20:09 AM PT

Closing
extended to

DocuSign Envelope ID: 92850E84-FE85-4FFD-A0FF-352354B41A21

EXHIBIT "B" 1

Bankrate

MORTGAGES

BANKING

CREDIT
CARDS

LOANS

INVESTING

HOME
EQUITY

PERSONAL
FINANCE

QSe

Interest Only Mortgage Calculator

The rates on interest-only loans can change as often as every month, or may be fixed for a 10-year period.
Check to see how your interest-only rate can change your mortgage payment.

Loan amount

\$ 200,313.5

Interest rate

5

%

New Monthly Payment

\$ 834.64

CALCULATE

DS MC 10/1/2018 8:00:03 AM PDT DS R 10/1/2018 8:20:09 AM P

EXHIBIT "B"

Bankrate

MORTGAGES

BANKING

CREDIT
CARDS

LOANS

INVESTING

HOME
EQUITY

PERSONAL
FINANCE

QSe

Interest Only Mortgage Calculator

The rates on interest-only loans can change as often as every month, or may be fixed for a 10-year period.
Check to see how your interest-only rate can change your mortgage payment.

Loan amount

\$ 158,659.9

Interest rate

5

%

New Monthly Payment

\$ 661.08

CALCULATE

DS MC 10/1/2018 8:00:03 AM PDT DS R 10/1/2018 8:20:09 AM I

DocuSign Envelope ID: 92850E84-FE85-4FFD-A0FF-352356B41821 "B" 1

1955 Huntington Payment Plan			
	Payment	Interest 5% only	Balance
October 1st 2018	12500		252500
October 1st-31st 2018		1052.08	
November 1st 2018		1052.08	
December 1st-31st 2018		1052.08	
January 1st 2019		1052.08	
			256708.3
February 1st 2019	12500		244208.3
February 1st-31st 2019		1017.53	
March 1st 2019		1017.53	
April 1st 2019		1017.53	
May 1st 2019		1017.53	
June 1st 2019		1017.53	
July 1st-31st 2019		1017.53	
			250313.5
August 1st 2019	50000		200313.5
August 1st-31st 2019		834.64	
September 1st 2019		834.64	
October 1st 2019		834.64	
November 1st 2019		834.64	
December 1st 2019		834.64	
January 1st 2020		834.64	
February 1st 2020		834.64	
March 1st 2020		834.64	
April 1st 2020		834.64	
May 1st-31st 2020		834.64	
			208659.9
June 1st 2020	50000		158659.9
June 1st-31st 2020		661.08	
July 1st 2020		661.08	
August 1st 2020		661.08	
September 1st 2020		661.08	
October 1st 2020		661.08	
November 1st 2020		661.08	
December 1st-31st 2020		661.08	
January 1st 2021		661.08	
February 1st 2021		661.08	
March 1st 2021		661.08	
April 1st 2021		661.08	
May 1st 2021		661.08	
June 1st 2021		661.08	
July 1st 2021		661.08	
August 1st 2021		661.08	
September 1st 2021		661.08	
October 1st 2021		661.08	
November 1st 2021		661.08	
December 1st-31st 2021		661.08	
			171220.4 Balloon Due
	Interest paid	31220.42	

DS
 [Signature] 10/1/2018 8:00:11

DS
 [Signature] 10/1/2018 8:20:09

Return Address:

Mike Canton
4404 Willamette Ct
Vancouver WA. 98661

3632127

12/02/2019 11:21:43 AM
Amendment CANTON MIKE 113.50
Cowlitz County Washington

Pages: 11



**WASHINGTON STATE COUNTY AUDITOR/RECORDER'S
INDEXING FORM (Cover Sheet)**

(RCW 65.04)

Please print or type information

Document Title(s) (or transactions contained therein):

1. CONTRACT Amendment
- 2.
- 3.
- 4.

Reference Number(s) of Documents assigned or released:

Legal, Page 1-4 CONTRACT Amendment, Page 5 Exhibit B New
Additional reference #'s on page ____ of document. Page 1+2 Exhibit B1 New
Page 1+2 B1 New-Option

Grantor(s) (Last name first, then first name and initials)

1. MIMI'S Rentals LLC
- 2.
- 3.
- 4.

☐ Additional names on page ____ of document.

Grantee(s) (Last name first, then first name and initials)

1. MLC VENTURES LLC
- 2.
- 3.
- 4.

☐ Additional names on page ____ of document.

Legal Description (abbreviated: i.e. lot, block, plat or section, township, range)

Attached

☐ Additional legal is on page ____ of document.

Assessor's Property Tax Parcel/Account Number

☐ Assessor Tax # not yet assigned.

R040256

The Auditor/Recorder will rely on the information provided on the form. The staff will not read the document to verify the accuracy or completeness of the indexing information provided herein.

After recording mail to:

Name:

Address:

Filed for record at request of:

CONTRACT AMENDMENT

This document amends the real estate contract recorded 10/04/2018 and replaces in entirety the unrecorded supplemental addendum to purchase and sales agreement signed 07/31/2019 between Michael Canton for MLC Ventures LLC and Roy A. and Linda M. Henson managers for MIMI's Rentals LLC.

The above stated contract shall be amended by replacing Section 4c in its entirety, which states:

PAYMENT OF AMOUNT FINANCED BY SELLER. Purchaser agrees to pay the sum of \$252,500.00 as follows: Please see Attached Exhibit B and B1.

NOTE: fill in the date in the following two lines if there is an early cash out date on the amount financed by seller.

NOTWITHSTANDING THE ABOVE, THE ENTIRE BALANCE OF PRINCIPAL AND INTEREST IS DUE IN FULL NOT LATER THAN DECEMBER 31, 2021. Payments are applied first to interest and then to principal. Payments shall be made at 2278 Larsen Lane, Castle Rock, WA 98611 or such other place as the seller may hereafter indicate in writing.

The replacement clause shall read:

PAYMENT OF AMOUNT FINANCED BY SELLER. Purchaser agrees to pay the sum of \$252,500.00 as follows: Please see Attached Exhibit B NEW and B1NEW and B1NEW-OPTION.

NOTWITHSTANDING THE ABOVE, THE ENTIRE BALANCE OF PRINCIPAL AND INTEREST IS DUE IN FULL NOT LATER THAN JUNE 1, 2024. Payments are applied first to interest and then to principal. Payments shall be made at 2278 Larsen Lane, Castle Rock, WA 98611 or such other place as the seller may hereafter indicate in writing.

Also amended by replacement is Exhibit B, an addendum/amendment to purchase and sales agreement between the above named entities which states:

IT IS AGREED BETWEEN THE SELLER AND BUYER AS FOLLOWS:

The terms of this owner carry contract shall be calculated on a 5 % interest only amortization schedule as indicated in scheduled "B". Payments of principal and interest shall be made according to the payment schedule agreed upon and attached as exhibit "B1". Additional payments over and above this schedule will require the schedule to be adjusted accordingly."

The replacement clause shall read:

CONTRACT AMENDMENT
Continued

Payments of principal and interest shall be made according to the payment schedule agreed upon and attached as exhibit "B1NEW" or "B1NEW-OPTION". Additional payments over and above these schedules will require the schedule to be adjusted accordingly.

The terms of this owner carry contract shall be calculated as follows:

The August 1, 2019 balance of \$200,313.5 will accrue interest at 5 per annum until June 2020 when monthly interest only payments commence. If the balance of \$8,346.40 of accumulated interest for the August 1, 2019 through June 1, 2020 period is paid in full the monthly interest only payments will be \$834.64, to be paid monthly beginning June 1, 2020 and continuing monthly through June 1, 2024 with no early payoff penalties.

If the option to pay the accumulated interest of \$8,346.40 for the August 1, 2019 though June 1, 2020 period is not exercised, the balance on June 1, 2020 of \$208,659.90 shall be carried at 5.5% per annum, with monthly interest only payments of \$956.36, the first being due June 1, 2020, and continuing monthly through June 1, 2024 with no early payoff penalties.

Also amended by replacement is Exhibit B1, a graphic depiction and amortization schedule to be replaced with the amortization schedules labeled Exhibit B1 NEW and EXHIBIT B1 NEW OPTION.

The above amendments are the only changes to the original contract. All other portions of the original contract remain in full force and effect.

In witness whereof the parties have signed and sealed this amendment to contract on this _____ day of _____, 2019.

CONTRACT AMENDMENT
Continued

MIMI's Rentals LLC

By 
Roy A. Henson
Manager

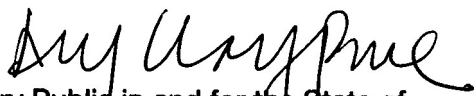
By 
Linda M. Henson
Manager

STATE OF WASHINGTON)
 : ss.
County of Cowlitz.)

I certify that I know or have satisfactory evidence that ROY A. HENSON and LINDA M. HENSON are the persons who appeared before me, and said persons acknowledged that they signed this instrument, on oath stated they were authorized to execute the instrument and acknowledged it as Manager and Manager, respectively, of MIMI's Rentals LLC to be the free and voluntary act of such party for the uses and purposes therein mentioned in the instrument.

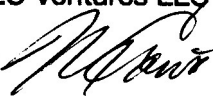
Given under my hand and official seal this 30th day of Oct., 2019




Notary Public in and for the State of
Washington, residing at Castle Rock, WA.
My commission expires: 7/15/2023

CONTRACT AMENDMENT
Continued

MLC Ventures LLC

By 

Michael Canton
Member

STATE OF WASHINGTON)
 : ss.
County of Cowlitz.)

I certify that I know or have satisfactory evidence that Michael Canton is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as Member of MLC Ventures LLC to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Given under my hand and official seal this 30th day of Oct., 2019




Notary Public in and for the State of
Washington, residing at Castle Rock, WA.
My commission expires: 7/15/23

EXHIBIT B NEW

Payments of principal and interest shall be made according to the payment schedule agreed upon and attached as exhibit "B1NEW" or "B1NEW-OPTION". Additional payments over and above these schedules will require the schedule to be adjusted accordingly.

The terms of this owner carry contract shall be calculated as follows:

The August 1, 2019 balance of \$200,313.5 will accrue interest at 5 per annum until June 2020 when monthly interest only payments commence. If the balance of \$8,346.40 of accumulated interest for the August 1, 2019 through June 1, 2020 period is paid in full the monthly interest only payments will be \$834.64, to be paid monthly beginning June 1, 2020 and continuing monthly through June 1, 2024 with no early payoff penalties.

If the option to pay the accumulated interest of \$8,346.40 for the August 1, 2019 through June 1, 2020 period is not exercised, the balance on June 1, 2020 of \$208,659.90 shall be carried at 5.5% per annum, with monthly interest only payments of \$956.36, the first being due June 1, 2020, and continuing monthly through June 1, 2024 with no early payoff penalties.

EXHIBIT B1 NEW				
1955 Huntington Payment Plan AMENDED OPTION TO PAY ACCUMULATED INTEREST- EXERCISED				
	Payment	Interest 5% only	Balance	
October 1st 2018	12500		252500	
October 1st-31st 2018		1052.08		
November 1st 2018		1052.08		
December 1st- 31st 2018		1052.08		
January 1st 2019		1052.08		
			256708.32	
February 1st 2019	12500		244208.32	
February 1st-31st 2019		1017.53		
March 1st 2019		1017.53		
April 1st 2019		1017.53		
May 1st 2019		1017.53		
June 1st 2019		1017.53		
July 1st-31st 2019		1017.53		
			250313.48	
August 1st 2019	50000		200313.5	
August 1st -31st 2019		834.64		
September 1st 2019		834.64		
October 1st 2019		834.64		
November 1st 2019		834.64		
December 1st 2019		834.64		
January 1st 2020		834.64		
February 1st 2020		834.64		
March 1st 2020		834.64		
April 1st 2020		834.64		
May 1st -31st 2020		834.64		
		Interest 5% only	200313.5	Accumulated interest of \$8346.4 paid back
June 1st 2020				
June 1st-31st 2020		834.64		
July 1st 2020		834.64		
August 1st 2020		834.64		
September 1st 2020		834.64		
October 1st 2020		834.64		
November 1st 2020		834.64		
December 1st-31st 2020		834.64		
January 1st 2021		834.64		
February 1st 2021		834.64		
March 1st 2021		834.64		
April 1st 2021		834.64		
May 1st 2021		834.64		
June 1st 2021		834.64		
July 1st 2021		834.64		
August 1st 2021		834.64		
September 1st 2021		834.64		
October 1st 2021		834.64		
November 1st 2021		834.64		
December 1st -31st 2021		834.64		
				PAGE 1 OF 2

January 1st 2022		834.64																	
February 1st 2022		834.64																	
March 1st 2022		834.64																	
April 1st 2022		834.64																	
May 1st 2022		834.64																	
June 1st 2022		834.64																	
July 1st 2022		834.64																	
August 1st 2022		834.64																	
September 1st 2022		834.64																	
October 1st 2022		834.64																	
November 1st 2022		834.64																	
December 1st -31st 2022		834.64																	
January 1st 2023		834.64																	
February 1st 2023		834.64																	
March 1st 2023		834.64																	
April 1st 2023		834.64																	
May 1st 2023		834.64																	
June 1st 2023		834.64																	
July 1st 2023		834.64																	
August 1st 2023		834.64																	
September 1st 2023		834.64																	
October 1st 2023		834.64																	
November 1st 2023		834.64																	
December 1st -31st 2023		834.64																	
January 1st 2024		834.64																	
February 1st 2024		834.64																	
March 1st 2024		834.64																	
April 1st 2024		834.64																	
May 1st 2024		834.64																	
June 1st 2024			200313.5	Balance due															
		Interest paid	58722.62																

PAGE 2 OF 2

B1 NEW-OPTION

1955 Huntington Payment Plan AMENDED OPTION TO PAY ACCUMULATED INTEREST- NOT EXERCISED					
		Payment	Interest 5% only	Balance	
October 1st 2018		12500	1052.08	252500	
October 1st-31st 2018			1052.08		
November 1st 2018			1052.08		
December 1st- 31st 2018					
January 1st 2019			1052.08	256708.32	
February 1st 2019		12500		244208.32	
February 1st-31st 2019			1017.53		
March 1st 2019			1017.53		
April 1st 2019			1017.53		
May 1st 2019			1017.53		
June 1st 2019			1017.53		
July 1st-31st 2019			1017.53	250313.48	
August 1st 2019		50000		200313.5	
August 1st -31st 2019			834.64		
September 1st 2019			834.64		
October 1st 2019			834.64		
November 1st 2019			834.64		
December 1st 2019			834.64		
January 1st 2020			834.64		
February 1st 2020			834.64		
March 1st 2020			834.64		
April 1st 2020			834.64		
May 1st -31st 2020			834.64		
June 1st 2020			Interest 5.5% only	208659.9	Accumulated
June 1st-31st 2020			956.36		Interest of \$834.64 not paid back
July 1st 2020			956.36		
August 1st 2020			956.36		
September 1st 2020			956.36		
October 1st 2020			956.36		
November 1st 2020			956.36		
December 1st-31st 2020			956.36		
January 1st 2021			956.36		

B1 NEW-OPTION

February 1st 2021				956.36			
March 1st 2021				956.36			
April 1st 2021				956.36			
May 1st 2021				956.36			
June 1st 2021				956.36			
July 1st 2021				956.36			
August 1st 2021				956.36			
September 1st 2021				956.36			
October 1st 2021				956.36			
November 1st 2021				956.36			
December 1st -31st 2021				956.36			
January 1st 2022				956.36			
February 1st 2022				956.36			
March 1st 2022				956.36			
April 1st 2022				956.36			
May 1st 2022				956.36			
June 1st 2022				956.36			
July 1st 2022				956.36			
August 1st 2022				956.36			
September 1st 2022				956.36			
October 1st 2022				956.36			
November 1st 2022				956.36			
December 1st -31st 2022				956.36			
January 1st 2023				956.36			
February 1st 2023				956.36			
March 1st 2023				956.36			
April 1st 2023				956.36			
May 1st 2023				956.36			
June 1st 2023				956.36			
July 1st 2023				956.36			
August 1st 2023				956.36			
September 1st 2023				956.36			
October 1st 2023				956.36			
November 1st 2023				956.36			
December 1st -31st 2023				956.36			
January 1st 2024				956.36			
February 1st 2024				956.36			
March 1st 2024				956.36			
April 1st 2024				956.36			
May 1st 2024				956.36			
June 1st 2024				956.36			
208659.9 Balance due							PAGE 2 OF 2

DB22-494B-491B-9201-8ED1793E586B

AMEND CANTON MIKE

Cowlitz County Assessor's Parcel Search

9/9/2018 4:42 AM

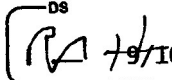
Parcel: 308100100 Site Address: 1955 S HUNTINGTON AVE , CASTLE ROCK 98611**Count:** R040256**Owner:** MIMIS RENTALS LLC
Mailing Address: 2278 LARSEN LN SW
CASTLE ROCK, WA 98611-9202**Jurisdiction:** CITY OF CASTLE ROCK**Abbr Property Ref:** SUB:CASTLE ROCK OUTLOT BLK:CR0L LOT:298, LOT:299 DESC: CR08080 LOT 2 NW1/4 SECT,TWN,RNG:14-9N-2W DESC: B HUNTINGTON DLC Short Plat CR-08080 Fee Number 950322055 PARCEL: 308100100**Neighborhood:** 4 - CASTLE ROCK**Tax District:** 600 Castle Rock City Limits**Levy Code:** 600 = CR-401-LV-#6-C1

Current Assessed Value	Assess Year	Tax Year	Type	Actual Value	Assess Value	Acres
	2018	2019	LAND	39,450	39,450	1.06
	2017	2018	LAND	37,570	37,570	1.06

Conveyance History:	Reception	Book	Page	Grantor
	3428843			HENSON ROY A/LINDA N
	950322055	8	80	
	930521024	1146	1032	HENSON ROY A/LINDA N

Property Details: Short Plat/Large Lot #: CR-08080**Photographs:**

 DS
9/9/2018 5:17:58 AM PDT


 DS
9/10/2018 1:31:53 PM PDT

Disclaimer: Neither Cowlitz County nor the Assessor/Treasurer warrants the accuracy, reliability or timeliness of any information in this system, and shall not be held liable for losses caused by using this information. Portions of this information may not be current or accurate. Any person or entity who relies on any information obtained from this system, does so at their own risk. All critical information should be independently verified.

3682681

05/19/2021 02:00:03 PM Pages: 6 \$108.50

Deed

CHICAGO TITLE VANCOUVER DOWNTOWN-655 W COLUMBIA WAY S
eRecorded at Cowlitz County, WA

When recorded return to:

CT6, LLC
PO Box 1419
Battle Ground, WA 98604

\$3,240.00 EXCISE TAX
AFFIDAVIT NO: 22624
COWLITZ COUNTY TREASURER
05/19/2021 DEPUTY JK

Filed for record at the request of:



CHICAGO TITLE
COMPANY OF WASHINGTON

655 W. Columbia Way, Suite 200
Vancouver, WA 98660

Escrow No.: 622-118607

STATUTORY WARRANTY DEED

THE GRANTOR(S) The Entrust Group FBO Raymond Alfred Pieren IRA 55-00603

for and in consideration of Ten And No/100 Dollars (\$10.00) and other good and valuable consideration
in hand paid, conveys, and warrants to CT6, LLC, a Washington limited liability company

the following described real estate, situated in the County of Cowlitz, State of Washington:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Abbreviated Legal: (Required if full legal not inserted above.)

CROL 302, Sections 14 and 23, Township 9 North, Range 2 West and CROL 355A and 10C-2,
30B, Section 23, Township 9 North, Range 2 West

Tax Parcel Number(s): 30813, 308640100, 6143802

Subject to:

SEE EXHIBIT "B" ATTACHED HERETO AND MADE A PART HEREOF

STATUTORY WARRANTY DEED

(continued)

Dated: May 14, 2021

Entrust FBO Raymond Alfred Pieren IRA 55-00603

BY:

Matthew Beck
The Entrust Group

State of _____

County of _____

I certify that I know or have satisfactory evidence that _____ is
the person who appeared before me, and said person acknowledged that he/she signed this
instrument, on oath stated that he/she was authorized to execute the instrument and acknowledged it as
_____, respectively, of The Entrust
Group FBO Raymond Alfred Pieren IRA 55-00603 to be the free and voluntary act of such party for the
uses and purposes mentioned in the instrument.

Dated: _____

SEE ATTACHED

Name: _____
Notary Public in and for the State of _____
Residing at: _____,
My appointment expires: _____

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of Alameda

On 05 / 14 / 2021 before me, Kien Han, Notary Public, Notary Public,
(here insert name and title of the officer)

personally appeared Matthew Beck - Authorized Signer
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) ~~is/are~~ subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Kien Han
Signature

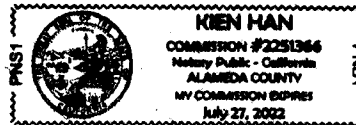


EXHIBIT "A"
Legal Description

For APN/Parcel ID(s): 30813, 308640100 and 6143802

Parcel I:

A tract of land situated in Section 3, 14, and 23, Township 9 North, Range 2 West of the Willamette Meridian, Cowlitz County, Washington, more particularly described as follows:

Beginning at a point 2127.95 feet West and 231.22 feet North of the Southeast corner of said Section 14;

Thence North 51° 19' 30" East a distance of 161.44 feet;

Thence North 12° 48' 22" East a distance of 413.75 feet;

Thence East a distance of 270 feet;

Thence South 11° 25' West a distance of 849.2 feet more or less to the Northerly right of way of the County Road;

Thence Northwesterly along said right of way to the point of beginning.

Parcel II:

Those portions of Government Lot 8, Section 14, Township 9 North, Range 2 West, of the Willamette Meridian, Cowlitz County, Washington and of Government Lot 2, Section 23, said Township and Range, described as follows:

Beginning at the Southeast corner of said Section 14;

Thence West a distance of 2158.7 feet;

Thence North a distance of 220.2 feet;

Thence South 87°46'00" West a distance of 300 feet to the true point of beginning;

Thence South 26°14'30" East a distance of 505.1 feet;

Thence North 51°43'00" East a distance of 374.8 feet, more or less, to the Southwesterly right of way line of the County Road;

Thence South 42°52'30" East, along said right of way line, a distance of 40.12 feet;

Thence South 51°43'00" West to a point South 26°01'00" East of 40.49 feet from a point South 26°14'30" East a distance of 505.1 feet from the true point of Beginning;

Thence South 26°01'00" East a distance of 449.21 feet;

Thence South 67°54'30" West a distance of 500 feet;

Thence North 26°01'00" West a distance of 998.2 feet;

Thence North 11°08'00" West to a point from which the true point of beginning bears North 87°46'30" East;

Thence North 87°46'30" East of the True point of beginning.

Excepting therefrom those portions of Government Lot 8, Section 14, Township 9 North, Range 2 West and Government Lot 2, Section 23, Township 9 North, Range 2 West, of the Willamette Meridian, described as follows:

Beginning at the Southeast corner of said Section 14;

Thence West a distance of 2158.7 feet;

Thence North a distance of 220.2 feet;

Thence South 87°46'30" West a distance of 300.0 feet to the true point of beginning;

EXHIBIT "A"
Legal Description
(continued)

Thence South 26°14'30" East a distance of 530.1 feet;

Thence South 87°50'44" West a distance of 542.94 feet;

Thence North 26°01' 00" West a distance of 388.2 feet;

Thence North 11°08' 00" West to a point from which the true point of beginning bears North 87°46'30" East;

Thence North 87°46'30" East a distance of 500.0 feet to the true point of beginning.

ALSO EXCEPTING THEREFROM a portion of the Northeast quarter and the Southeast quarter of Section 23, Township 9 North, Range 2 West, W.M., Cowlitz County, Washington lying Westerly, Southwesterly, and Southerly of the following described line as shown on that Record of Survey recorded August 2, 2017 in Book 36 of Surveys at page 143:

Commencing at the North one-sixteenth corner between said Section 23 and Section 24, from which, the Northeast corner of said Section 23 bears North 00°06'15" West 1314.15 feet; thence South 28°33'10" West 767.71 feet to the described said line and being the line of ordinary high water as it existed prior to the eruption of Mt. St. Helens on May 18, 1980 as shown on said records of survey; thence continuing along said line of ordinary high water through the following courses:

Thence Westerly along a curve to the left with a radius of 600.00 feet, from which the radius point bears South 32°11'06" West, through a central angle of 16°20'08" for an arc length of 171.06 feet;

Thence North 75°27'11" West 584.40 feet;

Thence Northwesterly along a curve to the right with a radius of 1000 feet, from which the radius point bears North 14°32'29" East, through a central angle of 23°12'01" for an arc length of 404.92 feet;

Thence North 52°15'10" West 735.92 feet; thence South 73°15'38" West 101.81 feet more or less, to the line of ordinary high water on the left bank of the Cowlitz River as it exists now or may move through natural processes of accretion, erosion or reliction in the future; Thence Northwesterly along said line of ordinary high water on the left bank of the Cowlitz River approximated by the following courses:

North 16°44'22" West 214.12 feet;

North 24°06'10" West 199.43 feet;

North 24°06'10" West 262.41 feet;

North 18°37'32" West 169.80 feet;

North 12°35'16" West 116.81 feet, more or less, to the terminus of Said Line, from which a 5/8 inch x 24 inch rebar with a yellow plastic cap marked LS 10997 was found as noted on said Record of Survey recorded August 2, 2017 in Book 36 of Surveys at page 143, bears North 87°50'44" East 105.62 feet.

EXHIBIT "B"
Exceptions

1. Taxes and Assessments as they become due and payable.
2. Assessments, if any, levied by The City of Castle Rock.
3. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

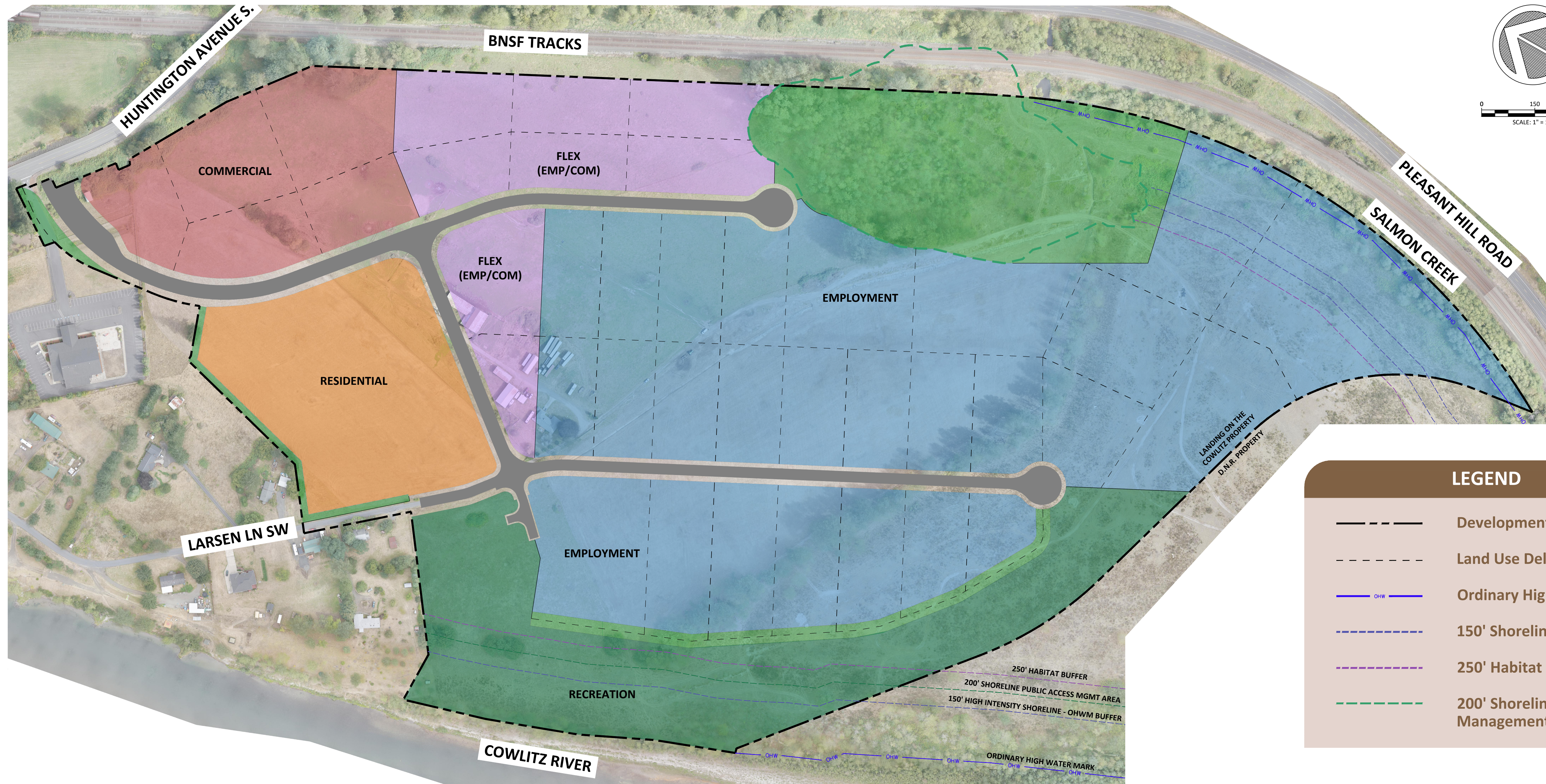
Granted to: Northwestern Long Distance Telephone Co.
Purpose: telephone and telegraph lines
Recording Date: September 22, 1908
Recording No.: Volume 27, Page 489
4. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: State of Washington Department of Game
Purpose: to permit and allow the free and unrestricted passage over and use of said stream bank property by sport fishermen in order to fish in the Cowlitz River
Recording Date: December 23, 1958
Recording No.: 497370
5. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Cowlitz County
Purpose: School bus turn around
Recording Date: December 29, 1965
Recording No.: 620999
6. Reservations contained in the Deed:

Grantor: Ivy M. Larsen, a single woman
Recording Date: July 11, 1957
Recording No.: 474558
7. Easements as disclosed on record of survey

Recording Date: September 5, 1996
Recording No.: Volume 15, Pages 163 and 164
8. As to any portion of said land now, formerly or in the future covered by water: Questions or adverse claims related to (1) lateral boundaries of any tidelands or shorelands; (2) shifting in course, boundary or location of the body of water; (3) rights of the State of Washington if the body of water is or was navigable; and (4) public regulatory and recreational rights (including powers of the USA) or private riparian rights which limit or prohibit use of the land or water.
9. Any unrecorded leaseholds, right of vendors and holders of security interests on personal property installed upon the Land and rights of tenants to remove trade fixtures at the expiration of the terms.



LEGEND

Development Boundary

Land Use Delineation

OHW

Ordinary High Water Mark

150' Shoreline - OHWM Area

250' Habitat Buffer

200' Shoreline Public Access Management Area

EMPLOYMENT (50.9 AC)

1

Light Industrial and accessory uses

2

624,000 square feet of building usage complying with the Industrial (I) zoning district as conditioned in Ord. 2021-10

COMMERCIAL (8.6 AC)

1

Neighborhood retail

2

Commercial and professional services

3

98,000 square feet of building usage complying with the Highway Business (C-2) zoning district as conditioned in Ord. 2021-10.

FLEX (10.9 AC)

1

Employment or commercial use

2

Allows flexibility and adaptability to future market conditions

3

Development area maximums complying with Ord. 2021-10 for commercial and employment

RECREATIONAL (14.6 AC)

1

Maximum 200 RV spaces

2

Public access to Cowlitz River for fishing, rustic boat launch, and other recreational uses

3

Potential tourist attraction for Castle Rock town center

RESIDENTIAL (9.1 AC)

1

Medium-density residential presence adjacent to commercial and employment uses lends to a live/work environment

2

Maximum of 200 dwelling units

OPEN SPACE (13.3 AC)

1

Landscape buffering

2

Open space

3

Potential critical areas protection (pending final delineation)

Note: Refer to Circulation and Access Plan for cross-circulation requirements and conceptual pedestrian easement locations.

LANDING ON THE COWLITZ

City of Castle Rock, WA
Proposed Mixed Use Master Planned Development
Castle Rock Landing on the Cowlitz
Notice of Modifications to the Mitigated Determination of Non-Significance
September 8, 2021

On July 30th, 2021, the City of Castle Rock, Washington issued an MDNS for a proposed master plan to guide the development of approximately 118-acres zoned Industrial, generally located at the southern end of Castle Rock between the BNSF rail line and Salmon Creek to the east, the Cowlitz River to the west, and the Timberline Church to the north. In accordance with the provisions of the City's regulations governing Master Planned Developments (CRMC 17.100), it is proposed that the project will include the following light industrial, commercial, multi-family residential, and recreational uses in a business park setting:

- 624,000 SF of light industrial and flex/office space on 58.7-acres.
- 98,000 SF of retail and commercial/professional services on 11-acres.
- 200 multi-family residential units on 7.8-acres.
- Recreational uses include a 200-unit RV park, as well as a rustic boat/kayak launch, public shoreline access, and recreational trails on 18-acres.

The project will also include the preservation of 8.2-acres of shorelines and critical areas as well the extension of a water main, fill and grading, onsite water and sewer system improvements, construction of internal streets, installation of storm water management facilities, and limited improvements to Larsen Lane. It is also anticipated that there will be improvements to Huntington Avenue S.

The mitigating measures identified by the City included provisions intended to avoid, minimize, and mitigate potential adverse impacts associated with the phased implementation of this project over time. This included a provision that a SEPA Checklist be submitted with each application to implement another phase of the master planned development. As a result of comments received by the City, including the Washington State Department of Archaeology and Historic Preservation, the Cowlitz Indian Tribe, and the Castle Rock Hearings Examiner, the City has modified the mitigating measures in the MDNS to read as shown below. The intent of these revisions is to promote joint consultation by the Project Sponsor and the City with the Cowlitz Indian Tribe, to more clearly require a cultural and archaeological survey, to clarify the conditions of use of Larsen Lane SW for emergency and limited construction access, and to provide the Hearing Examiner and City Council with a degree of flexibility in finalizing potential conditions of approval while providing appropriate environmental protections. For example, the City has identified the current protocols for responding to inadvertent discoveries of cultural artifacts but has invited the Cowlitz Indian Tribe to review and suggest revisions to update these protocols and it is not the intent of the City to interfere with this consultation process.

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As a result, the City is including the following modified mitigating measures as an Appendix to the proposed Master Site Plan to be used as the basis for establishing and implementing the Conditions of Master Site Plan approval:

- 1. A SEPA Checklist will be submitted with the application to implement each phase of the approved master plan.*
 - a. The City may require additional mitigation and/or conditions of approval based on an analysis of these subsequent environmental documents.*
- 2. All subsequent project specific development activities shall comply with the applicable provisions of the Castle Rock Municipal Code unless modified by these conditions of approval.*
- 3. There shall be no net loss of function or value of wetlands, streams, or rivers and associated habitats.*
 - a. A Critical Areas Report shall be submitted for all development activities that may impact environmentally sensitive areas on or near the site and a Critical Areas Permit or similar authorization shall be required for all non-exempt development activities.*
 - b. All critical areas and their buffers shall be delineated and placed in an open space tract.*
 - c. All development activities within 200' of a river or stream and their associated wetlands under the jurisdiction of the Washington State Shoreline Management Act shall comply with the provisions of the Castle Rock Shoreline Master Program.*
- 4. All development activities shall comply with the City Flood Hazard Prevention regulations including the elevation of buildings at least one foot above base flood elevations.*
- 5. Prior to the initiation of any clearing and grading activities the Project Sponsor shall submit for City review and approval a Master Clearing, Fill, and Grading Plan that is integrated with a Master Stormwater Management Plan that includes an analysis of the impacts of the development to the adjacent properties and measures to ensure that stormwater or flood waters will not adversely affect*

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neighboring properties.

- 6. The primary route of ingress and egress shall be from Huntington Avenue South and a new access road in the immediate vicinity of the existing Timberlake Church access road. All access roads in this corridor shall be designed, built, and improved to City industrial road standards, except as modified by the Conditions of Master Plan approval, provided that:*
 - a. With each application to implement a phase of development, the Project Sponsor shall submit an updated traffic report that identifies the number of trips to be generated, assesses existing conditions, identifies proposed mitigation measures to meet City standards, and that identifies when such mitigation measures are required.*
- 7. Larsen Lane SW is a public right-of-way and in its existing condition the use of Larsen Lane SW to access the Master Planned Development shall be limited to:*
 - a. Emergency ingress and egress, provided that:*
 - (1) The Project Sponsor shall be responsible for the design and construction of such improvements to Larsen Lane SW within the existing right-of-way from the site of the Master Planned Development to the intersection with Huntington Avenue South that may be required by the City to maintain emergency access to the Master Planned Development in accordance with the provisions of the International Fire Code as implemented and adopted by the City.*
 - (2) It is understood by the parties that if the required emergency access cannot be provided within the existing right-of-way that a different route for emergency access may be required.*
 - b. Interim access by the Project Sponsor, and their employees, subcontractors, and suppliers pending the construction of a temporary access road at the primary access point from Huntington Avenue near the church driveway, provided that:*

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- (1) The Project Sponsor shall provide the City with documentation of the existing condition of Larsen Lane SW and shall be responsible for the repair of any damages to the roadway during this interim period.*
 - (2) The City will require a bond or financial guarantee sufficient to restore Larsen Lane SW in its sole discretion.*
 - (3) The Project Sponsor shall design and construct, subject to City review and approval, a temporary access road at the primary point of access from Huntington Avenue near the church driveway no later than June 30, 2022, provided that this deadline may be extended with cause by the City.*
 - (4) The City will make a good faith effort to expedite the review and approval of this temporary access road.*
- 8. The City may install reasonable measures to prevent the use of Larsen Lane SW to access the Master Planned Development. This may include, but is not limited to, signage, a gate or bollards with a lock box, and a cul-de-sac or turnaround for vehicles attempting to enter the Master Planned Development.*
- 9. The Project Sponsor may propose to use Larsen Lane SW to provide a second access route to the Master Planned Development if such is required in accordance with local, state, or federal standards. The Project Sponsor shall be responsible for the design, acquisition of right-of-way, and construction of any required improvements to Larsen Lane SW including the intersection with Huntington Avenue South in accordance with City standards. The proposed design and use of these improvements shall be subject to environmental review and mitigation.*
- 10. The Project Sponsor shall prepare and submit with the first implementing application a Conceptual Master Plan to guide the development and use of pedestrian and bicycle facilities, parks, and open spaces open to the public. This Conceptual Master Plan shall include, but is not limited:*
- a. The standards for the development of trails, sidewalks, bike paths and lanes.*
 - b. Potential areas to view and access shorelines.*
 - c. Areas to be maintained by a private management entity, homeowner's*

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association, or the like.

- d. Areas proposed for dedication and maintenance by the City or other public agency, if any.*
- 11. The Project Sponsor shall be responsible for the design, construction, and maintenance of such improvements as may be required to connect to the City water system, unless otherwise agreed to by the parties. All new development shall be connected to the City water system, provided that plans for a separate irrigation system may be submitted for City review and approval.*
- 12. The Project Sponsor shall be responsible for the design, construction, and maintenance of such improvements as may be required to connect to the City sewer system, unless otherwise agreed to by the parties.*
- 13. The City and the Project Sponsor shall jointly consult with the Cowlitz Indian Tribe to determine the scope of a cultural and archaeological survey that shall be conducted prior to initiating any clearing, grading, filling, or excavation activities.*
 - a. Upon discovery of any human remains, artifacts, or evidence of potential archaeological, historical, or cultural resources all construction activities or uses authorized shall be suspended pending authorization to proceed from the City, and/or the Washington State Department of Archaeology and Historic Preservation, in accordance with the provisions of state and federal law, including, but not limited to RCWs 68.50.645, 27.44.055, and 68.60.055.*
 - b. If ground disturbing activities encounter human skeletal remains during construction, then all activity shall cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance until the Washington State Department of Archaeology and Historic Preservation (DAHP) provides notice to proceed. The finding of human skeletal remains shall be reported to the Castle Rock Police Department and the Cowlitz County Coroner in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed. The County Coroner will assume jurisdiction over the human skeletal remains and decide of whether those remains are forensic or non-forensic. If the County Coroner determines the remains are non-forensic, then they will report that*

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finding to the Department of Archaeology and Historic Preservation who will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the Cowlitz Indian Tribe. The DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

- c. If ground disturbing activities encounter artifacts, or evidence of potential archaeological, historical, or cultural resources during construction, then all activity shall cease that may cause further disturbance to those items. The Project Sponsor shall immediately contact the Castle Rock Public Works Department to determine how best to secure the site and to consult with the Cowlitz Indian Tribe and the DAHP.*

A copy of the application materials, the SEPA Checklist, the SEPA Threshold Determination, the required mitigating measures, and the Staff Report may be reviewed online at the City's website ci.castle-rock.wa.us. These documents are also available for review at Castle Rock City Hall, but due to COVID 19 restrictions, possibly by appointment only. It is anticipated the Castle Rock Hearings Examiner will issue a recommendation to the City Council in September and that the City Council will take action at a subsequent meeting(s) to approve, deny, or approve with conditions the proposed Master Site Plan. A Notice of Decision will be mailed to agencies and Parties of Record to these proceedings.

City of Castle Rock

PO Box 370
Castle Rock, WA 98611
(360) 274-8181



MEMORANDUM

Date: July 29, 2022

From: Carie Cuttonaro, Clerk-Treasurer

To: Marty Snell, Planning Services Manager, MacKay Sposito

RE: Castle Rock Landing on the Cowlitz – SEPA Determination

Please be advised that the City of Castle Rock or it's planning consultants have not received an appeal of the SEPA determination for the Castle Rock Landing on the Cowlitz Master Planned Mixed Use Development.

ORDINANCE NO. 2021-10

AN ORDINANCE APPROVING THE PROPOSED CASTLE ROCK LANDING ON THE COWLITZ DEVELOPMENT AS A MIXED-USE MASTER PLANNED DEVELOPMENT SUBJECT TO CONDITIONS, AUTHORIZING THE PREPARATION OF A DEVELOPMENT AGREEMENT, PROVIDING FOR SEVERABILITY, AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, Castle Rock Municipal Code Chapter 17.100 authorizes the approval of mixed-use, master planned developments in all zoning districts in the City; and

WHEREAS, Compass Group, LLC has submitted an application for a mixed-use, master planned development on approximately 118 acres in southern Castle Rock, generally located between the BNSF rail line and Salmon Creek to the east, the Cowlitz River to the west, and Timberline Church to the north; and

WHEREAS, the proposed site is designated Industrial on the Future Land Use Map and is zoned Industrial; and

WHEREAS, the Industrial zoning would permit a variety of manufacturing, construction oriented, and industrial uses on this site; and

WHEREAS, the proposed mix of uses proposed for this master planned development includes:

- 624,000 square feet of light industrial and flex/office space on 58.7 acres.
- 98,000 square feet of retail and commercial/professional services on 11 acres.
- 200 multi-family residential units on 7.8 acres.
- A 200-unit RV park, as well as a rustic boat/kayak launch, public shoreline access, and recreational trails on 18 acres; and

WHEREAS, the City has determined that this proposed project is eligible for consideration and a master planned development in accordance with the provisions of the Castle Rock Municipal Code; and

WHEREAS, a Notice of Application was distributed that provided the public with an opportunity to provide initial comments on the proposed development; and

WHEREAS, the City Development Review Team considered these comments and reviewed the application materials for consistency with the City's Development Regulation; and

WHEREAS, the City made a SEPA Threshold Determination that the proposed project would not have a probably significant impact on the environment and that an EIS was not required; and

WHEREAS, the City issued a Mitigated Determination of Non-Significance and distributed it for public review and comment along with the staff report and public hearing announcement; and

WHEREAS, the City accepted written comments on the SEPA Threshold determination and the Staff Recommended Conditions of Approval prior to the public hearing conducted by the City Hearings Examiner that were included in the record; and

WHEREAS, the City Hearings Examiner conducted the required public hearing on the Staff Recommendation to approve the Mixed-Use Master Planned Development subject to conditions; and

WHEREAS, the City Hearings Examiner held the public comment period open for an additional week following the public hearing; and

WHEREAS, the Hearings Examiner reviewed the application materials, the Staff Report, and the public comments received and prepared a written report dated September 14th, 2021, that includes Findings of Fact, Conclusions of Law, and a Recommendation to the City Council to approve the Master Planned Development subject to conditions; and

WHEREAS, the City subsequently issued a revised MDNS to address a question raised by the Hearings Examiner; and

WHEREAS, the Mayor and the City Development Review Team have continued to meet with the Project Sponsor to clarify and further refine the proposed development and the recommended conditions of approval; and

WHEREAS, a Special Study Session was conducted to provide the City Council with an opportunity to learn more about the proposed Master Planned Development directly from the Project Sponsor; and

WHEREAS, the approval of the proposed Master Planned Development would enable the Project Sponsor to proceed with the preparation of more detailed plans and to apply for the permits and approvals necessary to implement the approved Master Plan in phases; and

WHEREAS, a SEPA Checklist will be submitted with the application for each phase of the approved Master Planned Development; and

WHEREAS, the City may require additional mitigation and/or conditions of approval based on an analysis of these subsequent application materials.

NOW, THEREFORE, the City Council of the City of Castle Rock do ordain as follows:

Section 1 – Master Plan Approved. The Castle Rock Landing on the Cowlitz Master Plan, as depicted on the attached Exhibit A and incorporated herein by this reference, is hereby approved subject to conditions.

Section 2 – Conditions of Approval Adopted. The Conditions of Approval in the attached Exhibit B and incorporated herein by this reference, is hereby adopted.

Section 3 – Findings of Fact and Conclusions of Law Adopted. The Findings of Fact and Conclusions of Law contained in the Hearings Examiner Report to the City Council dated September 14, 2021, attached as Exhibit C, and incorporated herein by this reference, are hereby adopted.

Section 4 – Preparation of Draft Development Agreement Authorized. The Mayor and his/her designees are hereby authorized to prepare a draft Development Agreement in accordance with the provisions of the Laws of Washington State to guide the implementation of the Master Plan and Conditions of Approval, provided that a duly noticed public hearing will be conducted on the draft Development Agreement prior to action by the City Council.

Section 5 – Severability. Should any section, paragraph, sentence, clause or phrase of this Ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this Ordinance be pre-empted by state or federal law or regulations, such decision or pre-emption shall not affect the validity of the remaining portions of this Ordinance or its application to other persons or circumstances.

Section 6 – Effective Date. This Ordinance shall be in full force and effect five days after its passage and posting as required by law.

ADOPTED by the City Council and signed by the Mayor on this ____ day of _____ 2021.

Mayor

Attest:

Approved as to form:

City Clerk

City Attorney

Effective Date: _____

Exhibit A: Castle Rock Landing on the Cowlitz – City Council Review Master Site Plan.

Exhibit B: Castle Rock Landing on the Cowlitz – Conditions of Master Plan Approval.

Exhibit C: Castle Rock Landing on the Cowlitz – Hearing Examiner Recommendation.

Exhibit B
Castle Rock Landing on the Cowlitz
Conditions of Master Site Plan Approval
October 22, 2021

1. The approved Castle Rock Landing on the Cowlitz Master Site Plan shall consist of the following parcels totaling approximately 118 acres:
 - a. Parcel #30812 (20.83-acres), 2542 Larsen Lane SW.
 - b. Parcel #308100100 (1.06-acres), 1955 Huntington Avenue S.
 - c. Parcel #30813 (4.33-acres).
 - d. Parcel #30864 (78.34-acres).
 - e. Parcel #6143802 (6.44-acres).
 - f. Parcel# 308640100 (.34-acres).
 - g. Parcel #308640200 (7.8-acres).
2. All subsequent project specific development activities shall comply with the applicable provisions of the Castle Rock Municipal Code except as modified by these Conditions of Approval or a Development Agreement.
 - a. Development activities in the Employment Land Use Area shall comply with the provisions of the Industrial (I) zoning district except as modified by these Conditions of Approval.
 - b. Development activities in the Commercial Land Use Area shall comply with the provisions of the Highway Business (C-2) zoning district except as modified by these Conditions of Approval.
 - c. Development activities in the Residential Land Use Area shall comply with the provisions of the High Density Residential (R-2) zoning district except as modified by these Conditions of Approval.
3. The Project Sponsor shall be responsible for obtaining all local, state, and federal permits and approvals that may be required to implement the approved Master Planned Development.
4. Permitted uses in each land use area as depicted on the approved Master Site Plan may include the following, provided that the City may approve other uses based on a finding that they are similar in nature and compatible with the permitted uses.
 - a. Employment Land Use Area: Uses identified as permitted (P) or permitted through the

issuance of a conditional use permit (C) or permitted through a special use permit (S) in the Table of Permitted Land Uses CRMC 17.26.010 in the Industrial (I) zoning district are permitted (P).

- b. Commercial Land Use Area: The following uses and categories of uses identified as permitted (P) or permitted through the issuance of a conditional use permit (C), or permitted through a special use permit (S) in the Table of Permitted Uses CRMC 17.26.010 in the Highway Business (C-2) zoning district are permitted (P).

- (1) Accessory buildings.
- (2) Accessory uses.
- (3) Retail sales
- (4) Professional offices.
- (5) Bank.
- (6) Printing.
- (7) Animal grooming.
- (8) Bakery.
- (9) Beauty/barber shop.
- (10) Convenience store.
- (11) Kennel (indoor).
- (12) Laundry/dry cleaners.
- (13) Liquor Store.
- (14) Marijuana retail sales.
- (15) Microbrewery.
- (16) Child day care.
- (17) Hotels/motels.
- (18) Food cart/Mobile sales.
- (19) Restaurants/coffee shops/drive-through restaurants and the like.
- (20) Brew pub, tavern, cocktail lounge, wine tasting room and the like.
- (21) Health care providers and facilities.
- (22) Outdoor storage, displays, and sales.
- (23) Farmer's market, fruit stand.
- (24) Farm tool sales/rental.
- (25) Wireless communication facilities.
- (26) Public facilities.
- (27) Vehicle and boat sales and services.
- (28) Temporary uses.
- (29) Arcade.
- (30) Gallery/museum
- (31) Movie theater.
- (32) Performing arts theater.
- (33) Recreation, commercial (indoor).

- c. Residential Land Use Area: The following uses as identified as permitted (P) or permitted through a conditional use permit (C) or permitted through a special use permit (S) in the Table of Permitted Uses (CRMC 17.26) in the High Density

Residential (R-2) zoning district, are permitted (P).

- (1) Single Family Dwelling Units.
 - (2) Duplexes.
 - (3) Multi-Family Dwelling Units.
 - (4) Accessory Buildings.
 - (5) Accessory Dwelling Units.
 - (6) Bed and Breakfast Inn.
 - (7) Child Day Care.
 - (8) Home Business.
 - (9) Public Park.
 - (10) Temporary Uses.
 - d. Recreational Land Use Area: This area will be developed primarily as an RV Park, and may include day use only facilities and full-service, overnight RV pads designed and constructed in accordance with the applicable provisions of the Castle Rock Municipal Code including but not limited to CRMC Chapter 17.63 Recreational Vehicles.
 - e. Critical Areas/Open Space Tracts: This shall include a wetland and buffer to be placed in an open space tract(s) that shall not be developed, provided that low impact recreational uses such as trails may be permitted in accordance with local, state, and federal laws, regulations, and standards. Jurisdictional shoreline areas and their buffers may also be placed in an open space tract(s).
5. The following development standards shall apply within the Master Planned Development unless otherwise authorized and approved in accordance with the provisions of these Conditions of Approval.
- a. There are no minimum or maximum lot size or width requirements provided that applicable lot coverage, parking, loading, stormwater management , and landscaping requirements as well as the provisions of the International Building Codes, as adopted and implemented by the City are met.
 - b. There are no minimum front, side, or rear yard building setbacks, within the interior of the master planned development, provided that:
 - (1) There shall be a minimum landscape buffer of 20' along the external boundary of the master planned development that abuts privately owned properties not a part of the Master Planned Development. This requirement may be modified by mutual written agreement of the adjoining property owners and subject to City review and approval.
 - (2) All buildings must be setback at least 5' from the required 20' landscaped buffer.
 - (3) All buildings shall comply with the provisions of the International Building Codes as adopted and implemented by the City.

- c. The maximum building and structure heights are as follows:
 - (1) Employment Land Use Area: 50 feet.
 - (2) Commercial Land Use Area: 40 feet.
 - (3) Residential Land Use Area: 40 feet.
 - (4) Recreation Land Use Area: 35 feet.
 - (5) The maximum height of wireless communication facilities shall be determined in accordance with the provisions of CRMC Title 11 Communication Antennas and Towers.
 - (6) The Project Sponsor may propose to increase the maximum building height up to 25% provided that the City may limit the number of stories within the building and/or require additional mitigation in order to comply with the provisions of the International Fire Code and as may be necessary to protect the public health, safety, and welfare.
 - d. There is no minimum or maximum residential density requirement, provided that no more than 200 dwelling units shall be developed on 7.8 acres in the Residential Land Use Area.
- 6. There shall be no net loss of function or value of wetlands, streams, or rivers as a result of project related activities.
 - a. A Critical Areas Report shall be submitted for all development activities that may impact environmentally sensitive areas on or near the site and a Critical Areas Permit or similar authorization shall be required for all non-exempt development activities.
 - b. All critical areas and their buffers shall be delineated and placed in an open space tract(s).
 - c. All development activities within 200' of a river or a stream and their associated wetlands under the jurisdiction of the Washington State Shoreline Management Act shall comply with the provisions of the Castle Rock Shoreline Master Program.
 - 7. All development activities shall comply with the City Flood Hazard Prevention regulations including the elevation of buildings at least one foot above base flood elevations.
 - 8. Prior to the initiation of any clearing and grading activities the Project Sponsor shall submit for City review and approval a Master Clearing, Fill, and Grading Plan that is integrated with a Stormwater Management Plan that includes an analysis of the impacts of the proposed development to adjacent properties and measures to ensure that stormwater or flood waters will not adversely affect neighboring properties.

- a. Each application to implement a phase of development shall include a more detailed plan with Civil Drawings.
9. The Project Sponsor shall be responsible for the design, construction, and maintenance of such improvements as may be required to connect to the City water system, unless otherwise agreed to by the parties, provided that:
 - a. Prior to preparing design plans, the Project Sponsor shall provide the City with an estimate of anticipated water demand for each phase of development including anticipated fire flow needs.
 - b. The Project Sponsor may submit for City review and approval plans for a separate irrigation system.
 - c. The City has received a grant and loan from the Washington State Community Economic Revitalization Board (CERB) to extend a water main to the site. As a result, the City shall be responsible for the design and construction of this water main extension in accordance with the conditions of the grant and loan approval.
 10. The Project Sponsor shall be responsible for the design, construction, and maintenance of such improvements as may be required to connect to the City sewer system, unless otherwise agreed to by the parties, provided that:
 - a. Prior to preparing design plans, the Project Sponsor shall provide the City with an estimate of anticipated treatment capacity and flows for each phase of development.
 11. The primary route of ingress and egress shall be from Huntington Avenue S as depicted on the Master Site Plan approved by the City.
 - a. All internal access roads, alleys, and driveways shall be designed and constructed by the Project Sponsor to the appropriate City road standards unless a modification is approved by the City.
 - b. The Project Sponsor may propose to dedicate roads to the City, provided that the acceptance shall be at the sole discretion of the City.
 - c. No Certificates of Occupancy for any new construction shall be issued prior to the completion of the required access improvements, including but not limited to the primary access road from Huntington Avenue S.
 12. Larsen Lane SW is a public right-of-way and in its existing condition the use of Larsen Lane SW to access the Master Planned Development shall be limited to:
 - a. Emergency ingress and egress, provided that:
 - (1) The Project Sponsor shall be responsible for the design and construction of such

improvements to Larsen Lane SW within the existing right-of-way from the Master Planned Development to and including the intersection with Huntington Avenue S that may be required by the City to maintain emergency access to the Master Planned Development in accordance with the provisions of the International Fire Code as adopted and implemented by the City.

- (2) It is understood by the parties that if the required emergency access cannot be provided within the existing right-of-way that a different route for emergency access may be required.
- b. Interim access by the Project Sponsor, and their employees, subcontractors, and suppliers pending the construction of a temporary access road at the primary access point from Huntington Avenue S near the Timberlake Church driveway, provided that:
 - (1) The Project Sponsor shall provide the City with documentation of the existing condition of Larsen Lane SW and shall be responsible for the repair of any damages caused by the Project Sponsor or its employees, subcontractors, and suppliers to the roadway during this interim period.
 - (2) The City will require a bond or financial guarantee sufficient to restore Larsen Lane SW in its sole discretion.
 - (3) The Project Sponsor shall design and construct, subject to City review and approval, a temporary access road at the primary point of access from Huntington Avenue S near the church driveway no later than June 30, 2022, provided that this deadline may be extended with cause by the City.
 - (4) The City will make a good faith effort to expedite the review and approval of this temporary access road.
13. The City may install reasonable measures to prevent the use of Larsen Lane SW in its existing condition to access the Master Planned Development. This may include, but is not limited to, signage, a gate or bollards with a lock box, and a cul-de-sac or turnaround for vehicles attempting to enter the Master Planned Development.
14. The Project Sponsor may propose, subject to City review and approval, to improve Larsen Lane SW as a two-lane, secondary access road. This shall include the submittal of a traffic and engineering study, a SEPA Checklist, and proposed mitigation measures, for City review, provided that:
 - a. All improvements shall be designed and constructed to City standards unless a modification is approved by the City.
 - b. The improvements shall include the intersection of Larsen Lane SW with Huntington Avenue S.

- c. The Project Sponsor shall be responsible for the design, construction, and all reasonable costs associated with these improvements to Larsen Lane SW.
15. With the applications to implement each phase of development, the Project Sponsor shall include a Parking Study that identifies the parking requirements for each use and demonstrates how this parking need can reasonably be met. This Parking Study shall utilize the standards in the most recent edition of the Institute of Traffic Engineers (ITE) manual unless project specific data from similar projects is provided and accepted by the City.
- a. All parking shall be on-site unless on-street parking is included in approved street plans.
 - b. The Project Sponsor may propose shared or joint use parking.
 - c. All loading, pick-up, and delivery areas shall be on site and shall include sufficient area for the queuing of vehicles.
 - d. Barrier free parking shall be provided in accordance with the provisions of federal, state, and local laws/regulations.
 - e. Designated of "No Parking" areas necessary to preserve emergency vehicle access, provide safe vehicular and non-vehicular access and circulation, and to provide access to public utilities shall be clearly identified, maintained, and strictly enforced by the Project Sponsor.
16. All exterior lighting shall be shielded and downward facing in accordance with applicable provisions of state and local regulations.
17. The Project Sponsor shall prepare and submit with the first implementing application a Master Signage Plan to guide the design and location of signs throughout the site.
- a. The standards in this plan shall meet or exceed the standards in Castle Rock Municipal Code.
 - b. All subsequent implementing applications shall include signs consistent with the approved Master Signage Plan.
18. The Project Sponsor shall prepare and submit with the first implementing application a Conceptual Parks, Recreation, and Open Space Master Plan to guide the development and use of pedestrian and bicycle facilities, parks, and open spaces open to the public. This Conceptual Master Plan should include, but is not limited to:
- a. The standards for the development of trails, sidewalks, bike paths and lanes.
 - b. Potential areas for the development of public parks and open spaces.
 - c. Potential areas to view and access shorelines.

- d. Areas to be maintained by a private management entity, homeowner' s association, or the like.
 - e. Areas proposed for dedication and maintenance by the City or other public agency, provided that areas proposed for dedication to the City shall be accepted at the sole discretion of the City.
19. A proposed Phasing Plan shall be submitted with the first implementing application that identifies the projected target date for the construction of Phase 1 and an estimated timeline of subsequent phases of development. It is understood by the parties that the phasing plan may revised to respond to changes in market conditions, provided that:
- a. Each proposed phase of development shall include all infrastructure improvements necessary to support the use and continued operations of the development independentof future phases of development.
 - b. The City may impose additional conditions of approval that may be necessary to ensurethat the public health, safety, and welfare of the community is not adversely affected by the phasing plan.
20. The City and the Project Sponsor shall jointly consult with the Cowlitz Indian Tribe to determine the scope of a cultural and archaeological survey that shall be conducted prior to initiating any clearing, grading, filling, or excavation activities.
- a. Upon discovery of any human remains, artifacts, or evidence of potential archaeological, historical, or cultural resources all construction activities or uses authorized shall be suspended pending authorization to proceed from the City, and/or the Washington State Department of Archaeology and Historic Preservation, in accordance with the provisions of state and federal law, including, but not limited to RCWs 68.50.645, 27.44.055, and 68.60.055.
 - b. If ground disturbing activities encounter human skeletal remains during construction, then all activity shall cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance until the Washington State Department of Archaeology and Historic Preservation (DAHP) provides notice to proceed. The finding of human skeletal remains shall be reported to the Castle Rock Police Department and the Cowlitz County Coroner in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed. The County Coroner will assume jurisdiction over the human skeletal remains and decide of whether those remains are forensic or non-forensic. If the County Coroner determines the remains are non-forensic, then they will report that finding to the Department of Archaeology and Historic Preservation who will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that findingto any appropriate cemeteries and the Cowlitz Indian Tribe. The DAHP will then

handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

- c. If ground disturbing activities encounter artifacts, or evidence of potential archaeological, historical, or cultural resources during construction, then all activity shall cease that may cause further disturbance to those items. The Project Sponsor shall immediately contact the Castle Rock Public Works Department to determine how best to secure the site and to consult with the Cowlitz Indian Tribe and the DAHP.
21. Applications to implement the approved Master Site Plan and subsequent Development Agreement shall be processed in accordance with the provisions of CRMC 17.77, in effect at the time a complete application is submitted and accepted for processing, or as subsequently amended by the City, and as modified by CRMC 17.100, unless otherwise provided in these Conditions of Approval or a Development Agreement.
22. The Project Sponsor shall submit with the application to implement each phase of the approved Master Planned Development:
- a. An updated SEPA Checklist.
 - a. An updated traffic report that identifies the number of trips to be generated, assesses existing conditions, identifies proposed mitigation measures to meet City standards, and that identifies when the mitigation is required.
 - b. Other technical studies and reports that may be required by the City to fully evaluate and mitigate potential adverse impacts.
 - c. A Landscaping Plan prepared in accordance with the provisions of Castle Rock Municipal Code and as modified by these Conditions of Approval.
 - d. A Parking Plan prepared in accordance with the provisions of Castle Rock Municipal Code and as modified by these Conditions of Approval.
 - e. An updated Parks, Recreation, and Open Space Master Plan.
 - f. The applications shall also address the status of applicable conditions of approval of previous phases.
 - g. An updated Phasing Plan.
23. The City may require additional mitigation and/or conditions of approval based on an analysis of the application materials submitted to implement each subsequent phase of development.
24. The Project Sponsor may propose adjustments to the boundaries of the land use areas depicted on the Master Site Plan or to the applicable development standards in accordance

with the following provisions governing Minor and Major Modifications.

- a. Minor Modifications shall include revisions to the Master Site Plan that do not reduce the amount of open space or adversely affect environmentally sensitive areas or jurisdictional shoreline areas and do not trigger the need for a new SEPA Threshold Determination. Proposed Minor Modifications are subject to administrative review and approval by the Mayor or his/her designee and shall include a Notice of Application and an opportunity for the public to submit written comments.
 - b. Examples of Minor Modifications include, but are not limited to:
 - (1) An alternative development standard that is determined by the City to be functionally equivalent to, or superior to, the original standard or requirement in fulfilling the intent and purpose of that original standard or requirement.
 - (2) Approval of uses determined to be similar in nature and compatible with permitted uses in a land use area.
 - (3) Mutual written agreements between abutting property owners to modify the 20' landscaping requirement.
 - (4) Revisions to the shape of development areas.
 - (5) Increases in a proposed use that is offset by a corresponding decrease of another use that results in no net increase in trips.
 - (6) The realignment of internal road corridors provided that there is no decrease in functionality as determined by the City.
 - c. Major Modifications shall include those revisions that do not meet the criteria for a Minor Modification as determined by the City. Major Modifications shall be reviewed by City Development Review Team and upon preparation and distribution of a Staff Report the City Land Use Hearings Examiner shall conduct a public hearing and shall make a recommendation on the proposed modification to the City Council.
 - d. Examples of a Major Modification include, but are not limited to:
 - (1) The proposed use of Larsen Lane SW to provide a second access to the Master Planned Development.
 - (2) Proposed uses that are not similar in nature and/or that may not be compatible with approved uses.
25. The Project Sponsor and the City may execute a Development Agreement further clarifying these conditions and/or to provide more detailed guidance on how these conditions shall be implemented.

26. In the event of a question about the applicability of the Conditions of Approval or a potential conflict between standards or provisions, the Mayor or his/her designee shall make an administrative code interpretation, provided that such administrative determination may be appealed to the City's Land Use Hearings Examiner.
27. The Project Sponsor shall reimburse the City for all expenses incurred in the implementation of the approved Master Site Plan and Development Agreement including but not limited to the costs associated with the review and approval of implementing applications and construction plans, public notices, City consultants, peer reviews, construction monitoring, and enforcement.
28. Prior to any additional filling or grading of the project site, City staff and Department of Ecology shall undertake wetland boundary verification necessary to ensure that critical areas have been properly identified and rated and that the proposed buffers are adequate to protect the resources from the impacts related to future on-site developments.
29. The mitigation measures set forth in the revised SEPA MDNS of September 8, 2021, are incorporated herein as additional conditions of project approval. In the event of any conflict between the SEPA MDNS mitigation measures and these Conditions of Approval, the more stringent shall apply.

BEFORE THE CITY OF CASTLE ROCK HEARINGS EXAMINER

IN RE:) HEARING NO. _____
)
CASTLE ROCK LANDING ON THE) FINDINGS OF FACT,
COWLITZ - PROPOSED MASTER) CONCLUSIONS OF LAW
PLAN DEVELOPMENT,) AND RECOMMENDATIONS

APPLICANT: Compass Group, LLC

REPRESENTATIVES:

Shane Tapani
1904 S.E. 6th Place
Battleground, WA 98604

Marty Snell
MacKay & Sposito
1325 S.E. Tech Center Drive, Suite 140
Vancouver, WA 98693

E. Bronson Potter
Attorney at Law
9600 N.W. Lakeshore Avenue
Vancouver, WA 98665

SUMMARY OF REQUEST:

The Applicant seeks Master Planned Development approval for a mixed-use development on approximately 118 acres in southern Castle Rock. The proposed uses include 624,000 square feet of light industrial and/or flex/office space on 58.7 acres; 98,000 square feet of retail and commercial/professional services on 11 acres; 200 multi-family residential units on 7.8 acres; and a 200 unit RV park together with boat launch, shoreline access and recreational trails on 18 acres, as well as connecting streets and extension of water and sewer along with stormwater facilities.

The matter comes to the newly appointed City Hearing Examiner for the purpose of conducting a public hearing and providing a recommendation to the City Council on whether to approve the proposed development and, if so, on what conditions.

*Findings of Fact, Conclusions
of Law and Recommendations - I*

CITY OF CASTLE ROCK HEARING EXAMINER
299 NW CENTER ST. / P.O. BOX 939
CHEHALIS, WASHINGTON 98532
Phone: 360-748-3386/Fax: 748-3387

1 **LOCATION OF PROPOSAL:**

2 2542 Larsen Lane S.W., 1955 Huntington Avenue S, as well as Tax Parcel Nos. 30813, 30864,
3 6143802, 308640100, and 308640200. The site is generally located between the BNSF rail line
4 and Salmon Creek to the east, the Cowlitz River to the west, and the Timberline
Church/Huntington Avenue to the north.

5 **SUMMARY OF DECISION:**

6 The proposed Master Planned Development should be **approved** subject to modified conditions.

7 **BACKGROUND**

8 The Applicant, the Compass Group, LLC, seeks Master Planned Development approval
9 for a large scale industrial/commercial/residential/recreational mixed-use development located
10 on approximately 118 acres in the southern portion of the City. It proposes 624,000 square feet
11 of light industrial and/or flex/office space on 58.7 acres; 98,000 square feet of neighborhood,
12 retail and commercial/professional services on 11 acres; 200 multi-family residential units on 7.8
13 acres; and a 200 unit RV park, boat launch, shoreline access and recreational trails on 18 acres,
14 all on property with a current zoning designation of Industrial.

15 The application has several "firsts": It is the first such application under the City's new
16 regulations for Master Planned Developments; and it is the first matter to involve the City's
17 newly appointed Hearing Examiner for the purpose of providing a recommendation to City
18 Council.

19 The application is not without controversy. The owners of residential properties along
20 Larsen Lane are universally opposed to any use of Larsen Lane by the project except as may be
21 required for initial construction or for emergency services. These same neighbors are also
22 concerned about potential impacts to floodwater levels during flood events. An additional, late
23 developing issue is whether the property has undisclosed wetlands that must be delineated and
24 accounted for.

25
*Findings of Fact, Conclusions
of Law and Recommendations - 2*

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1 There has been a steady receipt of information before, during and after the public hearing,
2 all of which will be identified and discussed in a largely chronological fashion in order for the
3 reader to better understand how the application has progressed and, in particular, how the
4 proposed conditions of project approval by City Staff have evolved. Staff continues to
5 recommend approval of the Master Plan subject to a number of conditions but those conditions,
6 especially with respect to the use of Larsen Lane, have seen significant modification.

7 **INFORMATION RECEIVED IN ADVANCE OF THE PUBLIC HEARING**

8 The following are key events as well as public comments received in advance of the
9 public hearing:

- 10 • On or about July 22, 2021, the proposed Master Plan Development Notice of
11 Application is issued for the development with a posted deadline for written comments of July 7.
- 12 • In response to the Notice of Application, the City received letters from more than
13 twenty nearby residents expressing concerns. Most of these letters come from residents along
14 Larsen lane and urge the City to prohibit its use by the project except for emergency access.
15 These letters also address other issues including the project's impact on quality of life, property
16 values, and flooding. A more complete description of these letters can be found in the Staff
17 Report at pages 6 and 7.
- 18 • The Notice of Application also generated responses from several agencies
19 including the Washington State Department of Archaeology and Historic Preservation (DAHP),
20 the Southwest Clean Air Agency (SWCAA), Washington State Department of Fish and Wildlife
21 (WDFW), Washington State Department of Ecology (Ecology), and the Cowlitz County Noxious
22 Weed
23
24
25

1 Control Board. These agency comments are identified and summarized in the Staff Report age
2 pages 4 and 5. Most of these agency comments are fairly generic with the exception of the
3 comments from DAHP. DAHP notes that the project area has the potential to contain
4 archaeological resources and that the scale of the proposed ground disturbing actions would
5 destroy any archaeological resources present. DAHP therefore recommends a professional
6 archaeological survey of the project area prior to ground disturbing activities and also
7 recommends consultation with the concerned tribes, cultural committees and staff regarding
8 cultural resource issues.
9

10 • On July 28, 2021, the City's Planner, Mr. Dohrn, issued the City Staff Report. His
11 report incorporates a SEPA Mitigated Determination of Non-Significance (MDNS) issued by the
12 City as Lead Agency. Commencing at page 8 of the Staff Report, Mr. Dohrn recommends 11
13 mitigating measures to be included as conditions of Master Plan approval. These mitigating
14 measures address a variety of environmental issues, most notable among them are provisions for
15 protecting wetlands and other critical areas (Measure No. 3); stormwater management (Measure
16 No. 5); primary access from Huntington Avenue by way of a new access road in the immediate
17 vicinity of the existing Timberlake Church access road, and with updated traffic reports for each
18 phase of development (Measure No. 6); significant limitations on the use of Larsen Lane S.W.
19 for emergency ingress and egress only but with the possibility of its use being expanded in the
20 future (Measure No. 7); and the project's sponsor shall consult with the Cowlitz Tribe to
21 determine the likely potential for cultural resources to be found on the site, with appropriate
22 actions to take in the event resources are located (Measure No. 11).
23
24
25

1 In addition to these 11 mitigating measures per SEPA, City Staff recommends approval
2 of the Master Plan subject to an additional 25 conditions identified on pages 12-22 of the Staff
3 Report. These additional conditions incorporate the 11 SEPA mitigation measures, often using
4 the same language for both.

5 The Report gives notice that those wishing to comment on the SEPA MDNS or the
6 proposed conditions of approval must submit their comments no later than Monday, August 15,
7 2021.

8
9 • The Staff Report/MDNS elicited a second round of public comments, once again
10 mostly in opposition, especially to any expanded use of Larsen Lane. These comments included:

11 1. An August 10 memo from Melvin Larsen expressing concerns regarding
12 stormwaters and/or flood waters on neighboring properties as well as concerns over the possible
13 use of Larsen Lane.

14 2. An August 10 memo from Kris Hoffman expressing opposition to the project in
15 general on the belief that the development is not needed.

16 3. An August 12 memo from Roy and Linda Henson expressing concern over
17 stormwater issues.

18 4. An email dated August 12 from Terry Badley expressing concerns regarding the
19 project's impacts to the neighborhood's rural quality; concerns over the use of Larsen Lane;
20 stormwater runoff concerns; and general concerns about the project's impacts to schools, the City
21 and local traffic.

22
23 • A few days prior to the hearing, on August 12, the Applicant submitted a lengthy
24 response to the Staff Report. The Applicant requests changes to proposed Condition Nos. 4(a),
25

1 4(b), 4(c) and 11(a), all as more fully explained in the Applicant's response. These proposed
2 changes are largely of a technical nature dealing with the types of allowed uses as well as the
3 procedures for approving them. The Applicant then turns to proposed Condition No. 12 relating
4 to the use of Larsen Lane. The Applicant acknowledges that, in its current condition, Larsen
5 Lane should be limited to emergency vehicle access, but argues that its use should not be so
6 limited in the future and that the Applicant should be allowed the opportunity to more fully
7 develop it. The Applicant therefore proposes to strike the Staff's proposed Condition No. 12 and
8 replace it with an alternate version of Condition No. 12 allowing for potential future
9 development of Larsen Lane.
10

11 • Just prior to the public hearing on August 16, several additional agency comments
12 were received:

13 1. The Lower Columbia Fish Recovery Board (LCFRB) issued a detailed, three-
14 page letter expressing a number of concerns. The LCFRB was established by the State in 1998
15 in an effort to restore salmon, steelhead and other fish species in the Columbia River. The
16 LCFRB is concerned that the project lacks any discussion of appropriate mitigation and fails to
17 abide by the City's promise to aid in promoting salmon recovering along the Cowlitz.
18

19 2. By email dated August 16 the Cowlitz Indian Tribe requests Formal Consultation
20 on the project due to its potential for serious impact on cultural resources.

21 3. By email dated August 16, Miranda Adams, Shorelines/Wetlands Specialist for
22 Ecology, shared the concerns earlier expressed by Roy Henson that the project appears to have
23 additional wetlands which may have been recently plowed under by the Applicant's contractor
24 while the application was pending. Ms. Adams shares these concerns after having reviewed
25

1 aerial imagery of the site which suggests the existence of these historical wetlands as described
2 by Mr. Henson. Ecology would therefore like copies of all Critical Areas Reports and asks for
3 the opportunity to follow-up with a site visit to ensure that all wetlands on the property have
4 been accounted for and that any impacts to those wetlands will be fully compensated. Ms.
5 Adams' email arrived with a letter from Ecology formally stating these concerns and again
6 requesting that Ecology be involved in providing wetland boundary verification and other
7 technical assistance necessary to ensure that critical areas have been properly identified and
8 rated, and that proposed buffers are adequate to protect the resources from development.
9

10 • Just prior to the hearing the Applicant submitted several proposed changes to the
11 project's design through the introduction of a revised Conceptual Master Plan; a revised Mobility
12 Plan; and a revised Road Diagram. The revised Conceptual Master Plan would relocate
13 residential and commercial activities toward the front of the project and move industrial
14 activities toward the rear. The other revised plans are intended to relocate roads, trails, etc. in
15 keeping with the revised Master Plan.

16 • On August 14, several residents along Larsen Lane asked that the hearing be
17 postponed until it could be held in person. While I sympathize with the neighbor's preference to
18 have the hearing held in-person, remote hearings are a well-recognized form of hearings during
19 the current pandemic, especially as due process requires that applications be heard in a timely
20 way and it is unclear when Covid conditions may sufficiently improve to return to in-person
21 hearings. But recognizing that a remote hearing may deprive certain neighbors of an opportunity
22 to participate, I granted an extended period of time for the public to participate by allowing
23 additional written comment through the following Monday, August 23, 2021.
24
25

1 **PUBLIC HEARING**

2 Prior to the public hearing I undertook an independent site inspection that included an
3 examination of the site from Huntington Avenue, Larsen Lane and the adjoining church
4 property.

5 As noted earlier, the purpose of the public hearing was for the purpose of providing the
6 public with an opportunity to offer testimony to the Hearing Examiner who, in turn, is to provide
7 a recommendation to the City Council.

8 The matter was scheduled for public hearing at 6:00 p.m. on August 16, 2021. The
9 hearing was originally scheduled for both in-person and remote testimony but, due to COVID-
10 related issues, the in-person portion of the hearing was canceled, leaving only the remote
11 hearing. The City Clerk, Carie Cuttano, served as host of the hearing. The City appeared
12 through Greg Dohrn, Planning Consultant. The Applicant, Compass Group, LLC, appeared
13 through Tim Schauer and Marty Snell of MacKay & Sposito together with their attorney, E.
14 Bronson Potter. Several members of the public participated including several who testified. A
15 verbatim recording was made of the public hearing and all testimony was taken under oath.
16

17 The City's Planner, Gregg Dohrn, testified on behalf of the City and reviewed the
18 highlights of his extensive Staff Report. Mr. Dohrn noted that this application is the first of
19 its kind under the City's new regulations for Master Planned Developments with the intent being
20 to undertake master planning for larger sites with phased developments and mixed uses, thus
21 allowing greater flexibility as well as greater certainty for the benefit of the developer.

22 Mr. Dohrn explained that the site, containing 118 acres, is largely undeveloped and
23 presently zoned Industrial, with the same designation on the City's Land Use Map. The site is,
24 in effect, a peninsula with the only reasonable means of access being from the north via either
25

*Findings of Fact, Conclusions
of Law and Recommendations - 8*

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1 Huntington Avenue or Larsen Lane. The site is proposed for a mix of uses including light
2 industrial/flex; retail/commercial; multi-family and recreational including RV's, all as noted in
3 the earlier Background Section.

4 Mr. Dohrn then briefly reviewed the SEPA MDNS and the conditions being imposed on
5 the project under the City's SEPA regulatory authority. As noted earlier, the City, as Lead
6 Agency, has proposed 11 mitigation measures, found at Page 8 of the Staff Report, to mitigate
7 the project's impacts on the environment. These are in addition to the 25 conditions of Master
8 Plan Approval found at pages 12-22 of the Staff Report. The 25 conditions of plan approval
9 incorporate many of the SEPA mitigation measures while also addressing a number of other
10 conditions relating to the project's development and its allowed uses.

12 Mr. Dohrn then reviewed the Applicant's recently proposed changes and confirmed that
13 the City was willing to accept the Applicant's proposed changes to Condition Nos. 4(a), 4(b),
14 4(c), and 11(a). The City also accepts the Applicant's updated maps with the exception of the
15 updated road cross sections, noting that the City would need additional time to review before
16 accepting.

17 Mr. Dohrn confirmed that the City has adequate water and sewer capacity to provide for
18 the project. Sewer is already extended to the site and the City has received a grant which would
19 allow extension of the water main to the site.

20 Mr. Dohrn then turned to the controversial issue of access. The project abuts Huntington
21 Avenue which is proposed as the primary means of access, but the Fire Code requires a
22 secondary access for emergency purposes should the primary access be blocked. The City
23 therefore proposes Larsen Lane to be used as a secondary access for emergency purposes. Mr.
24
25

1 Dohrn explains that Larsen is a country lane. It was not built to City standards nor does it
2 currently meet City standards. Nonetheless, it is capable of providing access for emergency
3 purposes but is only suitable for this limited purpose. The City therefore proposes that the
4 project only be allowed access on Larsen Lane for emergency purposes except that, for the short
5 term, it be used for development purposes until access from Huntington Avenue can be
6 established. This would allow temporary use of Larsen by the Applicant, its agents and
7 contractors, subject to the Applicant being responsible for any damage caused to the roadway. In
8 order to enforce these restrictions it may become necessary to impose signage and perhaps
9 barricades to prohibit any other use of Larsen.
10

11 Mr. Dohrn added that there may be a time when the project requires a more complete
12 second access, perhaps via Larsen Lane. At that time the Applicant will need to design and
13 construct an appropriate roadway subject to SEPA review and appropriate mitigation.

14 Mr. Dohrn completed his testimony by addressing some of the other agency comments.
15 He acknowledged that DAHP had earlier *recommended* that a professional archeological survey
16 of the project area be conducted prior to ground disturbing activities as well as consultation with
17 concerned tribes, but is now *requesting* that these steps be undertaken, just as the Cowlitz Tribe
18 has requested. The City agrees with DAHP and the Tribe and also agrees to assume the lead in
19 consulting with the Cowlitz Tribe.
20

21 Mr. Dohrn also responded briefly to the recommendations of the LCFRB and said that
22 the City would work to address the Board's concerns.

23 Mr. Dohrn concluded his testimony by confirming that City Staff recommends approval
24 of the Master Plan subject to the SEPA mitigation measures as well as the conditions of plan
25

1 approval set forth in the Staff Report with the exception of agreed changes to proposed
2 Condition Nos. 4(a), 4(b), 4(c) and 11.

3 Following Mr. Dohrn's presentation, the Applicant's representative, Tim Schauer,
4 testified on its behalf. Mr. Schauer explained that the project is modeled after a similar project
5 found at the Port of Camas which has proven to be highly successful. He confirmed that the
6 Applicant had recently revised its Master Plan and had shifted several of the intended uses to
7 improve compatibility among uses, with multi-family/commercial being moved closer to the
8 front (north) and industrial being moved further away, with the goal of holding the industrial
9 property in large tracts for as long as possible to encourage more significant developments. Mr.
10 Schauer concluded his testimony by noting that the Applicant agrees that Larsen Lane is
11 currently only usable for emergency purposes but that the Applicant seeks the opportunity to
12 improve it in the future if necessary for the development of the project. The Applicant envisions
13 that the project has the potential to create six to nine hundred new jobs while providing two
14 hundred new residences, but with future access to Larsen being critical to some of this
15 development.
16

17 Following Mr. Schauer's testimony the Applicant's legal counsel, E. Bronson Potter
18 confirmed that the Applicant acknowledges that Larsen Lane can only be used currently for
19 emergency purposes. The Applicant will document its condition and abide by any weight limits
20 and agrees to be responsible for any damage it may cause to Larsen during construction. The
21 Applicant objects, however, to proposed conditions of approval that would prohibit future use of
22 Larsen. Instead, the Applicant proposes that the opportunity to develop Larsen in the future be
23 subject to further analysis and design and, of course, proper environmental review and
24 mitigation.
25

*Findings of Fact, Conclusions
of Law and Recommendations - 11*

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1 At the conclusion of the Applicant's presentation the hearing was opened to public
2 testimony. Approximately six members of the public asked to testify. The following is a brief
3 synopsis of their testimony:

4 Cheryl Adams said that she was assured by City Staff that the project would never be
5 allowed to use Larsen. She notes that the street used to be a private lane and was not developed
6 to public standards. All of the residents along Larsen will be significantly affected if the street is
7 widened as this would eliminate most yards. Most of the residents along the road have lived
8 there their whole lives and none of them want the road improved or widened. Ms. Adams feels
9 that any use of Larsen will destroy property values along the road as well as the residents' quiet
10 enjoyment.
11

12 Jennifer Walling is opposed for many of the reasons expressed by Ms. Adams. She is
13 worried that the project will increase traffic at a time when the City is ill-prepared for it. If
14 Larsen is widened she will lose twenty feet of her front yard with a corresponding decrease in
15 her property value.

16 Ted Sprague, Director of the Cowlitz County Economic Development Council (EDC),
17 expressed his support for the project. He noted that this application is the first significant
18 proposal for the site in the past twenty years and that when the application was presented to
19 CERB it was declared to be one of the best projects the Board had seen.
20

21 Roy Henson expressed his appreciation to City Staff for their efforts in reviewing the
22 application and recommended that the proposal be accepted but also noted that the project could
23 have significant adverse effects on stormwater if not properly designed.
24
25

1 Terry Badley is opposed to the project. He is a disabled veteran living on Larsen and
2 purchased his property for peace and serenity during his retirement years. He believes that the
3 project will interfere with the enjoyment of his property and will bring crime and other problems
4 into the neighborhood. Mr. Badley is also concerned that elevating of the site will displace flood
5 waters and worsen flooding on adjoining properties along Larsen.

6 Cathie Erickson is strongly opposed to the project, especially any potential use of Larsen,
7 as the road was never meant for any type of commercial activity. Any widening of the road will
8 have dramatic impacts upon the residences along Larsen, depriving them of their yards and
9 reducing their value. Ms. Erickson also shares the concerns of others that the proposed road
10 elevation of the project site will result in greater flooding on surrounding properties.

11 Following the public testimony the City and Applicant were allowed an opportunity to
12 respond. The City merely confirmed a few details regarding Larsen Lane: There is an eight-inch
13 water main in the Larsen right-of-way but there is no sewer service along Larsen. The right-of-
14 way for Larsen varies in width from 60 feet to 40 feet to 25 five feet to as little as 20 feet. As
15 such, there are segments of Larsen that cannot be widened unless additional right-of-way is
16 acquired.
17

18 **INFORMATION RECEIVED FOLLOWING THE PUBLIC HEARING**

19 After the public hearing on August 16, the public was allowed an additional week to
20 Monday, August 23, to provide additional written comment. Several additional comments were
21 received:
22

- 23 • An August 16 email from Melvin Larsen to the Mayor was forwarded to the Clerk
24 on August 17. Mr. Larsen reiterates several of the points made in his prior comments while
25

1 adding several others: That the Applicant's contractor had come onto the property during the
2 spring and double-disced the wetland areas and then reseeded in pasture grass, thus eliminating
3 evidence of historical wetlands on site. Mr. Larsen also described a tribal ceremony having
4 taken place fifteen to twenty years ago on the site at the base of the large fir tree in the field
5 directly south of the church property. It is believed that this ceremony was videotaped by several
6 members of the Cowlitz Tribe. Mr. Larsen has alerted the Cowlitz Tribal Heritage and Cultural
7 Resource Center and they are attempting to locate the video.
8

9 • On August 18, Roy Henson submitted a letter asserting that the Applicant's
10 current use of Larsen Lane is predicated on the property's existing zoning and its current use.
11 Mr. Henson believes that the Applicant is seeking a zoning change. If so, it is not entitled to
12 impose a new use on the public roadway. Mr. Henson therefore recommends that the City deny
13 the Applicant's request for a zoning change. [NOTE: The Applicant is not seeking a zoning
14 change but rather a Master Plan approval based upon the property's existing zoning.]

15 • On August 19, Cathie Erickson sent a letter reiterating her opposition to the
16 project, and that any access for the project should come from the property the Applicant
17 purchased from Mr. Henson along Huntington Avenue, not Larsen Lane. Ms. Erickson also
18 expressed concerns about stormwater/flood water as well as more generalized concerns
19 regarding negative impacts to the neighborhood resulting from the project.
20

21 • On August 20, Washington State Department of Transportation (WSDOT)
22 submitted a letter noting that the project is likely to cause significant adverse impacts to the
23 Interstate 5/Huntington Avenue interchange. As a result, at time of future land use applications
24 WSDOT may seek mitigation for these impacts.
25

1 ● On August 22, Melvin Larsen submitted an additional comment that the carrying
2 capacity of the Cowlitz River has been greatly reduced since the Mt. St. Helens eruption,
3 resulting in significantly greater flooding at several locations near Salmon Creek. Mr. Larsen
4 notes that, while the project may be elevated to avoid this flooding, its raised elevation is likely
5 to have significant adverse impacts to the surrounding properties. Mr. Larsen suggests deferring
6 any decision until the Corps of Engineers has determined the river's carrying capacity.
7

8 ● On August 22, Terry Badley submitted a letter reiterating many of his earlier
9 written and oral comments. He also expresses concern that there was no discussion during the
10 public hearing of security barriers and other means of traffic control on Larsen, and very little
11 discussion of stormwater management. Mr. Badley asks that appropriate consideration be given
12 to the people along Larsen who purchased their properties seeking a quiet and peaceful rural
13 lifestyle. Mr. Badley also believes that the project will have a significantly adverse impact
14 upon property values along Larsen.

15 ● On August 23, Ashley Helenberg submitted a letter expressing concerns about
16 perceived gaps in the SEPA MDNS. Ms. Helenberg believes that the project's traffic impacts
17 should be analyzed globally at this stage rather than in a fragmented manner during later stages
18 of development. She is also concerned that the MDNS fails to fully recognize the impacts the
19 project will have upon the City's public services, and fails to provide any mitigation for the
20 impacts to those services. She recognizes that the project may bring great benefits to the
21 community but that its environmental impacts should be more closely examined and that an
22 Environmental Impact Statement (EIS) should be required.
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1 No further public comments were received and the public comment period closed on
2 Monday, August 23. It initially appeared that this would bring all testimony to an end only to
3 discover that the City and Applicant were not in full agreement as to several matters. This was
4 not immediately clear and took several communications with the parties to fully understand:

- 5 • At the end of the day on August 23, City Staff issued an email:

6 1. Stating that the City has no objection to the additional maps and drawings
7 submitted by the Applicant but that proposed road cross sections are still subject to ongoing
8 discussions.

9 2. The City will assume the lead responsibility for consultation with the Cowlitz
10 Tribe.

11 3. The City and the Applicant have agreed to modify Condition Nos. 11 and 12
12 relating to the use of Larsen Lane as set forth more fully in the City's email.

13 • The next day, August 24, the Applicant sent an email stating that there was **no**
14 agreement with the City for proposed changes to Condition Nos. 11 and 12. The Applicant
15 explained that there had been discussions between legal counsel for the City and the Applicant
16 for proposed changes but that the City had ultimately not agreed to these proposals. The
17 Applicant therefore is unwilling to agree to changes to proposed Condition Nos. 11 and 12 as
18 suggested by the City unless a new Condition No. 13 is added, all as described in the Applicant's
19 email of August 24.

20 • Also on August 24, the Applicant asked for additional time to respond to some of
21 the final public comment, including that made by Mr. Henson. The Hearing Examiner granted
22 the Applicant's request and allowed it to Thursday, August 26, to respond.

1 ● As allowed, the Applicant's attorney, Mr. Potter, submitted a memo on August 26
2 challenging Mr. Henson's earlier assertions that the Applicant was without legal authority to
3 make use of Larsen Lane. Mr. Potter's memo concludes that the Applicant acknowledges the
4 current conditions of Larsen Lane make it unsuitable for a secondary access to the project site
5 without improvements but, nonetheless, any conditions which would deny the Applicant access
6 to Larsen Lane altogether would be a "taking" and would be compensable. The Applicant
7 therefore requests that the opportunity to improve Larsen Lane in the future be maintained
8 subject to requiring the performance of a traffic study and environmental review to identify the
9 necessary road improvements and mitigation, and impose those measures at such time as there is
10 a proposal to improve Larsen Lane as a secondary access.
11

12 ● Following the receipt of Mr. Potter's letter on August 26, it appeared that all input
13 into this matter was complete and therefore ready for the Hearing Examiner to prepare his
14 recommendation. But in reviewing the City's email of August 23 (suggesting the City was
15 willing to accept changes to the conditions imposed on the use of Larsen Lane) the Hearing
16 Examiner noted that the City's proposed changes in conditions appeared to be inconsistent with
17 the SEPA mitigation measures earlier imposed by the City as Lead Agency. This is not
18 allowable as final conditions of project approval cannot reduce the SEPA mitigation imposed by
19 the Lead Agency. Stated slightly differently, final conditions of approval can add to, but cannot
20 subtract from, mitigations imposed by the Lead Agency to protect the environment. Thus, if City
21 Staff wishes to recommend final conditions which lessen the requirements imposed under SEPA,
22 the City must first revise its SEPA Determination in order to eliminate any conflict.
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1 ● On August 31, the Hearing Examiner issued a letter to the parties explaining the
2 apparent conflict and asking the City to clarify its proposed conditions and whether it wished to
3 revise its SEPA Determination to be consistent.

4 ● City Staff responded on Friday, September 3 by a letter explaining the City's
5 desire to provide for flexibility with possible future development of Larsen Lane. As a result, the
6 City is issuing a Modified MDNS to reflect its agreement with the Applicant regarding Larsen
7 Lane, as well as its discussions with the Cowlitz Indian Tribe. Staff also asks that the following
8 language be included as a preface to its proposed conditions of approval:
9

10 "It is recommended that the following mitigating measures be referenced as an
11 appendix to the approved Master Site Plan and used as the basis for establishing
and implementing the conditions of Master Plan approval."

12 With the September 3 letter advising of the changes, the City also issued a "Notice of
13 Modification to the Mitigated Determination of Non-Significance" bearing the date of
14 September 8, 2021. The principal changes to the MDNS are as follows:
15

16 1. Whereas the original MDNS addressed the current and future use of Larsen Lane
17 in Measure No. 7, the revised SEPA MDNS addresses its use in three mitigating measures,
18 Measures Nos. 7, 8 and 9. New Measure No. 7 addresses the temporary use of Larsen Lane and
19 establishes a deadline of June 30, 2022, for establishment of a primary point of access from
20 Huntington Avenue. New Measure No. 8 recognizes the City's right to install reasonable
21 measures to prevent the use of Larsen Lane to access the Master Plan Development. New
22 Measure No. 9 allows the Applicant to propose the future use of Larsen Lane to provide a second
23 access route to the Master Plan Development, if required, with the Applicant responsible for the
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1 design, acquisition of the necessary right-of-way, and construction of any required improvements
2 including its intersection with Huntington Avenue, all in accordance with City standards. Any
3 proposed design and use of these improvements will be subject to environmental review and
4 mitigation.

5 2. Separately, original mitigating Measure No. 11 (now Mitigating Measure No. 13)
6 has been significantly revised. The earlier measure required the Applicant to consult with the
7 Cowlitz Tribe to determine the likely potential for cultural resources to be found on the site, and
8 whether a survey should be conducted. The new measure requires the City and Applicant to
9 jointly consult with the Cowlitz Indian Tribe to determine the scope of a cultural and
10 archaeological survey to be conducted prior to initiating any clearing, grading, filling or
11 excavation activities.
12

13 City Staff's letter of September 3 does not state that it also seeks to modify its conditions
14 of Master Plan approval consistent with the revised SEPA mitigation but this is the logical
15 conclusion to draw from the City's letter.

16 With the City's correspondence of September 3, the receipt of information to the Hearing
17 Examiner is now complete and will be the basis upon which his recommendation is based.

18 Accordingly I make the following:
19

20 **FINDINGS OF FACT**

21 General Description

22 1. Any Findings of Fact contained in the foregoing sections are incorporated herein
23 by reference and adopted by the Hearing Examiner as his Findings of Fact.
24
25

1 2. The Applicant seeks approval of a Master Plan mixed-use development on
2 approximately 118 acres in southern Castle Rock as identified on Exhibit 1, Vicinity Map, to the
3 Staff Report of July 28, 2021 (the "Staff Report").

4 3. The application is being reviewed under the City's recently enacted regulations for
5 Master Plan developments in all zoning districts. Chapter 17.100 Castle Rock Municipal Code
6 (CRMC).

7 4. The Applicant proposes a mix of uses including: 624,000 square feet of light
8 industrial and/or flex/office space on 58.7 acres; 98,000 square feet of retail and commercial
9 professional services on 11 acres; 200 multi-family residential units on 7.8 acres; and a 200 unit
10 RV park along with boat/kayak launch, public shoreline access and recreational trails on 18
11 acres.

12 5. The proposed allocation of the project site among these uses has recently been
13 amended as reflected in a revised Master Plan submitted August 16, 2021. As revised, proposed
14 residential and commercial uses have been relocated toward the front (north) end of the project
15 while industrial uses have been moved to the rear (south).

16 6. The project site has a zoning designation of Industrial.

17 7. The proposed site is designated as Industrial on the Future Land Use Map in the
18 City's Comprehensive Plan.

19 8. The project site is generally flat and is largely undeveloped with the exception of
20 an older residence/outbuildings as well as stockpiles of dredge soils removed from the Cowlitz
21 River following the eruption of Mt. St. Helens.

22 9. The project site is generally isolated from adjoining properties due to being
23 bordered by the BNSF rail line and Cedar Creek to the east, the Cowlitz River to the west and the
24 Timberline Church/Huntington Avenue to the north. Except for its boundary with the church
25

1 property, the project site has only a few other common boundaries with residential properties on
2 or near Larsen Lane.

3 10. The project site currently has very limited access via Larsen Lane, a country lane
4 running south from Huntington Avenue through a small rural residential neighborhood and
5 connecting to the project site along its west boundary. The Master Plan calls for the
6 establishment of a new primary access at or near the location of the existing Timberline Church
7 access along Huntington Avenue. This proposed access has not yet been developed and the
8 Applicant seeks the temporary use of Larsen Lane until the primary access on Huntington
9 Avenue has been constructed.

10 Findings Relating to SEPA

11 11. On July 28, 2021, the City, as Lead Agency, issued a SEPA Mitigated
12 Determination of Non-Significance (MDNS). The MDNS establishes 11 mitigation measures set
13 forth on pages 8-11 of the Staff Report.

14 12. The public comment for the SEPA MDNS expired August 15, 2021. Several
15 public and agency comments were received as noted earlier along with suggested changes by the
16 Applicant.

17 13. In response to comments received from the Cowlitz Indian Tribe and the
18 Applicant, the City revised the SEPA MDNS per notice issued September 3, 2021. The revised
19 MDNS replaces the original Mitigating Measure No. 7 with three new measures (7, 8 and 9)
20 relating to the present and future use of Larsen Lane, and replaces Condition 11 (now
21 Condition 13) with new requirements for consulting with the Cowlitz Tribe and the undertaking
22 of a Cultural Resources Study and the proper protection of potential archaeological, historical or
23 cultural resources.

1 Findings Relating to Wetlands and Other Critical Areas

2 14. The Applicant has identified areas of wetlands east and south of the existing
3 farm/residence as shown on the Master Plan Map. The identified wetlands have been delineated
4 as Category 3 Wetlands and given a 120-foot buffer, all as shown on the map.

5 15. As shown on the preliminary Master Plan Map, additional critical areas include
6 200-foot shoreline buffers along Cedar Creek and the Cowlitz River, all of which are subject to
7 the City's Shoreline Master Program and the State Shoreline Management Act.

8 16. A nearby resident, Melvin Larsen, testifies that the Applicant's contractor plowed
9 additional areas of wetlands earlier this year and reseeded in pasture grass. Mr. Larsen does not
10 clearly identify the location of these potential additional wetlands other than being "most of the
11 area covered by mudflow from May 18, 1980 eruption of Mt. St. Helens". It is unclear if this is a
12 different area of wetlands than the Applicant has designated on its mapping but it appears to be.

13 17. Miranda Adams, Shorelines/Wetlands Specialist for the Department of Ecology,
14 agrees with Mr. Larsen that there is evidence of additional wetlands beyond those identified by
15 the Applicant on the Master Plan Map. Ms. Adams bases this belief on historical aerial
16 photography of the site suggesting wetland conditions.

17 18. Ms. Adams and the Department of Ecology request copies of all Critical Areas
18 Reports and ask that the agency be allowed to follow-up with a site visit to ensure that all
19 wetlands on the property have been accounted for and that impacts to those wetlands have been
20 fully compensated.

21 19. Appropriate conditions need to be imposed on the project to ensure that all critical
22 areas, including wetlands, have been fully identified, categorized and either fully protected or
23 any impacts having been fully mitigated.

1 Findings Related to Archaeological Resources

2 20. The Department of Archaeology and Historical Preservation (DAHP) has notified
3 the City that the project site is in an area determined to be at very high risk of containing
4 archaeological resources. The scale of the proposed ground disturbing actions would destroy any
5 archaeological resources present. DAHP therefore requests a professional archaeological survey
6 of the project area be conducted prior to ground disturbing activities. It also requests
7 consultation with the Cowlitz Tribe Cultural Committees and staff regarding cultural resource
8 issues.

9 21. A nearby resident, Melvin Larsen, testifies to there having been historic tribal
10 ceremonies on the site perhaps 15-20 years ago and that the ceremonies may have been recorded.
11 Mr. Larsen has provided this information to the Cowlitz Indian Tribe and it is seeking evidence
12 of the recording.

13 22. The Cowlitz Tribe has requested formal consultation on any development of the
14 project site.

15 23. The City has agreed to assume responsibility for consulting with the Cowlitz
16 Tribe in the preparation of a professional archaeological survey of the project area prior to any
17 ground disturbing activities.

18 24. The SEPA MDNS and the Staff's proposed conditions of plan approval have been
19 modified accordingly.

20 Findings Relating to Stormwaters and Floodwaters

21 25. As earlier noted, the property is fairly flat with the exception of elevated areas
22 caused by the placement of dredge materials south of the existing farmhouse and pasture. Much
23 of the property sits below the 100-year flood elevation. The Applicant proposes to elevate the
24 project site one foot above the 100-year flood elevation.

1 26. The owners of several nearby residential properties, as well as
2 the Lower Columbia Fish Recovery Board (LCFRB), have express concern that raising the
3 elevation of the project site will result in higher floodwater levels on adjoining properties,
4 particularly the residential properties on or near Larsen Lane.

5 Findings Relating to Riparian and Shoreline Impacts

6 27. By letter dated August 16, 2021, the Lower Columbia Fish Recovery Board
7 (LCFRB) has expressed a number of concerns relating to the project's impacts on riparian and
8 shoreline buffers. The LCFRB does not claim that the project violates any critical areas or other
9 environmental regulations but instead expresses the belief that much of the development is
10 inconsistent with the intent of the Lower Columbia River Salmon Recovery Plan as well as the
11 Lower Cowlitz Subbasin Plan and the Lower Cowlitz River and Floodplain Habitat Restoration
12 Project Siting and Design Report. More specifically, the Lower Cowlitz Strategy, page 42,
13 identifies the project site as a restoration opportunity capable of reconnecting 1,000 feet of off
14 channel habitat and restoring 2,000 feet of riparian habitat. The LCFRB believes that the Master
15 Plan will impair or restrain floodplain restoration, with 93% of this site proposed for
16 development and the remainder "encumbered by perfunctory regulatory buffers." The LCFRB
17 notes that the City of Castle Rock is identifies as a key "recovery partner" in the recovery plan
18 and has promised to "ensure standards in land use and environmental programs and plans
19 affording adequate protection of ecologically important areas (stream channels, riparian zones,
20 floodplains, CMZ, wetlands, unstable geology". The LCFRB suggests that the Master Plan is
21 not in keeping with the City's promises. It therefore recommends among other things: (a) the
22 relocation of Salmon Creek to its historic location on the project site; (b) creating and improving
23 off channel, side channel and riparian habitat as recommended by the Lower Columbia Strategy;
24 and (c) providing more detailed information as to proposed recreation areas and their impacts to
25 the shoreline and other critical areas, and the possible elimination of the boat launch.

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1 Findings Relating to Larsen Lane

2 28. As noted earlier, the Master Plan proposes the construction of a primary access
3 along Huntington Avenue at or near the existing access to the Timberline Church.

4 29. The only existing access into the project site is off of Huntington Avenue by way
5 of Larsen Lane. Larsen Lane was originally constructed as a private lane and then later
6 dedicated to the public. It is a paved but rural country lane with limited width and limited right-
7 of-way. As noted earlier, portions of its right-of-way are only 20-25 feet in width, thus
8 preventing its widening.

9 30. Larsen Lane runs south from Huntington Avenue, passing several rural residential
10 properties before terminating at the old farmhouse in the center of the project site.

11 31. Residents along Larsen Lane are universally opposed to its use by the project.
12 Residents cite to its limited width and right-of-way; its location within a quiet rural residential
13 area; and the dramatic impact its widening would have upon the affected residences and their
14 values.

15 32. The applicable Fire Code requires the project to have a secondary access for
16 emergency purposes. Currently, there is no other secondary access to the site other than Larsen
17 Lane. The City therefore proposes to rely on Larsen Lane as the project site's secondary access
18 for emergency purposes. The City also proposes to allow the Applicant to utilize Larsen Lane
19 during initial construction until such time as the primary access off of Huntington Avenue has
20 been constructed, but no later than June 30, 2022, provided that this deadline may be extended
21 with cause by the City.

22 33. The original Staff Report addresses proposed conditions for the use of Larsen
23 Lane in both the MDNS (Mitigation Measure No. 7) as well as in the proposed conditions of
24 Master Plan approval (Condition No. 12). As proposed in the Staff Report, use of Larsen Lane
25

1 would be limited to emergency ingress and egress only although the Applicant could propose to
2 use it to provide a second access if such is required by local, state or federal standards. If so, the
3 Applicant would be responsible for the design, acquisition of right-of-way and construction of
4 required improvements, all of which would be subject to environmental review and mitigation.

5 34. The Applicant has opposed the suggested limitations on the use of Larsen Lane
6 and argues that it has a fundamental right to utilize the roadway as it currently provides access to
7 the project site. The Applicant has therefore urged the City to revise its conditions relating to the
8 use of Larsen Lane to allow the Applicant greater opportunity in the future to make use of it.

9 35. By correspondence dated September 3, 2021, City Staff has reached agreement
10 with the Applicant on revised conditions for the use of Larsen Lane. These conditions are set
11 forth in proposed Mitigation Measure Nos. 7, 8 and 9 in the City's revised SEPA MDNS. Due
12 to their importance these revised measures are set forth herein in their entirety:

13 "7. Larsen Lane SW is a public right-of-way and in its existing condition the
14 use of Larsen Lane SW to access the Master Planned Development shall
15 be limited to:

16 a. Emergency ingress and egress, provided that:

17 (1) The Project Sponsor shall be responsible for the design and
18 construction of such improvements to Larsen Lane SW within the existing
19 right-of-way from the site of the Master Planned Development to the
20 intersection with Huntington Avenue South that may be required by the
21 City to maintain emergency access to the Master Planned Development in
22 accordance with the provisions of the International Fire Code as
23 implemented and adopted by the City.

24 (2) It is understood by the parties that if the required
25 emergency access cannot be provided within the existing right-of-way that
a different route for emergency access may be required.

1 b. Interim access by the Project Sponsor, and their employees,
2 subcontractors, and suppliers pending the construction of a temporary
3 access road at the primary access point from Huntington Avenue near the
4 church driveway, provided that:

5 (1) The Project Sponsor shall provide the City with
6 documentation of the existing condition of Larsen Lane SW and shall be
7 responsible for the repair of any damages to the roadway during this
8 interim period.

9 (2) The City will require a bond or financial guarantee
10 sufficient to restore Larsen Lane SW in its sole discretion.

11 (3) The Project Sponsor shall design and construct, subject to City
12 review and approval, a temporary access road at the primary point of
13 access from Huntington Avenue near the church driveway no later than
14 June 30, 2022, provided that this deadline may be extended with cause by
15 the City.

16 (4) The City will make a good faith effort to expedite the review
17 and approval of this temporary access road.

18 8. The City may install reasonable measures to prevent the use of Larsen
19 Lane SW to access the Master Planned Development. This may include,
20 but is not limited to, signage, a gate or bollards with a lock box, and a cul-
21 de-sac or turnaround for vehicles attempting to enter the Master Planned
22 Development.

23 9. The Project Sponsor may propose to use Larsen Lane SW to provide a
24 second access route to the Master Planned Development if such is required
25 in accordance with local, state, or federal standards. The Project Sponsor
shall be responsible for the design, acquisition of right-of-way, and
construction of any required improvements to Larsen Lane SW including
the intersection with Huntington Avenue South in accordance with City
standards. The proposed design and use of these improvements shall be
subject to environmental review and mitigation."

36. Although the City has not asked that its conditions of Master Plan approval be
modified consistent with these proposed changes to the MDNS, the logical conclusion to be

1 drawn is that proposed Condition No. 12 is to be replaced with new Condition Nos. 12, 13 and
2 14, consistent with revised MDNS Measure Nos. 7, 8 and 9.

3 Findings Relating to Proposed Conditions of Master Plan Approval

4 37. The Staff Report at pages 12-22, contains 25 proposed conditions of Master Plan
5 approval. As earlier noted, the City agrees to modify proposed Condition No. 4 as requested by
6 the Applicant. Similarly, the City has agreed to modify proposed Condition
7 No. 11(a) as requested by the Applicant. As just noted, the City proposes to replace proposed
8 Condition No. 12 with new Condition Nos. 12, 13 and 14 consistent with the revised MDNS
9 Measure Nos. 7, 8 and 9. As a result, proposed Condition Nos. 13-25 would be renumbered
10 15-27, with there now being a total of twenty-seven proposed conditions. Finally, proposed
11 Condition No. 18 (now renumbered to Condition No. 20) would be revised to be consistent with
12 the recent revision to MDNS Measure No. 13 relating to archaeological resources.

13 Findings Relating to the Application's Compliance with the Master Plan Development
14 Ordinance, Chapter 17.100 CRMC

15 38. Master Plans must comply with the requirements of the recently enacted Chapter
16 17.100 CRMC as well as other applicable development regulations, and must be consistent with
17 the City's Comprehensive Plan.

18 39. On or about March 5, 2021, the Applicant submitted a "Project Narrative" in
19 which it analyzes the proposed Master Plan in relation to the Master Plan Development
20 Ordinance, other development regulations and the Comprehensive Plan. Unless otherwise noted,
21 City Staff concurs with the Applicant's analysis.

22 The following is an examination of the project's compliance with each requirement of
23 Chapter 17.100, other development regulations, and its consistency with the Comprehensive
24 Plan:

Findings Relating to Compliance With CRMC 17.100.010.

40. The Applicant declares, and the City concurs, that the application meets the purpose of a Master Plan Development by providing a mix of uses, phased development in coordination with City services, protection of environmentally sensitive areas, and development of public uses and amenities.

41. The Applicant and City concur that that the Master Plan application, as conditioned, will:

1. Facilitate the development of large areas in an integrated manner by allowing for development of a 118-acre development area through a master planned mix of uses.

2. Support development in phases by implementing the proposed Master Plan in phases that will be timed with utility and road extensions.

3. Provide needed services and facilities in an orderly fiscally and responsible manner by coordinating with City services to provide logical and useful extension of services to the site.

4. Promote economic development, job creation, private investment and increased housing opportunities by developing the southern gateway to Castle Rock in an area that has long been envisioned for industrial and commercial development. The proposal will implement the City's vision and provide short term construction jobs, long term employment, and opportunities for private investment and business ownership. It will also expand the number of housing units as well as new opportunities for light industrial/flex properties.

5. Preserve or enhance natural amenities, features, shorelines and environmentally sensitive areas by identifying and protecting wetlands and their buffers and shorelines.

1 6. Avoid and minimize to the greatest extent possible, adverse environmental
2 impacts and ensure appropriate mitigation by analyzing the project's environmental
3 impacts by appropriate specialists and, where needed, providing mitigation.

4 7. Encourage environmentally sustainable development by preserving
5 wetlands, avoiding impacts to fish habitat and shorelines, protecting waterways, treating
6 and managing stormwater, designing buildings with energy efficient design elements, and
7 adding beneficial landscaping.

8 8. Provide certainty regarding the character, timing and conditions for
9 developments while at the same time providing a degree of flexibility to respond to
10 changes in market and economic conditions by preparing a phasing plan to propose
11 implemental in stages with clear deadlines for development.

12 9. Promote consistency with the goals, policies and objectives of the Castle
13 Rock Comprehensive Plan.

14 42. The Applicant and City therefore assert that the project, as conditioned, complies
15 with all of the goals of Chapter 17.100 CRMC.

16 43. The Hearing Examiner has reviewed the City and Applicant's Findings and adopts
17 them as his own Findings and finds that the project, as conditioned, will comply with the goals of
18 the Master Plan Development Ordinance.

19 Findings Relating to 17.100.020.

20 44. All Master Plan Development Applications must comply with the requirements of
21 CRMC 17.100.020 relating to the information contained in the application.

22 45. The Applicant and the City concur that the Master Plan Application has satisfied
23 all of the requirements of CRMC 17.100.020 with respect to the form of the application and its
24 contents.

1 46. The Hearing Examiner has revised the City and Applicant's proposed Findings
2 and adopts them as his own Findings excepting, however, any Finding that wetlands have been
3 fully identified.

4 Findings Relating to CRMC 17.100.030

5 47. Pursuant to CRMC 17.100.030, proposed Master Plan Developments shall
6 comply with all applicable use restrictions and development standards in the zoning district in
7 which it is located. The City may approve additional uses based on a Finding that they are
8 consistent with the City's Comprehensive Plan, or compatible with the uses permitted in the
9 zoning district, and will not adversely affect the public health and safety.

10 48. The City and Applicant assert that the proposed Master Plan will comply with the
11 applicable use restrictions and development standards of the Industrial zoning district, or are
12 consistent with the City's Comprehensive Plan, or compatible with the uses permitted in the
13 Industrial zoning district, and will not adversely affect the public health and safety.

14 49. The Hearing Examiner has revised the proposed Findings of the City and
15 Applicant and concurs that the proposes uses are either permitted in the Industrial zoning district
16 or, as conditioned, are consistent with the City's Comprehensive Plan, are compatible with the
17 uses permitted in the Industrial zoning district, and will not adversely affect the public health and
18 safety.

19 Findings Relating to CRMC 17.100.040

20 50. Approval of a Master Plan Development must satisfy the 9 criteria set forth in
21 CRMC 17.100.040.

22 51. 17.100.040.A.1. City Staff and the Applicant find that the project, as conditioned,
23 demonstrates the economic and efficient use of land and provides for an integrated and consistent
24 development plan for the site, and that its layout represents an efficient and coordinated use of
25 land, with integrated uses that will increase the activation and desirability of the site.

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1 52. The Hearing Examiner has reviewed the City's Finding and adopts it as his own
2 Finding.

3 53. 17.100.040.A.2. The City and Applicant find that the Applicant has identified
4 development standards and uses that are consistent with the Master Plan and that the project has
5 been designed in a manner that is compatible with adjacent land uses, after consideration of
6 applicable mitigation and site design. They assert that the plan has been designed with existing
7 residential uses in mind and that there are protections within existing development standards to
8 protect uses on adjacent single-family residential properties.

9 54. The Hearing Examiner has reviewed the City's Finding and concurs that the plan,
10 as additionally conditioned by the Hearing Examiner, will be sufficiently compatible with
11 adjacent land uses.

12 55. 17.100.040.A.3. The City and Applicant find that consideration has been given to
13 "low impact development" stormwater concepts, including low impact biofiltration treatment
14 solutions for stormwater from roads, parking lots and streets.

15 56. The Hearing Examiner has reviewed the City's Findings and adopts them as his
16 own Findings.

17 57. 17.100.040.A.4. The City and the Applicant find that there will be adequate
18 infrastructure capacity available by the time each phase of development is completed. The
19 Master Plan includes conceptual utility plans and a conceptual phasing plan. These plans will be
20 developed in consultation with City services to ensure adequate capacity for each stage of the
21 project and provide services to other in line users if needed.

22 58. The Hearing Examiner has reviewed the City's Findings and adopts them as his
23 own Findings.

24 59. 17.100.040.A.5. The City and Applicant find that the Master Plan Development
25 contains design, landscaping, parking/traffic management, and use mixture and location that

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1 limit or mitigate conflicts between the Master Plan Development and adjacent uses. The plan is
2 designed with existing residential uses in mind; the transition of uses within the revised Master
3 Plan are intended to improve compatibility between the project and the adjoining residential
4 neighborhood; residential and commercial uses have been placed close to the major access point
5 to provide efficient access; landscaping and screening requirements contained in the City's
6 Development Regulations will help limit conflicts with adjacent uses; and the project's use of
7 Larsen Lane has been minimized.

8 60. The Hearing Examiner has reviewed the City's proposed Findings and generally
9 adopts them as his own Findings. The Master Plan is designed with existing residential uses in
10 mind so long as the City retains control of any future improvements to Larsen Lane.

11 61. 17.100.040.A.6. The City and the Applicant find that potential significant off-site
12 impacts including noise, shading, glare and traffic have been identified and mitigated to the
13 extent reasonable and practical, with development occurring in phases and significant off-site
14 impacts identified and mitigated at each stage through separate SEPA review.

15 62. The Hearing Examiner has reviewed the City's proposed Findings and generally
16 adopts them as his own Findings except as noted in the Hearing Examiner's Findings Relating to
17 17.100.040.A.5.

18 63. 17.100.040.A.7. The City and Applicant find that the project is designed and
19 includes appropriate consideration of open spaces and transportation corridors, designs of streets
20 and public open space amenities, and results in the functional and visual appearance of an
21 integrated project; that it has been designed at a high level to create a cohesive and sensible
22 layout of a mix of uses; that public open space amenities are shown and described and that
23 various levels and types of transportation elements have been implemented.

24 64. The Hearing Examiner has reviewed these Findings and generally concurs with
25 the exception as noted to 17.100.040.A.5.

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1 65. 17.100.040.A.8. The City and the Applicant find that the proposed development
2 is designed to be consistent with the provisions of the Shoreline Master Program and Critical
3 Areas Ordinance. They find that no impacts to shorelines will result through approval of Master
4 Plan and any future impacts to shorelines will be identified and managed in accordance with the
5 Shoreline Master Program. The Applicant has noted wetlands along the eastern boundary of the
6 site and has undertaken preliminary delineation of them. The Applicant asserts that no impacts
7 will result through the approval of the Master Plan and that no impacts to the wetlands or
8 wetland buffers are foreseen with future development. Future development adjacent to the
9 wetland will include SEPA review and specialists reports delineating and classifying all wetlands
10 and establishing required buffers.

11 66. The Hearing Examiner has reviewed these Findings and does not fully adopt
12 them. There is anecdotal evidence of additional wetlands on-site. The existence/nonexistence of
13 these additional wetlands must be determined prior to further development. With this exception,
14 the Hearing Examiner adopts the proposed Findings as his own Findings.

15 67. 17.100.040.A.9. The City and Applicant find that the proposed development will
16 not adversely affect the public health, safety or welfare; that the plan has been designed to
17 consider the impacts on the surrounding environment and that it does not adversely affect the
18 public health, safety or welfare; that the Master Plan itself will not result in any physical
19 development and that any actual development will require additional land use and building
20 applications with associated SEPA review, and any impacts will be detailed, studied, addressed,
21 and mitigated to ensure that public health, safety and welfare are maintained.

22 68. The Hearing Examiner has reviewed these Findings and generally adopts them
23 except as previously noted with respect to wetland issues and the use of Larsen Lane.

24 69. The Application is generally in compliance with CRMC 17.100.050. and .060.
25

1 70. The Applicant's Project Narrative, commencing at page 11, addresses the issue of
2 proposed uses and their compatibility with existing zoning designations. As noted, proposed
3 uses in the Master Plan are either permitted uses and, as such, are allowed.

4 71. The Project Narrative, commencing at page 16, addresses development standards
5 for high density residential, highway business and industrial development and finds that future
6 development will comply with these various requirements. City Staff concurs. The Hearing
7 Examiner has reviewed these Findings and adopts them as his own Findings.

8 Findings Relating to Fish and Wildlife Habitat

9 72. CRMC 18.10.130.D requires development activities to conform to the
10 requirements of this ordinance and when impacts to fish and wildlife habitat cannot be avoided,
11 the performance standards found in this chapter shall be used to develop plans. The Applicant
12 responds to this requirement by noting that future applications for development in or near critical
13 areas will include additional SEPA review with all necessary expert reports to delineate and
14 protect critical areas. The Applicant asserts that any impacts to habitat will be beneficial, not
15 harmful, with these proposed impacts to be detailed in future critical areas reports.

16 73. The Applicant's assurances that all impacts to fish and wildlife habitat
17 conservation areas will be beneficial is in conflict with the position taken by the Lower
18 Columbia Fish Recovery Board (LCFRB) which has expressed concern that the project lacks any
19 discussion over appropriate mitigation and does not make any attempt to enhance salmon
20 recovery along the Cowlitz or Lower Columbia River.

21 Findings Relating to Frequently Flooded Areas

22 74. The majority of the property is within FEMA Special Hazard Area AE Zone and
23 is designated as a frequently flooded area.

24 75. All development within frequently flooded areas must comply with Chapter 15.24
25 CRMC, Flood Damage Prevention.

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1 76. The Applicant acknowledges that much of the site is below the level of the 100-
2 year floodplain and that the project calls for raising the site elevation to a minimum of 1 foot
3 above the base flood elevation.

4 77. Several residents along Larsen Lane, as well as the LCFRB, have expressed
5 concern that raising the elevation of the project site to a minimum of 1 foot above the 100-year
6 flood elevation level will displace floodwaters onto adjoining properties, especially properties
7 along Larsen Lane.

8 78. The City's Flood Damage Prevention Ordinance, Chapter 15.24 CRMC, does not
9 prohibit the proposed elevation of the site.

10 79. The Applicant acknowledges that future site development will comply with
11 specific standards for frequently flooded areas.

12 Findings Related to Consistency with the City's Comprehensive Plan

13 80. The Applicant and the City find that the project, as conditioned, is consistent
14 with:

- 15 ● The Residential Development Goals and Policies, especially Goal 2, by providing
16 opportunity for a broad range of housing choices to meet the changing needs of the community.
- 17 ● Several of the goals of the Land Development/Subdivision Goals and Policies by
18 presenting an orderly, well-designed concept bringing economic development with long term
19 benefit to the southern portion of the City and improved infrastructure.
- 20 ● The Commercial/Industrial Goals by significantly increasing the amount of
21 available commercial and industrial acreage with a mix of commercial uses for tourists and
22 residents.
- 23 ● The Urban Growth Goals and Policies by extending water and sewer lines as well
24 as other utility and stormwater systems.
- 25 ● The Housing Goals by providing 200 multi-family housing units.

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- The Transportation Goals and Policies by making fuller use of Huntington Avenue and providing pedestrian and bicycle pathways as required by the City's development standards.

- The Policies for Water, Sewer, Stormwater, other utilities and Capital Facilities

by expanding and improving all of these utilities in the southern portion of the City.

- The Economic Development Goals and Policies, including strategic initiatives 1 and 3, by including a mix of uses that promote a wide range of employment opportunities on underutilized property, and by developing industrial and commercial real estate that will increase the availability of market-ready sites and provides opportunities for retail and service offerings that will increase sale tax revenues and provide in-town business resources.

- The Future Economic Development Goals and Policies for reasons identified above.

- And the Park and Recreation Open Space Goals by including recreational components that will increase and improve public access to the Cowlitz River along with possible recreational trails and other possible amenities along both Salmon Creek and the Cowlitz River.

81. The Applicant and City therefore assert that the project, as conditioned, is fully consistent with the City's Comprehensive Plan. The Hearing Examiner has reviewed these proposed findings and concurs with the finding that the project, as conditioned, is consistent with the City's Comprehensive Plan.

ANALYSIS

In most respects this Master Plan Development Application is straightforward. If approved and developed, it will offer new opportunities for commercial, residential, industrial and recreational acreage on under-utilized property, providing significant economic benefit to the southern portion of the City.

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1 Having said this, there remain several issues with the Application including:

- 2 1. Wetland issues;
- 3 2. Future use of Larsen Lane;
- 4 3. Floodwaters; and
- 5 4. Salmon recovery efforts.

6 Each of these issues will be analyzed more fully below.

7 Wetlands

8 Every project in the City, including this one, must properly identify all wetlands on site;
9 categorize those wetlands; and provide appropriate protections for both the wetlands and their
10 buffers. As part of its application the Applicant has identified several areas of wetlands roughly
11 due east of the old farm house and outbuildings on the site. It has also categorized those
12 wetlands and identified necessary buffers for them.

13 But it is not clear that the wetlands delineated by the Applicant are all of the wetlands on
14 site. There is persuasive anecdotal evidence that the site contains additional wetlands which
15 have yet to be properly recognized and protected. That anecdotal evidence comes from two
16 independent sources: 1) A nearby resident who observed what appeared to be wetlands plowed
17 over earlier this year and re-seeded in pasture grass and 2) an expert from Ecology whose
18 examination of aerial photography reaches the same conclusion. This anecdotal evidence is not
19 proof that additional wetlands exist on site but is credible enough to require further wetlands
20 review before any additional grading or filling occurs that might harm critical areas.

21 The Department of Ecology has asked that Master Plan approval be conditioned upon
22 Ecology having the opportunity to work with the City to determine whether any additional
23 wetland areas exist before allowing any additional grading and filling. This is a reasonable,
24 necessary suggestion. I therefore recommend that the following additional condition be imposed
25 on Master Plan Development approval:

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1 **No. 28. Prior to any additional filling or grading of the project site, City staff**
2 **and Department of Ecology shall undertake wetland boundary verification**
3 **necessary to insure that critical areas have been properly identified and**
4 **rated and that the proposed buffers are adequate to protect the resources**
5 **from the impacts related to future on-site developments.**

6 Use of Larsen Lane

7 While all interested parties - the City, the Applicant, and the residents along Larsen Lane
8 - are in agreement that the project should be allowed to use Larsen Lane for both emergency
9 services as well as temporary construction needs, there is significant disagreement as to any
10 future, expanded use. The neighborhood is united in asking that the Applicant be denied any
11 expanded future use, while the Applicant argues that it has a fundamental right to use Larsen if
12 the necessary right-of-way can be acquired and the street improved to accommodate greater use.

13 At the conclusion of the lengthy public hearing process the City and Applicant reached
14 consensus on proposed conditions of approval to limit the current use of Larsen and ensure that
15 any damage to it is reimbursed, while also providing for the opportunity to have it someday
16 become a secondary access for the project.

17 I concur with the compromise reached between City staff and the Applicant with respect
18 to the future use of Larsen Lane - with one notable exception. As written, Proposed Mitigation
19 Measure 9 (the same as Proposed Condition No. 14) suggests that the Applicant will control the
20 decision to improve Larsen Lane if it can acquire the necessary right-of-way and construct an
21 improved street in accordance with City standards. If this is what the City Staff and Applicant
22 are intending then I respectfully disagree. While the Applicant may be encouraged to acquire
23 necessary right-of-way and propose its dedication to the City in order to improve the street, it is
24 the City who will decide whether to accept the proposed dedication of additional right-of-way,
25

1 and then decide whether to allow the street to be widened and improved. These are all decisions
2 for a future City Council to make, not the Applicant.

3 It is unclear whether the City staff and Applicant were suggesting this but, to be safe, I
4 recommend that Condition No. 14 (and Proposed Mitigation Measure No. 9) be revised as
5 follows:

6 14. "The project sponsor may propose to use Larsen Lane S.W. to provide
7 second access to the Master Plan Development if such is required in accordance
8 with local, state or federal standards. The project sponsor shall be responsible for
9 the design, acquisition of right-of-way, and construction of any required
10 improvements to Larsen Lane S.W., including the intersection with Huntington
11 Avenue S. in accordance with City standards, provided, however, that the City
12 reserves the right to accept the proposed dedication of additional right-of-way and
13 approve construction of the required improvements. Proposed design and use of
14 these improvements shall be subjected to environmental review and mitigation."

15 At the risk of being repetitive, this City Council cannot bind future City Councils to
16 accept, carte blanche, proposed dedications of right-of-way or future improvements to the City's
17 streets. Those decisions must be reserved for future City Councils to make after determining
18 them to be in the City's interest.

19 Floodwaters

20 A significant portion of the project site is below the 100-year flood elevation level. The
21 Applicant has given clear notice that, in order for the property to be developed, it must be raised
22 to a level at least one foot above the 100-year flood elevation. The City's ordinances allow for
23 this.

24 What is beneficial for the project site will, of course, be burdensome to surrounding
25 properties, as displaced floodwaters will seek a new location. Neighbors are naturally

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1 concerned but, again, the proposed action is allowed by the City's ordinances.

2 Nonetheless, the Master Plan Development Ordinance allows the Council to: "Promote
3 the planning and development of sites in a manner that avoids and minimizes potential adverse
4 environmental impacts and that insures appropriate mitigation." Thus, the City Council has the
5 authority to impose additional mitigation for any floodwater impacts arising from raising the
6 elevation of the site. The Hearing Examiner has no recommendation in this regard but merely
7 reminds the Council of its authority.

8 Salmon Recovery Efforts

9 The Lower Columbia Fish Recovery Board has expressed dismay over the fact that
10 regional salmon recovery planning had envisioned the project site as a location for key
11 restoration efforts and that the City had promised to support those efforts, and yet the Master
12 Plan does not provide any mitigation or restoration devoted to salmon recovery. Again, the
13 LCFRB is not claiming that the project violates any of the City's ordinances but rather is in
14 conflict with the City's promises to aid in salmon recovery. This is a matter for the City Council
15 to address at a policy level, with a reminder that the Council has the authority to condition
16 approval in such a matter as to promote development that "avoids and minimizes potential
17 adverse environmental impacts . . . insures appropriate mitigation . . . and encourages
18 environmentally sustainable development." Again, the Hearing Examiner makes no
19 recommendation but merely brings this to the Council's attention.

20 Additional Recommendations

21 Archaeological Resources

22 Project review and the public hearing process have helped identify the site as having
23 potentially important archaeological resources which, by agreement of all parties including
24 DAHP, the Cowlitz Tribe, the City and the Applicant, will be examined more carefully, with the
25

1 agreement to undertake a professional survey before any grading and filling. All of the
2 interested parties should be commended for arriving at a mutually satisfactory approach.

3 Proposed Added Language Regarding the Revised MDNS

4 As part of its revisions to the SEPA MDNS, City staff recommends the following
5 language be added as a preface to the proposed conditions of approval:

6 "It is recommended that the following mitigating measures be referenced as an
7 appendix to the approved Master Site Plan and be used as the basis for
8 establishing and implementing the conditions of Master Plan Approval."

9 This language is somewhat confusing as it leaves a suggestion that the SEPA mitigating
10 measures are intended as general guidelines and not as obligations. As was stated earlier, the
11 mitigation measures imposed by the lead agency (the City) under SEPA must be followed and
12 cannot be lessened by other conditions of project approval. I therefore recommend that instead
13 of adding the proposed language as a preface to the Conditions of Approval the following
14 additional Condition be added to the Conditions of Approval:

15 **"Condition 29. The mitigation measures set forth in the revised SEPA**
16 **MDNS of September 8, 2021, are incorporated herein as additional**
17 **conditions of project approval. In the event of any conflict between the**
18 **SEPA MDNS mitigation measures and these Conditions of Approval, the**
19 **more stringent shall apply."**

20 SUMMARY

21 In summary, I recommend that the Council **APPROVE** the proposed Master Plan
22 Development subject to modified conditions of approval as I have suggested with possible
23 additional conditions relating to floodwaters and salmon recovery at the Council's discretion.

1 DATED this 14th day of September, 2021.

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4 Mark C. Scheibmeir
City of Olympia Hearing Examiner
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CONDITIONS OF APPROVAL

1. The approved Master Site Plan shall consist of the following parcels totaling approximately 118 acres:
 - a. Parcel #30812 (20.83-acres), 2542 Larsen Lane SW.
 - b. Parcel #308100100 (1.06-acres), 1955 Huntington Avenue South.
 - c. Parcel #30813 (4.33-acres).
 - d. Parcel #30864 (78.34-acres).
 - e. Parcel #6143802 (6.44-acres).
 - f. Parcel # 308640100 (.34-acres).
 - g. Parcel #308640200 (7.81-acres).
2. All subsequent project specific development activities shall comply with the applicable provisions of the Castle Rock Municipal Code except as modified by these Conditions of Approval or the Development Agreement.
 - a. Development activities in the Employment Land Use Area shall comply with the provisions of the Industrial (I) zoning district except as modified by these Conditions of Approval.
 - b. Development activities in the Commercial Land Use Area shall comply with the provisions of the Highway Business (C-2) zoning district except as modified by these Conditions of Approval.
 - c. Development activities in the Residential Land Use Area shall comply with the provisions of the High Density Residential (R-2) zoning district except as modified by these Conditions of Approval.
3. The Project Sponsor shall be responsible for obtaining all local, state, and federal permits and approvals that may be required to implement the approved Master Planned Development.
4. Permitted uses in each land use area as depicted on the approved Master Site Plan may include the following, provided that the City may approve other uses based on a finding that they are similar in nature and compatible with the permitted uses.
 - a. Employment Land Use Area: Uses identified as permitted (P) or permitted through the issuance of a conditional use permit (C), or permitted through a special use permit (S) in the Table of Permitted Land Uses CRMC 17.26.010 in the Industrial (I) zoning

district are permitted (P).

- b. Commercial Land Use Area: The following uses and categories of uses identified as permitted (P) or permitted through the issuance of a conditional use permit (C), or permitted through a special use permit (S) in the Table of Permitted Uses CRMC 17.26.010 in the Highway Business (C-2) zoning district are permitted (P).

- (1) Accessory buildings.
- (2) Accessory uses.
- (3) Retail sales
- (4) Professional offices.
- (5) Bank.
- (6) Printing.
- (7) Animal grooming.
- (8) Bakery.
- (9) Beauty/barber shop.
- (10) Convenience store.
- (11) Kennel (indoor).
- (12) Laundry/dry cleaners.
- (13) Liquor Store.
- (14) Marijuana retail sales.
- (15) Microbrewery.
- (16) Child day care.
- (17) Hotels/motels.
- (18) Food cart/Mobile sales.
- (19) Restaurants/coffee shops/drive-through restaurants and the like.
- (20) Brew pub, tavern, cocktail lounge, wine tasting room and the like.
- (21) Health care providers and facilities.
- (22) Outdoor storage, displays, and sales.
- (23) Farmer's market, fruit stand.
- (24) Farm tool sales/rental.
- (25) Wireless communication facilities.
- (26) Public facilities.
- (27) Vehicle and boat sales and services.
- (28) Temporary uses.
- (29) Arcade.
- (30) Gallery/museum
- (31) Movie theater.
- (32) Performing arts theater.
- (33) Recreation, commercial (indoor).

- c. Residential Land Use Area: The following uses as identified as permitted (P) or permitted through a conditional use permit (C), or permitted through a special use permit (S) in the Table of Permitted Uses (CRMC 17.26) in the High Density Residential (R-2) zoning district, are permitted (P).

- (1) Single Family Dwelling Units.
 - (2) Duplexes.
 - (3) Multi-Family Dwelling Units.
 - (4) Accessory Buildings.
 - (5) Accessory Dwelling Units.
 - (6) Bed and Breakfast Inn.
 - (7) Child Day Care.
 - (8) Home Business.
 - (9) Public Park.
 - (10) Temporary Uses.
- d. Recreational Land Use Area: This area will be developed primarily as an RV Park, and may include day use only facilities and full-service, overnight RV pads designed and constructed in accordance with the applicable provisions of the Castle Rock Municipal Code including but not limited to CRMC Chapter 17.63 Recreational Vehicles.
- e. Critical Areas/Open Space Tracts: This shall include a wetland and buffer to be placed in an open space tract(s) that shall not be developed, provided that low impact recreational uses such as trails may be permitted in accordance with local, state, and federal laws, regulations, and standards. Jurisdictional shoreline areas and their buffers may also be placed in an open space tract(s).
5. The following development standards shall apply within the Master Planned Development unless otherwise authorized and approved in accordance with the provisions of these Conditions of Approval.
- a. There are no minimum or maximum lot size or width requirements provided that applicable lot coverage, parking, loading, stormwater management, and landscaping requirements as well as the provisions of the International Building Codes, as adopted and implemented by the City are met.
 - b. There are no minimum front, side, or rear yard building setbacks, within the interior of the master planned development, provided that:
 - (1) There shall be a minimum landscape buffer of 20' along the external boundary of the master planned development that abuts privately owned properties not a part of the Master Planned Development. This requirement may be modified by mutual written agreement of the adjoining property owners and subject to City review and approval.
 - (2) All buildings must be setback at least 5' from the required 20' landscaped buffer.
 - (3) All buildings shall comply with the provisions of the International Building Codes as adopted and implemented by the City.
 - c. The maximum building and structure heights are as follows:

- (1) Employment Land Use Area: 50 feet.
 - (2) Commercial Land Use Area: 40 feet.
 - (3) Residential Land Use Area: 40 feet.
 - (4) Recreation Land Use Area: 35 feet.
 - (5) The maximum height of wireless communication facilities shall be determined in accordance with the provisions of CRMC Title 11 Communication Antennas and Towers.
 - (6) The Project Sponsor may propose to increase the maximum building height up to 25% provided that the City may limit the number of stories within the building and/or require additional mitigation in order to comply with the provisions of the International Fire Code and as may be necessary to protect the public health, safety, and welfare.
- d. There is not minimum or maximum residential density requirement, provided that no more than 200 dwelling units shall be developed on 7.8 acres in the Residential Land Use Area.
6. There shall be no net loss of function or value of wetlands, streams, or rivers as a result of project related activities.
 - a. A Critical Areas Report shall be submitted for all development activities that may impact environmentally sensitive areas on or near the site and a Critical Areas Permit or similar authorization shall be required for all non-exempt development activities.
 - b. All critical areas and their buffers shall be delineated and placed in an open space tract(s).
 - c. All development activities within 200' of a river or stream and their associated wetlands under the jurisdiction of the Washington State Shoreline Management Act shall comply with the provisions of the Castle Rock Shoreline Master Program.
 7. All development activities shall comply with the City Flood Hazard Prevention regulations including the elevation of buildings at least one foot above base flood elevations.
 8. Prior to the initiation of any clearing and grading activities the Project Sponsor shall submit for City review and approval a Master Clearing, Fill, and Grading Plan that is integrated with a Stormwater Management Plan that includes an analysis of the impacts of the proposed development to adjacent properties and measures to ensure that stormwater or flood waters will not adversely affect neighboring properties.

- a. Each application to implement a Phase of Development shall include a more detailed plan with Civil Drawings.
9. The Project Sponsor shall be responsible for the design, construction, and maintenance of such improvements as may be required to connect to the City water system, unless otherwise agreed to by the parties, provided that:
 - a. Prior to preparing design plans, the Project Sponsor shall provide the City with an estimate of anticipated water demand for each phase of development including anticipated fire flow needs.
 - b. The Project Sponsor may submit, for City review and approval plans for a separate irrigation system.
 - c. The City has received a grant and loan from the Washington State Community Economic Revitalization Board (CERB) to extend a water main to the site. As a result, the City shall be responsible for the design and construction of this water main extension in accordance with the conditions of the grant and loan approval.
10. The Project Sponsor shall be responsible for the design, construction, and maintenance of such improvements as may be required to connect to the City sewer system, unless otherwise agreed to by the parties, provided that:
 - a. Prior to preparing design plans, the Project Sponsor shall provide the City with an estimate of anticipated treatment capacity and flows for each phase of development.
11. The primary route of ingress and egress shall be from Huntington Avenue South as depicted on the Master Site Plan approved by the City.
 - a. All internal access roads, alleys, and driveways shall be designed and constructed by the Project Sponsor to the appropriate City road standards unless a modification is approved by the City.
 - b. The Project Sponsor may propose to dedicate roads to the City, provided that the acceptance shall be at the sole discretion of the City.
12. Larsen Lane SW is a public right-of-way and in its existing condition the use of Larsen Lane SW to access the Master Planned Development shall be limited to:
 - a. Emergency ingress and egress, provided that:
 - (1) The Project Sponsor shall be responsible for the design and construction of such improvements to Larsen Lane SW within the existing right-of-way from the site of the Master Planned Development to the intersection with Huntington Avenue South that may be required by the City to maintain emergency access to the Master Planned Development in accordance with the provisions of the

International Fire Code as implemented and adopted by the City.

(2) It is understood by the parties that if the required emergency access cannot be provided within the existing right-of-way that a different route for emergency access may be required.

b. Interim access by the Project Sponsor, and their employees, subcontractors, and suppliers pending the construction of a temporary access road at the primary access point from Huntington Avenue near the church driveway, provided that:

(1) The Project Sponsor shall provide the City with documentation of the existing condition of Larsen Lane SW and shall be responsible for the repair of any damages to the roadway during this interim period.

(2) The City will require a bond or financial guarantee sufficient to restore Larsen Lane SW in its sole discretion.

(3) The Project Sponsor shall design and construct, subject to City review and approval, a temporary access road at the primary point of access from Huntington Avenue near the church driveway no later than June 30, 2022, provided that this deadline may be extended with cause by the City.

(4) The City will make a good faith effort to expedite the review and approval of this temporary access road.

13. The City may install reasonable measures to prevent the use of Larsen Lane SW to access the Master Planned Development. This may include, but is not limited to, signage, a gate or bollards with a lock box, and a cul-de-sac or turnaround for vehicles attempting to enter the Master Planned Development.
14. The project sponsor may propose to use Larsen Lane S.W. to provide second access to the Master Plan Development if such is required in accordance with local, state or federal standards. The project sponsor shall be responsible for the design, acquisition of right-of-way, and construction of any required improvements to Larsen Lane S.W., including the intersection with Huntington Avenue S. in accordance with City standards, provided, however, that the City reserves the right to accept the proposed dedication of additional right-of-way and approve construction of the required improvements. Proposed design and use of these improvements shall be subjected to environmental review and mitigation.
15. With the applications to implement each phase of development, the Project Sponsor shall include a Parking Study that identifies the parking requirements for each use and demonstrates how this parking need can reasonably be met. This Parking Study shall utilize the standards in the most recent edition of the Institute of Traffic Engineers (ITE)

manual unless project specific data from similar projects is provided and accepted by the City.

- a. All parking shall be on-site unless on-street parking is included in approved street plans.
 - b. The Project Sponsor may propose shared or joint use parking.
 - c. All loading, pick-up, and delivery areas shall be on site and shall include sufficient area for the queuing of vehicles.
 - d. Barrier free parking shall be provided in accordance with the provisions of federal, state, and local laws/regulations.
 - e. Designated of "No Parking" areas necessary to preserve emergency vehicle access, provide safe vehicular and non-vehicular access and circulation, and to provide access to public utilities shall be clearly identified, maintained, and strictly enforced by the Project Sponsor.
16. All exterior lighting shall be shielded and downward facing in accordance with applicable provisions of state and local regulations.
17. The Project Sponsor shall prepare and submit with the first implementing application a Master Signage Plan to guide the design and location of signs throughout the site.
- a. The standards in this plan shall meet or exceed the standards in Castle Rock Municipal Code.
 - b. All subsequent implementing applications shall include signs consistent with the approved Master Signage Plan.
18. The Project Sponsor shall prepare and submit with the first implementing application a Conceptual Parks, Recreation, and Open Space Master Plan to guide the development and use of pedestrian and bicycle facilities, parks, and open spaces open to the public. This Conceptual Master Plan should include, but is not limited:
- a. The standards for the development of trails, sidewalks, bike paths and lanes.
 - b. Potential areas for the development of public parks and open spaces.
 - c. Potential areas to view and access shorelines.
 - d. Areas to be maintained by a private management entity, homeowner's association, or the like.
 - e. Areas proposed for dedication and maintenance by the City or other public agency,

provided that areas proposed for dedication to the City shall be accepted at the sole discretion of the City.

19. A proposed Phasing Plan shall be submitted with the first implementing application that identifies the projected target date for the construction of Phase 1 and an estimated timeline of subsequent phases of development. It is understood by the parties that the phasing plan may be revised to respond to changes in market conditions, provided that:
 - a. Each proposed phase of development shall include all infrastructure improvements necessary to support the use and continued operations of the development independent of future phases of development.
 - b. The City may impose additional conditions of approval that may be necessary to ensure that the public health, safety, and welfare of the community is not adversely affected by the phasing plan.
20. The City and the Project Sponsor shall jointly consult with the Cowlitz Indian Tribe to determine the scope of a cultural and archaeological survey that shall be conducted prior to initiating any clearing, grading, filling, or excavation activities.
 - a. Upon discovery of any human remains, artifacts, or evidence of potential archaeological, historical, or cultural resources all construction activities or uses authorized shall be suspended pending authorization to proceed from the City, and/or the Washington State Department of Archaeology and Historic Preservation, in accordance with the provisions of state and federal law, including, but not limited to RCWs 68.50.645, 27.44.055, and 68.60.055.
 - b. If ground disturbing activities encounter human skeletal remains during construction, then all activity shall cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance until the Washington State Department of Archaeology and Historic Preservation (DAHP) provides notice to proceed. The finding of human skeletal remains shall be reported to the Castle Rock Police Department and the Cowlitz County Coroner in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed. The County Coroner will assume jurisdiction over the human skeletal remains and decide of whether those remains are forensic or non-forensic. If the County Coroner determines the remains are non-forensic, then they will report that finding to the Department of Archaeology and Historic Preservation who will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the Cowlitz Indian Tribe. The DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

- c. If ground disturbing activities encounter artifacts, or evidence of potential archaeological, historical, or cultural resources during construction, then all activity shall cease that may cause further disturbance to those items. The Project Sponsor shall immediately contact the Castle Rock Public Works Department to determine how best to secure the site and to consult with the Cowlitz Indian Tribe and the DAHP.
21. Applications to implement the approved Master Site Plan and subsequent Development Agreement shall be processed in accordance with the provisions of CRMC 17.77, in effect at the time a complete application is submitted and accepted for processing, or as subsequently amended by the City, and as modified by CRMC 17.100, unless otherwise provided in these Conditions of Approval or the Development Agreement.
22. The Project Sponsor shall submit with the application to implement each phase of the approved Master Site Plan:
- a. An updated SEPA Checklist.
 - a. An updated traffic report that identifies the number of trips to be generated, assesses existing conditions, identifies proposed mitigation measures to meet City standards, and that identifies when the mitigation is required.
 - b. Other technical studies and reports that may be required by the City to fully evaluate and mitigate potential adverse impacts.
 - c. A Landscaping Plan prepared in accordance with the provisions of Castle Rock Municipal Code and as modified by these Conditions of Approval.
 - d. A Parking Plan prepared in accordance with the provisions of Castle Rock Municipal Code and as modified by these Conditions of Approval.
 - e. An updated Parks, Recreation, and Open Space Master Plan.
 - f. The applications shall also address the status of applicable conditions of approval of previous phases.
 - g. An updated Phasing Plan.
23. The City may require additional mitigation and/or conditions of approval based on an analysis of the application materials submitted to implement each subsequent phase of development.
24. The Project Sponsor may propose adjustments to the boundaries of the land use areas depicted on the Master Site Plan or to the applicable development standards in accordance with the following provisions governing Minor and Major Modifications.

- a. Minor Modifications shall include revisions to the Master Site Plan that do not reduce the amount of open space or adversely affect environmentally sensitive areas or jurisdictional shoreline areas and do not trigger the need for a new SEPA Threshold Determination. Proposed Minor Modifications are subject to administrative review and approval by the Mayor or his/her designee and shall include a Notice of Application and an opportunity for the public to submit written comments.
 - b. Examples of Minor Modifications include, but are not limited to:
 - (1) An alternative development standard that is determined by the City to be functionally equivalent to, or superior to, the original standard or requirement in fulfilling the intent and purpose of that original standard or requirement.
 - (2) Approval of uses determined to be similar in nature and compatible with permitted uses in a land use area.
 - (3) Mutual written agreements between abutting property owners to modify the 20' landscaping requirement.
 - (4) Revisions to the shape of development areas.
 - (5) Increases in a proposed use that is offset by a corresponding decrease of another use that results in no net increase in trips.
 - (6) The realignment of internal road corridors provided that there is no decrease in functionality as determined by the City.
 - c. Major Modifications shall include those revisions that do not meet the criteria for a Minor Modification as determined by the City. Major Modifications shall be reviewed by City Development Review Team and upon preparation and distribution of a Staff Report the City Land Use Hearings Examiner shall conduct a public hearing and shall make a recommendation on the proposed modification to the City Council.
 - d. Examples of a Major Modification include, but are not limited to:
 - (1) The proposed use of Larsen Lane SW to provide a second access to the Master Planned Development.
 - (2) Proposed uses that are not similar in nature and/or that may not be compatible with approved uses.
25. The Project Sponsor and the City may execute a Development Agreement further clarifying these conditions and/or to provide more detailed guidance on how these conditions shall be implemented.

26. In the event of a question about the applicability of the Conditions of Approval or a potential conflict between standards or provisions, the Mayor or his/her designee shall make an administrative code interpretation, provided that such administrative determination may be appealed to the City's Land Use Hearings Examiner.
27. The Project Sponsor shall reimburse the City for all expenses incurred in the implementation of the approved Master Site Plan and Development Agreement including but not limited to the costs associated with the review and approval of implementing applications and construction plans, public notices, City consultants, peer reviews, construction monitoring, and enforcement.
28. Prior to any additional filling or grading of the project site, City staff and Department of Ecology shall undertake wetland boundary verification necessary to insure that critical areas have been properly identified and rated and that the proposed buffers are adequate to protect the resources from the impacts related to future on-site developments.
29. The mitigation measures set forth in the revised SEPA MDNS of September 8, 2021, are incorporated herein as additional conditions of project approval. In the event of any conflict between the SEPA MDNS mitigation measures and these Conditions of Approval, the more stringent shall apply.

LANDING ON THE COWLITZ CONSISTENCY NOTICE

The purpose of this Consistency Notice is to notify City of Castle Rock staff of all lot line moves or exempt land divisions occurring within the Landing on the Cowlitz Master Plan area.

CT6 LLC, as the master developer of the Landing on the Cowlitz (LOTIC), has established this process for documentation of consistency of any proposed lot line move/creation to the following standards, as established in Ordinance 2021-10 (the LOTIC Master Plan Approval and Conditions of Approval):

Condition 2: All subsequent project specific development activities shall comply with the applicable provisions of the Castle Rock Municipal Code except as modified by these Conditions of Approval or the Development Agreement.

As allowed within the LOTIC Development Agreement, property within the LOTIC may undergo lot line moves or lot creation via an expedited Boundary Line Adjustment process or expedited Short Subdivision process as codified in the City of Castle Rock Municipal Code. Such actions are required to provide this Consistency Notice prior to their completion, allowing 30 days for City review and signature of the Notice.

This consistency notification is for the following proposed line move(s)/lot creation:

The consistency review process to move or create the lot boundary will be:

- ☐ Expedited Boundary Line Adjustment (for a lot within the LOTIC master plan)
- ☐ Expedited Short Subdivision (for property within an approved City of Castle Rock Master Plan)

Standard Boundary Line Adjustments and Land Divisions/Subdivisions must be reviewed and approved through the land use application process established by the City of Castle Rock.

The new lot configuration meets the following criteria for a conforming lot within the Landing on the Cowlitz:

- ☐ Lot size: LOTIC has no lot size standard; however, the resulting lot(s) allows adequate room for the requirements of the proposed use including building size and setbacks, parking, utilities, stormwater, and access.
 - ☐ Lot size: If the resulting lot(s) is created through an Exempt Land Division process, the resulting lot(s) meets minimum size requirement of ____ acres established by ____ (City code)_____
- ☐ Lot frontage: LOTIC has no lot width standard; however, the resulting lot(s) has adequate frontage on a public or private street to allow for access and egress for proposed use and emergency vehicles.
- ☐ Easements for Access, Cross-Circulation and Utilities: LOTIC has cross-circulation and utility easement requirements; the resulting lot(s) meets the requirements for cross-circulation according to the most recent

approved LOTC Master Plan and provides room for any required utility easements for conceptual utility extensions and maintenance access, according to the most recent LOTC utility and stormwater plans. Easement locations will be established through the land use application process for future use.

- ☐ Building: The resulting lot(s) will have adequate space to accommodate the building size and configuration required for future use, along with adequate room for required building setbacks.
- ☐ Parking: The resulting lot(s) will have adequate space and configuration to accommodate the number of required parking spaces for future use.
- ☐ An exhibit showing the lot line move/creation is attached.

This notice, with all signatures, shall be a requirement for Counter Completeness for the subsequent land use application that establishes the proposed use on the property.

SIGNATURES

APPLICANT: _____

DATE: _____

MASTER DEVELOPER: _____

DATE: _____

CITY REPRESENTATIVE: _____

DATE: _____

City of Castle Rock
Expedited Boundary Line Adjustment
Consistency Review Form

SUBMIT THIS FORM TO THE BUILDING & PLANNING DEPARTMENT

DEVELOPER

Name _____	Phone _____	E-mail _____
Address _____	City _____	State _____ Zip _____

PROPERTY OWNER (FOR ALL SUBJECT PARCELS)

Name _____	Phone _____	E-mail _____
Address _____	City _____	State _____ Zip _____

MASTER PLAN INFORMATION

Development Agreement _____	Project Phase _____
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LOCATION OF PARCELS:

Site Address: _____ **Cross Street:** _____

Tax Parcel Numbers: _____

AUTHORIZATION

I affirm that I am the Authorized Signatory for the subject sites and state that the information contained in this consistency review form, map, and supporting documents is true and correct to the best of my knowledge. I certify that this Boundary Line Adjustment does not create a new parcel as per RCW 58.17.040(6). Signatures on this form grant city staff authority to enter my property for the purpose of reviewing this expedited boundary line adjustment.

Authorized Signature (Letter of authorization required if other than property owner) _____	Date _____
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Expedited Boundary Line Adjustment

Consistency Review Instructions

"Boundary Line Adjustment" Defined:

A boundary line adjustment (BLA) is the adjustment of property boundary lines which does not create any additional lot, tract, parcel, site, or division nor create any lot, tract, parcel, site, or division which contains insufficient area and dimension to meet minimum requirements of the zoning code or a building site.

Purpose:

Expedited boundary line adjustments may be recorded via a Consistency Review Process with the City of Castle Rock if properties proposed for adjustment are within an approved master plan and under common ownership. Property owners are required to submit a Consistency Notice to the City of Castle Rock for review prior to being recorded with the Cowlitz County Auditor to confirm compliance with applicable lot dimensions, setbacks, and other lot standards. All Boundary Line Adjustments shall follow the State and City code.

Procedure:

Upon receipt of submission for an expedited boundary line adjustment consistency review, the City of Castle Rock will:

1. Within seven (7) calendar days of submittal, the City designee shall determine if the Consistency Review package is **Counter Complete** and shall send the developer a letter stating such or identifying what additional information is required to make it counter complete.
2. The City designee shall review the Consistency Review package and provide a signed Consistency Notice to the developer within thirty (30) calendar days after the date the Consistency Review package was accepted as counter complete. Time spent by the developer to revise plans or provide additional information or materials requested by the City shall not be included in the 30-day period.

Note: The City of Castle Rock will notify the developer in a timely manner if the above review timelines are unable to be met due to substantial circumstances and will provide the developer with the anticipated review timeline.

3. Upon receipt of the signed Consistency Notice the developer shall record the legal description and exhibit of the newly configured lots with the Cowlitz County Auditor.
4. After recording the boundary line adjustment, the developer shall notify the City of Castle Rock and provide evidence of the recorded document to City of Castle Rock staff. The developer's surveyor shall install all monuments for the adjusted parcels and notify City staff of installation.

Expedited Boundary Line Adjustment

Consistency Review Submittal Requirements

The following checklist identifies information to be included with the consistency review. **All** items must be submitted, and/or addressed before the review package will be considered Counter Complete.

☐ **CONSISTENCY REVIEW FORM:**

The form shall be completed and signed by the owner(s) of record or their authorized representative. If signed by an authorized representative, a letter of authorization signed by the owner of record identifying the authorized representative to act on their behalf shall accompany the application.

☐ **CONSISTENCY NOTICE:**

The developer shall submit a completed copy of the Consistency Notice signed by the developer and master developer, or their authorized representatives, as outlined above.

☐ **NARRATIVE:**

A narrative describing the reason for the boundary line adjustment.

☐ **COPY OF CURRENT APPROVED MASTER PLAN:**

The developer shall submit a copy of the current approved master plan in which the property resides for consistency review.

☐ **CURRENT OWNERS DEED:**

Copy of all property owners' recorded deeds, verifying current ownership.

☐ **SALES HISTORY:**

Complete sales history of all parcels since 1969. Sales history shall be comprised of copies of all deeds or real estate contracts showing previous owners or divisions for the properties involved. It is used to verify the legal creation of the parcel and is available from either a title company or the Cowlitz County assessor's office.

☐ **BOUNDARY LINE ADJUSTMENT MAP SHOWING EXISTING & ADJUSTED CONDITIONS:**

- Layout and dimensions of parcels drawn to scale (18 x 24-inch sheet size)
- Owner's name and mailing address
- Surveyor or engineer's name and mailing address
- The date, north point, and scale of the drawing
- Appropriate identification of the drawing as a Boundary Line Adjustment with the project phase identifier
- A vicinity map showing the phase in larger area adjacent to the site
- Address of each parcel including number and street name
- Area of existing and adjusted parcels in acres or square feet
- Location, width, lengths, and names of existing and adjusted parcels including:
 - Lot boundary lines with dimensions
 - Radius, length, central angle of all tangent curves
 - Radius, length, centered angle, long chord distance, and bearing of all non-tangent curves
 - Location and type of all permanent monuments within the development including initial point, boundary monuments, and lot corners
 - Identify reference points of existing surveys related to the parcels
 - Location and descriptions of all stakes, monuments, or other evidence found on the ground and used to determine the boundaries of the parcels
 - Identify any deed restrictions, reservations, or covenants attached to the parcels, if applicable
- Location and size of existing public and private utilities within or immediately adjacent to the parcels including:
 - Sanitary sewers
 - Water mains
 - Public storm drains
 - Culverts
 - Fire hydrants
 - Electrical lines

- Existing access routes including:
 - Public and private roads or alleys
 - Existing reservations or restrictions relating to site access
 - Right-of-way widths with centerline shown
 - Radius, length, central angle of all tangent curves
 - Radius, length, centered angle, long chord distance, and bearing of all non-tangent curves
- Location of all existing and proposed easements, denoted by dashed lines, including:
 - Recorded reference number, if applicable
 - Width, length, and bearing
- Location of adjusted lot corner monuments to be established **after** recording
- Written legal description of adjusted parcels
- Surveyor's certificate certifying that the individual is registered as a professional land surveyor in the state of Washington and certifies that the boundaries shown are based on actual survey of the land as described and that all lot corners have been staked on the ground as shown on the Boundary Line Adjustment map
- Note including confirmation of the signed and data Consistency Review Form

Note: The City designee reserves the right to waive any of the above survey and submittal requirements at their discretion if deemed not applicable or necessary to complete the consistency review process. The City designee may also require additional information pertaining to the adjusted parcel location and the immediate vicinity for review of the proposal. Variations of the above requirements will be reviewed by the City designee on a case-by-case basis.

City of Castle Rock
Expedited Short Subdivision
Consistency Review Form

SUBMIT THIS FORM TO THE BUILDING & PLANNING DEPARTMENT

DEVELOPER

Name _____	Phone _____	E-mail _____
Address _____	City _____	State _____ Zip _____

PROPERTY OWNER (FOR ALL SUBJECT PARCELS)

Name _____	Phone _____	E-mail _____
Address _____	City _____	State _____ Zip _____

MASTER PLAN INFORMATION

Development Agreement _____	Project Phase _____
-----------------------------	---------------------

LOCATION OF PARCEL(S):

Site Address: _____ **Cross Street:** _____

Tax Parcel Number: _____

AUTHORIZATION

I affirm that I am the Authorized Signatory for the subject sites and state that the information contained in this consistency review form, map, and supporting documents is true and correct to the best of my knowledge. Signatures on this form grant city staff authority to enter my property for the purposes of reviewing this expedited short subdivision.

Authorized Signature (Letter of authorization required if other than property owner) _____	Date _____
---	------------

Expedited Short Subdivision

Consistency Review Instructions

"Short Subdivision" Defined:

Short subdivision is the division or redivision of land into four or fewer lots, tracts, parcels, sites or divisions for the purpose of sale, lease, or transfer of ownership.

Purpose:

Expedited short subdivisions may be recorded via a Consistency Review process with the City of Castle Rock if the overall property proposed for division is within an approved master plan and under common ownership. Expedited short subdivisions may only be used when creating 5-acre lots or larger, consistent with RCW 58.17. The property owner is required to submit a Consistency Notice to the City of Castle Rock for review prior to being recorded with the Cowlitz County Auditor to determine compliance with applicable lot dimensions, setbacks, and other lot standards. All short subdivisions shall follow the State and City code.

Procedure:

Upon receipt of submission for an expedited short subdivision consistency review, the City of Castle Rock will:

1. Within seven (7) calendar days of submittal, the City designee shall determine if the Consistency Review package is **Counter Complete** and shall send the developer a letter stating such or identifying what additional information is required to make it counter complete.
2. The City designee shall review the Consistency Review package and provide a signed Consistency Notice to the developer within thirty (30) calendar days after the date the Consistency Review package was accepted as counter complete. Time spent by the developer to revise plans or provide additional information or materials requested by the City shall not be included in the 30-day period.

Note: The City of Castle Rock will notify the developer in a timely manner if the above review timelines are unable to be met due to substantial circumstances and will provide the developer with the anticipated review timeline.

3. Upon receipt of the signed Consistency Notice the developer shall record the proposed short subdivision with the Cowlitz County Auditor.
4. After recording, the developer shall notify the City of Castle Rock and provide evidence of the recorded document to City of Castle Rock staff. The developer's surveyor shall install all monuments for the new parcels and notify City staff of installation.

Expedited Short Subdivision

Consistency Review Submittal Requirements

The following checklist identifies information to be included with the consistency review. **All** items must be submitted, and/or addressed before the review package will be considered Counter Complete.

☐ **CONSISTENCY REVIEW FORM:**

The form shall be completed and signed by the owner(s) of record or their authorized representative. If signed by an authorized representative, a letter of authorization signed by the owner of record identifying the authorized representative to act on their behalf shall accompany the application.

☐ **CONSISTENCY NOTICE:**

The developer shall submit a completed copy of the Consistency Notice signed by the developer and master developer, or their authorized representatives, as outlined above.

☐ **NARRATIVE:**

A narrative describing the intent or purpose of the short subdivision.

☐ **COPY OF CURRENT APPROVED MASTER PLAN:**

The developer shall submit a copy of the current approved master plan in which the property resides for consistency review.

☐ **CURRENT OWNERS DEED:**

Copy of all property owners' recorded deeds, verifying current ownership.

☐ **SALES HISTORY:**

Complete sales history of all parcels since 1969. Sales history shall be comprised of copies of all deeds or real estate contracts showing previous owners or divisions for the properties involved. It is used to verify the legal creation of the parcel and is available from either a title company or the Cowlitz County assessor's office.

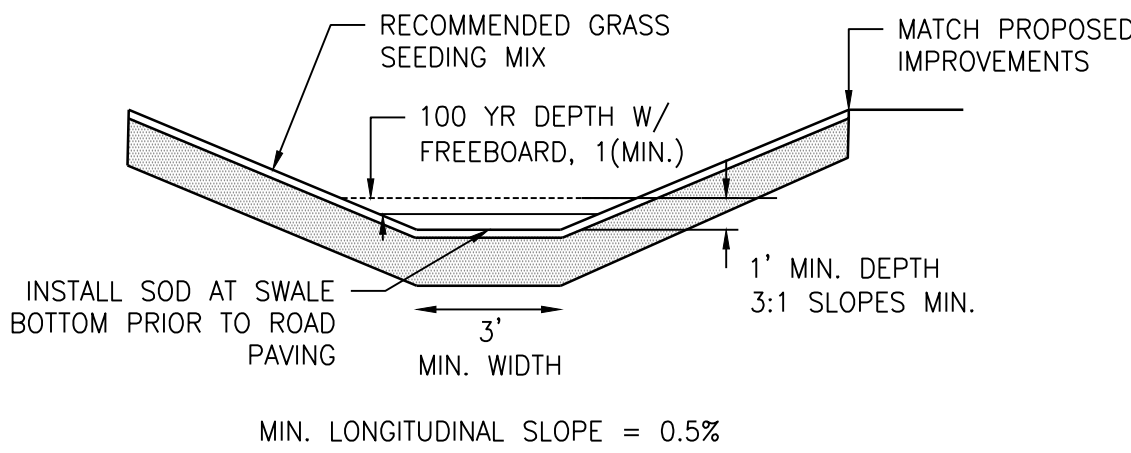
☐ **SHORT SUBDIVISION MAP SHOWING EXISTING & PROPOSED CONDITIONS:**

- Layout and dimensions of parcels drawn to scale (18 x 24-inch sheet size)
- Owner's name and mailing address
- Surveyor or engineer's name and mailing address
- The date, north point, and scale of the drawing
- Appropriate identification of the drawing as a Short Subdivision with the project phase identifier
- A vicinity map showing the phase in larger area adjacent to the site
- Address of existing and proposed parcels including number and street name
- Area of existing and proposed parcels in acres or square feet
- Location, widths, dimensions, lengths, and names of existing and proposed parcels including:
 - Tract, block, and lot boundary lines with dimensions
 - Proposed lot and block numbers
 - Radius, length, central angle of all tangent curves
 - Radius, length, centered angle, long chord distance, and bearing of all non-tangent curves
 - Location and type of all permanent monuments within the development including initial point, boundary monuments, and lot corners
 - Adjoining corners of adjoining subdivisions, if applicable
 - Identify reference points of existing surveys related to the parcels
 - Location and descriptions of all stakes, monuments, or other evidence found on the ground and used to determine the boundaries of the parcels
 - Identify any deed restrictions, reservations, or covenants attached to the parcels, if applicable
- Location, approximate acreage, and dimension of areas proposed for public use, open space, park, recreation, and/or common ownership, if applicable
- Identify any land or improvements to be dedicated or donated for any public purpose or private use in common, if applicable
- Identify any areas, and the proposed uses thereof, to be dedicated by the owner, if applicable

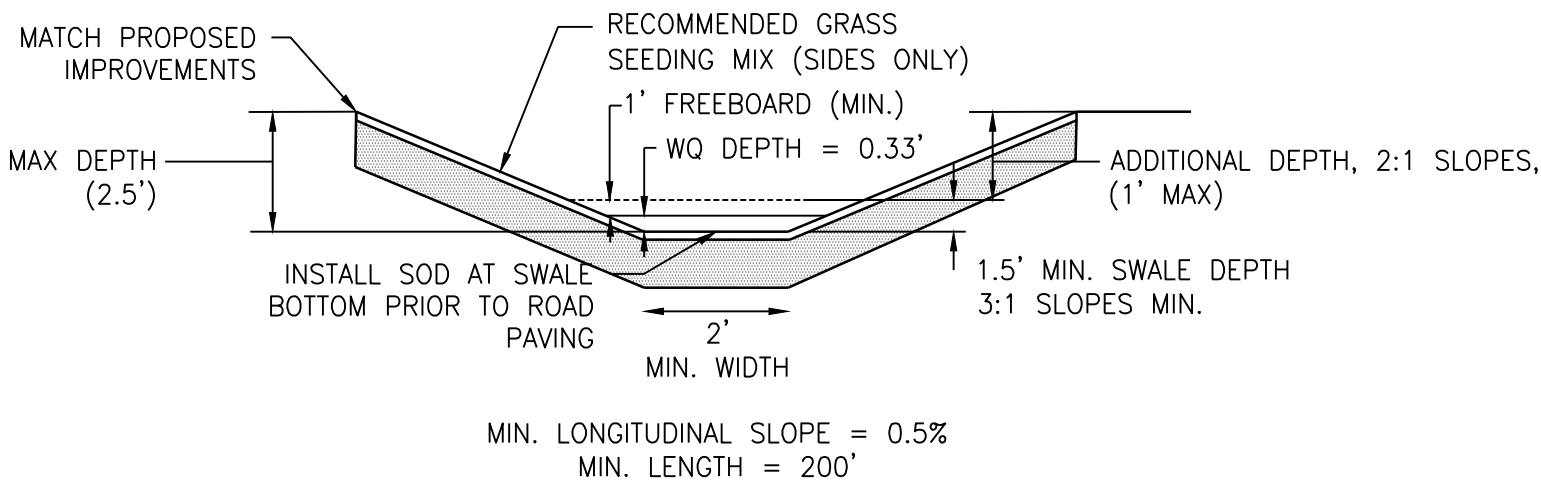
- Location and size of existing public and private utilities within or immediately adjacent to the parcels including:
 - Sanitary sewers
 - Water mains
 - Public storm drains
 - Culverts
 - Fire hydrants
 - Electrical lines
- Existing and proposed access routes including:
 - Public and private roads or alleys
 - Existing or proposed reservations or restrictions relating to site access
 - Right-of-way widths with centerline shown
 - Radius, length, central angle of all tangent curves
 - Radius, length, centered angle, long chord distance, and bearing of all non-tangent curves
- Location of all existing and proposed easements, denoted by dashed lines, including:
 - Recorded reference number, if applicable
 - Width, length, and bearing
- Location and description of monuments to be established **after** recording including:
 - All lot corners
 - All street intersections
 - Centerline of all streets at each point of curvature and point of tangent
- Location of areas within a designated 100-year floodplain, if applicable
- Location of flood control features on the property and references to easements or deeds for drainage land, if applicable
- Written legal description of existing and proposed lots
- Surveyor's certificate certifying that the individual is registered as a professional land surveyor in the State of Washington and certifies that the boundaries shown are based on actual survey of the land as described and that all lot corners have been staked on the ground as shown on the Short Subdivision map
- Note including confirmation of the signed and data Consistency Review Form

Note: The City designee reserves the right to waive any of the above survey and submittal requirements at their discretion if deemed not applicable or necessary to complete the consistency review process. The City designee may also require additional information pertaining to the property location and the immediate vicinity for review of the proposal. Variations of the above requirements will be reviewed by the City designee on a case-by-case basis.

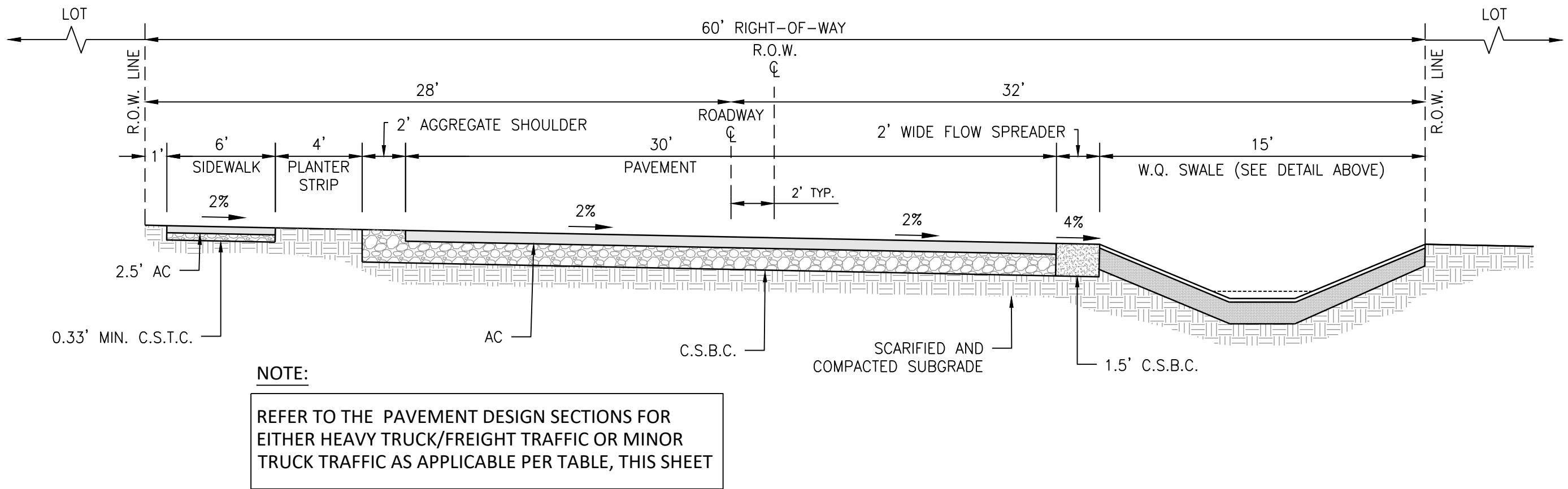
CONVEYANCE DITCH SECTION



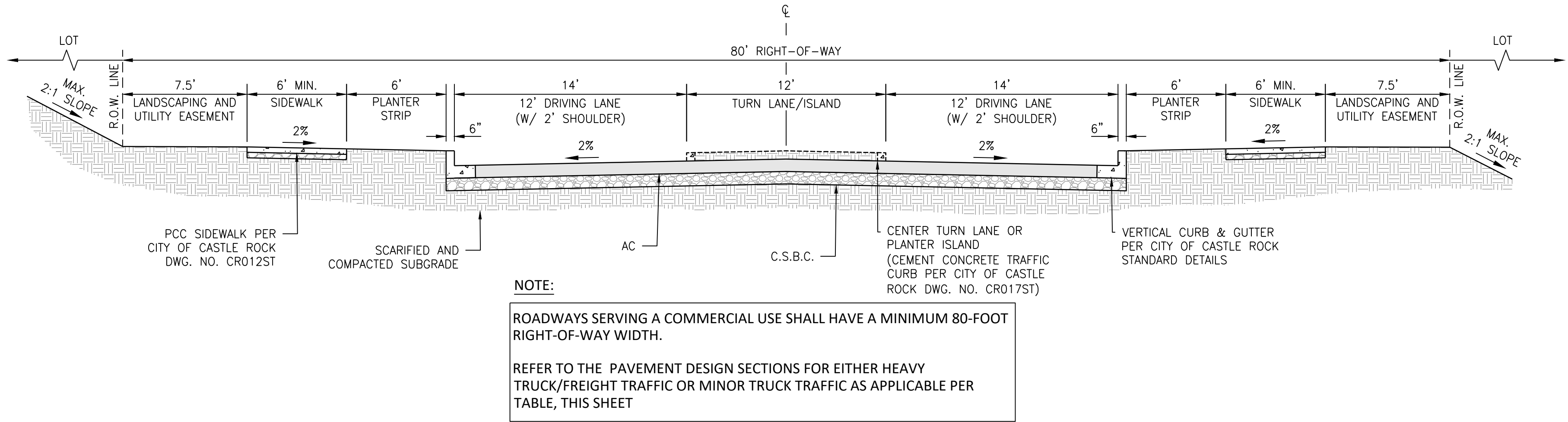
W.Q. SWALE SECTION



INDUSTRIAL COLLECTOR - ROADWAY SECTION



CITY OF CASTLE ROCK - STANDARD MINOR ARTERIAL ROADWAY SECTION



LOTIC ROADWAY SECTION STANDARDS

COMPACTION STANDARDS

MATERIAL	% COMPACTION	ASTM STD.
ASPHALTIC CONCRETE (CL 1/2" PG 58-22)	91%	D2041
CRUSHED SURFACING TOP COURSE (C.S.T.C. PER WSDOT 9-03.9(3))	95%	D1557
CRUSHED SURFACING BASE COURSE (C.S.B.C. PER WSDOT 9-03.9(3))	95%	D1557
NATIVE SUBGRADE	98%	D1557
CEMENT-AMENDED SUBGRADE	95%	D558

AC PAVEMENT SECTIONS - NATIVE/ENGINEERED FILL

	HEAVY TRUCK/ FREIGHT TRAFFIC	MINOR TRUCK TRAFFIC	STD. VEHICULAR TRAFFIC
AC THICKNESS	5.5"	5.0"	4.0"
# OF AC LIFTS	3	2	2
CRUSHED SURFACING BASE COURSE DEPTH	16.5"	14.0"	10.5"
SUBGRADE DEPTH	12.0"	12.0"	12.0"

AC PAVEMENT SECTIONS - CEMENT-AMENDED
SUBGRADE

	HEAVY TRUCK/ FREIGHT TRAFFIC	MINOR TRUCK TRAFFIC	STD. VEHICULAR TRAFFIC
AC THICKNESS	5.5"	5.0"	4.0"
# OF AC LIFTS	3	2	2
CRUSHED SURFACING BASE COURSE DEPTH	6.5"	4.5"	4.0"
CEMENT AMENDED SUBGRADE DEPTH	12.0"	12.0"	12.0"

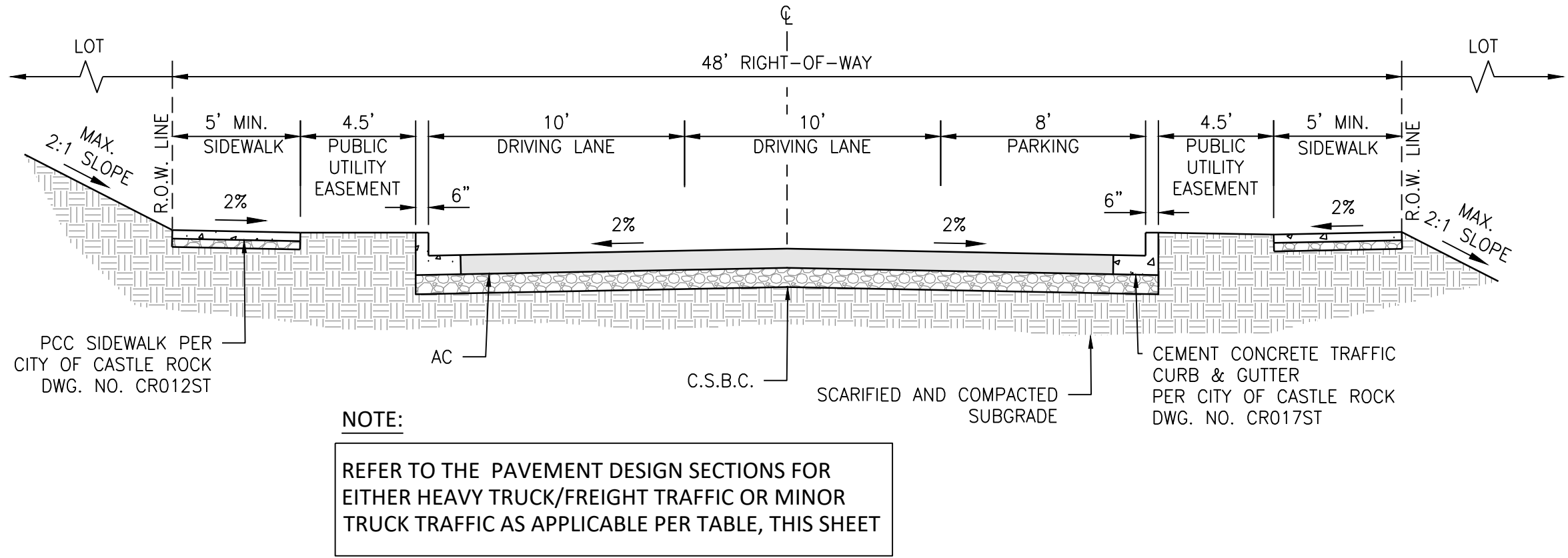
NOTE:

PAVEMENT SECTIONS SHOWN ABOVE ARE PRELIMINARY RECOMMENDATIONS AS PROVIDED BY COLUMBIA WEST ENGINEERING DURING MASTER PLANNING PROCESS AND ARE BASED ON THE PROJECT GEOTECHNICAL REPORT, DATED MARCH 30, 2023. FINAL PAVEMENT SECTIONS FOR PUBLIC AND PRIVATE ROADWAYS WITHIN LOTC SHALL BE DESIGNED AND APPROVED BY A LICENSED PROFESSIONAL GEOTECHNICAL ENGINEER PRIOR TO FINAL PERMIT APPROVAL.

LANDING ON THE COWLITZ - PROPOSED ROADWAY SECTIONS (EXHIBIT 1 OF 2)

OCTOBER 2023

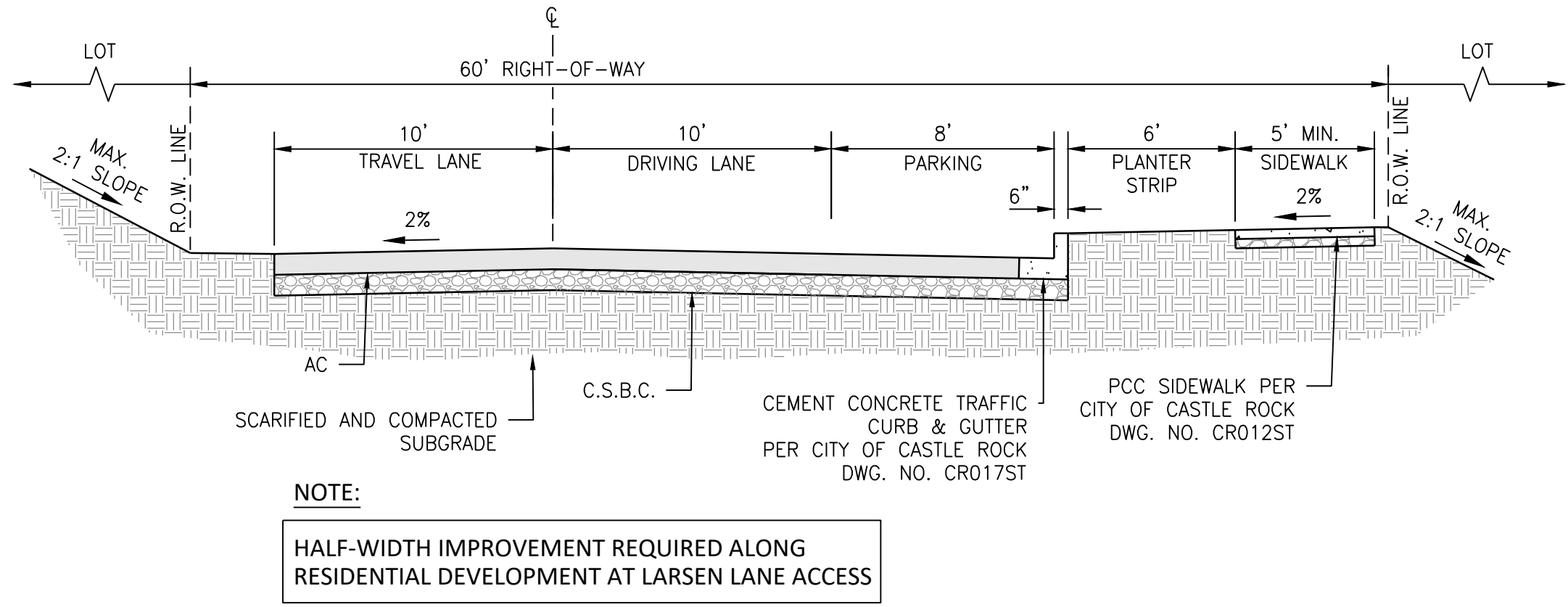
RESIDENTIAL LOCAL ACCESS ROADWAY SECTION



LOTIC ROADWAY SECTION STANDARDS

MATERIAL	% COMPACTION	ASTM STD.
ASPHALTIC CONCRETE (CL 1/2" PG 58-22)	91%	D2041
CRUSHED SURFACING TOP COURSE (C.S.T.C. PER WSDOT 9-03.9(3))	95%	D1557
CRUSHED SURFACING BASE COURSE (C.S.B.C. PER WSDOT 9-03.9(3))	95%	D1557
NATIVE SUBGRADE	98%	D1557
CEMENT-AMENDED SUBGRADE	95%	D558

EMERGENCY ACCESS - ROADWAY SECTION



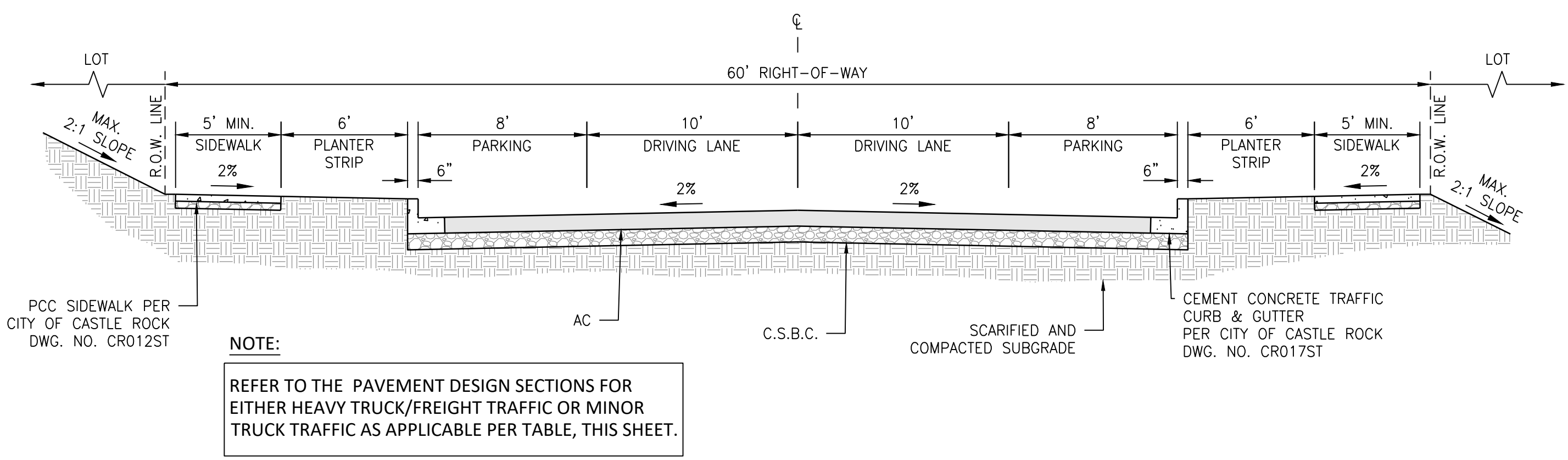
AC PAVEMENT SECTIONS - NATIVE/ENGINEERED FILL

	HEAVY TRUCK/ FREIGHT TRAFFIC	MINOR TRUCK TRAFFIC	STD. VEHICULAR TRAFFIC
AC THICKNESS	5.5"	5.0"	4.0"
# OF AC LIFTS	3	2	2
CRUSHED SURFACING BASE COURSE DEPTH	16.5"	14.0"	10.5"
SUBGRADE DEPTH	12.0"	12.0"	12.0"

AC PAVEMENT SECTIONS - CEMENT-AMENDED SUBGRADE

	HEAVY TRUCK/ FREIGHT TRAFFIC	MINOR TRUCK TRAFFIC	STD. VEHICULAR TRAFFIC
AC THICKNESS	5.5"	5.0"	4.0"
# OF AC LIFTS	3	2	2
CRUSHED SURFACING BASE COURSE DEPTH	6.5"	4.5"	4.0"
CEMENT AMENDED SUBGRADE DEPTH	12.0"	12.0"	12.0"

CITY OF CASTLE ROCK - STANDARD COLLECTOR ROADWAY SECTION

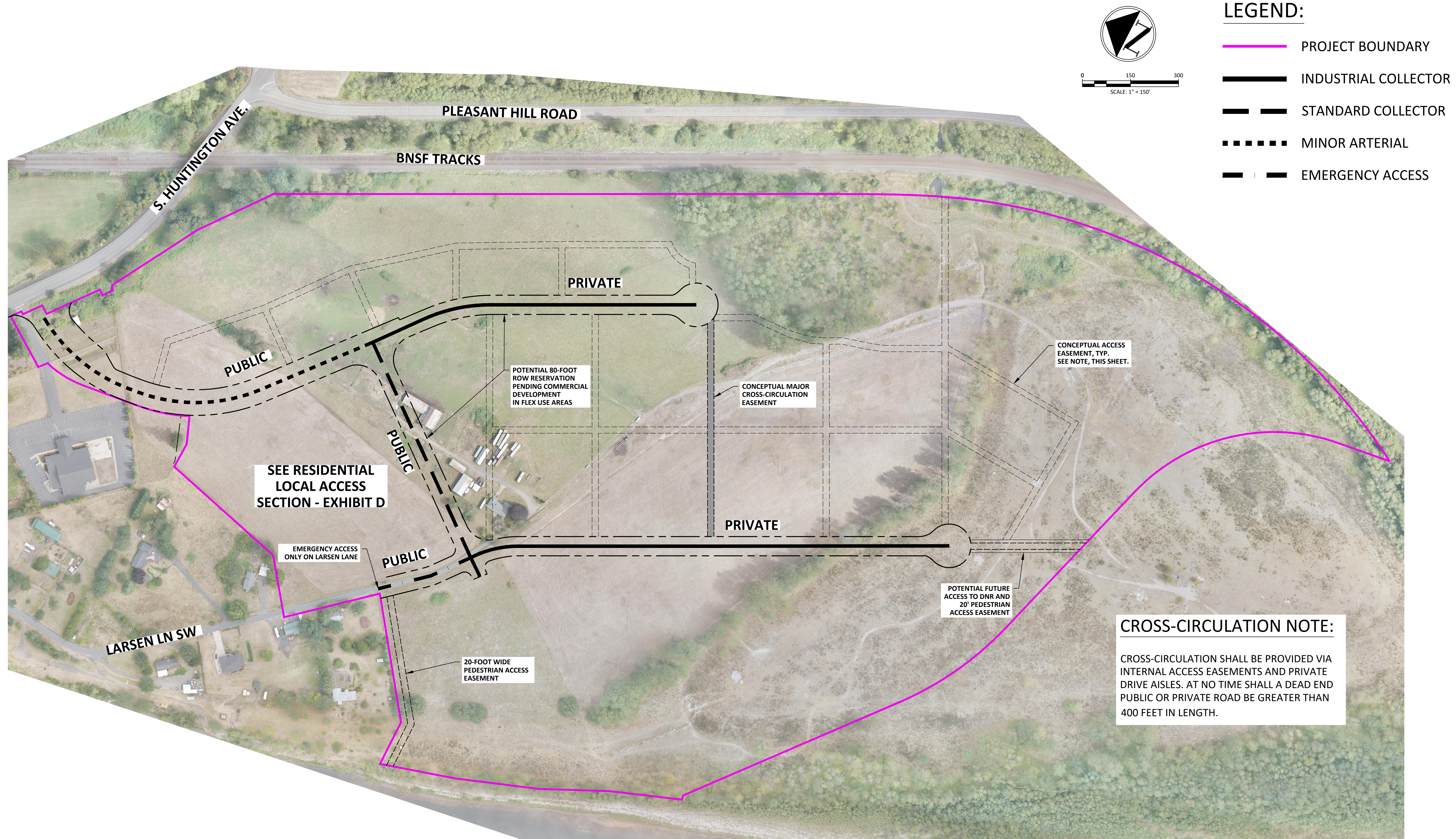


NOTE:
PAVEMENT SECTIONS SHOWN ABOVE ARE PRELIMINARY
RECOMMENDATIONS AS PROVIDED BY COLUMBIA WEST
ENGINEERING DURING THE MASTER PLANNING PROCESS AND
ARE BASED ON THE PROJECT GEOTECHNICAL REPORT, DATED
MARCH 30, 2023. FINAL PAVEMENT SECTIONS FOR PUBLIC AND
PRIVATE ROADWAYS WITHIN LOTIC SHALL BE DESIGNED AND
APPROVED BY A LICENSED PROFESSIONAL GEOTECHNICAL
ENGINEER PRIOR TO FINAL PERMIT APPROVAL.

LANDING ON THE COWLITZ - PROPOSED ROADWAY SECTIONS (EXHIBIT 2 OF 2)

OCTOBER 2023



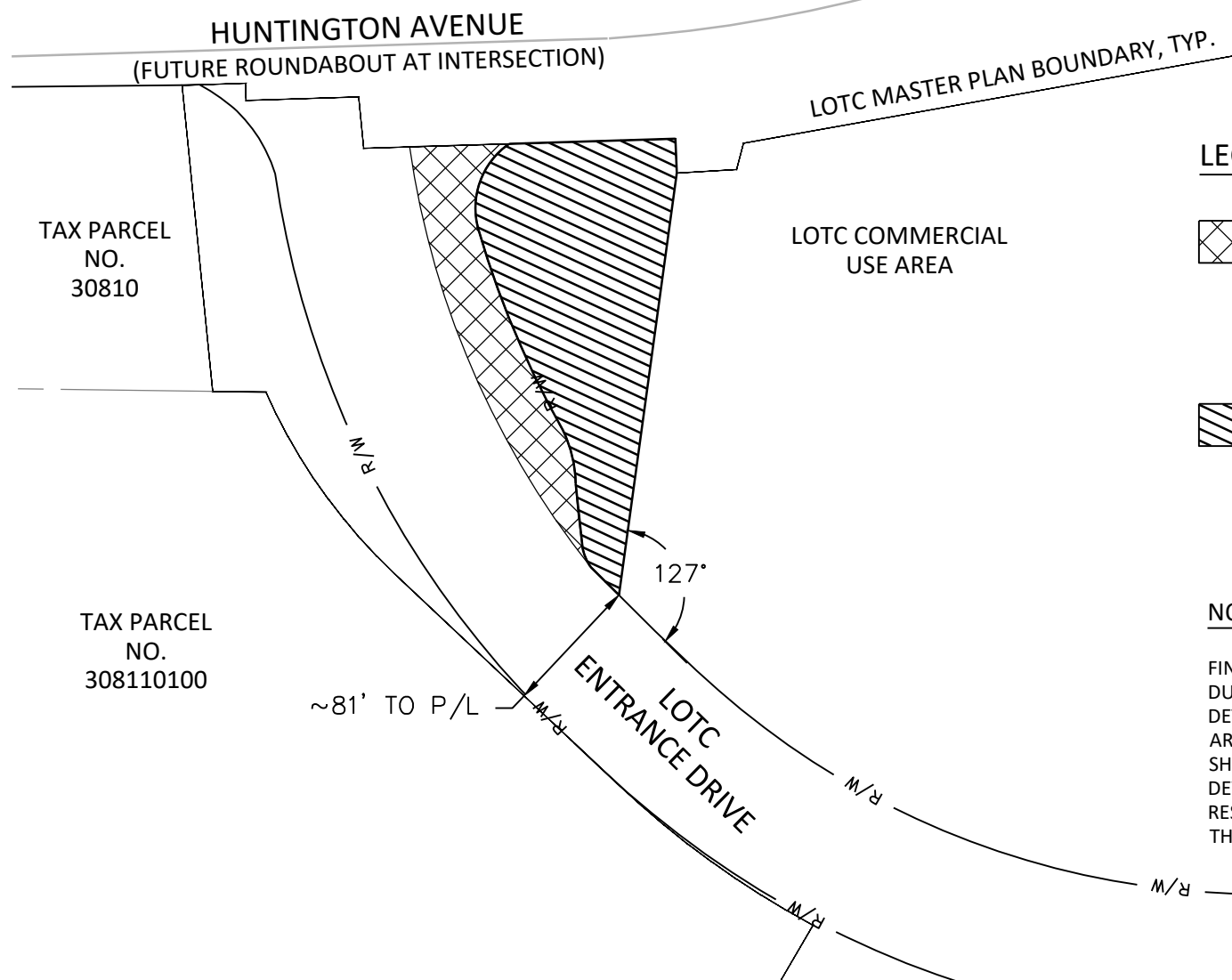


LANDING ON THE COWLITZ - PROPOSED CIRCULATION & ACCESS PLAN

OCTOBER 2023



SCALE: 1" = 100'



LEGEND

 ROW DEDICATION FOR SINGLE-LANE ROUNDABOUT (APPROX. 0.2 ACRES)

 CONCEPTUAL ROW SET-ASIDE FOR FUTURE 2-LANE ROUNDABOUT (APPROX. 0.5 ACRES)

NOTE:

FINAL SIZE AND ROW DIMENSIONS FOR DUAL-CIRCULATING ROUNDABOUT TO BE DETERMINED AT THE TIME IMPROVEMENTS ARE DEEMED NECESSARY. SET-ASIDE AREA SHOWN HEREIN IS SCHEMATIC ONLY. DEVELOPMENT WITHIN THIS AREA SHALL BE RESTRICTED TO THE STANDARDS OUTLINED IN THE DEVELOPMENT AGREEMENT.

LANDING ON THE COWLITZ

Landing on the Cowlitz

Traffic Summary

Introduction

The Landing on the Cowlitz (LOTIC) Master Plan was approved in October 2021 with Ordinance 2021-10. An initial Trip Generation Study was prepared by Lancaster Mobley with a summary report dated March 8, 2021. Lancaster Mobley prepared a formal Scoping Memorandum in October 2022 which summarized the team's approach for the Transportation Impact Study. After reviewing the proposed scope of study, the City of Castle Rock issued a review response in November 2022. A formal Development Agreement Transportation Impact Study (Exhibit A) was prepared by Lancaster Mobley, dated November 2023, utilizing the comments issued from the City of Castle Rock in the scope review memorandum.

Below is a high-level summary of the study findings and an outline of the reservation and trip accounting methodology.

Anticipated Trip Generation

The DA Transportation Impact Study prepared reflects the following trip generation calculations that the project could generate:

Table 1: Trip Generation Summary

Trip Description (Excluding Internal Capture Trips)	AM Peak Hour Trips	PM Peak Hour Trips
Total Trips	1,019	1,522

Based on the results of the operational analysis, three intersections are projected to exceed acceptable levels of operation. These intersections include (1) the site access at Huntington Avenue, (2) SR-411 at Westside Highway, and (3) I-5 Northbound Ramps at Huntington Avenue. Note that SR-411 and I-5 are both WSDOT intersections and mitigation associated at these locations will require further coordination with WSDOT agency staff.

All other study intersections are projected to continue operating acceptably through 2043 with full buildout of the site.

As depicted from the table above, the full buildout of the development is anticipated to generate approximately 1,522 PM peak hour trips excluding internal capture. When the development consumes all reserved PM peak hour trips from the reservation bank, the developer will conduct a new transportation impact study to reassess mitigation.

Additional analysis was conducted utilizing the methodology presented in the Development Agreement Transportation Impact Study to determine that the dual-circulating lane roundabout at the site access at Huntington Avenue would be necessary when 2,445 PM peak hour trip counts are reached. If and/or when the development consumes 80 percent of the PM peak hour trips (1,956 PM peak hour trips) at this intersection, the developer will be required to begin design of the second circulating lane at the roundabout. Any additional right-of-way required for these improvements shall be dedicated to the City of Castle Rock, at no cost to the City, at the time of design as depicted in Exhibit H of the Development

Agreement.

Trip Reservation and Capacity

The City of Castle Rock has reserved transportation capacity for the LOTC development. The LOTC development has been granted an initial 1,000 PM peak hour trips for reservation. Additional transportation capacity, up to 1,750 PM peak hour trips, may be reserved when the development consumes 80 percent (800 PM peak hour trips) of the initial capacity as outlined in the Development Agreement.

Internal Trip Accounting Analysis

Trip accounting will be tracked internally and with each proposed development application. The LOTC developer will supply the City of Castle Rock with an updated Trip Generation and Accounting Analysis during the regularly scheduled working meetings between the developer and city staff. Trip accounting will be comprised of two tracking categories: (1) number of reserved trips not yet allocated within the development and (2) number of trips that have been allocated within the development. Below is an example of how trip balances will be tracked and accounted for:

Table 2: Internal Trip Accounting Analysis Example

1,000 PM Peak Hour Trip Bank			
Project Name	PM Peak Hour Trips Allocated	PM Peak Hour Trips Remaining in Bank	Cumulative PM Peak Hour Trips Consumed from Bank
		1,000	
LOTB Bldg 1	150	850	150
LOTB Bldg 2	78	772	228
Field Data Collection Required at 250 PM Peak Hour Trips			
LOTB Bldg 3	92	680	320
LOTB Bldg 4	125	555	445
Field Data Collection Required at 500 PM Peak Hour Trips			
LOTB Bldg 5	67	488	512
LOTB Bldg 6	138	350	650
LOTB Bldg 7	74	276	724
Field Data Collection Required at 750 PM Peak Hour Trips			
LOTB Bldg 8	93	183	817
Additional Reservation Capacity Request Allowed at 800 PM Peak Hour Trips			

The internal trip accounting analysis will help to guide the mitigation forecast and act as a tool for the developer and City of Castle Rock to estimate the timeline of required improvements. Internal trip collection shall be limited to the site access at Huntington Avenue and at intersections internal to the LOTC development, as determined necessary. The developer will perform actual “on the road” trip counts when increments of 250 cumulative PM peak hour trips are consumed from the bank. These counts are to act as a system of checks and balances for the internal trip accounting analysis.

Trip counts shall be conducted at a time that is mutually agreed upon by the developer and the City of Castle Rock. The following considerations shall be made when scheduling the data collection:

- Data shall be collected no less than 2 weeks before or after a major holiday.
- Data collection shall avoid summer months when school is not in session, if possible.
- Counts shall be collected over a three-day period (Tuesday – Thursday).

An average of the collected counts shall be taken and used to update the internal trip accounting analysis. The averaged field data collected shall replace the existing balance within the trip accounting analysis for cumulative trips consumed from the bank.

Transportation Compliance Letter Requirements

In addition to the internal trip accounting analysis, each private site development will prepare and submit a Transportation Compliance Letter, including trip generation and accounting analysis. Refer to Exhibit B for an example of the Transportation Compliance Letter. The compliance letter shall include the incorporate the following elements:

- Provide a calculation of total, primary, and pass-by trips generated by the development application.
- Apply an internal trip capture rate of 6% to AM peak hour trips and 13% to PM peak hour trips and average weekday trips generated.
- Provide a summary of the current LOTC trip accounting analysis in addition to the anticipated total trips generated by the proposed development to ensure the total PM peak hour trip reservation is not exceeded.
- Provide a trip impact analysis to determine if/when mitigation thresholds will be met at the intersections of SR 411 at Westside Highway, Site Access at Huntington Avenue, and the I-5 Northbound Ramps and Huntington Avenue. Trip impacts to these intersections shall be applied in a manner consistent with the DA TIS.
- The letter shall utilize the following applications at each intersection listed below:
 - SR-411 at Westside Highway – Apply only externally generated primary trips.
 - Site Access at Huntington Avenue – Apply externally generated primary and pass-by trips.
 - I-5 Northbound Ramps at Huntington Avenue – Apply externally generated primary and pass-by trips.
- Each letter shall provide a trip assignment figure depicting each intersection above.

Mitigation Trip Impact Tracking

Mitigation trip accounting will be tracked internally and with each proposed development application. The LOTC developer will supply the City of Castle Rock with an updated Mitigation Trip Impact Summary during the regularly scheduled working meetings between the developer and city staff. Mitigation will be accounted for using the internal trip accounting analysis and by performing actual “on the road” traffic counts from existing development within the LOTC, as described above, and again during the interim traffic analysis period as described below and agreed-upon with City of Castle Rock staff.

The DA Transportation Impact Study outlines the potential mitigation measures that will be necessary to the existing transportation system as trips from the LOTC development are incorporated into the system. Utilizing these known thresholds, the developer will supply the City of Castle Rock with an updated Mitigation Trip Impact Summary, as requested during the working meetings. Below is an example of how

mitigation impacts will be tracked and summarized:

Table 3: Mitigation Trip Impact Summary Example

Transportation Facility	Planned Mitigation	Peak Hour Trigger	Mitigation Threshold (Trips)	Total Impacts (Trips)	Threshold Exceeded (Y/N)
Huntington Avenue at Site Access	Single-Lane Roundabout with By-Pass Lane	PM	657		

As discussed within the full DA TIS, all other intersections under the City of Castle Rock's purview will operate acceptably by full buildout of the LOTC project. The developer shall consult directly with the Washington State Department of Transportation (WSDOT) for all required mitigation measures associated with Interstate 5 and SR-411.

An interim traffic study shall be performed when internal accounting shows that approximately 500 PM peak hour trips have been consumed within the bank. The interim traffic study shall include the following intersections:

- Huntington Avenue at Site Access
- SR-411 at Westside Highway
- Interstate 5 Northbound Ramps at Huntington Avenue

Interim traffic studies shall include an updated 2043 analysis, consistent with the current DA TIS.

Summary

The master developer will submit a copy of the Trip Accounting and Mitigation Trip Impact summaries to the City of Castle Rock, as requested during the working meetings, to document the status of capacity and mitigation used for the LOTC development. If the total net new peak trips generated by the LOTC development exceed the thresholds listed in the tables above, the applicant will prepare a new traffic impact analysis to assess the impact of the anticipated excess trips and corresponding mitigation measures.

Please refer to the enclosed Development Agreement Transportation Impact Study and example Transportation Compliance Letter for more information.

Enclosed:

Exhibit A – Development Agreement Transportation Impact Study

Exhibit B – Example Transportation Compliance Letter



Landing on the Cowlitz Master Plan

Development Agreement
Transportation Impact Study
Castle Rock, Washington

Date:

November 13, 2023

Prepared for:

**Shane Tapani
Compass LLC**

Prepared by:

Daniel Stumpf, PE

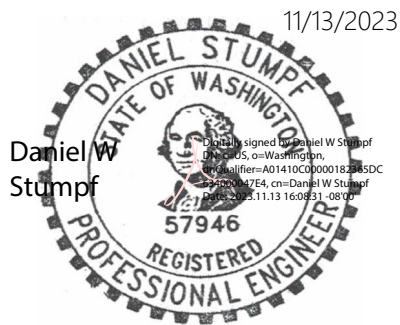


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Appendices

Appendix A – Trip Generation and Distribution

- Trip Generation Calculations
- Pass-by Rate Data
- Internal Capture Rate Calculations
- U.S. Census Data Maps

Appendix B – Traffic Volumes

- Traffic Counts

Appendix C – Operation Analysis

- Level of Service Descriptions
- Synchro Capacity Reports
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Executive Summary

1. The proposed Landing on the Cowlitz (LOT) Master Plan project, located near 1955 S Huntington Avenue in Castle Rock, Washington, will include the development of residential, recreational, retail, industrial, and office space on construction of a residential subdivision on six properties (lots 308100100, 30812, 30813, 30864, 6143802, and 308640100).
2. The trip generation calculations show that the LOTC Master Plan project could generate the following:
 - a. Total Trips (Excluding Internal Capture Trips): 1,019 AM peak hour trips, 1,522 PM peak hour trips, and 16,096 average weekday trips.
 - b. Pass-by Trips (Excluding Internal Capture Trips): 164 AM peak hour trips, 368 PM peak hour trips, and 3,786 average weekday trips.
 - c. Primary Trips (Excluding Internal Capture Trips): 855 AM peak hour trips, 1,154 PM peak hour trips, and 12,310 average weekday trips.
3. Based on the results of the operational analysis, the following intersections are projected to exceed acceptable levels of operation:
 - a. SR-411 at Westside Highway
 - b. Site Access at Huntington Avenue
 - c. I-5 Northbound Ramps at Huntington Avenue

For the intersection of SR-411 at Westside Highway, mitigation is expected to be necessary regardless of whether or not the proposed project is developed. It's recommended that a proportionate share contribution mechanism be established in order to collect impact fees at the intersection from all future development applications in the area, inclusive of development that occurs outside the LOTC Master Plan area. Specific capacity-related improvements at the WSDOT intersections will require further coordination with agency staff.

For the site access intersection along Huntington Avenue, as part of the LOTC Master Plan project the intersection will be redesigned as a single lane roundabout with a northeast bound right-turn bypass lane.

4. Thresholds for determining when mitigation will be necessary at the aforementioned intersections include the following:
 - a. SR-411 at Westside Highway: 0 PM peak hour trips (collection of proportionate share fee contributions is recommended for all development in the surrounding area).
 - b. Site Access at Huntington Avenue: 657 PM peak hour trip impact to intersection.
 - c. I-5 Northbound Ramps at Huntington Avenue: 384 PM peak hour trips impact to intersection.
5. All other study intersections are currently operating acceptably and are projected to continue operating acceptably through 2043 with full buildout of the site. No operational mitigation is necessary or recommended at these study intersections.



Project Description

Introduction

This Transportation Impact Study (TIS) was prepared to provide an evaluation of transportation impacts related to the planned Landing on the Cowlitz (LOT) Master Plan project, located near 1955 S Huntington Avenue in Castle Rock, Washington. The intent of this TIS is to provide supplemental input towards the preparation of a Development Agreement (DA) for the LOTC Master Plan area and to determine if/when mitigation may be warranted to address capacity related deficiencies at intersections of significance.

Based on correspondence with the City of Castle Rock's transportation consultant, the report includes a capacity/level of service analysis at the following intersections:

- | | |
|--|--|
| 1. SR-411 at Westside Highway | 7. Larson Lane at Huntington Avenue |
| 2. A Street at 3 rd Avenue | 8. Site Access at Huntington Avenue |
| 3. Cowlitz Street at Huntington Avenue | 9. Pleasant Hill Road at Huntington Avenue |
| 4. A Street at Huntington Avenue | 10. Interstate 5 (I-5) Southbound Ramps at Huntington Avenue |
| 5. C Street at Huntington Avenue | 11. I-5 Northbound Ramps at Huntington Avenue |
| 6. Front Avenue at Huntington Avenue | |

The purpose of this study is to determine whether the transportation system within the vicinity of the site is capable of 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, and level of service calculations is included in the appendix to this report.

Location Description

The subject site is located south of Huntington Avenue, east of the Cowlitz River, and west of I-5 in Castle Rock, Washington. The site consists of six properties (lots 308100100, 30812, 30813, 30864, 6143802, and 308640100), which encompass an approximate total of 118 acres. Lot 30812 is currently developed with a single-family detached house and several ancillary agricultural/storage buildings, while the other five lots are either undeveloped or used for agricultural purposes.

Figure 1 presents an aerial image of the nearby vicinity with the project site outlined in yellow.





Figure 1: Aerial Photo of Site Vicinity (Image from Google Earth)

Vicinity Streets

The study area is composed of 10 roadways near the project site. Table 1 provides a description of each vicinity roadway.

Table 1: Vicinity Roadway Descriptions

Street Name	Jurisdiction	Functional Classification	Speed (MPH)	On-Street Parking	Curbs & Sidewalks	Bicycle Lanes
Cowlitz Street	Castle Rock	Minor Collector	25	Partially Permitted	Partial Both Sides	None
Ph10	Cowlitz County	Minor Collector	40	Not Permitted	None	None
A Street	Castle Rock/ WSDOT	Minor Arterial	25/35	Partially Permitted	Partial Both Sides	None
C Street	Castle Rock	Local Street	25	Permitted	Partial Both Sides	None
Front Avenue	Castle Rock	Local Street	25	Permitted	Both Sides	None

Table Notes: Functional classification based on Castle Rock Comprehensive Plan, 2006.

Statutory speed based on Washington State Code Section RCW 46.61.400.

Table 1: Vicinity Roadway Descriptions (Continued)

Street Name	Jurisdiction	Functional Classification	Speed (MPH)	On-Street Parking	Curbs & Sidewalks	Bicycle Lanes
Westside Highway	Cowlitz County /WSDOT	Minor Arterial/Major Collector	35/50	Not Permitted	None	None
3rd Avenue	Castle Rock	Local Street/Minor Collector	25	Permitted	Partial Both Sides	None
Huntington Avenue	Castle Rock/ WSDOT	Minor Arterial/Major Collector	25/40	Partially Permitted	Partial Both Sides	Partial Both Sides
Larson Lane	Castle Rock	Local Street	20	Not Permitted	None	None
Pleasant Hill Road	Castle Rock	Minor Collector	50	Not Permitted	None	None

Table Notes: Functional classification based on Castle Rock Comprehensive Plan, 2006.

Statutory speed based on Washington State Code Section RCW 46.61.400.

Study Intersections

Based on correspondence with Castle Rock's transportation consultant, an analysis of 11 existing nearby intersections of significance was requested. A summarized description of these study intersections under their existing lane configurations is provided in Table 2.

Table 2: Study Intersection Descriptions

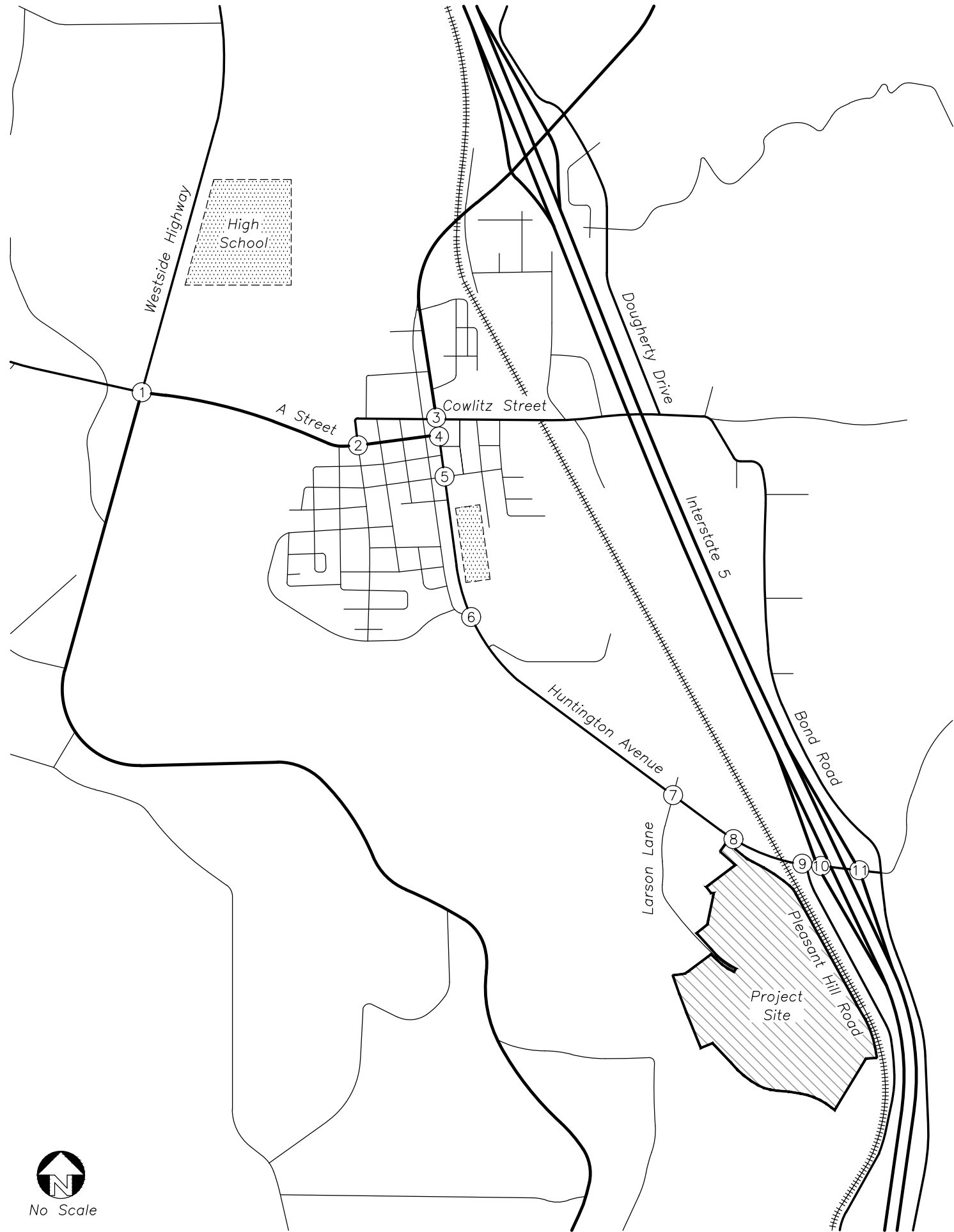
Number	Intersection	Geometry	Traffic Control	Phasing/Stopped Approaches
1	SR-411 at Westside Highway	Four-Legged	Stop-Controlled	All-Way Stop-Controlled
2	A Street at 3rd Avenue	Four-Legged	Stop-Controlled	Stop-Controlled NB/SB Approaches
3	Cowlitz Street at Huntington Avenue	Four-Legged	Stop-Controlled	All-Way Stop-Controlled, West Leg One-Way Westbound
4	A Street at Huntington Avenue	Three-Legged	Stop-Controlled	All-Way Stop-Controlled
5	C Street at Huntington Avenue	Four-Legged	Stop-Controlled	Stop-Controlled EB/WB Approaches
6	Front Avenue at Huntington Avenue	Three-Legged	Stop-Controlled	Stop-Controlled EB Approach

Table 2: Study Intersection Descriptions (Continued)

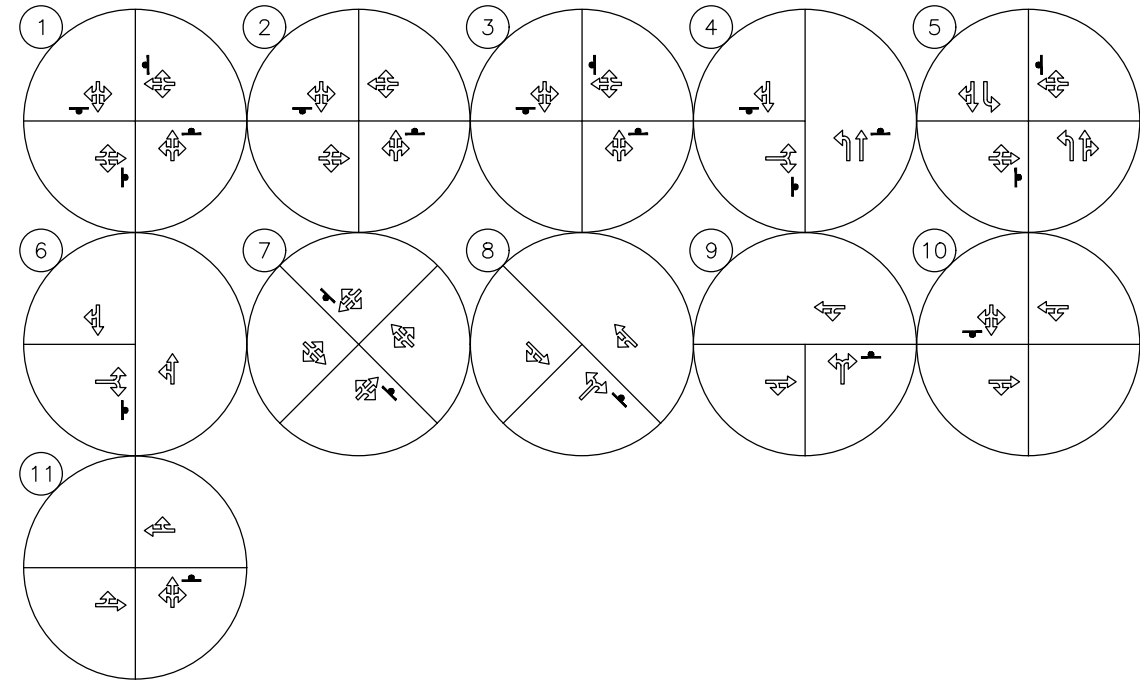
Number	Intersection	Geometry	Traffic Control	Phasing/Stopped Approaches
7	Larson Lane at Huntington Avenue	Four-Legged*	Stop-Controlled	Stop-Controlled NEB/SWB Approaches
8	Site Access at Huntington Avenue	Three-Legged	Stop-Controlled	Stop-Controlled NEB Approach
9	Pleasant Hill Road at Huntington Avenue	Three-Legged	Stop-Controlled	Stop-Controlled NB Approach
10	I-5 Southbound Ramps at Huntington Avenue	Four-Legged	Stop-Controlled	Stop-Controlled SB Approach
11	I-5 Northbound Ramps at Huntington Avenue	Four-Legged	Stop-Controlled	Stop-Controlled NB Approach

* One of the intersection legs consists of a driveway.

A vicinity map showing the project site, vicinity streets, and study intersection configurations are shown in Figure 2.



- LEGEND**
- STUDY INTERSECTION
 - ┐ STOP SIGN
 - ▨ PROJECT SITE
 - ▤ SCHOOLS
 - ARTERIAL ROADWAY
 - COLLECTOR ROADWAY
 - LOCAL ROADWAY
 - +++ RAILROAD TRACKS



Site Trips

Trip Generation

The Landing on the Cowlitz Master Plan area will include the future development of the following land uses:

- Approximately 200 residential dwelling units.
- Recreational use space consisting of a 200-vehicle capacity RV park with various amenities including a public rustic boat launch.
- Approximately 55,000 square feet of flex office space.
- Approximately 123,000 square feet of general commercial (i.e. retail) space (original approval for this and the above bulleted item was a total of 98,000 square feet of retail and commercial/professional services).
- Light industrial/flex space consisting of the following:
 - Approximately 320,000 square feet of Industrial Park space.
 - Approximately 242,000 square feet of Business Park Space.

An existing vacant single-family house and ancillary agricultural structures will be removed following future development of the project site. However, for simplicity no trip reductions associated with this house were considered.

ITE Land Use Codes

To estimate the number of trips that will be generated by the LOTC Master Plan project, trip rates/equations from the *Trip Generation Manual*¹ were used. Specifically, data from the following land uses codes were used:

- 130, *Industrial Park*, based on the square footage of the gross building floor area.
- 220, *Multifamily Housing (Low-Rise)*, based on the number of dwelling units.
- 416, *Campground/Recreational Vehicle Park*, based on the number of occupied campsites (i.e. RV spaces).
- 710, *General Office Building*, based on the square footage of the gross building floor area.
- 770, *Business Park*, based on the square footage of the gross building floor area.
- 821, *Shopping Plaza (40-150k)* subcategory *Supermarket – Yes*, based on the square footage of the gross building floor area.

Internal Trips

Given a variety of land-uses are proposed for development within the project site (including residential, commercial, industrial, and recreational uses), some trips generated within the master plan area are expected to be shared or internally captured by other land-uses within the project site. Subsequently, these internally captured trips will not impact the nearby transportation system. Using the NCHRP Report 684, internal capture

¹ Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2021.

rates were calculated for the proposed land uses during the AM and PM peak hours. Per the NCHRP Report 684 calculations, the following internal capture rates were determined:

- AM Peak Hour: Approximately 6% of the total site trips.
- PM Peak Hour: Approximately 13% of the total site trips.

Pass-by Trips

The retail portion of the proposed development is expected to attract pass-by and diverted trips to the site. Pass-by trips are trips that leave the adjacent roadway to patronize a land use and then continue in their original direction of travel. Similar to pass-by trips, diverted trips are trips that divert from a nearby roadway not adjacent to the site to patronize a land use before continuing to their original destination. Pass-by trips do not add additional vehicles to the surrounding transportation system; however, they do add additional turning movements at site access intersections. Diverted trips may add turning movements at both site access and other nearby intersections.

Pass-by and diverted trip rates were determined using data provided within the *Trip Generation Manual, 11th Edition*. Based on data from land use code 821 a PM peak hour pass-by rate of 40 percent was used to determine pass-by trip generation of the site, specifically for the retail portion of the master plan area. It is assumed that the AM peak hour and daily pass-by rates would approximately match the PM peak hour rate. For the purposes of this analysis, diverted trips were treated as primary trips.

Analysis Results

Based on the above methodologies and assumptions, the trip generation calculations show that the LOTC Master Plan project could generate the following:

- Total Trips (Excluding Internal Capture Trips): 1,019 AM peak hour trips, 1,522 PM peak hour trips, and 16,096 average weekday trips.
- Pass-by Trips (Excluding Internal Capture Trips): 164 AM peak hour trips, 368 PM peak hour trips, and 3,786 average weekday trips.
- Primary Trips (Excluding Internal Capture Trips): 855 AM peak hour trips, 1,154 PM peak hour trips, and 12,310 average weekday trips.

The trip generation estimates are summarized in Table 3. Detailed trip generation calculations are included in the technical appendix.

Table 3: Trip Generation Summary

Land Use	ITE Code	Size/Rate	AM Peak Hour			PM Peak Hour			Weekday Total
			Enter	Exit	Total	Enter	Exit	Total	
Industrial Park	130	320,000 SF	88	21	109	24	85	109	1,720
Residential	220	200 units	20	65	85	67	40	107	1,358
RV Park	416	200 sites	15	27	42	35	19	54	570
Flex (Office)	710	55,000 SF	88	12	100	17	84	101	690
Business Park	770	242,000 SF	267	47	314	82	235	317	3,286
Commercial Retail	821	123,000 SF	269	165	434	510	552	1,062	10,878
<i>Pass-by</i>	<i>821</i>	<i>40%</i>	<i>87</i>	<i>87</i>	<i>174</i>	<i>212</i>	<i>212</i>	<i>424</i>	<i>4,352</i>
Total Trips			747	337	1,084	735	1,015	1,750	18,502
<i>Total Pass-by Trips</i>			<i>87</i>	<i>87</i>	<i>174</i>	<i>212</i>	<i>212</i>	<i>424</i>	<i>4,352</i>
Total Primary Trips			660	250	910	523	803	1,326	14,150
<i>Internal Trip Reduction (Total Trips)</i>		6% (13%)	45	20	65	96	132	228	2,406
<i>Internal Trip Reduction (Pass-by Trips)</i>			5	5	10	28	28	56	566
<i>Internal Trip Reduction (Primary Trips)</i>			40	15	55	68	104	172	1,840
Total External Trips			702	317	1,019	639	883	1,522	16,096
<i>Total External Pass-by Trips</i>			<i>82</i>	<i>82</i>	<i>164</i>	<i>184</i>	<i>184</i>	<i>368</i>	<i>3,786</i>
Total External Primary Trips			620	235	855	455	699	1,154	12,310

Table Notes: AM and PM/ADT internal rates denoted as AM (PM/ADT).



Trip Distribution

The trip distribution of site trips for the proposed development was estimated based on the geographical location of the project site, locations of likely trip origins and destinations, locations of major transportation facilities in the site vicinity, and US residential/employment census data retrieved at <https://onthemap.ces.census.gov/>.

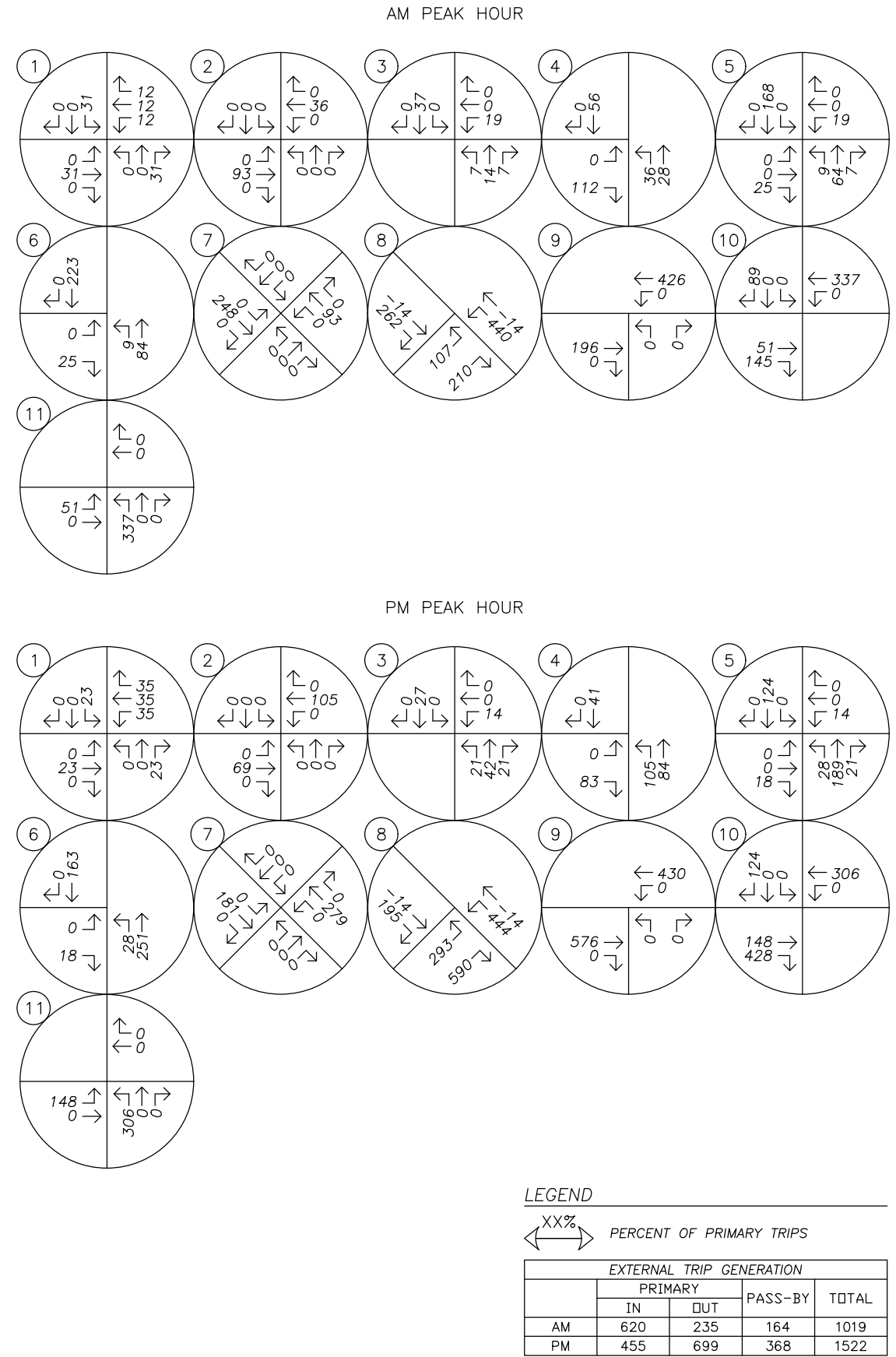
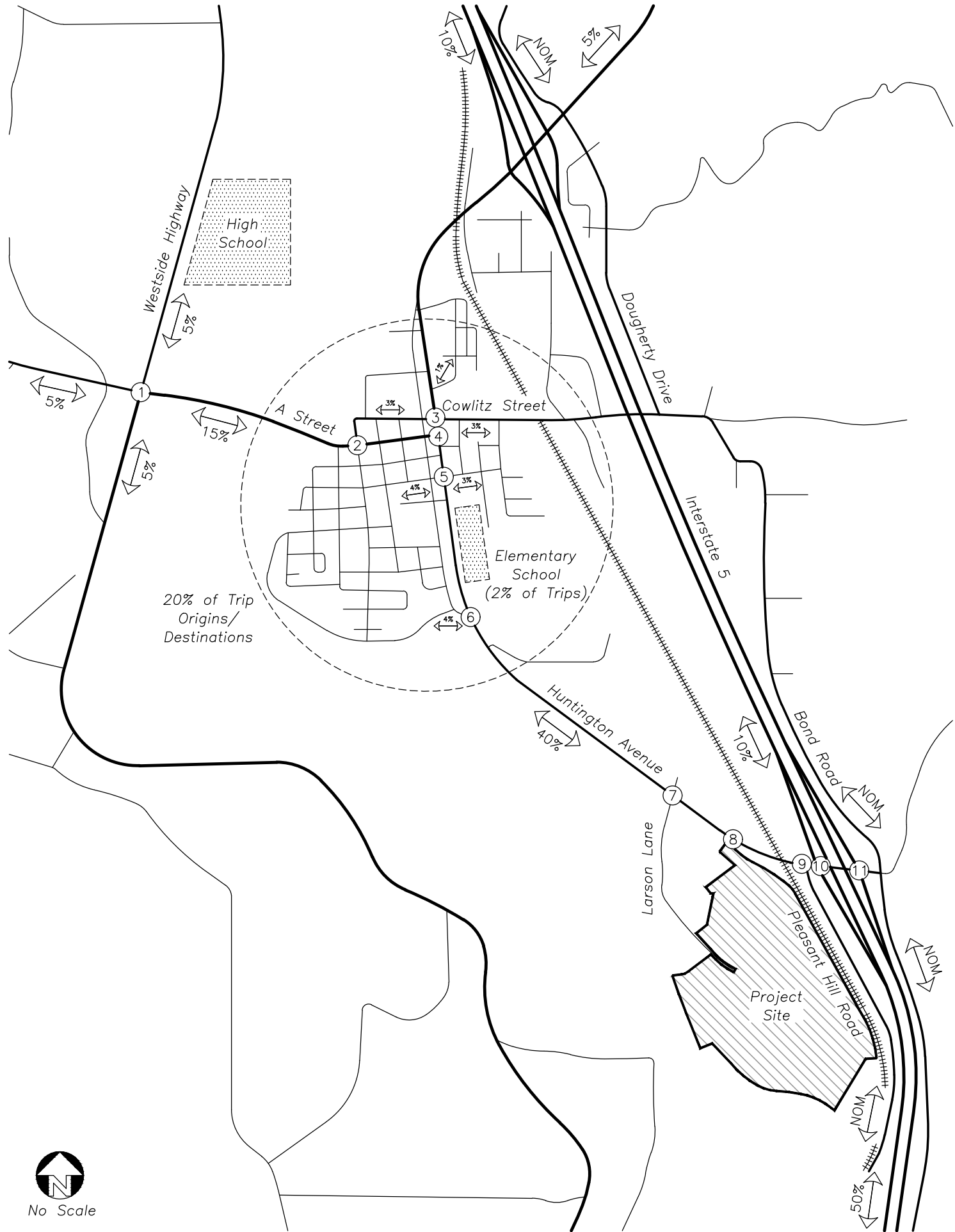
The following primary trip distribution was estimated:

- Approximately 50% of site trips will travel to/from the south along I-5.
- Approximately 40% of site trips will travel to/from the northwest along Huntington Avenue
 - Approximately 20% of site trips will travel to/from locales within the City of Castle Rock, predominately near the city center.
 - Approximately 15% of site trips will travel to/from the west along A Street. Of these 15% of trips, approximately 5% of trips are anticipated to travel in each direction to/from the north, south, and west of the SR-411 at Ph #10 Road intersection.
 - Approximately 5% of site trips will travel to/from the north along Mt. St. Helens Way (SR-504).
- Approximately 10% of site trips will travel to/from the north along I-5.

For pass-by trip distribution, it is assumed that only 5%-10% of volumes along Huntington Avenue will be drawn as a pass-by trips. The remaining pass-by trips generated by the site were assumed to be drawn from I-5. Although I-5 isn't technically adjacent to the site, the proposed project is expected to be large enough to reasonably draw/influence traffic from the highway.

The trip distribution and assignment for the total external site trips generated during the AM and PM peak hours are shown in Figure 3. The externally generated primary and pass-by trips are shown in Figure A in the appendix.





Traffic Volumes

Existing Conditions

Traffic counts were conducted at the study intersections on the following dates from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM:

- Tuesday/Wednesday, February 14/15, 2023.
- Tuesday, October 17, 2023.

To estimate major street traffic volumes at the future site access intersection, major-street volumes were balanced with the adjacent study intersections where traffic counts were collected. The larger of the eastbound and westbound volumes with the adjacent study intersections were used to maintain a conservative evaluation of major-street volumes. For the purposes of this analysis no peak hour trips were assumed to travel to/from the minor-street approach, which is currently utilized as a driveway that serves a religious institution.

Figure 4 shows the year 2023 existing traffic volumes at the study intersections during the AM and PM peak hours.

Background Conditions

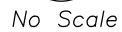
To provide an analysis of the impact of the proposed LOTC Master Plan project on the nearby transportation facilities, an estimate of future traffic volumes is required. In order to approximate the future year 2043 traffic volumes at the study intersections, a compounded growth rate of two percent per year for an assumed buildout condition of 20 years was applied to the year 2023 existing traffic volumes.

Figure 5 shows the projected year 2043 background traffic volumes at the study intersections during the AM and PM peak hours.

Buildout Conditions

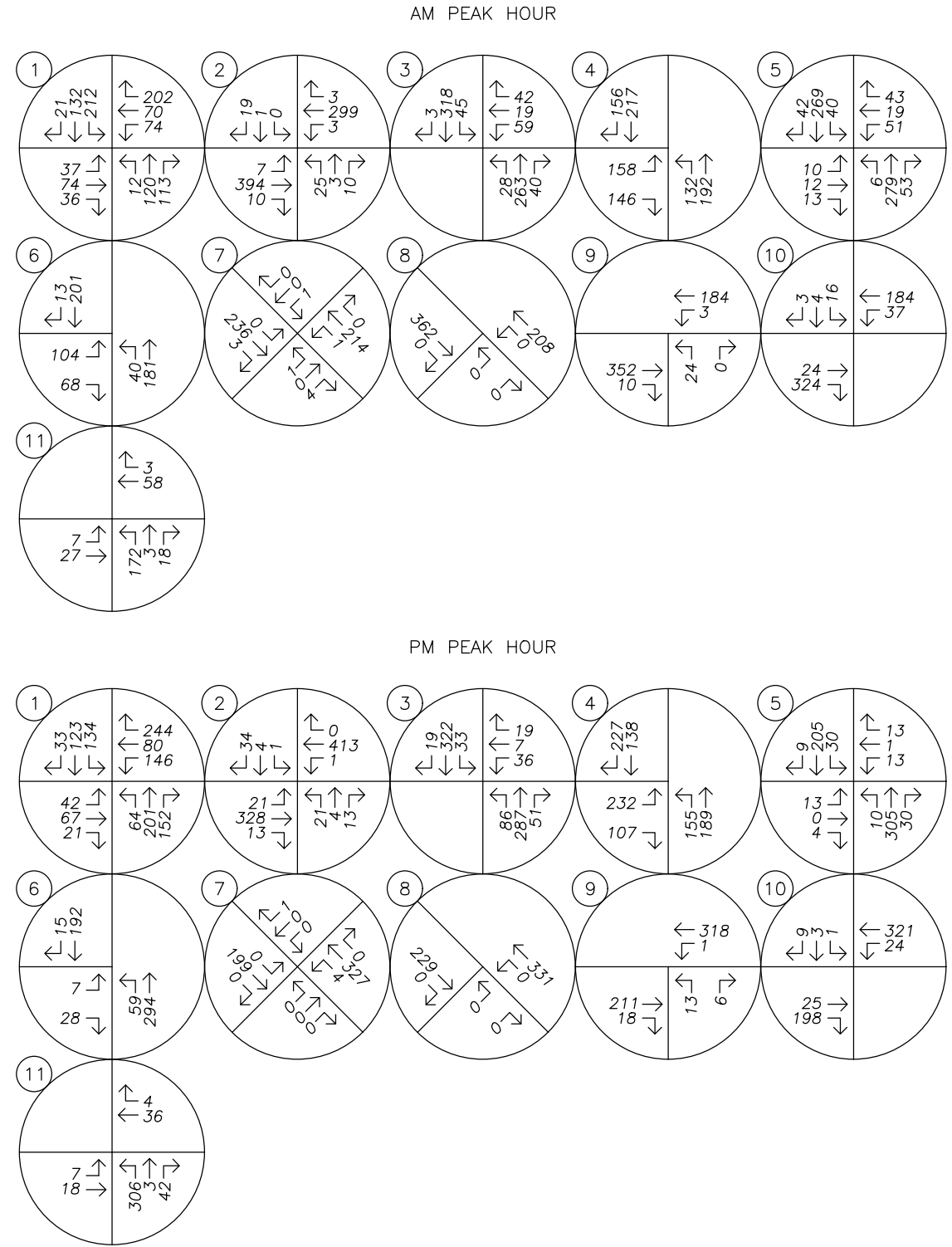
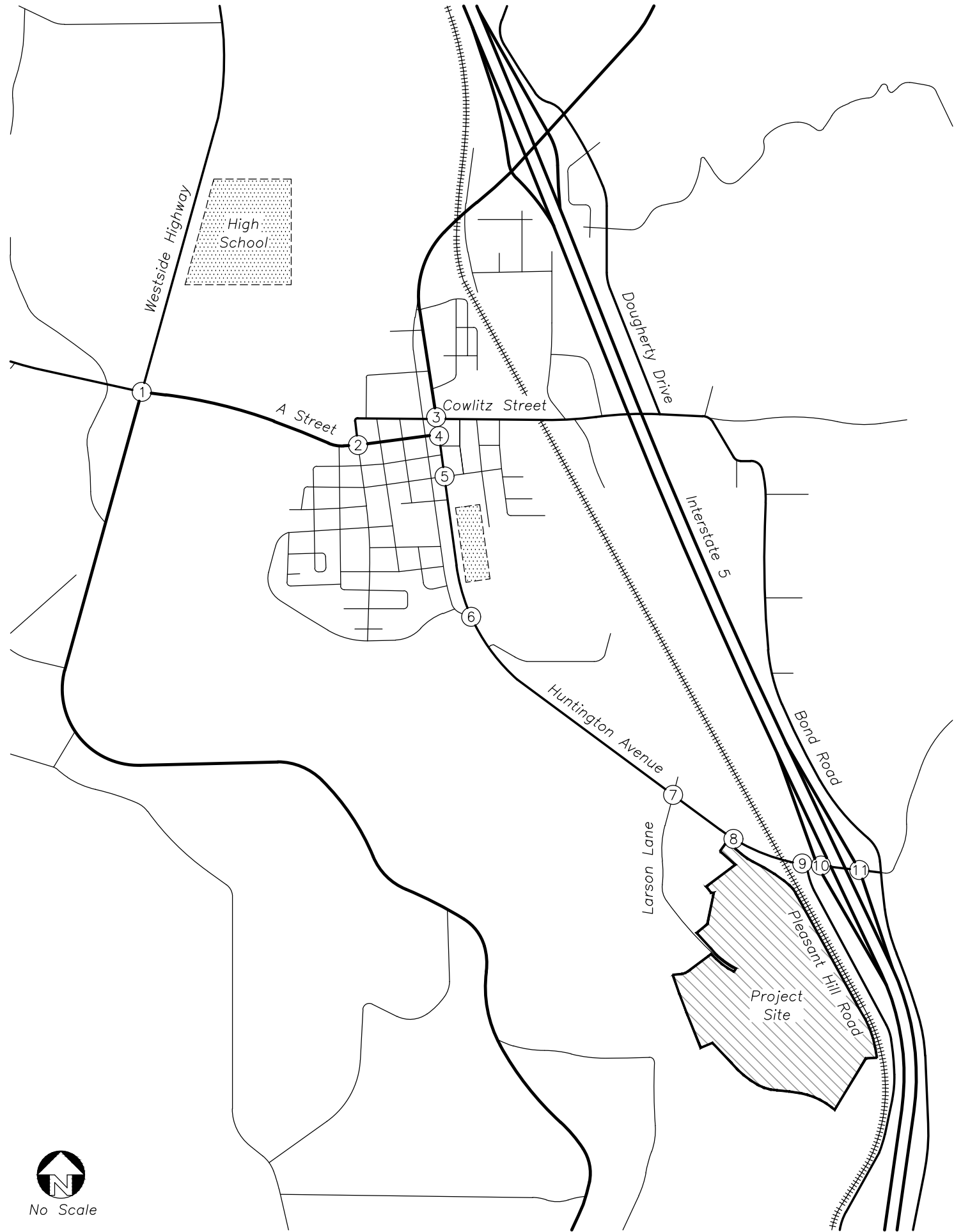
Potential peak hour trips calculated to be generated by the proposed LOTC Master Plan project, as described earlier within the *Site Trips* section, were added to the projected year 2043 background traffic volumes to obtain the expected 2043 site buildout volumes.

Figure 6 shows the year 2043 full site buildout traffic volumes at the study intersections during the AM and PM peak hours.



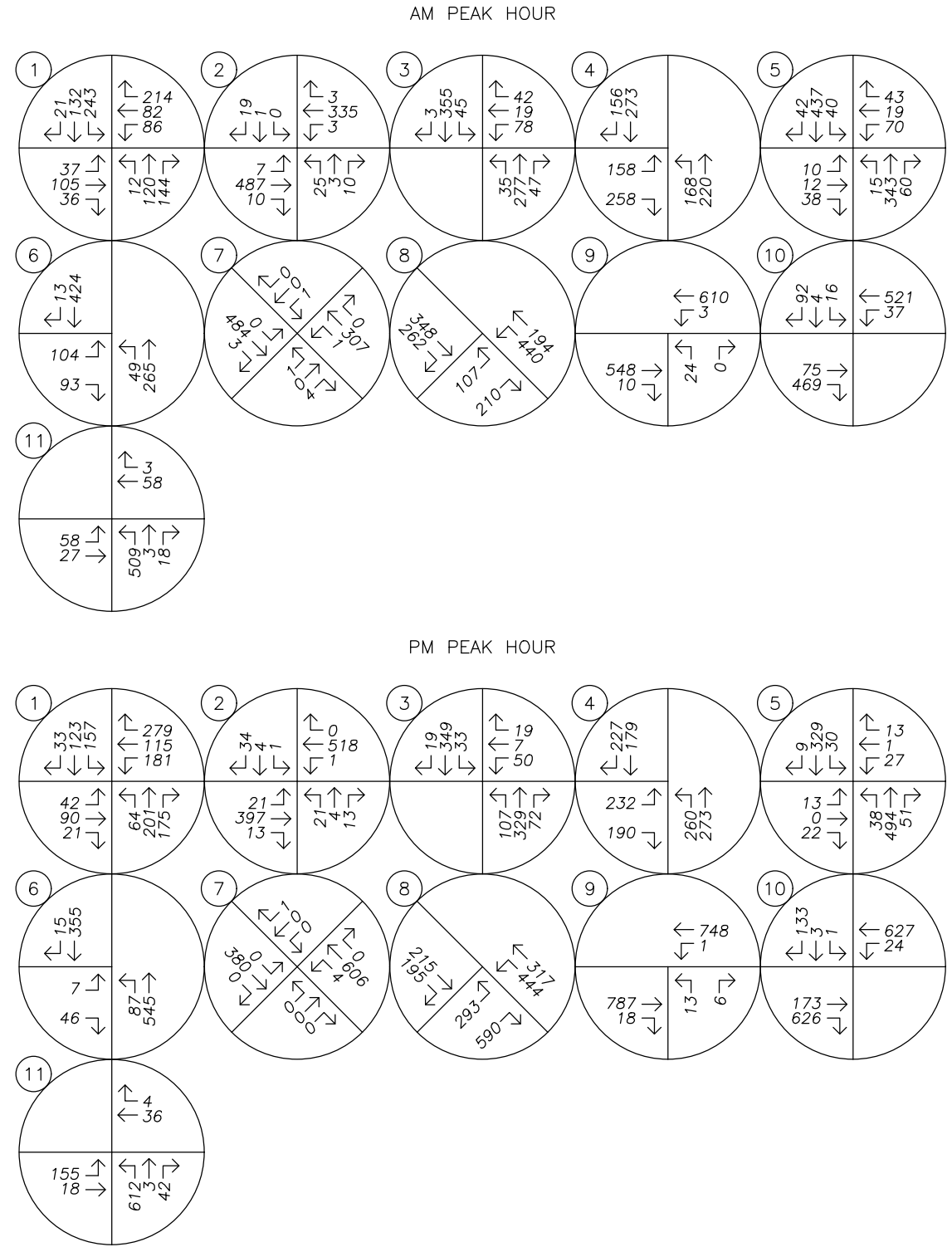
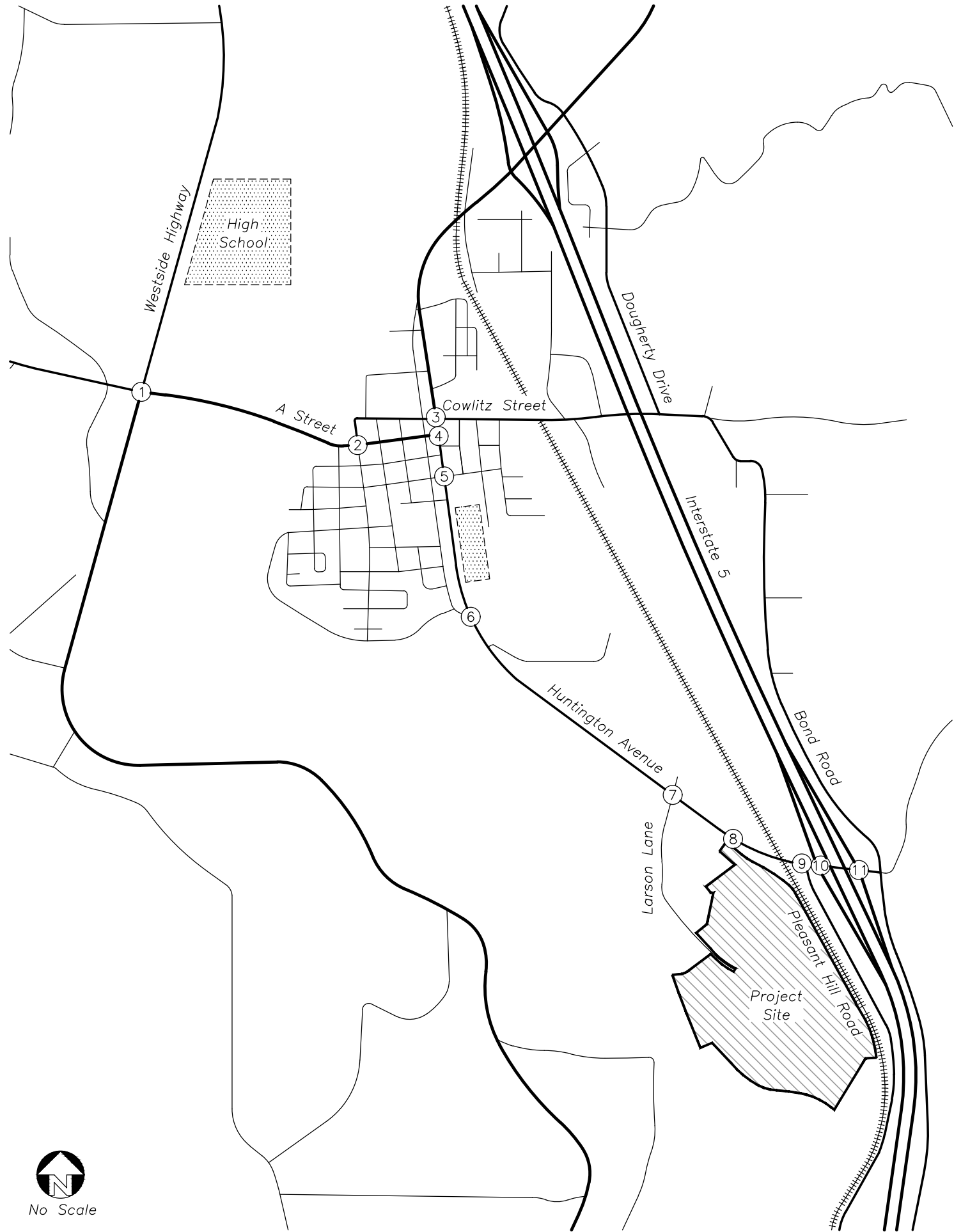


No Scale





No Scale



TRAFFIC VOLUMES
Year 2043 Buildout Conditions
AM & PM Peak Hours

Figure 6
Landing on the Cowlitz Master Plan
11/13/2023

Operational Analysis

Intersection Capacity Analysis

A capacity and delay analysis were conducted for each of the study intersections per the unsignalized intersection analysis methodologies in the *Highway Capacity Manual* (HCM)². 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 City of Castle Rock does not have specific thresholds for evaluating acceptable intersection operation. For the purposes of this analysis and based on a comparison of standards in other jurisdictions throughout Clark and Cowlitz County, the following were assumed:

- Signalized intersections are required to operate at LOS D or better overall.
- Roundabouts and all-way stop-controlled intersections are to operate at LOS D or better overall with no single turn lane operating below LOS E.
- All other unsignalized intersection approach lanes are required to operate at LOS E or better.

The study intersections along SR-411 operate under the jurisdiction of WSDOT. According to the Revised Code of Washington (RCW) 47.06.140(2):

The department of transportation, in consultation with local governments, shall set level of service standards for state highways and state ferry routes of statewide significance. Although the department shall consult with local governments when setting level of service standards, the department retains authority to make final decisions regarding level of service standards for state highways and state ferry routes of statewide significance. In establishing level of service standards for state highways and state ferry routes of statewide significance, the department shall consider the necessary balance between providing for the free interjurisdictional movement of people and goods and the needs of local communities using these facilities...

Per WSDOT's online *Level of Service Standard* ArcGIS website³, the segment of SR-411 within the study area operates with as LOS C or better standard. However, in conjunction with the above code section an alternative LOS standard may be considered which better serves the local community.

² Transportation Research Board, *Highway Capacity Manual 7th Edition*, 2022.

³ [WSDOT – Level of Service Standard \(arcgis.com\)](https://www.wsdot.wa.gov/levelofservice/)

Delay & Capacity Analysis

The study intersections were analyzed utilizing methodologies and parameters detailed in the *WSDOT Synchro & SimTraffic Protocol*⁴ document. Of specific note, the following peak hour factors (PHF) were incorporated in the analysis models:

- For existing year conditions, a PHF of no less than 0.80 was applied to each study intersection.
- For future year 2043 conditions the PHF was increased to 1.0.

The LOS, delay, and v/c results of the capacity analysis are shown in Table 4 for the AM and PM peak hours. Detailed calculations as well as tables showing the relationship between delay and LOS are included in the appendix to this report.

Table 4: Intersection Capacity Analysis Summary

Analysis Scenario	AM Peak Hour			PM Peak Hour		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
1. SR-411 at Westside Highway						
2023 Existing Conditions	B	12	0.48	B	13	0.51
2043 Background Conditions	C	16	0.62	D	28	0.84
2043 Buildout Conditions	C	21	0.74	F	60	1.11
2. A Street at 3rd Avenue						
2023 Existing Conditions	B	14	0.07	B	14	0.07
2043 Background Conditions	C	16	0.10	C	16	0.11
2043 Buildout Conditions	C	18	0.12	C	20	0.14
3. Cowlitz Steet at Huntington Avenue						
2023 Existing Conditions	B	10	0.39	B	10	0.36
2043 Background Conditions	B	11	0.48	B	12	0.53
2043 Buildout Conditions	B	13	0.54	B	14	0.65
4. A Steet at Huntington Avenue						
2023 Existing Conditions	B	11	0.43	B	10	0.35
2043 Background Conditions	B	13	0.54	B	14	0.54
2043 Buildout Conditions	C	19	0.69	C	20	0.73

Table Notes: **BOLDED** text indicates intersection operation above jurisdictional standards.

⁴ [WSDOT Synchro & SimTraffic Protocol \(wa.gov\)](https://www.wa.gov)



Table 4: Intersection Capacity Analysis Summary (Continued)

Analysis Scenario	AM Peak Hour			PM Peak Hour		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
5. C Street at Huntington Avenue						
2023 Existing Conditions	B	12	0.15	B	10	0.03
2043 Background Conditions	B	13	0.20	B	11	0.04
2043 Buildout Conditions	C	16	0.29	B	14	0.10
6. Front Avenue at Huntington Avenue						
2023 Existing Conditions	B	12	0.22	A	10	0.03
2043 Background Conditions	B	13	0.28	B	10	0.05
2043 Buildout Conditions	C	21	0.46	B	13	0.10
7. Larson Lane at Huntington Avenue						
2023 Existing Conditions	B	11	<0.01	A	10	<0.01
2043 Background Conditions	B	12	<0.01	B	10	<0.01
2043 Buildout Conditions	C	17	0.01	B	12	<0.01
8. Site Access at Huntington Avenue						
2023 Existing Conditions	A	0	0.00	A	0	0.00
2043 Background Conditions	A	0	0.00	A	0	0.00
2043 Buildout Conditions	F	>120	>1.20	F	>120	>1.20
9. Pleasant Hill Road at Huntington Avenue						
2023 Existing Conditions	B	12	0.04	B	11	0.02
2043 Background Conditions	B	13	0.05	B	12	0.03
2043 Buildout Conditions	C	24	0.11	D	30	0.12
10. I-5 Southbound Ramps at Huntington Avenue						
2023 Existing Conditions	B	10	0.03	A	10	0.01
2043 Background Conditions	B	10	0.03	B	10	0.02
2043 Buildout Conditions	B	14	0.22	C	15	0.28
11. I-5 Northbound Ramps at Huntington Avenue						
2023 Existing Conditions	A	10	0.18	B	10	0.28
2043 Background Conditions	B	10	0.21	B	11	0.37
2043 Buildout Conditions	C	20	0.69	F	95	1.11

Table Notes: **BOLDED** text indicates intersection operation above jurisdictional standards.

Based on the results of the operational analysis, the following intersections are projected to exceed acceptable levels of operation:

1. SR-411 at Westside Highway – 2043 Background Conditions during the PM peak hour.
8. Site Access at Huntington Avenue – 2043 Buildout Conditions during the AM and PM peak hours.
11. I-5 Northbound Ramps at Huntington Avenue – 2043 Buildout Conditions during the PM peak hour.

All other study intersections are currently operating acceptably and are projected to continue operating acceptably through 2043 with full buildout of the site. No operational mitigation is necessary or recommended at these study intersections.

SR-411 at Westside Hwy & I-5 NB Ramps at Huntington Avenue

For the intersection of SR-411 at Westside Highway, mitigation was found to be necessary by year 2043 without impacts from the proposed LOTC Master Plan project. Since mitigation is expected to be necessary regardless of whether or not the proposed project is developed, it's recommended that a proportionate share contribution mechanism be established in order to collect impact fees at the intersection from all future development applications in the area, inclusive of development that occurs outside the LOTC Master Plan area.

Since the intersections of SR-411 at Westside Highway and the I-5 northbound ramps at Huntington Avenue operate under the jurisdiction of WSDOT, WSDOT may consider alternative mitigation more prudent than what would be provided in this DA analysis. Therefore, no specific capacity-related improvements are suggested for these intersections.

Site Access at Huntington Avenue

For the site access intersection along Huntington Avenue, as part of the LOTC Master Plan project the intersection will be redesigned as a single lane roundabout with a northeast bound right-turn bypass lane. To evaluate if the intersection will operate acceptably as a roundabout with full buildout of the LOTC Master Plan project, Sidra software was utilized and the intersection was modeled in accordance with parameters outlined in the *WSDOT Sidra Policy Settings*⁵ document. Table 5 presents operation at the site access intersection along Huntington Avenue with mitigation in place.

Table 5: Mitigation Analysis Summary

Analysis Scenario	AM Peak Hour			PM Peak Hour		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
8. Site Access at Huntington Avenue						
2043 Buildout Conditions	F	>120	>1.20	F	>120	>1.20
2043 Mitigated Conditions	A	8	0.57	A	7	0.64

Table Notes: **BOLDED** text indicates intersection operation above jurisdictional standards.

⁵ [WSDOT Sidra Policy Setting \(wa.gov\)](https://www.wa.gov)



Mitigation Thresholds

To determine when the proposed LOTC Master Plan project will trigger the need for mitigation at the site access and I-5 northbound ramps intersections along Huntington Avenue, site trip generation was adjusted to determine a PM peak hour trip impact threshold for when mitigation may be necessary. Table 6 presents these thresholds of when mitigation will be required at the study intersections.

Table 6: Intersection Capacity Analysis Summary

Mitigation	PM Peak Hour Impact Threshold (Total External Trips Impacting Intersection)	LOTC Master Plan Trip Generation	
		Total External PM Peak Hour Trips Generated	Percent of Master Plan Developed
1. SR-411 at Westside Highway			
TBD, Collect Proportionate Share Contributions	0	0	0.0%
8. Site Access at Huntington Avenue			
Single Lane Roundabout with a NEB Right-turn Bypass Lane	657	657	43.2%
11. I-5 NB Ramps at Huntington Avenue			
TBD	384	1,296	85.2%



Conclusions

1. The trip generation calculations show that the LOTC Master Plan project could generate the following:
 - a. Total Trips (Excluding Internal Capture Trips): 1,019 AM peak hour trips, 1,522 PM peak hour trips, and 16,096 average weekday trips.
 - b. Pass-by Trips (Excluding Internal Capture Trips): 164 AM peak hour trips, 368 PM peak hour trips, and 3,786 average weekday trips.
 - c. Primary Trips (Excluding Internal Capture Trips): 855 AM peak hour trips, 1,154 PM peak hour trips, and 12,310 average weekday trips.
2. Based on the results of the operational analysis, the following intersections are projected to exceed acceptable levels of operation:
 - a. SR-411 at Westside Highway
 - b. Site Access at Huntington Avenue
 - c. I-5 Northbound Ramps at Huntington Avenue

For the intersection of SR-411 at Westside Highway, mitigation is expected to be necessary regardless of whether or not the proposed project is developed. It's recommended that a proportionate share contribution mechanism be established in order to collect impact fees at the intersection from all future development applications in the area, inclusive of development that occurs outside the LOTC Master Plan area. Specific capacity-related improvements at the WSDOT intersections will require further coordination with agency staff.

For the site access intersection along Huntington Avenue, as part of the LOTC Master Plan project the intersection will be redesigned as a single lane roundabout with a northeast bound right-turn bypass lane.

3. Thresholds for determining when mitigation will be necessary at the aforementioned intersections include the following:
 - a. SR-411 at Westside Highway: 0 PM peak hour trips (collection of proportionate share fee contributions is recommended for all development in the surrounding area).
 - b. Site Access at Huntington Avenue: 657 PM peak hour trip impact to intersection.
 - c. I-5 Northbound Ramps at Huntington Avenue: 384 PM peak hour trips impact to intersection.

All other study intersections are currently operating acceptably and are projected to continue operating acceptably through 2043 with full buildout of the site. No operational mitigation is necessary or recommended at these study intersections.

Appendix A – Trip Generation and Distribution

Trip Generation Calculations

Pass-by Rate Data

Internal Capture Rate Calculations

U.S. Census Data Maps





TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition
Proposed Conditions

Land Use: Industrial Park
Land Use Code: 130
Land Use Subcategory: All Sites
Setting/Location: General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Vehicle
Variable Quantity: 320

AM PEAK HOUR

Trip Rate: 0.34

	Enter	Exit	Total
Directional Split	81%	19%	
Trip Ends	88	21	109

PM PEAK HOUR

Trip Rate: 0.34

	Enter	Exit	Total
Directional Split	22%	78%	
Trip Ends	24	85	109

WEEKDAY

Trip Equation: $\ln(T) = 0.52\ln(X) + 4.45$

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	860	860	1,720

SATURDAY

Trip Rate: 2.54

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	406	406	812



TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition
Proposed Conditions

Land Use: Multifamily Housing (Low-Rise)
Land Use Code: 220
Land Use Subcategory: Not Close to Rail Transit
Setting/Location: General Urban/Suburban
Variable: Dwelling Units
Trip Type: Vehicle
Variable Quantity: 200

AM PEAK HOUR

Trip Equation: $T=0.31(X)+22.85$

	Enter	Exit	Total
Directional Split	24%	76%	
Trip Ends	20	65	85

PM PEAK HOUR

Trip Equation: $T=0.43(X)+20.55$

	Enter	Exit	Total
Directional Split	63%	37%	
Trip Ends	67	40	107

WEEKDAY

Trip Equation: $T=6.41(X)+75.31$

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	679	679	1,358



TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition
Proposed Conditions

Land Use: Campground/Recreational Vehicle Park

Land Use Code: 416

Land Use Subcategory: All Sites

Setting/Location: General Urban/Suburban

Variable: Occupied Campsites

Trip Type: Vehicle

Variable Quantity: 200

AM PEAK HOUR

Trip Rate: 0.21

	Enter	Exit	Total
Directional Split	36%	64%	
Trip Ends	15	27	42

PM PEAK HOUR

Trip Rate: 0.27

	Enter	Exit	Total
Directional Split	65%	35%	
Trip Ends	35	19	54

WEEKDAY

Trip Rate: 2.7

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	270	270	540

Note: Weekday trip generation assumed to be ten times the PM Peak Hour.



TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition
Proposed Conditions

Land Use: Campground/Recreational Vehicle Park
Land Use Code: 416
Land Use Subcategory: All Sites
Setting/Location: General Urban/Suburban
Variable: Occupied Campsites
Trip Type: Vehicle
Variable Quantity: 200

AM PEAK HOUR

Trip Rate: 0.21

	Enter	Exit	Total
Directional Split	36%	64%	
Trip Ends	15	27	42

PM PEAK HOUR

Trip Rate: 0.27

	Enter	Exit	Total
Directional Split	65%	35%	
Trip Ends	35	19	54

WEEKDAY

Trip Rate: 2.7

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	270	270	540

Note: Weekday trip generation assumed to be ten times the PM Peak Hour.



TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition
Proposed Conditions

Land Use: General Office Building
Land Use Code: 710
Land Use Subcategory: All Sites
Setting/Location: General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Vehicle
Variable Quantity: 55

AM PEAK HOUR

Trip Equation: $\ln(T) = 0.86\ln(X) + 1.16$

	Enter	Exit	Total
Directional Split	88%	12%	
Trip Ends	88	12	100

PM PEAK HOUR

Trip Equation: $\ln(T) = 0.83\ln(X) + 1.29$

	Enter	Exit	Total
Directional Split	17%	83%	
Trip Ends	17	84	101

WEEKDAY

Trip Equation: $\ln(T) = 0.87\ln(X) + 3.05$

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	345	345	690

SATURDAY

Trip Rate: 2.21

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	61	61	122



TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition
Proposed Conditions

Land Use: Business Park
Land Use Code: 770
Land Use Subcategory: All Sites
Setting/Location: General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Vehicle
Variable Quantity: 242

AM PEAK HOUR

Trip Equation: $\ln(T) = 0.94\ln(X) + 0.59$

	Enter	Exit	Total
Directional Split	85%	15%	
Trip Ends	267	47	314

PM PEAK HOUR

Trip Equation: $\ln(T) = 0.88\ln(X) + 0.93$

	Enter	Exit	Total
Directional Split	26%	74%	
Trip Ends	82	235	317

WEEKDAY

Trip Equation: $T = 10.62(X) + 715.67$

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	1,643	1,643	3,286

SATURDAY

Trip Equation: $\ln(T) = 0.83\ln(X) + 1.94$

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	331	331	662



TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition
Proposed Conditions

Land Use: Shopping Plaza (40-150k)
Land Use Code: 821
Land Use Subcategory: Supermarket - Yes
Setting/Location: General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Vehicle
Variable Quantity: 123

AM PEAK HOUR

Trip Rate: 3.53

	Enter	Exit	Total
Directional Split	62%	38%	
Trip Ends	269	165	434

PM PEAK HOUR

Trip Equation: $T=7.67(X)+118.86$

	Enter	Exit	Total
Directional Split	48%	52%	
Trip Ends	510	552	1,062

WEEKDAY

Trip Equation: $T=76.96(X)+1412.79$

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	5,439	5,439	10,878

SATURDAY

Trip Rate: 116.15

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	7,143	7,143	14,286

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual*, 11th Edition

Land Use Code	821								
Land Use	Shopping Plaza (40 - 150k)								
Setting	General Urban/Suburban								
Time Period	Weekday PM Peak Period								
# Data Sites	15								
Average Pass-By Rate	40%								
	Pass-By Characteristics for Individual Sites								
GLA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
45	Florida	1992	844	56	24	20	44	—	30
50	Florida	1992	555	41	41	18	59	—	30
52	Florida	1995	665	42	33	25	58	—	30
53	Florida	1993	162	59	—	—	41	—	30
57.23	Kentucky	1993	247	31	53	16	69	2659	34
60	Florida	1995	1583	40	38	22	60	—	30
69.4	Kentucky	1993	109	25	42	33	75	1559	34
77	Florida	1992	365	46	—	—	54	—	30
78	Florida	1991	702	55	23	22	45	—	30
82	Florida	1992	336	34	—	—	66	—	30
92.857	Kentucky	1993	133	22	50	28	78	3555	34
100.888	Kentucky	1993	281	28	50	22	72	2111	34
121.54	Kentucky	1993	210	53	30	17	47	2636	34
144	New Jersey	1990	176	32	44	24	68	—	24
146.8	Kentucky	1993	—	36	39	25	64	—	34

NCHRP 8-51 Internal Trip Capture Estimation Tool					
Project Name:	Landing on the Cowlitz Master Plan	Organization:	Lancaster Mobley		
Project Location:	Castle Rock, WA	Performed By:	Daniel Stumpf, PE		
Scenario Description:		Date:	10/19/2023		
Analysis Year:	Buildout Conditions	Checked By:			
Analysis Period:	AM Street Peak Hour	Date:			

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office	770	112	KSF	414	355	59
Retail	821	123	KSF	434	269	165
Restaurant				0		
Cinema/Entertainment	416	200	campsites	42	15	27
Residential	220	200	units	85	20	65
Hotel				0		
All Other Land Uses ²	130	450	KSF	109	88	21
Total				1084	747	337

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office	1.25	0%	0%	1.25	0%	0%
Retail	1.25	0%	0%	1.25	0%	0%
Restaurant						
Cinema/Entertainment	1.25	0%	0%	1.25	0%	0%
Residential	1.25	0%	0%	1.25	0%	0%
Hotel						
All Other Land Uses ²	1.25	0%	0%	1.25	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		21	0	0	0	0
Retail	18		0	0	1	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	2	1	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	1,355	934	421
Internal Capture Percentage	6%	5%	10%
External Vehicle-Trips ³	1,014	712	302
External Transit-Trips ⁴	0	0	0
External Non-Motorized Trips ⁴	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	5%	28%
Retail	7%	9%
Restaurant	N/A	N/A
Cinema/Entertainment	0%	0%
Residential	4%	4%
Hotel	N/A	N/A

¹ Land Use Codes (LUCs) from <i>Trip Generation Informational Report</i> , published by the Institute of Transportation Engineers.
² Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator
³ Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A
⁴ Person-Trips
*Indicates computation that has been rounded to the nearest whole number.
<i>Estimation Tool Developed by the Texas Transportation Institute</i>

Project Name:	Landing on the Cowlitz Master Plan
Analysis Period:	AM Street Peak Hour

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.25	355	444	1.25	59	74
Retail	1.25	269	336	1.25	165	206
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.25	15	19	1.25	27	34
Residential	1.25	20	25	1.25	65	81
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		21	47	0	1	0
Retail	60		27	0	29	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	2	1	16	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		108	0	0	0	0
Retail	18		0	0	1	0
Restaurant	62	27		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	13	57	0	0		0
Hotel	13	13	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	20	424	444	339	0	0
Retail	22	314	336	251	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	19	19	15	0	0
Residential	1	24	25	19	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	110	110	88	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	21	53	74	42	0	0
Retail	19	187	206	150	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	34	34	27	0	0
Residential	3	78	81	62	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	26	26	21	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

²Person-Trips

³Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool					
Project Name:	Landing on the Cowlitz Master Plan	Organization:	Lancaster Mobley		
Project Location:	Castle Rock, WA	Performed By:	Daniel Stumpf, PE		
Scenario Description:		Date:	10/19/2023		
Analysis Year:	Buildout Conditions	Checked By:			
Analysis Period:	PM Street Peak Hour	Date:			

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office	770	112	KSF	418	99	319
Retail	821	123	KSF	1062	510	552
Restaurant				0		
Cinema/Entertainment	416	200	campsites	54	35	19
Residential	220	200	units	107	67	40
Hotel				0		
All Other Land Uses ²	130	450	KSF	109	24	85
Total				1750	735	1015

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office	1.25	0%	0%	1.25	0%	0%
Retail	1.25	0%	0%	1.25	0%	0%
Restaurant						
Cinema/Entertainment	1.25	0%	0%	1.25	0%	0%
Residential	1.25	0%	0%	1.25	0%	0%
Hotel						
All Other Land Uses ²	1.25	0%	0%	1.25	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		600	600		600	
Retail					600	
Restaurant						
Cinema/Entertainment					600	
Residential		600				
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		45	0	0	3	0
Retail	14		0	11	39	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	5	0		2	0
Residential	2	18	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	2,189	920	1,269
Internal Capture Percentage	13%	15%	11%
External Vehicle-Trips ³	1,529	624	905
External Transit-Trips ⁴	0	0	0
External Non-Motorized Trips ⁴	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	13%	12%
Retail	11%	9%
Restaurant	N/A	N/A
Cinema/Entertainment	25%	29%
Residential	52%	40%
Hotel	N/A	N/A

¹ Land Use Codes (LUCs) from <i>Trip Generation Informational Report</i> , published by the Institute of Transportation Engineers.
² Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator
³ Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P
⁴ Person-Trips
*Indicates computation that has been rounded to the nearest whole number.
<i>Estimation Tool Developed by the Texas Transportation Institute</i>

Project Name:	Landing on the Cowlitz Master Plan
Analysis Period:	PM Street Peak Hour

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.25	99	124	1.25	319	399
Retail	1.25	510	638	1.25	552	690
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.25	35	44	1.25	19	24
Residential	1.25	67	84	1.25	40	50
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		70	14	0	8	0
Retail	14		200	28	179	35
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	5	7		2	0
Residential	2	18	11	0		2
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		45	0	0	3	0
Retail	38		0	11	39	0
Restaurant	37	319		14	13	0
Cinema/Entertainment	7	26	0		3	0
Residential	71	56	0	0		0
Hotel	0	13	0	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	16	108	124	86	0	0
Retail	68	570	638	456	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	11	33	44	26	0	0
Residential	44	40	84	32	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	30	30	24	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	48	351	399	281	0	0
Retail	64	626	690	501	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	7	17	24	14	0	0
Residential	20	30	50	24	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	106	106	85	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

²Person-Trips

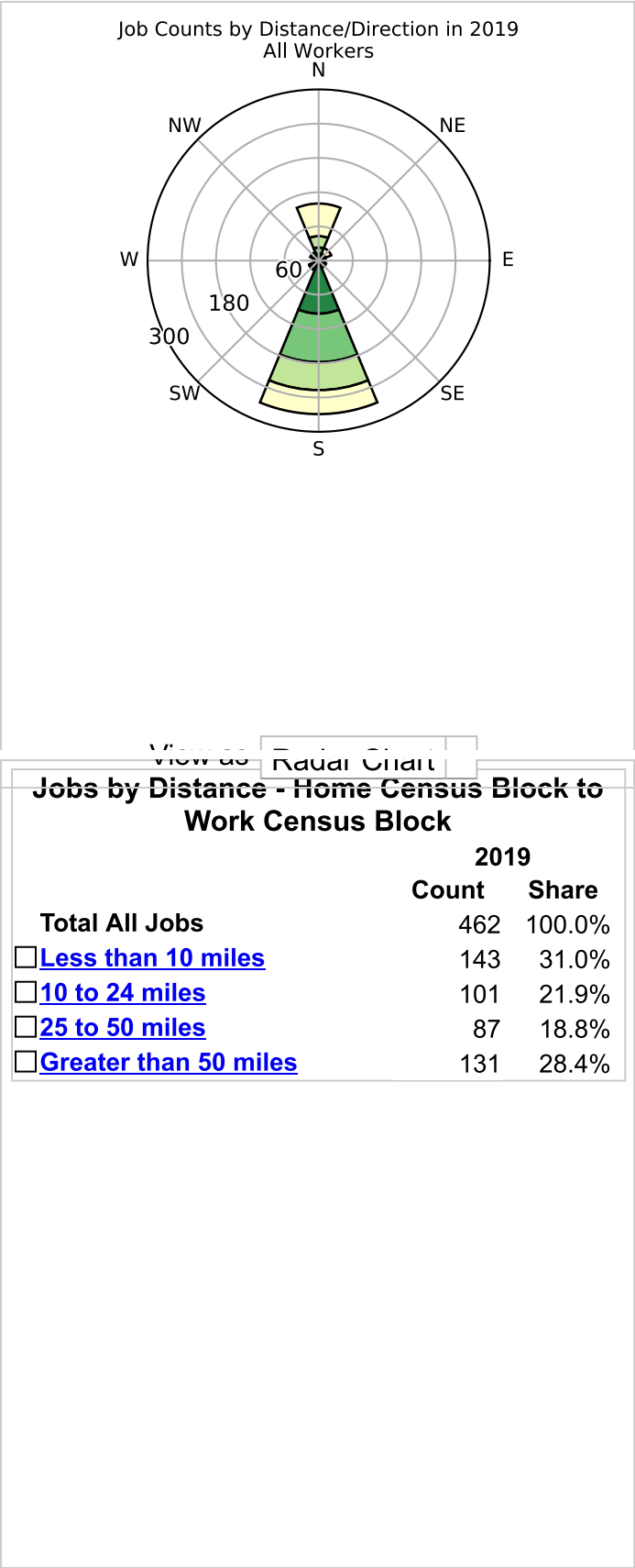
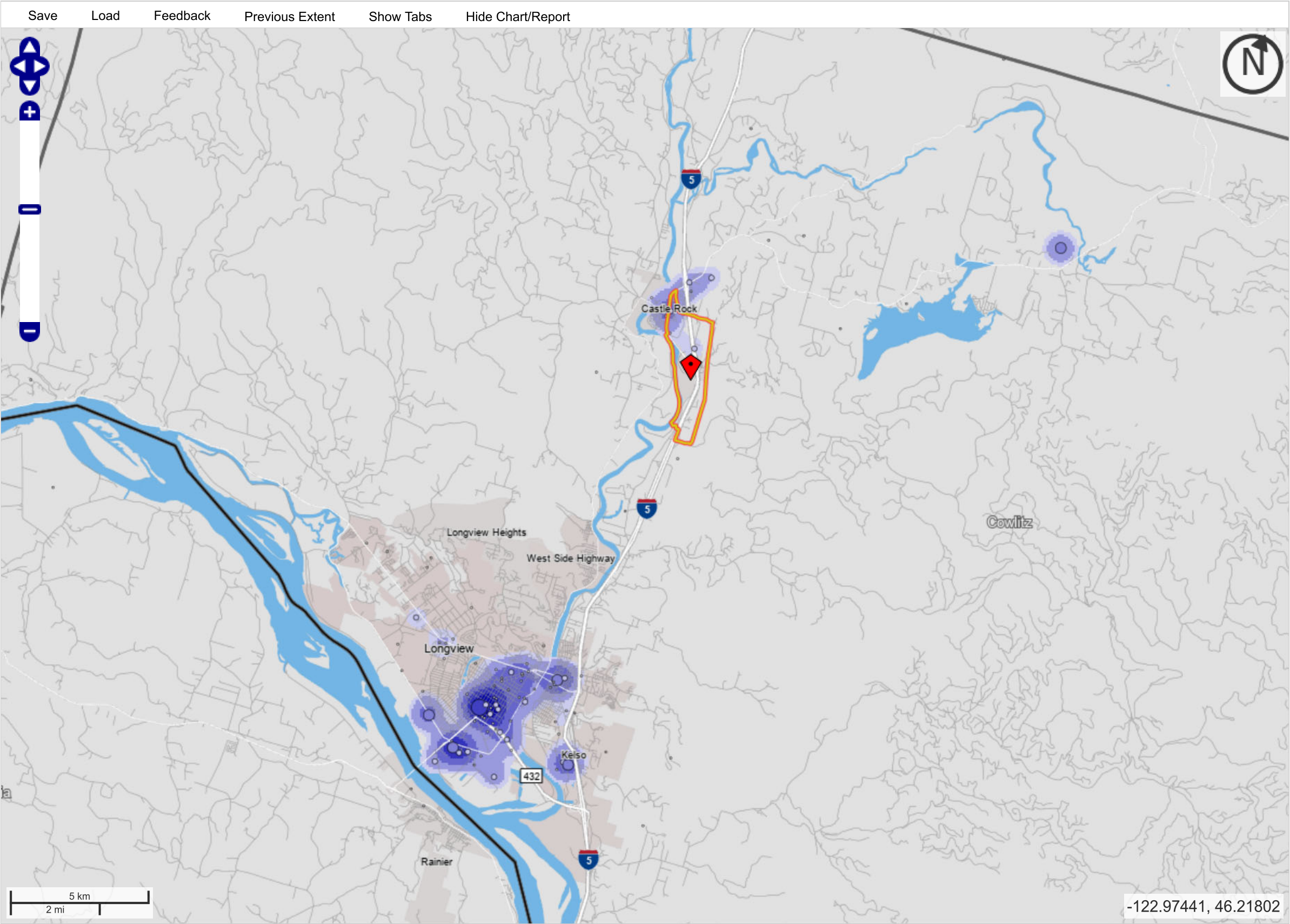
³Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

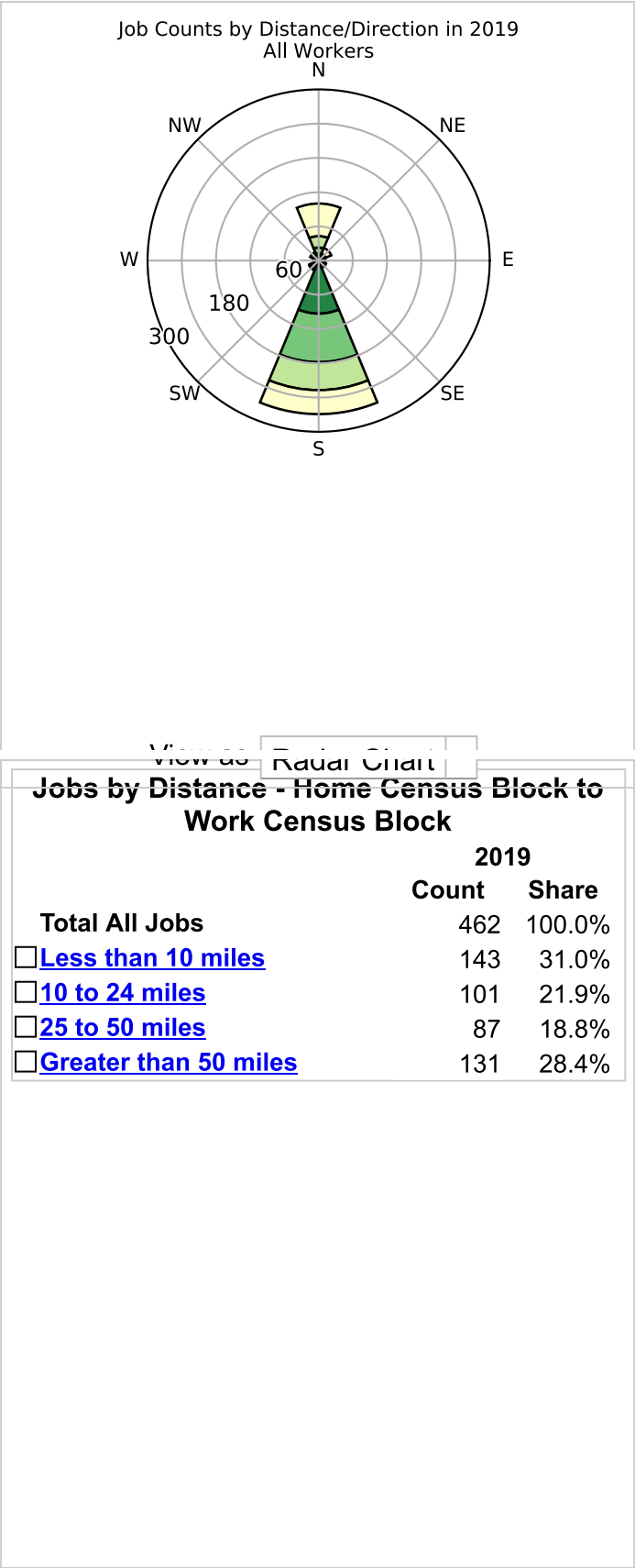
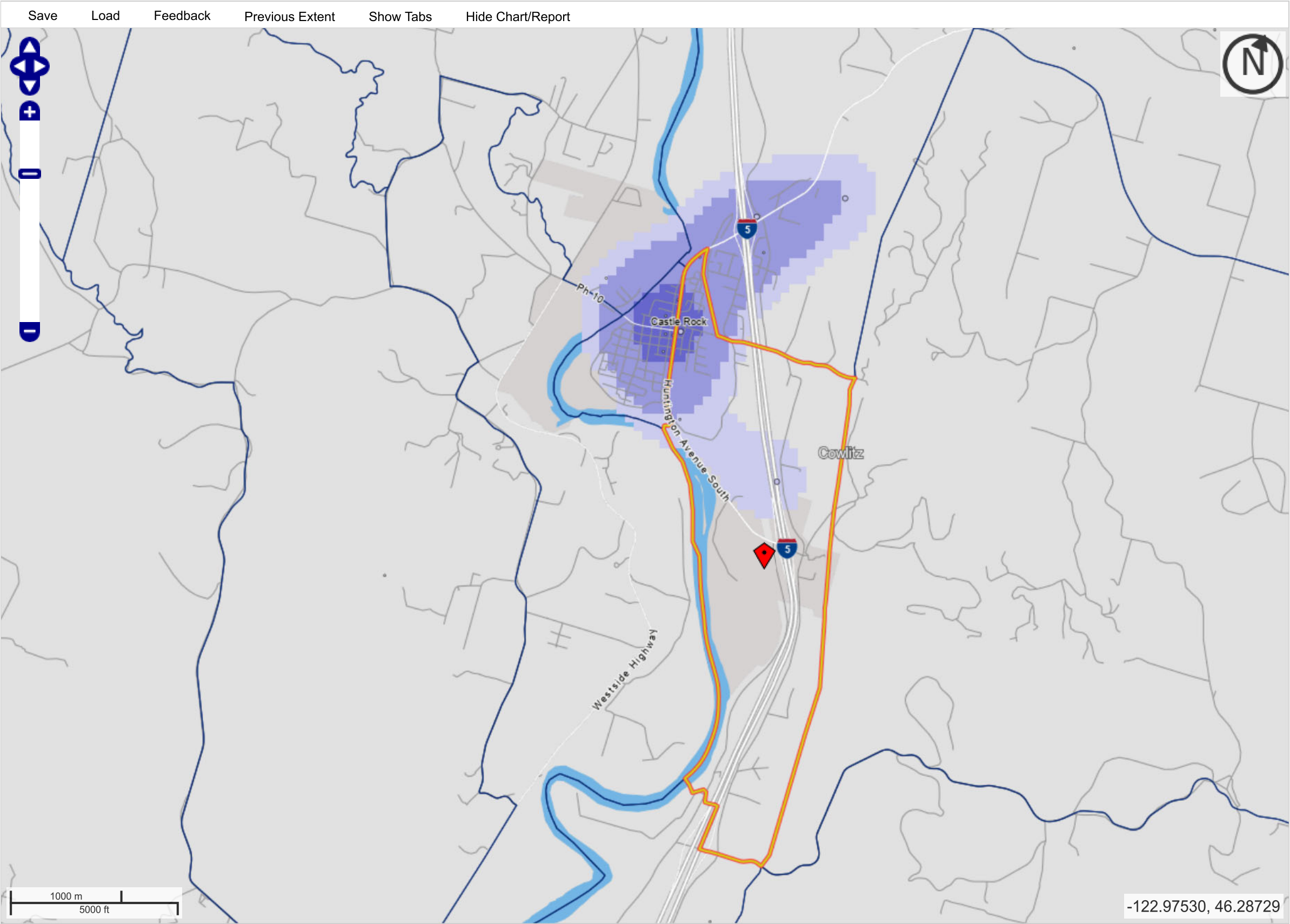
*Indicates computation that has been rounded to the nearest whole number.

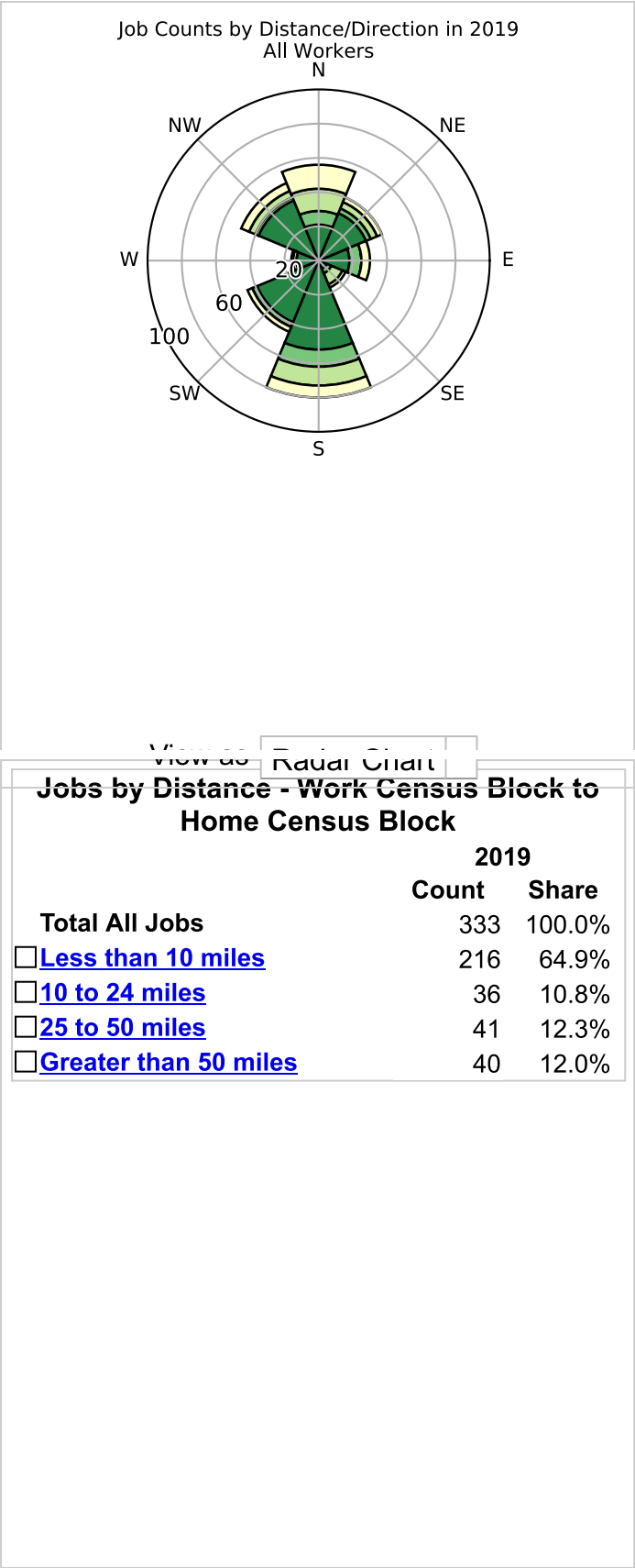
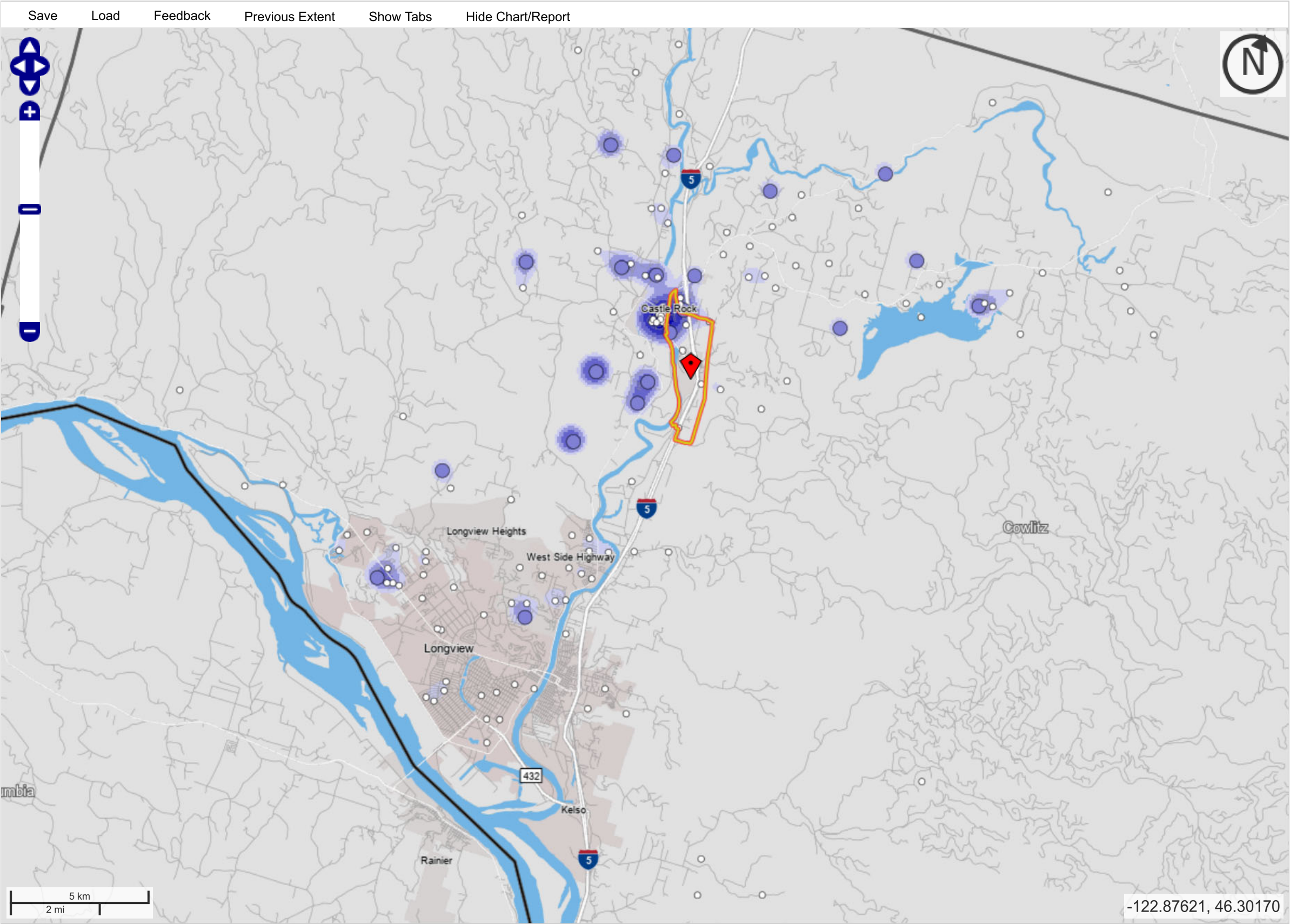
Table 7.1a Adjusted Internal Trip Capture Rates for Trip Origins within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Office	0.0%	0.0%
	To Retail	28.0%	17.6%
	To Restaurant	63.0%	3.5%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	1.0%	2.0%
	To Hotel	0.0%	0.0%
From RETAIL	To Office	29.0%	2.0%
	To Retail	0.0%	0.0%
	To Restaurant	13.0%	29.0%
	To Cinema/Entertainment	0.0%	4.0%
	To Residential	14.0%	26.0%
	To Hotel	0.0%	5.0%
From RESTAURANT	To Office	31.0%	3.0%
	To Retail	14.0%	41.0%
	To Restaurant	0.0%	0.0%
	To Cinema/Entertainment	0.0%	8.0%
	To Residential	4.0%	18.0%
	To Hotel	3.0%	7.0%
From CINEMA/ENTERTAINMENT	To Office	0.0%	2.0%
	To Retail	0.0%	21.0%
	To Restaurant	0.0%	31.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	8.0%
	To Hotel	0.0%	2.0%
From RESIDENTIAL	To Office	2.0%	4.0%
	To Retail	1.0%	37.0%
	To Restaurant	20.0%	21.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	0.0%
	To Hotel	0.0%	3.0%
From HOTEL	To Office	75.0%	0.0%
	To Retail	14.0%	16.0%
	To Restaurant	9.0%	68.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	2.0%
	To Hotel	0.0%	0.0%

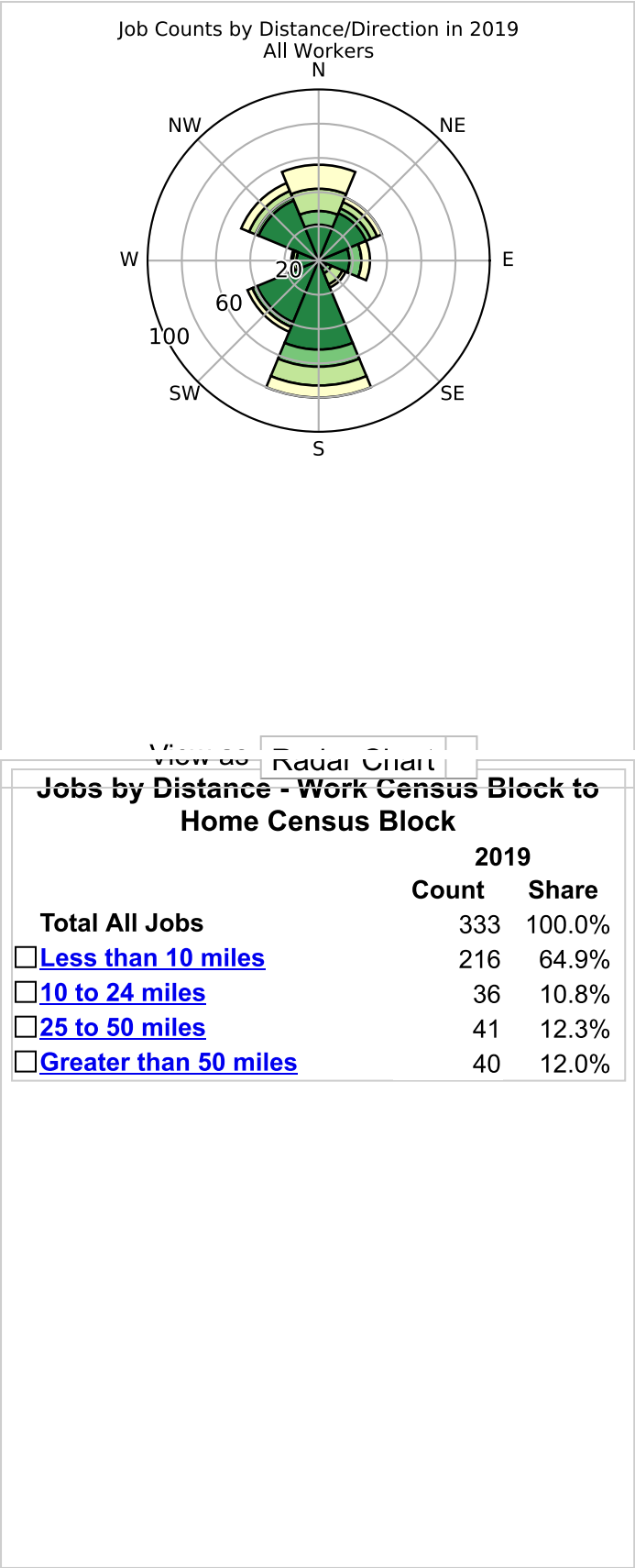
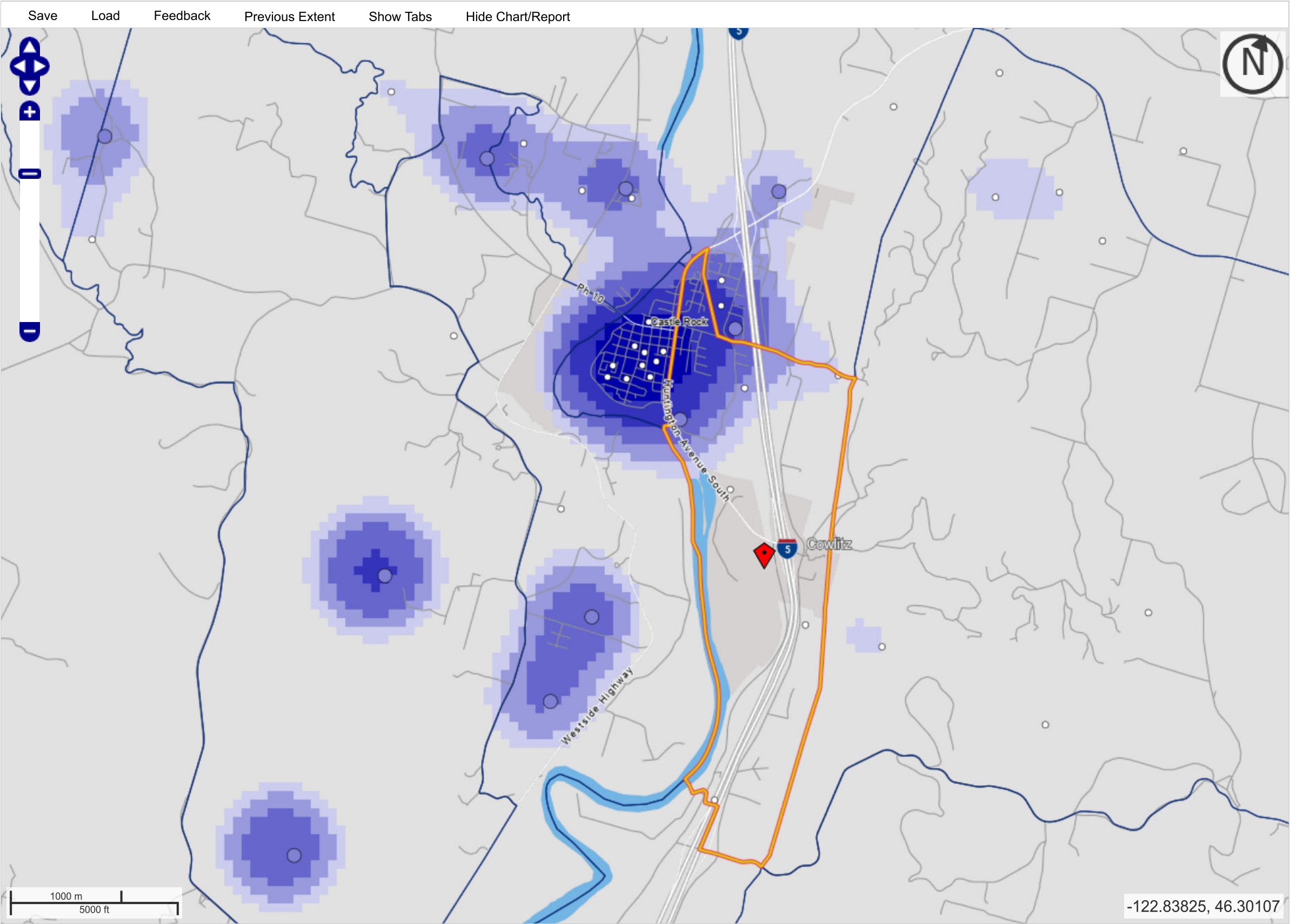
Table 7.2a Adjusted Internal Trip Capture Rates for Trip Destinations within a Multi-Use Development

Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Office	0.0%	0.0%
	From Retail	4.0%	31.0%
	From Restaurant	14.0%	30.0%
	From Cinema/Entertainment	0.0%	6.0%
	From Residential	3.0%	57.0%
	From Hotel	3.0%	0.0%
To RETAIL	From Office	32.0%	7.0%
	From Retail	0.0%	0.0%
	From Restaurant	8.0%	50.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	17.0%	8.8%
	From Hotel	4.0%	2.0%
To RESTAURANT	From Office	23.0%	1.8%
	From Retail	50.0%	29.0%
	From Restaurant	0.0%	0.0%
	From Cinema/Entertainment	0.0%	3.0%
	From Residential	20.0%	14.0%
	From Hotel	6.0%	5.0%
To CINEMA/ENTERTAINMENT	From Office	0.0%	1.0%
	From Retail	0.0%	26.0%
	From Restaurant	0.0%	32.0%
	From Cinema/Entertainment	0.0%	0.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To RESIDENTIAL	From Office	0.0%	4.0%
	From Retail	2.0%	46.0%
	From Restaurant	5.0%	16.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To HOTEL	From Office	0.0%	0.0%
	From Retail	0.0%	17.0%
	From Restaurant	4.0%	71.0%
	From Cinema/Entertainment	0.0%	1.0%
	From Residential	0.0%	12.0%
	From Hotel	0.0%	0.0%









Appendix B – Traffic Volumes

Traffic Counts





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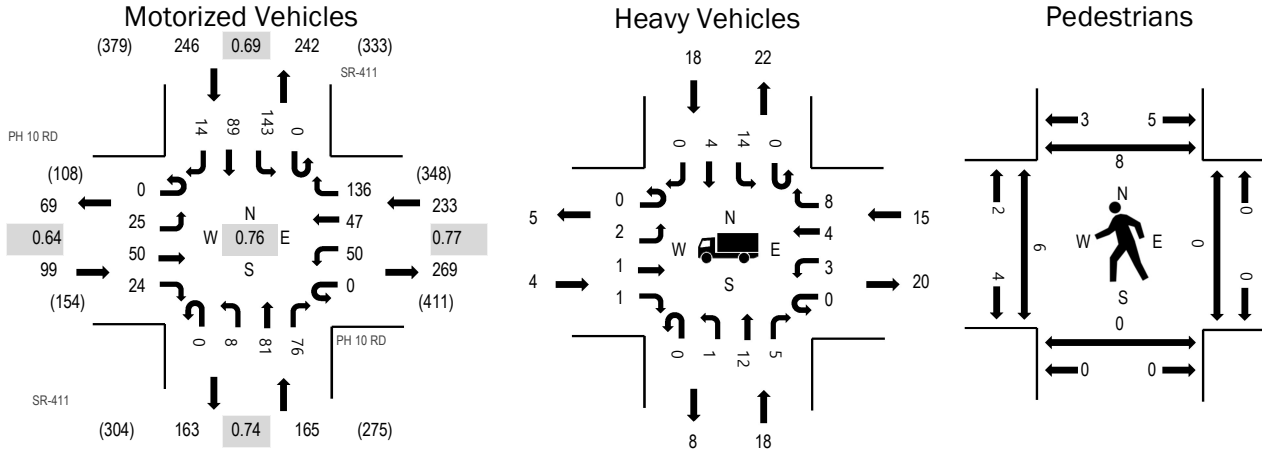
Location: 1 SR-411 & PH 10 RD AM

Date: Tuesday, October 17, 2023

Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	4.0%	0.64
WB	6.4%	0.77
NB	10.9%	0.74
SB	7.3%	0.69
All	7.4%	0.76

Traffic Counts - Motorized Vehicles

Interval Start Time	PH 10 RD Eastbound				PH 10 RD Westbound				SR-411 Northbound				SR-411 Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	1	1	0	2	0	3	0	0	4	6	0	4	8	1	30	683
7:05 AM	0	0	2	0	0	3	0	2	0	0	4	8	0	5	5	1	30	712
7:10 AM	0	1	4	0	0	1	3	3	0	0	1	2	0	6	5	0	26	728
7:15 AM	0	2	6	3	0	2	2	5	0	1	4	6	0	2	8	0	41	743
7:20 AM	0	4	4	2	0	3	1	4	0	1	1	7	0	7	5	3	42	737
7:25 AM	0	3	6	1	0	1	1	14	0	1	10	6	0	11	1	2	57	735
7:30 AM	0	3	11	3	0	10	3	8	0	1	10	7	0	25	10	1	92	724
7:35 AM	0	4	4	4	0	3	1	14	0	1	7	11	0	17	8	1	75	659
7:40 AM	0	2	3	2	0	4	5	14	0	1	9	9	0	16	11	1	77	625
7:45 AM	0	1	0	1	0	2	8	17	0	1	8	8	0	14	7	1	68	579
7:50 AM	0	2	7	1	0	4	11	14	0	1	12	3	0	12	12	2	81	549
7:55 AM	0	3	2	2	0	4	3	16	0	0	10	3	0	8	12	1	64	502
8:00 AM	0	0	3	2	0	7	5	13	0	0	7	5	0	13	2	2	59	473
8:05 AM	0	0	1	3	0	6	2	7	0	0	1	5	0	14	7	0	46	
8:10 AM	0	1	3	0	0	4	5	10	0	0	2	6	0	4	6	0	41	
8:15 AM	0	1	3	2	0	7	2	3	0	0	3	5	0	4	5	0	35	
8:20 AM	0	2	4	2	0	5	2	3	0	0	3	6	0	4	8	1	40	
8:25 AM	0	1	1	2	0	1	7	12	0	2	2	8	0	2	5	3	46	
8:30 AM	0	0	0	1	0	7	1	1	0	1	3	6	0	4	3	0	27	
8:35 AM	0	1	2	3	0	7	0	0	0	1	5	9	0	3	9	1	41	
8:40 AM	0	0	2	2	0	2	4	2	0	0	4	3	0	2	9	1	31	
8:45 AM	0	1	1	1	0	7	1	5	0	0	3	7	0	7	4	1	38	
8:50 AM	0	1	6	1	0	1	1	5	0	0	4	4	0	3	7	1	34	
8:55 AM	0	1	1	4	0	4	4	4	0	0	3	3	0	4	7	0	35	
Count Total	0	34	77	43	0	97	72	179	0	12	120	143	0	191	164	24	1,156	
Peak Hour	0	25	50	24	0	50	47	136	0	8	81	76	0	143	89	14	743	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	1	0	1	2	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	1	1	1	3	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	1	0	0	1	2	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	2	1	0	3	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	1	0	1	1	3	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	1	1	0	0	2	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	2	2
7:30 AM	1	4	2	2	9	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	1	0	5	6	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	4	1	0	5	7:40 AM	0	0	0	0	0	7:40 AM	1	0	0	1	2
7:45 AM	0	0	3	2	5	7:45 AM	0	0	0	0	0	7:45 AM	1	0	0	1	2
7:50 AM	0	0	0	3	3	7:50 AM	0	0	0	0	0	7:50 AM	2	0	0	1	3
7:55 AM	0	2	2	3	7	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	1	1
8:00 AM	0	1	2	0	3	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	0	1	1	2	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	1	1
8:10 AM	1	3	2	1	7	8:10 AM	0	0	0	0	0	8:10 AM	2	0	0	1	3
8:15 AM	0	0	2	0	2	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	2	0	0	0	2	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	1	2	0	3	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	1	1	0	2	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	1	0	2	0	3	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	1	2	1	1	5	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	1	2	1	4	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	1	0	3	2	6	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	1	1	2	0	4	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	11	26	31	25	93	Count Total	0	0	0	0	0	Count Total	6	0	0	8	14
Peak Hour	4	18	15	18	55	Peak Hour	0	0	0	0	0	Peak Hour	6	0	0	8	14



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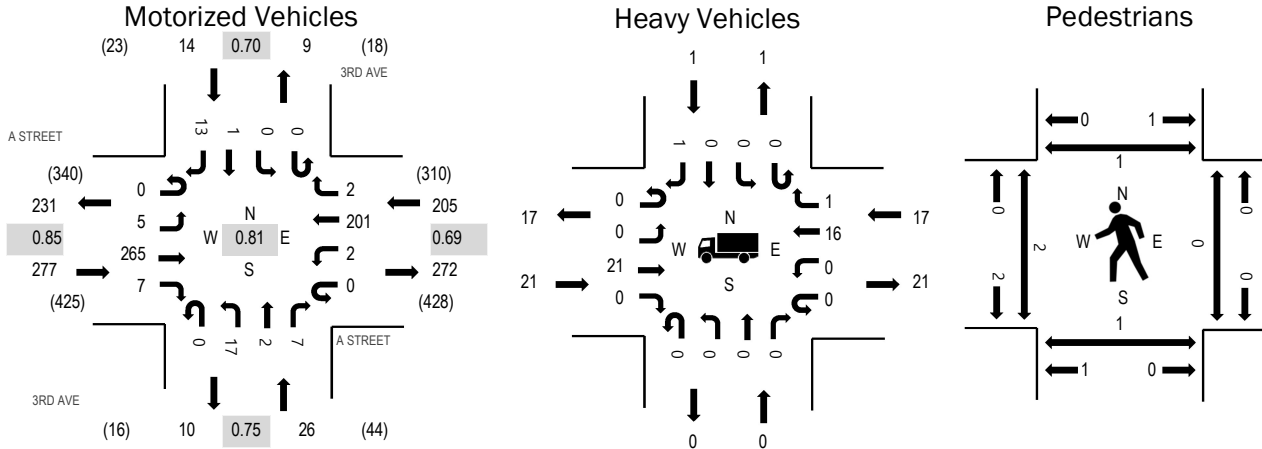
Location: 2 3RD AVE & A STREET AM

Date: Tuesday, October 17, 2023

Peak Hour: 07:25 AM - 08:25 AM

Peak 15-Minutes: 07:50 AM - 08:05 AM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	7.6%	0.85
WB	8.3%	0.69
NB	0.0%	0.75
SB	7.1%	0.70
All	7.5%	0.81

Traffic Counts - Motorized Vehicles

Interval Start Time	A STREET Eastbound				A STREET Westbound				3RD AVE Northbound				3RD AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	10	0	0	1	4	0	0	0	0	2	0	0	0	1	18	461
7:05 AM	0	0	21	0	0	1	9	0	0	0	0	0	0	0	0	0	31	495
7:10 AM	0	1	14	0	0	0	7	0	0	0	0	2	0	0	0	1	25	500
7:15 AM	0	0	12	0	0	0	10	0	0	1	0	2	0	0	0	0	25	505
7:20 AM	0	0	8	0	0	0	6	0	0	0	1	1	0	0	0	1	17	511
7:25 AM	0	0	24	0	0	0	15	0	0	0	0	0	0	0	0	2	41	522
7:30 AM	0	1	26	1	0	0	16	0	0	0	1	2	0	0	0	1	48	502
7:35 AM	0	1	24	1	0	1	17	0	0	1	1	1	0	0	0	0	47	475
7:40 AM	0	0	26	1	0	1	19	0	0	4	0	0	0	0	0	2	53	460
7:45 AM	0	1	25	0	0	0	19	0	0	1	0	0	0	0	0	1	47	426
7:50 AM	0	0	25	2	0	0	25	0	0	3	0	0	0	0	0	2	57	409
7:55 AM	0	1	23	0	0	0	23	0	0	2	0	1	0	0	0	2	52	368
8:00 AM	0	1	21	0	0	0	26	0	0	2	0	1	0	0	0	1	52	341
8:05 AM	0	0	21	0	0	0	11	0	0	3	0	0	0	0	1	0	36	
8:10 AM	0	0	18	0	0	0	11	0	0	0	0	1	0	0	0	0	30	
8:15 AM	0	0	15	2	0	0	12	0	0	1	0	0	0	0	0	1	31	
8:20 AM	0	0	17	0	0	0	7	2	0	0	0	1	0	0	0	1	28	
8:25 AM	0	1	6	1	0	0	12	0	0	0	0	1	0	0	0	0	21	
8:30 AM	0	0	12	0	0	0	7	0	0	1	0	1	0	0	0	0	21	
8:35 AM	0	0	18	0	0	0	10	1	0	0	0	2	0	0	1	0	32	
8:40 AM	0	1	5	0	0	0	10	1	0	1	0	0	0	0	0	1	19	
8:45 AM	0	0	19	0	0	1	6	1	0	0	1	0	0	0	0	2	30	
8:50 AM	0	1	5	0	0	0	8	0	0	0	0	1	0	0	0	1	16	
8:55 AM	0	0	13	0	0	0	10	0	0	0	0	1	0	0	1	0	25	
Count Total	0	9	408	8	0	5	300	5	0	20	4	20	0	0	3	20	802	
Peak Hour	0	5	265	7	0	2	201	2	0	17	2	7	0	0	1	13	522	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	1	0	1	7:00 AM	0	0	0	0	0	7:00 AM	1	1	0	0	2
7:05 AM	0	0	1	0	1	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0	7:10 AM	1	0	0	0	1
7:15 AM	1	0	1	0	2	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	0	1	0	1	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	1	0	0	0	1	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	1	0	3	0	4	7:30 AM	0	0	0	0	0	7:30 AM	0	1	0	0	1
7:35 AM	3	0	0	0	3	7:35 AM	0	0	0	0	0	7:35 AM	2	0	0	0	2
7:40 AM	3	0	1	0	4	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	4	0	2	0	6	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	1	0	1	0	2	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	3	0	3	0	6	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	2	0	1	0	3	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	1	0	1	0	2	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	1	1
8:10 AM	0	0	1	0	1	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	2	0	2	1	5	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	0	2	0	2	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	1	0	0	0	1	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	2	0	2	0	4	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	1	0	1	0	2	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	2	0	3	0	5	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	0	1	0	1	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	2	0	2	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	3	0	1	0	4	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	31	0	31	1	63	Count Total	0	0	0	0	0	Count Total	4	2	0	1	7
Peak Hour	21	0	17	1	39	Peak Hour	0	0	0	0	0	Peak Hour	2	1	0	1	4

Location: 3 HUNTINGTON AVE & COWLITZ STREET AM

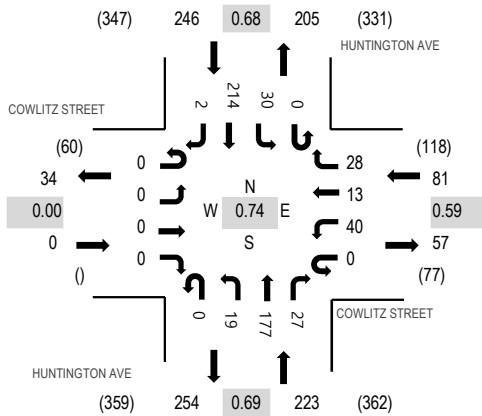
Date: Tuesday, October 17, 2023

Peak Hour: 07:20 AM - 08:20 AM

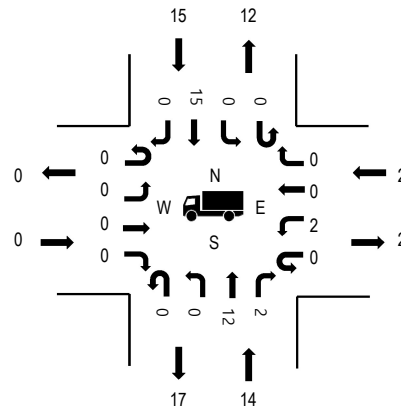
Peak 15-Minutes: 07:35 AM - 07:50 AM

Peak Hour

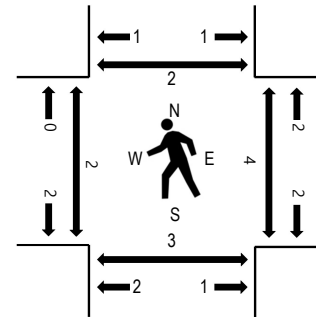
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	2.5%	0.59
NB	6.3%	0.69
SB	6.1%	0.68
All	5.6%	0.74

Traffic Counts - Motorized Vehicles

Interval Start Time	COWLITZ STREET				COWLITZ STREET				HUNTINGTON AVE				HUNTINGTON AVE				Total	Rolling Hour
	Eastbound				Westbound				Northbound				Southbound					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	0	0	0	0	0	1	0	0	3	0	0	1	5	0	10	484
7:05 AM	0	0	0	0	0	1	0	2	0	1	7	0	0	1	5	0	17	509
7:10 AM	0	0	0	0	0	1	0	1	0	1	11	1	0	0	8	0	23	531
7:15 AM	0	0	0	0	0	2	1	1	0	0	12	1	0	0	4	1	22	544
7:20 AM	0	0	0	0	0	4	0	2	0	0	10	1	0	2	17	0	36	550
7:25 AM	0	0	0	0	0	4	0	1	0	0	3	0	0	3	18	0	29	548
7:30 AM	0	0	0	0	0	2	1	3	0	0	11	2	0	2	22	0	43	542
7:35 AM	0	0	0	0	0	4	1	2	0	2	11	0	0	4	32	1	57	528
7:40 AM	0	0	0	0	0	12	2	3	0	2	18	2	0	2	21	0	62	494
7:45 AM	0	0	0	0	0	3	3	4	0	4	20	3	0	6	24	0	67	464
7:50 AM	0	0	0	0	0	2	3	3	0	2	21	3	0	6	14	0	54	414
7:55 AM	0	0	0	0	0	3	1	4	0	2	24	6	0	3	20	1	64	391
8:00 AM	0	0	0	0	0	1	0	4	0	2	17	4	0	2	5	0	35	343
8:05 AM	0	0	0	0	0	2	0	0	0	1	17	4	0	0	15	0	39	
8:10 AM	0	0	0	0	0	1	2	1	0	4	11	1	0	0	16	0	36	
8:15 AM	0	0	0	0	0	2	0	1	0	0	14	1	0	0	10	0	28	
8:20 AM	0	0	0	0	0	4	0	1	0	0	12	3	0	0	14	0	34	
8:25 AM	0	0	0	0	0	1	0	3	0	1	9	1	0	0	7	1	23	
8:30 AM	0	0	0	0	0	2	0	2	0	1	7	1	0	0	15	1	29	
8:35 AM	0	0	0	0	0	0	1	1	0	1	12	0	0	1	6	1	23	
8:40 AM	0	0	0	0	0	2	2	1	0	5	9	3	0	1	9	0	32	
8:45 AM	0	0	0	0	0	2	0	2	0	4	4	0	0	1	4	0	17	
8:50 AM	0	0	0	0	0	0	1	0	0	1	14	4	0	1	10	0	31	
8:55 AM	0	0	0	0	0	0	1	1	0	0	10	0	0	0	3	1	16	
Count Total	0	0	0	0	0	55	19	44	0	34	287	41	0	36	304	7	827	
Peak Hour	0	0	0	0	0	40	13	28	0	19	177	27	0	30	214	2	550	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	1	1	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0	7:05 AM	0	1	0	0	1
7:10 AM	0	1	0	0	1	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	1	1	2	4	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	1	1
7:25 AM	0	0	0	1	1	7:25 AM	0	0	0	0	0	7:25 AM	0	0	1	1	2
7:30 AM	0	2	0	2	4	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	0	0	1	1	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	0	0	1	1	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	4	0	0	4	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	3	0	1	4	7:50 AM	0	0	0	0	0	7:50 AM	0	1	2	0	3
7:55 AM	0	0	0	2	2	7:55 AM	0	0	0	0	0	7:55 AM	0	1	1	0	2
8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0	8:00 AM	2	0	0	0	2
8:05 AM	0	1	0	3	4	8:05 AM	0	0	0	0	0	8:05 AM	0	1	0	0	1
8:10 AM	0	0	1	2	3	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	3	0	0	3	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	0	0	2	2	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	1	0	1	2	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	1	0	4	5	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	1	0	1	2	8:35 AM	0	0	0	0	0	8:35 AM	1	0	0	0	1
8:40 AM	0	2	0	1	3	8:40 AM	0	0	0	0	0	8:40 AM	2	0	0	0	2
8:45 AM	0	0	0	1	1	8:45 AM	0	0	0	0	0	8:45 AM	0	0	1	2	3
8:50 AM	0	0	0	1	1	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	1	0	0	1	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	0	21	2	27	50	Count Total	0	0	0	0	0	Count Total	5	4	5	4	18
Peak Hour	0	14	2	15	31	Peak Hour	0	0	0	0	0	Peak Hour	2	3	4	2	11



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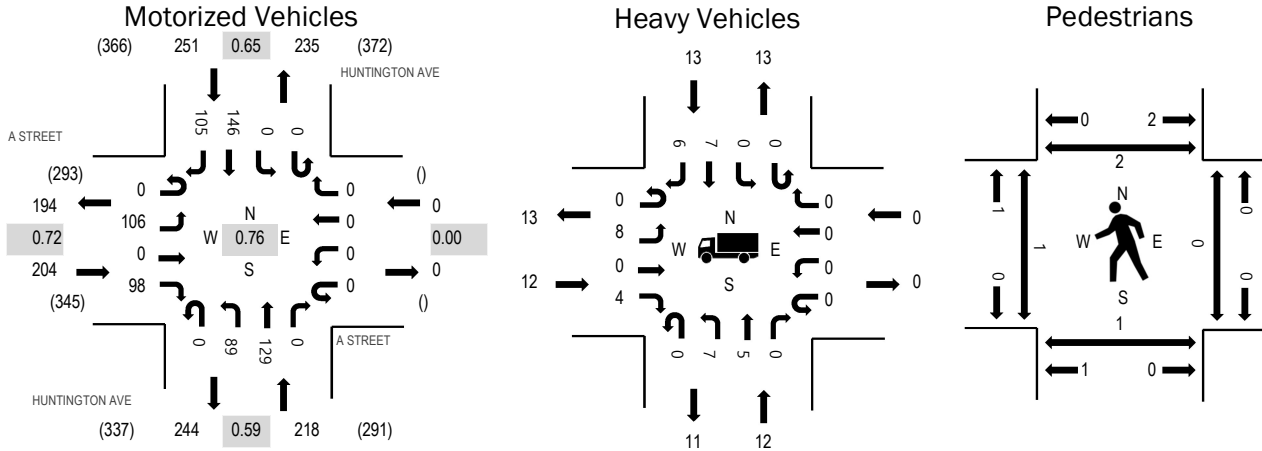
Location: 4 HUNTINGTON AVE & A STREET AM

Date: Tuesday, October 17, 2023

Peak Hour: 07:25 AM - 08:25 AM

Peak 15-Minutes: 07:40 AM - 07:55 AM

Peak Hour



	HV%	PHF
EB	5.9%	0.72
WB	0.0%	0.00
NB	5.5%	0.59
SB	5.2%	0.65
All	5.5%	0.76

Traffic Counts - Motorized Vehicles

Interval Start Time	A STREET Eastbound				A STREET Westbound				HUNTINGTON AVE Northbound				HUNTINGTON AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	6	0	5	0	0	0	0	0	2	1	0	0	0	1	5	20	581
7:05 AM	0	5	0	2	0	0	0	0	0	2	3	0	0	0	2	4	18	614
7:10 AM	0	7	0	8	0	0	0	0	0	3	6	0	0	0	5	4	33	644
7:15 AM	0	12	0	5	0	0	0	0	0	2	1	0	0	0	6	3	29	655
7:20 AM	0	7	0	4	0	0	0	0	0	4	4	0	0	0	7	11	37	666
7:25 AM	0	2	0	6	0	0	0	0	0	6	3	0	0	0	12	8	37	673
7:30 AM	0	9	0	10	0	0	0	0	0	9	5	0	0	0	17	7	57	661
7:35 AM	0	9	0	6	0	0	0	0	0	9	3	0	0	0	23	14	64	636
7:40 AM	0	10	0	7	0	0	0	0	0	15	16	0	0	0	22	10	80	599
7:45 AM	0	8	0	4	0	0	0	0	0	10	17	0	0	0	16	11	66	551
7:50 AM	0	11	0	15	0	0	0	0	0	15	19	0	0	0	12	4	76	509
7:55 AM	0	10	0	10	0	0	0	0	0	5	18	0	0	0	13	8	64	463
8:00 AM	0	13	0	12	0	0	0	0	0	6	14	0	0	0	4	4	53	421
8:05 AM	0	7	0	10	0	0	0	0	0	3	12	0	0	0	9	7	48	
8:10 AM	0	8	0	7	0	0	0	0	0	4	8	0	0	0	6	11	44	
8:15 AM	0	8	0	6	0	0	0	0	0	3	10	0	0	0	5	8	40	
8:20 AM	0	11	0	5	0	0	0	0	0	4	4	0	0	0	7	13	44	
8:25 AM	0	3	0	4	0	0	0	0	0	2	4	0	0	0	4	8	25	
8:30 AM	0	6	0	4	0	0	0	0	0	1	4	0	0	0	5	12	32	
8:35 AM	0	12	0	5	0	0	0	0	0	2	2	0	0	0	3	3	27	
8:40 AM	0	12	0	2	0	0	0	0	0	2	4	0	0	0	5	7	32	
8:45 AM	0	5	0	3	0	0	0	0	0	4	5	0	0	0	2	5	24	
8:50 AM	0	11	0	0	0	0	0	0	0	2	7	0	0	0	3	7	30	
8:55 AM	0	8	0	5	0	0	0	0	0	4	2	0	0	0	3	0	22	
Count Total	0	200	0	145	0	0	0	0	0	119	172	0	0	0	192	174	1,002	
Peak Hour	0	106	0	98	0	0	0	0	0	89	129	0	0	0	146	105	673	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	2	2	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	1	1
7:05 AM	0	1	0	0	1	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	1	0	0	0	1	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	1	0	2	3	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	1	0	1	2	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	1	0	2	3	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	1	0	1	2	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	1	1
7:40 AM	0	3	0	1	4	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	2	2	0	0	4	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	2	3	0	0	5	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	2	0	0	0	2	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	2	0	0	2	4	8:00 AM	0	0	0	0	0	8:00 AM	1	1	0	2	4
8:05 AM	1	0	0	3	4	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	0	0	2	2	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	3	1	0	0	4	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	0	0	1	1	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	0	0	4	4	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	2	0	0	3	5	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	1	0	0	1	2	8:35 AM	0	0	0	0	0	8:35 AM	0	1	0	0	1
8:40 AM	2	1	0	2	5	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	1	0	1	2	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	1	0	1	2	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	2	0	0	0	2	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	20	17	0	29	66	Count Total	0	0	0	0	0	Count Total	1	2	0	4	7
Peak Hour	12	12	0	13	37	Peak Hour	0	0	0	0	0	Peak Hour	1	1	0	3	5



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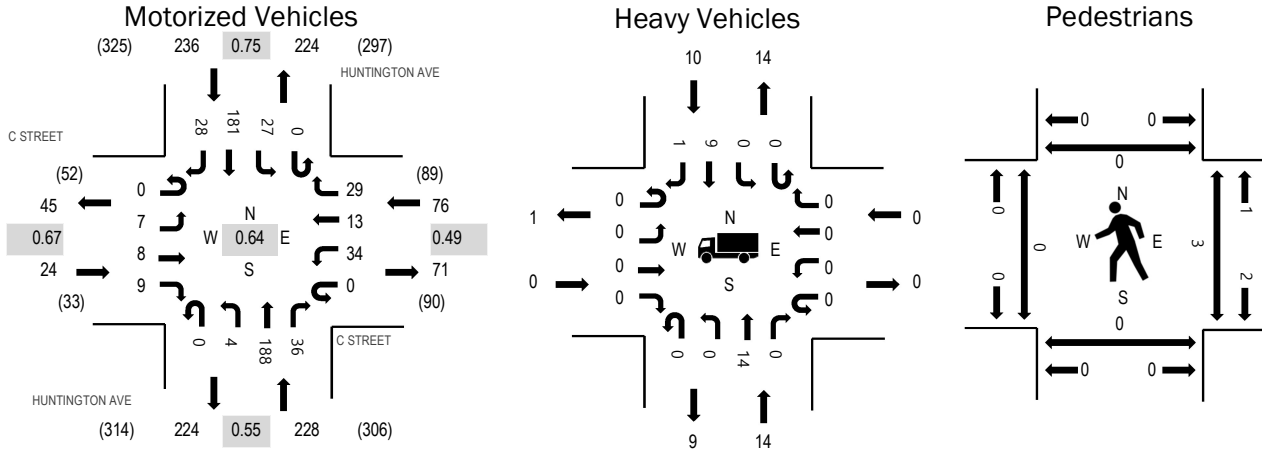
Location: 5 HUNTINGTON AVE & C STREET AM

Date: Tuesday, October 17, 2023

Peak Hour: 07:20 AM - 08:20 AM

Peak 15-Minutes: 07:40 AM - 07:55 AM

Peak Hour



	HV%	PHF
EB	0.0%	0.67
WB	0.0%	0.49
NB	6.1%	0.55
SB	4.2%	0.75
All	4.3%	0.64

Traffic Counts - Motorized Vehicles

Interval Start Time	C STREET Eastbound				C STREET Westbound				HUNTINGTON AVE Northbound				HUNTINGTON AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	1	0	0	1	0	0	0	0	3	0	0	2	3	0	10	493
7:05 AM	0	0	0	0	0	1	0	0	0	0	4	0	0	0	3	2	10	523
7:10 AM	0	0	0	0	0	1	0	0	0	0	9	1	0	1	10	2	24	549
7:15 AM	0	0	1	1	0	0	0	0	0	0	3	1	0	2	9	0	17	555
7:20 AM	0	1	0	2	0	0	1	0	0	0	8	3	0	1	9	1	26	564
7:25 AM	0	0	1	0	0	3	2	1	0	1	9	3	0	0	14	3	37	558
7:30 AM	0	2	1	1	0	3	1	2	0	0	9	3	0	4	21	4	51	539
7:35 AM	0	0	0	1	0	3	0	1	0	0	12	2	0	4	18	1	42	504
7:40 AM	0	0	0	0	0	7	0	4	0	0	32	7	0	3	14	10	77	474
7:45 AM	0	0	2	0	0	2	1	4	0	1	19	13	0	1	12	6	61	414
7:50 AM	0	0	1	1	0	7	6	8	0	0	28	3	0	8	19	1	82	370
7:55 AM	0	2	3	0	0	3	2	5	0	1	18	0	0	5	16	1	56	299
8:00 AM	0	1	0	0	0	3	0	2	0	1	16	1	0	0	16	0	40	260
8:05 AM	0	1	0	0	0	1	0	1	0	0	14	0	0	0	19	0	36	
8:10 AM	0	0	0	2	0	2	0	1	0	0	11	0	0	1	13	0	30	
8:15 AM	0	0	0	2	0	0	0	0	0	0	12	1	0	0	10	1	26	
8:20 AM	0	1	0	0	0	0	0	0	0	0	7	1	0	0	11	0	20	
8:25 AM	0	0	0	0	0	1	0	0	0	0	6	2	0	1	8	0	18	
8:30 AM	0	0	0	0	0	1	0	1	0	0	5	1	0	0	8	0	16	
8:35 AM	0	0	0	0	0	4	0	0	0	0	4	0	0	0	4	0	12	
8:40 AM	0	3	0	0	0	1	0	0	0	0	4	1	0	0	8	0	17	
8:45 AM	0	0	0	1	0	0	0	0	0	1	8	0	0	1	5	1	17	
8:50 AM	0	1	0	0	0	1	0	0	0	0	7	0	0	0	2	0	11	
8:55 AM	0	0	0	0	0	1	0	0	0	1	7	2	0	1	5	0	17	
Count Total	0	12	10	11	0	46	13	30	0	6	255	45	0	35	257	33	753	
Peak Hour	0	7	8	9	0	34	13	29	0	4	188	36	0	27	181	28	564	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	1	0	0	1	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	0	0	1	1	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	1	0	0	1	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	2	0	1	3	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	1	0	1	2	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	1	0	1	2	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	3	0	1	4	7:40 AM	0	0	0	0	0	7:40 AM	0	0	2	0	2
7:45 AM	0	2	0	0	2	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	3	0	0	3	7:50 AM	0	0	0	0	0	7:50 AM	0	0	1	0	1
7:55 AM	0	0	0	2	2	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	0	0	1	1	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	0	0	2	2	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	0	0	1	1	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	1	0	0	1	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	0	0	1	1	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	0	0	1	1	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	1	0	0	1	8:40 AM	0	0	0	0	0	8:40 AM	0	0	1	0	1
8:45 AM	0	2	0	0	2	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	0	0	1	1	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	0	18	0	14	32	Count Total	0	0	0	0	0	Count Total	0	0	4	0	4
Peak Hour	0	14	0	10	24	Peak Hour	0	0	0	0	0	Peak Hour	0	0	3	0	3



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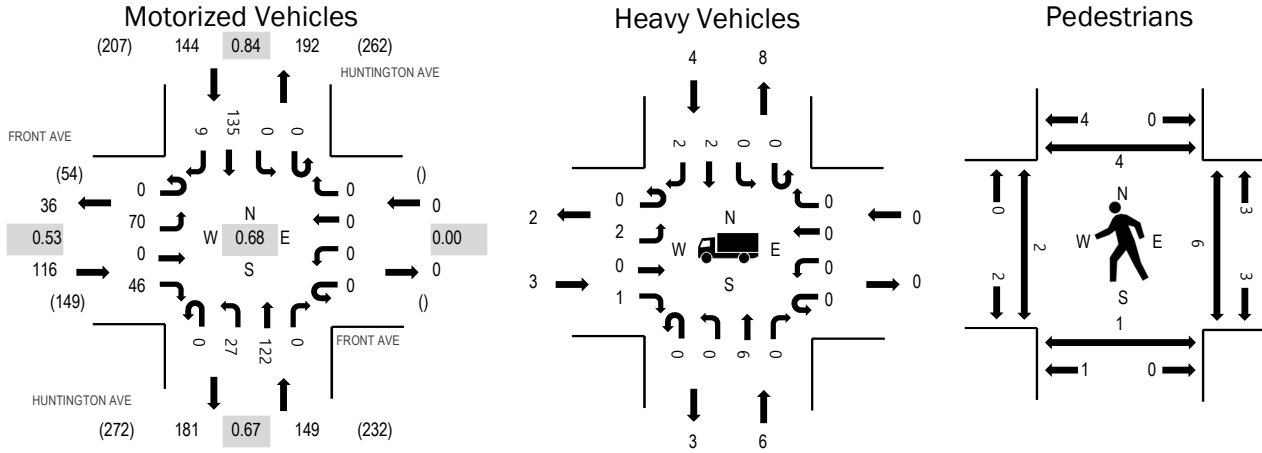
Location: 6 HUNTINGTON AVE & FRONT AVE AM

Date: Tuesday, October 17, 2023

Peak Hour: 07:25 AM - 08:25 AM

Peak 15-Minutes: 07:35 AM - 07:50 AM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	2.6%	0.53
WB	0.0%	0.00
NB	4.0%	0.67
SB	2.8%	0.84
All	3.2%	0.68

Traffic Counts - Motorized Vehicles

Interval Start Time	FRONT AVE Eastbound				FRONT AVE Westbound				HUNTINGTON AVE Northbound				HUNTINGTON AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	0	0	0	0	0	0	0	1	3	0	0	0	3	0	7	360
7:05 AM	0	0	0	2	0	0	0	0	0	3	5	0	0	0	2	0	12	376
7:10 AM	0	1	0	1	0	0	0	0	0	1	7	0	0	0	7	0	17	391
7:15 AM	0	0	0	4	0	0	0	0	0	4	6	0	0	0	3	0	17	398
7:20 AM	0	0	0	3	0	0	0	0	0	0	10	0	0	0	7	0	20	405
7:25 AM	0	0	0	7	0	0	0	0	0	5	15	0	0	0	14	2	43	409
7:30 AM	0	7	0	6	0	0	0	0	0	1	11	0	0	0	7	0	32	382
7:35 AM	0	8	0	7	0	0	0	0	0	5	17	0	0	0	10	2	49	365
7:40 AM	0	15	0	8	0	0	0	0	0	5	13	0	0	0	12	1	54	335
7:45 AM	0	15	0	2	0	0	0	0	0	4	14	0	0	0	13	0	48	297
7:50 AM	0	7	0	3	0	0	0	0	0	1	10	0	0	0	16	1	38	260
7:55 AM	0	8	0	0	0	0	0	0	0	0	9	0	0	0	6	0	23	234
8:00 AM	0	1	0	1	0	0	0	0	0	0	6	0	0	0	13	2	23	228
8:05 AM	0	0	0	4	0	0	0	0	0	1	10	0	0	0	12	0	27	
8:10 AM	0	1	0	4	0	0	0	0	0	2	4	0	0	0	13	0	24	
8:15 AM	0	4	0	1	0	0	0	0	0	1	7	0	0	0	10	1	24	
8:20 AM	0	4	0	3	0	0	0	0	0	2	6	0	0	0	9	0	24	
8:25 AM	0	1	0	5	0	0	0	0	0	0	4	0	0	0	6	0	16	
8:30 AM	0	0	0	4	0	0	0	0	0	1	4	0	0	0	6	0	15	
8:35 AM	0	1	0	2	0	0	0	0	0	3	2	0	0	0	11	0	19	
8:40 AM	0	0	0	4	0	0	0	0	0	2	3	0	0	0	7	0	16	
8:45 AM	0	0	0	1	0	0	0	0	0	0	6	0	0	0	4	0	11	
8:50 AM	0	0	0	0	0	0	0	0	0	1	8	0	0	0	2	1	12	
8:55 AM	0	1	0	3	0	0	0	0	0	1	8	0	0	0	4	0	17	
Count Total	0	74	0	75	0	0	0	0	0	44	188	0	0	0	197	10	588	
Peak Hour	0	70	0	46	0	0	0	0	0	27	122	0	0	0	135	9	409	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	1	0	0	1	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	2	0	1	3	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	1	2	0	0	3	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	1	0	0	1	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	0	0	3	3	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	1	0	0	1	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	1	0	0	0	1	7:45 AM	0	0	0	0	0	7:45 AM	0	1	1	0	2
7:50 AM	0	1	0	0	1	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	2	2
7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0	7:55 AM	0	0	3	0	3
8:00 AM	1	0	0	0	1	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	0	0	1	1	8:05 AM	0	0	0	0	0	8:05 AM	0	0	2	0	2
8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0	8:10 AM	1	0	0	1	2
8:15 AM	0	1	0	0	1	8:15 AM	0	0	0	0	0	8:15 AM	1	0	0	1	2
8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	0	0	1	1	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	1	0	0	1	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	1	0	0	0	1	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	2	0	0	2	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	4	12	0	6	22	Count Total	0	0	0	0	0	Count Total	2	1	6	4	13
Peak Hour	3	6	0	4	13	Peak Hour	0	0	0	0	0	Peak Hour	2	1	6	4	13



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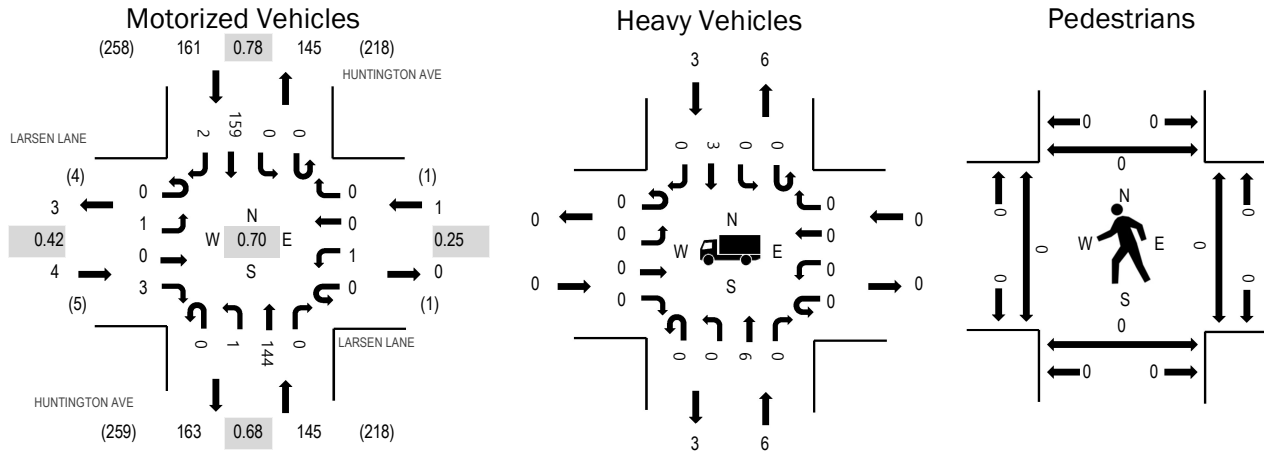
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Location: 7 HUNTINGTON AVE & LARSEN LANE AM

Date: Tuesday, October 17, 2023

Peak Hour: 07:20 AM - 08:20 AM

Peak 15-Minutes: 07:35 AM - 07:50 AM

Peak Hour

Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.42
WB	0.0%	0.25
NB	4.1%	0.68
SB	1.9%	0.78
All	2.9%	0.70

Traffic Counts - Motorized Vehicles

Interval Start Time	LARSEN LANE Eastbound				LARSEN LANE Westbound				HUNTINGTON AVE Northbound				HUNTINGTON AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	7	270
7:05 AM	0	1	0	0	0	0	0	0	0	0	10	0	0	0	4	0	15	285
7:10 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	7	0	10	292
7:15 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	8	0	19	306
7:20 AM	0	0	0	1	0	0	0	0	0	0	14	0	0	0	8	1	24	311
7:25 AM	0	0	0	0	0	0	0	0	0	0	17	0	0	0	17	0	34	309
7:30 AM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	0	20	285
7:35 AM	0	1	0	0	0	0	0	0	0	0	21	0	0	0	17	0	39	278
7:40 AM	0	0	0	2	0	0	0	0	0	0	15	0	0	0	19	0	36	259
7:45 AM	0	0	0	0	0	0	0	0	0	1	17	0	0	0	18	0	36	236
7:50 AM	0	0	0	0	0	0	0	0	0	0	12	0	0	0	5	0	17	212
7:55 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	7	0	13	206
8:00 AM	0	0	0	0	0	1	0	0	0	0	9	0	0	0	12	0	22	212
8:05 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	15	0	22	
8:10 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	17	1	24	
8:15 AM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	14	0	24	
8:20 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	16	0	22	
8:25 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	9	0	10	
8:30 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	9	0	13	
8:35 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	13	0	20	
8:40 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	9	0	13	
8:45 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	5	0	12	
8:50 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	4	0	11	
8:55 AM	0	0	0	0	0	0	0	0	0	0	9	1	0	0	8	1	19	
Count Total	0	2	0	3	0	1	0	0	0	1	216	1	0	0	255	3	482	
Peak Hour	0	1	0	3	0	1	0	0	0	1	144	0	0	0	159	2	311	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	1	0	0	1	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	2	0	1	3	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	3	0	1	4	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	0	0	1	1	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	1	0	0	1	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	1	0	0	1	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	0	0	1	1	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	1	0	0	1	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	0	0	1	1	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	1	0	0	1	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	1	0	0	1	8:40 AM	0	0	0	0	0	8:40 AM	1	0	0	0	1
8:45 AM	0	2	0	1	3	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	0	13	0	6	19	Count Total	0	0	0	0	0	Count Total	1	0	0	0	1
Peak Hour	0	6	0	3	9	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0



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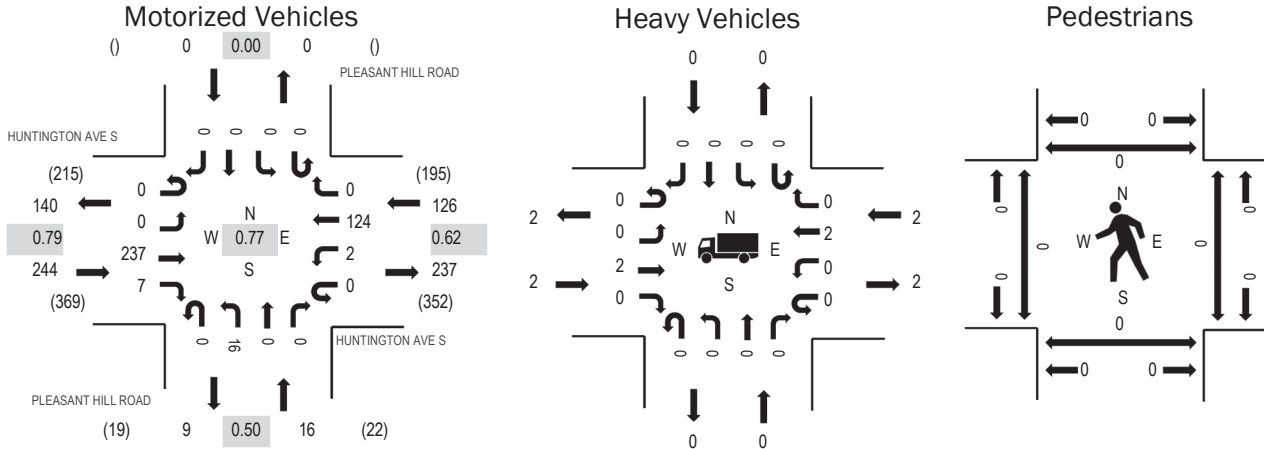
Location: 1 PLEASANT HILL ROAD & HUNTINGTON AVE S AM

Date: Wednesday, February 15, 2023

Peak Hour: 07:20 AM - 08:20 AM

Peak 15-Minutes: 07:35 AM - 07:50 AM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.8%	0.79
WB	1.6%	0.62
NB	0.0%	0.50
SB	0.0%	0.00
All	1.0%	0.77

Traffic Counts - Motorized Vehicles

Interval Start Time	HUNTINGTON AVE S Eastbound				HUNTINGTON AVE S Westbound				PLEASANT HILL ROAD Northbound				PLEASANT HILL ROAD Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	8	1	0	0	4	0	0	1	0	0	0	0	0	0	14	347
7:05 AM	0	0	10	0	0	0	3	0	0	0	0	0	0	0	0	0	13	365
7:10 AM	0	0	12	0	0	0	2	0	0	0	0	0	0	0	0	0	14	380
7:15 AM	0	0	6	0	0	0	8	0	0	0	0	0	0	0	0	0	14	383
7:20 AM	0	0	13	0	0	0	13	0	0	1	0	0	0	0	0	0	27	386
7:25 AM	0	0	18	0	0	0	10	0	0	2	0	0	0	0	0	0	30	375
7:30 AM	0	0	17	0	0	0	19	0	0	2	0	0	0	0	0	0	38	357
7:35 AM	0	0	24	0	0	0	19	0	0	1	0	0	0	0	0	0	44	340
7:40 AM	0	0	27	0	0	0	13	0	0	2	0	0	0	0	0	0	42	323
7:45 AM	0	0	22	1	0	0	14	0	0	2	0	0	0	0	0	0	39	302
7:50 AM	0	0	21	2	0	1	14	0	0	4	0	0	0	0	0	0	42	282
7:55 AM	0	0	23	0	0	0	7	0	0	0	0	0	0	0	0	0	30	254
8:00 AM	0	0	26	3	0	0	2	0	0	1	0	0	0	0	0	0	32	239
8:05 AM	0	0	24	1	0	1	2	0	0	0	0	0	0	0	0	0	28	
8:10 AM	0	0	12	0	0	0	4	0	0	1	0	0	0	0	0	0	17	
8:15 AM	0	0	10	0	0	0	7	0	0	0	0	0	0	0	0	0	17	
8:20 AM	0	0	6	1	0	0	9	0	0	0	0	0	0	0	0	0	16	
8:25 AM	0	0	9	2	0	0	1	0	0	0	0	0	0	0	0	0	12	
8:30 AM	0	0	14	1	0	0	4	0	0	2	0	0	0	0	0	0	21	
8:35 AM	0	0	16	1	0	0	9	0	0	1	0	0	0	0	0	0	27	
8:40 AM	0	0	15	1	0	0	4	0	0	1	0	0	0	0	0	0	21	
8:45 AM	0	0	11	0	0	0	7	0	0	1	0	0	0	0	0	0	19	
8:50 AM	0	0	4	1	0	0	9	0	0	0	0	0	0	0	0	0	14	
8:55 AM	0	0	4	2	0	0	9	0	0	0	0	0	0	0	0	0	15	
Count Total	0	0	352	17	0	2	193	0	0	22	0	0	0	0	0	0	586	
Peak Hour	0	0	237	7	0	2	124	0	0	16	0	0	0	0	0	0	386	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	1	0	0	0	1	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	1	0	0	0	1	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	0	1	0	1	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	0	1	0	1	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	1	0	0	0	1	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	1	0	0	0	1	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	1	0	0	0	1	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	2	1	0	0	3	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	1	0	1	0	2	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	0	1	0	1	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	1	0	2	0	3	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	1	0	0	0	1	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	10	1	6	0	17	Count Total	0	0	0	0	0	Count Total	0	0	0	0	0
Peak Hour	2	0	2	0	4	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0



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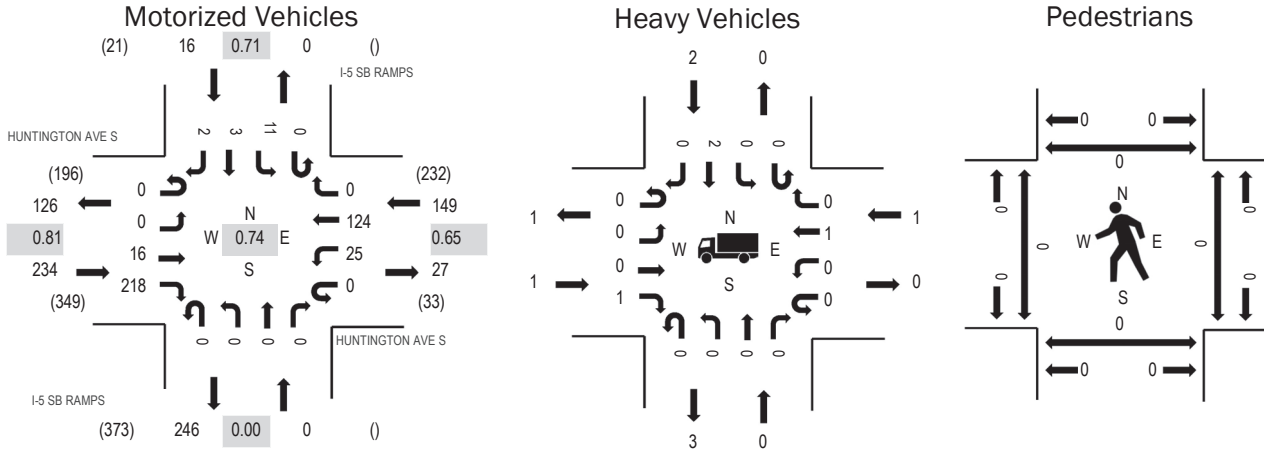
Location: 2 I-5 SB RAMPS & HUNTINGTON AVE S AM

Date: Wednesday, February 15, 2023

Peak Hour: 07:20 AM - 08:20 AM

Peak 15-Minutes: 07:35 AM - 07:50 AM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.4%	0.81
WB	0.7%	0.65
NB	0.0%	0.00
SB	12.5%	0.71
All	1.0%	0.74

Traffic Counts - Motorized Vehicles

Interval Start Time	HUNTINGTON AVE S Eastbound				HUNTINGTON AVE S Westbound				I-5 SB RAMPS Northbound				I-5 SB RAMPS Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	0	10	0	0	4	0	0	0	0	0	0	0	0	0	14	361
7:05 AM	0	0	2	8	0	1	3	0	0	0	0	0	0	0	0	0	14	378
7:10 AM	0	0	0	12	0	0	2	0	0	0	0	0	0	0	0	0	14	391
7:15 AM	0	0	0	6	0	3	8	0	0	0	0	0	0	0	0	0	17	396
7:20 AM	0	0	1	12	0	1	15	0	0	0	0	0	0	0	0	0	29	399
7:25 AM	0	0	1	16	0	2	8	0	0	0	0	0	0	1	2	0	30	387
7:30 AM	0	0	4	14	0	2	17	0	0	0	0	0	0	0	0	0	37	368
7:35 AM	0	0	0	24	0	4	20	0	0	0	0	0	0	1	0	0	49	352
7:40 AM	0	0	2	24	0	2	13	0	0	0	0	0	0	1	0	1	43	327
7:45 AM	0	0	2	20	0	3	14	0	0	0	0	0	0	2	1	0	42	309
7:50 AM	0	0	0	21	0	1	15	0	0	0	0	0	0	1	0	0	38	286
7:55 AM	0	0	1	22	0	3	7	0	0	0	0	0	0	1	0	0	34	264
8:00 AM	0	0	3	21	0	4	2	0	0	0	0	0	0	1	0	0	31	241
8:05 AM	0	0	1	22	0	0	3	0	0	0	0	0	0	0	0	1	27	
8:10 AM	0	0	0	13	0	1	3	0	0	0	0	0	0	2	0	0	19	
8:15 AM	0	0	1	9	0	2	7	0	0	0	0	0	0	1	0	0	20	
8:20 AM	0	0	0	6	0	1	9	0	0	0	0	0	0	0	1	0	17	
8:25 AM	0	0	0	8	0	2	0	0	0	0	0	0	0	0	1	0	11	
8:30 AM	0	0	0	14	0	1	5	0	0	0	0	0	0	0	0	1	21	
8:35 AM	0	0	1	13	0	0	9	0	0	0	0	0	0	1	0	0	24	
8:40 AM	0	0	2	15	0	4	4	0	0	0	0	0	0	0	0	0	25	
8:45 AM	0	0	0	11	0	0	7	0	0	0	0	0	0	0	0	1	19	
8:50 AM	0	0	0	4	0	3	9	0	0	0	0	0	0	0	0	0	16	
8:55 AM	0	0	0	3	0	0	8	0	0	0	0	0	0	0	0	0	11	
Count Total	0	0	21	328	0	40	192	0	0	0	0	0	0	12	5	4	602	
Peak Hour	0	0	16	218	0	25	124	0	0	0	0	0	0	11	3	2	399	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	1	0	0	0	1	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	1	0	0	0	1	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	0	1	0	1	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	0	0	1	1	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	0	0	1	1	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	1	0	0	0	1	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	0	0	0	0	8:05 AM	0	0	1	0	1	8:05 AM	0	0	0	0	0
8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	0	0	1	1	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	0	0	1	1	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	0	1	1	2	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	0	2	0	2	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	3	0	4	5	12	Count Total	0	0	1	0	1	Count Total	0	0	0	0	0
Peak Hour	1	0	1	2	4	Peak Hour	0	0	1	0	1	Peak Hour	0	0	0	0	0



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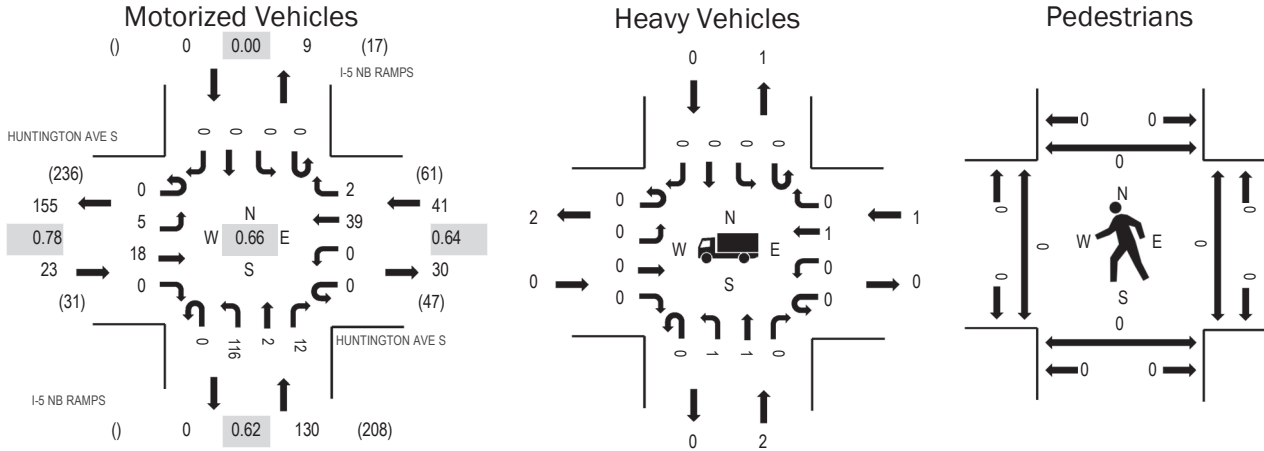
Location: 3 I-5 NB RAMPS & HUNTINGTON AVE S AM

Date: Wednesday, February 15, 2023

Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.78
WB	2.4%	0.64
NB	1.5%	0.62
SB	0.0%	0.00
All	1.5%	0.66

Traffic Counts - Motorized Vehicles

Interval Start Time	HUNTINGTON AVE S Eastbound				HUNTINGTON AVE S Westbound				I-5 NB RAMPS Northbound				I-5 NB RAMPS Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	0	0	0	0	1	0	0	3	1	1	0	0	0	0	6	186
7:05 AM	0	0	2	0	0	0	1	0	0	3	0	1	0	0	0	0	7	192
7:10 AM	0	0	0	0	0	0	0	0	0	2	0	3	0	0	0	0	5	190
7:15 AM	0	0	0	0	0	0	4	0	0	7	0	1	0	0	0	0	12	194
7:20 AM	0	0	1	0	0	0	4	0	0	11	1	1	0	0	0	0	18	193
7:25 AM	0	0	2	0	0	0	2	0	0	9	0	0	0	0	0	0	13	187
7:30 AM	0	2	2	0	0	0	3	0	0	19	0	2	0	0	0	0	28	177
7:35 AM	0	1	0	0	0	0	6	0	0	20	0	1	0	0	0	0	28	154
7:40 AM	0	0	3	0	0	0	2	1	0	11	0	0	0	0	0	0	17	138
7:45 AM	0	2	2	0	0	0	7	0	0	13	0	0	0	0	0	0	24	133
7:50 AM	0	0	0	0	0	0	1	0	0	12	0	2	0	0	0	0	15	116
7:55 AM	0	0	1	0	0	0	3	1	0	7	0	1	0	0	0	0	13	117
8:00 AM	0	0	3	0	0	0	4	0	0	2	0	3	0	0	0	0	12	114
8:05 AM	0	0	1	0	0	0	1	0	0	2	1	0	0	0	0	0	5	
8:10 AM	0	0	3	0	0	0	2	0	0	3	0	1	0	0	0	0	9	
8:15 AM	0	0	2	0	0	0	2	0	0	7	0	0	0	0	0	0	11	
8:20 AM	0	0	0	0	0	0	2	1	0	8	1	0	0	0	0	0	12	
8:25 AM	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	3	
8:30 AM	0	0	0	0	0	0	1	0	0	4	0	0	0	0	0	0	5	
8:35 AM	0	1	1	0	0	0	1	0	0	8	1	0	0	0	0	0	12	
8:40 AM	0	1	1	0	0	0	4	0	0	5	0	1	0	0	0	0	12	
8:45 AM	0	0	0	0	0	0	0	1	0	6	0	0	0	0	0	0	7	
8:50 AM	0	0	0	0	0	0	3	1	0	10	0	2	0	0	0	0	16	
8:55 AM	0	0	0	0	0	0	0	0	0	8	0	2	0	0	0	0	10	
Count Total	0	7	24	0	0	0	56	5	0	180	5	23	0	0	0	0	300	
Peak Hour	0	5	18	0	0	0	39	2	0	116	2	12	0	0	0	0	194	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	1	0	0	1	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	1	1	0	2	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	1	0	0	1	8:05 AM	0	0	1	0	1	8:05 AM	0	0	0	0	0
8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	1	0	0	0	1	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	1	0	0	1	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	1	2	0	0	3	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	2	0	0	2	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	1	0	1	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	2	9	2	0	13	Count Total	0	0	1	0	1	Count Total	0	0	0	0	0
Peak Hour	0	2	1	0	3	Peak Hour	0	0	1	0	1	Peak Hour	0	0	0	0	0



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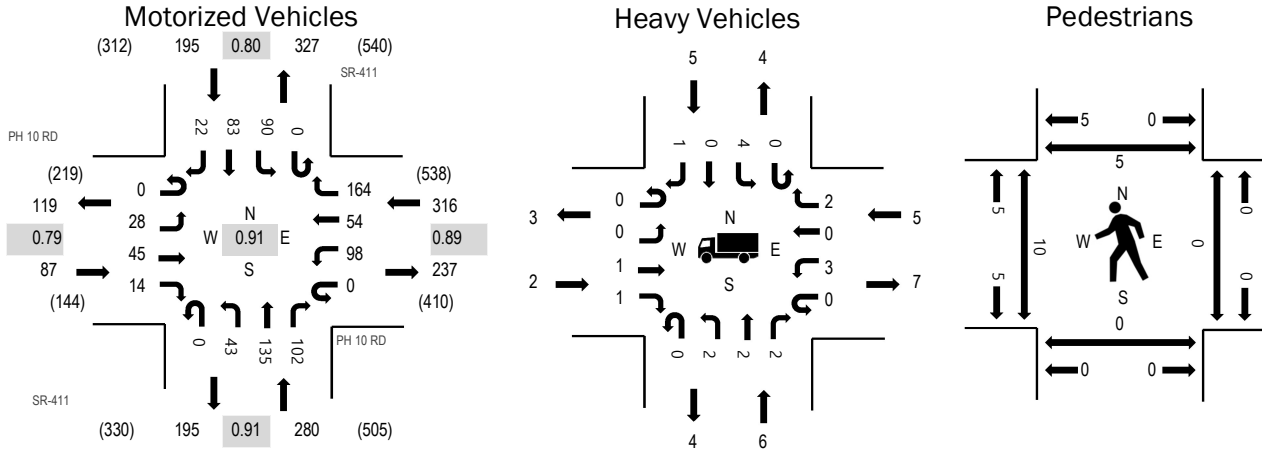
Location: 1 SR-411 & PH 10 RD PM

Date: Tuesday, October 17, 2023

Peak Hour: 04:20 PM - 05:20 PM

Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	2.3%	0.79
WB	1.6%	0.89
NB	2.1%	0.91
SB	2.6%	0.80
All	2.1%	0.91

Traffic Counts - Motorized Vehicles

Interval Start Time	PH 10 RD Eastbound				PH 10 RD Westbound				SR-411 Northbound				SR-411 Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	2	0	0	8	5	5	0	4	3	5	0	5	5	1	43	828
4:05 PM	0	1	5	1	0	6	8	8	0	3	12	11	0	4	4	1	64	854
4:10 PM	0	0	8	2	0	12	9	8	0	3	3	11	0	6	3	1	66	857
4:15 PM	0	3	2	1	0	7	6	7	0	3	9	7	0	1	4	1	51	860
4:20 PM	0	1	5	1	0	10	4	11	0	3	11	8	0	7	7	2	70	878
4:25 PM	0	4	5	1	0	9	5	10	0	5	10	12	0	4	5	2	72	864
4:30 PM	0	3	3	2	0	10	4	13	0	1	13	7	0	9	9	3	77	840
4:35 PM	0	4	4	1	0	11	7	7	0	8	14	5	0	11	8	1	81	821
4:40 PM	0	5	7	1	0	9	3	13	0	7	10	12	0	9	8	0	84	782
4:45 PM	0	1	4	0	0	6	5	10	0	0	8	7	0	12	11	0	64	744
4:50 PM	0	2	2	3	0	6	2	15	0	1	12	9	0	11	5	4	72	729
4:55 PM	0	1	3	1	0	9	4	23	0	2	15	8	0	6	11	1	84	707
5:00 PM	0	1	4	1	0	6	2	21	0	1	10	11	0	5	4	3	69	671
5:05 PM	0	3	6	0	0	7	5	12	0	6	8	9	0	5	5	1	67	
5:10 PM	0	1	0	1	0	9	8	15	0	4	9	6	0	7	7	2	69	
5:15 PM	0	2	2	2	0	6	5	14	0	5	15	8	0	4	3	3	69	
5:20 PM	0	1	1	0	0	11	4	7	0	4	9	7	0	4	3	5	56	
5:25 PM	0	1	2	1	0	8	3	4	0	2	13	5	0	4	3	2	48	
5:30 PM	0	2	3	2	0	8	5	9	0	2	9	10	0	3	5	0	58	
5:35 PM	0	0	2	0	0	2	4	6	0	1	16	4	0	3	3	1	42	
5:40 PM	0	2	1	1	0	3	1	10	0	1	9	6	0	6	5	1	46	
5:45 PM	0	0	1	0	0	3	3	5	0	1	11	10	0	12	2	1	49	
5:50 PM	0	1	3	4	0	4	3	12	0	2	7	4	0	5	3	2	50	
5:55 PM	0	1	3	0	0	7	4	7	0	2	12	4	0	3	4	1	48	
Count Total	0	40	78	26	0	177	109	252	0	71	248	186	0	146	127	39	1,499	
Peak Hour	0	28	45	14	0	98	54	164	0	43	135	102	0	90	83	22	878	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	1	1	0	0	2	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	1	0	0	0	1	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	1	0	1	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	2	0	2	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	2	2	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	1	0	0	1	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	1	1
4:30 PM	0	1	1	0	2	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	1	1	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	1	0	1	2	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	2	0	0	2	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	2	0	0	0	2	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	2	0	2	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	1	0	1	2	5:05 PM	0	0	0	0	0	5:05 PM	5	0	0	5	10
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	2	0	2	5:15 PM	0	0	0	0	0	5:15 PM	5	0	0	0	5
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	1	0	1	5:50 PM	0	0	0	0	0	5:50 PM	1	0	0	1	2
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	1	0	0	1	2
Count Total	4	7	7	5	23	Count Total	0	0	2	0	2	Count Total	12	0	0	8	20
Peak Hour	2	6	5	5	18	Peak Hour	0	0	0	0	0	Peak Hour	10	0	0	6	16



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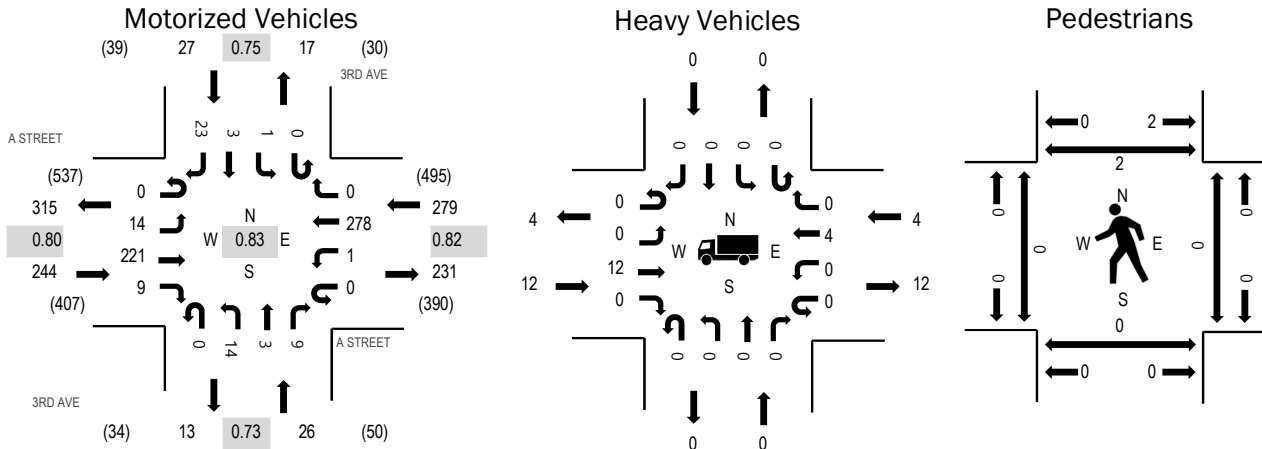
Location: 2 3RD AVE & A STREET PM

Date: Tuesday, October 17, 2023

Peak Hour: 04:15 PM - 05:15 PM

Peak 15-Minutes: 04:40 PM - 04:55 PM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	4.9%	0.80
WB	1.4%	0.82
NB	0.0%	0.73
SB	0.0%	0.75
All	2.8%	0.83

Traffic Counts - Motorized Vehicles

Interval Start Time	A STREET Eastbound				A STREET Westbound				3RD AVE Northbound				3RD AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	3	13	2	0	0	25	0	0	0	0	0	0	0	2	0	45	557
4:05 PM	0	0	17	0	0	0	27	0	0	2	1	0	0	0	0	0	47	558
4:10 PM	0	0	12	2	0	0	25	0	0	0	0	2	0	0	0	1	42	569
4:15 PM	0	0	23	1	0	0	19	0	0	1	1	0	0	0	1	1	47	576
4:20 PM	0	0	11	0	0	0	19	0	0	1	0	2	0	0	0	2	35	560
4:25 PM	0	2	18	0	0	0	24	0	0	1	0	1	0	0	0	1	47	561
4:30 PM	0	2	21	0	0	0	21	0	0	0	0	0	0	1	0	1	46	548
4:35 PM	0	3	14	1	0	0	22	0	0	0	0	0	0	0	0	2	42	527
4:40 PM	0	0	25	1	0	1	37	0	0	2	0	2	0	0	0	2	70	522
4:45 PM	0	1	21	0	0	0	25	0	0	1	0	0	0	0	0	3	51	479
4:50 PM	0	3	24	1	0	0	19	0	0	2	0	0	0	0	0	3	52	467
4:55 PM	0	0	9	1	0	0	16	0	0	3	0	1	0	0	1	2	33	443
5:00 PM	0	1	17	2	0	0	21	0	0	1	1	1	0	0	0	2	46	434
5:05 PM	0	2	20	1	0	0	29	0	0	1	1	1	0	0	1	2	58	
5:10 PM	0	0	18	1	0	0	26	0	0	1	0	1	0	0	0	2	49	
5:15 PM	0	1	10	2	0	1	16	0	0	0	0	1	0	0	0	0	31	
5:20 PM	0	0	14	2	0	0	19	0	0	1	0	0	0	0	0	0	36	
5:25 PM	0	1	6	1	0	0	19	0	0	1	0	2	0	0	0	4	34	
5:30 PM	0	0	12	0	0	0	10	0	0	1	0	2	0	0	0	0	25	
5:35 PM	0	0	14	1	0	1	15	1	0	1	1	3	0	0	0	0	37	
5:40 PM	0	0	9	1	0	2	13	0	0	0	1	0	0	1	0	0	27	
5:45 PM	0	2	19	0	0	2	14	0	0	0	0	0	0	0	2	0	39	
5:50 PM	0	1	12	0	0	0	14	0	0	0	0	1	0	0	0	0	28	
5:55 PM	0	0	6	0	0	0	12	0	0	0	1	3	0	0	0	2	24	
Count Total	0	22	365	20	0	7	487	1	0	20	7	23	0	2	7	30	991	
Peak Hour	0	14	221	9	0	1	278	0	0	14	3	9	0	1	3	23	576	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	1	0	1	0	2	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	2	0	1	0	3	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	1	0	1	0	2	4:10 PM	0	0	0	0	0	4:10 PM	0	1	0	0	1
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	1	0	0	0	1	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	2	2
4:25 PM	1	0	0	0	1	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	2	0	2	4:30 PM	1	0	0	0	1	4:30 PM	0	0	0	0	0
4:35 PM	1	0	0	0	1	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	1	0	0	0	1	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	2	0	0	0	2	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	1	1
4:50 PM	1	0	0	0	1	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	1	0	1	4:55 PM	1	0	0	0	1	4:55 PM	0	0	0	0	0
5:00 PM	1	0	1	0	2	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	1	0	0	0	1	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	3	0	0	0	3	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	1	0	1	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	1	1
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	3	1	4
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	1	0	0	0	1	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	2	2
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	1	1	2
5:40 PM	1	0	1	0	2	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	18	0	9	0	27	Count Total	2	0	0	0	2	Count Total	0	1	4	8	13
Peak Hour	12	0	4	0	16	Peak Hour	2	0	0	0	2	Peak Hour	0	0	0	3	3



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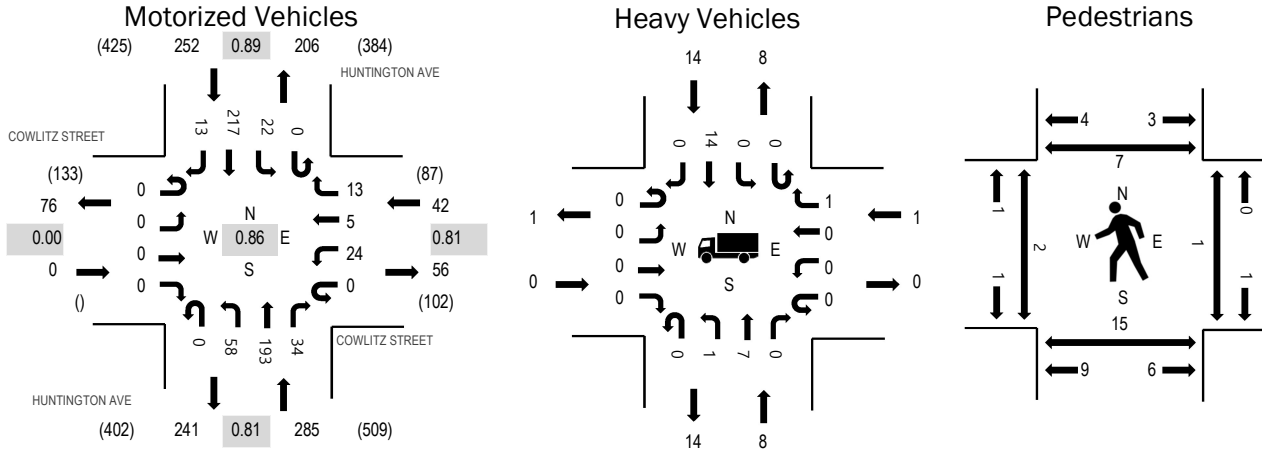
Location: 3 HUNTINGTON AVE & COWLITZ STREET PM

Date: Tuesday, October 17, 2023

Peak Hour: 04:05 PM - 05:05 PM

Peak 15-Minutes: 04:10 PM - 04:25 PM

Peak Hour



	HV%	PHF
EB	0.0%	0.00
WB	2.4%	0.81
NB	2.8%	0.81
SB	5.6%	0.89
All	4.0%	0.86

Traffic Counts - Motorized Vehicles

Interval Start Time	COWLITZ STREET Eastbound				COWLITZ STREET Westbound				HUNTINGTON AVE Northbound				HUNTINGTON AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	0	0	0	2	0	1	0	1	19	3	0	2	18	2	48	575
4:05 PM	0	0	0	0	0	1	1	0	0	3	13	1	0	0	20	4	43	579
4:10 PM	0	0	0	0	0	0	0	2	0	3	21	3	0	1	21	2	53	571
4:15 PM	0	0	0	0	0	6	2	0	0	9	19	3	0	3	14	1	57	568
4:20 PM	0	0	0	0	0	3	0	3	0	6	21	4	0	2	19	0	58	550
4:25 PM	0	0	0	0	0	1	0	2	0	5	18	0	0	4	21	1	52	524
4:30 PM	0	0	0	0	0	0	0	0	0	6	13	4	0	2	22	1	48	508
4:35 PM	0	0	0	0	0	2	0	1	0	5	16	2	0	0	21	0	47	502
4:40 PM	0	0	0	0	0	0	0	0	0	3	15	3	0	4	15	1	41	501
4:45 PM	0	0	0	0	0	5	1	1	0	4	10	4	0	1	15	1	42	485
4:50 PM	0	0	0	0	0	1	0	1	0	3	17	3	0	1	15	1	42	477
4:55 PM	0	0	0	0	0	3	1	2	0	5	13	0	0	1	19	0	44	470
5:00 PM	0	0	0	0	0	2	0	1	0	6	17	7	0	3	15	1	52	446
5:05 PM	0	0	0	0	0	2	1	0	0	5	14	1	0	0	8	4	35	
5:10 PM	0	0	0	0	0	2	1	1	0	3	18	3	0	1	16	5	50	
5:15 PM	0	0	0	0	0	1	1	1	0	2	9	2	0	2	19	2	39	
5:20 PM	0	0	0	0	0	4	1	0	0	2	13	1	0	2	7	2	32	
5:25 PM	0	0	0	0	0	3	0	3	0	4	13	2	0	0	11	0	36	
5:30 PM	0	0	0	0	0	0	2	2	0	4	17	2	0	3	12	0	42	
5:35 PM	0	0	0	0	0	4	1	1	0	3	18	1	0	2	16	0	46	
5:40 PM	0	0	0	0	0	1	0	2	0	1	10	2	0	3	6	0	25	
5:45 PM	0	0	0	0	0	0	0	0	0	2	18	3	0	1	10	0	34	
5:50 PM	0	0	0	0	0	3	0	3	0	0	10	4	0	1	12	2	35	
5:55 PM	0	0	0	0	0	1	1	0	0	5	5	4	0	1	3	0	20	
Count Total	0	0	0	0	0	47	13	27	0	90	357	62	0	40	355	30	1,021	
Peak Hour	0	0	0	0	0	24	5	13	0	58	193	34	0	22	217	13	579	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	1	1	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	3	3	4:05 PM	0	0	0	0	0	4:05 PM	2	1	0	0	3
4:10 PM	0	2	0	0	2	4:10 PM	0	0	0	0	0	4:10 PM	0	1	0	0	1
4:15 PM	0	0	0	2	2	4:15 PM	0	0	0	0	0	4:15 PM	0	1	0	1	2
4:20 PM	0	1	0	0	1	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	2	2
4:25 PM	0	1	0	2	3	4:25 PM	0	0	0	0	0	4:25 PM	0	2	0	0	2
4:30 PM	0	2	0	3	5	4:30 PM	0	0	0	0	0	4:30 PM	0	1	0	1	2
4:35 PM	0	0	0	1	1	4:35 PM	0	0	0	0	0	4:35 PM	0	1	1	0	2
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	1	1	4:45 PM	0	0	0	0	0	4:45 PM	0	2	0	2	4
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	3	0	0	3
4:55 PM	0	1	1	1	3	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	1	1
5:00 PM	0	1	0	1	2	5:00 PM	0	0	0	0	0	5:00 PM	0	4	0	0	4
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	1	0	1	2
5:10 PM	0	3	0	1	4	5:10 PM	0	0	0	0	0	5:10 PM	1	0	0	3	4
5:15 PM	0	0	0	1	1	5:15 PM	0	0	0	0	0	5:15 PM	1	3	0	0	4
5:20 PM	0	0	0	2	2	5:20 PM	0	0	0	0	0	5:20 PM	1	1	0	2	4
5:25 PM	0	1	0	0	1	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	1	0	0	1	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	1	0	0	1	5:35 PM	0	0	0	0	0	5:35 PM	0	1	1	0	2
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	1	0	1
5:45 PM	0	1	0	0	1	5:45 PM	0	0	0	0	0	5:45 PM	0	1	2	0	3
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	4	4
Count Total	0	15	1	19	35	Count Total	0	0	0	0	0	Count Total	5	23	5	17	50
Peak Hour	0	8	1	14	23	Peak Hour	0	0	0	0	0	Peak Hour	2	16	1	7	26



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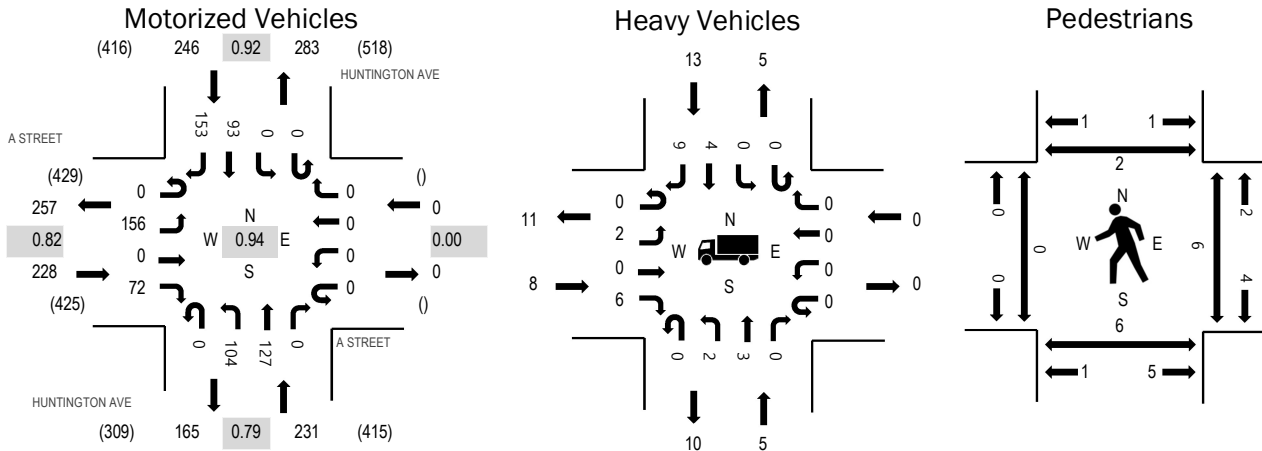
Location: 4 HUNTINGTON AVE & A STREET PM

Date: Tuesday, October 17, 2023

Peak Hour: 04:00 PM - 05:00 PM

Peak 15-Minutes: 04:10 PM - 04:25 PM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	3.5%	0.82
WB	0.0%	0.00
NB	2.2%	0.79
SB	5.3%	0.92
All	3.7%	0.94

Traffic Counts - Motorized Vehicles

Interval Start Time	A STREET Eastbound				A STREET Westbound				HUNTINGTON AVE Northbound				HUNTINGTON AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	13	0	5	0	0	0	0	0	11	10	0	0	0	6	13	58	705
4:05 PM	0	8	0	3	0	0	0	0	0	14	9	0	0	0	4	15	53	703
4:10 PM	0	16	0	1	0	0	0	0	0	10	13	0	0	0	6	15	61	692
4:15 PM	0	16	0	4	0	0	0	0	0	9	18	0	0	0	11	11	69	685
4:20 PM	0	13	0	3	0	0	0	0	0	6	15	0	0	0	8	13	58	666
4:25 PM	0	13	0	4	0	0	0	0	0	8	11	0	0	0	9	15	60	646
4:30 PM	0	13	0	8	0	0	0	0	0	7	11	0	0	0	11	11	61	626
4:35 PM	0	10	0	9	0	0	0	0	0	4	12	0	0	0	7	14	56	612
4:40 PM	0	16	0	12	0	0	0	0	0	6	6	0	0	0	9	10	59	610
4:45 PM	0	10	0	12	0	0	0	0	0	10	10	0	0	0	8	12	62	586
4:50 PM	0	17	0	3	0	0	0	0	0	8	7	0	0	0	6	10	51	578
4:55 PM	0	11	0	8	0	0	0	0	0	11	5	0	0	0	8	14	57	569
5:00 PM	0	13	0	6	0	0	0	0	0	6	12	0	0	0	11	8	56	551
5:05 PM	0	10	0	2	0	0	0	0	0	8	12	0	0	0	2	8	42	
5:10 PM	0	15	0	1	0	0	0	0	0	7	12	0	0	0	13	6	54	
5:15 PM	0	8	0	5	0	0	0	0	0	7	5	0	0	0	10	15	50	
5:20 PM	0	9	0	3	0	0	0	0	0	7	7	0	0	0	4	8	38	
5:25 PM	0	11	0	3	0	0	0	0	0	4	8	0	0	0	4	10	40	
5:30 PM	0	11	0	8	0	0	0	0	0	7	10	0	0	0	6	5	47	
5:35 PM	0	11	0	9	0	0	0	0	0	4	10	0	0	0	10	10	54	
5:40 PM	0	6	0	11	0	0	0	0	0	4	7	0	0	0	2	5	35	
5:45 PM	0	15	0	10	0	0	0	0	0	8	10	0	0	0	7	4	54	
5:50 PM	0	11	0	3	0	0	0	0	0	7	5	0	0	0	4	12	42	
5:55 PM	0	8	0	8	0	0	0	0	0	8	9	0	0	0	2	4	39	
Count Total	0	284	0	141	0	0	0	0	0	181	234	0	0	0	168	248	1,256	
Peak Hour	0	156	0	72	0	0	0	0	0	104	127	0	0	0	93	153	705	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	2	0	0	1	3	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	1	2	0	2	5	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	1	1
4:10 PM	1	0	0	1	2	4:10 PM	0	0	0	0	0	4:10 PM	0	0	2	0	2
4:15 PM	0	0	0	2	2	4:15 PM	0	0	0	0	0	4:15 PM	0	0	1	0	1
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	1	1
4:25 PM	1	0	0	2	3	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	1	0	1	2	4:30 PM	0	0	0	0	0	4:30 PM	1	0	0	0	1
4:35 PM	0	0	0	1	1	4:35 PM	0	0	0	0	0	4:35 PM	0	5	1	0	6
4:40 PM	1	0	0	1	2	4:40 PM	0	0	0	0	0	4:40 PM	0	1	1	0	2
4:45 PM	2	0	0	0	2	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	1	0	1	2	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	1	0	1	2	4:55 PM	0	0	0	0	0	4:55 PM	0	0	1	0	1
5:00 PM	0	0	0	1	1	5:00 PM	0	0	0	0	0	5:00 PM	0	2	0	0	2
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	3	0	0	0	3	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	2	2
5:15 PM	0	1	0	1	2	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	1	1	5:20 PM	0	0	0	0	0	5:20 PM	0	1	1	1	3
5:25 PM	1	0	0	0	1	5:25 PM	0	0	0	0	0	5:25 PM	0	4	0	0	4
5:30 PM	1	0	0	0	1	5:30 PM	0	0	0	0	0	5:30 PM	0	2	0	0	2
5:35 PM	1	1	0	0	2	5:35 PM	0	0	0	0	0	5:35 PM	0	1	1	0	2
5:40 PM	1	2	0	0	3	5:40 PM	0	0	0	0	0	5:40 PM	0	0	1	0	1
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	2	0	2
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	1	0	0	1	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	15	10	0	16	41	Count Total	0	0	0	0	0	Count Total	1	16	11	5	33
Peak Hour	8	5	0	13	26	Peak Hour	0	0	0	0	0	Peak Hour	1	6	6	2	15



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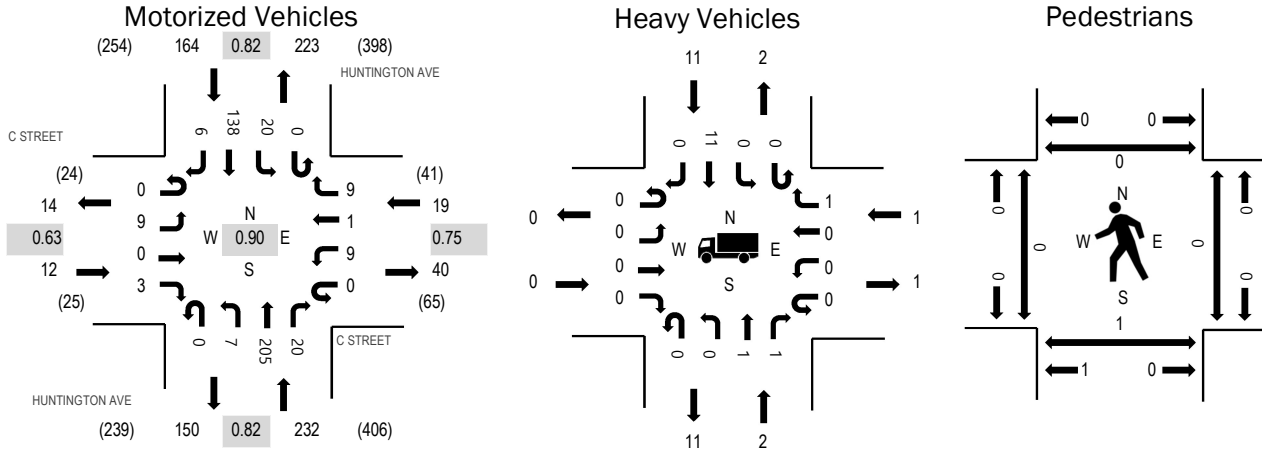
Location: 5 HUNTINGTON AVE & C STREET PM

Date: Tuesday, October 17, 2023

Peak Hour: 04:05 PM - 05:05 PM

Peak 15-Minutes: 04:20 PM - 04:35 PM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.63
WB	5.3%	0.75
NB	0.9%	0.82
SB	6.7%	0.82
All	3.3%	0.90

Traffic Counts - Motorized Vehicles

Interval Start Time	C STREET Eastbound				C STREET Westbound				HUNTINGTON AVE Northbound				HUNTINGTON AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	0	1	0	0	1	0	0	1	23	0	0	1	6	2	35	418
4:05 PM	0	2	0	0	0	1	0	2	0	0	21	2	0	3	6	0	37	427
4:10 PM	0	0	0	0	0	0	0	0	0	0	22	2	0	1	9	1	35	419
4:15 PM	0	0	0	1	0	1	0	0	0	0	22	0	0	0	10	0	34	415
4:20 PM	0	3	0	0	0	0	0	0	0	2	21	3	0	2	9	1	41	402
4:25 PM	0	0	0	1	0	2	0	2	0	2	21	1	0	3	9	1	42	388
4:30 PM	0	0	0	0	0	1	0	0	0	1	13	3	0	3	14	1	36	368
4:35 PM	0	1	0	0	0	1	0	1	0	1	12	0	0	0	15	0	31	358
4:40 PM	0	1	0	0	0	0	0	0	0	0	11	3	0	0	17	0	32	348
4:45 PM	0	0	0	0	0	0	0	1	0	0	17	1	0	4	14	0	37	334
4:50 PM	0	1	0	0	0	0	0	0	0	0	17	3	0	1	7	0	29	327
4:55 PM	0	0	0	0	0	0	1	2	0	1	10	0	0	1	13	1	29	320
5:00 PM	0	1	0	1	0	3	0	1	0	0	18	2	0	2	15	1	44	308
5:05 PM	0	0	0	2	0	1	0	0	0	0	16	2	0	1	7	0	29	
5:10 PM	0	0	1	0	0	2	0	0	0	0	15	1	0	1	10	1	31	
5:15 PM	0	1	0	0	0	0	0	2	0	0	9	2	0	1	5	1	21	
5:20 PM	0	1	0	1	0	1	0	1	0	0	11	2	0	0	8	2	27	
5:25 PM	0	0	1	0	0	0	0	0	0	0	13	4	0	0	3	1	22	
5:30 PM	0	1	0	2	0	1	0	2	0	0	11	1	0	0	8	0	26	
5:35 PM	0	0	0	0	0	0	1	1	0	0	15	0	0	0	4	0	21	
5:40 PM	0	1	0	0	0	0	0	0	0	0	8	2	0	1	6	0	18	
5:45 PM	0	1	0	0	0	3	0	4	0	0	13	0	0	0	9	0	30	
5:50 PM	0	0	0	0	0	1	0	0	0	0	9	0	0	4	8	0	22	
5:55 PM	0	0	0	0	0	0	0	1	0	0	16	0	0	0	0	0	17	
Count Total	0	14	2	9	0	18	3	20	0	8	364	34	0	29	212	13	726	
Peak Hour	0	9	0	3	0	9	1	9	0	7	205	20	0	20	138	6	427	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	1	1	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	1	0	2	3	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	1	0	0	1	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	2	2	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	1	1	4:35 PM	0	0	0	0	0	4:35 PM	0	1	0	0	1
4:40 PM	0	0	0	3	3	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	2	2	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	1	0	1	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	1	1	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	1	0	0	1	5:10 PM	0	0	0	0	0	5:10 PM	0	0	2	0	2
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	1	0	1
5:20 PM	0	0	0	2	2	5:20 PM	0	0	0	0	0	5:20 PM	0	0	1	0	1
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	1	1	5:30 PM	0	0	0	0	0	5:30 PM	0	0	1	0	1
5:35 PM	0	1	0	0	1	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	4	4	2	0	10
5:45 PM	0	1	0	0	1	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	1	0	0	1	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	0	6	1	15	22	Count Total	0	0	0	0	0	Count Total	4	5	7	0	16
Peak Hour	0	2	1	11	14	Peak Hour	0	0	0	0	0	Peak Hour	0	1	0	0	1



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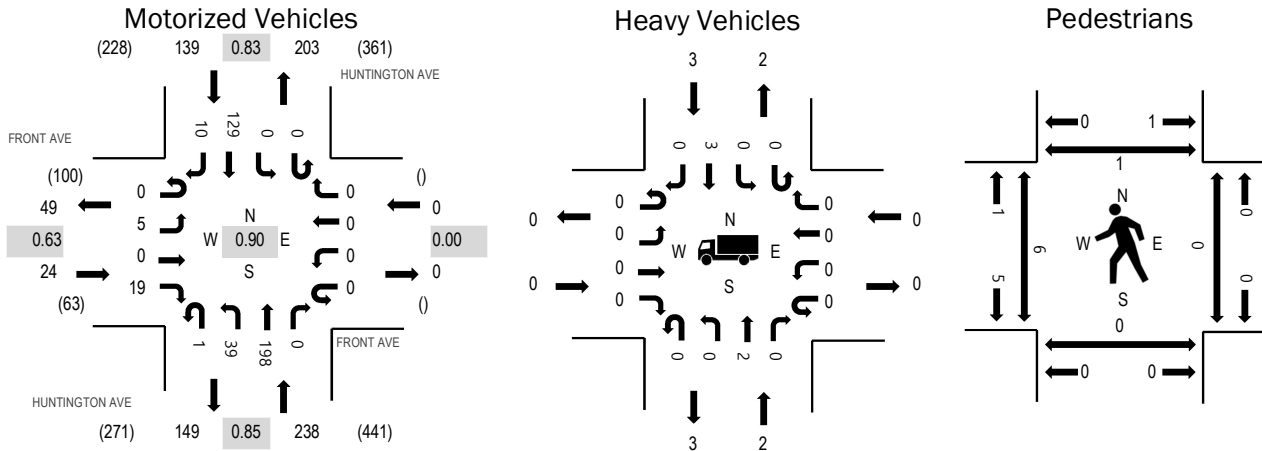
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Location: 6 HUNTINGTON AVE & FRONT AVE PM

Date: Tuesday, October 17, 2023

Peak Hour: 04:10 PM - 05:10 PM

Peak 15-Minutes: 04:25 PM - 04:40 PM

Peak Hour**Traffic Counts - Motorized Vehicles**

Interval Start Time	FRONT AVE Eastbound				FRONT AVE Westbound				HUNTINGTON AVE Northbound				HUNTINGTON AVE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	0	4	0	0	0	0	0	3	20	0	0	0	6	1	34	394
4:05 PM	0	1	0	2	0	0	0	0	0	3	11	0	0	0	7	0	24	393
4:10 PM	0	2	0	2	0	0	0	0	0	3	21	0	0	0	11	1	40	401
4:15 PM	0	1	0	0	0	0	0	0	0	3	19	0	0	0	12	0	35	398
4:20 PM	0	0	0	2	0	0	0	0	0	3	18	0	0	0	7	0	30	393
4:25 PM	0	0	0	1	0	0	0	0	0	4	23	0	0	0	9	2	39	388
4:30 PM	0	0	0	1	0	0	0	0	0	3	16	0	0	0	11	3	34	375
4:35 PM	0	0	0	1	0	0	0	0	0	6	14	0	0	0	16	1	38	368
4:40 PM	0	0	0	2	0	0	0	0	0	2	11	0	0	0	11	0	26	359
4:45 PM	0	1	0	3	0	0	0	0	0	2	16	0	0	0	8	2	32	355
4:50 PM	0	0	0	1	0	0	0	0	0	3	18	0	0	0	9	0	31	354
4:55 PM	0	1	0	4	0	0	0	0	1	2	11	0	0	0	12	0	31	352
5:00 PM	0	0	0	1	0	0	0	0	0	4	14	0	0	0	13	1	33	338
5:05 PM	0	0	0	1	0	0	0	0	0	4	17	0	0	0	10	0	32	
5:10 PM	0	0	0	3	0	0	0	0	0	6	18	0	0	0	9	1	37	
5:15 PM	0	0	0	5	0	0	0	0	0	6	10	0	0	0	9	0	30	
5:20 PM	0	0	0	3	0	0	0	0	0	3	11	0	0	0	8	0	25	
5:25 PM	0	0	0	6	0	0	0	0	0	3	13	0	0	0	4	0	26	
5:30 PM	0	0	0	0	0	0	0	0	0	2	17	0	0	0	8	0	27	
5:35 PM	0	0	0	2	0	0	0	0	0	7	10	0	0	0	9	1	29	
5:40 PM	0	0	0	1	0	0	0	0	0	4	14	0	0	0	3	0	22	
5:45 PM	0	0	0	3	0	0	0	0	0	3	14	0	0	0	11	0	31	
5:50 PM	0	1	0	4	0	0	0	0	0	4	11	0	0	0	8	1	29	
5:55 PM	0	0	0	4	0	0	0	0	0	3	7	0	0	0	3	0	17	
Count Total	0	7	0	56	0	0	0	0	1	86	354	0	0	0	214	14	732	
Peak Hour	0	5	0	19	0	0	0	0	1	39	198	0	0	0	129	10	401	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	1	0	0	1	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	1	0	1	2	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	1	0	0	1	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	5	0	0	0	5
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	1	1	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	1	1	5:05 PM	0	0	0	0	0	5:05 PM	1	0	0	1	2
5:10 PM	0	1	0	0	1	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	1	0	0	1	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	2	0	0	2	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	1	0	0	2	3
5:40 PM	0	1	0	0	1	5:40 PM	0	0	0	0	0	5:40 PM	2	0	0	7	9
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	1	0	0	0	1	5:50 PM	0	0	0	0	0	5:50 PM	1	0	0	1	2
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	1	8	0	3	12	Count Total	0	0	0	0	0	Count Total	10	0	0	11	21
Peak Hour	0	2	0	3	5	Peak Hour	0	0	0	0	0	Peak Hour	6	0	0	1	7

Location: 7 HUNTINGTON AVE & LARSEN LANE PM

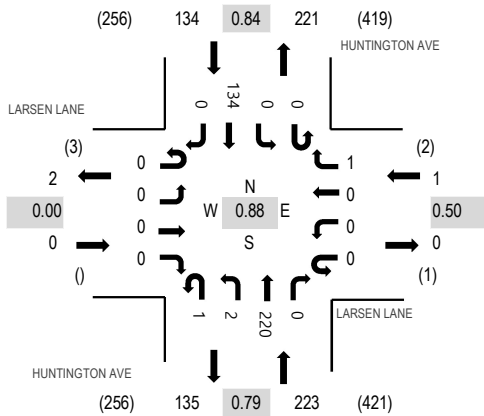
Date: Tuesday, October 17, 2023

Peak Hour: 04:10 PM - 05:10 PM

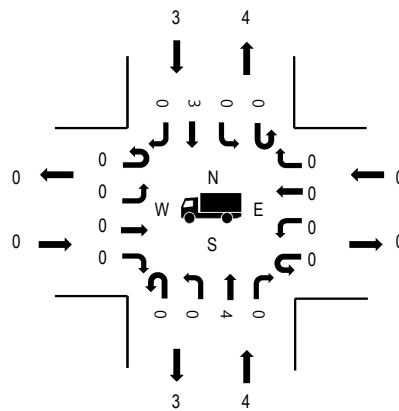
Peak 15-Minutes: 04:10 PM - 04:25 PM

Peak Hour

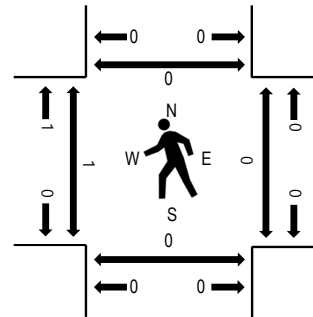
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	0.0%	0.50
NB	1.8%	0.79
SB	2.2%	0.84
All	2.0%	0.88

Traffic Counts - Motorized Vehicles

Interval Start Time	LARSEN LANE				LARSEN LANE				HUNTINGTON AVE				HUNTINGTON AVE				Total	Rolling Hour
	Eastbound				Westbound				Northbound				Southbound					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	0	0	0	0	0	0	0	0	18	0	0	0	11	0	29	357
4:05 PM	0	0	0	0	0	0	0	0	0	0	22	0	0	0	14	0	36	357
4:10 PM	0	0	0	0	0	0	0	0	0	1	25	0	0	0	13	0	39	358
4:15 PM	0	0	0	0	0	0	0	0	1	0	20	0	0	0	10	0	31	350
4:20 PM	0	0	0	0	0	0	0	0	0	1	23	0	0	0	8	0	32	347
4:25 PM	0	0	0	0	0	0	0	0	0	0	21	0	0	0	12	0	33	341
4:30 PM	0	0	0	0	0	0	0	0	0	0	17	0	0	0	7	0	24	334
4:35 PM	0	0	0	0	0	0	0	1	0	0	18	0	0	0	14	0	33	336
4:40 PM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	12	0	23	324
4:45 PM	0	0	0	0	0	0	0	0	0	0	19	0	0	0	8	0	27	325
4:50 PM	0	0	0	0	0	0	0	0	0	0	14	0	0	0	10	0	24	326
4:55 PM	0	0	0	0	0	0	0	0	0	0	13	0	0	0	13	0	26	328
5:00 PM	0	0	0	0	0	0	0	0	0	0	18	0	0	0	11	0	29	322
5:05 PM	0	0	0	0	0	0	0	0	0	0	21	0	0	0	16	0	37	
5:10 PM	0	0	0	0	0	0	0	0	0	0	21	0	0	0	10	0	31	
5:15 PM	0	0	0	0	0	0	0	0	0	0	15	0	0	0	12	1	28	
5:20 PM	0	0	0	0	0	0	0	0	0	0	18	0	0	0	8	0	26	
5:25 PM	0	0	0	0	0	0	0	0	0	0	14	0	0	0	12	0	26	
5:30 PM	0	0	0	0	0	1	0	0	0	0	18	0	0	0	7	0	26	
5:35 PM	0	0	0	0	0	0	0	0	0	0	12	0	0	0	9	0	21	
5:40 PM	0	0	0	0	0	0	0	0	0	0	19	0	0	0	5	0	24	
5:45 PM	0	0	0	0	0	0	0	0	0	0	17	0	0	0	11	0	28	
5:50 PM	0	0	0	0	0	0	0	0	0	0	13	0	0	0	13	0	26	
5:55 PM	0	0	0	0	0	0	0	0	0	0	11	0	0	1	8	0	20	
Count Total	0	0	0	0	0	1	0	1	1	2	418	0	0	1	254	1	679	
Peak Hour	0	0	0	0	0	0	0	1	1	2	220	0	0	0	134	0	358	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	1	0	0	1	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	1	0	1	2	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	1	0	0	1	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	1	0	0	1	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	1	0	1	2	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	1	0	0	0	1
5:05 PM	0	0	0	1	1	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	1	0	0	1	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	1	0	0	1	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	1	0	0	1	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	1	0	0	1	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	0	9	0	3	12	Count Total	0	0	0	0	0	Count Total	1	0	0	0	1
Peak Hour	0	4	0	3	7	Peak Hour	0	0	0	0	0	Peak Hour	1	0	0	0	1



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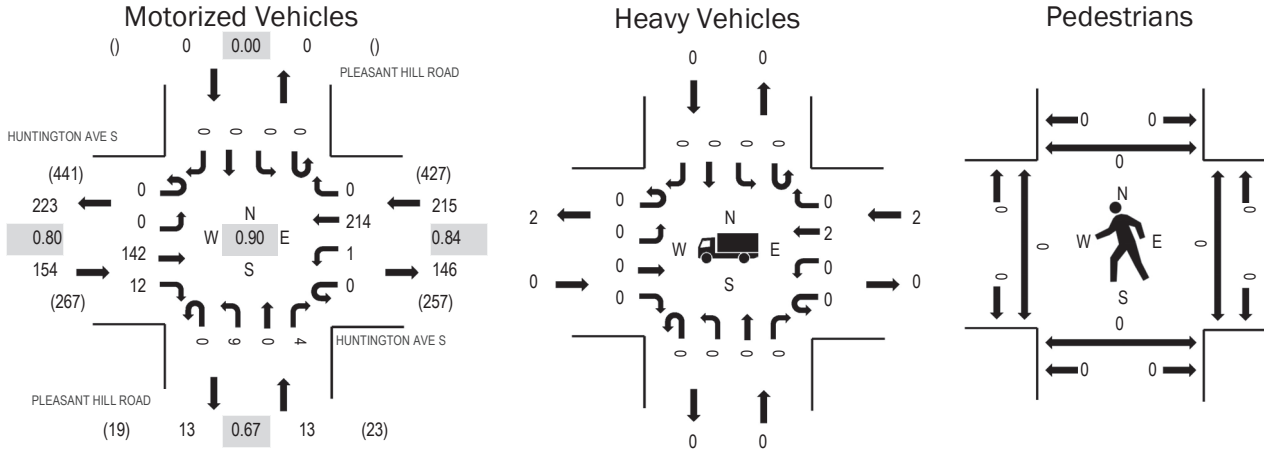
Location: 1 PLEASANT HILL ROAD & HUNTINGTON AVE S PM

Date: Tuesday, February 14, 2023

Peak Hour: 04:25 PM - 05:25 PM

Peak 15-Minutes: 04:35 PM - 04:50 PM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.80
WB	0.9%	0.84
NB	0.0%	0.67
SB	0.0%	0.00
All	0.5%	0.90

Traffic Counts - Motorized Vehicles

Interval Start Time	HUNTINGTON AVE S Eastbound				HUNTINGTON AVE S Westbound				PLEASANT HILL ROAD Northbound				PLEASANT HILL ROAD Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	13	1	0	0	23	0	0	0	0	0	0	0	0	0	37	381
4:05 PM	0	0	14	0	0	0	14	0	0	0	0	0	0	0	0	0	28	373
4:10 PM	0	0	13	0	0	0	17	0	0	2	0	0	0	0	0	0	32	376
4:15 PM	0	0	9	0	0	0	23	0	0	1	0	0	0	0	0	0	33	381
4:20 PM	0	0	12	2	0	0	12	0	0	1	0	0	0	0	0	0	27	379
4:25 PM	0	0	11	1	0	0	23	0	0	0	0	0	0	0	0	0	35	382
4:30 PM	0	0	7	0	0	0	21	0	0	1	0	0	0	0	0	0	29	369
4:35 PM	0	0	17	3	0	0	20	0	0	1	0	0	0	0	0	0	41	367
4:40 PM	0	0	12	3	0	0	13	0	0	0	0	0	0	0	0	0	28	354
4:45 PM	0	0	14	0	0	0	23	0	0	0	0	0	0	0	0	0	37	346
4:50 PM	0	0	13	0	0	0	12	0	0	2	0	1	0	0	0	0	28	335
4:55 PM	0	0	8	3	0	0	14	0	0	1	0	0	0	0	0	0	26	337
5:00 PM	0	0	8	0	0	0	19	0	0	2	0	0	0	0	0	0	29	336
5:05 PM	0	0	17	0	0	1	12	0	0	0	0	1	0	0	0	0	31	
5:10 PM	0	0	14	1	0	0	20	0	0	1	0	1	0	0	0	0	37	
5:15 PM	0	0	11	0	0	0	19	0	0	0	0	1	0	0	0	0	31	
5:20 PM	0	0	10	1	0	0	18	0	0	1	0	0	0	0	0	0	30	
5:25 PM	0	0	6	0	0	0	15	0	0	0	0	1	0	0	0	0	22	
5:30 PM	0	0	8	0	0	0	18	0	0	1	0	0	0	0	0	0	27	
5:35 PM	0	0	9	1	0	0	18	0	0	0	0	0	0	0	0	0	28	
5:40 PM	0	0	4	1	0	0	13	0	1	0	0	1	0	0	0	0	20	
5:45 PM	0	0	6	0	0	0	19	0	0	0	0	1	0	0	0	0	26	
5:50 PM	0	0	10	0	0	0	20	0	0	0	0	0	0	0	0	0	30	
5:55 PM	0	0	4	0	0	0	20	0	0	1	0	0	0	0	0	0	25	
Count Total	0	0	250	17	0	1	426	0	1	15	0	7	0	0	0	0	717	
Peak Hour	0	0	142	12	0	1	214	0	0	9	0	4	0	0	0	0	382	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	2	0	0	0	2	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	2	0	2	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	1	0	1	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	1	0	1	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	1	0	1	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	2	0	2	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	1	0	1	0	2	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	3	0	8	0	11	Count Total	0	0	0	0	0	Count Total	0	0	0	0	0
Peak Hour	0	0	2	0	2	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0

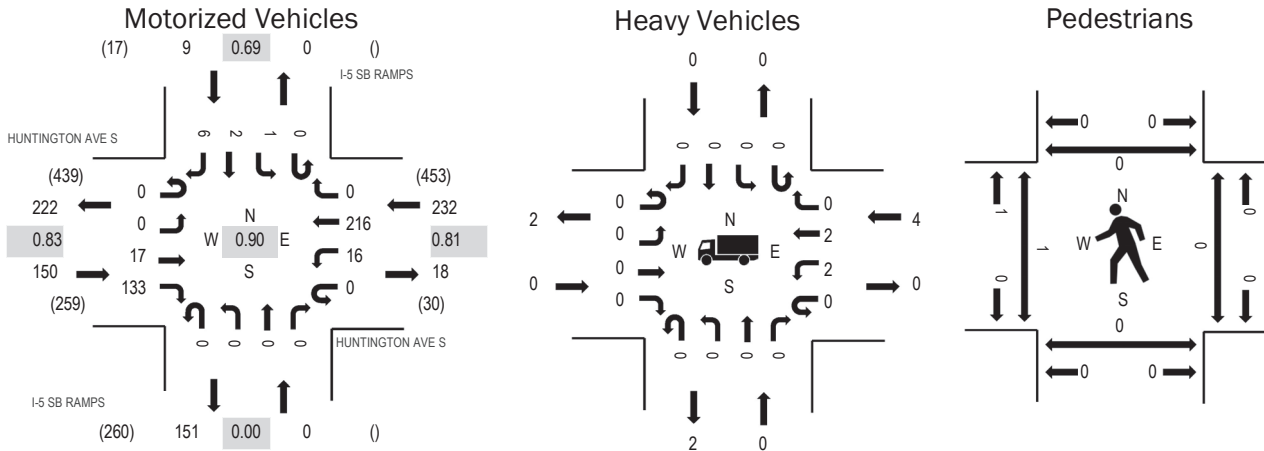
Location: 2 I-5 SB RAMPS & HUNTINGTON AVE S PM

Date: Tuesday, February 14, 2023

Peak Hour: 04:25 PM - 05:25 PM

Peak 15-Minutes: 04:25 PM - 04:40 PM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.83
WB	1.7%	0.81
NB	0.0%	0.00
SB	0.0%	0.69
All	1.0%	0.90

Traffic Counts - Motorized Vehicles

Interval Start Time	HUNTINGTON AVE S				HUNTINGTON AVE S				I-5 SB RAMPS				I-5 SB RAMPS				Total	Rolling Hour	
	Eastbound				Westbound				Northbound				Southbound						
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			
4:00 PM	0	0	0	13	0	0	23	0	0	0	0	0	0	0	0	0	0	36	382
4:05 PM	0	0	1	13	0	1	14	0	0	0	0	0	0	0	1	0	0	30	375
4:10 PM	0	0	1	12	0	0	18	0	0	0	0	0	0	0	0	0	0	31	383
4:15 PM	0	0	0	9	0	1	23	0	0	0	0	0	0	0	0	0	1	34	388
4:20 PM	0	0	2	11	0	1	11	0	0	0	0	0	0	0	1	0	0	26	386
4:25 PM	0	0	2	8	0	2	23	0	0	0	0	0	0	0	0	0	0	35	391
4:30 PM	0	0	0	9	0	2	21	0	0	0	0	0	0	0	0	0	0	32	379
4:35 PM	0	0	2	15	0	3	21	0	0	0	0	0	0	0	0	0	1	42	374
4:40 PM	0	0	1	12	0	1	14	0	0	0	0	0	0	0	0	0	0	28	360
4:45 PM	0	0	1	13	0	0	21	0	0	0	0	0	0	0	0	0	2	37	352
4:50 PM	0	0	3	11	0	3	11	0	0	0	0	0	0	0	0	0	0	28	342
4:55 PM	0	0	0	8	0	0	15	0	0	0	0	0	0	0	0	0	0	23	344
5:00 PM	0	0	2	6	0	1	19	0	0	0	0	0	0	0	0	0	1	29	347
5:05 PM	0	0	3	17	0	3	14	0	0	0	0	0	0	0	0	1	0	38	
5:10 PM	0	0	1	13	0	0	20	0	0	0	0	0	0	0	0	1	1	36	
5:15 PM	0	0	1	11	0	0	19	0	0	0	0	0	0	0	0	0	1	32	
5:20 PM	0	0	1	10	0	1	18	0	0	0	0	0	0	0	1	0	0	31	
5:25 PM	0	0	0	6	0	2	15	0	0	0	0	0	0	0	0	0	0	23	
5:30 PM	0	0	0	8	0	1	18	0	0	0	0	0	0	0	0	0	0	27	
5:35 PM	0	0	0	9	0	2	17	0	0	0	0	0	0	0	0	0	0	28	
5:40 PM	0	0	1	4	0	0	14	0	0	0	0	0	0	0	0	1	0	20	
5:45 PM	0	0	3	4	0	0	18	0	0	0	0	0	0	0	0	0	2	27	
5:50 PM	0	0	2	7	0	0	21	0	0	0	0	0	0	0	0	0	0	30	
5:55 PM	0	0	0	3	0	1	20	0	0	0	0	0	0	0	0	0	2	26	
Count Total	0	0	27	232	0	25	428	0	0	0	0	0	0	0	3	3	11	729	
Peak Hour	0	0	17	133	0	16	216	0	0	0	0	0	0	0	1	2	6	391	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	1	0	0	0	1	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	1	0	1	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	1	0	1	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0	4:30 PM	1	0	0	0	1
4:35 PM	0	0	3	0	3	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	1	0	0	0	1	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	2	0	5	0	7	Count Total	0	0	0	0	0	Count Total	1	0	0	0	1
Peak Hour	0	0	4	0	4	Peak Hour	0	0	0	0	0	Peak Hour	1	0	0	0	1



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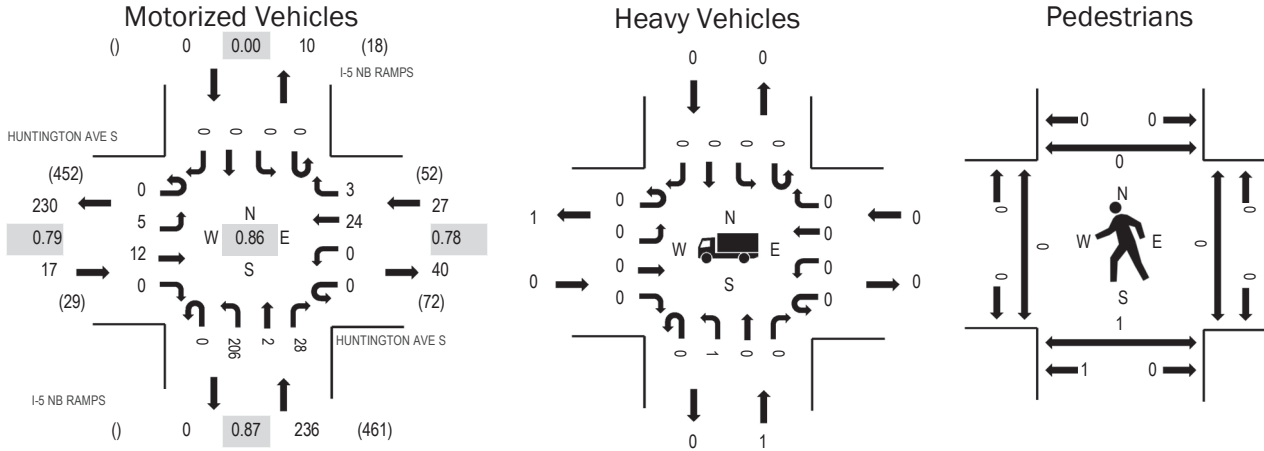
Location: 3 I-5 NB RAMPS & HUNTINGTON AVE S PM

Date: Tuesday, February 14, 2023

Peak Hour: 04:25 PM - 05:25 PM

Peak 15-Minutes: 04:25 PM - 04:40 PM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.79
WB	0.0%	0.78
NB	0.4%	0.87
SB	0.0%	0.00
All	0.4%	0.86

Traffic Counts - Motorized Vehicles

Interval Start Time	HUNTINGTON AVE S Eastbound				HUNTINGTON AVE S Westbound				I-5 NB RAMPS Northbound				I-5 NB RAMPS Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	0	0	0	0	3	0	0	20	0	1	0	0	0	0	24	268
4:05 PM	0	1	0	0	0	0	2	1	0	12	0	4	0	0	0	0	20	273
4:10 PM	0	1	0	0	0	0	3	0	0	16	0	1	0	0	0	0	21	272
4:15 PM	0	0	0	0	0	0	3	0	0	21	0	0	0	0	0	0	24	273
4:20 PM	0	0	3	0	0	0	2	0	0	10	0	2	0	0	0	0	17	275
4:25 PM	0	1	1	0	0	0	4	0	0	22	0	2	0	0	0	0	30	280
4:30 PM	0	0	0	0	0	0	3	1	0	21	0	2	0	0	0	0	27	270
4:35 PM	0	0	2	0	0	0	1	0	0	19	0	2	0	0	0	0	24	267
4:40 PM	0	0	1	0	0	0	1	0	0	13	0	2	0	0	0	0	17	264
4:45 PM	0	0	1	0	0	0	1	1	0	22	0	0	0	0	0	0	25	267
4:50 PM	0	0	3	0	0	0	3	0	0	12	1	2	0	0	0	0	21	263
4:55 PM	0	0	0	0	0	0	0	0	0	14	1	3	0	0	0	0	18	270
5:00 PM	0	1	1	0	0	0	3	0	0	19	0	5	0	0	0	0	29	274
5:05 PM	0	1	2	0	0	0	5	0	0	9	0	2	0	0	0	0	19	
5:10 PM	0	0	1	0	0	0	0	0	0	21	0	0	0	0	0	0	22	
5:15 PM	0	1	0	0	0	0	0	0	0	20	0	5	0	0	0	0	26	
5:20 PM	0	1	0	0	0	0	3	1	0	14	0	3	0	0	0	0	22	
5:25 PM	0	0	0	0	0	0	3	0	0	16	0	1	0	0	0	0	20	
5:30 PM	0	0	0	0	0	0	1	1	0	18	0	4	0	0	0	0	24	
5:35 PM	0	0	0	0	0	0	2	1	0	16	0	2	0	0	0	0	21	
5:40 PM	0	1	1	0	0	0	0	0	0	14	0	4	0	0	0	0	20	
5:45 PM	0	1	1	0	0	0	0	0	0	18	0	1	0	0	0	0	21	
5:50 PM	0	0	3	0	0	0	1	1	0	21	0	2	0	0	0	0	28	
5:55 PM	0	0	0	0	0	0	1	0	0	19	0	2	0	0	0	0	22	
Count Total	0	9	20	0	0	0	45	7	0	407	2	52	0	0	0	0	542	
Peak Hour	0	5	12	0	0	0	24	3	0	206	2	28	0	0	0	0	280	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	1	0	1	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	1	0	0	1	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	1	0	0	1	4:25 PM	0	0	1	0	1	4:25 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	1	0	0	1	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	1	0	1	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	0	3	2	0	5	Count Total	0	0	1	0	1	Count Total	0	1	0	0	1
Peak Hour	0	1	0	0	1	Peak Hour	0	0	1	0	1	Peak Hour	0	1	0	0	1

Appendix C – Operation Analysis

Level of Service Descriptions

Synchro Capacity Reports

Sidra (Roundabout) Capacity Analysis





Level of Service Definitions

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 (LOS)	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 (LOS)	Control Delay per Vehicle (Seconds)
A	<10
B	10-15
C	15-25
D	25-35
E	35-50
F	>50

HCM 7th AWSC
1: Westside Highway & SR-411

11/07/2023

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	50	24	50	47	136	8	81	76	143	89	14
Future Vol, veh/h	25	50	24	50	47	136	8	81	76	143	89	14
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	4	4	4	6	6	6	11	11	11	7	7	7
Mvmt Flow	31	63	30	63	59	170	10	101	95	179	111	18
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.4	12.5	11.1	13.8
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	25%	21%	58%
Vol Thru, %	49%	51%	20%	36%
Vol Right, %	46%	24%	58%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	165	99	233	246
LT Vol	8	25	50	143
Through Vol	81	50	47	89
RT Vol	76	24	136	14
Lane Flow Rate	206	124	291	308
Geometry Grp	1	1	1	1
Degree of Util (X)	0.316	0.201	0.433	0.48
Departure Headway (Hd)	5.516	5.835	5.358	5.614
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	650	611	670	640
Service Time	3.574	3.902	3.413	3.664
HCM Lane V/C Ratio	0.317	0.203	0.434	0.481
HCM Control Delay, s/veh	11.1	10.4	12.5	13.8
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.4	0.7	2.2	2.6

HCM 7th TWSC
2: 3rd Avenue & A Street

11/07/2023

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	265	7	2	201	2	17	2	7	0	1	13
Future Vol, veh/h	5	265	7	2	201	2	17	2	7	0	1	13
Conflicting Peds, #/hr	1	0	1	1	0	1	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	8	8	8	8	8	8	0	0	0	7	7	7
Mvmt Flow	6	327	9	2	248	2	21	2	9	0	1	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	252	0	0	337	0	0	601	601	332	596	604	252
Stage 1	-	-	-	-	-	-	345	345	-	255	255	-
Stage 2	-	-	-	-	-	-	256	257	-	341	349	-
Critical Hdwy	4.18	-	-	4.18	-	-	7.1	6.5	6.2	7.17	6.57	6.27
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.17	5.57	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.17	5.57	-
Follow-up Hdwy	2.272	-	-	2.272	-	-	3.5	4	3.3	3.563	4.063	3.363
Pot Cap-1 Maneuver	1279	-	-	1190	-	-	415	417	714	408	406	774
Stage 1	-	-	-	-	-	-	675	640	-	738	687	-
Stage 2	-	-	-	-	-	-	753	699	-	664	625	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1278	-	-	1188	-	-	401	412	713	397	401	772
Mov Cap-2 Maneuver	-	-	-	-	-	-	401	412	-	397	401	-
Stage 1	-	-	-	-	-	-	670	635	-	736	685	-
Stage 2	-	-	-	-	-	-	733	697	-	649	620	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.14	0.08	13.5	10.09
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	456	32	-	-	18	-	-	724
HCM Lane V/C Ratio	0.07	0.005	-	-	0.002	-	-	0.024
HCM Control Delay (s/veh)	13.5	7.8	0	-	8	0	-	10.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

HCM 7th AWSC

3: Huntington Avenue & Cowlitz Street

11/07/2023

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕			↕			↕	
Traffic Vol, veh/h	0	0	0	40	13	28	19	177	27	30	214	2
Future Vol, veh/h	0	0	0	40	13	28	19	177	27	30	214	2
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	3	3	3	6	6	6	6	6	6
Mvmt Flow	0	0	0	50	16	35	24	221	34	38	268	3
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	9.1	10.1	10.6
HCM LOS	A	B	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	9%	49%	12%
Vol Thru, %	79%	16%	87%
Vol Right, %	12%	35%	1%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	223	81	246
LT Vol	19	40	30
Through Vol	177	13	214
RT Vol	27	28	2
Lane Flow Rate	279	101	308
Geometry Grp	1	1	1
Degree of Util (X)	0.352	0.145	0.392
Departure Headway (Hd)	4.548	5.151	4.589
Convergence, Y/N	Yes	Yes	Yes
Cap	789	694	784
Service Time	2.583	3.2	2.623
HCM Lane V/C Ratio	0.354	0.146	0.393
HCM Control Delay, s/veh	10.1	9.1	10.6
HCM Lane LOS	B	A	B
HCM 95th-tile Q	1.6	0.5	1.9

HCM 7th AWSC
4: Huntington Avenue & A Street

11/07/2023

Intersection

Intersection Delay, s/veh 11.1

Intersection LOS B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	106	98	89	129	146	105
Future Vol, veh/h	106	98	89	129	146	105
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	6	6	6	6	5	5
Mvmt Flow	133	123	111	161	183	131
Number of Lanes	1	0	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	11.3	10.3	11.5
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	100%	0%	52%	0%
Vol Thru, %	0%	100%	0%	58%
Vol Right, %	0%	0%	48%	42%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	89	129	204	251
LT Vol	89	0	106	0
Through Vol	0	129	0	146
RT Vol	0	0	98	105
Lane Flow Rate	111	161	255	314
Geometry Grp	7	7	2	5
Degree of Util (X)	0.188	0.25	0.368	0.424
Departure Headway (Hd)	6.084	5.579	5.197	4.862
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	584	637	686	731
Service Time	3.881	3.375	3.284	2.949
HCM Lane V/C Ratio	0.19	0.253	0.372	0.43
HCM Control Delay, s/veh	10.3	10.3	11.3	11.5
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	0.7	1	1.7	2.1

HCM 7th TWSC
5: Huntington Avenue & C Street

11/07/2023

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	7	8	9	34	13	29	4	188	36	27	181	28
Future Vol, veh/h	7	8	9	34	13	29	4	188	36	27	181	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	6	6	6	4	4	4
Mvmt Flow	9	10	11	43	16	36	5	235	45	34	226	35

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	564	604	244	569	599	261	261	0	0	283	0	0
Stage 1	311	311	-	271	271	-	-	-	-	-	-	-
Stage 2	253	293	-	299	329	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.254	-	-	2.236	-	-
Pot Cap-1 Maneuver	439	415	800	436	418	783	1280	-	-	1268	-	-
Stage 1	703	662	-	740	689	-	-	-	-	-	-	-
Stage 2	756	674	-	714	650	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	394	401	800	408	404	781	1280	-	-	1264	-	-
Mov Cap-2 Maneuver	552	532	-	570	540	-	-	-	-	-	-	-
Stage 1	685	644	-	735	685	-	-	-	-	-	-	-
Stage 2	701	669	-	675	633	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v11.15		11.74	0.14	0.91
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1280	-	-	616	629	1264	-
HCM Lane V/C Ratio	0.004	-	-	0.049	0.151	0.027	-
HCM Control Delay (s/veh)	7.8	-	-	11.1	11.7	7.9	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.5	0.1	-

HCM 7th TWSC
6: Huntington Avenue & Front Avenue

11/07/2023

Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	70	46	27	122	135	9
Future Vol, veh/h	70	46	27	122	135	9
Conflicting Peds, #/hr	4	1	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	3	3	4	4	3	3
Mvmt Flow	88	58	34	153	169	11

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	400	177	182	0	-	0
Stage 1	176	-	-	-	-	-
Stage 2	224	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.236	-	-	-
Pot Cap-1 Maneuver	604	863	1381	-	-	-
Stage 1	852	-	-	-	-	-
Stage 2	811	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	585	861	1379	-	-	-
Mov Cap-2 Maneuver	585	-	-	-	-	-
Stage 1	827	-	-	-	-	-
Stage 2	809	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.85	1.39	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	326	-	670	-	-
HCM Lane V/C Ratio	0.024	-	0.216	-	-
HCM Control Delay (s/veh)	7.7	0	11.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

HCM 7th TWSC
7: Larson Lane & Huntington Avenue

11/07/2023

Intersection												
Int Delay, s/veh	0.2											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	3	1	0	0	0	159	2	1	144	0
Future Vol, veh/h	1	0	3	1	0	0	0	159	2	1	144	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	4	4	4
Mvmt Flow	1	0	4	1	0	0	0	199	3	1	180	0

Major/Minor	Minor1		Minor2		Major1			Major2				
Conflicting Flow All	383	383	200	381	384	180	180	0	0	201	0	0
Stage 1	200	200	-	183	183	-	-	-	-	-	-	-
Stage 2	183	183	-	199	201	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	579	554	846	580	553	868	1396	-	-	1359	-	-
Stage 1	806	739	-	824	752	-	-	-	-	-	-	-
Stage 2	824	752	-	808	739	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	579	553	846	577	552	868	1396	-	-	1359	-	-
Mov Cap-2 Maneuver	579	553	-	577	552	-	-	-	-	-	-	-
Stage 1	806	739	-	823	752	-	-	-	-	-	-	-
Stage 2	823	752	-	804	739	-	-	-	-	-	-	-

Approach	NB		SB		SE		NW					
HCM Control Delay, s/v	9.78		11.25		0		0.05					
HCM LOS	A		B									

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	758	12	-	-	1396	-	-	577
HCM Lane V/C Ratio	0.007	0.001	-	-	-	-	-	0.002
HCM Control Delay (s/veh)	9.8	7.7	0	-	0	-	-	11.3
HCM Lane LOS	A	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

HCM 7th TWSC

8: Site Access & Huntington Avenue

11/07/2023

Intersection						
Int Delay, s/veh	0					
Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	0	0	244	0	0	140
Future Vol, veh/h	0	0	244	0	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	1	1	2	2
Mvmt Flow	0	0	305	0	0	175

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	480	305	0
Stage 1	305	-	-
Stage 2	175	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	545	735	-
Stage 1	748	-	-
Stage 2	855	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	545	735	-
Mov Cap-2 Maneuver	545	-	-
Stage 1	748	-	-
Stage 2	855	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	-	1256	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-

Intersection

Int Delay, s/veh 0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	237	7	2	124	16	0
Future Vol, veh/h	237	7	2	124	16	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	296	9	3	155	20	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	305
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1256
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1256
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.12	11.65
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	561	-	-	29	-
HCM Lane V/C Ratio	0.036	-	-	0.002	-
HCM Control Delay (s/veh)	11.6	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

HCM 7th TWSC
10: I-5 SB Ramps & Huntington Avenue

11/07/2023

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔	
Traffic Vol, veh/h	0	16	218	25	124	0	0	0	0	11	3	2
Future Vol, veh/h	0	16	218	25	124	0	0	0	0	11	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	1	1	1	0	0	0	13	13	13
Mvmt Flow	0	20	273	31	155	0	0	0	0	14	4	3

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	293	0	0	238	510	155
Stage 1	-	-	-	-	-	-	218	218	-
Stage 2	-	-	-	-	-	-	20	293	-
Critical Hdwy	-	-	-	4.11	-	-	6.53	6.63	6.33
Critical Hdwy Stg 1	-	-	-	-	-	-	5.53	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.53	5.63	-
Follow-up Hdwy	-	-	-	2.209	-	-	3.617	4.117	3.417
Pot Cap-1 Maneuver	0	-	-	1275	-	0	727	451	863
Stage 1	0	-	-	-	-	0	793	703	-
Stage 2	0	-	-	-	-	0	975	651	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1275	-	-	708	0	863
Mov Cap-2 Maneuver	-	-	-	-	-	-	708	0	-
Stage 1	-	-	-	-	-	-	793	0	-
Stage 2	-	-	-	-	-	-	949	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	1.32	10.09
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	302	-	728
HCM Lane V/C Ratio	-	-	0.025	-	0.027
HCM Control Delay (s/veh)	-	-	7.9	0	10.1
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.1

HCM 7th TWSC
11: I-5 NB Ramps & Huntington Avenue

11/07/2023

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔				
Traffic Vol, veh/h	5	18	0	0	39	2	116	2	12	0	0	0
Future Vol, veh/h	5	18	0	0	39	2	116	2	12	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	2	2	2	2	2	2	0	0	0
Mvmt Flow	6	23	0	0	49	3	145	3	15	0	0	0

Major/Minor	Major1		Major2		Minor1				
Conflicting Flow All	51	0	-	-	-	0	84	86	23
Stage 1	-	-	-	-	-	-	35	35	-
Stage 2	-	-	-	-	-	-	49	51	-
Critical Hdwy	4.1	-	-	-	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1568	-	0	0	-	-	918	804	1054
Stage 1	-	-	0	0	-	-	987	866	-
Stage 2	-	-	0	0	-	-	974	852	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1568	-	-	-	-	-	914	0	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	914	0	-
Stage 1	-	-	-	-	-	-	983	0	-
Stage 2	-	-	-	-	-	-	974	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	1.59	0	9.71
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	926	391	-	-	-
HCM Lane V/C Ratio	0.176	0.004	-	-	-
HCM Control Delay (s/veh)	9.7	7.3	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.6	0	-	-	-

HCM 7th AWSC
1: Westside Highway & SR-411

10/27/2023

Intersection	
Intersection Delay, s/veh	12.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	28	45	14	98	54	164	43	135	102	90	83	22
Future Vol, veh/h	28	45	14	98	54	164	43	135	102	90	83	22
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	31	49	15	108	59	180	47	148	112	99	91	24
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.2	13.8	12.9	11.7
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	32%	31%	46%
Vol Thru, %	48%	52%	17%	43%
Vol Right, %	36%	16%	52%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	280	87	316	195
LT Vol	43	28	98	90
Through Vol	135	45	54	83
RT Vol	102	14	164	22
Lane Flow Rate	308	96	347	214
Geometry Grp	1	1	1	1
Degree of Util (X)	0.458	0.158	0.511	0.341
Departure Headway (Hd)	5.356	5.966	5.296	5.723
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	671	598	677	626
Service Time	3.409	4.04	3.35	3.783
HCM Lane V/C Ratio	0.459	0.161	0.513	0.342
HCM Control Delay, s/veh	12.9	10.2	13.8	11.7
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	2.4	0.6	2.9	1.5

HCM 7th TWSC
2: 3rd Avenue & A Street

10/27/2023

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	221	9	1	278	0	14	3	9	1	3	23
Future Vol, veh/h	14	221	9	1	278	0	14	3	9	1	3	23
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	5	5	5	1	1	1	0	0	0	0	0	0
Mvmt Flow	17	266	11	1	335	0	17	4	11	1	4	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	337	0	0	277	0	0	645	645	272	641	650	337
Stage 1	-	-	-	-	-	-	305	305	-	339	339	-
Stage 2	-	-	-	-	-	-	339	339	-	302	311	-
Critical Hdwy	4.15	-	-	4.11	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1206	-	-	1292	-	-	388	394	772	390	391	710
Stage 1	-	-	-	-	-	-	709	666	-	679	643	-
Stage 2	-	-	-	-	-	-	680	643	-	712	662	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1203	-	-	1292	-	-	363	386	772	374	383	708
Mov Cap-2 Maneuver	-	-	-	-	-	-	363	386	-	374	383	-
Stage 1	-	-	-	-	-	-	697	655	-	677	641	-
Stage 2	-	-	-	-	-	-	649	641	-	686	651	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.46	0.03	13.63	11.04
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	448	102	-	-	6	-	-	628
HCM Lane V/C Ratio	0.07	0.014	-	-	0.001	-	-	0.052
HCM Control Delay (s/veh)	13.6	8	0	-	7.8	0	-	11
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.2

HCM 7th AWSC

3: Huntington Avenue & Cowlitz Street

10/27/2023

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	24	5	13	58	193	34	22	217	13
Future Vol, veh/h	0	0	0	24	5	13	58	193	34	22	217	13
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	2	2	2	3	3	3	6	6	6
Mvmt Flow	0	0	0	28	6	15	67	224	40	26	252	15
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	8.7	10.3	10
HCM LOS	A	B	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	20%	57%	9%
Vol Thru, %	68%	12%	86%
Vol Right, %	12%	31%	5%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	285	42	252
LT Vol	58	24	22
Through Vol	193	5	217
RT Vol	34	13	13
Lane Flow Rate	331	49	293
Geometry Grp	1	1	1
Degree of Util (X)	0.401	0.071	0.363
Departure Headway (Hd)	4.353	5.216	4.454
Convergence, Y/N	Yes	Yes	Yes
Cap	828	686	809
Service Time	2.373	3.255	2.475
HCM Lane V/C Ratio	0.4	0.071	0.362
HCM Control Delay, s/veh	10.3	8.7	10
HCM Lane LOS	B	A	A
HCM 95th-tile Q	1.9	0.2	1.7

HCM 7th AWSC
4: Huntington Avenue & A Street

10/27/2023

Intersection

Intersection Delay, s/veh 10.2

Intersection LOS B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	156	72	104	127	93	153
Future Vol, veh/h	156	72	104	127	93	153
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	4	4	2	2	5	5
Mvmt Flow	166	77	111	135	99	163
Number of Lanes	1	0	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	10.8	9.8	10.1
HCM LOS	B	A	B

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	100%	0%	68%	0%
Vol Thru, %	0%	100%	0%	38%
Vol Right, %	0%	0%	32%	62%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	104	127	228	246
LT Vol	104	0	156	0
Through Vol	0	127	0	93
RT Vol	0	0	72	153
Lane Flow Rate	111	135	243	262
Geometry Grp	7	7	2	5
Degree of Util (X)	0.182	0.203	0.343	0.339
Departure Headway (Hd)	5.914	5.41	5.097	4.663
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	603	659	701	764
Service Time	3.687	3.182	3.166	2.729
HCM Lane V/C Ratio	0.184	0.205	0.347	0.343
HCM Control Delay, s/veh	10	9.6	10.8	10.1
HCM Lane LOS	A	A	B	B
HCM 95th-tile Q	0.7	0.8	1.5	1.5

HCM 7th TWSC
5: Huntington Avenue & C Street

10/27/2023

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	9	0	3	9	1	9	7	205	20	20	138	6
Future Vol, veh/h	9	0	3	9	1	9	7	205	20	20	138	6
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	5	5	5	1	1	1	7	7	7
Mvmt Flow	10	0	3	10	1	10	8	228	22	22	153	7

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	445	467	158	453	459	239	160	0	0	250	0	0
Stage 1	201	201	-	254	254	-	-	-	-	-	-	-
Stage 2	244	266	-	199	204	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.15	6.55	6.25	4.11	-	-	4.17	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.545	4.045	3.345	2.209	-	-	2.263	-	-
Pot Cap-1 Maneuver	527	497	893	512	494	793	1425	-	-	1287	-	-
Stage 1	805	739	-	743	691	-	-	-	-	-	-	-
Stage 2	764	693	-	796	727	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	507	485	892	498	483	793	1425	-	-	1287	-	-
Mov Cap-2 Maneuver	637	591	-	634	593	-	-	-	-	-	-	-
Stage 1	791	726	-	739	687	-	-	-	-	-	-	-
Stage 2	749	689	-	779	714	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v10.35		10.32	0.23	0.96
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1425	-	-	686	698	1287	-
HCM Lane V/C Ratio	0.005	-	-	0.019	0.03	0.017	-
HCM Control Delay (s/veh)	7.5	-	-	10.3	10.3	7.8	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.1	-

HCM 7th TWSC
6: Huntington Avenue & Front Avenue

10/27/2023

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	19	40	198	129	10
Future Vol, veh/h	5	19	40	198	129	10
Conflicting Peds, #/hr	1	0	6	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	1	1	2	2
Mvmt Flow	6	21	44	220	143	11

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	465	155	160	0	-	0
Stage 1	155	-	-	-	-	-
Stage 2	310	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	560	896	1425	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	533	891	1417	-	-	-
Mov Cap-2 Maneuver	533	-	-	-	-	-
Stage 1	842	-	-	-	-	-
Stage 2	744	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.77	1.28	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	303	-	782	-	-
HCM Lane V/C Ratio	0.031	-	0.034	-	-
HCM Control Delay (s/veh)	7.6	0	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

HCM 7th TWSC
7: Larson Lane & Huntington Avenue

10/27/2023

Intersection												
Int Delay, s/veh	0.1											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	1	0	134	0	3	220	0
Future Vol, veh/h	0	0	0	0	0	1	0	134	0	3	220	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	1	0	152	0	3	250	0

Major/Minor	Minor1		Minor2		Major1		Major2					
Conflicting Flow All	410	410	153	409	410	250	250	0	0	153	0	0
Stage 1	153	153	-	257	257	-	-	-	-	-	-	-
Stage 2	257	257	-	152	153	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	556	534	898	556	534	794	1316	-	-	1427	-	-
Stage 1	854	774	-	752	699	-	-	-	-	-	-	-
Stage 2	752	699	-	855	774	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	553	532	897	555	532	794	1316	-	-	1426	-	-
Mov Cap-2 Maneuver	553	532	-	555	532	-	-	-	-	-	-	-
Stage 1	853	774	-	750	697	-	-	-	-	-	-	-
Stage 2	749	697	-	855	774	-	-	-	-	-	-	-

Approach	NB		SB		SE		NW	
HCM Control Delay, s/v	0		9.54		0		0.1	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	-	24	-	-	1316	-	-	794
HCM Lane V/C Ratio	-	0.002	-	-	-	-	-	0.001
HCM Control Delay (s/veh)	0	7.5	0	-	0	-	-	9.5
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0

HCM 7th TWSC
8: Site Access & Huntington Avenue

10/27/2023

Intersection						
Int Delay, s/veh	0					
Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	0	0	154	0	0	223
Future Vol, veh/h	0	0	154	0	0	223
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	0	0	1	1
Mvmt Flow	0	0	171	0	0	248

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	419	171	0	0	171	0
Stage 1	171	-	-	-	-	-
Stage 2	248	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.11	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	591	873	-	-	1412	-
Stage 1	859	-	-	-	-	-
Stage 2	793	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	591	873	-	-	1412	-
Mov Cap-2 Maneuver	591	-	-	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	793	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	-	1412	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	142	12	1	214	9	4
Future Vol, veh/h	142	12	1	214	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	158	13	1	238	10	4
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	171	0	404	164
Stage 1	-	-	-	-	164	-
Stage 2	-	-	-	-	240	-
Critical Hdwy	-	-	4.11	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.209	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1412	-	606	885
Stage 1	-	-	-	-	870	-
Stage 2	-	-	-	-	805	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1412	-	606	885
Mov Cap-2 Maneuver	-	-	-	-	606	-
Stage 1	-	-	-	-	870	-
Stage 2	-	-	-	-	804	-
Approach	EB	WB		NB		
HCM Control Delay, s/v	0	0.04		10.48		
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	671	-	-	8	-	
HCM Lane V/C Ratio	0.022	-	-	0.001	-	
HCM Control Delay (s/veh)	10.5	-	-	7.6	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

HCM 7th TWSC
10: I-5 SB Ramps & Huntington Avenue

10/27/2023

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↱			↱						↱↲	
Traffic Vol, veh/h	0	17	133	16	216	0	0	0	0	1	2	6
Future Vol, veh/h	0	17	133	16	216	0	0	0	0	1	2	6
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	2	2	2	0	0	0	0	0	0
Mvmt Flow	0	19	148	18	240	0	0	0	0	1	2	7

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	167	0	0	294	442	241
Stage 1	-	-	-	-	-	-	276	276	-
Stage 2	-	-	-	-	-	-	19	167	-
Critical Hdwy	-	-	-	4.12	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1411	-	0	701	513	803
Stage 1	0	-	-	-	-	0	776	686	-
Stage 2	0	-	-	-	-	0	1009	764	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1411	-	-	691	0	802
Mov Cap-2 Maneuver	-	-	-	-	-	-	691	0	-
Stage 1	-	-	-	-	-	-	776	0	-
Stage 2	-	-	-	-	-	-	994	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.52	9.65
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	124	-	784
HCM Lane V/C Ratio	-	-	0.013	-	0.013
HCM Control Delay (s/veh)	-	-	7.6	0	9.7
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0

HCM 7th TWSC
11: I-5 NB Ramps & Huntington Avenue

10/27/2023

Intersection												
Int Delay, s/veh	8.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔				
Traffic Vol, veh/h	5	12	0	0	24	3	206	2	28	0	0	0
Future Vol, veh/h	5	12	0	0	24	3	206	2	28	0	0	0
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	14	0	0	28	3	240	2	33	0	0	0

Major/Minor	Major1		Major2		Minor1					
Conflicting Flow All	31	0	-	-	-	0	53	57	14	
Stage 1	-	-	-	-	-	-	26	26	-	
Stage 2	-	-	-	-	-	-	28	31	-	
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2	
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-	
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3	
Pot Cap-1 Maneuver	1594	-	0	0	-	-	960	838	1072	
Stage 1	-	-	0	0	-	-	1002	878	-	
Stage 2	-	-	0	0	-	-	1000	873	-	
Platoon blocked, %	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	1594	-	-	-	-	-	956	0	1072	
Mov Cap-2 Maneuver	-	-	-	-	-	-	956	0	-	
Stage 1	-	-	-	-	-	-	999	0	-	
Stage 2	-	-	-	-	-	-	1000	0	-	

Approach	EB	WB	NB
HCM Control Delay, s/v	2.14	0	10.18
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	969	529	-	-	-
HCM Lane V/C Ratio	0.283	0.004	-	-	-
HCM Control Delay (s/veh)	10.2	7.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	1.2	0	-	-	-

HCM 7th AWSC
1: Westside Highway & SR-411

11/07/2023

Intersection	
Intersection Delay, s/veh	16.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	37	74	36	74	70	202	12	120	113	212	132	21
Future Vol, veh/h	37	74	36	74	70	202	12	120	113	212	132	21
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
Heavy Vehicles, %	4	4	4	6	6	6	11	11	11	7	7	7
Mvmt Flow	37	74	36	74	70	202	12	120	113	212	132	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	12	16.5	13.6	18.9
HCM LOS	B	C	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	25%	21%	58%
Vol Thru, %	49%	50%	20%	36%
Vol Right, %	46%	24%	58%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	245	147	346	365
LT Vol	12	37	74	212
Through Vol	120	74	70	132
RT Vol	113	36	202	21
Lane Flow Rate	245	147	346	365
Geometry Grp	1	1	1	1
Degree of Util (X)	0.418	0.268	0.569	0.624
Departure Headway (Hd)	6.144	6.554	5.922	6.158
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	586	547	609	588
Service Time	4.192	4.608	3.964	4.202
HCM Lane V/C Ratio	0.418	0.269	0.568	0.621
HCM Control Delay, s/veh	13.6	12	16.5	18.9
HCM Lane LOS	B	B	C	C
HCM 95th-tile Q	2.1	1.1	3.6	4.3

HCM 7th TWSC
2: 3rd Avenue & A Street

11/07/2023

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	394	10	3	299	3	25	3	10	0	1	19
Future Vol, veh/h	7	394	10	3	299	3	25	3	10	0	1	19
Conflicting Peds, #/hr	1	0	1	1	0	1	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	8	8	8	8	8	8	0	0	0	7	7	7
Mvmt Flow	7	394	10	3	299	3	25	3	10	0	1	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	303	0	0	405	0	0	722	723	400	717	727	304
Stage 1	-	-	-	-	-	-	414	414	-	308	308	-
Stage 2	-	-	-	-	-	-	308	309	-	410	419	-
Critical Hdwy	4.18	-	-	4.18	-	-	7.1	6.5	6.2	7.17	6.57	6.27
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.17	5.57	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.17	5.57	-
Follow-up Hdwy	2.272	-	-	2.272	-	-	3.5	4	3.3	3.563	4.063	3.363
Pot Cap-1 Maneuver	1225	-	-	1122	-	-	345	355	654	338	345	725
Stage 1	-	-	-	-	-	-	620	597	-	692	652	-
Stage 2	-	-	-	-	-	-	707	663	-	609	582	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1223	-	-	1121	-	-	330	350	654	327	341	723
Mov Cap-2 Maneuver	-	-	-	-	-	-	330	350	-	327	341	-
Stage 1	-	-	-	-	-	-	614	592	-	689	649	-
Stage 2	-	-	-	-	-	-	684	660	-	592	577	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.14	0.08	15.47	10.42
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	382	31	-	-	18	-	-	684
HCM Lane V/C Ratio	0.1	0.006	-	-	0.003	-	-	0.029
HCM Control Delay (s/veh)	15.5	8	0	-	8.2	0	-	10.4
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.1

HCM 7th AWSC

3: Huntington Avenue & Cowlitz Street

11/07/2023

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕			↕			↕	
Traffic Vol, veh/h	0	0	0	59	19	42	28	263	40	45	318	3
Future Vol, veh/h	0	0	0	59	19	42	28	263	40	45	318	3
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
Heavy Vehicles, %	0	0	0	3	3	3	6	6	6	6	6	6
Mvmt Flow	0	0	0	59	19	42	28	263	40	45	318	3
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	9.7	11.3	12.1
HCM LOS	A	B	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	8%	49%	12%
Vol Thru, %	79%	16%	87%
Vol Right, %	12%	35%	1%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	331	120	366
LT Vol	28	59	45
Through Vol	263	19	318
RT Vol	40	42	3
Lane Flow Rate	331	120	366
Geometry Grp	1	1	1
Degree of Util (X)	0.431	0.18	0.48
Departure Headway (Hd)	4.687	5.402	4.719
Convergence, Y/N	Yes	Yes	Yes
Cap	765	659	761
Service Time	2.738	3.476	2.769
HCM Lane V/C Ratio	0.433	0.182	0.481
HCM Control Delay, s/veh	11.3	9.7	12.1
HCM Lane LOS	B	A	B
HCM 95th-tile Q	2.2	0.7	2.6

HCM 7th AWSC

4: Huntington Avenue & A Street

11/07/2023

Intersection

Intersection Delay, s/veh 13.1

Intersection LOS B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	158	146	132	192	217	156
Future Vol, veh/h	158	146	132	192	217	156
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	6	6	6	5	5
Mvmt Flow	158	146	132	192	217	156
Number of Lanes	1	0	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	13.6	11.4	14.3
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	100%	0%	52%	0%
Vol Thru, %	0%	100%	0%	58%
Vol Right, %	0%	0%	48%	42%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	132	192	304	373
LT Vol	132	0	158	0
Through Vol	0	192	0	217
RT Vol	0	0	146	156
Lane Flow Rate	132	192	304	373
Geometry Grp	7	7	2	5
Degree of Util (X)	0.238	0.319	0.472	0.542
Departure Headway (Hd)	6.487	5.979	5.586	5.231
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	553	601	644	690
Service Time	4.225	3.718	3.625	3.266
HCM Lane V/C Ratio	0.239	0.319	0.472	0.541
HCM Control Delay, s/veh	11.3	11.5	13.6	14.3
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	0.9	1.4	2.5	3.3

HCM 7th TWSC
5: Huntington Avenue & C Street

11/07/2023

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	10	12	13	51	19	43	6	279	53	40	269	42
Future Vol, veh/h	10	12	13	51	19	43	6	279	53	40	269	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	6	6	6	4	4	4
Mvmt Flow	10	12	13	51	19	43	6	279	53	40	269	42

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	671	717	290	676	712	309	311	0	0	335	0	0
Stage 1	370	370	-	321	321	-	-	-	-	-	-	-
Stage 2	301	347	-	355	391	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.254	-	-	2.236	-	-
Pot Cap-1 Maneuver	373	358	754	370	360	736	1227	-	-	1213	-	-
Stage 1	654	624	-	695	656	-	-	-	-	-	-	-
Stage 2	713	638	-	666	611	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	326	343	754	341	346	734	1227	-	-	1210	-	-
Mov Cap-2 Maneuver	495	487	-	517	497	-	-	-	-	-	-	-
Stage 1	633	603	-	690	651	-	-	-	-	-	-	-
Stage 2	648	633	-	621	590	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v11.81		12.74	0.14	0.92
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1227	-	-	564	578	1210	-
HCM Lane V/C Ratio	0.005	-	-	0.062	0.196	0.033	-
HCM Control Delay (s/veh)	7.9	-	-	11.8	12.7	8.1	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.7	0.1	-

HCM 7th TWSC
6: Huntington Avenue & Front Avenue

11/07/2023

Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	104	68	40	181	201	13
Future Vol, veh/h	104	68	40	181	201	13
Conflicting Peds, #/hr	4	1	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	4	4	3	3
Mvmt Flow	104	68	40	181	201	13

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	475	211	216	0	-	0
Stage 1	210	-	-	-	-	-
Stage 2	265	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.236	-	-	-
Pot Cap-1 Maneuver	547	827	1342	-	-	-
Stage 1	823	-	-	-	-	-
Stage 2	777	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	527	825	1339	-	-	-
Mov Cap-2 Maneuver	527	-	-	-	-	-
Stage 1	794	-	-	-	-	-
Stage 2	776	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v13.12		1.41	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	326	-	614	-	-
HCM Lane V/C Ratio	0.03	-	0.28	-	-
HCM Control Delay (s/veh)	7.8	0	13.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1.1	-	-

HCM 7th TWSC
7: Larson Lane & Huntington Avenue

11/07/2023

Intersection												
Int Delay, s/veh	0.2											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	4	1	0	0	0	236	3	1	214	0
Future Vol, veh/h	1	0	4	1	0	0	0	236	3	1	214	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	4	4	4
Mvmt Flow	1	0	4	1	0	0	0	236	3	1	214	0

Major/Minor	Minor1		Minor2		Major1			Major2				
Conflicting Flow All	454	454	238	452	455	214	214	0	0	239	0	0
Stage 1	238	238	-	216	216	-	-	-	-	-	-	-
Stage 2	216	216	-	236	239	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	520	505	806	521	504	831	1356	-	-	1316	-	-
Stage 1	770	712	-	791	728	-	-	-	-	-	-	-
Stage 2	791	728	-	772	711	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	520	505	806	518	504	831	1356	-	-	1316	-	-
Mov Cap-2 Maneuver	520	505	-	518	504	-	-	-	-	-	-	-
Stage 1	770	712	-	790	727	-	-	-	-	-	-	-
Stage 2	790	727	-	768	711	-	-	-	-	-	-	-

Approach	NB		SB		SE		NW	
HCM Control Delay, s/v	9.99		11.96		0		0.04	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	726	8	-	-	1356	-	-	518
HCM Lane V/C Ratio	0.007	0.001	-	-	-	-	-	0.002
HCM Control Delay (s/veh)	10	7.7	0	-	0	-	-	12
HCM Lane LOS	A	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

HCM 7th TWSC

8: Site Access & Huntington Avenue

11/07/2023

Intersection						
Int Delay, s/veh	0					
Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	0	0	362	0	0	208
Future Vol, veh/h	0	0	362	0	0	208
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	1	1	2	2
Mvmt Flow	0	0	362	0	0	208

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	570	362	0
Stage 1	362	-	-
Stage 2	208	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	483	683	-
Stage 1	704	-	-
Stage 2	827	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	483	683	-
Mov Cap-2 Maneuver	483	-	-
Stage 1	704	-	-
Stage 2	827	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	-	1197	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	352	10	3	184	24	0
Future Vol, veh/h	352	10	3	184	24	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	352	10	3	184	24	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	362	0	547
Stage 1	-	-	-	-	357
Stage 2	-	-	-	-	190
Critical Hdwy	-	-	4.12	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.218	-	3.5
Pot Cap-1 Maneuver	-	-	1197	-	502
Stage 1	-	-	-	-	713
Stage 2	-	-	-	-	847
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1197	-	500
Mov Cap-2 Maneuver	-	-	-	-	500
Stage 1	-	-	-	-	713
Stage 2	-	-	-	-	845

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.13	12.56
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	500	-	-	29	-
HCM Lane V/C Ratio	0.048	-	-	0.003	-
HCM Control Delay (s/veh)	12.6	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

HCM 7th TWSC
10: I-5 SB Ramps & Huntington Avenue

11/07/2023

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔	
Traffic Vol, veh/h	0	24	324	37	184	0	0	0	0	16	4	3
Future Vol, veh/h	0	24	324	37	184	0	0	0	0	16	4	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	1	1	1	0	0	0	13	13	13
Mvmt Flow	0	24	324	37	184	0	0	0	0	16	4	3

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	348	0	0	282	606	184
Stage 1	-	-	-	-	-	-	258	258	-
Stage 2	-	-	-	-	-	-	24	348	-
Critical Hdwy	-	-	-	4.11	-	-	6.53	6.63	6.33
Critical Hdwy Stg 1	-	-	-	-	-	-	5.53	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.53	5.63	-
Follow-up Hdwy	-	-	-	2.209	-	-	3.617	4.117	3.417
Pot Cap-1 Maneuver	0	-	-	1216	-	0	685	397	831
Stage 1	0	-	-	-	-	0	760	675	-
Stage 2	0	-	-	-	-	0	971	615	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1216	-	-	662	0	831
Mov Cap-2 Maneuver	-	-	-	-	-	-	662	0	-
Stage 1	-	-	-	-	-	-	760	0	-
Stage 2	-	-	-	-	-	-	938	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	1.35	10.45
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	301	-	684
HCM Lane V/C Ratio	-	-	0.03	-	0.034
HCM Control Delay (s/veh)	-	-	8.1	0	10.4
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.1

HCM 7th TWSC
11: I-5 NB Ramps & Huntington Avenue

11/07/2023

Intersection												
Int Delay, s/veh	6.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔				
Traffic Vol, veh/h	7	27	0	0	58	3	172	3	18	0	0	0
Future Vol, veh/h	7	27	0	0	58	3	172	3	18	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	2	2	2	2	2	2	0	0	0
Mvmt Flow	7	27	0	0	58	3	172	3	18	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	61	0	-	-	-	0	99	102	27
Stage 1	-	-	-	-	-	-	41	41	-
Stage 2	-	-	-	-	-	-	58	61	-
Critical Hdwy	4.1	-	-	-	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1555	-	0	0	-	-	900	788	1048
Stage 1	-	-	0	0	-	-	981	861	-
Stage 2	-	-	0	0	-	-	965	844	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1555	-	-	-	-	-	896	0	1048
Mov Cap-2 Maneuver	-	-	-	-	-	-	896	0	-
Stage 1	-	-	-	-	-	-	977	0	-
Stage 2	-	-	-	-	-	-	965	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	1.51	0	10.03
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	908	371	-	-	-
HCM Lane V/C Ratio	0.212	0.005	-	-	-
HCM Control Delay (s/veh)	10	7.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.8	0	-	-	-

HCM 7th AWSC
1: Westside Highway & SR-411

10/27/2023

Intersection	
Intersection Delay, s/veh	27.7
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	42	67	21	146	80	244	64	201	152	134	123	33
Future Vol, veh/h	42	67	21	146	80	244	64	201	152	134	123	33
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	42	67	21	146	80	244	64	201	152	134	123	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	13.8	35.8	28.5	19.5
HCM LOS	B	E	D	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	32%	31%	46%
Vol Thru, %	48%	52%	17%	42%
Vol Right, %	36%	16%	52%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	417	130	470	290
LT Vol	64	42	146	134
Through Vol	201	67	80	123
RT Vol	152	21	244	33
Lane Flow Rate	417	130	470	290
Geometry Grp	1	1	1	1
Degree of Util (X)	0.769	0.278	0.848	0.575
Departure Headway (Hd)	6.643	7.709	6.495	7.144
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	546	464	559	505
Service Time	4.677	5.793	4.52	5.214
HCM Lane V/C Ratio	0.764	0.28	0.841	0.574
HCM Control Delay, s/veh	28.5	13.8	35.8	19.5
HCM Lane LOS	D	B	E	C
HCM 95th-tile Q	6.9	1.1	9	3.6

HCM 7th TWSC
2: 3rd Avenue & A Street

10/27/2023

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	328	13	1	413	0	21	4	13	1	4	34
Future Vol, veh/h	21	328	13	1	413	0	21	4	13	1	4	34
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	1	1	1	0	0	0	0	0	0
Mvmt Flow	21	328	13	1	413	0	21	4	13	1	4	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	415	0	0	341	0	0	794	794	335	789	800	415
Stage 1	-	-	-	-	-	-	377	377	-	417	417	-
Stage 2	-	-	-	-	-	-	417	417	-	372	383	-
Critical Hdwy	4.15	-	-	4.11	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1128	-	-	1224	-	-	309	323	712	311	320	642
Stage 1	-	-	-	-	-	-	649	620	-	617	595	-
Stage 2	-	-	-	-	-	-	617	595	-	653	616	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1126	-	-	1224	-	-	282	315	712	293	312	641
Mov Cap-2 Maneuver	-	-	-	-	-	-	282	315	-	293	312	-
Stage 1	-	-	-	-	-	-	634	605	-	615	593	-
Stage 2	-	-	-	-	-	-	580	593	-	622	601	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.48			0.02			16.17			11.87		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	360	104	-	-	4	-	-	563
HCM Lane V/C Ratio	0.106	0.019	-	-	0.001	-	-	0.069
HCM Control Delay (s/veh)	16.2	8.3	0	-	7.9	0	-	11.9
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0	-	-	0.2

HCM 7th AWSC
3: Huntington Avenue & Cowlitz Street

10/27/2023

Intersection												
Intersection Delay, s/veh	12											
Intersection LOS	B											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	36	7	19	86	287	51	33	322	19
Future Vol, veh/h	0	0	0	36	7	19	86	287	51	33	322	19
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
Heavy Vehicles, %	0	0	0	2	2	2	3	3	3	6	6	6
Mvmt Flow	0	0	0	36	7	19	86	287	51	33	322	19
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB			NB			SB		
Opposing Approach				SB			NB		
Opposing Lanes	0			1			1		
Conflicting Approach Left	NB						WB		
Conflicting Lanes Left	1			0			1		
Conflicting Approach Right	SB			WB					
Conflicting Lanes Right	1			1			0		
HCM Control Delay, s/veh	9.3			12.5			11.8		
HCM LOS	A			B			B		

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	20%	58%	9%
Vol Thru, %	68%	11%	86%
Vol Right, %	12%	31%	5%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	424	62	374
LT Vol	86	36	33
Through Vol	287	7	322
RT Vol	51	19	19
Lane Flow Rate	424	62	374
Geometry Grp	1	1	1
Degree of Util (X)	0.529	0.096	0.479
Departure Headway (Hd)	4.495	5.595	4.607
Convergence, Y/N	Yes	Yes	Yes
Cap	801	637	782
Service Time	2.527	3.661	2.641
HCM Lane V/C Ratio	0.529	0.097	0.478
HCM Control Delay, s/veh	12.5	9.3	11.8
HCM Lane LOS	B	A	B
HCM 95th-tile Q	3.2	0.3	2.6

HCM 7th AWSC

4: Huntington Avenue & A Street

10/27/2023

Intersection

Intersection Delay, s/veh 13.8

Intersection LOS B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	232	107	155	189	138	227
Future Vol, veh/h	232	107	155	189	138	227
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	4	4	2	2	5	5
Mvmt Flow	232	107	155	189	138	227
Number of Lanes	1	0	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	15.3	11.7	14.3
HCM LOS	C	B	B

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	100%	0%	68%	0%
Vol Thru, %	0%	100%	0%	38%
Vol Right, %	0%	0%	32%	62%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	155	189	339	365
LT Vol	155	0	232	0
Through Vol	0	189	0	138
RT Vol	0	0	107	227
Lane Flow Rate	155	189	339	365
Geometry Grp	7	7	2	5
Degree of Util (X)	0.282	0.318	0.538	0.535
Departure Headway (Hd)	6.56	6.052	5.717	5.275
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	547	593	631	683
Service Time	4.308	3.799	3.759	3.318
HCM Lane V/C Ratio	0.283	0.319	0.537	0.534
HCM Control Delay, s/veh	11.9	11.6	15.3	14.3
HCM Lane LOS	B	B	C	B
HCM 95th-tile Q	1.2	1.4	3.2	3.2

HCM 7th TWSC
5: Huntington Avenue & C Street

10/27/2023

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	13	0	4	13	1	13	10	305	30	30	205	9
Future Vol, veh/h	13	0	4	13	1	13	10	305	30	30	205	9
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	5	5	5	1	1	1	7	7	7
Mvmt Flow	13	0	4	13	1	13	10	305	30	30	205	9

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	595	625	211	606	614	320	214	0	0	335	0	0
Stage 1	270	270	-	340	340	-	-	-	-	-	-	-
Stage 2	326	355	-	266	274	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.15	6.55	6.25	4.11	-	-	4.17	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.545	4.045	3.345	2.209	-	-	2.263	-	-
Pot Cap-1 Maneuver	419	404	835	405	403	714	1362	-	-	1197	-	-
Stage 1	741	690	-	669	634	-	-	-	-	-	-	-
Stage 2	691	633	-	733	678	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	397	391	834	389	390	714	1362	-	-	1197	-	-
Mov Cap-2 Maneuver	553	521	-	554	528	-	-	-	-	-	-	-
Stage 1	722	673	-	664	629	-	-	-	-	-	-	-
Stage 2	673	629	-	710	661	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v11.17		11.08	0.22	0.99
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1362	-	-	600 620	1197	-	-
HCM Lane V/C Ratio	0.007	-	-	0.028 0.044	0.025	-	-
HCM Control Delay (s/veh)	7.7	-	-	11.2 11.1	8.1	-	-
HCM Lane LOS	A	-	-	B B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1 0.1	0.1	-	-

HCM 7th TWSC
6: Huntington Avenue & Front Avenue

10/27/2023

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	28	59	294	192	15
Future Vol, veh/h	7	28	59	294	192	15
Conflicting Peds, #/hr	1	0	6	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	1	1	2	2
Mvmt Flow	7	28	59	294	192	15

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	619	206	213	0	-	0
Stage 1	206	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	456	840	1363	-	-	-
Stage 1	834	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	427	835	1355	-	-	-
Mov Cap-2 Maneuver	427	-	-	-	-	-
Stage 1	786	-	-	-	-	-
Stage 2	668	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.4	1.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	301	-	701	-	-
HCM Lane V/C Ratio	0.044	-	0.05	-	-
HCM Control Delay (s/veh)	7.8	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

HCM 7th TWSC
7: Larson Lane & Huntington Avenue

10/27/2023

Intersection												
Int Delay, s/veh	0.1											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	1	0	199	0	4	327	0
Future Vol, veh/h	0	0	0	0	0	1	0	199	0	4	327	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	1	0	199	0	4	327	0

Major/Minor	Minor1		Minor2		Major1			Major2				
Conflicting Flow All	535	535	200	534	535	327	327	0	0	200	0	0
Stage 1	200	200	-	335	335	-	-	-	-	-	-	-
Stage 2	335	335	-	199	200	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	459	454	846	460	454	719	1233	-	-	1372	-	-
Stage 1	806	739	-	683	646	-	-	-	-	-	-	-
Stage 2	683	646	-	807	739	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	457	452	845	458	452	719	1233	-	-	1371	-	-
Mov Cap-2 Maneuver	457	452	-	458	452	-	-	-	-	-	-	-
Stage 1	806	739	-	681	644	-	-	-	-	-	-	-
Stage 2	680	644	-	807	739	-	-	-	-	-	-	-

Approach	NB		SB		SE		NW	
HCM Control Delay, s/v	0		10.01		0		0.09	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	-	22	-	-	1233	-	-	719
HCM Lane V/C Ratio	-	0.003	-	-	-	-	-	0.001
HCM Control Delay (s/veh)	0	7.6	0	-	0	-	-	10
HCM Lane LOS	A	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0

HCM 7th TWSC 8: Site Access & Huntington Avenue

10/27/2023

Intersection						
Int Delay, s/veh	0					
Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	0	0	229	0	0	331
Future Vol, veh/h	0	0	229	0	0	331
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	0	0	1	1
Mvmt Flow	0	0	229	0	0	331

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	560	229	0
Stage 1	229	-	-
Stage 2	331	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	489	810	-
Stage 1	809	-	-
Stage 2	728	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	489	810	-
Mov Cap-2 Maneuver	489	-	-
Stage 1	809	-	-
Stage 2	728	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	-	1345	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-

HCM 7th TWSC
9: Pleasant Hill Road & Huntington Avenue

10/27/2023

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	211	18	1	318	13	6
Future Vol, veh/h	211	18	1	318	13	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	211	18	1	318	13	6

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	229	0	540
Stage 1	-	-	-	-	220
Stage 2	-	-	-	-	320
Critical Hdwy	-	-	4.11	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.209	-	3.5
Pot Cap-1 Maneuver	-	-	1345	-	506
Stage 1	-	-	-	-	821
Stage 2	-	-	-	-	741
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1345	-	506
Mov Cap-2 Maneuver	-	-	-	-	506
Stage 1	-	-	-	-	821
Stage 2	-	-	-	-	740

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.02	11.46
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	576	-	-	6	-
HCM Lane V/C Ratio	0.033	-	-	0.001	-
HCM Control Delay (s/veh)	11.5	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

HCM 7th TWSC
10: I-5 SB Ramps & Huntington Avenue

10/27/2023

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↱			↱						↱↲	
Traffic Vol, veh/h	0	25	198	24	321	0	0	0	0	1	3	9
Future Vol, veh/h	0	25	198	24	321	0	0	0	0	1	3	9
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	2	2	2	0	0	0	0	0	0
Mvmt Flow	0	25	198	24	321	0	0	0	0	1	3	9

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	223	0	0	394	592	322
Stage 1	-	-	-	-	-	-	369	369	-
Stage 2	-	-	-	-	-	-	25	223	-
Critical Hdwy	-	-	-	4.12	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1346	-	0	615	422	724
Stage 1	0	-	-	-	-	0	704	624	-
Stage 2	0	-	-	-	-	0	1003	723	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1346	-	-	601	0	723
Mov Cap-2 Maneuver	-	-	-	-	-	-	601	0	-
Stage 1	-	-	-	-	-	-	704	0	-
Stage 2	-	-	-	-	-	-	981	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.54	10.18
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	125	-	709
HCM Lane V/C Ratio	-	-	0.018	-	0.018
HCM Control Delay (s/veh)	-	-	7.7	0	10.2
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.1

HCM 7th TWSC
11: I-5 NB Ramps & Huntington Avenue

10/27/2023

Intersection												
Int Delay, s/veh	9.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔				
Traffic Vol, veh/h	7	18	0	0	36	4	306	3	42	0	0	0
Future Vol, veh/h	7	18	0	0	36	4	306	3	42	0	0	0
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	18	0	0	36	4	306	3	42	0	0	0

Major/Minor	Major1		Major2		Minor1					
Conflicting Flow All	40	0	-	-	-	0	68	72	18	
Stage 1	-	-	-	-	-	-	32	32	-	
Stage 2	-	-	-	-	-	-	36	40	-	
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2	
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-	
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3	
Pot Cap-1 Maneuver	1583	-	0	0	-	-	942	822	1066	
Stage 1	-	-	0	0	-	-	996	872	-	
Stage 2	-	-	0	0	-	-	992	866	-	
Platoon blocked, %	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	1583	-	-	-	-	-	938	0	1066	
Mov Cap-2 Maneuver	-	-	-	-	-	-	938	0	-	
Stage 1	-	-	-	-	-	-	991	0	-	
Stage 2	-	-	-	-	-	-	992	0	-	

Approach	EB	WB	NB
HCM Control Delay, s/v	2.04	0	10.98
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	952	504	-	-	-
HCM Lane V/C Ratio	0.369	0.004	-	-	-
HCM Control Delay (s/veh)	11	7.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	1.7	0	-	-	-

HCM 7th AWSC
1: Westside Highway & SR-411

11/07/2023

Intersection												
Intersection Delay, s/veh	21.1											
Intersection LOS	C											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	37	105	36	86	82	214	12	120	144	243	132	21
Future Vol, veh/h	37	105	36	86	82	214	12	120	144	243	132	21
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
Heavy Vehicles, %	4	4	4	6	6	6	11	11	11	7	7	7
Mvmt Flow	37	105	36	86	82	214	12	120	144	243	132	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	14.3	22.2	16.8	26.1
HCM LOS	B	C	C	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	21%	23%	61%
Vol Thru, %	43%	59%	21%	33%
Vol Right, %	52%	20%	56%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	276	178	382	396
LT Vol	12	37	86	243
Through Vol	120	105	82	132
RT Vol	144	36	214	21
Lane Flow Rate	276	178	382	396
Geometry Grp	1	1	1	1
Degree of Util (X)	0.518	0.358	0.68	0.732
Departure Headway (Hd)	6.758	7.242	6.518	6.768
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	538	498	558	539
Service Time	4.758	5.26	4.518	4.768
HCM Lane V/C Ratio	0.513	0.357	0.685	0.735
HCM Control Delay, s/veh	16.8	14.3	22.2	26.1
HCM Lane LOS	C	B	C	D
HCM 95th-tile Q	3	1.6	5.2	6.1

HCM 7th TWSC
2: 3rd Avenue & A Street

11/07/2023

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	487	10	3	335	3	25	3	10	0	1	19
Future Vol, veh/h	7	487	10	3	335	3	25	3	10	0	1	19
Conflicting Peds, #/hr	1	0	1	1	0	1	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	8	8	8	8	8	8	0	0	0	7	7	7
Mvmt Flow	7	487	10	3	335	3	25	3	10	0	1	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	339	0	0	498	0	0	851	852	493	846	856	340
Stage 1	-	-	-	-	-	-	507	507	-	344	344	-
Stage 2	-	-	-	-	-	-	344	345	-	503	512	-
Critical Hdwy	4.18	-	-	4.18	-	-	7.1	6.5	6.2	7.17	6.57	6.27
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.17	5.57	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.17	5.57	-
Follow-up Hdwy	2.272	-	-	2.272	-	-	3.5	4	3.3	3.563	4.063	3.363
Pot Cap-1 Maneuver	1187	-	-	1036	-	-	282	299	580	277	290	692
Stage 1	-	-	-	-	-	-	552	543	-	662	628	-
Stage 2	-	-	-	-	-	-	676	640	-	542	528	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1186	-	-	1035	-	-	270	295	580	266	286	690
Mov Cap-2 Maneuver	-	-	-	-	-	-	270	295	-	266	286	-
Stage 1	-	-	-	-	-	-	547	538	-	659	625	-
Stage 2	-	-	-	-	-	-	653	637	-	525	523	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.11	0.07	17.92	10.77
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	316	25	-	-	16	-	-	644
HCM Lane V/C Ratio	0.12	0.006	-	-	0.003	-	-	0.031
HCM Control Delay (s/veh)	17.9	8.1	0	-	8.5	0	-	10.8
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.1

HCM 7th AWSC

3: Huntington Avenue & Cowlitz Street

11/07/2023

Intersection	
Intersection Delay, s/veh	12.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	78	19	42	35	277	47	45	355	3
Future Vol, veh/h	0	0	0	78	19	42	35	277	47	45	355	3
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
Heavy Vehicles, %	0	0	0	3	3	3	6	6	6	6	6	6
Mvmt Flow	0	0	0	78	19	42	35	277	47	45	355	3
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	10.3	12.3	13.5
HCM LOS	B	B	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	10%	56%	11%
Vol Thru, %	77%	14%	88%
Vol Right, %	13%	30%	1%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	359	139	403
LT Vol	35	78	45
Through Vol	277	19	355
RT Vol	47	42	3
Lane Flow Rate	359	139	403
Geometry Grp	1	1	1
Degree of Util (X)	0.479	0.216	0.54
Departure Headway (Hd)	4.801	5.596	4.823
Convergence, Y/N	Yes	Yes	Yes
Cap	743	634	742
Service Time	2.869	3.695	2.89
HCM Lane V/C Ratio	0.483	0.219	0.543
HCM Control Delay, s/veh	12.3	10.3	13.5
HCM Lane LOS	B	B	B
HCM 95th-tile Q	2.6	0.8	3.3

HCM 7th AWSC
4: Huntington Avenue & A Street

11/07/2023

Intersection

Intersection Delay, s/veh 18.5

Intersection LOS C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	158	258	168	220	273	156
Future Vol, veh/h	158	258	168	220	273	156
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	6	6	6	5	5
Mvmt Flow	158	258	168	220	273	156
Number of Lanes	1	0	1	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	20.4	13.6	21
HCM LOS	C	B	C

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	100%	0%	38%	0%
Vol Thru, %	0%	100%	0%	64%
Vol Right, %	0%	0%	62%	36%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	168	220	416	429
LT Vol	168	0	158	0
Through Vol	0	220	0	273
RT Vol	0	0	258	156
Lane Flow Rate	168	220	416	429
Geometry Grp	7	7	2	5
Degree of Util (X)	0.331	0.402	0.677	0.692
Departure Headway (Hd)	7.087	6.576	5.86	5.81
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	504	543	612	618
Service Time	4.872	4.361	3.931	3.884
HCM Lane V/C Ratio	0.333	0.405	0.68	0.694
HCM Control Delay, s/veh	13.4	13.8	20.4	21
HCM Lane LOS	B	B	C	C
HCM 95th-tile Q	1.4	1.9	5.2	5.5

HCM 7th TWSC
5: Huntington Avenue & C Street

11/07/2023

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↘		↗	↘	
Traffic Vol, veh/h	10	12	38	70	19	43	15	343	60	40	437	42
Future Vol, veh/h	10	12	38	70	19	43	15	343	60	40	437	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	6	6	6	4	4	4
Mvmt Flow	10	12	38	70	19	43	15	343	60	40	437	42

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	921	974	458	929	965	376	479	0	0	406	0	0
Stage 1	538	538	-	406	406	-	-	-	-	-	-	-
Stage 2	383	436	-	523	559	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.254	-	-	2.236	-	-
Pot Cap-1 Maneuver	253	254	607	250	257	675	1063	-	-	1142	-	-
Stage 1	531	526	-	626	601	-	-	-	-	-	-	-
Stage 2	644	583	-	541	514	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	216	241	607	216	244	673	1063	-	-	1139	-	-
Mov Cap-2 Maneuver	399	405	-	394	408	-	-	-	-	-	-	-
Stage 1	512	507	-	615	591	-	-	-	-	-	-	-
Stage 2	575	573	-	478	496	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v12.97		16	0.3	0.64
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1063	-	-	512 458	1139	-	-
HCM Lane V/C Ratio	0.014	-	-	0.117 0.288	0.035	-	-
HCM Control Delay (s/veh)	8.4	-	-	13 16	8.3	-	-
HCM Lane LOS	A	-	-	B C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4 1.2	0.1	-	-

HCM 7th TWSC
6: Huntington Avenue & Front Avenue

11/07/2023

Intersection						
Int Delay, s/veh	4.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	104	93	49	265	424	13
Future Vol, veh/h	104	93	49	265	424	13
Conflicting Peds, #/hr	4	1	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	3	4	4	3	3
Mvmt Flow	104	93	49	265	424	13

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	800	434	439	0	-	0
Stage 1	433	-	-	-	-	-
Stage 2	367	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.236	-	-	-
Pot Cap-1 Maneuver	353	620	1110	-	-	-
Stage 1	652	-	-	-	-	-
Stage 2	699	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	333	618	1108	-	-	-
Mov Cap-2 Maneuver	333	-	-	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	697	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v20.51		1.31	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	281	-	426	-	-
HCM Lane V/C Ratio	0.044	-	0.462	-	-
HCM Control Delay (s/veh)	8.4	0	20.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	2.4	-	-

HCM 7th TWSC
7: Larson Lane & Huntington Avenue

11/07/2023

Intersection												
Int Delay, s/veh	0.1											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	4	1	0	0	0	484	3	1	307	0
Future Vol, veh/h	1	0	4	1	0	0	0	484	3	1	307	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	4	4	4
Mvmt Flow	1	0	4	1	0	0	0	484	3	1	307	0

Major/Minor	Minor1		Minor2		Major1			Major2				
Conflicting Flow All	795	795	486	793	796	307	307	0	0	487	0	0
Stage 1	486	486	-	309	309	-	-	-	-	-	-	-
Stage 2	309	309	-	484	487	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	308	323	586	309	322	738	1254	-	-	1066	-	-
Stage 1	567	555	-	705	663	-	-	-	-	-	-	-
Stage 2	705	663	-	568	554	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	308	322	586	306	322	738	1254	-	-	1066	-	-
Mov Cap-2 Maneuver	308	322	-	306	322	-	-	-	-	-	-	-
Stage 1	567	555	-	705	662	-	-	-	-	-	-	-
Stage 2	705	662	-	564	554	-	-	-	-	-	-	-

Approach	NB		SB		SE		NW	
HCM Control Delay, s/v12.33			16.79		0		0.03	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	496	6	-	-	1254	-	-	306
HCM Lane V/C Ratio	0.01	0.001	-	-	-	-	-	0.003
HCM Control Delay (s/veh)	12.3	8.4	0	-	0	-	-	16.8
HCM Lane LOS	B	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection

Int Delay, s/veh 118.8

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	107	210	348	262	440	194
Future Vol, veh/h	107	210	348	262	440	194
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	1	1	2	2
Mvmt Flow	107	210	348	262	440	194

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1553	479	0
Stage 1	479	-	-
Stage 2	1074	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	125	587	-
Stage 1	623	-	-
Stage 2	328	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	~ 61	587	-
Mov Cap-2 Maneuver	~ 61	-	-
Stage 1	623	-	-
Stage 2	161	-	-

Approach	NB	SE	NW
HCM Control Delay, s/veh	568.51	0	8.17
HCM LOS	F		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	151	864	-	-	-
HCM Lane V/C Ratio	2.106	0.454	-	-	-
HCM Control Delay (s/veh)	\$ 568.5	11.8	0	-	-
HCM Lane LOS	F	B	A	-	-
HCM 95th %tile Q(veh)	25.5	2.4	-	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 7th TWSC
9: Pleasant Hill Road & Huntington Avenue

11/07/2023

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	548	10	3	610	24	0
Future Vol, veh/h	548	10	3	610	24	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	548	10	3	610	24	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	558	0	1169
Stage 1	-	-	-	-	553
Stage 2	-	-	-	-	616
Critical Hdwy	-	-	4.12	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.218	-	3.5
Pot Cap-1 Maneuver	-	-	1013	-	215
Stage 1	-	-	-	-	580
Stage 2	-	-	-	-	543
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1013	-	214
Mov Cap-2 Maneuver	-	-	-	-	214
Stage 1	-	-	-	-	580
Stage 2	-	-	-	-	540

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.04	23.89
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	214	-	-	9	-
HCM Lane V/C Ratio	0.112	-	-	0.003	-
HCM Control Delay (s/veh)	23.9	-	-	8.6	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

HCM 7th TWSC
10: I-5 SB Ramps & Huntington Avenue

11/07/2023

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↱			↱						↲	
Traffic Vol, veh/h	0	75	469	37	521	0	0	0	0	16	4	92
Future Vol, veh/h	0	75	469	37	521	0	0	0	0	16	4	92
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	1	1	1	0	0	0	13	13	13
Mvmt Flow	0	75	469	37	521	0	0	0	0	16	4	92

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	544	0	0	670	1139	521
Stage 1	-	-	-	-	-	-	595	595	-
Stage 2	-	-	-	-	-	-	75	544	-
Critical Hdwy	-	-	-	4.11	-	-	6.53	6.63	6.33
Critical Hdwy Stg 1	-	-	-	-	-	-	5.53	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.53	5.63	-
Follow-up Hdwy	-	-	-	2.209	-	-	3.617	4.117	3.417
Pot Cap-1 Maneuver	0	-	-	1030	-	0	406	192	534
Stage 1	0	-	-	-	-	0	530	475	-
Stage 2	0	-	-	-	-	0	921	502	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1030	-	-	385	0	534
Mov Cap-2 Maneuver	-	-	-	-	-	-	385	0	-
Stage 1	-	-	-	-	-	-	530	0	-
Stage 2	-	-	-	-	-	-	874	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.57	14.14
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	119	-	505
HCM Lane V/C Ratio	-	-	0.036	-	0.222
HCM Control Delay (s/veh)	-	-	8.6	0	14.1
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.8

HCM 7th TWSC
11: I-5 NB Ramps & Huntington Avenue

11/07/2023

Intersection												
Int Delay, s/veh	16											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔				
Traffic Vol, veh/h	58	27	0	0	58	3	509	3	18	0	0	0
Future Vol, veh/h	58	27	0	0	58	3	509	3	18	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	2	2	2	2	2	2	0	0	0
Mvmt Flow	58	27	0	0	58	3	509	3	18	0	0	0

Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	61	0	-	-	0	201	204 27
Stage 1	-	-	-	-	-	143	143 -
Stage 2	-	-	-	-	-	58	61 -
Critical Hdwy	4.1	-	-	-	-	6.42	6.52 6.22
Critical Hdwy Stg 1	-	-	-	-	-	5.42	5.52 -
Critical Hdwy Stg 2	-	-	-	-	-	5.42	5.52 -
Follow-up Hdwy	2.2	-	-	-	-	3.518	4.018 3.318
Pot Cap-1 Maneuver	1555	-	0	0	-	788	692 1048
Stage 1	-	-	0	0	-	884	779 -
Stage 2	-	-	0	0	-	965	844 -
Platoon blocked, %	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1555	-	-	-	-	758	0 1048
Mov Cap-2 Maneuver	-	-	-	-	-	758	0 -
Stage 1	-	-	-	-	-	851	0 -
Stage 2	-	-	-	-	-	965	0 -

Approach	EB	WB	NB
HCM Control Delay, s/v	5.05	0	19.61
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	765	1228	-	-	-
HCM Lane V/C Ratio	0.693	0.037	-	-	-
HCM Control Delay (s/veh)	19.6	7.4	0	-	-
HCM Lane LOS	C	A	A	-	-
HCM 95th %tile Q(veh)	5.7	0.1	-	-	-

HCM 7th AWSC
1: Westside Highway & SR-411

10/27/2023

Intersection	
Intersection Delay, s/veh	59.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	42	90	21	181	115	279	64	201	175	157	123	33
Future Vol, veh/h	42	90	21	181	115	279	64	201	175	157	123	33
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	42	90	21	181	115	279	64	201	175	157	123	33
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	16.7	101.5	43.8	26.6
HCM LOS	C	F	E	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	27%	31%	50%
Vol Thru, %	46%	59%	20%	39%
Vol Right, %	40%	14%	49%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	440	153	575	313
LT Vol	64	42	181	157
Through Vol	201	90	115	123
RT Vol	175	21	279	33
Lane Flow Rate	440	153	575	313
Geometry Grp	1	1	1	1
Degree of Util (X)	0.874	0.357	1.117	0.674
Departure Headway (Hd)	7.584	8.849	6.995	8.229
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	480	409	518	441
Service Time	5.584	6.849	5.067	6.229
HCM Lane V/C Ratio	0.917	0.374	1.11	0.71
HCM Control Delay, s/veh	43.8	16.7	101.5	26.6
HCM Lane LOS	E	C	F	D
HCM 95th-tile Q	9.3	1.6	18.8	4.9

HCM 7th TWSC
2: 3rd Avenue & A Street

10/27/2023

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	397	13	1	518	0	21	4	13	1	4	34
Future Vol, veh/h	21	397	13	1	518	0	21	4	13	1	4	34
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	1	1	1	0	0	0	0	0	0
Mvmt Flow	21	397	13	1	518	0	21	4	13	1	4	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	520	0	0	410	0	0	968	968	404	963	974	520
Stage 1	-	-	-	-	-	-	446	446	-	522	522	-
Stage 2	-	-	-	-	-	-	522	522	-	441	452	-
Critical Hdwy	4.15	-	-	4.11	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1031	-	-	1154	-	-	235	256	651	237	254	560
Stage 1	-	-	-	-	-	-	596	578	-	542	534	-
Stage 2	-	-	-	-	-	-	542	534	-	599	574	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1029	-	-	1154	-	-	212	248	651	222	246	559
Mov Cap-2 Maneuver	-	-	-	-	-	-	212	248	-	222	246	-
Stage 1	-	-	-	-	-	-	580	562	-	540	533	-
Stage 2	-	-	-	-	-	-	504	533	-	568	559	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.42	0.02	19.81	13.2
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	281	87	-	-	3	-	-	478
HCM Lane V/C Ratio	0.135	0.02	-	-	0.001	-	-	0.082
HCM Control Delay (s/veh)	19.8	8.6	0	-	8.1	0	-	13.2
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0	-	-	0.3

HCM 7th AWSC
3: Huntington Avenue & Cowlitz Street

10/27/2023

Intersection	
Intersection Delay, s/veh	14.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Vol, veh/h	0	0	0	50	7	19	107	329	72	33	349	19
Future Vol, veh/h	0	0	0	50	7	19	107	329	72	33	349	19
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
Heavy Vehicles, %	0	0	0	2	2	2	3	3	3	6	6	6
Mvmt Flow	0	0	0	50	7	19	107	329	72	33	349	19
Number of Lanes	0	0	0	0	1	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	9.8	15.7	13.1
HCM LOS	A	C	B

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	21%	66%	8%
Vol Thru, %	65%	9%	87%
Vol Right, %	14%	25%	5%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	508	76	401
LT Vol	107	50	33
Through Vol	329	7	349
RT Vol	72	19	19
Lane Flow Rate	508	76	401
Geometry Grp	1	1	1
Degree of Util (X)	0.646	0.124	0.53
Departure Headway (Hd)	4.576	5.886	4.756
Convergence, Y/N	Yes	Yes	Yes
Cap	787	603	754
Service Time	2.622	3.979	2.807
HCM Lane V/C Ratio	0.645	0.126	0.532
HCM Control Delay, s/veh	15.7	9.8	13.1
HCM Lane LOS	C	A	B
HCM 95th-tile Q	4.8	0.4	3.2

HCM 7th AWSC

4: Huntington Avenue & A Street

10/27/2023

Intersection

Intersection Delay, s/veh 20

Intersection LOS C

Movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	232	190	260	273	179	227
Future Vol, veh/h	232	190	260	273	179	227
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	4	4	2	2	5	5
Mvmt Flow	232	190	260	273	179	227
Number of Lanes	1	0	1	1	1	0

Approach

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	2	0	1
HCM Control Delay, s/veh	23.8	16.5	20.5
HCM LOS	C	C	C

Lane

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	100%	0%	55%	0%
Vol Thru, %	0%	100%	0%	44%
Vol Right, %	0%	0%	45%	56%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	260	273	422	406
LT Vol	260	0	232	0
Through Vol	0	273	0	179
RT Vol	0	0	190	227
Lane Flow Rate	260	273	422	406
Geometry Grp	7	7	2	5
Degree of Util (X)	0.513	0.5	0.722	0.672
Departure Headway (Hd)	7.098	6.587	6.163	5.958
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	504	543	582	601
Service Time	4.893	4.382	4.239	4.044
HCM Lane V/C Ratio	0.516	0.503	0.725	0.676
HCM Control Delay, s/veh	17.2	15.9	23.8	20.5
HCM Lane LOS	C	C	C	C
HCM 95th-tile Q	2.9	2.8	6	5.1

HCM 7th TWSC
5: Huntington Avenue & C Street

10/27/2023

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	13	0	22	27	1	13	38	494	51	30	329	9
Future Vol, veh/h	13	0	22	27	1	13	38	494	51	30	329	9
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	5	5	5	1	1	1	7	7	7
Mvmt Flow	13	0	22	27	1	13	38	494	51	30	329	9

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	964	1015	335	986	994	520	338	0	0	545	0	0
Stage 1	394	394	-	596	596	-	-	-	-	-	-	-
Stage 2	571	621	-	390	398	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.15	6.55	6.25	4.11	-	-	4.17	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.545	4.045	3.345	2.209	-	-	2.263	-	-
Pot Cap-1 Maneuver	237	240	712	224	242	551	1227	-	-	999	-	-
Stage 1	635	609	-	485	487	-	-	-	-	-	-	-
Stage 2	510	482	-	628	598	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	217	226	711	204	228	551	1227	-	-	999	-	-
Mov Cap-2 Maneuver	389	380	-	383	389	-	-	-	-	-	-	-
Stage 1	616	591	-	470	472	-	-	-	-	-	-	-
Stage 2	481	468	-	590	580	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v12.08		14.39	0.52	0.71
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1227	-	-	544 424	999	-	-
HCM Lane V/C Ratio	0.031	-	-	0.064 0.097	0.03	-	-
HCM Control Delay (s/veh)	8	-	-	12.1 14.4	8.7	-	-
HCM Lane LOS	A	-	-	B B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2 0.3	0.1	-	-

HCM 7th TWSC
6: Huntington Avenue & Front Avenue

10/27/2023

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	46	87	545	355	15
Future Vol, veh/h	7	46	87	545	355	15
Conflicting Peds, #/hr	1	0	6	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	1	1	2	2
Mvmt Flow	7	46	87	545	355	15

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1089	369	376	0	-	0
Stage 1	369	-	-	-	-	-
Stage 2	720	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	241	681	1188	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	486	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	213	678	1181	-	-	-
Mov Cap-2 Maneuver	213	-	-	-	-	-
Stage 1	626	-	-	-	-	-
Stage 2	483	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v12.61		1.14	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	248	-	526	-	-
HCM Lane V/C Ratio	0.074	-	0.101	-	-
HCM Control Delay (s/veh)	8.3	0	12.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

HCM 7th TWSC
7: Larson Lane & Huntington Avenue

10/27/2023

Intersection												
Int Delay, s/veh	0											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	1	0	380	0	4	606	0
Future Vol, veh/h	0	0	0	0	0	1	0	380	0	4	606	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	1	0	380	0	4	606	0

Major/Minor	Minor1		Minor2		Major1		Major2					
Conflicting Flow All	995	995	381	994	995	606	606	0	0	381	0	0
Stage 1	381	381	-	614	614	-	-	-	-	-	-	-
Stage 2	614	614	-	380	381	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	226	247	671	226	247	501	972	-	-	1177	-	-
Stage 1	645	617	-	483	486	-	-	-	-	-	-	-
Stage 2	483	486	-	646	617	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	224	245	670	225	245	501	972	-	-	1176	-	-
Mov Cap-2 Maneuver	224	245	-	225	245	-	-	-	-	-	-	-
Stage 1	645	616	-	480	483	-	-	-	-	-	-	-
Stage 2	479	483	-	646	616	-	-	-	-	-	-	-

Approach	NB		SB		SE		NW	
HCM Control Delay, s/v	0		12.2		0		0.05	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	-	12	-	-	972	-	-	501
HCM Lane V/C Ratio	-	0.003	-	-	-	-	-	0.002
HCM Control Delay (s/veh)	0	8.1	0	-	0	-	-	12.2
HCM Lane LOS	A	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0

HCM 7th TWSC

8: Site Access & Huntington Avenue

10/27/2023

Intersection						
Int Delay, s/veh	798.2					
Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	293	590	215	195	444	317
Future Vol, veh/h	293	590	215	195	444	317
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	0	0	1	1
Mvmt Flow	293	590	215	195	444	317
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1518	313	0	0	410	0
Stage 1	313	-	-	-	-	-
Stage 2	1205	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.11	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	~ 131	728	-	-	1154	-
Stage 1	742	-	-	-	-	-
Stage 2	~ 284	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 70	728	-	-	1154	-
Mov Cap-2 Maneuver	~ 70	-	-	-	-	-
Stage 1	742	-	-	-	-	-
Stage 2	~ 151	-	-	-	-	-
Approach	NB	SE	NW			
HCM Control Delay \$/h	151.69	0	5.87			
HCM LOS	F					
Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER	
Capacity (veh/h)	177	951	-	-	-	
HCM Lane V/C Ratio	5.003	0.385	-	-	-	
HCM Control Delay (s/veh)	\$ 1851.7	10.1	0	-	-	
HCM Lane LOS	F	B	A	-	-	
HCM 95th %tile Q(veh)	91.9	1.8	-	-	-	
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Intersection

Int Delay, s/veh 0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	787	18	1	748	13	6
Future Vol, veh/h	787	18	1	748	13	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	787	18	1	748	13	6

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	805
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.11
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.209
Pot Cap-1 Maneuver	-	-	824
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	824
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.01	30.26
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	161	-	-	2	-
HCM Lane V/C Ratio	0.118	-	-	0.001	-
HCM Control Delay (s/veh)	30.3	-	-	9.4	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

HCM 7th TWSC
10: I-5 SB Ramps & Huntington Avenue

10/27/2023

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↱			↱						↲	
Traffic Vol, veh/h	0	173	626	24	627	0	0	0	0	1	3	133
Future Vol, veh/h	0	173	626	24	627	0	0	0	0	1	3	133
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	2	2	2	0	0	0	0	0	0
Mvmt Flow	0	173	626	24	627	0	0	0	0	1	3	133

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	799	0	0	848	1474	628
Stage 1	-	-	-	-	-	-	675	675	-
Stage 2	-	-	-	-	-	-	173	799	-
Critical Hdwy	-	-	-	4.12	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	824	-	0	334	128	487
Stage 1	0	-	-	-	-	0	510	456	-
Stage 2	0	-	-	-	-	0	862	401	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	824	-	-	319	0	486
Mov Cap-2 Maneuver	-	-	-	-	-	-	319	0	-
Stage 1	-	-	-	-	-	-	510	0	-
Stage 2	-	-	-	-	-	-	824	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.35	15.34
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	66	-	484
HCM Lane V/C Ratio	-	-	0.029	-	0.283
HCM Control Delay (s/veh)	-	-	9.5	0	15.3
HCM Lane LOS	-	-	A	A	C
HCM 95th %tile Q(veh)	-	-	0.1	-	1.2

HCM 7th TWSC
11: I-5 NB Ramps & Huntington Avenue

10/27/2023

Intersection												
Int Delay, s/veh	73.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	155	18	0	0	36	4	612	3	42	0	0	0
Future Vol, veh/h	155	18	0	0	36	4	612	3	42	0	0	0
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	155	18	0	0	36	4	612	3	42	0	0	0
Major/Minor	Major1			Major2			Minor1					
Conflicting Flow All	40	0	-	-	-	0	364	368	18			
Stage 1	-	-	-	-	-	-	328	328	-			
Stage 2	-	-	-	-	-	-	36	40	-			
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2			
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-			
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3			
Pot Cap-1 Maneuver	1583	-	0	0	-	-	639	564	1066			
Stage 1	-	-	0	0	-	-	734	651	-			
Stage 2	-	-	0	0	-	-	992	866	-			
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1583	-	-	-	-	- ~	576	0	1066			
Mov Cap-2 Maneuver	-	-	-	-	-	- ~	576	0	-			
Stage 1	-	-	-	-	-	-	662	0	-			
Stage 2	-	-	-	-	-	-	992	0	-			
Approach	EB			WB			NB					
HCM Control Delay, s/v	6.74			0			95.02					
HCM LOS							F					
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR							
Capacity (veh/h)	594	1567	-	-	-							
HCM Lane V/C Ratio	1.107	0.098	-	-	-							
HCM Control Delay (s/veh)	95	7.5	0	-	-							
HCM Lane LOS	F	A	A	-	-							
HCM 95th %tile Q(veh)	20.1	0.3	-	-	-							
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 7th TWSC
8: Site Access & Huntington Avenue

10/27/2023

Intersection						
Int Delay, s/veh	17.3					
Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	135	246	215	92	184	317
Future Vol, veh/h	135	246	215	92	184	317
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	0	0	1	1
Mvmt Flow	135	246	215	92	184	317
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	946	261	0	0	307	0
Stage 1	261	-	-	-	-	-
Stage 2	685	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.11	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	290	778	-	-	1259	-
Stage 1	783	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	239	778	-	-	1259	-
Mov Cap-2 Maneuver	239	-	-	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	412	-	-	-	-	-
Approach	NB	SE	NW			
HCM Control Delay, s/v50.09		0	3.07			
HCM LOS	F					
Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER	
Capacity (veh/h)	432	661	-	-	-	
HCM Lane V/C Ratio	0.882	0.146	-	-	-	
HCM Control Delay (s/veh)	50.1	8.3	0	-	-	
HCM Lane LOS	F	A	A	-	-	
HCM 95th %tile Q(veh)	9.2	0.5	-	-	-	

HCM 7th TWSC
11: I-5 NB Ramps & Huntington Avenue

10/27/2023

Intersection												
Int Delay, s/veh	39.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔				
Traffic Vol, veh/h	132	18	0	0	36	4	565	3	42	0	0	0
Future Vol, veh/h	132	18	0	0	36	4	565	3	42	0	0	0
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	132	18	0	0	36	4	565	3	42	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	40	0	-	-	-	0	318	322	18
Stage 1	-	-	-	-	-	-	282	282	-
Stage 2	-	-	-	-	-	-	36	40	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1583	-	0	0	-	-	679	599	1066
Stage 1	-	-	0	0	-	-	770	681	-
Stage 2	-	-	0	0	-	-	992	866	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1583	-	-	-	-	-	622	0	1066
Mov Cap-2 Maneuver	-	-	-	-	-	-	622	0	-
Stage 1	-	-	-	-	-	-	705	0	-
Stage 2	-	-	-	-	-	-	992	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	6.58	0	50.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	641	1567	-	-	-
HCM Lane V/C Ratio	0.952	0.083	-	-	-
HCM Control Delay (s/veh)	50.1	7.5	0	-	-
HCM Lane LOS	F	A	A	-	-
HCM 95th %tile Q(veh)	13.3	0.3	-	-	-

SITE LAYOUT

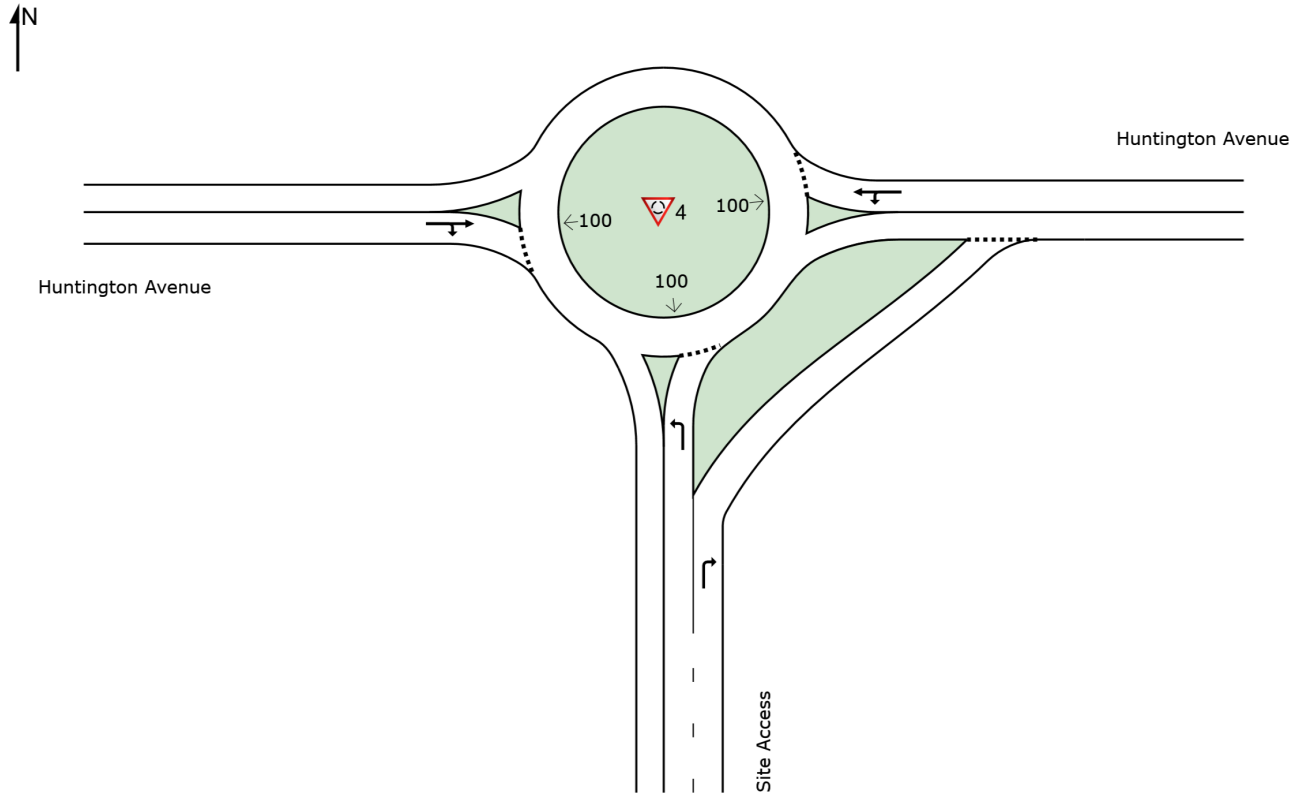
Site: 4 [STAM (100%) (Site Folder: General)]

Site Access at Huntington Avenue

Site Category: 2043 Buildout Conditions (100%) - AM Peak Hour (Scenario 1)

Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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LANE SUMMARY

Site: 4 [STAM (100%) (Site Folder: General)]

Site Access at Huntington Avenue

Site Category: 2043 Buildout Conditions (100%) - AM Peak Hour (Scenario 1)

Roundabout

Lane Use and Performance													
	DEMAND FLOWS [Total HV]		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE [Veh Dist]		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: Site Access													
Lane 1 ^d	107	2.0	1334	0.080	100	9.8	LOS A	0.5	12.3	Full	250	0.0	0.0
Lane 2	210	2.0	1334	0.157	100	4.1	LOS A	1.0	25.4	Full	250	0.0	0.0
Approach	317	2.0		0.157		6.0	LOS A	1.0	25.4				
East: Huntington Avenue													
Lane 1 ^d	634	1.6	1337	0.474	100	8.6	LOS A	3.5	88.9	Full	1600	0.0	0.0
Approach	634	1.6		0.474		8.6	LOS A	3.5	88.9				
West: Huntington Avenue													
Lane 1 ^d	610	0.8	1078	0.566	100	7.2	LOS A	4.7	119.0	Full	1600	0.0	0.0
Approach	610	0.8		0.566		7.2	LOS A	4.7	119.0				
Intersection	1561	1.4		0.566		7.5	LOS A	4.7	119.0				

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used).

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Site Access										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov.	Ov. Lane No.
From S To Exit:	W	E			Cap. veh/h	v/c	%	%		
Lane 1	107	-	107	2.0	1334	0.080	100	NA	NA	
Lane 2	-	210	210	2.0	1334	0.157	100	NA	NA	
Approach	107	210	317	2.0		0.157				
East: Huntington Avenue										
Mov.	L2	T1	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov.	Ov. Lane No.
From E To Exit:	S	W			Cap. veh/h	v/c	%	%		
Lane 1	440	194	634	1.6	1337	0.474	100	NA	NA	
Approach	440	194	634	1.6		0.474				
West: Huntington Avenue										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov.	Ov. Lane No.
From W To Exit:	E	S			Cap. veh/h	v/c	%	%		
Lane 1	348	262	610	0.8	1078	0.566	100	NA	NA	

Approach	348	262	610	0.8	0.566
Total %HV Deg.Satn (v/c)					
Intersection	1561	1.4	0.566		

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis											
	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Site Access Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
East Exit: Huntington Avenue Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
West Exit: Huntington Avenue Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									

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SITE LAYOUT

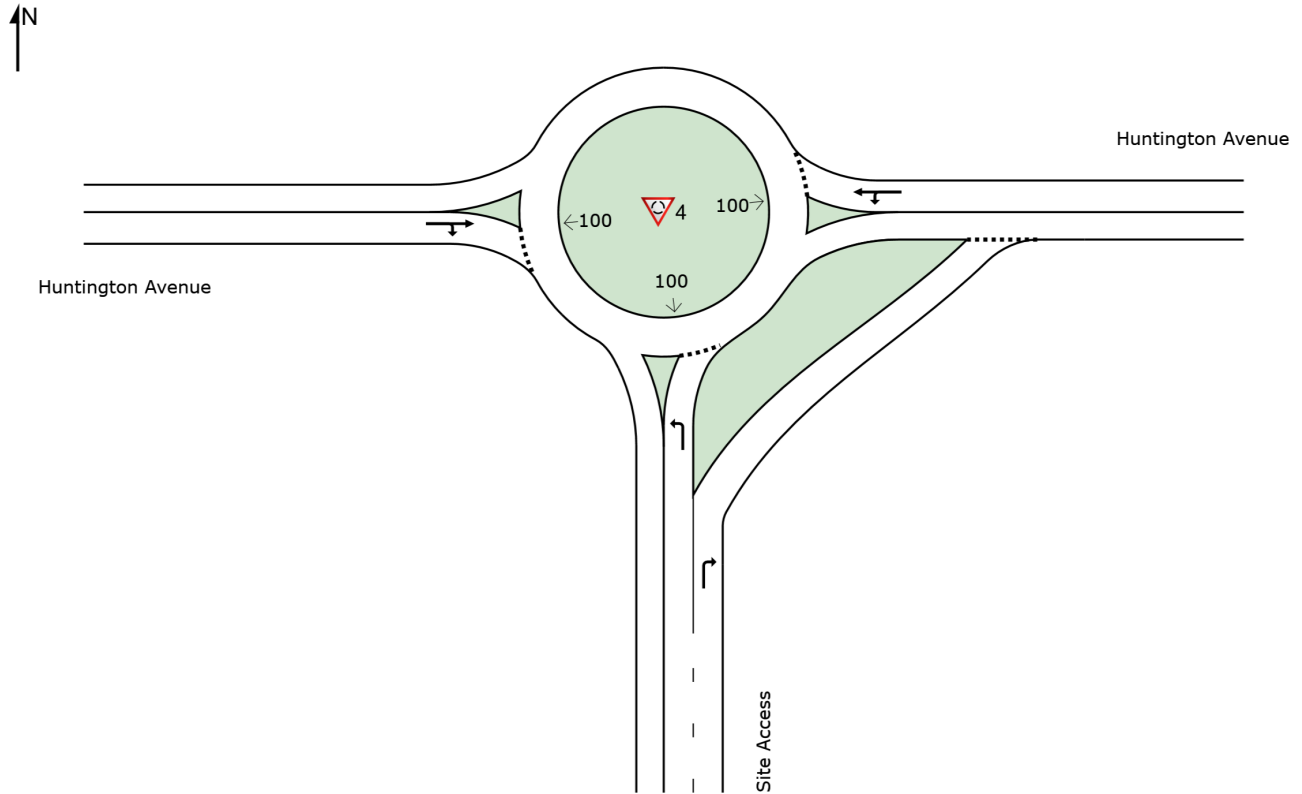
Site: 4 [STPM (100%) (Site Folder: General)]

Site Access at Huntington Avenue

Site Category: 2043 Buildout Conditions (100%) - PM Peak Hour (Scenario 1)

Roundabout

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LANE SUMMARY

Site: 4 [STPM (100%) (Site Folder: General)]

Site Access at Huntington Avenue

Site Category: 2043 Buildout Conditions (100%) - PM Peak Hour (Scenario 1)

Roundabout

Lane Use and Performance													
	DEMAND FLOWS [Total HV]		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE [Veh Dist]		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: Site Access													
Lane 1 ^d	293	2.0	1461	0.201	100	9.5	LOS A	1.3	31.8	Full	250	0.0	0.0
Lane 2	590	2.0	1461	0.404	100	3.8	LOS A	3.0	77.2	Full	250	0.0	0.0
Approach	883	2.0		0.404		5.7	LOS A	3.0	77.2				
East: Huntington Avenue													
Lane 1 ^d	761	0.9	1184	0.643	100	9.9	LOS A	6.0	150.6	Full	1600	0.0	0.0
Approach	761	0.9		0.643		9.9	LOS A	6.0	150.6				
West: Huntington Avenue													
Lane 1 ^d	410	0.0	1046	0.392	100	6.0	LOS A	2.7	67.4	Full	1600	0.0	0.0
Approach	410	0.0		0.392		6.0	LOS A	2.7	67.4				
Intersection	2054	1.2		0.643		7.3	LOS A	6.0	150.6				

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used).

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Site Access										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov.	Ov. Lane No.
From S To Exit:	W	E			Cap. veh/h	v/c	%	%		
Lane 1	293	-	293	2.0	1461	0.201	100	NA	NA	
Lane 2	-	590	590	2.0	1461	0.404	100	NA	NA	
Approach	293	590	883	2.0		0.404				
East: Huntington Avenue										
Mov.	L2	T1	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov.	Ov. Lane No.
From E To Exit:	S	W			Cap. veh/h	v/c	%	%		
Lane 1	444	317	761	0.9	1184	0.643	100	NA	NA	
Approach	444	317	761	0.9		0.643				
West: Huntington Avenue										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov.	Ov. Lane No.
From W To Exit:	E	S			Cap. veh/h	v/c	%	%		
Lane 1	215	195	410	0.0	1046	0.392	100	NA	NA	

Approach	215	195	410	0.0	0.392
Total %HV Deg.Satn (v/c)					
Intersection	2054	1.2	0.643		

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis											
	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Site Access Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
East Exit: Huntington Avenue Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
West Exit: Huntington Avenue Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									

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Memorandum

To: **NAME**
From: **TRAFFIC ENGINEER**
Date: **November 13, 2023**
Subject: **Development C**
Transportation Compliance Letter

Introduction

This Transportation Compliance Letter (TCL) details a trip generation and accounting analysis for the proposed **Development C**, to be located within the Landing on the Cowlitz (LOT) Master Plan area in Castle Rock, Washington. The project will develop a **15,000 square foot hardware store**.

Since the proposed development will be located in the Landing on the Cowlitz Master Plan area, according to the LOTC Development Agreement all subsequent land use development applications in the LOTC Master Plan area are required to prepare a trip generation and accounting analysis to verify the following:

- Ensure total site trip generation of all existing/planned/proposed developments within the LOTC Master Plan area does not exceed the reserved number of PM peak hour trips.
- Determine if/when mitigation will be triggered at nearby transportation facilities based on the total PM peak hour trip generation of all existing/planned/proposed developments within the LOTC Master Plan area.

The City of Castle Rock has reserved transportation capacity for the LOTC development. The LOTC development has been granted an initial 1,000 PM peak hour trips for reservation. Additional transportation capacity, up to 1,750 PM peak hour trips, may be reserved when the development consumes 80% (800 PM peak hour trips) of the initial capacity as outlined in the Development Agreement.

Detailed trip generation calculations and supporting data are included as attachments to this memorandum.

Project Site Description

ENTER DEVELOPMENT SPECIFIC NARRATIVE/DESCRIPTION

Trip Generation Analysis

To estimate the number of trips that will be generated by the proposed use, trip rates from the *Trip Generation Manual*¹ were used. Data from the land use code 821, Hardware/Paint Store, was used to estimate site trip generation based on the square footage of the gross building floor area.

In accordance with the *Landing on the Cowlitz Master Plan Transportation Impact Study* (TIS), dated November 13, 2023, the following internal capture rates were applied to the proposed development's trip generation:

- AM Peak Hour: Approximately 6% of the total site trips.
- PM Peak Hour & Average Weekday: Approximately 13% of the total site trips.

IF APPLICABLE INSERT PASS-BY TRIP DATA

The trip generation calculations show that the proposed development is projected to generate the following:

- Total Trips (Excluding Internal Capture Trips): X AM peak hour trips, X PM peak hour trips, and X average weekday trips.
- Pass-by Trips (Excluding Internal Capture Trips): X AM peak hour trips, X PM peak hour trips, and X average weekday trips.
- Primary Trips (Excluding Internal Capture Trips): X AM peak hour trips, X PM peak hour trips, and X average weekday trips.

The trip generation estimates are summarized in Table 1. Detailed trip generation calculations are included as an attachment to this memorandum.

¹ Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2021.



Table 1: Trip Generation Summary

Land Use Code		Size	AM Peak Hour			PM Peak Hour			Weekday Total
			Enter	Exit	Total	Enter	Exit	Total	
Hardware/Paint Store	816	15,000 SF	8	6	14	21	24	45	122
<i>Pass-by Trips</i>	-	<i>0% (0%)</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Total Primary Trips			8	6	14	21	24	45	122
<i>Internal Trip Reduction (Total Trips)</i>		6% (13%)	<i>0</i>	<i>1</i>	<i>1</i>	<i>3</i>	<i>3</i>	<i>6</i>	<i>16</i>
<i>Internal Trip Reduction (Pass-by Trips)</i>			<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Internal Trip Reduction (Primary Trips)</i>			<i>0</i>	<i>1</i>	<i>1</i>	<i>3</i>	<i>3</i>	<i>6</i>	<i>16</i>
Total External Trips			8	5	13	18	21	39	106
<i>Total External Pass-by Trips</i>			0	0	0	0	0	0	0
Total External Primary Trips			8	5	13	18	21	39	106

Table Notes: AM and PM/ADT internal and pass-by rates denoted as AM (PM/ADT).

Trip Accounting Analysis

As described above, the proposed development will be located within the LOTC Master Plan where per the LOTC Development Agreement a reserved number of PM peak hour trips are vested. Additionally, PM peak hour thresholds to determine when transportation mitigation at nearby facilities would be necessary were established. To determine if the proposed development will not exceed the vested trip thresholds or trigger the need for transportation mitigation, a trip accounting analysis was conducted.

LOTC Trip Accounting

Development C will be the third development application proposed in the LOTC Master Plan area, where currently the total remaining trips vested are **850 PM peak hour trips**. After approval of **Development C**, **805** PM peak hour trips will remain available in the bank of trips. Table 2 below summarizes the remaining trips vested in the LOTC Master Plan area following approval of the proposed development application.



Table 2: Remaining Vested Trip Summary (Total Trips Generated)

Project Name	Total PM Peak Hour Trips Allocated	Total PM Peak Hour Trips Remaining in Bank	Cumulative PM Peak Hour Trips Consumed from Bank
LOTG Master Plan	-	1,000	-
Development A	100	900	100
Subdivision B	50	850	150
Proposed Development C	45	805	195

Mitigation Threshold Analysis

Per the *Landing on the Cowlitz Master Plan TIS*, three intersections were identified as requiring capacity related mitigation improvements at specific impact thresholds. These intersections include the following:

1. SR-411 at Westside Highway
 - a. Mitigation required under 2043 conditions with or without impacts from the LOTG Master Plan area.
 - b. The LOTG will impact the intersection with 15% of externally generated primary trips.
2. Site Access at Huntington Avenue
 - a. Mitigation required once impacted by 657 PM peak hour trips.
 - b. The LOTG will impact the intersection with 100% of externally generated primary trips and pass-by trips.
3. I-5 Northbound Ramps at Huntington Avenue
 - a. Mitigation required once impacted by 384 PM peak hour trips.
 - b. The LOTG will impact the intersection with the following:
 - i. 10% of externally generated primary trips exiting the site.
 - ii. 50% of externally generated primary trips entering the site.
 - iii. 47.5% of externally generated pass-by trips.

Table 3 evaluates the PM peak hour trip thresholds of mitigation at nearby transportation facilities and if they will be necessary as part of this application.



Table 3: Mitigation Trip Impact Summary (Externally Generated PM Peak Hour Trips)

Transportation Facility		Planned Mitigation	Mitigation Threshold	Prior Approved Development Impacts	Proposed Development Impacts	Total Trip Impact	Mitigation Threshold Exceeded?
<i>Apply Externally Generated Primary Trip Impacts</i>							
1	SR-411 at Westside Highway	TBD, Collect Proportionate Share Contributions	0	23	7	30	Yes
<i>Apply Externally Generated Primary & Pass-by Trip Impacts</i>							
2	Site Access at Huntington Avenue	Single Lane Roundabout with NEB Right-turn Bypass Lane	657	150	45	195	No
3	I-5 NB Ramps at Huntington Avenue	TBD	384	90	12	102	No

A trip assignment figure for the proposed development is included as an attachment to this TCL.

Analysis Summary

Based on Tables 2 and 3, the proposed development will not increase PM peak hour trip generation to a level that exceeds the number of trips vested in the LOTC Master Plan area. The threshold for improvements at **Intersection 1** are met; however, these improvements were triggered without impacts from the LOTC Master Plan project. No other mitigation is necessary or recommended as part of the **Development C** application.

Conclusions

ENTER FINDINGS AND RECOMMENDATIONS



Landing on the Cowlitz

Infrastructure Engineering & Design Standards

Purpose and Intent

The intent of this agreement is to ensure that all development within the Landing on the Cowlitz is constructed in accordance with the City of Castle Rock's Provisions for Flood Hazard Prevention (CRMC 15.24), Section 60.3 of the Federal Emergency Management Administration (FEMA) regulations, the National Flood Insurance Program (NFIP), and the requirements of the U.S. Environmental Protection Agency (EPA).

Design Standards

Public roadways shall be designed to ensure that the lowest point of any paved section is not less than the base flood elevation (48 feet). Public roadways shall be crowned to ensure that travel lanes are above the base flood elevation.

Private roadways shall be designed to ensure that the lowest point of any paved section is not more than six inches below the base flood elevation. Emergency access shall be provided throughout the site in the event of a 100-year flood.

Utilities shall be designed to avoid impairment or contamination during a flood event and shall be constructed to minimize flood damage. The finish floor elevation of structures serving critical infrastructure shall be set no less than one foot above the base flood elevation.

Permitting Requirements

Building Permit Approval

Prior to building permit approval, the applicant shall provide the City of Castle Rock with an elevation certificate, prepared by a professional land surveyor, confirming that all building pads, or associated lowest adjacent grade, have been elevated to at least one foot above the base flood elevation. The lowest adjacent grade elevation is defined as the lowest ground touching the structure, including any attached decks or garage. Elevations shall be presented to the nearest tenth of a foot and referenced to the same datum as the official National Flood Insurance Program map for the Castle Rock community.

Final Occupancy

Prior to final occupancy, the applicant shall supply the City of Castle Rock with proof of submission to FEMA for a Conditional Determination in the form of either a Conditional Letter of Map Revision based on Fill (CLOMR-F) or a Conditional Letter of Map Amendment (CLOMA) if natural grade is above the base flood elevation. Developers shall note that the CLOMR-F and CLOMA letters do not remove the

mandatory purchase of flood insurance requirements, it merely provides comment from FEMA on the proposed plan and does not revise or amend the NFIP map.

Note, once the conditional determination has been issued by FEMA the developer may, at their own discretion, submit for a final determination in the form of either a Letter of Map Revision Based on Fill (LOMR-F) or Letter of Map Amendment (LOMA). Final determination from FEMA officially revises the current NFIP map to show changes to flood elevations of the property. Final determination is not a requirement of development; however, the developer shall note that the issuance of a LOMA or LOMR-F eliminates the federal flood insurance purchase requirements as a condition of federal or federally backed financing. However, mortgage lenders retain the prerogative to require flood insurance as a condition of providing financing, regardless of the location of a structure.

Phase Completion

After full build-out of each phase of the LOTC, the developer shall submit a final determination request to FEMA to revise the current NFIP map for the full phase. The developer shall note that parcels or structures which have already undergone final determination do not need to be included in the overall phase determination request.